पेटेंट कार्यालय
शासकीय जर्नल

OFFICIAL JOURNAL
OF
THE PATENT OFFICE

निर्गमन सं. 31/2024	शुक्रवार	दिनांक: 02/08/2024
ISSUE NO. 31/2024	FRIDAY	DATE: 02/08/2024

पेटेंट कार्यालय का एक प्रकाशन
PUBLICATION OF THE PATENT OFFICE

INTRODUCTION

In view of the recent amendment made in the Patents Act, 1970 by the Patents (Amendment) Act, 2005 effective from 01st January 2005, the Official Journal of The Patent Office is required to be published under the Statute. This Journal is being published on weekly basis on every Friday covering the various proceedings on Patents as required according to the provision of Section 145 of the Patents Act 1970. All the enquiries on this Official Journal and other information as required by the public should be addressed to the Controller General of Patents, Designs & Trade Marks. Suggestions and comments are requested from all quarters so that the content can be enriched.

(PROF. (DR) UNNAT P. PANDIT)
CONTROLLER GENERAL OF PATENTS, DESIGNS & TRADE MARKS

02th AUGUST, 2024

CONTENTS

THE PATENT OFFICE
KOLKATA, 02/08/2024
Address of the Patent Offices/Jurisdictions
The following are addresses of all the Patent Offices located at different places having their Territorial Jurisdiction on a Zonal basis as shown below:-

1	Office of the Controller General of Patents, Designs & Trade Marks, Boudhik Sampada Bhavan, Near Antop Hill Post Office,S.M.Road,Antop Hill, Mumbai – 400 037 Phone: (91)(22) 24123311, Fax : (91)(22) 24123322 E-mail: cgpdtm@nic.in	4	The Patent Office, Government of India, Intellectual Property Rights Building, G.S.T. Road, Guindy, Chennai – 600 032. Phone: (91)(44) 2250 2081-84 Fax : (91)(44) 2250 2066 E-mail: chennai-patent@nic.in ❖ The States of Andhra Pradesh, Telangana, Karnataka, Kerala, Tamil Nadu and the Union Territories of Puducherry and Lakshadweep.
2	The Patent Office, Government of India, Boudhik Sampada Bhavan, Near Antop Hill Post Office,S.M.Road,Antop Hill, Mumbai – 400 037 Phone: (91)(22) 24137701 Fax: (91)(22) 24130387 E-mail: mumbai-patent@nic.in ❖ The States of Gujarat, Maharashtra, Madhya Pradesh, Goa and Chhattisgarh and the Union Territories of Daman and Diu & Dadra and Nagar Haveli	5	The Patent Office (Head Office), Government of India, Boudhik Sampada Bhavan, CP-2, Sector –V, Salt Lake City, Kolkata- 700 091 Phone: (91)(33) 2367 1943/44/45/46/87 Fax: (91)(33) 2367 1988 E-Mail: kolkata-patent@nic.in ❖ Rest of India
3	The Patent Office, Government of India, Boudhik Sampada Bhavan, Plot No. 32., Sector-14, Dwarka, New Delhi – 110075 Phone: (91)(11) 25300200 & 28032253 Fax: (91)(11) 28034301 & 28034302 E.mail: delhi-patent@nic.in ❖ The States of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan, Uttar Pradesh, Uttaranchal, Delhi and the Union Territory of Chandigarh.		

Website: www.ipindia.nic.in
www.patentoffice.nic.in

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 and The Patents (Amendment) Act, 2005 or by the Patents (Amendment) Rules, 2006 will be received only at the appropriate offices of the Patent Office.

Fees: The Fees may either be paid in cash or may be sent by Bank Draft or Cheques payable to the Controller of Patents drawn on a scheduled Bank at the place where the appropriate office is situated.

पेटेंट कार्यालय
कोलकाता, दिनांक 02/08/2024
कार्यालयों के क्षेत्राधिकार के पते

विभिन्न जगहों पर स्थित पेटेंट कार्यालय के पते आंचलिक आधार पर दर्शित उनके प्रादेशिक अधिकार क्षेत्र के साथ नीचे दिए गए है:-

1	कार्यालय : महानियंत्रक, एकस्व, अभिकल्प तथा व्यापार चिहन, एंटोप हिल डाकघर के समीप, एस. एम. रोड, एंटोप हिल, मुम्बई- 400 037, भारत, फोन: (91) (22) 24123311 फ़ैक्स: (91) (22) 24123322 ई. मेल: cgpdtm@nic.in	4	पेटेंट कार्यालय, भारत सरकार इंटेलेक्चुअल प्रॉपर्टी राइट्स बिल्डिंग, इंडस्ट्रियल इस्टेट एसआईडीसीओ आरएमडी गोडाउन एरिया एडजसेन्ट टु ईगल फ्लास्क, जी. एस. टी. रोड, गायन्डी चेन्नई - 600 032. फोन: (91)(44) 2250 2081-84 फ़ैक्स: (91)(44) 2250-2066 ई. मेल: chennai-patent@nic.in ❖ आन्ध्र प्रदेश, तेलंगाना, कर्नाटक, केरल, तमिलनाडु तथा पुडुचेरी राज्य क्षेत्र एवं संघ शासित क्षेत्र, लक्षदीप
2	पेटेंट कार्यालय, भारत सरकार बौद्धिक संपदा भवन, एंटोप हिल डाकघर के समीप, एस. एम. रोड, एंटोप हिल, मुम्बई- 400 037, फोन: (91) (22) 24137701 फ़ैक्स: (91) (22) 24130387 ई. मेल: Mumbai-patent@nic.in ❖ गुजरात, महाराष्ट्र, मध्य प्रदेश, गोवा तथा छत्तीसगढ़ राज्य क्षेत्र एवं संघ शासित क्षेत्र, दमन तथा दीव, दादर और नगर हवेली.	5	पेटेंट कार्यालय, भारत सरकार कोलकाता, (प्रधान कार्यालय) बौद्धिक संपदा भवन, सीपी-2, सेक्टर- V, साल्ट लेक सिटी, कोलकाता-700 091, भारत. फोन: (91)(33) 2367 1943/44/45/46/87 फ़ैक्स:/Fax: (91)(33) 2367 1988 ई. मेल: kolkata-patent@nic.in ❖ भारत का अवशेष क्षेत्र
3	पेटेंट कार्यालय, भारत सरकार बौद्धिक संपदा भवन, प्लॉट सं. 32, सेक्टर- 14, द्वारका, नई दिल्ली- 110 075. फोन: (91)(11) 25300200, 28032253 फ़ैक्स: (91)(11) 28034301, 28034302 ई. मेल: delhi-patent@nic.in हरियाणा, हिमाचल प्रदेश, जम्मू तथा कश्मीर, पंजाब,राजस्थान, उत्तर प्रदेश, दिल्ली तथा उत्तरांचल राज्य क्षेत्रों, एवं संघ शासित क्षेत्र चंडीगढ़		

वेबसाइट: http://www.ipindia.nic.in
www.patentoffice.nic.in

पेटेंट अधिनियम, 1970 तथा पेटेंट (संशोधन) अधिनियम, 2005 अथवा पेटेंट (संशोधन) नियम, 2006 द्वारा वांछित सभी आवेदन, सूचनाए, विवरण या अन्य दस्तावेज़ या कोई शुल्क पेटेंट कार्यालय के केवल उपयुक्त कार्यालय में स्वीकृत होंगे।

शुल्क: शुल्क या तो नगद रूप में या Controller of Patents के नाम में देय बैंक ड्राफ्ट या चेक के द्वारा भेजी जा सकती है जो उसी स्थान के किसी अनुसूचित बैंक में प्रदत्त हो जहाँ उपयुक्त कार्यालय स्थित है ।

SPECIAL NOTICE

18 Months publication as required under Section 11A of the Patents Act, 1970 as amended by the Patents (Amendment) Act, 2005.

Notice is hereby given that any person at any time before the grant of Patent may give representation by way of opposition to the Controller of Patents at appropriate office on the ground and in a manner specified under section 25(1) of the Patents (Amendment) Act, 2005 read with Rule 55 of the Patents (Amendment) Rules, 2006.

Notice is also given that if any interested person requests for copies of the complete specification, drawing and abstract of any application already published, the photocopy of the same can be supplied by the Patent Office as per the jurisdiction on payment of prescribed fees of Rs.8/- per page. If any further details are required to be obtained, the same can be provided by the respective Patent Offices on request.

(PROF. (DR) UNNAT P. PANDIT)
CONTROLLER GENERAL OF PATENTS, DESIGNS & TRADE MARKS

SPECIAL NOTICE

Under the new provision of the Patents Act, 1970 as amended by the Patents (Amendment) Act, 2005 and Rules there under, Publication of the matter relating to Patents in the Official Gazette of India Part III, Section 2 has been discontinued and instead The Official Journal of the Patent Office is being published containing all the activities of The Patent Office such as publication of all the patent applications after 18th months , grant of patents & all other information in respect of the proceedings as required under the provisions of the Patents (Amendment) Act, 2005 and Rules thereunder on weekly basis on every **Friday**.

The Journal is uploaded in the website every Friday. So Paper form and CD-ROM form of the Journal are discontinued from 01/01/2009.

SPECIAL NOTICE

Every effort is being taken to publish all the patent applications under section 11(A) of the Patents Act. However, if duplication of publication of any application is found, then earlier date of publication will be taken for the purpose of provisional protection for applicant and Patent Office will grant Patent not before six months from the date of second publication, provided that there is there is no third party representation.

Early Publication:

The following patent applications have been published under section 11A (2) of The Patents (Amendment) Act 2005 and rule 24A of The Patents (Amendment) Rules, 2006. Any person may file representation by way of opposition to the Controller of Patents at the appropriate office against the grant of the patent in the prescribed manner under section 25(1) of the Patents (Amendment) Act 2005 read with the rule 55 of The Patents (Amendment) Rules, 2006:

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202311036490 A

(19) INDIA

(22) Date of filing of Application :26/05/2023

(43) Publication Date : 02/08/2024

(54) Title of the invention : TOPICAL COMPOSITIONS COMPRISING EUPHORBIA PROSTRATA

(51) International classification	:A61K0009000000, A61K0036470000, A61B0017000000, A61K0031167000, A61P0009140000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Mankind Pharma Ltd.
Address of Applicant :208, Okhla Industrial Estate Phase III New Delhi India - 110020 New Delhi ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)KARTHIKEYAN, V
Address of Applicant :191-E Sector 4-II IMT, Manesar, Gurugram - 122050 Gurugram ---------- ----------
2)MUTHULINGAM, Chithambaram
Address of Applicant :191-E Sector 4-II IMT, Manesar, Gurugram - 122050 Gurugram ---------- ----------
3)KUMAR, Anil
Address of Applicant :191-E Sector 4-II IMT, Manesar, Gurugram - 122050 Gurugram ---------- ----------

(57) Abstract :
ABSTRACT The present invention provides a topical composition of Euphorbia Prostrata, optionally comprising one or more pharmaceutically active agent, wherein said composition is suitable for the treatment of haemorrhoids, haemorrhoids during pregnancy, anal fissures, anal fistula, and varicose veins. Dated this, 20th Day of May, 2024 For Mankind Pharma Ltd.

No. of Pages : 28 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :31/07/2023

(21) Application No.202311051315 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MODEL-G-TECH LCFC COOKING STOVE

(51) International classification :F24C5/18, F24C5/00, F24C15/20
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)CIED IUST FOUNDATION
Address of Applicant :CIED Building, Islamic University of Science and Technology AWANTIPORA ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Ab Gani Bhat
Address of Applicant :Kharbrari, Bugam, Yaripora, Kulgam KULGAM ---------- ----------

(57) Abstract :
The Model-G-Tech LcFc cooking stove is an innovative, eco-friendly alternative to traditional kerosene and diesel stoves, designed to address financial and environmental concerns. This stove utilizes used engine oils and cooking oils as fuel sources, significantly reducing operational costs and promoting responsible waste disposal. The stove features a smokeless design that minimizes indoor air pollution and associated health risks. Key components include a fuel reservoir, a fuel delivery system, a combustion chamber with a secondary combustion chamber for emission control, an air intake mechanism powered by a rechargeable battery, and adjustable flame settings. The stove's high efficiency ensures optimal fuel consumption, while safety features such as temperature sensors, safety valves, pressure regulators, and an automatic shutoff mechanism enhance user safety. The Model-G-Tech LcFc cooking stove provides a cost-effective, sustainable, and health-conscious solution for households, particularly in low-income communities, while contributing positively to environmental conservation.

No. of Pages : 15 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/04/2024
(21) Application No.202411033343 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A RAPID, SENSITIVE, SPECIFIC AND FIELD DEPLOYABLE DIAGNOSTIC PROCESS FOR CHILLI LEAF CURL VIRUS

(51) International classification	:C12Q0001700000, C12Q0001688300, A01H0005080000, H01J0049000000, B01L0009000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)INDIAN COUNCIL OF AGRICULTURAL RESEARCH (ICAR)
Address of Applicant :KRISHI BHAWAN, 1 DR. RAJENDRA PRASAD ROAD NEW DELHI-110001 INDIA ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)ROY, ANIRBAN
Address of Applicant :DIVISION OF PLANT PATHOLOGY, ICAR-INDIAN AGRICULTURAL RESEARCH INSTITUTE NEW DELHI-110012 INDIA ---------- ----------
2)SINHA, PARIMAL
Address of Applicant :DIVISION OF PLANT PATHOLOGY, ICAR-INDIAN AGRICULTURAL RESEARCH INSTITUTE NEW DELHI-110012 INDIA ---------- ----------
3)MANDAL, BIKASH
Address of Applicant :DIVISION OF PLANT PATHOLOGY, ICAR-INDIAN AGRICULTURAL RESEARCH INSTITUTE NEW DELHI-110012 INDIA ---------- ----------
4)PAUL, SAMRAT
Address of Applicant :DIVISION OF PLANT PATHOLOGY, ICAR-INDIAN AGRICULTURAL RESEARCH INSTITUTE NEW DELHI-110012 INDIA ---------- ----------
5)EMMADI, VENU
Address of Applicant :DIVISION OF PLANT PATHOLOGY, ICAR-INDIAN AGRICULTURAL RESEARCH INSTITUTE NEW DELHI-110012 INDIA ---------- ----------
6)SAXENA, SHIPRA
Address of Applicant :DIVISION OF PLANT PATHOLOGY, ICAR-INDIAN AGRICULTURAL RESEARCH INSTITUTE NEW DELHI-110012 INDIA ---------- ----------

(57) Abstract :
A Rapid, Sensitive, Specific, And Field Deployable Diagnostic Process For Chilli Leaf Curl Virus Using Recombinase Polymerase Amplification Assisted Crispr Cas12a System The present invention relates to the set of primers and crRNA sequence designed for Recombinase Polymerase Amplification (RPA) and CRISPR Cas12a Assay respectively. The present invention describes the method of specific detection of the Chilli Leaf Curl Virus in crude leaf extract by combining the specificity of the crRNACas12a system with the sensitivity of the RPA system. The method of Chilli Leaf Curl Virus detection involves crude sap preparation, fluorescence-based readout, and lateral flow assay, for rapid and sensitive, on-the-spot detection of virus. The invention could serve as a prototype for upscaling on-the-spot detection of other begomoviruses in field conditions without the prior need for instruments.

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/06/2024
(21) Application No.202411048736 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A MULTIPLE INPUT MULTIPLE OUTPUT (MIMO) RADAR SYSTEM FOR THROUGH-WALL IMAGING (TWI)

(51) International classification	:H01Q0013080000, H01Q0021060000, G01S0013890000, G01S0013420000, H01L0023000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)INDIAN INSTITUTE OF TECHNOLOGY ROORKEE
Address of Applicant :Roorkee, Uttarakhand-247667, India Roorkee ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SINGH, Dharmendra
Address of Applicant :Indian Institute of Technology, Roorkee-247667 Uttarakhand, India Roorkee ---------- ----------
2)SINGH, Vineet
Address of Applicant :Indian Institute of Technology, Roorkee-247667 Uttarakhand, India Roorkee ---------- ----------
3)ANAND, Suman
Address of Applicant :Indian Institute of Technology, Roorkee-247667 Uttarakhand, India Roorkee ---------- ----------
4)MALI, Pravin
Address of Applicant :Indian Institute of Technology, Roorkee-247667 Uttarakhand, India Roorkee ---------- ----------
5)GOTRA, Shailza
Address of Applicant :Indian Institute of Technology, Roorkee-247667 Uttarakhand, India Roorkee ---------- ----------

(57) Abstract :
The present invention discloses a multiple input multiple output (MIMO) radar system (100) for through-wall imaging (TWI), comprising a plurality of Vivaldi antenna elements arranged in a 4x4 grid configuration. Each element serves as both a transmitter and receiver and is configured to receive one or more echo signals. The antenna elements are spaced at an optimized distance to maintain signal isolation. The proposed invention provides significant advantages in imaging and radar detection technologies, particularly through its use of a MIMO radar system (100) with the proposed Vivaldi antennas configuration.

No. of Pages : 29 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :10/02/2023
(21) Application No.202311008945 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM FOR INJECTING TREATED RAIN WATER DIRECTLY TO THE AQUIFERS.

(51) International classification :E03B3/02, E03F5/10
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SWAMI RAMA HIMALAYAN UNIVERSITY
Address of Applicant :Swami Rama Himalayan University; Swami Ram Nagar, Jolly Grant, Dehradun Uttarakhand India 248016 Dehradun ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Er. Harsh Pati Uniyal
Address of Applicant :Advisor, Swami Rama Himalayan University; Swami Ram Nagar, Jolly Grant, Dehradun Uttarakhand India 248016 Dehradun ---------- ----------

(57) Abstract :
The present invention relates to a system for rainwater harvesting and recharging by direct injection to aquifers through defunct or failed borewell/handpumps in a quickest and cheapest way.The invention discloses a system and method of recharging/replenish fresh clean filtered rain water to the exhausted/depleted underground aquifer from which water has been withdrawn by already installed India Mark II hand pumps having 5" dia MS casing pipe body and a 32mm dia GI riser pipe based hand pump assembly inside the casing pipe. The surrounding ground level of the casing pipe is excavated up to 1 meter and graded filter media with pebbles, charcoal and sand is filled in the excavated portion are provided in a MS fabricated chamber. At the bottom of graded filter media a few holes are done in the casing pipe to allow filtered water to enter inside the casing pipe and flow directly to recharge the depleted/dried up aquifer connected to it. Thus the rain water after filtration enters the hand pump body through these holes and straight away travels about 50-80 meter depth and filled in the aquifer within few minutes without any loss due to seepage or evaporation. (Figure 2)

No. of Pages : 28 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/08/2023
(21) Application No.202311054269 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : INNJAH WATER MOTOR PUMP

(51) International classification	:F04D0013060000, F24F0008117000, F02B0061040000, F04D0015020000, C02F0001320000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)CIED IUST FOUNDATION
Address of Applicant :CIED Building, Islamic University of Science and Technology Awantipora ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Jehangir Ahmad Dar
Address of Applicant :Jablipora, Bijbehora, Anantnog, Jammu & Kashmir Bijbehara ---------- ----------

(57) Abstract :
The InnJah Water Motor Pump is an innovative advancement in water pump technology designed to enhance performance, reliability, and energy efficiency. This invention addresses the critical issues of heat management and continuous operation in traditional water pumps. The pump features a groundbreaking heat dissipation system utilizing a helical tube filled with water, which circulates around the motor to rapidly extract and dissipate heat, reducing the motor's operating temperature at a rate 20 times faster than conventional air-cooled pumps. Additionally, the pump is equipped with an automatic cut-off feature that includes an electric sensor and associated circuitry. This sensor continuously monitors water flow and triggers an automatic shut-off switch when water is unavailable, preventing dry running and reducing unnecessary electricity consumption. The integrated design of the heat dissipation system and automatic cut-off feature ensures a longer motor lifespan, improved safety, and significant energy savings. The InnJah Water Motor Pump represents a comprehensive solution for various water pumping applications, offering a reliable, cost-effective, and environmentally friendly alternative to traditional pumps.

No. of Pages : 16 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/06/2024
(21) Application No.202411049650 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : PROCESS FOR PREPARATION OF A BIOFORMULATION FROM ORGANIC SOURCES

(51) International classification :C05F11/08, C05G3/00, C05G3/80, C12N1/20, C12N1/14, A01N63/22, A01N63/38
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Indian Council of Agricultural Research
Address of Applicant :Dr. Rajendra Prasad Road, Krishi Bhavan, New Delhi – 110001, India New Delhi ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Thanagavelu, R.
Address of Applicant :ICAR - National Research Centre for Banana, Thogamalai Road, Thayanur Post, Tiruchirapalli - 620 102, Tamil Nadu, India Tiruchirapalli ---------- ----------
2)Gopi, M.
Address of Applicant :ICAR - National Research Centre for Banana, Thogamalai Road, Thayanur Post, Tiruchirapalli - 620 102, Tamil Nadu, India Tiruchirapalli ---------- ----------
3)Arthee, R.
Address of Applicant :ICAR - National Research Centre for Banana, Thogamalai Road, Thayanur Post, Tiruchirapalli - 620 102, Tamil Nadu, India Tiruchirapalli ---------- ----------
4)Hadimani, Amaresh
Address of Applicant :ICAR - National Research Centre for Banana, Thogamalai Road, Thayanur Post, Tiruchirapalli - 620 102, Tamil Nadu, India Tiruchirapalli ---------- ----------
5)Sekar, T.
Address of Applicant :ICAR - National Research Centre for Banana, Thogamalai Road, Thayanur Post, Tiruchirapalli - 620 102, Tamil Nadu, India Tiruchirapalli ---------- ----------
6)Loganathan, M.
Address of Applicant :ICAR - National Research Centre for Banana, Thogamalai Road, Thayanur Post, Tiruchirapalli - 620 102, Tamil Nadu, India Tiruchirapalli ---------- ----------
7)Selvarajan, R.
Address of Applicant :ICAR - National Research Centre for Banana, Thogamalai Road, Thayanur Post, Tiruchirapalli - 620 102, Tamil Nadu, India Tiruchirapalli ---------- ----------

(57) Abstract :
The present invention discloses a process of preparation of a bioformulation by organic sources as raw materials for the rapid mass production and delivery of fungal and bacterial antagonists like rice boiled extract for the management of Fusarium wilt disease in banana. The process of the present invention is cost-efficient, time-efficient, environmentally and farmer friendly. Further, said bioformulation is easily applicable in to the soil by drenching or through drip irrigation or was mixed with other organic carriers like farm yard manure (FYM) and applied in the soil.

No. of Pages : 17 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/04/2023
(21) Application No.202311025483 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A NOVEL MIXTURE OF SOLUBILIZING AGENTS FOR THE SOLUBILIZATION OF POORLY SOLUBLE ACTIVE AGENTS

(51) International classification	:A61K0009000000, A61K0009140000, A61P0001040000, C07K0016280000, A61K0047140000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)AKUMS DRUGS & PHARMACEUTICALS LIMITED
Address of Applicant :304, Mohan Place, LSC, Block-C, Saraswati Vihar, New Delhi ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Jain Sanjeev
Address of Applicant :AKUMS DRUGS & PHARMACEUTICALS LIMITED Plot no. 131 to 133, Block – C, Mangolpuri Industrial Area, Phase – 1 (Adjoining CBSE Office), Delhi - 110083 New Delhi ---------- ----------

(57) Abstract :
The present invention provides a novel mixtures of solubilizing agent for the solubilization of poorly water soluble pharmaceutically active agents. Moreover, the present invention provides a pharmaceutical composition comprising poorly water soluble active agent and novel mixture of solubilizing agent.

No. of Pages : 26 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/06/2023
(21) Application No.202311037985 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYNERGISTIC PHARMACEUTICAL COMBINATIONS OF EUPHORBIA PROSTRATA

(51) International classification	:A61K0036470000, A61K0045060000, A61Q0011000000, A01H0006380000, A61K0008978900
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Mankind Pharma Ltd.
Address of Applicant :208, Okhla Industrial Estate Phase III New Delhi India - 110020 New Delhi ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)KHOBRAGADE, Kunal
Address of Applicant :D-205, 2nd Floor, Tower 2nd, Plot No. R 1, Seawood Railway Station, Sector 40, Seawood Grand Central, Nerul Node, Navi Mumbai Maharashtra - 400706 Navi Mumbai ---------- ----------
2)BORKAR, Nilesh
Address of Applicant :D-205, 2nd Floor, Tower 2nd, Plot No. R 1, Seawood Railway Station, Sector 40, Seawood Grand Central, Nerul Node, Navi Mumbai Maharashtra - 400706 Navi Mumbai ---------- ----------
3)KUMAR, Anil
Address of Applicant :191-E Sector 4-II IMT, Manesar, Gurugram -122050 Gurugram ---------- ----------

(57) Abstract :
The present invention provides a synergistic pharmaceutical combination comprising a topical composition comprising Euphorbia Prostrata and an oral composition comprising Euphorbia Prostrata, wherein said topical and oral compositions comprises one or more pharmaceutical acceptable excipients and optionally one or more other active agent.

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :08/05/2024

(21) Application No.202411036461 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : EXPLORING MACHINE LEARNING APPROACHES FOR AUTOMATED COVID-19 DETECTION AND FORECASTING

(51) International classification :G06N0020000000, H04L0041160000, H04W0004029000, G16H0050800000, G06N0003080000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Prof Shafqat Alauddin
Address of Applicant :Professor,Department of Chemistry,Shibli National College,Azamgarh-276001,U.P. Azamgarh ---------- ----------
2)Dr. K.Indhumathi
3)S. Pandarinathan
4)Rantham Subramaniam Venkatesan
5)Dr. Manju Hajarilal Pardeshi
6)Mrs.R. Madhumitha
7)Dnyaneshwar Buwaji Khamankar
8)Dr. B. Guravaiah
9)Dr.N.Nandhini
10)Anthony Savio Herminio Da Piedade Fernandes
11)Sindhu K
12)Surya Pratap Singh
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Prof Shafqat Alauddin
Address of Applicant :Professor,Department of Chemistry,Shibli National College,Azamgarh-276001,U.P. Azamgarh ---------- ----------
2)Dr. K.Indhumathi
Address of Applicant :Assistant Professor/Department of Computer Applications, Kalasalingam Academy of Research and Education, Krishnan koil,Srivilliputhur, Tamil Nadu 626126 Srivilliputhur ---------- ----------
3)S. Pandarinathan
Address of Applicant :Assistant Professor (Biochemistry) ICAR- Krishi Vigyan Kendra, Virinjipuram, Vellore District- 632 104 Virinjipuram ---------- ----------
4)Rantham Subramaniam Venkatesan
Address of Applicant :Principal, Lakshmi Bangaru Arts and Science College, Pallipetai,Melmaruvathur - 603319 Chengalpet ---------- ----------
5)Dr. Manju Hajarilal Pardeshi
Address of Applicant :Assistant Professor, Dept. of Zoology, Arts Commerce & Science College Maregaon dist. Yavatmal Maregaon ---------- ----------
6)Mrs.R. Madhumitha
Address of Applicant :Assistant Professor, Department of ECE, St.Joseph's College Of Engineering, Chennai-600119 Chennai ---------- ----------
7)Dnyaneshwar Buwaji Khamankar
Address of Applicant :Asistant Professor And Head Department Of Zoology Lokmanya Tilak Mahavidyalaya Wani 445304 Wani ---------- ----------
8)Dr. B. Guravaiah
Address of Applicant :Assistant professor/Mathematics and StatisticsVignan's Foundation for Science, Technology & Research (Deemed to be University), Guntur, 522213 Guntur ---------- ----------
9)Dr.N.Nandhini
Address of Applicant :Assistant professor/ Department of Computer Applications, SNS College of Technology , Coimbatore-641035 Saravanampatti ---------- ----------
10)Anthony Savio Herminio Da Piedade Fernandes
Address of Applicant :Founder Owner, Trading Equations, 54/C, Xell, Bastora, Bardez, Goa (403507) Bastora ---------- ----------
11)Sindhu K
Address of Applicant :Assistant Professor/ MCA, M. Kumarasamy College of Engineering, Karur, 639113 Karur ---------- ----------
12)Surya Pratap Singh
Address of Applicant :RESEARCH SCIENTIST-1(B) MRU-Uttar Pradesh University of Medical Sciences.Etawah Pin code:- 206130. Etawah ---------- ----------

(57) Abstract :
Exploring Machine Learning Approaches for Automated COVID-19 Detection and Forecasting is the proposed invention. The proposed invention focuses on understanding how machine learning techniques can help in detection and forecasting of pandemic diseases. The invention focuses on analysing the parameters of Automated COVID-19 Detection and Forecasting using algorithms of machine learning.

No. of Pages : 12 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :31/05/2024

(21) Application No.202411042653 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DEVELOPMENT OF ECONOMICAL ONE-POT METHOD FOR THE SYNTHESIS OF NOVEL FERROCENYL-THIOETHERS

(51) International classification :C07F17/02
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Malaviya National Institute of Technology (MNIT) Jaipur
Address of Applicant :Malaviya National Institute of Technology Jaipur, LJN Marg, Jaipur Rajasthan-302017, India. Jaipur ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Meena Nemiwal
Address of Applicant :TR-14 Department of Chemistry, Malaviya National Institute of Technology Jaipur, Rajasthan India-302017 Jaipur ---------- ----------
2)Dr. Raj Kumar Joshi
Address of Applicant :Organometallic and Catalysis Lab,TR-16, Department of Chemistry, Department of Chemistry, Malaviya National Institute of Technology Jaipur Jaipur ---------- ----------
3)Vijesh Tomar
Address of Applicant :Organometallic and Catalysis Lab,TR-16, Department of Chemistry, Malaviya National Institute of Technology Jaipur, Rajasthan, India-302017 Jaipur ---------- ----------
4)Deepak Sharma
Address of Applicant :Organometallic and Catalysis Lab,TR-16, Department of Chemistry, Malaviya National Institute of Technology Jaipur, Rajasthan, India-302017 Jaipur ---------- ----------

(57) Abstract :
The present invention introduces a cost-effective method for synthesizing ferrocenyl-thioethers, specifically ferrocenyl-thioether acrylaldehyde and ferrocenyl-thioether acrylonitrile. The reaction achieves complete product formation within 4 hours. After purification, the final product is characterized using different spectroscopic techniques. The development of this synthetic methodology represents a significant step forward in the synthesis of ferrocenyl thioethers, offering a sustainable, efficient, and versatile approach that holds promise for both academic research and industrial applications in fields such as materials science, catalysis, and organic synthesis.

No. of Pages : 22 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2024
(21) Application No.202411050487 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A BIOMETRIC-ENABLED VOTING SYSTEM WITH MULTIFACTOR AUTHENTICATION

(51) International classification :G07C0013000000, G07C0013020000, G06Q0050000000, G06Q0050260000, G07C0009370000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)RAJKIYA ENGINEERING COLLEGE BANDA
Address of Applicant :RAJKIYA ENGINEERING COLLEGE BANDA, ATARRA, DIST-BANDA, U.P.-210201 ---------- ----------
2)MR. MRATYUNJAY SINGH
3)DR. BINDESHWAR SINGH
4)MR. SARVESH KUMAR
5)MR. ASHISH TRIPATHI
6)PROF. SHEO PRASAD SHUKLA
7)MR. ANURAG GUPTA
8)MR. ABHISHEK MAITHIL
9)MR. KRISHNA MOHAN CHAUDHARY
10)MR. NIKHIL GAUTAM
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MR. MRATYUNJAY SINGH
Address of Applicant :ASSISTANT PROFESSOR, ELECTRICAL ENGINEERING DEPARTMENT, RAJKIYA ENGINEERING COLLEGE BANDA-210201 ---------- ----------
2)DR. BINDESHWAR SINGH
Address of Applicant :ASSOCIATE PROFESSOR, ELECTRICAL ENGINEERING DEPARTMENT, KNIT SULTANPUR-228118 ---------- ----------
3)MR. SARVESH KUMAR
Address of Applicant :ASSISTANT PROFESSOR, ELECTRICAL ENGINEERING DEPARTMENT, RAJKIYA ENGINEERING COLLEGE BANDA-210201 ---------- ----------
4)MR. ASHISH TRIPATHI
Address of Applicant :ASSISTANT PROFESSOR, ELECTRICAL ENGINEERING DEPARTMENT, RAJKIYA ENGINEERING COLLEGE BANDA-210201 ---------- ----------
5)PROF. SHEO PRASAD SHUKLA
Address of Applicant :DIRECTOR, RAJKIYA ENGINEERING COLLEGE BANDA-210201 ---------- ----------
6)MR. ANURAG GUPTA
Address of Applicant :RAJKIYA ENGINEERING COLLEGE BANDA-210201 ---------- ----------
7)MR. ABHISHEK MAITHIL
Address of Applicant :RAJKIYA ENGINEERING COLLEGE BANDA-210201 ---------- ----------
8)MR. KRISHNA MOHAN CHAUDHARY
Address of Applicant :RAJKIYA ENGINEERING COLLEGE BANDA-210201 ---------- ----------
9)MR. NIKHIL GAUTAM
Address of Applicant :RAJKIYA ENGINEERING COLLEGE BANDA-210201 ---------- ----------

(57) Abstract :
Disclosed herein is a biometric enabled voting system (100) comprising a monitoring box (102). The system (100) comprising a ballot box (104) serially connected to the monitoring box (102) and configured to perform voter registration and enables voters to cast their votes during the election process. The system (100) comprising a biometric identification module (106) installed on the ballot box (104) and including a fingerprint scanner (108) and an iris scanner (110). The system (100) comprising an integrated memory unit (112) installed in the ballot box (104) and configured to securely store fingerprints and iris pattern of the potential voters for verification. The system (100) comprising an integrated scanner (114) operationally coupled to the ballot box (104) and configured to scan and capture know your customer (KYC) documents. The system (100) comprising an integrated display unit (116) installed on the ballot box (104) and configured to display real-time voting data.

No. of Pages : 33 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/06/2024
(21) Application No.202411049654 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A METHOD OF PREPARATION OF A BIOFORMULATION FROM ORGANIC SOURCES

(51) International classification :C12N1/14, A01N63/38, C05F11/02, C05F11/08, C05G3/00, C05G3/80
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Indian Council of Agricultural Research
Address of Applicant :Dr. Rajendra Prasad Road, Krishi Bhavan, New Delhi – 110001, India New Delhi ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Thanagavelu, R.
Address of Applicant :ICAR - National Research Centre for Banana, Thogamalai Road, Thayanur Post, Tiruchirapalli - 620 102, Tamil Nadu, India Tiruchirapalli ---------- ----------
2)Gopi, M.
Address of Applicant :ICAR - National Research Centre for Banana, Thogamalai Road, Thayanur Post, Tiruchirapalli - 620 102, Tamil Nadu, India Tiruchirapalli ---------- ----------
3)Hadimani, Amaresh
Address of Applicant :ICAR - National Research Centre for Banana, Thogamalai Road, Thayanur Post, Tiruchirapalli - 620 102, Tamil Nadu, India Tiruchirapalli ---------- ----------
4)Loganathan, M.
Address of Applicant :ICAR - National Research Centre for Banana, Thogamalai Road, Thayanur Post, Tiruchirapalli - 620 102, Tamil Nadu, India Tiruchirapalli ---------- ----------
5)Selvarajan, R.
Address of Applicant :ICAR - National Research Centre for Banana, Thogamalai Road, Thayanur Post, Tiruchirapalli - 620 102, Tamil Nadu, India Tiruchirapalli ---------- ----------

(57) Abstract :
The present invention relates to a method for preparing a bioformulation comprising of organic waste sources. Particularly, the bioformulation includes readily available organic waste sources such as farm yard manure (FYM), rice husk ash, rice bran powder, rice chaffy grain and soy bean paste along with water and a mother culture of Trichoderma spp. The method of preparation of said bioformulation is cost-friendly, environment and farmer friendly, supports growth of beneficial microbes in the soil rhizosphere, highly effective in controlling the Fusarium wilt disease in banana and promotes plant growth and yield. The bioformulation prepared by this method is capable of being stored for 6-8 months at room temperature.

No. of Pages : 23 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/06/2024

(21) Application No.202411049901 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : NATURAL SHAMPOO POWDER COMPOSITION

(51) International classification :A61K36/31, A61K36/77, A61K36/48, A61K8/9789, A61K8/64, A61K8/67, A61Q5/02
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Ajay Kumar Shukla
Address of Applicant :Assistant Professor, Institute of Pharmacy, Dr. Rammanohar Lohia Avadh University, Ayodhya, Uttar Pradesh Pin:224001 India Ayodhya ---------- ----------
2)Vimal Kumar Yadav
3)Kunal Agam Kanaujia
4)Vishnu Prasad Yadav
5)Vineet Bharti
6)Shailendra Kumar
7)Anil Kumar
8)Sindhu Singh
9)Pushpendra Kumar
10)Dr. Jayanti Tiwari
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Ajay Kumar Shukla
Address of Applicant :Assistant Professor, Institute of Pharmacy, Dr. Rammanohar Lohia Avadh University, Ayodhya, Uttar Pradesh Pin:224001 India Ayodhya ---------- ----------
2)Vimal Kumar Yadav
Address of Applicant :Assistant Professor, Institute of Pharmacy, Dr. Rammanohar Lohia Avadh University, Ayodhya, Uttar Pradesh Pin:224001 India Ayodhya ---------- ----------
3)Kunal Agam Kanaujia
Address of Applicant :Assistant Professor, Institute of Pharmacy, Dr. Rammanohar Lohia Avadh University, Ayodhya, Uttar Pradesh Pin:224001 India Ayodhya ---------- ----------
4)Vishnu Prasad Yadav
Address of Applicant :Assistant Professor, Institute of Pharmacy, Dr. Rammanohar Lohia Avadh University, Ayodhya, Uttar Pradesh Pin:224001 India Ayodhya ---------- ----------
5)Vineet Bharti
Address of Applicant :Assistant Professor, Institute of Pharmacy, Dr. Rammanohar Lohia Avadh University, Ayodhya, Uttar Pradesh Pin:224001 India Ayodhya ---------- ----------
6)Shailendra Kumar
Address of Applicant :Professor, Department of Microbiology, Dr. Rammanohar Lohia Avadh University, Ayodhya, Uttar Pradesh Pin:224001 India Ayodhya ---------- ----------
7)Anil Kumar
Address of Applicant :Assistant Professor, Department of Physics, Dr. Rammanohar Lohia Avadh University, Ayodhya, Uttar Pradesh Pin:224001 India Ayodhya ---------- ----------
8)Sindhu Singh
Address of Applicant :Assistant Professor, Department of Physics, Dr. Rammanohar Lohia Avadh University, Ayodhya, Uttar Pradesh Pin:224001 India Ayodhya ---------- ----------
9)Pushpendra Kumar
Address of Applicant :Faculty of Pharmacy, Uttar Pradesh University of Medical Sciences, Saifai Etawa, Uttar Pradesh, Pin:206130 India Etawa ---------- ----------
10)Dr. Jayanti Tiwari
Address of Applicant :Associate Professor, B.Pharmacy, GGITS, Jabalpur, Madhya Pradesh Pin:482003 India Jabalpur ---------- ----------

(57) Abstract :
The present invention provides a herbal shampoo powder that is safe and effective without using any chemicals, all while focusing on natural components. It helps to remove oil, debris, and dandruff while strengthening, darkening, and promoting hair growth. In addition, it functions as a conditioning agent and does all of these things without harming or compromising hair. Based on both scientific rationale and conventional use, the herbs reetha, shikakai, and mustard cake were chosen to create the herbal shampoo powder. The present invention further provides a process for preparing natural shampoo powder and applications in hair care.

No. of Pages : 26 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/06/2024
(21) Application No.202411050007 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : PROCESS OF MAKING UPCYCLED TEXTILE FOR CLOTHING AND LIFESTYLE

(51) International classification :D04H1/4266, D06N3/00, D06N3/04, D21H17/01, D21H17/02, D21H23/22, D21H27/06
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Namuna wearable art Private Limited
Address of Applicant :35, old cannaught place, chakrata road, Dehradun Dehradun ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Jyoti Panwar
Address of Applicant :118, lane C5, Ashima Vihar, Turner road, clement town, Dehradun, Uttarakhand, 248002 Dehradun ---------- ----------

(57) Abstract :
The present invention relates to process for making sustainable garments from upcycled materials tailored for high-end fashion artistic work. The resulting garment represents a harmonious blend of innovative design, artistic creativity, and environmental sustainability, appealing to both environmentally conscious consumers and high-end fashion enthusiasts. These garments can be used for fashion industries as well as paintings.

No. of Pages : 16 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/07/2024
(21) Application No.202411051888 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AI-DRIVEN WEB-BASED HEALTHCARE PLATFORM WITH REAL-TIME DIAGNOSTICS AND INTEGRATED SERVICES

(51) International classification :G06F16/95, G16H50/20, G16H80/00, G06F40/30, G06Q30/0601, G06N20/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Swarnim Seth
Address of Applicant :G-43, II Floor, Laxmi Nagar, Delhi-110092, India Laxmi Nagar ---------- ----------
2)Shivangi Pachauri
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Swarnim Seth
Address of Applicant :G-43, II Floor, Laxmi Nagar, Delhi-110092, India Laxmi Nagar ---------- ----------
2)Shivangi Pachauri
Address of Applicant :1/1946, Motiram Road, Ram Nagar, Shahdara, Delhi-110032, India Shahdara ---------- ----------

(57) Abstract :
The invention relates to a web-based healthcare platform featuring an Artificial Intelligence (AI)-driven doctor that employs Natural Language Processing (NLP) techniques to understand and analyze user symptoms, providing real-time diagnoses and home remedies. Users interact with the AI-driven doctor via a conversational interface. The platform includes a video consultation module for booking and conducting real-time video consultations with specialized doctors, an e-commerce module for purchasing prescribed medicines directly and facilitating their delivery, and a scheduling module for booking and coordinating home-based lab tests with partnered laboratories. Additionally, the platform offers a diet chart generation system to create personalized diet plans based on doctor recommendations and user health profiles. It also integrates with wearable devices for continuous health monitoring and real-time data synchronization.

No. of Pages : 26 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2024
(21) Application No.202411050644 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN AUTOMATIC CLEANING APPARATUS FOR AN AIR CONDITIONER

(51) International classification	:G01N0035000000, H01H0035180000, A47L0007000000, A47L0011400000, G01N0035100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)SHARDA UNIVERSITY
Address of Applicant :Plot No. 32-34, Knowledge Park 3, Greater Noida, 201310, Uttar Pradesh (UP), India (IN) Greater Noida ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr. Gajendra Ahirwar
Address of Applicant :Department of Civil Engineering, Sharda University, Plot no. 32-34 Knowledge park 3, Greater Noida, 201310, Uttar Pradesh (UP), India (IN) Greater Noida ---------- ----------
2)Nishant Kumar
Address of Applicant :Department of Civil Engineering, Sharda University, Plot no. 32-34 Knowledge park 3, Greater Noida, 201310, Uttar Pradesh (UP), India (IN) Greater Noida ---------- ----------
3)Sunil Kumar
Address of Applicant :Department of Civil Engineering, Sharda University, Plot no. 32-34 Knowledge park 3, Greater Noida, 201310, Uttar Pradesh (UP), India (IN) Greater Noida ---------- ----------

(57) Abstract :
An automated cleaning apparatus (100) for an air conditioner (AC) unit (200) comprising a storage tank (102) fluidically coupled to a drain outlet of the AC unit to collect fluid and a panel (104) equipped with a plurality of nozzles (106). Additionally, the apparatus (100) includes a pump (108) fluidically coupled to the storage tank (102) to draw the fluid and the plurality of nozzles (106). Further, the apparatus (100) includes a control unit (110) operatively coupled to a float switch (112) and the pump (108) via a relay circuit (114). The control unit (110) is configured to activate the pump (108) to supply fluid to the plurality of nozzles (106) when the fluid level in the storage tank (102) reaches a predefined threshold and to deactivate the pump (108) when the float switch (112) contacts a bottom surface of the storage tank (102).

No. of Pages : 23 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202411054030 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ROLE OF SOCIAL LEARNING IN UNDERSTANDING ENVIRONMENTALLY SUSTAINABLE CONSUMPTION BEHAVIOR

(51) International classification	:G09B0019000000, G06Q0010100000, G09B0007020000, G09B0007000000, G09B0005020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Manipal University Jaipur
Address of Applicant :Manipal University Jaipur, Off Jaipur-Ajmer Expressway, Post: Dehmi Kalan, Jaipur-303007, Rajasthan, India Jaipur ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Meenakshi Sharma
Address of Applicant :Department of Business Administration, School of Business & Commerce, Faculty of Management & Commerce, Manipal University Jaipur, Dehmi Kalan, Near GVK Toll Plaza, Jaipur, Rajasthan 303007 Jaipur ---------- ----------
2)Dr Nishu Gupta
Address of Applicant :Department of Business Administration, School of Business & Commerce, Faculty of Management & Commerce, Manipal University Jaipur, Dehmi Kalan, Near GVK Toll Plaza, Jaipur, Rajasthan 303007 Jaipur ---------- ----------

(57) Abstract :
The present invention relates to a method to understand the environmentally sustainable consumption behavior using social learning. Social Learning (SL) takes place when conflicting interests, real-world norms, and values come together in a setting that promotes learning. The following traits are linked to learning: (1) It's a process that affects how individuals feel, think, and behave.; (2) All throughout their lives, people learn from their experiences; (3) Both conscious and subconscious learning occurs. A person's or a group's ability to contribute productively to the resolution of new societal and personal problems can be enhanced by the development of SL values, knowledge, and action competence. Since it accepts the idea that observations and attendants' thoughts can control behavior, SL theory in conjunction with environmental sustainable development aids in explaining and influencing the complex consumption behavior. By utilizing ecologically sustainable development and SL theory as a foundation for curriculum, consumer educators can “strive to raise their students' emotional states, critically assess their thought patterns and self-beliefs (personal factors), improve their academic performance and self-control (behavior), and change classroom and school policies that might be detrimental to students' learning (environmental factor)”

No. of Pages : 8 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :16/07/2024

(21) Application No.202411054120 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : IMPROVED DECISION SUPPORT SYSTEM FOR URBAN AIR QUALITY CONTROL AND MANAGEMENT USING GRADIENT BOOSTING MACHINES AND XGBOOST

(51) International classification	:G06N0020000000, G01N0033000000, G06N0005000000, G06Q0050260000, H04L0012280000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Manipal University Jaipur
Address of Applicant :Manipal University Jaipur, Off Jaipur-Ajmer Expressway, Post: Dehmi Kalan, Jaipur-303007, Rajasthan, India Jaipur ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Sunil Kumar
Address of Applicant :Dept of IoT & Intelligent System, Manipal University Jaipur Jaipur ---------- ----------
2)Dr. Susheela Vishnoi
Address of Applicant :Dept of Computer Science & Engineering, Manipal University Jaipur Jaipur ---------- ----------

(57) Abstract :
The present invention relates to an improved decision support system (DSS) for controlling and managing urban air quality using state-of-the-art machine learning methods, particularly eXtreme Gradient Boosting (XGBoost) and Gradient Boosting Machines (GBM).Urban planners, environmental agencies, and lawmakers should expect accurate real-time air quality projections and useful insights from the system. Proactive steps to reduce air pollution are made possible by the integration of GBM and XGBoost, which improves the system's predicted accuracy and efficiency.

No. of Pages : 9 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024
(21) Application No.202411054473 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : NOVEL N-ETHANAMINE-11-AZAARTEMISININ AND ITS AMIDE DERIVATIVES, THEIR PROCESS OF PREPARATION AND ANTIMALARIAL COMPOSITIONS COMPRISING THE SAME

(51) International classification :A61P0025000000, C07D0231140000, C07D0487040000, A61P0025160000, A61P0043000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Banasthali Vidyapith
Address of Applicant :Banasthali Vidyapith, Banasthali, Newai, Tonk, Rajasthan – 304022 India Newai ---------- ----------
2)Prof. Jaya Dwivedi
3)Dr. Ved Prakash Verma
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Prof. Jaya Dwivedi
Address of Applicant :Department of Chemistry, Banasthali Vidyapith, Banasthali, Newai, Tonk, Rajasthan – 304022 India Newai ---------- ----------
2)Dr. Ved Prakash Verma
Address of Applicant :Department of Education in Science and Mathematics (DESM), Regional Institute of Education, Bhubaneshwar 751022, Orissa, India Bhubaneshwar ---------- ----------
3)Komal Rathi
Address of Applicant :Department of Chemistry, Banasthali Vidyapith, Banasthali, Newai, Tonk, Rajasthan – 304022, India Newai ---------- ----------
4)Aashima Gupta
Address of Applicant :Special Centre for Molecular Medicine, Jawaharlal Nehru University, New Delhi - 110067, India Delhi ---------- ----------
5)Shailja Singh
Address of Applicant :Special Centre for Molecular Medicine, Jawaharlal Nehru University, New Delhi, 110067, India Delhi ---------- ----------
6)Prakash Chandra Agarwal
Address of Applicant :Department of Education in Science and Mathematics (DESM), Regional Institute of Education, Bhubaneshwar 751022, Orissa, India Bhubaneshwar ---------- ----------

(57) Abstract :
Novel N-ethanamine-11-azaartemisinin and its amide derivatives, their process of preparation and antimalarial compositions comprising the same The present invention discloses novel N-ethanamine-11-azaartemisinin compounds represented by formula I and its salts. R is selected from a H; -C(O)R1, where R1 is (a) 6-14-membered substituted or unsubstituted aryl moiety selected from phenyl, -naphthyl, -biphenyl; (b) 5-14-membered substituted or unsubstituted heteroaryl moiety selected from -pyridinyl, -thienyl, -indolyl, -indolinyl; (c) 3-6-membered substituted or unsubstituted cycloalkyl moiety selected from cyclopropyl, -cyclobutyl, -cyclopentyl, -cyclohexyl; (d) substituted or unsubstituted, linear or branched, saturated or unsaturated, -C1-C6- alkyl moiety selected from -methyl, -ethyl, n -propyl, iso-propyl, -n-butyl, -iso-butyl, -n-pentyl, -iso-pentyl, -neo-pentyl, -n-hexyl; -ethenyl, -propenyl, -butenyl, -pentenyl, -hexenyl; wherein substitution is with one or more moieties selected from but not limited to halogen, amino, nitro, cyano, hydroxy, alkoxy, thio, alkylthio group. The invention also discloses the process of preparing novel N-ethanamine-11-azaartemisinin and its amide derivatives and antimalarial compositions comprising the same.

No. of Pages : 26 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024
(21) Application No.202411054483 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR HUMAN RESOURCE VISUALIZATION PROCESSING

(51) International classification	:G06Q0010100000, G06Q0010060000, G06F0009500000, H04L0047700000, H04L0041220000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Manipal University Jaipur
Address of Applicant :Manipal University Jaipur, Off Jaipur-Ajmer Expressway, Post: Dehmi Kalan, Jaipur-303007, Rajasthan, India Jaipur ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Shweta Bagdi
Address of Applicant :Department of Business Administration, School of Business and Commerce, Manipal University Jaipur, Jaipur, Rajasthan, India Jaipur ---------- ----------
2)Dr. Sonal Sidana
Address of Applicant :Department of Business Administration, School of Business and Commerce, Manipal University Jaipur, Jaipur, Rajasthan, India Jaipur ---------- ----------

(57) Abstract :
The present invention relates to a method for human resource visualization processing. The method comprises: obtaining a request for human resource visualization that includes employee ID data; obtaining human resource data of the employees based on the visualization request; calculating the position capacity coefficient of the employee using the obtained human resource data; and visually representing the position capacity coefficient of the employee. This method effectively distributes work tasks within an enterprise, mitigating issues associated with inefficient allocation of human resources. Additionally, the invention provides a human resource visualization processing system to implement the method.

No. of Pages : 8 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024
(21) Application No.202411054486 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : FORENSIC ACCOUNTING MEETS AI: REVOLUTIONIZING FINANCIAL FRAUD DETECTION

(51) International classification	:G06Q0040000000, G06Q0010060000, G06Q0030000000, C08G0018670000, G06Q0020400000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Manipal University Jaipur
Address of Applicant :Manipal University Jaipur, Off Jaipur-Ajmer Expressway, Post: Dehmi Kalan, Jaipur-303007, Rajasthan, India Jaipur ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Aanyaa Chaudhary
Address of Applicant :TAPMI School of Business Manipal University Jaipur Jaipur-Ajmer Express Highway, Dehmi Kalan, Near GVK Toll Plaza, Jaipur, Rajasthan 303007 Jaipur ---------- ----------
2)Dr Umesh Solanki
Address of Applicant :TAPMI School of Business Manipal University Jaipur Jaipur-Ajmer Express Highway, Dehmi Kalan, Near GVK Toll Plaza, Jaipur, Rajasthan 303007 Jaipur ---------- ----------
3)CA(Dr) Kamakshi Mehta
Address of Applicant :TAPMI School of Business Manipal University Jaipur Jaipur-Ajmer Express Highway, Dehmi Kalan, Near GVK Toll Plaza, Jaipur, Rajasthan 303007 Jaipur ---------- ----------

(57) Abstract :
The present invention focuses on identifying the mediating role of AI tools in forensic accounting and the detection of financial fraud. By developing a research model utilizing structural equation modeling, the invention aims to assess the impact of forensic accounting on the detection of financial fraud. In recent times, the financial sector has experienced numerous market scams, raising significant concerns among professionals and auditors responsible for maintaining transparency and accuracy in daily auditing activities. On a global scale, the integration of artificial intelligence (AI) has markedly enhanced the capabilities of machines when combined with human expertise, thereby augmenting traditional methods for addressing financial information manipulation. The findings will aid professionals in understanding the advantages of AI technology within the forensic accounting field, facilitating more effective fraud prevention.

No. of Pages : 7 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :17/07/2024

(21) Application No.202411054730 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : AI AND NLP-BASED SYSTEMS USING BERT, LSTM AND DATA ANALYTICS METHODS FOR EARLY DETECTION OF ALZHEIMER'S DISEASE THROUGH HUMAN BEHAVIOUR ANALYSIS AND INTEGRATION WITH HR MANAGEMENT MODELS

(51) International classification :G06Q0010060000, G06N0003040000, G06Q0010100000, G06N0020000000, A61B0005000000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)JAGENDRA SINGH
Address of Applicant :FF2, Sheetal Apartment, Chiranjeev Vihar ---------- ----------
2)Dr Bhupesh Goyal
3)A Naga Lakshman Kumar
4)Dr. Ashwin Ankar
5)Dr Arun Kumar Singh
6)T. Dhivya
7)Sunita
8)DN Murali Krishna Rao
9)Chandra Prakash Katare Omprakash
10)Bhavani Viyyapu
11)Rajeswari Katare
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)JAGENDRA SINGH
Address of Applicant :FF2, Sheetal Apartment, Chiranjeev Vihar ---------- ----------
2)Dr Bhupesh Goyal
Address of Applicant :Professor, Department of Allied and Healthcare Sciences, Vivekananda Global university, Jaipur Jaipur ---------- ----------
3)A Naga Lakshman Kumar
Address of Applicant :Associate Professor, Department of MCA, Swarnandhra College of Engineering and Technology, West Godavari West Godavari ---------- ----------
4)Dr. Ashwin Ankar
Address of Applicant :Assistant Professor, Department of Science and Technology, G H Raisoni College of Arts, Commerce and Science, Nagpur Nagpur ---------- ----------
5)Dr Arun Kumar Singh
Address of Applicant :Professor, Department of Computer Application, University Institute of Computing, Chandigarh University, Mohali Mohali ---------- ----------
6)T. Dhivya
Address of Applicant :Assistant Professor, Department of Artificial Intelligence and Data Science, Velalar College of Engineering and Technology, Erode Erode ---------- ----------
7)Sunita
Address of Applicant :Assistant Professor, Department of Information Science And Engineering, Dayanand Sagar Academy Of Technology And Management, Bangalore Bangalore ---------- ----------
8)DN Murali Krishna Rao
Address of Applicant :Research Scholar, JNTUH, Hyderabad Hyderabad ---------- ----------
9)Chandra Prakash Katare Omprakash
Address of Applicant :Research Scholar, Osmania University, Secunderabad Secunderabad ---------- ----------
10)Bhavani Viyyapu
Address of Applicant :Research Scholar, JNTUK, Vijayawada Vijayawada ---------- ----------
11)Rajeswari Katare
Address of Applicant :Research Scholar, Osmania University, Secunderabad Secunderabad ---------- ----------

(57) Abstract :
The present invention relates to an innovative AI and NLP-based system designed for the early detection of Alzheimer's disease through human behavior analysis. Utilizing advanced models such as BERT (Bidirectional Encoder Representations from Transformers), LSTM (Long Short-Term Memory networks), and comprehensive data analytics methods, this system offers a novel approach to identifying early signs of Alzheimer's disease. The core of the system is its ability to analyze vast amounts of behavioral data, including speech patterns, daily activity logs, and other relevant human interactions. By integrating natural language processing (NLP) capabilities with robust AI algorithms, the system can detect subtle changes in behavior that may indicate the onset of Alzheimer's disease. The use of BERT allows for an in-depth understanding of linguistic nuances, while LSTM networks excel at recognizing temporal patterns in the data, providing a powerful combination for early diagnosis. Moreover, this system seamlessly integrates with human resource (HR) management models, offering a dual functionality. It can monitor employees' cognitive health, ensuring early intervention and support within workplace environments. The integration with HR management models enables organizations to maintain a healthy workforce, improve productivity, and reduce healthcare costs through proactive measures. Cloud-based solutions enhance the system's scalability and accessibility, allowing for real-time data processing and analysis. The integration of cloud technologies ensures that the system can handle large datasets and provide timely insights to healthcare professionals and HR managers. This invention promises significant advancements in both healthcare and corporate wellness, providing a comprehensive tool for the early detection of Alzheimer's disease and the promotion of cognitive health in professional settings.

No. of Pages : 6 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024

(21) Application No.202411054747 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A NOVEL PIEZOELECTRIC MATERIAL-BASED EYE-BLINK SENSOR SYSTEM FORWIRELESS BIONIC CONTROL

(51) International classification	:A61B0005000000, G01L0001160000, H02N0002180000, G11B0020100000, H05K0001020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)MANIPAL UNIVERSITY JAIPUR
Address of Applicant :Dehmi Kalan, Off Jaipur-Ajmer Expressway, Jaipur-303007, Rajasthan, India ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Mrinmoy Misra
Address of Applicant :Assistant Professor (Senior), Department of Mechatronics, Manipal University Jaipur, Dehmi Kalan, Off Jaipur-Ajmer Expressway, Jaipur-303007, Rajasthan, India ---------- ----------
2)Dr Shambo Roy Chowdhury
Address of Applicant :Assistant Professor, Department of Mechatronics, Manipal University Jaipur, Dehmi Kalan, Off Jaipur-Ajmer Expressway, Jaipur- 303007, Rajasthan, India ---------- ----------
3)Yatin Kohli
Address of Applicant :Student, Department of Mechatronics, Manipal University Jaipur, Dehmi Kalan, Off Jaipur-Ajmer Expressway, Jaipur- 303007, Rajasthan, India ---------- ----------
4)Darshan Kapur
Address of Applicant :Student, Department of Mechatronics, Manipal University Jaipur, Dehmi Kalan, Off Jaipur-Ajmer Expressway, Jaipur- 303007, Rajasthan, India ---------- ----------
5)Dr Sudip Mondal
Address of Applicant :Assistant Professor, Pukyong National University ---------- ----------
6)Dr Junghwan Oh
Address of Applicant :Professor, Department of Biomedical Engineering, Pukyong National University ---------- ----------

(57) Abstract :
The present invention relates to a novel piezoelectric material-based eye-blink sensor system (100) for wireless bionic control. The system (100) comprises a piezoelectric eye-blink sensor module, a flexible substrate, an energy management unit, a computation unit, and a wireless communication module. The piezoelectric eye-blink sensor module, configured to generate an electrical signal in response to mechanical stress. The flexible substrate allowing direct attachment to the skin. The energy management unit integrated with the piezoelectric sensor module, designed to harvest energy from the generated electrical signals to power the system autonomously. The computation unit configured to process the electrical signals to detect eye-blink patterns using an embedded algorithm. The wireless communication module configured to transmit processed data to an external control unit for wireless bionic control applications

No. of Pages : 14 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024
(21) Application No.202411054753 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A METHOD FOR EXPLORING THE DYNAMICS BETWEEN EMPLOYEE EXPERIENCE, EMPLOYEE ENGAGEMENT AND EMPLOYEE TURNOVER INTENTION

(51) International classification	:G06Q0010100000, G06Q0010060000, A61P0017100000, A61K0031203000, G06Q0030020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Manipal University Jaipur
Address of Applicant :Manipal University Jaipur, Off Jaipur-Ajmer Expressway, Post: Dehmi Kalan, Jaipur-303007, Rajasthan, India Jaipur ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Aanyaa Chaudhary
Address of Applicant :TAPMI School of Business Manipal University Jaipur Jaipur-Ajmer Express Highway, Dehmi Kalan, Near GVK Toll Plaza, Jaipur, Rajasthan 303007 Jaipur ---------- ----------
2)Dr. Sonal Khandelwal
Address of Applicant :TAPMI School of Business Manipal University Jaipur Jaipur-Ajmer Express Highway, Dehmi Kalan, Near GVK Toll Plaza, Jaipur, Rajasthan 303007 Jaipur ---------- ----------

(57) Abstract :
The present invention relates to a method to explore the dynamics between employee experience, employee engagement and employee turnover intention in BPO sector. The invention aims to enhance the comprehension of EX in human resource management and investigates its impacts on TI and the mediating role of employee engagement (EE). Employee Experience (EX) is an emerging discipline and its implications on Employee Engagement (EE) levels and employee turnover intentions (TI) is an intriguing concept. It underscores the gradual transition to EX, which emphasizes understanding employees as individuals with emotional needs, rather than mere assets. The present method suggests that enhancing EX can lead to higher EE and lower TI, emphasizing the need for personalized employee management strategies. This invention in the Indian BPO sector provides novel insights into EX, suggesting further research in other industries and on additional demographic variables. It highlights the potential for future studies to explore EX's relationships with constructs like employee loyalty, satisfaction, performance, and commitment.

No. of Pages : 10 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024

(21) Application No.202411054172 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : GREEN SYNTHESIZED SILVER NANOPARTICLES-LOADED ITRACONAZOLE TRANSDERMAL PATCH AND METHOD THEREOF

(51) International classification :A61K0009700000, A61K0031496000, A61K0009000000, A61P0035000000, A61K0047340000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY (PHARMACY INSTITUTE)
Address of Applicant :19, KNOWLEDGE PARK-II, INSTITUTIONAL AREA, GREATER NOIDA-201306, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR RUPA MAZUMDER
Address of Applicant :NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY (PHARMACY INSTITUTE), 19 KNOWLEDGE PARK II, INSTITUTIONAL AREA, GREATER NOIDA 201306 GREATER NOIDA ---------- ----------
2)MR KAMAL KANT KAUSHIK
Address of Applicant :NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY (PHARMACY INSTITUTE), 19 KNOWLEDGE PARK II, INSTITUTIONAL AREA, GREATER NOIDA 201306 GREATER NOIDA ---------- ----------
3)DR SWARUPANJALI PADHI
Address of Applicant :NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY (PHARMACY INSTITUTE), 19 KNOWLEDGE PARK II, INSTITUTIONAL AREA, GREATER NOIDA 201306 GREATER NOIDA ---------- ----------
4)MR ABHIJIT DEBNATH
Address of Applicant :NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY (PHARMACY INSTITUTE), 19 KNOWLEDGE PARK II, INSTITUTIONAL AREA, GREATER NOIDA 201306 GREATER NOIDA ---------- ----------

(57) Abstract :
Disclosed herein is a green synthesized silver nanoparticles-loaded itraconazole transdermal patch and method thereof (100) that comprises a plurality of green synthesized silver nanoparticles (102), wherein the silver nanoparticles (102) are synthesized using a biocompatible method (104) involving a plant extract (106) to enhance biocompatibility and reduce cytotoxicity. The patch further comprises a therapeutic agent (108), wherein the therapeutic agent (108) comprises itraconazole (110), said itraconazole (110) being repurposed for anticancer activity and loaded onto said silver nanoparticles (102) to inhibit basal cell carcinoma growth. The patch further comprises a patch matrix (112), wherein the patch matrix (112) is configured to facilitate the controlled and sustained release of the therapeutic agent (108) through the skin over an extended period.

No. of Pages : 29 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202411054184 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AI-BASED MEDICAL DEVICES

(51) International classification :G06N3/08, G16H50/20, G16H30/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)ANURAG VARSHNEY
Address of Applicant :II-B 159, NEHRU NAGAR, GHAZIABAD-201001 ---------- ----------
2)YUVRAJ VARSHNEY
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)ANURAG VARSHNEY
Address of Applicant :II-B 159, NEHRU NAGAR, GHAZIABAD-201001 ---------- ----------
2)YUVRAJ VARSHNEY
Address of Applicant :II-B 159, NEHRU NAGAR, GHAZIABAD-201001 ---------- ----------

(57) Abstract :
The present invention relates the details of Manufacturing medical gadgets based on artificial intelligence Machine learning algorithms have the potential to improve the accuracy of diagnostic imaging instruments such as MRI {Magnetic Resonance Imaging), 1 CT {Computed Tomography), and X-rays. The invention has characterised the components used in manufacturing Al-based diagnostic imaging devices as follows: MRI machines, CT scanners, X-ray machines, and other machines.

No. of Pages : 10 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202411054185 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : IOT-BASED MONITORING EQUIPMENT FOR INTELLIGENT FARMING AND REAL-TIME FOOD QUALITY ASSESSMENT

(51) International classification	:G01N0031220000, A01K0029000000, G06F0003041000, A01B0079000000, A23K0050800000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)ANURAG VARSHNEY
Address of Applicant :II-B 159, NEHRU NAGAR, GHAZIABAD-201001 ---------- ----------
2)YUVRAJ VARSHNEY
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)ANURAG VARSHNEY
Address of Applicant :II-B 159, NEHRU NAGAR, GHAZIABAD-201001 ---------- ----------
2)YUVRAJ VARSHNEY
Address of Applicant :II-B 159, NEHRU NAGAR, GHAZIABAD-201001 ---------- ----------

(57) Abstract :
The present invention relates the loT smart agricultural solutions use sensors to monitor crop fields and automate irrigation systems. loT monitoring additionally facilitates to bridge the gap between devices and businesses by gathering and analyzing different loT data at the web scale from linked devices, customers, and applications. Internet of things {loT) model assumes that multiple objects can interact and collaborate through wireless or cabled connections, creating new services and applications i:o achieve a common goal. In this view, the promise of an intelligent environment is immensely appealing, imagining a world in which reality and artificial digital virtual components of the world interact to produce a better environment.

No. of Pages : 18 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202411054186 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ROBOTIC ARM FOR DIFFERENT INDUSTRIAL PURPOSES

(51) International classification	:B29C0035080000, B29B0013020000, C02F0101200000, B29C0049640000, H05B0003000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)ANURAG VARSHNEY
Address of Applicant :II-B 159, NEHRU NAGAR, GHAZIABAD-201001 ---------- ----------
2)YUVRAJ VARSHNEY
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)ANURAG VARSHNEY
Address of Applicant :II-B 159, NEHRU NAGAR, GHAZIABAD-201001 ---------- ----------
2)YUVRAJ VARSHNEY
Address of Applicant :II-B 159, NEHRU NAGAR, GHAZIABAD-201001 ---------- ----------

(57) Abstract :
The present invention relates the Robotic arm for different Industrial purposes. Robotic Arm is uses in many Applications like in 1. Manufacturing: Used in assembly lines, welding, painting, and packaging. 2. Medical: Employed in surgeries, rehabilitation, and laboratory automation. 3. logistics: Applied in sorting, palletizing, and material handling. 4. Agriculture: Utilized in planting, harvesting, and monitoring crops . • 5. Research: Used in laboratories and educational settings for developing new technologies and applications

No. of Pages : 9 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024
(21) Application No.202411054487 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN INNOVATIVE SYSTEM FOR CUSTOMER SATISFACTION AND LOYALTY VIA EXPERIENTIAL MARKETING

(51) International classification	:G06Q0030020000, A63F0003040000, G10L0025630000, A61B0005160000, G06F0016906000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Manipal University Jaipur
Address of Applicant :Manipal University Jaipur, Off Jaipur-Ajmer Expressway, Post: Dehmi Kalan, Jaipur-303007, Rajasthan, India Jaipur ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)CA(Dr) Kamakshi Mehta
Address of Applicant :TAPMI School of Business Manipal University Jaipur Jaipur-Ajmer Express Highway, Dehmi Kalan, Near GVK Toll Plaza, Jaipur, Rajasthan 303007 Jaipur ---------- ----------
2)Dr. Subhabaha Pal
Address of Applicant :TAPMI School of Business Manipal University Jaipur Jaipur-Ajmer Express Highway, Dehmi Kalan, Near GVK Toll Plaza, Jaipur, Rajasthan 303007 Jaipur ---------- ----------

(57) Abstract :
The present invention relates to an innovative system for customer satisfaction and loyalty via experiential marketing. The system creates a structured equation model to evaluate customer satisfaction and perceived quality under the influence of emotional and psychological experiences (sense, feel, and think). The system methodology comprises: development of the conceptual framework; collection of data through standardized questionnaire; measures both dependent and independent variable; collected data were analyzed using PLS-SEM; and relationships between the sensory experiences, customer satisfaction, perceived quality, and brand loyalty were tested using bootstrapping resampling techniques to evaluate the significance of the paths in the model. Marketers have lately concentrated on improving customer retention by means of experiential marketing to increase brand loyalty. The model looks at how these events support customer retention and brand loyalty as well. Practical implications suggest that experiential marketing can significantly build a loyal customer base by engaging their senses and emotions, thus differentiating brands in a competitive market.

No. of Pages : 18 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024
(21) Application No.202411054501 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYNTHESIS AND ANTIBACTERIAL ACTIVITY OF 3 ,5-DIAMINO-4-(4'-BROMOPHENYLAZO) ISOXAZOLE

(51) International classification	:A61P0031040000, A61K0009080000, A61Q0019000000, A61B0005000000, A61K0009000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Maharishi Markandeshwar (Deemed to be University)
Address of Applicant :Maharishi Markandeshwar (Deemed to be University), Ambala - Yamunanagar Highway, Mullana-Ambala, Haryana-133207, India Mullana ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)KETAN VASHISHT
Address of Applicant :Maharishi Markandeshwar (Deemed to be University), Ambala - Yamunanagar Highway, Mullana-Ambala, Haryana-133207, India Mullana ---------- ----------
2)POOJA SETHI
Address of Applicant :Maharishi Markandeshwar (Deemed to be University), Ambala - Yamunanagar Highway, Mullana-Ambala, Haryana-133207, India Mullana ---------- ----------

(57) Abstract :
This invention relates to the synthesis of a novel compound, 3,5-Diamino-4-(4'-bromophenylazo) isoxazole, characterized by unique structural and spectral properties. The synthesis involves creating an intermediate compound, 2-[(4'-bromophenyl) hydrazono]malononitrile, followed by a reflux reaction with hydroxylamine hydrochloride and sodium acetate in ethanol. The process is monitored using thin-layer chromatography (TLC) and purified through recrystallization. The compound exhibits significant antibacterial activity against both Gram-positive and Gram-negative bacteria, including Staphylococcus aureus and Escherichia coli, making it a potent candidate for developing new antimicrobial agents. The novelty lies in the specific synthesis method and the resulting compound's unique properties and applications in medical and pharmaceutical fields.

No. of Pages : 19 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024
(21) Application No.202411054502 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : BIMETALLIC NI/CO ORGANIC FRAMEWORK OVER RGO FOR PHOTOCATALYTIC DYE DEGRADATION AND METHOD THEREOF

(51) International classification	:C02F0001300000, B01J0035000000, C02F0101300000, C07C0051265000, H01L0021768000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Maharishi Markandeshwar (Deemed to be University)
Address of Applicant :Maharishi Markandeshwar (Deemed to be University), Ambala - Yamunanagar Highway, Mullana-Ambala, Haryana-133207, India Mullana ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SONU JAKHAR
Address of Applicant :Maharishi Markandeshwar (Deemed to be University), Ambala - Yamunanagar Highway, Mullana-Ambala, Haryana-133207, India Mullana ---------- ----------
2)NIRANKAR SINGH
Address of Applicant :Maharishi Markandeshwar (Deemed to be University), Ambala - Yamunanagar Highway, Mullana-Ambala, Haryana-133207, India Mullana ---------- ----------

(57) Abstract :
The present invention pertains to a novel NCMR Nanocomposite comprising cobalt and nickel metal moieties, benzene dicarboxylic acid as a linker, and reduced graphene oxide (RGO) as an organic conductive template. The synthesis involves combining Co (NO3)2.6H2O, NiCl2.6H2O, and 1,4-BDC in N,N-Dimethylformamide (DMF), followed by heating and filtration processes. The resultant nanocomposite exhibits a spherical morphology with an average diameter of 300 nm and demonstrates properties such as a low optical band gap of 2.88 eV, a large specific surface area of 104 m2/g, and stability in cyclic operations. The application of the developed product include photocatalytic degradation of organic dyes under sunlight and potential use in wastewater treatment system

No. of Pages : 15 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202411054187 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SETUP OF SPACE STATION WITH COMMUNICATION SATELLITE AND LIFE SUPPORT

(51) International classification	:B64G0001100000, B64G0001120000, C02F0009000000, B64G0001640000, H04B0007185000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)ANURAG VARSHNEY
Address of Applicant :II-B 159, NEHRU NAGAR, GHAZIABAD-201001 ---------- ----------
2)YUVRAJ VARSHNEY
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)ANURAG VARSHNEY
Address of Applicant :II-B 159, NEHRU NAGAR, GHAZIABAD-201001 ---------- ----------
2)YUVRAJ VARSHNEY
Address of Applicant :II-B 159, NEHRU NAGAR, GHAZIABAD-201001 ---------- ----------

(57) Abstract :
The present invention relates to the Setup of Space Station with communication satellite and life support system, establishing a space station involves integrating advanced technologies and systems to sustain human life in the harsh environment of space. Each component plays a crucial role in ensuring the safety, comfort, and pr9ductivity of crew members during extended missions. More particularly, the setup requirements for a space station, covering essentials like air, water, food, power, communication devices, life-saving equipment, and sanitation facilities to be establish in Space Station. Title

No. of Pages : 13 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :16/07/2024

(21) Application No.202411054246 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : PHARMACOGNOSTICAL AND PHARMACOLOGICAL EVALUATION OF LEAF OF TACOMA CAPENSIS

(51) International classification :A61K0036185000, A23L0033105000, G09B0023280000, G01N0033500000, A61K0036000000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**

1)Mrs. Richa Saxena
Address of Applicant :Assistant Professor, School of Pharmaceutical sciences, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102. ---------- ----------

2)Mr. Apoorv Rastogi

3)Ms. Tahira Sultan

4)Mrs. Neha Rahi

5)Mr. Vidhan Chand Bala

6)Ms. Srishti Goyal

7)Ms. Geeta Biswas

8)Ms. Kajal Devi

9)Mr. Himanshu Gangwar

10)Mr. Amit Kumar

11)Dr. Sushil Kumar

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Mrs. Richa Saxena
Address of Applicant :Assistant Professor, School of Pharmaceutical sciences, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102. ---------- ----------

2)Mr. Apoorv Rastogi
Address of Applicant :Assistant Professor, Sahara Degree College, Janunagar, kemri, milak, Rampur Pin Code:243701 ---------- ----------

3)Ms. Tahira Sultan
Address of Applicant :Assistant Professor, School of Pharmaceutical sciences, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102. ---------- ----------

4)Mrs. Neha Rahi
Address of Applicant :Associate Professor, Rampal Singh Smarak College of Pharmacy, Ratupura, Uttar Pradesh, Pin Code: 244601 ---------- ----------

5)Mr. Vidhan Chand Bala
Address of Applicant :Assistant Professor, School of Pharmaceutical sciences, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102. ---------- ----------

6)Ms. Srishti Goyal
Address of Applicant :School of Pharmaceutical sciences, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102. ---------- ----------

7)Ms. Geeta Biswas
Address of Applicant :Assistant Professor, Surajmal University, Kichha, Udham Singh Nagar, Uttrakhand, Pin Code: 263148. ---------- ----------

8)Ms. Kajal Devi
Address of Applicant :Shree Satya College of higher education, Moradabad, Uttar Pradesh, Pin Code: 244102. ---------- ----------

9)Mr. Himanshu Gangwar
Address of Applicant :Assistant Professor, Surajmal College of pharmacy, Surajmal University Kichha Udham Singh Nagar, Uttrakhand, Pin Code: 263148. ---------- ----------

10)Mr. Amit Kumar
Address of Applicant :Assistant Professor, MIT College of Pharmacy, MIT Campus, (Affiliated to Dr. A.P.J. Abdul Kalam Technical University), Ram Ganga Vihar Phase-II, Moradabad, Uttar Pradesh, Pin Code: 244001 ---------- ----------

11)Dr. Sushil Kumar
Address of Applicant :Professor, School of Pharmaceutical sciences, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102. ---------- ----------

(57) Abstract :
The present invention relates to the pharmacognostical and pharmacological evaluation of Tecoma capensis leaves, exploring its potential therapeutic benefits. Phytochemical screening revealed the presence of alkaloids, flavonoids, tannins, and other bioactive compounds. Quantitative microscopy provided essential data on stomatal characteristics and vein patterns. Ash and extractive values indicated the composition and yield potential of the plant material. Animal studies, using Wistar albino rats, evaluated acute toxicity and anti-diarrheal effects of ethanolic leaf extracts. Results showed significant antioxidant activity through DPPH and hydrogen peroxide scavenging assays, underscoring its potential as a natural antioxidant.

No. of Pages : 18 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202411054249 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : EV CHARGING STATION PLACEMENT PREDICTION

(51) International classification :G06Q0030020000, B60L0053300000, G06N0020000000, G06Q0050260000, B60L0053140000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Manipal University Jaipur
Address of Applicant :Manipal University Jaipur, Off Jaipur-Ajmer Expressway, Post: Dehmi Kalan, Jaipur-303007, Rajasthan, India Jaipur ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Rishabh Bassi
Address of Applicant :Department of CSE, Manipal University Jaipur, Jaipur-Ajmer Express Highway, Dehmi Kalan, Near GVK Toll Plaza, Jaipur, Rajasthan 303007 Jaipur ---------- ----------
2)Nachiketa Jha
Address of Applicant :Department of CSE, Manipal University Jaipur, Jaipur-Ajmer Express Highway, Dehmi Kalan, Near GVK Toll Plaza, Jaipur, Rajasthan 303007 Jaipur ---------- ----------
3)Mr Shishir Singh Chauhan
Address of Applicant :Department of CSE, Manipal University Jaipur, Jaipur-Ajmer Express Highway, Dehmi Kalan, Near GVK Toll Plaza, Jaipur, Rajasthan 303007 Jaipur ---------- ----------

(57) Abstract :
The present invention relates to a method to predict the placement of new EV charging station location. The method uses a machine learning model called a Random Forest Regressor to predict the optimal placements for stations depending on a number of crucial characteristics. This model incorporates a wider range of characteristics, including traffic volume, population density, urbanization level, accessibility to highways, kind of location (residential, commercial, or industrial), and current electric vehicle adoption. The model's strength lies in its ability to predict multiple potential sites within a suitable area while accounting for the interactions between these different elements. This strategy encourages the use of electric vehicles and lowers greenhouse gas emissions by making it easier for EV infrastructure to expand, which promotes sustainable urban growth.

No. of Pages : 10 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024

(21) Application No.202411054251 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SMART AUDIO ASSISTANT FOR VIRTUALLY IMPAIRED USING COMPUTER VISION

(51) International classification	:G06F0003160000, A61H0003060000, G09B0021000000, H04L0067120000, H04N0007180000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Manipal University Jaipur
Address of Applicant :Manipal University Jaipur, Off Jaipur-Ajmer Expressway, Post: Dehmi Kalan, Jaipur-303007, Rajasthan, India Jaipur ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Manoj Kumar Sharma
Address of Applicant :Department of Computer and Communication Engineering, MUJ Jaipur ---------- ----------
2)Parv Valiramani
Address of Applicant :Department of Computer Science Engineering, MUJ Jaipur ---------- ----------
3)Meetul Choudhary
Address of Applicant :Department of Computer Science Engineering, MUJ Jaipur ---------- ----------

(57) Abstract :
The present invention relates to a smart audio assistant device for virtually impaired using computer vision. The system integrates computer vision and IoT sensors that act as a smart virtual assistant to provide auditory information for all daily activities. For instance, if the person wants to cook something then he can ask the device for locating the kitchen tools and the device will locate those tools (using visual recognition and image capturing technology) and guide the user on how to use it through the entire process. The basic idea is to minimize the visually impaired individual's dependencies on others to perform their basic daily life activities like making coffee, cooking food, ironing clothes and many more. To make the daily activities and navigation easy for visually disabled and a device that can act as virtual assistant in reading the boards, texts, and assisting them through almost everything. Visually impaired individuals live a very dependent life which is not only a problem for them but also their family members. This device will not only help them with daily chores but also make them independent to a considerable level. The designed system will enable them to work like a normal person.

No. of Pages : 11 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024

(21) Application No.202411054754 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM AND METHOD FOR ENHANCING BIG DATA QUALITY USING PROCESS PATTERN MODEL

(51) International classification	:G06Q0010060000, G06N0020000000, G06F0016215000, G06F0016250000, G06N0005020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Mr. Hriday Kumar Gupta
Address of Applicant :Department of Computer Science & Engineering, KIET Group of Institutions, Delhi-NCR Ghaziabad. - 201206, UP, India ---------- ----------
2)Mr. Rajesh Kumar
3)Mr. Manish Kumar
4)Dr. Deepti Seth
5)Dr. Sheetal Mital
6)Prof. (Dr.) Agraj Tripathi
7)Dr. Seema Maitrey
8)Ms. Deepti Singh
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr. Hriday Kumar Gupta
Address of Applicant :Department of Computer Science & Engineering, KIET Group of Institutions, Delhi-NCR Ghaziabad. - 201206, UP, India ---------- ----------
2)Mr. Rajesh Kumar
Address of Applicant :Department of Computer Science & Engineering, Shobhit Institute of Engineering & Technology, Meerut (NAAC 'A' Grade Accredited Deemed to-be-University) NH-58, Modipuram, Meerut, Uttar Pradesh 250110 ---------- ----------
3)Mr. Manish Kumar
Address of Applicant :Department of Computer Science & Engineering, Ajay Kumar Garg Engineering College, 27th Km Milestone, Delhi-Meerut Expressway, Ghaziabad - 201015 ---------- ----------
4)Dr. Deepti Seth
Address of Applicant :Department of Applied Science, KIET Group of Institutions, Delhi-NCR Ghaziabad. -201206, UP, India ---------- ----------
5)Dr. Sheetal Mital
Address of Applicant :Department of Applied Science, KIET Group of Institutions, Delhi-NCR Ghaziabad. -201206, UP, India ---------- ----------
6)Prof. (Dr.) Agraj Tripathi
Address of Applicant :Department of Basic Sciences & Humanities (Mathematics), Pranveer Singh Institute of Technology, Kanpur-209305, U.P., India ---------- ----------
7)Dr. Seema Maitrey
Address of Applicant :Department of Computer Science & Engineering, KIET Group of Institutions, Delhi-NCR Ghaziabad. -201206, UP, India ---------- ----------
8)Ms. Deepti Singh
Address of Applicant :Department of Computer Science & Engineering, KIET Group of Institutions, Delhi-NCR Ghaziabad. -201206, UP, India ---------- ----------

(57) Abstract :
ABSTRACT The present invention relates to a system and method for enhancing big data quality using process pattern model. The system includes a data ingestion module for collecting data, a process pattern extraction module utilizing machine learning to identify normal data behaviors, and a data quality assessment module for detecting anomalies, inconsistencies, and missing values. A data correction module applies techniques such as imputation and outlier removal, while a data standardization module ensures consistent data formats. Additionally, a real-time monitoring and feedback module continuously oversees data quality and provides feedback for improvement. The method involves steps of data collection, pattern extraction, quality assessment, data correction, standardization, and real-time monitoring. This invention addresses the scalability, real-time processing, and diversity challenges of big data, ensuring high-quality, reliable data for analytics and decision-making across various industries. It significantly reduces manual intervention, enhances data reliability, and supports continuous improvement.

No. of Pages : 11 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024

(21) Application No.202411054764 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTOMATED FOOD SAFETY MONITORING AND COMPLIANCE SYSTEM FOR COMMERCIAL KITCHENS

(51) International classification	:G06Q0010060000, G06Q0030000000, G01R0022060000, G06F0016270000, H04L0067120000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Sidharth Srivastava
Address of Applicant :Associate Professor, School of Hospitality & Tourism, Galgotias University, Plot No.2, Sector 17-A Yamuna Expressway, Greater Noida, Gautam Buddh Nagar, Uttar Pradesh, India 203201 ---------- ----------
2)Dr.Sunil Kumar
3)Mr. Amit Kumar
4)Dr. Suprabhat Banerjee
5)Mr. Kunal
6)Dr. Sushil Kumar
7)Mr. Kanchan Aich
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Sidharth Srivastava
Address of Applicant :Associate Professor, School of Hospitality & Tourism, Galgotias University, Plot No.2, Sector 17-A Yamuna Expressway, Greater Noida, Gautam Buddh Nagar, Uttar Pradesh, India 203201 ---------- ----------
2)Dr.Sunil Kumar
Address of Applicant :Deputy Director - Culinary Arts SCHM, MRIIRS, Faridabad, Haryana-121003 ---------- ----------
3)Mr. Amit Kumar
Address of Applicant :Assistant Professor (Food Production), Banarsidas Chandiwala Institute of Hotel Management and Catering Technology, Chandiwala Estate, Maa Anandamai Marg, Kalkaji, New Delhi, 110019 ---------- ----------
4)Dr. Suprabhat Banerjee
Address of Applicant :Associate Professor, Amity School of Hospitality, Amity University Campus, Sector-125, Noida - 201313 ---------- ----------
5)Mr. Kunal
Address of Applicant :Assistant Professor, School of Culinary and Hotel Management, Manav Rachna International Institute of Research & Studies (MRIIRS), Sector 43, Faridabad, Haryana 121004 ---------- ----------
6)Dr. Sushil Kumar
Address of Applicant :Associate Professor, Amity School of Hospitality, Amity University, Rajasthan ---------- ----------
7)Mr. Kanchan Aich
Address of Applicant :Assistant Professor, Amity School of Hospitality, SP-1, Kant Kalwar, NH11C, RIICO Industrial Area, Rajasthan 303002 ---------- ----------

(57) Abstract :
The invention relates to a system and method for an automated food safety monitoring and compliance system designed for commercial kitchens. Integrating IoT sensors, a central processing unit (CPU), a user interface, and a cloud-based platform, the system continuously monitors critical parameters such as temperature, humidity, and hygiene practices. Real-time data analysis enables immediate alerts and comprehensive compliance reports, ensuring adherence to health regulations and proactive management of food safety. The system's scalability, predictive maintenance capabilities, and user-friendly interface enhance operational efficiency, mitigate risks of foodborne illnesses, and optimize kitchen management practices.

No. of Pages : 19 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202411054767 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM AND METHOD FOR ASSESSING THE IMPACT OF STUDENTS' UTILIZATION OF SOCIAL MEDIA ON THEIR ABILITY TO ACQUIRE LISTENING AND COMPREHENSION SKILLS

(51) International classification	:G06N0020000000, G06Q0050000000, G06Q0050200000, G09B0007000000, G06F0040300000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Preeti
Address of Applicant :Assistant Professor, Department of English, School of Liberal Education, Galgotias University, Greater Noida, Gautam Buddha Nagar, Uttar Pradesh ---------- ----------
2)Dr. Reshu Singh
3)Kusum Lata
4)Dr. B. R. Verma
5)Dr. Karamthoti MB
6)Dr. Rao M
7)Dr. Anurag Shrivastava
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Preeti
Address of Applicant :Assistant Professor, Department of English, School of Liberal Education, Galgotias University, Greater Noida, Gautam Buddha Nagar, Uttar Pradesh ---------- ----------
2)Dr. Reshu Singh
Address of Applicant :Assistant Professor, Department of English, Bhavan's MAS College, Mumbai, Under Central Sanskrit University, New Delhi ---------- ----------
3)Kusum Lata
Address of Applicant :Senior Research Scholar, Department of Education, Maharshi Dayanand University, Rohtak ---------- ----------
4)Dr. B. R. Verma
Address of Applicant :Assistant Professor, Department of Physics, Govt. Nagarjuna PG College of Science, Raipur (CG) ---------- ----------
5)Dr. Karamthoti MB
Address of Applicant :Faculty of Physiology, AIMSR, Kollam, 691537 ---------- ----------
6)Dr. Rao M
Address of Applicant :Faculty of Pharmacology, AIMSR, Kollam, 691537 ---------- ----------
7)Dr. Anurag Shrivastava
Address of Applicant :Post-Doctoral Fellowship, Department of Electronics and Communication Engineering, Lincoln University College (LUC), Malaysia ---------- ----------

(57) Abstract :
The present invention relates to a system and method for evaluating the impact of social media usage on students' listening and comprehension skills. The system comprises several integrated modules: a data collection module for gathering detailed information on students' social media activity; a linguistic analysis module for assessing listening and comprehension skills through standardized tests and real-time tasks involving social media content; an analytical engine that employs correlation algorithms and machine learning techniques to analyze the relationship between social media usage and linguistic performance; and a reporting module that generates detailed insights and recommendations for educators. This system aims to provide educators and researchers with actionable data to optimize learning strategies and improve educational outcomes by understanding how social media interactions influence students' linguistic development.

No. of Pages : 22 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024
(21) Application No.202411054503 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MACHINE LEARNING BASED SMART AND SAFE MONITORING OF SEWAGE AND SEPTIC TANK

(51) International classification	:H04L0067120000, C02F0011040000, C02F0003280000, H04L0067125000, G06N0020000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Maharishi Markandeshwar (Deemed to be University),
Address of Applicant :Maharishi Markandeshwar (Deemed to be University), Ambala - Yamunanagar Highway, Mullana-Ambala, Haryana-133207, India Mullana ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Aman Ganesh
Address of Applicant :Maharishi Markandeshwar (Deemed to be University), Ambala - Yamunanagar Highway, Mullana-Ambala, Haryana-133207, India Mullana ---------- ----------
2)Shelja
Address of Applicant :Maharishi Markandeshwar (Deemed to be University), Ambala - Yamunanagar Highway, Mullana-Ambala, Haryana-133207, India Mullana ---------- ----------

(57) Abstract :
The present invention is related to a smart monitoring of septic tank and sewage system which includes smart verification of the presence of plurality of gases and generating safe and danger alarm to allow or stop the manual scavenging of the septic tank. The system includes plurality of sensor nodes (101) placed strategically placed in the manhole connected to a central IoT server (103) through a plurality of IoT gateway (102) which in turn is connected to the central controller (104) with an embedded machine learning algorithm, an alarm module (106), a display module (105), and a customized mobile app (107). The invention is particularly helpful in the governance and controlling the scavenging of the manhole by measuring the as concentration level in the septic tank and the estimated time for escaping the septic tank gases to fall within the safety working limit.

No. of Pages : 10 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024
(21) Application No.202411054504 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : PHOTOCATALYTIC DEGRADATION OF METHYLENE BLUE USING PVP-ASSISTED CUS BALL STRUCTURES: SYNTHESIS AND METHOD THEREOF

(51) International classification	:B01J0035000000, C02F0001300000, C02F0001280000, C02F0101300000, B01J0027040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Maharishi Markandeshwar (Deemed to be University)
Address of Applicant :Maharishi Markandeshwar (Deemed to be University), Ambala - Yamunanagar Highway, Mullana-Ambala, Haryana-133207, India Mullana ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SURESH KUMAR
Address of Applicant :Maharishi Markandeshwar (Deemed to be University), Ambala - Yamunanagar Highway, Mullana-Ambala, Haryana-133207, India Mullana ---------- ----------
2)VISHAL DHIMAN
Address of Applicant :Maharishi Markandeshwar (Deemed to be University), Ambala - Yamunanagar Highway, Mullana-Ambala, Haryana-133207, India Mullana ---------- ----------

(57) Abstract :
The present invention relates to a method for synthesizing polyvinylpyrrolidone (PVP)-assisted copper sulfide (CuS) structures using a solvothermal process. Cupric chloride dihydrate and thiourea serve as primary sources of copper and sulfur, respectively, with DMF as a solvent. The synthesized CuS structures exhibit distinct XRD diffraction peaks indicative of hexagonal geerite phases, with morphologies ranging to spherical aggregates. The CuS structures demonstrate enhanced photocatalytic efficiency for dye degradation under sunlight, making them suitable for water cleaning and treatment applications. The process allows for control over crystallite size and morphology through adjustment of reaction parameters, leading to improved dye degradation rates and percentages with higher PVP content. This invention offers an economical and efficient solution-based method for producing CuS structures with potential for environmental remediation.

No. of Pages : 15 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024
(21) Application No.202411054505 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : EARLY DETECTION OF SUICIDAL TENDENCIES THROUGH EVALUATION OF SEVIER DEPRESSION DETECTION BY IMAGE AND VIDEO ANALYSIS

(51) International classification :A61B0005160000, G06N0003080000, A61B0005000000, G06N0003040000, G06T0005400000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Manipal University Jaipur
Address of Applicant :Manipal University Jaipur, Off Jaipur-Ajmer Expressway, Post: Dehmi Kalan, Jaipur-303007, Rajasthan, India Jaipur ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Manoj Kumar Sharma
Address of Applicant :Department of Computer and Communication Engineering, Manipal University Jaipur Jaipur-Ajmer Express Highway, Dehmi Kalan, Near GVK Toll Plaza, Jaipur, Rajasthan 303007 Jaipur ---------- ----------
2)Parv Valiramani
Address of Applicant :Department of Computer Science Engineering, Manipal University Jaipur Jaipur-Ajmer Express Highway, Dehmi Kalan, Near GVK Toll Plaza, Jaipur, Rajasthan 303007 Jaipur ---------- ----------
3)Meetul Choudhary
Address of Applicant :Department of Computer Science Engineering, Manipal University Jaipur Jaipur-Ajmer Express Highway, Dehmi Kalan, Near GVK Toll Plaza, Jaipur, Rajasthan 303007 Jaipur ---------- ----------

(57) Abstract :
The present invention relates to an early detection of suicidal tendencies. The method comprises: data is collected from various sources, including publicly available datasets, online forums, and social media platforms, with proper consent and privacy measures in place; contrast adjustment and histogram equalization, will be applied to enhance the visual features and minimize variations in lighting conditions and image quality; and apply advanced deep learning approaches to analyse the pre-processed data. The existing methods for suicide ideation detection have primarily relied on textual data analysis, such as monitoring twitter posts and online communication. However, these approaches are limited by the availability and accuracy of self-reported information, as individuals may be reluctant to express their suicidal thoughts openly. Furthermore, textual analysis alone may fail to capture the problems of nonverbal cues that can be indicative of suicidal ideation. This work aims to address the discussed limitations using machine learning techniques to analyse visual data, specifically images, for the detection of suicide ideation. By leveraging the rich information contained in visual cues, such as facial expressions, body posture, and environmental contexts, this approach has the impending to produce comprehensive and accurate analysis of any individual mental state, enabling timely intervention and support. The early detection of suicidal tendencies is a critical challenge with profound implications for saving lives and addressing a major public health crisis. A worldwide very potent cause of deaths is suicide, and its prevention requires timely intervention and support for at-risk individuals. Traditional methods for assessing suicide risk, such as self-reporting questionnaires and clinical evaluations, have inherent limitations, including potential biases, subjective interpretations, and the inability to provide continuous monitoring. The growth and improvement in computer vision tech and machine learning have led us to new avenues for suicide ideation detection through the analysis of visual data, such as images and video streams. Visual cues, including facial expressions, body language, and environmental contexts, can provide valuable insights into an individual's emotional state and potential suicidal ideation. With the help of deep learning algorithms and computer vision techniques, it is possible to develop automated systems that can analyse visual data in real-time, enabling early detection and timely intervention.

No. of Pages : 14 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202411054795 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN ADVANCED REGISTRATION SYSTEM USING ARDUINO AND RFID TECHNOLOGY

(51) International classification	:G06F0040180000, G06Q0010100000, G06F0040174000, H04W0008000000, H04W0084180000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Manipal University Jaipur
Address of Applicant :Manipal University Jaipur, Off Jaipur-Ajmer Expressway, Post: Dehmi Kalan, Jaipur-303007, Rajasthan, India Jaipur ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Suman Bhakar
Address of Applicant :Department of IoT and Intelligent Systems, Manipal University Jaipur Jaipur-Ajmer Express Highway, Dehmi Kalan, Near GVK Toll Plaza, Jaipur, Rajasthan 303007 Jaipur ---------- ----------

(57) Abstract :
The present invention relates to an advanced registration system using Arduino and RFID technology. The advanced registration system, driven by Arduino and RFID technology, revolutionizes the registration process by eradicating redundant form submissions. Utilizing a user-friendly interface crafted through Streamlit, students input their details only once. This information is stored in an Excel spreadsheet with a specific column designated for event registrations. Future participation merely entails a quick tap of an RFID card, promptly updating the Excel record. This streamlined method significantly boosts efficiency, guaranteeing precise and effortless event coordination for both organizers and attendees without the need for repetitive data entry.

No. of Pages : 13 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024

(21) Application No.202411054804 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : THREE LAYER AUTHENTICATION SYSTEM

(51) International classification	:G06F0021320000, G07C0009000000, G07C0009250000, H04L0009320000, G06F0021310000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Manish Kumar
Address of Applicant :J-14, PSIT,Kanpur-Agra-Delhi NH2, Bhauti, Kanpur-209305 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)ANKIT JAIN
Address of Applicant :Assistant Professor, Department of ECE, Pranveer Singh Institute of Technology, Kanpur, Uttar Pradesh-209305 KANPUR ---------- ----------
2)RIDDHIMA GUPTA
Address of Applicant :Department of ECE, Pranveer Singh Institute of Technology, Kanpur, Uttar Pradesh-209305 KANPUR ---------- ----------
3)ROHAN KUMAR
Address of Applicant :Department of ECE, Pranveer Singh Institute of Technology, Kanpur, Uttar Pradesh-209305 KANPUR ---------- ----------
4)ANSHIKA SINGH
Address of Applicant :Department of ECE, Pranveer Singh Institute of Technology, Kanpur, Uttar Pradesh-209305 KANPUR ---------- ----------
5)SHIVANSH MISHRA
Address of Applicant :Department of ECE, Pranveer Singh Institute of Technology, Kanpur, Uttar Pradesh-209305 KANPUR ---------- ----------

(57) Abstract :
The present invention introduces a low-power novel three-layer (three-factor) security system designed to ensure robust access control with enhanced security features. Integrating a keypad, RFID reader, fingerprint sensor, ESP32 microcontroller, relay, buzzer, and OLED display, this system offers multi-factor authentication for secure access to restricted areas. Users navigate through layers of authentication, including password entry, RFID card verification, and fingerprint recognition, ensuring stringent access control. Upon successful authentication, the system activates a relay to unlock the door mechanism, providing access while logging access data to Google Sheets for auditing purposes. Additionally, the system generates and sends OTPs through email or SMS for final verification, enhancing security measures. Real-time feedback is provided to users via a buzzer and OLED display, ensuring a seamless and user-friendly experience. This innovative security system offers unparalleled protection against unauthorized access, making it an ideal solution for a wide range of applications, from residential and commercial buildings to sensitive areas requiring high security.The integration of cloud-based data logging allows for easy access and analysis of access records, providing a comprehensive and efficient security solution.

No. of Pages : 15 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202411054817 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN AUTOMATIC VOICE-CONTROLLED ALAN-AI NEWS APPLICATION SYSTEM

(51) International classification :G01W0001100000, G10L0015220000, G06F0021310000, G06Q0040000000, G06Q0020100000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)NOIDA INSTITUTE OF ENGINEERING & TECHNOLOGY
Address of Applicant :19, KNOWLEDGE PARK-II, INSTITUTIONAL AREA, GREATER NOIDA-201306, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. SANDHYA UMRAO
Address of Applicant :NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, 19, KNOWLEDGE PARK-II, INSTITUTIONAL AREA, GREATER NOIDA-201306, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA GREATER NOIDA ---------- ----------
2)MR. RAM KUMAR SHARMA
Address of Applicant :NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, 19, KNOWLEDGE PARK-II, INSTITUTIONAL AREA, GREATER NOIDA-201306, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA GREATER NOIDA ---------- ----------
3)DR. RAMAN BATRA
Address of Applicant :NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, 19, KNOWLEDGE PARK-II, INSTITUTIONAL AREA, GREATER NOIDA-201306, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA GREATER NOIDA ---------- ----------
4)MS. SAVITA YADAV
Address of Applicant :NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, 19, KNOWLEDGE PARK-II, INSTITUTIONAL AREA, GREATER NOIDA-201306, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA GREATER NOIDA ---------- ----------

(57) Abstract :
Disclosed herein is an automatic voice-controlled news application system (100) that comprises a voice recognition module (102) comprising, Alan AI technology to process and interpret user voice commands with high accuracy. The system (100) includes a user interface module (104) comprising, ReactJS to provide a dynamic and responsive user interface. The system (100) also includes a news retrieval module (106) comprising, News API to fetch current news content in JSON format. The system (100) also includes a weather data integration module (108) comprising, OpenWeatherMap API to provide weather data, including current weather, forecasts, and historical data. The system (100) also includes a backend processing module (110) comprises, JavaScript, supporting dynamic typing, first-class functions, and prototype-based object orientation. The system (100) also includes security module (112) configured to implement robust security measures to protect user data and ensure secure authentication.

No. of Pages : 25 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202411054843 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A METHOD FOR ANALYZING THE BEHAVIOR OF MAGNETOHYDRODYNAMIC (MHD) RADIATIVE WILLIAMSON FLUID OVER AN INCLINED MOVING PLATE COVERING OF WATER BASED HYBRID NANOMATERIAL

(51) International classification	:C09K0005100000, G06F0030200000, H02K0044080000, H02K0044100000, A61B0005341000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Manipal University Jaipur
Address of Applicant :Manipal University Jaipur, Off Jaipur-Ajmer Expressway, Post: Dehmi Kalan, Jaipur-303007, Rajasthan, India Jaipur ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Ruchika Mehta
Address of Applicant :Department of Mathematics & Statistics, Manipal University Jaipur, Jaipur 303007, Rajasthan, India Jaipur ---------- ----------
2)Anurag Bhatnagar
Address of Applicant :Department of Information Technology, Manipal University Jaipur, Jaipur 303007, Rajasthan, India Jaipur ---------- ----------
3)Sanju Jangid
Address of Applicant :Department of Mathematics, Jaipur National University, Jaipur 302017, Rajasthan, India Jaipur ---------- ----------
4)Dr. Jagdev Singh
Address of Applicant :Department of Mathematics, JECRC University, Jaipur, Rajasthan, India Jaipur ---------- ----------
5)Dr. Devendra Kumar
Address of Applicant :Department of Mathematics, University of Rajasthan, Jaipur, Rajasthan, India Jaipur ---------- ----------

(57) Abstract :
The present invention relates to a numerical method for analyzing the behavior of magnetohydrodynamic (MHD) radiative Williamson fluid over an inclined moving plate covering of Water based Hybrid Nanomaterial. A non-linear partial differential equation system is designed and then mathematically cracked with the BVP4C technique under some plausible assumptions. The effects of a specific set of unique parameters on the temperature field profiles, motion characteristics, shear stress, and heat transfer are described in detail. For both shrinking and extending surfaces, the motion decreased as the Williamson fluid increased. An increase in energy profile is seen in the radiation impression. With an inclined plate, the shear rate decreases, and with a buoyancy impression, it rises. The creation of improved, ultra-high-performance coolants, or nanofluids, for several industrial and technical applications has been made possible by recent advancements in nanotechnology. The viscous dissipation impact on the radiative-convective Williamson flow of hybrid nanofluid via a sloping stirring plate with a hydrodynamic imprint is investigated in this work using a mathematical solution.

No. of Pages : 14 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202411054850 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ADFAR: ADVANCED FACIAL RECOGNITION-BASED ATTENDANCE TRACKING SYSTEM

(51) International classification :G06Q0010100000, G06F0021320000, G06Q0040000000, G06Q0050200000, G16H0040630000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Manipal University Jaipur
Address of Applicant :Manipal University Jaipur, Off Jaipur-Ajmer Expressway, Post: Dehmi Kalan, Jaipur-303007, Rajasthan, India Jaipur ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Sayar Singh Shekhawat
Address of Applicant :Department of CSE, SCSE, Faculty of Engineering, Manipal University Jaipur, Jaipur, Rajasthan, India. Jaipur ---------- ----------
2)Prisha Prafull Tated
Address of Applicant :Department of CSE, SCSE, Faculty of Engineering, Manipal University Jaipur, Jaipur, Rajasthan, India. Jaipur ---------- ----------
3)Dr. Prashant Vats
Address of Applicant :Department of CSE, SCSE, Faculty of Engineering, Manipal University Jaipur, Jaipur, Rajasthan, India. Jaipur ---------- ----------
4)Dr. Ashok Kumar Saini
Address of Applicant :Department of CSE, SCSE, Faculty of Engineering, Manipal University Jaipur, Jaipur, Rajasthan, India. Jaipur ---------- ----------

(57) Abstract :
The present invention relates to an advanced facial recognition based attendance tracking system. The system comprises; a high-resolution camera, a central processing unit, a secure database, and an advanced image processing algorithms to capture and analyse facial features. The system is designed to automatically detect and log attendance as users enter and exit designated areas, eliminating the need for manual sign-ins or card swipes. With its robust data management capabilities, Advanced Facial Recognition-Based Attendance (ADFAR) Tracking System offers real-time attendance monitoring, detailed reporting, and integration with existing human resources and payroll systems. Additionally, the system is equipped with enhanced security features to protect user data and ensure compliance with privacy regulations. Advanced Facial Recognition-Based Attendance Tracking System (ADFAR) represents a significant advancement in attendance tracking, offering a reliable and user-friendly solution for educational institutions, workplaces, and various other environments. Advanced Facial Recognition-Based Attendance Tracking System is an innovative attendance management solution that leverages cutting-edge facial recognition technology to provide accurate and efficient attendance tracking.

No. of Pages : 11 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024

(21) Application No.202411054858 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A MENTAL HEALTH SYSTEM

(51) International classification :G16H0010200000, G16H0020700000, H04L0009320000, H04L0051020000, G16H0050300000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)NOIDA INSTITUTE OF ENGINEERING & TECHNOLOGY
Address of Applicant :19, KNOWLEDGE PARK-II, INSTITUTIONAL AREA, GREATER NOIDA-201306, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)ADITEE MATTOO
Address of Applicant :NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, 19, KNOWLEDGE PARK-II, INSTITUTIONAL AREA, GREATER NOIDA-201306, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA GREATER NOIDA ---------- ----------
2)NEETU RAJPUT
Address of Applicant :NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, 19, KNOWLEDGE PARK-II, INSTITUTIONAL AREA, GREATER NOIDA-201306, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA GREATER NOIDA ---------- ----------
3)GARIMA JAIN
Address of Applicant :NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, 19, KNOWLEDGE PARK-II, INSTITUTIONAL AREA, GREATER NOIDA-201306, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA GREATER NOIDA ---------- ----------
4)DR. KUMUD SAXENA
Address of Applicant :NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, 19, KNOWLEDGE PARK-II, INSTITUTIONAL AREA, GREATER NOIDA-201306, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA GREATER NOIDA ---------- ----------
5)DR. RAMAN BATRA
Address of Applicant :NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, 19, KNOWLEDGE PARK-II, INSTITUTIONAL AREA, GREATER NOIDA-201306, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA GREATER NOIDA ---------- ----------

(57) Abstract :
Disclosed herein is a mental health system (100) for mental health support, the mental health system (100) comprising a user authentication module (102) configured to enable signup and login through personal information or Google accounts, a questionnaire module (104) configured to provide a quiz-based experience where users answer questions to receive personalized insights and recommendations based on user responses, a dashboard interface (106) configured to present various health and wellbeing modules, a step tracker module (108) configured to monitor and record users daily physical activity and steps encouraging an active and healthy lifestyle, a Chatbot (110) configured to act as a virtual assistant to guide users, answer queries, and offer personalized suggestions based on user interactions and preferences, and a database module (112) configured to store the data such as daily journal, inspirational quotes, goals, etc.

No. of Pages : 29 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202411054869 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : FLORAL WASTE TO VIBRANT HUES

(51) International classification	:D06P0001340000, C09B0061000000, C02F0001440000, B60W0010080000, B01D0011020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Chandigarh University
Address of Applicant :Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India. Mohali ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Ritik Sharma
Address of Applicant :Department of Chemical Engineering, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------
2)Tamanna Sood
Address of Applicant :Department of Chemical Engineering, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------

(57) Abstract :
A novel system and method for eco-friendly extraction of natural dyes and pigments from floral and organic waste, addressing environmental concerns. The system integrates mechanical processing, enzymatic treatment, green solvent extraction, purification, concentration, and waste valorization. A mechanical unit shreds and grinds waste, enhancing solvent exposure. Enzymatic treatment breaks down cell walls, while green solvents extract color compounds under optimized conditions. Purification employs membrane filtration and chromatography, concentrating dyes and pigments with solvent recycling. Residual biomass is valorized for compost or bioenergy, achieving zero waste. Real-time control optimizes enzymatic treatment and extraction parameters. The system offers scalability, environmentally friendly solutions, and compatibility with floral and organic waste types. Valorizing biomass, contributes to the circular economy. This invention sets a new standard for sustainable natural dye extraction, promising wide-ranging applications in textiles, art, and cosmetics industries.

No. of Pages : 19 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202411054870 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : LIVESTOCK FARMING SYSTEM AND METHOD THEREOF

(51) International classification :A61B0005024000, A61B0005000000, A61B0005020500, G06N0020000000, A61B0005352000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Chandigarh University
Address of Applicant :Chandigarh University National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India. Mohali ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Md Shahnawaz Anwar
Address of Applicant :Chandigarh University National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India. Mohali ---------- ----------

(57) Abstract :
The present invention comprises a wearable devices equipped with various sensors for continuous health monitoring, including heart rate, temperature, and movement patterns. The advanced machine learning methods analyze behavioral data to detect anomalies and generate alerts. GPS (Global Positioning System) enables location tracking and a boundary layer to ensure animals remain in restricted areas. Predictive analytics are employed to forecast potential disease outbreaks, allowing for defensive measures. A centralized data integration and analysis platform collects and processes information from all components, providing farm managers with actionable insights through an intuitive interface, the system enhances animal welfare, improves farm productivity, and enables data-driven decision-making by combining these interconnected technologies.

No. of Pages : 13 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202411054871 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : FRAGRANCE RELEASING SMART ACCESSORIES

(51) International classification	:A61L0009120000, C11D0003500000, A61Q0013000000, A61L0009140000, B05B0011000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Chandigarh University
Address of Applicant :Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India. Mohali ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Pankita Dviwedi
Address of Applicant :University Centre for Research and Development (Intellectual Property Rights Cell), Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------

(57) Abstract :
The invention relates to fragrance-releasing smart accessories designed to release perfume gradually over an extended period. The accessories feature concealed perfume containers made of resin materials, aesthetically integrated to resemble decorative elements such as stones, gems, and metal inlays. The perfume is released via passive diffusion through a permeable membrane, and actively controlled by a microprocessor, that regulates the opening, and closing of the container. The microprocessor, connected to a mobile application via Bluetooth, allows users to customize release schedules, adjust fragrance intensity, monitor perfume levels, and receive refill notifications. The mobile application provides an interface for managing various settings, ensuring a convenient user experience. The perfume containers are easily refillable using standard perfume droppers, and refill bottles, maintaining continuous functionality without compromising the accessory's aesthetic appeal.

No. of Pages : 27 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024
(21) Application No.202411054528 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DYNAMIC GESTURE-BASED CONTROL SYSTEM FOR INTERACTIVE PRESENTATIONS WITH REAL-TIME ADAPTIVE ZOOM AND ANNOTATION CAPABILITIES

(51) International classification :G06F0003010000, G06F0001160000, G06F0003048830, G06F0003030000, H04N0005232000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Jaypee University of Information Technology
Address of Applicant :Waknaghat, Solan - 173234, Himachal Pradesh, India. Solan ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Pranjal Thakur
Address of Applicant :Department of CSE & IT, Jaypee University of Information Technology, Waknaghat, Solan - 173234, Himachal Pradesh, India. Solan ---------- ----------
2)Aditya Sood
Address of Applicant :Department of CSE & IT, Jaypee University of Information Technology, Waknaghat, Solan - 173234, Himachal Pradesh, India. Solan ---------- ----------
3)Prateek Thakral
Address of Applicant :Department of CSE & IT, Jaypee University of Information Technology, Waknaghat, Solan - 173234, Himachal Pradesh, India. Solan ---------- ----------
4)Shruti Jain
Address of Applicant :Department of Electronics and Communication Engineering, Jaypee University of Information Technology, Waknaghat, Solan - 173234, Himachal Pradesh, India. Solan ---------- ----------

(57) Abstract :
ABSTRACT The present invention discloses a method (300) for controlling interactive presentations using gestures. The method involves distributing IoT-enabled gesture sensors within a presentation environment and integrating them with wearable devices worn by the presenter. A central processing unit (CPU) receives gesture data from these sensors via a communication network and executes machine-learning algorithms to interpret and recognize hand gestures in real time. The recognized gestures control the navigation of presentation content through a presentation control module. Additionally, a dynamic zoom control subsystem is integrated, enabling adaptive zoom functionalities that follow the presenter's hand movements. The method further includes feedback integration for continuous improvement, control of multimedia elements, and real-time annotation capabilities. The present system aims to enhance the interactivity, accuracy, and effectiveness of presentations.

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024
(21) Application No.202411054529 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : EMOTION-AWARE VIRTUAL ASSISTANTS UTILIZING MULTI-MODAL SENTIMENT ANALYSIS FOR ENHANCED USER INTERACTION

(51) International classification	:G06F0040300000, G06N0003080000, G10L0025630000, G06N0003000000, G06N0003040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Manipal University Jaipur
Address of Applicant :Manipal University Jaipur, Off Jaipur-Ajmer Expressway, Post: Dehmi Kalan, Jaipur-303007, Rajasthan, India Jaipur ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Sudhir Sharma
Address of Applicant :Department of Data Science & Engineering, Manipal University Jaipur, Jaipur, Rajasthann303007 Jaipur ---------- ----------

(57) Abstract :
The present invention relates to an emotion-aware virtual assistants utilizing multi-modal sentiment analysis for enhanced user interaction. Emotion-aware virtual Assistants comprise natural language processing (NLP) methods and tools along with sentiment analysis to identify and interact with user emotions. These incorporate human-like features by closely identifying textual, vocal and contextual data meaning that these assistants are more sensitive. This invention aims to solve the problems of virtual assistants, which do not understand emotions or feelings, thus providing robots or AI with unemotional and inefficient communication interfaces for the users. The invention devised a strategy which processes data from multiple modalities to increase the accuracy of emotion recognition and adapt deep learning algorithms for detecting subtle changes in emotions. It improves the experiences of patients and customers in service delivery through the support system across various settings.

No. of Pages : 14 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024
(21) Application No.202411054547 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : "A GREEN SYNTHETIC TIO2 NANOPARTICLES-BASED COMPOSITION AND METHOD FOR PREPARATION THEREOF"

(51) International classification	:A61K0036590000, B01J0035000000, A61P0031100000, A61P0031040000, B82Y0005000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)DIT University
Address of Applicant :Mussoorie Diversion Road, Village Makkawala, Dehradun, Uttarakhand, India -248009 Dehradun ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Neha
Address of Applicant :Research Scholar (M. Pharm, Pharmacology), Faculty of Pharmacy, DIT University, Dehradun, India-248009 Dehradun ---------- ----------
2)Dr. Pankaj Pant
Address of Applicant :Assistant Professor, Faculty of Pharmacy, DIT University, Dehradun, India-248009 Dehradun ---------- ----------
3)Dr. Neha Kukreti
Address of Applicant :Assistant Professor, Chitkara College of Pharmacy, Chitkara University, Rajpura, Punjab, India- 140401 Rajpura ---------- ----------
4)Tejaus M Kolhar
Address of Applicant :PhD Scholar, Amity Institute of Molecular Medicine & Stem Cell Research, Amity University, Sector-125, Noida Noida ---------- ----------
5)Dr. Prayas Singh
Address of Applicant :Assistant Professor, Department of Physics, DIT University, Dehradun India-248009 Dehradun ---------- ----------
6)Dr. Ravi Kumar Shukla
Address of Applicant :Associate Professor & Head, Department of Physics, DIT University, Dehradun, India-248009 Dehradun ---------- ----------
7)Dr. Havagiray R. Chitme
Address of Applicant :Professor & Deputy Director, Amity Institute of Pharmacy, Amity University, Sector-125, Noida. Noida ---------- ----------

(57) Abstract :
The present invention introduces a pioneering method for developing novel green synthetic TiO2 nanoparticles. These nanoparticles are derived from a natural source, namely the hydroalcoholic extract of Tinospora cordifolia (TC). A significant aspect of this invention is the creation of green synthetic TiO2 nanoparticles originating from hydroalcoholic extract of Tinospora cordifolia (TC), utilizing microwave technology at a power level of 100 watts.

No. of Pages : 17 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :17/07/2024

(21) Application No.202411054548 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : "A SYSTEM FOR A NON-INTRUSIVE MULTI-LAYER NEURAL NETWORK-BASED ARCHITECTURE FOR FORECASTING STRESS/ANXIETY"

(51) International classification	:G06N0003040000, G06N0003080000, A61P0025220000, G16H0050200000, A61B0005000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)DIT University
Address of Applicant :Mussoorie Diversion Road, Village Makkawala, Dehradun, Uttarakhand, India -248009 Dehradun ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Pooja Gupta
Address of Applicant :Assistant Professor, School of Computing, DIT University, Dehradun, Uttarakhand-248009 Dehradun ---------- ----------
2)Dr. Srabanti Maji
Address of Applicant :Associate Professor, School of Computing, DIT University, Dehradun, Uttarakhand-248009 Dehradun ---------- ----------

(57) Abstract :
The present invention relates to a system for a non-intrusive multi-layer Neural Network-based architecture for forecasting stress/anxiety, comprising; i) A first layer normalizes the video frames, to classify the analyzed AUs, an Open face library is used; ii) A second layer receives the intensity levels of AUs and generates an AU matrix; and iii) A Neural Network architecture that examines the patterns from the AU matrix was used to predict the two emotional states in the third layer.

No. of Pages : 11 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202411054872 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MILLET BEETROOT CANDY

(51) International classification :A23G3/34, A23G3/48, A23L7/10, A23L33/105
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Chandigarh University,
Address of Applicant :Chandigarh University National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India. Mohali ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Prachi Avinash
Address of Applicant :Department of Nutrition And Dietetics, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------
2)Ms. Shikha Srivastava
Address of Applicant :Department of Nutrition And Dietetics, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------

(57) Abstract :
The present invention relates to a millet beetroot candy that incorporates the nutritional benefits of millet, agar-agar, and beetroot. This confectionary product combines millet, rich in fibre, protein, magnesium, and phosphorus, with the heart-healthy benefits of beetroot, rich in vitamins, antioxidants, and nitrates. The unique candy having features of moist taste with furnishing essential nutrients, making it a healthy treat. The formulation involves natural ingredients, and processes that retain maximum nutritive benefits, using natural sweeteners like honey or maple syrup rather than refined sugars. This gluten-free, antioxidant-rich candy offers to health-conscious individualities seeking pleasurable and beneficial snacks. The innovative mix of millet, agar-agar, and beetroot creates a visually charming and nutritional sweetmeat that stands out in the confectionary industry.

No. of Pages : 15 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024

(21) Application No.202411054873 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MAGNETIC STIRRER SYSTEM

(51) International classification	:H05B0001020000, C12M0001060000, B01L0007000000, B05B0015250000, B01J0019180000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Chandigarh University
Address of Applicant :Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India. Mohali ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Nupur Aggarwal
Address of Applicant :Department of Physics,Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------
2)Dr. Naveen Kumar
Address of Applicant :Department of Physics,Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------
3)Dr. Shivani Singla
Address of Applicant :Department of Physics,Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------

(57) Abstract :
The invention discloses the SmartStir magnetic stirrer system introduces an innovative approach to laboratory stirring, and heating through its advanced, remotely controlled design.The system offers unparalleled accuracy, and convenience utilizing a high-precision hot plate, a magnetic stirring mechanism, and a robust control unit. The mobile application interface allows users to adjust stirring speeds, and temperatures in real time, ensuring precise, and reproducible experimental conditions. Safety features, including over-temperature protection, and real-time alerts, guarantee safe operation. The modular design supports future upgrades, making the SmartStir system an adaptable, and essential tool for modern laboratories.

No. of Pages : 23 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024

(21) Application No.202411054874 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : PHOTOSYNTHETIC HUMANS

(51) International classification	:C12N0005160000, C07K0014470000, B29C0065340000, A61L0027380000, B29C0065000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Chandigarh University
Address of Applicant :Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India. Mohali ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Narendra Vikram Singh
Address of Applicant :Intellectual Property Rights Cell, University Centre for Research & Development, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------
2)Pankita Dviwedi
Address of Applicant :Intellectual Property Rights Cell, University Centre for Research & Development Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------
3)Dr. Sangita Saha
Address of Applicant :Intellectual Property Rights Cell, University Centre for Research & Development Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------

(57) Abstract :
The present invention discloses a novel method to enable human skin cells to perform photosynthesis. Using hybridoma technology, human skin cells are fused with photosynthetic cells, resulting in hybrid cells capable of photosynthesis. The method involves the preparation, and fusion of human skin cells with photosynthetic cells via techniques such as polyethylene glycol (PEG) fusion, and electrofusion. Post-fusion, the hybrid cells called hybridomas, are cultured in selective media to isolate successfully fused cells, that are subsequently genetically engineered to optimize photosynthetic efficiency. Main genetic modifications include the introduction of essential photosynthetic genes, codon optimization, and the use of regulatory elements to enhance gene expression. The hybrid cells are further integrated into human skin through micro-injection, and skin grafting, ensuring their viability, and functionality. This novel approach has the potential to address malnutrition, and food scarcity by providing an alternative energy source through photosynthesis in human cells.

No. of Pages : 28 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202411054875 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : BIOFILM INHIBITION ON SILICON CATHETERS USING LAB SYNTHESIZED SILVER BIONANOPARTICLES

(51) International classification	:C12N0001200000, A61K0009000000, A61L0027540000, A61L0029140000, C12R0001250000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Chandigarh University
Address of Applicant :Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India. Mohali ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Babita Thakur
Address of Applicant :Department of Biotechnology, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------
2)Dr. Sukhminderjit Kaur
Address of Applicant :Department of Biotechnology, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------

(57) Abstract :
The present invention discloses a medical device and method for inhibiting biofilm formation on silicon catheters using silver nanoparticles synthesized by lactic acid bacteria (LAB), Lactobacillus plantarum 1625 MTCC 5690. The main parts of invention include isolating LAB strains from traditional fermented foods, synthesizing silver nanoparticles through LAB culturing in silver nitrate solution, and applying these nanoparticles as an invariant coating on silicon catheters 600. The LAB-synthesized nanoparticles inhibit bacterial adhesion and disruption of existing biofilms, specifically targeting Pseudomonas putida. The biocompatible and safe nanoparticles reduce biofilm biomass and depth by releasing silver ions upon contact with excretory body fluid or urine. Crystal violet staining and Field Emission Scanning Electron Microscopy (FESEM) experimental results 400 and 500 validate the targated result. The method ensures medical-grade sterility and offers an effective alternative to conventional antibiotic treatments and hence enhancing patient issues in clinical settings.

No. of Pages : 19 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202411054876 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A NOVEL HAIR CLUTCHER SYSTEM

(51) International classification	:A45D0020120000, A61Q0005120000, A45D0020100000, A61B0005000000, A61Q0005000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Chandigarh University
Address of Applicant :Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India. Mohali ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Ruby
Address of Applicant :University Centre for Research and Development (UCRD) Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------

(57) Abstract :
The present invention discloses a hair clutcher equipped with a hair strength measurement mechanism. The device comprises micro-sensors embedded in the gripping surfaces 101 to measure hair tensile strength and elasticity, processed by a microcontroller. It includes a biometric feedback and alert system 102 comparing current and historical data, utilizing advanced materials like graphene for enhanced sensitivity 103. Additionally, it features sensors for hair hydration measurement 104 and a customizable design with adjustable tension settings for various hair types 105. The data is displayed on a digital screen or transmitted via Bluetooth to a mobile device. This integrated system offers both hair styling and comprehensive hair health monitoring, making it a versatile tool for proactive hair care management.

No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202411054877 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SMART LOCKER SYSTEM WITH MULTI-LAYER SECURITY

(51) International classification :G06F0021320000, G07C0009000000, H04W0012060000, A61B0005000000, E05B0039000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Chandigarh University
Address of Applicant :Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India. Mohali ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Ishan Thakral
Address of Applicant :Department of Computer Science Engineering, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------
2)Nikhil Aggarwal
Address of Applicant :Department of Computer Science Engineering, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------
3)Ankit Jhinkwan
Address of Applicant :Department of Computer Science Engineering, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------

(57) Abstract :
A smart locker system for securing valuable items comprises multiple security layers including a biometric authentication module and an eye-based authentication module. The biometric module captures and verifies biometric data, while the eye-based module verifies eye identification data via an iris scanner and eye-vein pattern recognition, including Morse code detection through eye movements. An internal camera monitors and records access attempts, and a weight monitoring unit measures and reports item weights. An alert module notifies users of failed authentication or unauthorized access via GSM communication. The control unit processes inputs and controls the lock mechanism, which features dual-layer activation. A mobile application interface allows remote monitoring and alert management. The system is powered by a primary power source and an emergency backup battery, ensuring continuous operation, with security measures such as data encryption and secure communication protocols for data transmission.

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202411054878 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : FLORAL WASTE VALORIZATION

(51) International classification	:B01D0011020000, C11B0009020000, C11B0009000000, A61Q0019000000, C10G0001100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Chandigarh University
Address of Applicant :Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India. Mohali ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Ritik Sharma
Address of Applicant :Department of Chemical Engineering, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------
2)Tamanna Sood
Address of Applicant :Department of Chemical Engineering, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------

(57) Abstract :
A comprehensive floral waste valorization process derived from the perfume industry. The process involve collecting discarded floral components, and undergoing thorough cleaning to eliminate impurities. The processed waste then undergoes enzymatic optimization, supercritical fluid extraction (SFE), and fractional distillation to isolate essential oils rich in therapeutic properties. By utilizing floral waste, this method not only modorates environmental harm but also minimizes waste generation. Additionally, a method for extracting essential oils, and natural fragrances from floral waste emphasizing enzymatic optimization, SFE utilizing carbon dioxide as a solvent, and fractional distillation under vacuum conditions. The resulting aromatic compounds are blended to create therapeutic fragrances tailored to specific therapeutic effects. These oils are utilized for relaxation, stress reduction, and providing respiratory support. Thus the method offering a sustainable solution for both the perfume industry, and environmental conservation.

No. of Pages : 22 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202411054879 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : POSTURE MONITORING SYSTEM AND METHOD THEREOF

(51) International classification :A61B0005000000, G06F0003010000, A61B0005110000, A41D0001000000, A61B0005020500
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Chandigarh University
Address of Applicant :Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India. Mohali ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Poulabi Dey
Address of Applicant :Department of UCRD, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------
2)Kirti Babber
Address of Applicant :Department of UCRD, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------
3)Narendra Vikram Singh
Address of Applicant :Department of UCRD, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------

(57) Abstract :
The present invention discloses a smart clothing system 100 for posture monitoring and correction, comprising a garment with embedded flexible sensors, including pressure sensors 101, accelerometers 102, and gyroscopes 103, which detect changes in posture, body alignment, orientation, and movement. A control unit 104 with a microprocessor 105, wireless communication module 106, haptic feedback system, and machine learning programming module analyzes posture data and provides tactile feedback to guide the user toward proper posture. The control unit 106 transmits data to a mobile application that offers real-time visual feedback, tracks posture trends, and provides personalized recommendations. The system includes a flexible, rechargeable battery 107 integrated into the garment. The mobile application 108 features a virtual coach for audio-based guidance. The embodiments, including the sensor-embedded garment, control unit, haptic feedback system, mobile application, and virtual coach, work together to monitor posture, provide feedback, and offer personalized guidance, promoting better posture habits and overall well-being.

No. of Pages : 23 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202411054880 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SMART PLANT CARE SYSTEM AND METHOD THEREOF

(51) International classification	:A61B0005000000, A01G0025160000, G16H0040670000, A61B0005020500, G01N0021840000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Chandigarh University
Address of Applicant :Department of UCRD, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Md Shahnawaz Anwar
Address of Applicant :Chandigarh University National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India. Mohali ---------- ----------

(57) Abstract :
The Smart Plant Care System is an intelligent, automated solution for plant care and monitoring. The system includes a sensor, a processor, an actuator, a modem, a water pump, a camera, a power supply, a buzzer, and a user interface to provide real-time plant health monitoring and automated care. The soil moisture sensor detects moisture levels, while the processor analyzes this data and activates an actuator as needed. A camera captures real-time plant images, which are then analyzed by the processor. The system sends alert messages to the user by a modem and activates a buzzer for immediate attention. This integrated approach allows for automated plant care and timely user notifications, potentially improving plant health management and resource efficiency.

No. of Pages : 14 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202411054882 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SENTINEL SYSTEM AND METHOD THEREOF

(51) International classification :H04L0051000000, G06K0009620000, G06N0020000000, G06F0016330000, G06N0020200000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Chandigarh University
Address of Applicant :Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India. Mohali ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Ankit Kumar Singh
Address of Applicant :Department of Computer Science and Engineering, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------
2)Dr. Rohan Gupta
Address of Applicant :Department of Computer Science and Engineering, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------
3)Utkarsh
Address of Applicant :Department of Computer Science and Engineering, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------

(57) Abstract :
The present invention discloses a system that collects input data from screenshots, comments, and messages across various digital platforms, submitted via online, mobile, and social media interfaces. During pre-processing, it standardizes the data by removing extraneous characters, tokenizing text, converting to lowercase, removing stopwords, and lemmatizing words. The text undergoes feature extraction using methods like TF-IDF vectorization to translate it into numerical representations suitable for machine learning. The processed features are fed into multiple machine learning models: Random Forest, which enhances classification accuracy through ensemble learning; Support Vector Machine, which excels in high-dimensional binary classification; and Logistic Regression, which offers probabilistic classification for binary outcomes. The system categorizes the text into various types of cyberbullying, such as verbal harassment and cyberstalking. It connects users with relevant NGOs and support groups for targeted assistance. The system presents classification results and recommended actions if cyberbullying is detected, providing immediate support resources.

No. of Pages : 14 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202411054883 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : WEARABLE SENSOR SYSTEM

(51) International classification	:A61B0005000000, G16H0040670000, A61B0005389000, A61B0005110000, G16H0080000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Chandigarh University
Address of Applicant :Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India. Mohali ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Himanshu Tripathi
Address of Applicant :Department of Physiotherapy, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------
2)Aayushi
Address of Applicant :Department of Physiotherapy, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------

(57) Abstract :
The invention presents a wearable sensor system integrating inertial measurement units (IMUs), electromyography (EMG) sensors, biometric sensors, virtual/augmented reality (VR/AR), machine learning, and telehealth components enabling comprehensive remote monitoring of the physiotherapy progress. Strategically positioned IMUs capture the bio-mechanical data on body movements, and joint angles. EMG sensors near muscle groups detect activation patterns, and imbalances. Biometric sensors measure physiological parameters such as heart rate, and respiration. A VR/AR interface overlays visual guidance, and gamified elements. Machine learning models analyse multimodal data, identify deviations, generate personalized feedback, and predict optimal recovery pathways. Telehealth integration facilitates secure data transmission, virtual consultations, and remote program adjustments. The system's embodiments collectively offer an innovative solution for data-driven, personalized rehabilitation monitoring, enhancing patient engagement, and care accessibility.

No. of Pages : 25 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024

(21) Application No.202411054884 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD OF SYNTHESIS OF TITANIUM DI-OXIDE BERBERINE BASED NANOGEL FORMULATION

(51) International classification	:A61K0031437500, A61Q0019000000, A61K0047320000, A61K0009060000, A61P0033000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Chandigarh University
Address of Applicant :Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India. Mohali ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Vimal Arora
Address of Applicant :University of Pharma Sciences, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------
2)Shubham Chaudhari
Address of Applicant :University of Pharma Sciences, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------
3)Ritika Puri
Address of Applicant :University of Pharma Sciences, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------
4)Sanjeev Kumar
Address of Applicant :Department of Physics, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------

(57) Abstract :
The invention presents the process for synthesizing a novel “Titanium dioxide (TiO2) nanoparticle-based Berberine Nanogel” for dermatological/topical application, utilising the synergistic potential of titanium dioxide nanoparticles (TiO2 NPs), and berberine. The nanogel matrix ensures optimal dispersion of the nanoparticles, facilitating controlled release of the active ingredients. The nanogel is designed to be non-greasy, and easy to apply thereby reducing skin irritation, and improving user compliance. Additionally, the nanogel offers enhanced stability, and an extended shelf life by protecting the active compounds from environmental degradation. The production process is cost-effective, and scalable, making the nanogel an economically viable solution for widespread use. This innovative composition aims to address the key limitations of existing topical formulations, providing a safer, more effective, and user-friendly alternative for skin care. The Berberine Nanogel offers a promising strategy in the dermatological/topical application, using synergistic actions of berberine, and TiO2 NPs.

No. of Pages : 25 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024

(21) Application No.202411054885 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SELF-CLEANING SWIMMING POOL SYSTEM

(51) International classification	:C02F0009000000, C02F0001000000, G06Q0010060000, C02F0001520000, C02F0001280000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Chandigarh University
Address of Applicant :Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India. Mohali ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Shivam Pandey
Address of Applicant :Department of Computer Science Engineering, Chandigarh University National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India. Mohali ---------- ----------
2)DR. Vikas Wasson
Address of Applicant :Department of Computer Science Engineering, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------
3)Dr. Ruchi
Address of Applicant :Department of Electronics and Communication Engineering, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------

(57) Abstract :
The present invention discloses an AI-powered self-cleaning swimming pool system. This system autonomously monitors, analyzes, and optimizes the quality of pool water in real-time by integrating advanced sensors, and AI processes. The key features include enhanced automation, adaptive cleaning capabilities, learning capabilities, smart maintenance scheduling, and significant reductions in cost, and effort. The system operates by collecting data, analyzing it, draining unsuitable water into a purification tank, cleansing the water through filtration, and chemical treatment, performing potential water brushing, conducting quality checks, and reintroducing purified water into the pool. Continuous monitoring ensures optimal water quality at all times. This invention represents a concept shift in pool maintenance, offering efficiency, effectiveness, and convenience to pool owners while minimizing environmental impact.

No. of Pages : 20 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024

(21) Application No.202411054886 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : TARGETED DRUG DELIVERY SYSTEM

(51) International classification	:A61L0029160000, A61K0009510000, A61M0031000000, A61L0027540000, A61K0047690000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Chandigarh University
Address of Applicant :Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India. Mohali ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Shubham Chaudhari
Address of Applicant :University Institute of Pharma Sciences, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------
2)Rudra Narayan Subudhi
Address of Applicant :University Institute of Pharma Sciences, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------
3)Manoj Dalabehera
Address of Applicant :University Institute of Pharma Sciences, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------

(57) Abstract :
The present invention comprises a sophisticated targeted drug delivery system utilizing cutting-edge nanotechnology. The system encompasses functionalized nanoparticles, controlled release mechanisms, smart nano-carriers, and multifunctional platforms. The nanoparticles are adorned with specific ligands that deliver therapeutic payloads directly to diseased cells. On-demand drug release is facilitated by smart nano-carriers that dynamically react to pathological stimuli through controlled release mechanisms. The incorporation of multi-functional platforms enhances the system's therapeutic potential by providing a multitude of additional features such as immune regulation, and diagnostic imaging. The targeted drug delivery systems are made of biocompatible materials, offering a safe, and efficient drug administration, opening the door to customized treatment that caters to the needs of patients for improved therapy outcomes.

No. of Pages : 18 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024

(21) Application No.202411054549 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : "A CURCUMIN AND CYCLODEXTRIN (CDNS) BASED BIOADHESIVE FORMULATION (NANOSPONGES) FOR VAGINAL ENDOMETRIOSIS"

(51) International classification	:A61K0009000000, A61K0009200000, A61K0031120000, A61K0009280000, A61P0001160000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)DIT University
Address of Applicant :Mussoorie Diversion Road, Village Makkawala, Dehradun, Uttarakhand, India -248009 Dehradun ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mrs. U.B. Abhini
Address of Applicant :Research Scholar, DIT University, Dehradun, Uttarakhand, India -248009 Dehradun ---------- ----------
2)Bhavna Kumar
Address of Applicant :Associate Professor, Faculty of Pharmacy, DIT University, Dehradun, Uttarakhand, India -248009 Dehradun ---------- ----------
3)G. Mariappan
Address of Applicant :Associate Professor, St. Mary's college of Pharmacy, Secunderabad, Telangana, India- 500025 Secunderabad ---------- ----------
4)Manmohan Singhal
Address of Applicant :Associate Professor, Faculty of Pharmacy, DIT University, Dehradun, Uttarakhand, India -248009 Dehradun ---------- ----------
5)Samir Bhargava
Address of Applicant :Faculty of Pharmacy, DIT University, Dehradun, Uttarakhand, India -248009 Dehradun ---------- ----------

(57) Abstract :
The present invention relates to the present invention is a solid dosage form of a curcumin, i.e., Tablet which disintegrates by a surface erosion mechanism. This dosage form was developed for intravaginal use to treat endometriosis. It was proposed to prepare curcumin loaded CDNS based tablets containing 100 mg of curcumin to deliver biologically effective amount of drug for six hours, after insertion into the low moisture environment of human vagina and lowers the side effects of the oral use of tablets.

No. of Pages : 18 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024

(21) Application No.202411054550 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : "A NANOMATERIAL COMPOSITION FOR WASTE WATER TREATMENT AND METHOD FOR PREPARATION THEREOF"

(51) International classification	:C05B0007000000, C04B0028320000, C02F0001280000, C02F0001520000, C01B0025450000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)DIT University
Address of Applicant :Mussoorie Diversion Road, Village Makkawala, Dehradun, Uttarakhand, India -248009 Dehradun ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Vishakha Kaushik
Address of Applicant :Assistant Professor-I, MNRL, Faculty of Physics, DIT University, Dehradun, Uttarakhand, India -248009 Dehradun ---------- ----------
2)Dr. Sachin Pathak
Address of Applicant :Associate Professor, School of Engineering, UPES, Dehradun, Uttarakhand, India -248009 Dehradun ---------- ----------
3)Dr. Neeru Dabas
Address of Applicant :Assistant Professor, Amity school of applied sciences, Departments of CBFS, Amity Univesity, Gurugram 122413 Gurugram ---------- ----------
4)Manish Jha
Address of Applicant :Research Scholar, MNRL, DIT University, Dehradun, Uttarakhand, India -248009 Dehradun ---------- ----------
5)Vanshita Baria
Address of Applicant :PG student, MNRL, DIT University, Dehradun, Uttarakhand, India -248009 Dehradun ---------- ----------

(57) Abstract :
This invention relates to a nanomaterial composition for waste water treatment, comprising: i) analytical grade magnesium chloride ($MgCl_2.4H_2O$) in the range of 1 to 1.02%; ii) potassium dihydrogen orthophosphate (KH_2PO_4) in the range of 0.5 to 0.68%; iii) Urea [$CO(NH_2)_2$] in the range of 0.5 to 0.6%.The method for synthesis of magnesium ammonium phosphate or struvite (SV), comprises the steps of: i) Mixing magnesium chloride and potassium dihydrogen orthophosphate with DI water and a homogeneous solution is obtained after magnetic stirring; ii) Another, homogeneous solution of urea is prepared and mixed with the obtained solution; iii) Transferring said homogeneous solution to an autoclave; iv) Placing the autoclave in the hot air oven for 1 hour at 120 °C and cooled down naturally; v) Cleaning the product with distilled water and ethanol four times.

No. of Pages : 18 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024

(21) Application No.202411054551 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : "CURCUMIN-5FUA CO-DELIVERY CASEIN-BASED NANOPARTICLES AND METHOD OF PREPARATION THEREOF"

(51) International classification	:A61P0035000000, A61K0009000000, A61K0009510000, A61K0031120000, A61K0049000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)DIT University
Address of Applicant :Mussoorie Diversion Road, Village Makkawala, Dehradun, Uttarakhand, India -248009 Dehradun ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Aman Chaudhary
Address of Applicant :M pharm (Scholar), Faculty of Pharmacy, SoPPHI, DIT University, Makkawala, Dehradun, Uttarakhand, India -248009 Dehradun ---------- ----------
2)Dr Ashok Behera
Address of Applicant :Assistant Professor I, Faculty of Pharmacy, SoPPHI, DIT University, Makkawala, Dehradun, Uttarakhand, India -248009 Dehradun ---------- ----------
3)Nisha Agari Bhatt
Address of Applicant :PhD (Scholar), Faculty of Pharmacy, SoPPHI, DIT University, Makkawala, Dehradun, Uttarakhand, India -248009 Dehradun ---------- ----------
4)Prof. (Dr) Jagannath Sahoo
Address of Applicant :Dean, Shobhaben Pratapbhai patel school of pharmacy and technology management, Vile Parle Mumbai-400056, India. Mumbai ---------- ----------

(57) Abstract :
The present invention relates to a curcumin-FUA loaded hybrid nanoparticle, comprising; i) Curcumin in the range of 1mg to 2mg, ii) Fluorouracil acetic acid in the range of 1mg to 5mg; iii) Calcium Chloride in the range of 0.2 ml to 0.4ml; and iii) Sodium Caseinate 5mg.More, specially it relates to curcumin-FUA loaded hybrid nanoparticle composition developed by loading the drug in casein nanoparticle for treatment of cancer. The method for preparation of nanocomposite comprises the steps of: i) characterized using DLS, FTIR, TEM and SEM ii) cross-linking process utilized to create the nano formulation; iii) Drug release tests using dialysis method at various physiological pHs; iv) Assays for stability and antioxidant activity.

No. of Pages : 30 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/06/2024
(21) Application No.202411049100 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DISTAL UPPER LIMB REHABILITATIVE VR MODULE

(51) International classification :A63B23/035, A63B71/06, G06F3/01, G06N3/04, G16H20/30
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)INDIAN INSTITUTE OF TECHNOLOGY DELHI
Address of Applicant :Hauz Khas, New Delhi- 110016, India ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MEHNDIRATTA, Amit
Address of Applicant :Centre for Biomedical Engineering 298, Block III, Indian Institute of Technology Delhi (IIT-D) Hauz Khas, New Delhi 110016, India ---------- ----------
2)SINGH, Neha
Address of Applicant :Centre for Biomedical Engineering Indian Institute of Technology Delhi, Hauz Khas, New Delhi-110016, India ---------- ----------
3)NATH, Debashish
Address of Applicant :Centre for Biomedical Engineering, Indian Institute of Technology Delhi, Hauz Khas, New Delhi- 110016, India ---------- ----------

(57) Abstract :
ABSTRACT The present invention describes a provides a system (100) and a method for user limb rehabilitation. In an example, the system (100) includes a processing unit (104) that simulates a Virtual Reality (VR) environment providing a plurality of 5 tasks tailored to each user's specific clinical presentation. The system (100) comprises a human computer interface (102) having a variable resistance which is adjusted based on a user limb performance in response to the plurality of tasks in the VR environment. The VR environment simulated by the processing unit (104) is displayed by a display unit (106).

No. of Pages : 28 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202411054973 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYNTHESIS OF SMALLER CHAIN PEPTIDE CANDIDATES AGAINST M. TUBERCULOSIS AND MITIGATING LUNG INJURY ASSOCIATED WITH METHOTREXATE TREATMENT

(51) International classification :A61K0038000000, C12N0015520000, C07K0007080000, C12N0015115000, C07K0001000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)KIET Group of Institutions (KIET School of Pharmacy)
Address of Applicant :KIET School of Pharmacy, KIET Group of Institutions (affiliated to Dr. A.P.J. Abdul Kalam Technical University, Lucknow), Delhi-NCR, 13 KM Stone, Ghaziabad-Meerut Road (NH-58), Murad Nagar Ghaziabad, Uttar Pradesh, India-201206 Ghaziabad ---------- ----------
2)Dr. Binkey Srivastava
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Kandasamy Nagarajan
Address of Applicant :KIET School of Pharmacy, 13 KM Stone, Ghaziabad-Meerut Road (NH-58), Murad Nagar Ghaziabad Uttar Pradesh India 201206 Ghaziabad ---------- ----------
2)Garima Kapoor
Address of Applicant :KIET School of Pharmacy, 13 KM Stone, Ghaziabad-Meerut Road (NH-58), Murad Nagar Ghaziabad Uttar Pradesh India 201206 Ghaziabad ---------- ----------
3)Pooja Gangwar
Address of Applicant :KIET School of Pharmacy, 13 KM Stone, Ghaziabad-Meerut Road (NH-58), Murad Nagar Ghaziabad Uttar Pradesh India 201206 Ghaziabad ---------- ----------
4)Richa Goel
Address of Applicant :KIET School of Pharmacy, 13 KM Stone, Ghaziabad-Meerut Road (NH-58), Murad Nagar Ghaziabad Uttar Pradesh India 201206 Ghaziabad ---------- ----------
5)Snigdha Bhardwaj
Address of Applicant :KIET School of Pharmacy, 13 KM Stone, Ghaziabad-Meerut Road (NH-58), Murad Nagar Ghaziabad Uttar Pradesh India 201206 Ghaziabad ---------- ----------
6)Parul Grover
Address of Applicant :KIET School of Pharmacy, 13 KM Stone, Ghaziabad-Meerut Road (NH-58), Murad Nagar Ghaziabad Uttar Pradesh India 201206 Ghaziabad ---------- ----------

(57) Abstract :
The present invention discloses novel peptides consisting of the amino acid sequence Cys-Asp (SEQ ID 1), Gln-Leu (SEQ ID 2), Gln-Gly-Ser (SEQ ID 3), Cys-Gly-Pro-Thr (SEQ ID 4). The novel peptides of claim 1, having binding affinity with a target protein Polyketide synthase 13 of Cys-Asp ?G= -8.84 Kcal/mol, Gln-Leu ?G= -8.65 Kcal/mol, Gln-Gly-Ser ?G= -7.42 Kcal/mol, and Cys-Gly-Pro-Thr ?G= -8.43 Kcal/mol. The invention also discloses a novel polypeptide of the amino acid sequence Cys-Gly-Pro-Thr (SEQ ID 4) as peptide candidate against M. tuberculosis and mitigating lung injury associated with methotrexate treatment and a process to prepare thereof.

No. of Pages : 32 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202411055059 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ADVANCED NANO SATELLITE

(51) International classification	:B64G0001100000, G01S0019420000, G09B0023180000, G01W0001080000, H04N0005330000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Manish Kumar
Address of Applicant :J-14, PSIT,Kanpur-Agra-Delhi NH2, Bhauti, Kanpur-209305 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Manish Kumar
Address of Applicant :Professor, Department of ECE, Pranveer Singh Institute of Technology, Kanpur ---------- ----------
2)Mr. Ankit Jain
Address of Applicant :Assistant Professor, Department of ECE, Pranveer Singh Institute of Technology Kanpur ---------- ----------
3)Dr. Raghavendra Singh
Address of Applicant :Professor, Department of ECE, Pranveer Singh Institute of Technology Kanpur ---------- ----------
4)Dr. Puspraj Singh Chauhan
Address of Applicant :Associate Professor, Department of ECE, Pranveer Singh Institute of Technology Kanpur ---------- ----------
5)Sandeep Kumar Khare
Address of Applicant :Astronomy Educator, Space India Pvt. Ltd, Delhi Kanpur ---------- ----------
6)Ayush Srivastava
Address of Applicant :Final year, Department of ECE, Pranveer Singh Institute of Technology Kanpur ---------- ----------
7)Aditya Gupta
Address of Applicant :Final year, Department of ECE, Pranveer Singh Institute of Technology Kanpur ---------- ----------
8)Ritish Katiyar
Address of Applicant :Third year, Department of ECE, Pranveer Singh Institute of Technology Kanpur ---------- ----------
9)Rahul Kumar
Address of Applicant :Third year, Department of ECE, Pranveer Singh Institute of Technology Kanpur ---------- ----------

(57) Abstract :
This invention describes an advanced nano satellite designed for educational purposes, offering a hands-on learning experience in satellite technology and space exploration. The satellite measures atmospheric conditions such as temperature and pressure, as well as location and velocity. It is equipped with an alarm system that triggers upon landing, ensuring easy recovery. Additionally, the satellite captures images of Earth, with all collected data stored on an SD card for subsequent analysis. Key components include the BMP280 for atmospheric measurements, INA219 for power monitoring, MPU6050 for orientation, GPS NEO 6M for navigation, XBee Pro S2C for communication, Arduino Mega 2560 for control, SG90 servo motor for mechanical operations, ESP-32 CAM for imaging, and a buzzer for audio signalling. The satellite's robust design and comprehensive functionality make it an invaluable educational tool, bridging the gap between theoretical learning and practical application in the field of nano satellite technology. This invention aims to enhance the educational experience by providing a cost-effective, easily accessible platform for students to explore and understand the fundamentals of satellite operations and data collection.

No. of Pages : 1 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024

(21) Application No.202411054890 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A DEVICE FOR PAIN MANAGEMENT

(51) International classification :A61N0001360000, A61B0005000000, A61N0001040000, A61N0001372000, G06N0020000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Chandigarh University
Address of Applicant :Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India. Mohali ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Prof.(Dr.) Himanshu Tripathi
Address of Applicant :University Institute of Allied Health Sciences, Chandigarh University, National Highway 05, Chandigarh-Ludhiana Highway, Mohali, Punjab -140413, India Mohali ---------- ----------

(57) Abstract :
The present invention discloses a portable electrical stimulation device for personalized pain management that comprises a handheld unit with a rechargeable battery, microcontroller, and pulse generator; modular electrodes with conductive gel pads; sensors for monitoring physiological parameters; and a user interface. The microcontroller runs an adaptive stimulation programming module that employs machine learning to analyze user feedback and physiological data, optimizing stimulation parameters in real-time. The pulse generator adjusts the waveform, frequency, pulse width, and amplitude of the electrical signal based on the output of the programming module, delivered through the electrodes. The compact design of the device allows for comfortable, discreet use throughout the day. This invention offers an approach to personalized pain relief by continuously learning and adapting to the unique pain response of the user, potentially transforming the field of pain management.

No. of Pages : 23 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024

(21) Application No.202411054913 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A LOW COST ROBOT FOR PATH PLANNING

(51) International classification	:G01C0021160000, B25J0009160000, G05D0001020000, G01S0019480000, G05B0009020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Manipal University Jaipur
Address of Applicant :Manipal University Jaipur, Off Jaipur-Ajmer Expressway, Post: Dehmi Kalan, Jaipur-303007, Rajasthan, India Jaipur ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Rohit Mittal
Address of Applicant :Dept of IoT and IS, Manipal University Jaipur Jaipur ---------- ----------
2)Geeta Rani
Address of Applicant :Dept of IoT and IS, Manipal University Jaipur Jaipur ---------- ----------
3)Vibhakar Pathak
Address of Applicant :Department of Information Technology, Arya College of Engineering and Information Technology, Jaipur 302028, India Jaipur ---------- ----------
4)Sonam Chhikara
Address of Applicant :Dept of CSE, Manipal University Jaipur Jaipur ---------- ----------
5)Vijaypal Singh Dhaka
Address of Applicant :Dept of CCE, Manipal University Jaipur Jaipur ---------- ----------
6)Eugenio Vocaturo
Address of Applicant :Department of Computer Engineering, Modeling, Electronics and Systems, University of Calabria, 87036 Rende, Cosenza, Italy; National Research Council, Institute of Nanotechnology (CNR-NANOTEC) Ponte P. Bucci, Cubo 31/C, 87036 Rende, Cosenza, Italy ---------- ----------
7)Ester Zumpano
Address of Applicant :Department of Computer Engineering, Modeling, Electronics and Systems, University of Calabria, 87036 Rende, Cosenza, Italy; National Research Council, Institute of Nanotechnology (CNR-NANOTEC) Ponte P. Bucci, Cubo 31/C, 87036 Rende, Cosenza, Italy ---------- ----------

(57) Abstract :
The present invention relates to a robot for path planning. The robot comprises: multiple sensors to provide eight degree of freedom and to navigate in different environments such as muddy road, smooth road, cemented road, curvy road but not limited to, Kalman filter and unscented Kalman filter techniques for localization and position estimation, a 12 V D.C. motor with an independent accelerometer mode in eZ430 Chronos, an inertial Measurement Unit mounted on the Arduino UNO, Arduino UNO works as a controller board for the robot, Zigbee modules for wireless transmission, a Bluetooth module HC-06, processor. The presnet design of a robot that precisely predicts the next move and optimizes its path across various environments. The invention also calculates the sectorial error while moving on a curvy path. The disclosed invention replaces high cost visual sensors with low cost sensors. Thus reduces the cost of path planning for a robot.

No. of Pages : 10 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202411054281 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD FOR FORMULATING AND EVALUATING MUCOADHESIVE MICROSPHERES FOR ORAL CONTROLLED RELEASE

(51) International classification :A61K0009160000, A61K0009000000, C09K0008035000, D01D0005000000, B33Y0010000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY (PHARMACY INSTITUTE)
Address of Applicant :19, KNOWLEDGE PARK-II, INSTITUTIONAL AREA, GREATER NOIDA-201306, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR SUSHMA VERMA
Address of Applicant :NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY (PHARMACY INSTITUTE), 19 KNOWLEDGE PARK II, INSTITUTIONAL AREA, GREATER NOIDA 201306 GREATER NOIDA ---------- ----------
2)NEERJA KUMARI
Address of Applicant :NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY (PHARMACY INSTITUTE), 19 KNOWLEDGE PARK II, INSTITUTIONAL AREA, GREATER NOIDA 201306 GREATER NOIDA ---------- ----------
3)DR MONIKA
Address of Applicant :NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY (PHARMACY INSTITUTE), 19 KNOWLEDGE PARK II, INSTITUTIONAL AREA, GREATER NOIDA 201306 GREATER NOIDA ---------- ----------
4)MS SWATI YADAV
Address of Applicant :NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY (PHARMACY INSTITUTE), 19 KNOWLEDGE PARK II, INSTITUTIONAL AREA, GREATER NOIDA 201306 GREATER NOIDA ---------- ----------
5)MS NIDHI SHARMA
Address of Applicant :NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY (PHARMACY INSTITUTE), 19 KNOWLEDGE PARK II, INSTITUTIONAL AREA, GREATER NOIDA 201306 GREATER NOIDA ---------- ----------
6)DR SALAHUDDIN
Address of Applicant :NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY (PHARMACY INSTITUTE), 19 KNOWLEDGE PARK II, INSTITUTIONAL AREA, GREATER NOIDA 201306 GREATER NOIDA ---------- ----------

(57) Abstract :
Disclosed herein is a method for formulating and evaluating mucoadhesive microspheres for oral controlled release (100) preparing a drug-polymer solution (106) by mixing the anti-diabetic drug (102) with a suitable polymer (104) and a solvent. The method (100) includes preparing a secondary polymer solution (108) containing a cross-linking agent (110). The method (100) also includes emulsifying (112) the drug-polymer solution (106) into the secondary polymer solution (108). The method (100) also includes initiating cross-linking (114) of the polymer in the emulsion to develop solid microspheres (116). The method (100) also includes solidifying (118) the microspheres (116) through drying (124) techniques. The method (100) also includes separating (120) the solidified microspheres (116) from the liquid phase. The method (100) also includes washing (122) the microspheres (116) with an appropriate solvent. The method (100) also includes drying (124) the washed microspheres (116). The method (100) also includes evaluating (126) the release profile and mucoadhesive properties of the microspheres (116).

No. of Pages : 29 No. of Claims : 10

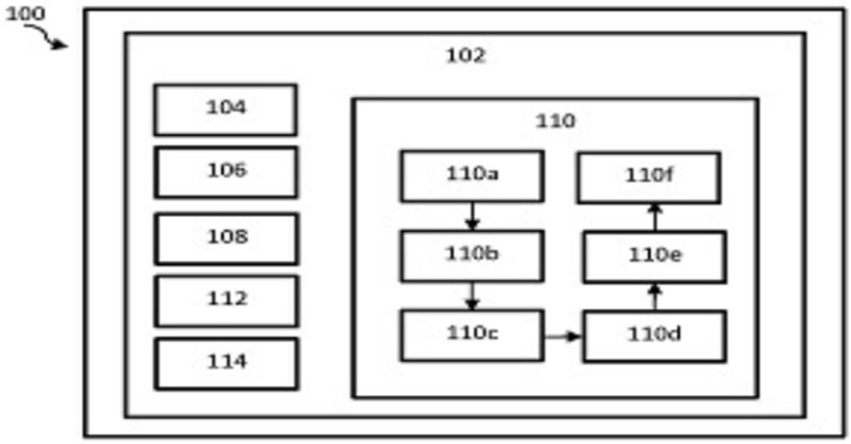
(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :10/07/2023
(21) Application No.202321046361 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM AND A METHOD FOR IMPLEMENTING A DRAWING APPLICATION PLATFORM FOR GENERATING FORMWORK LAYOUTS

(51) International classification :G06F30/13, G06T7/543, G06T7/60, G06T11/00, G06Q10/0875
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)KULKARNI, Swapnil Padmakar
Address of Applicant :1022, Orange Blossom, Uday Baug, BT Kawade Rd, Pune - 411013, Maharashtra, India Pune ---------- ----------
2)KULKARNI, Tejaswini Swapnil
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)KULKARNI, Swapnil Padmakar
Address of Applicant :1022, Orange Blossom, Uday Baug, BT Kawade Rd, Pune - 411013, Maharashtra, India Pune ---------- ----------
2)KULKARNI, Tejaswini Swapnil
Address of Applicant :1022, Orange Blossom, Uday Baug, BT Kawade Rd, Pune - 411013, Maharashtra, India Pune ---------- ----------

(57) Abstract :
ABSTRACT A SYSTEM AND A METHOD FOR IMPLEMENTING A DRAWING APPLICATION PLATFORM FOR GENERATING FORMWORK LAYOUTS
The present disclosure discloses a system(100) and a method(200) for implementing a drawing application platform for generating formwork layouts. The system(100) comprises an inputting module(108) to select an architectural shell plan image(114); a pre-processing framework module(110) to receive said shell plan image(114); a marking module (110a) to identify layers to mark an area and elements and non-polylines lines and convert said lines into polylines to obtain closed polylines; a parameter selection module(110b) to select area, elements and enter parameters; an identifying module(110c) to identify entities, rooms, and walls; a creating module(110d) to create layouts; a determining tool(110e) to determine internal and external corner profile geometry and calculate the length and height of elements and calculate deck panels to generate a layout of said shell plan and wall elevation; a pre-validation module(110f) to validate and generate a validated layout for shell plan and wall elevation and generate a bill of material.



No. of Pages : 76 No. of Claims : 19

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/12/2023
(21) Application No.202321085629 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SENSORY FUNCTION EVALUATION DEVICE

(51) International classification	:A61B0005000000, A61B0005110000, H04L0009320000, G09F0009330000, C22C0038120000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)MARWADI UNIVERSITY
Address of Applicant :MARWADI UNIVERSITY, Rajkot-Morbi Highway, At Gauridad, Rajkot – 360003, Gujarat, India Rajkot ---------- ----------
2)Dr. Desai Bhakti Rajeshbhai
3)Dr. Kakkad Ashish Dhirajlal
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Desai Bhakti Rajeshbhai
Address of Applicant :MARWADI UNIVERSITY, Rajkot-Morbi Highway, At Gauridad, Rajkot – 360003, Gujarat, India Rajkot ---------- ----------
2)Dr. Kakkad Ashish Dhirajlal
Address of Applicant :MARWADI UNIVERSITY, Rajkot-Morbi Highway, At Gauridad, Rajkot – 360003, Gujarat, India Rajkot ---------- ----------

(57) Abstract :
ABSTRACT SENSORY FUNCTION EVALUATION DEVICE The present invention relates to sensory device for measuring sensation. In the present device, different sensors are used and value can be increase or decrease through different knobs. At the same time, it will display on an LED screen and compare those with normative reference values and also use them for modification of treatment plans and prevention purposes. The device offers concurrent display of subjective and objective sensory values, facilitating the identification of normative reference values and modification of treatment plans based on acquired data. With its user-friendly design and standardized measurement protocols, this device promises to enhance the accuracy and efficacy of sensory evaluation in physiotherapy practice.

No. of Pages : 34 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/02/2024
(21) Application No.202421015199 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : IMPROVED BI-DIRECTIONAL INDUCTIVE POWER SYSTEM AND METHOD THEREOF

(51) International classification	:H02M3/335, H02J50/10, H02J50/70, B60L53/12, H01F38/14
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Indian Institute of Technology Goa
Address of Applicant :Goa College of Engineering Campus, Farmagudi, Ponda Ponda ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)FIGARADO, Sheron
Address of Applicant :School of Electrical Sciences, IIT Goa, Goa Engineering College Campus, Farmagudi Ponda ---------- ----------
2)BURYE, Rohan Sandeep
Address of Applicant :C.F. 30, Housing Board Colony, Durgawadi Taleigao ---------- ----------

(57) Abstract :
[00070] An improved bi-directional inductive power transfer (BIPT) system (100) and method (300) thereof is disclosed. In one embodiment, the BIPT system (100) includes a first converter unit (106) configured to convert a DC input from a DC source (102) into a real AC power using a zero-voltage switching operation across a wide range of load conditions, a first series compensation unit (108) configured to generate a first variable reactive power to eliminate effective reactance in a primary side circuit. The BIPT system 100 includes a loosely coupled transformer unit (110) configured to transfer the real AC power to a secondary side circuit, and a second series compensation unit (112) configured to generate a second variable reactive power to eliminate effective reactance in the secondary side circuit. The BIPT system (100) includes a second converter unit (116) configured to rectify the real AC power to generate a DC output. FIG. 1

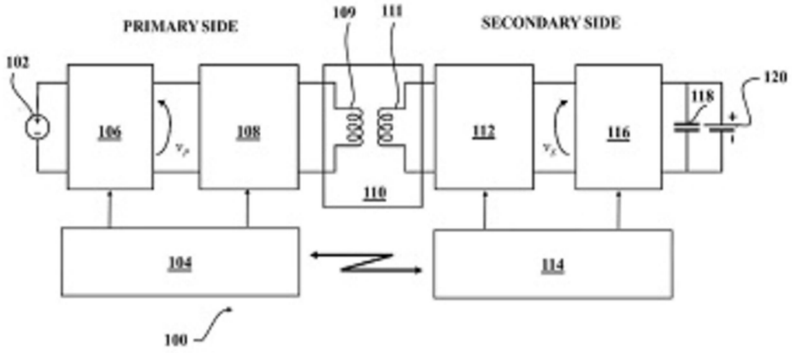


FIG. 1A

No. of Pages : 32 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :31/12/2022
(21) Application No.202221077703 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A COMPOSITION OF STABLE SILVER NANOPARTICLE SUSPENSION AND FORMULATION THEREOF

(51) International classification	:A01K0063040000, A01G0031020000, A61K0047260000, A61K0009000000, A01K0063000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)AIC Life Sciences
Address of Applicant :102, Angel Square, Near Royal Square, Utran, Surat, Gujarat, 394105, India Surat ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Bhagat Chintan Bipinchandra
Address of Applicant :71, New Ashirwad Park Row House Society, B/H Dream Honda, Udhna, Surat, Gujarat. 394210 Surat ---------- ----------
2)Kheni Ashish Madhavjibhai
Address of Applicant :245, Kamal Bagh Society, Near Ram Krishna, LH road, Surat, Gujarat. 395006 Surat ---------- ----------
3)Patel Sandeep Ishverbhai
Address of Applicant :3, Ugam Nagar, LH Road, Surat, Gujarat.395006 Surat ---------- ----------

(57) Abstract :
The present invention generally relates to the technical field of composition and formulation of stable silver nano particle suspension. Particularly, the present disclosure relates to a composition and formulation of stable silver nano particle suspension for pharmaceutical preparation, aquaculture and aquaponics and method of preparing the same.

No. of Pages : 14 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/04/2023
(21) Application No.202321030056 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN ADVANCED HAEMOSTATIC MATERIAL AND PROCESS OF PREPARATION THEREOF.

(51) International classification :A61P0007040000, A61L0024000000, A61L0015280000, A61P0043000000, A61L0015440000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)NAVRACHANA UNIVERSITY
Address of Applicant :Vasna-Bhayli Main Rd, Bhayli, Vadodara, Gujarat 391410. Vadodara ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SUMIT S. BHAWAL
Address of Applicant :Navrachana University, Vasna-Bhayli Main Rd, Bhayli, Vadodara, Gujarat, India, 391410 Vadodara, ---------- ----------
2)SHAHNUN M. MAFAT
Address of Applicant :Navrachana University, Vasna-Bhayli Main Rd, Bhayli, Vadodara, Gujarat, India, 391410 Vadodara, ---------- ----------
3)JHANVI H. PADHIYAR
Address of Applicant :Navrachana University, Vasna-Bhayli Main Rd, Bhayli, Vadodara, Gujarat, India, 391410. Vadodara, ---------- ----------
4)SUMAN DASGUPTA
Address of Applicant :Navrachana University, Vasna-Bhayli Main Rd, Bhayli, Vadodara, Gujarat, India, 391410. Vadodara, ---------- ----------
5)DEVANSHU PATHAK
Address of Applicant :Navrachana University, Vasna-Bhayli Main Rd, Bhayli, Vadodara, Gujarat, India, 391410. ---------- ----------

(57) Abstract :
TITLE: AN ADVANCED HAEMOSTATIC MATERIAL AND PROCESS OF PREPARATION THEREOF. ABSTRACT: An advanced haemostatic material and process of preparation thereof. More particularly the present invention relates to a covalently modified cotton as a haemostatic material. The present haemostatic material is covalently bonded with functional linkers, and haemostatic and/or antibacterial agents in a specified manner. The said haemostatic material shows enhanced blood absorption, haemostatic and antibacterial capacity useful in in emergency blood loss situation.

No. of Pages : 42 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/06/2023
(21) Application No.202321040907 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR DATA STANDARDIZATION

(51) International classification	:G06N0020000000, G06F0016220000, G06N0003040000, G06N0020200000, G06N0003080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)6SENSE INSIGHTS, INC.
Address of Applicant :450 Mission Street, Suite 201 San Francisco California United States of America - 94105 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)KEWALRAMANI, Rohit
Address of Applicant :C204, Simran Corner,Near Govind Garden, Pimple Saudagar,Pune, Maharashtra, India -411027 Pune ---------- ----------

(57) Abstract :
TRAINING A STANDARDIZATION ALGORITHM ABSTRACT A system and a method for training a standardization algorithm is disclosed. The system may receive customer data. The customer data may be transformed into columnar data. Further, the columnar data may be analyzed to extract a set of features. The set of features may comprise a set of columnar features and a set of column type features. Further, context for the columnar data may be determined. Furthermore, standard column headers may be identified for columns in the columnar data. A standardization algorithm may be trained using the standard column headers and the customer data.

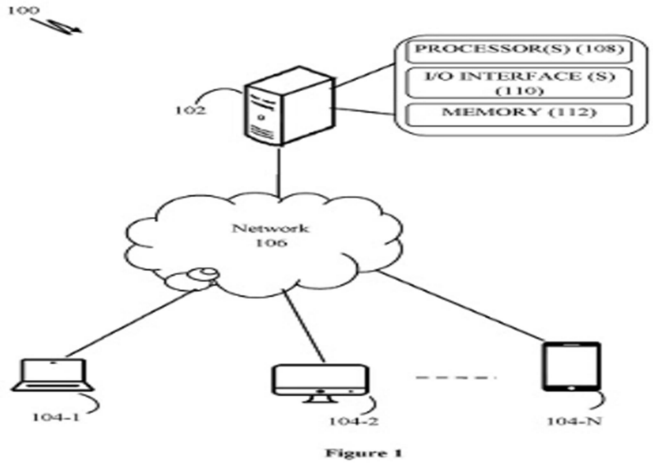


Figure 1

No. of Pages : 33 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2023

(21) Application No.202321051158 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SPIRULINA EFFERVESCENT TABLET

(51) International classification :A61K9/20, A61K35/748, A61K9/28, A61K47/12, A61K47/02, A61K31/714, A61K35/592, A61K31/593
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)MARWADI UNIVERSITY
Address of Applicant :MARWADI UNIVERSITY, Rajkot-Morbi Highway, At Gauridad, Rajkot – 360003, Gujarat, India Rajkot ---------- ----------
2)Rathod Ruchita Piyushbhai
3)Dr. Viralkumar Bhikhalal Mandaliya
4)Dr. Arun Kiritbhai Soni
5)Dr. Gaurav Vinodbhai Sanghvi
6)Dr. Lalji Hakubhai Baldaniya
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Rathod Ruchita Piyushbhai
Address of Applicant :MARWADI UNIVERSITY, Rajkot-Morbi Highway, At Gauridad, Rajkot – 360003, Gujarat, India Rajkot ---------- ----------
2)Dr. Viralkumar Bhikhalal Mandaliya
Address of Applicant :MARWADI UNIVERSITY, Rajkot-Morbi Highway, At Gauridad, Rajkot – 360003, Gujarat, India Rajkot ---------- ----------
3)Dr. Arun Kiritbhai Soni
Address of Applicant :MARWADI UNIVERSITY, Rajkot-Morbi Highway, At Gauridad, Rajkot – 360003, Gujarat, India Ranjkot ---------- ----------
4)Dr. Gaurav Vinodbhai Sanghvi
Address of Applicant :MARWADI UNIVERSITY, Rajkot-Morbi Highway, At Gauridad, Rajkot – 360003, Gujarat, India Rajkot ---------- ----------
5)Dr. Lalji Hakubhai Baldaniya
Address of Applicant :MARWADI UNIVERSITY, Rajkot-Morbi Highway, At Gauridad, Rajkot – 360003, Gujarat, India Rajkot ---------- ----------

(57) Abstract :
SPIRULINA EFFERVESCENT TABLET The spirulina is used in a number of food items due to its distinctive nutritional profile and versatility. The present invention is an effervescent tablet of spirulina and its preparation. The present invention also relates to a packaging material and storage condition of an effervescent tablet of spirulina. The present efferevescent tablet comprises of spirulina dry powder, sodium bicarbonate, citric acid, tartaric acid and other additives.

No. of Pages : 16 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/05/2024

(21) Application No.202421035776 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A METHOD FOR DEPOSITING UNIFORM COATING OF 2D TITANATE NANOSHEETS.

(51) International classification :B82Y30/00, B82Y40/00, C01G23/047, B01J21/06
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)D.Y. PATIL EDUCATION SOCIETY (DEEMED TO BE UNIVERSITY), KASABA BAWADA, KOLHAPUR.
Address of Applicant :869,' E' D.Y. PATIL EDUCATION SOCIETY (DEEMED TO BE UNIVERSITY), D. Y. PATIL VIDYANAGAR, KASABA BAWADA, KOLHAPUR - 416006, MAHARASHTRA, INDIA ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. JAYAVANT L. GUNJAKAR
Address of Applicant :869,' E' D.Y. PATIL EDUCATION SOCIETY (DEEMED TO BE UNIVERSITY), D. Y. PATIL VIDYANAGAR, KASABA BAWADA, KOLHAPUR - 416006, MAHARASHTRA, INDIA ---------- ----------
2)MR. VIKAS V. MAGDUM
Address of Applicant :869,' E' D.Y. PATIL EDUCATION SOCIETY (DEEMED TO BE UNIVERSITY), D. Y. PATIL VIDYANAGAR, KASABA BAWADA, KOLHAPUR - 416006, MAHARASHTRA, INDIA ---------- ----------
3)MR. YOGESH M. CHITARE
Address of Applicant :869,' E' D.Y. PATIL EDUCATION SOCIETY (DEEMED TO BE UNIVERSITY), D. Y. PATIL VIDYANAGAR, KASABA BAWADA, KOLHAPUR - 416006, MAHARASHTRA, INDIA ---------- ----------
4)MS. SHIRIN P. KULKARNI
Address of Applicant :869,' E' D.Y. PATIL EDUCATION SOCIETY (DEEMED TO BE UNIVERSITY), D. Y. PATIL VIDYANAGAR, KASABA BAWADA, KOLHAPUR - 416006, MAHARASHTRA, INDIA ---------- ----------
5)PROF. CHANDRAKANT D. LOKHANDE
Address of Applicant :869,' E' D.Y. PATIL EDUCATION SOCIETY (DEEMED TO BE UNIVERSITY), D. Y. PATIL VIDYANAGAR, KASABA BAWADA, KOLHAPUR - 416006, MAHARASHTRA, INDIA ---------- ----------

(57) Abstract :
Abstract A method of deposition of uniform and oriented coating of titanate nanosheets from its exfoliated solution using the dip coating technique is claimed. The precursor for the deposition of titanate coating is derived from the host crystals of HxTi2-x/4a\/404.H20, followed by calcination, protonation, exfoliation, and dialysis process. Highly uniform and adherent Titanate nanosheet coating is achieved by optimizing the dip coating parameters such as dipping and retrieval times, number of dipping cycles, and drying temperature. The X-ray diffraction (XRD) study of titanate nanosheet coating shows well-ordered lepidocrocite structure with orthorhombic symmetry. Field emission scanning electron microscope (FE-SEM) and cross-section field emission scanning electron microscopy (FE-SEM) images shows uniformly coated stacked titanate nanosheets with thickness of 484±20 nm.

No. of Pages : 17 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/08/2023

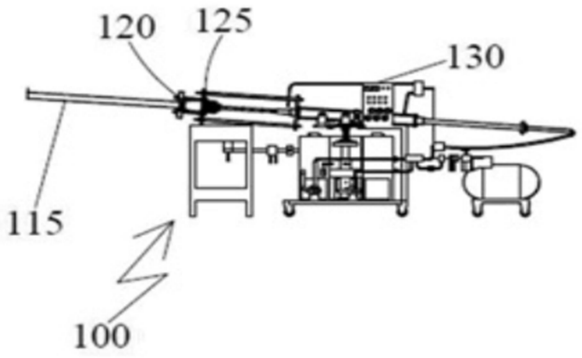
(21) Application No.202321057306 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : TUBE CLEANING APPARATUS

(51) International classification :B08B9/04, B08B9/057, B08B9/055, F28G15/00, B08B1/12
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Anand Vasant Bam
Address of Applicant :B 24 Anant Colony, Bibwewadi Corner, Pune, Maharashtra, India- 411037. Pune ---------- ----------
2)Mrinilani Anand Bam
3)Jagdish Rajegaekwad
4)Vedanta Jagdish Rajegaekwad
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Anand Vasant Bam
Address of Applicant :B 24 Anant Colony, Bibwewadi Corner, Pune, Maharashtra, India- 411037. Pune ---------- ----------
2)Mrinilani Anand Bam
Address of Applicant :B 24 Anant Colony, Bibwewadi Corner, Pune, Maharashtra, India- 411037. Pune ---------- ----------
3)Jagdish Rajegaekwad
Address of Applicant :A-22, Aditya Residency, 498, Parvati Pune 411009 Pune ---------- ----------
4)Vedanta Jagdish Rajegaekwad
Address of Applicant :A-22, Aditya Residency, 498, Parvati Pune 411009 Pune ---------- ----------

(57) Abstract :
"TUBE CLEANING APPARATUS" A tube cleaning apparatus 100 is presented, designed to interface with a tube 115 targeted for cleaning. The tube 115 is connected to the apparatus 100 via a flange 120 positioned at the open end of the tube, securely linked to an adapter 125 integrated into the tube cleaning apparatus 100. Alignment of the tube 115 with the apparatus 100 ensures that their central axes are coaxial, with a system in place to address minor misalignments. The apparatus 100 features a controller unit 130 responsible for managing cycle times and other pertinent parameters. Operating in manual, semi-automatic, or automatic modes as configured within the controller unit 130, the apparatus 100 facilitates cleaning of the tube 115 in accordance with predefined protocols. All cleaning operations, including chemical cleaning, water washing, hot air flushing, and oiling, are executed within a CIP (Clean-in-Place) framework, eliminating the need for any disassembly or reassembly processes. (FIG. 1 for publication)



No. of Pages : 60 No. of Claims : 17

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/11/2023
(21) Application No.202321078002 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SN-NI HYBRID MICROSTRUCTURE AND A METHOD OF SYNTHESIZING SN-NI HYBRID MICROSTRUCTURE

(51) International classification :B82Y30/00, B82Y40/00, C01G19/02, C01G53/11, C07F15/04
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Goa University
Address of Applicant :Goa University, University Road, Taleigao Plateau, Goa, 403206 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Pranay Morajkar
Address of Applicant :H. No. 202/40 Sankalp Niwas,Kailas Nagar, Assonora Goa 403503 Assonora ---------- ----------
2)Astrid Vailanka Mendes
Address of Applicant :H.No. 36, Carmita Waddo, Merces Vaddy Tiswadi GOA 403005 Tiswadi ---------- ----------

(57) Abstract :
ABSTRACT Sn-Ni HYBRID MICROSTRUCTURE AND A METHOD OF SYNTHESIZING Sn-Ni HYBRID MICROSTRUCTURE The present invention pertains to a SnO2-NiS2 hybrid microstructure, with the flexibility of substituting tin with either lead or cobalt. The method for fabricating this SnO2-NiS2 hybrid microstructure involves several steps: (a) preparing a solution consisting of a nickel precursor and tin precursor in deionized water, referred to as Solution A; (b) creating a separate solution by dissolving thiosemicarbazide in deionized water to form Solution B; (c) combining Solution B with Solution A while vigorously stirring to form Solution C; (d) introducing a controlled volume of H2O2 solution drop by drop into Solution C under continuous stirring; (e) adjusting the pH of Solution C within the range of 1-5 by adding an acid or alkali as needed; (f) subjecting the resultant solution to hydrothermal conditions within the temperature range of 130-180°C to induce the formation of a precipitate; and (g) subsequently washing and drying the precipitate to obtain the SnO2-NiS2 hybrid microstructured material. [To be published with Figure 1]

No. of Pages : 15 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :25/04/2024

(21) Application No.202421032834 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : FUZZY MACHINE LEARNING AND BLOCKCHAIN: A NEW APPROACH TO CYBERSECURITY IN ELECTRIC VEHICLE-BASED SMART CLOUD MODELS

(51) International classification :G06N0020000000, H04L0009320000, G06K0009620000, G06N0020100000, H04L0067120000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**

1)Pankaj Kumar
Address of Applicant :Assistant professor/Electrical,Dr.D.Y.Patil Institute of technology Pimpri Pune Maharashtra Pune ---------- ----------

2)Prof.(Dr.) Neelam Sahu

3)Vinod N. Alone

4)Debabrata Roy

5)Dr Ch N Santhosh Kumar

6)Dr. Amit Chauhan

7)Dr Pawan K Sharma

8)Dr.S.Subhalakshmi

9)Ms.Sunantha.D

10)Dr.Uma Ravi Sankar Yalavarthy

11)Sathya S

12)Saranya C

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Pankaj Kumar
Address of Applicant :Assistant professor/Electrical,Dr.D.Y.Patil Institute of technology Pimpri Pune Maharashtra Pune ---------- ----------

2)Prof.(Dr.) Neelam Sahu
Address of Applicant :Professor And Group Coordinator In Core Research and Innovation Group -AISECT Group Of Universities,(CRIG-AGU),Rabindranath Tagore University Campus, Mendua, Bhojpur, Raisen(M.P.) India-464993 Bhopal ---------- ----------

3)Vinod N. Alone
Address of Applicant :Assistant Professor, Computer Engineering Department, VPPCOE & VA , Sion , Mumbai - 400022. Mumbai ---------- ----------

4)Debabrata Roy
Address of Applicant :Assistant Professor, Mechanical Engineering, NSHM Knowledge Campus, Durgapur-Group of Institutions, Durgapur, 713212 Durgapur ---------- ----------

5)Dr Ch N Santhosh Kumar
Address of Applicant :Professor/CSE(DS), Institute of Aeronautical Engineering, Dundigal Malkaggiri ---------- ----------

6)Dr. Amit Chauhan
Address of Applicant :Department of Life Sciences, CHRIST University, Bengaluru, Karnataka, India 560029 Bengaluru ---------- ----------

7)Dr Pawan K Sharma
Address of Applicant :Tata Motors Ltd , Group Chief Information Security Officer , Thane - West Mumbai ---------- ----------

8)Dr.S.Subhalakshmi
Address of Applicant :Assistant Professor, Department of Mathematics, SNS College of Technology, Coimbatore-641035 Coimbatore ---------- ----------

9)Ms.Sunantha.D
Address of Applicant :Assistant Professor, Department of Mathematics, SNS College of Technology, Coimbatore-641035 Coimbatore ---------- ----------

10)Dr.Uma Ravi Sankar Yalavarthy
Address of Applicant :Assistant Professor, Vignan's Lara Institute of Technology and Science (A), Vadlamudi, PIN 522213 of Technology and Science (A), Vadlamudi, PIN 522213 Guntur ---------- ----------

11)Sathya S
Address of Applicant :Assistant Professor, Department of Mathematics, SNS College of Technology, Coimbatore-641035 Coimbatore ---------- ----------

12)Saranya C
Address of Applicant :Assistant Professor, Department of Mathematics, SNS College of Technology, Coimbatore-641035 Coimbatore ---------- ----------

(57) Abstract :
Fuzzy machine learning and blockchain: a new approach to cybersecurity in electric vehicle-based smart cloud models is the proposed invention. The proposed invention focuses on understanding the functions of cybersecurity. The invention focuses on analyzing the parameters of electric vehicle based smart cloud models using algorithms of Machine Learning.

No. of Pages : 12 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/05/2024

(21) Application No.202421039820 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A POINT-OF-CARE DIAGNOSTIC SYSTEM BASED ON LASER SPECKLE CONTRAST IMAGING (LSCI) USING AN IMAGE CONDUIT

(51) International classification :G02B27/48, G02B27/52, A61B1/00, A61B5/026
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)INDIAN INSTITUTE OF TECHNOLOGY BOMBAY
Address of Applicant :Powai, Mumbai – 400076, Maharashtra, India Mumbai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)PAUL, Ria
Address of Applicant :Department of Biosciences and Bioengineering, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
2)DAS, Susweta
Address of Applicant :Department of Biosciences and Bioengineering, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
3)SARKAR, Soumyajit
Address of Applicant :Department of Biosciences and Bioengineering, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
4)ZAFFAR, Mohammad
Address of Applicant :Department of Biosciences and Bioengineering, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
5)VARMA, Hari M.
Address of Applicant :Department of Biosciences and Bioengineering, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------

(57) Abstract :
The present invention provides a diagnostic system based on laser speckle contrast imaging (LSCI) for image conduit suitable for point-of-care testing (POCT), the system comprises a camera equipped on the system for normal and microscopic view (6), a microscopic objective (4), tube lens (5), laser source (1a) with beam shaping and beam expansion optics (1b and 1c), image conduit (6), two crossed linear polarizers (9a & 9b) and two beam splitters (2) and (8). The beam shaping optics could include an anamorphic prism or a pair of cylindrical lenses. The beam expansion could be a Galilean-type expander with or without a diffuser. The beamsplitter (8) enables switching between the white light source (7) for a normal view and, the laser source (1a) for a microscopic perfusion view depending on which one is turned on. The beamsplitter (2) is arranged in a reflection geometry specifically designed for laser speckle contrast imaging wherein the system combines the features of the endoscope into a compact and portable imaging system suitable for POCT. The crossed polarizers (9a and 9b) result in high quality artefact free images by minimizing the effect of ghost images. The components have been combined into a portable imaging system, showing the potential of POCT endoscopy. The camera provides a microscopic perfusion view of the Region of Interest and a normal view which helps the clinician to position the device in the required ROI and track blood flow changes in real time. Figure 1

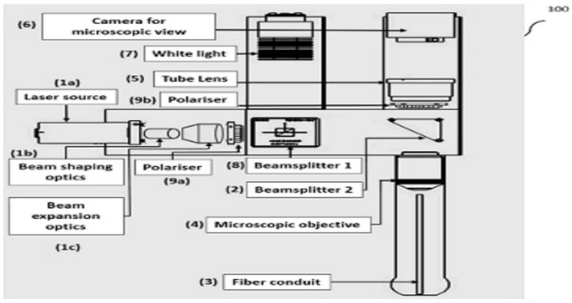


FIGURE 1

No. of Pages : 23 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202421021529 A

(19) INDIA

(22) Date of filing of Application :21/03/2024

(43) Publication Date : 02/08/2024

(54) Title of the invention : EXPLORING ANTICANCER AND ANTI TUBERCULOSIS ACTIVITIES OF PT(II) QUINAZOLINE COMPLEX DERIVED FROM (E)-2-METHYL-3(1-(NAPHTHALEN-1-YL)ETHYLIDENEAMINO)QUINAZOLINE-4(3H)-ONE[EMNEDAQZHO].

(51) International classification	:A61P35/00, A61P31/06, C07F15/00, A61K31/517
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)MS. SHEEBA MUMTAZ AHMED SHAIKH
Address of Applicant :A-704, OM SAI BUILDING, NEAR A2 TOWER HILL PARK, JOGESHWARI WEST, MUMBAI-400 102, MAHARASHTRA, INDIA. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MS. SHEEBA MUMTAZ AHMED SHAIKH
Address of Applicant :A-704, OM SAI BUILDING, NEAR A2 TOWER HILL PARK, JOGESHWARI WEST, MUMBAI-400 102, MAHARASHTRA, INDIA. ---------- ----------

(57) Abstract :
Abstract: \n vitro cytotoxicity assessment has become a critical aspect of developing therapeutic agents for a wide array of human diseases, including cancer, autoimmune disorders. and infectious ailments like tuberculosis (TB). Metal complexes, especially those based on platinum, have garnered substantial attention in cancer treatment due to their notable efficacy, typified by cisplatin's ability to induce filamentous growth. Osplatim. an inorganic heavy metal complex, shares mechanistic similarities with certain eellcycle- phase nonspecific alkylaBng agents, funcBoning via the formaBon of inierstrand DN A cross-links and DNAadducts, thereby impeding DNA, RNA, and protein synthesis, primarily in cancer cells. TB remains a significant global health challenge, necessitating the development of novel vaccines and drugs to combat its spread. The rational development of antitubercular agents hinges on a comprehensive understanding of the genetics, physiology, and host interactions of Mycobacterium tuberculosis. In this study, platinum metal complexes derived from (E)-2-methyl-3-{ 1-(naphthalen-1- yl) ethylideneamino)quinazolin-4{3H)-one jEMNEDAQZHO] were synthesisecl and evaluated for their potential as anticancer and antituberculosis agents. Meticulous molecule selection, protein data bank (PDB) optimization, and multi-component reaction methods were employed for synthesis. Characterisation of the resultant complexes was conducted using various analytical techniques, encompassing IR, TLC, NMR, XRD, TGA, Mass spectrum, and physicochemical parameter analysis. The prioritized molecules underwent in vitro assays to assess their anticancer activity via the MTT assay and antituberculosis activity using M. tuberculosis strain MTCC 300 as standards. The findings reveal promising potential for platinum metal complexes derived from quinazolinone Schiff bases [EMNEDAQZMO] as both anticancer and antituberculosis agents, as evidenced by their observed inhibitor)' effects in in vitro cytotoxicity assays and evaluations against M. tuberculosis strain MTCC 300. This study underscores the therapeutic promise of these novel platinum metal complexes and emphasizes the necessity for further investigations to elucidate their mechanisms of action and therapeutic efficacy in both preclinical and clinical contexts. Keywords: In vitro cytotoxicity assessment. Anticancer therapy. Antituberculosis therapy, Metal complexes. Platinum-based compounds, Cisplatin, Mechanism of action, Mycobacterium tuberculosis

No. of Pages : 15 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/05/2024
(21) Application No.202421040504 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A NOVEL LAMINATED PAPER DRONE FRAME

(51) International classification :B64U20/60, B64U20/65, B64C39/02, B64U10/14, B33Y80/00, B64C64/295, B64C64/147
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)INDIAN INSTITUTE OF TECHNOLOGY BOMBAY
Address of Applicant :Powai, Mumbai – 400076, Maharashtra, India Mumbai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)POOLAN, Karunakara Poopathi Kapuppasamy
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
2)DUBEY, Sudhanshu
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
3)PRASAD, Vishnu
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
4)PATEL, Ashik Kumar
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
5)MAURYA, Shubham Subhash
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
6)ARYAMAAN, Aditya Rajesh
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
7)ACHARYA, Abhijith Padmanbhan
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
8)SATHISH, Sooraj
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------

(57) Abstract :
The present invention relates to a drone frame comprising a plurality of layers of Kraft paper laminated with Low-Density Polyethylene (LDPE). The invention further provides a method of manufacturing a drone frame, which is a cost-effective and versatile solution for drone frame manufacturing. The drone frame is lightweight yet rigid, and it is manufactured using an additive manufacturing process, specifically the OptiLAM technology, which involves layer-by-layer printing of the laminated layers. The resulting drone frame exhibits comparable strength and rigidity to traditional materials like carbon fiber.

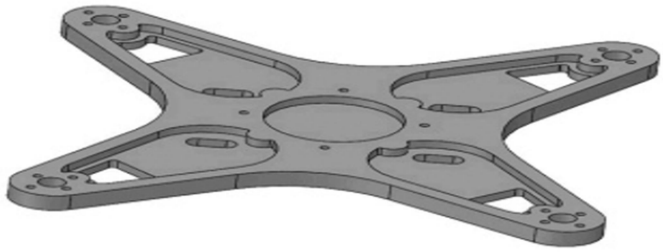


FIGURE 1

No. of Pages : 23 No. of Claims : 17

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :31/03/2023

(21) Application No.202321024917 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : HERBAL COMPOSITION

(51) International classification :A61K0036185000, A61K0036590000, A61K0036756000, A61K0036290000, A61P0019020000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Cira Herbals LLP
Address of Applicant :3-A, Aneesh Apartment CHSL, AZAD LANE S.V.ROAD, ANDHERI (W) MUMBAI Maharashtra INDIA 400058 Mumbai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Gautam Chandrakumar Shah
Address of Applicant :3, Punil Apts 9 Ashok Nagar CHS, N S Road 11, JVPD Scheme, Vile Parle West Mumbai Maharashtra India 400049 Mumbai ---------- ----------
2)Hiral Manitt Shah
Address of Applicant :3, Punil Apts 9 Ashok Nagar CHS, N S Road 11, JVPD Scheme, Vile Parle West Mumbai Maharashtra India 400049 Mumbai ---------- ----------
3)Ritendre Singh Matharu
Address of Applicant :A12, Trident Hotel Road Haridas ji ki Magri Udaipur Rajasthan India 313001 Udaipur ---------- ----------

(57) Abstract :
The present invention relates to a polyherbal composition comprising a mixture of Phellodendron amurense or Berberis aristata, Tribulus terrestris, Piper nigrum, and Tinospora cordifolia for treatment of osteoarthritis and associated inflammation.

No. of Pages : 30 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :09/05/2024

(21) Application No.202421036597 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : EVAPORATIVE AIR COOLER WITH A TANK

(51) International classification :F24F13/00, F24F5/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SYMPHONY LIMITED
Address of Applicant :Symphony house, FP-12, TP-50, Off S. G. Highway, Bodakdev, Ahmedabad, Gujarat, 380059, India Ahmedabad ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)BAKERI, Achal Anil
Address of Applicant :Symphony house, FP-12, TP-50, Off S. G. Highway, Bodakdev, Ahmedabad, Gujarat, 380059, India Ahmedabad ---------- ----------

(57) Abstract :
Disclosed is a tank (104) that includes a base (202). The base (202) includes a plurality of depressions (206a-206d) and a plurality of aperture sets (208a-208d). The plurality of depressions (206a-206d) are disposed in the base (202). Each depression of the plurality of depressions (206a-206d) accommodates one of (i) a leg of a plurality of legs (201a-201d) in a first position of the plurality of legs (201a-201d) and (ii) one or more accessories (400). Each leg of the plurality of legs (201a-201d) is coupled to corresponding aperture set of the plurality of aperture sets (208a-208d) in a second position of the plurality of legs (201a-201d). FIG. 1 is the reference figure.

FIG. 1

No. of Pages : 26 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :09/05/2024

(21) Application No.202421036671 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A USB-FI HOTSPOT DEVICE

(51) International classification :H04W0088040000, H04W0052020000, H02J0007000000, H04N0021610000, H04W0048140000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Shri Ramdeobaba College of Engineering and Management
Address of Applicant :Shri Ramdeobaba College of Engineering and Management, Katol road, Nagpur, Maharashtra, India ---------- ----------
2)GANDHI, Vineet A.
3)TIWARI, Ayush M.
4)NANDWANE, Aditya P.
5)PANDE, Harsh M.
6)HARDAS, Bhalchandra
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)GANDHI, Vineet A.
Address of Applicant :Dept. of Electronics Engineering, Shri Ramdeobaba College of Engineering and Management, Ramdeo Tekdi, Gittikhadan, Katol Road, Nagpur, Maharashtra, India-440013 ---------- ----------
2)TIWARI, Ayush M.
Address of Applicant :Dept. of Electronics Engineering, Shri Ramdeobaba College of Engineering and Management, Ramdeo Tekdi, Gittikhadan, Katol Road, Nagpur, Maharashtra, India- 440013 ---------- ----------
3)NANDWANE, Aditya P.
Address of Applicant :Dept. of Electronics Engineering, Shri Ramdeobaba College of Engineering and Management, Ramdeo Tekdi, Gittikhadan, Katol Road, Nagpur, Maharashtra, India- 440013 ---------- ----------
4)PANDE, Harsh M.
Address of Applicant :Dept. of Electronics Engineering, Shri Ramdeobaba College of Engineering and Management, Ramdeo Tekdi, Gittikhadan, Katol Road, Nagpur, Maharashtra, India - 440013 ---------- ----------
5)HARDAS, Bhalchandra
Address of Applicant :Shri Ramdeobaba College of Engineering and Management, Katol road, Nagpur, Maharashtra, India ---------- ----------

(57) Abstract :
The present invention relates to a USB-fi hotspot device designed to redefine mobile internet sharing. Comprising a USB-Fi device, a mobile phone with USB tethering capability, and a USB data cable, the system aims to alleviate common issues such as battery drain, overheating, and signal instability. The USB-Fi device integrates a rechargeable battery and connects to the mobile phone via a C type port (101), enabling USB tethering. Through this connection, the USB-Fi device acts as a portable hotspot/router, wirelessly distributing internet connectivity to other devices. By offloading hotspot functionality from the mobile phone, the invention mitigates battery drain and overheating concerns. Furthermore, it enhances signal strength, ensuring a stable and reliable internet connection. This innovation offers a hassle-free solution for sharing mobile internet, promising an enhanced user experience

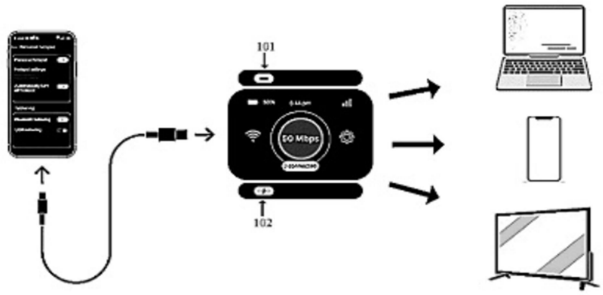


Figure 1

No. of Pages : 10 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/05/2024
(21) Application No.202421038112 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : COMPOSITE BOARD BASED FRAMEWORK FOR BICYCLE

(51) International classification :B62J1/08, B62K19/02, B62K19/14
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)INDIAN INSTITUTE OF TECHNOLOGY BOMBAY
Address of Applicant :Powai, Mumbai – 400076, Maharashtra, India Mumbai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MUNSHI, Kishori Lal
Address of Applicant :CTech Labs Private Limited, C-703, Vijay Vihar, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
2)CHAUHAN, Aakaash Singh
Address of Applicant :Centre for Technology Alternatives for Rural Areas (CTARA), Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
3)KORDE, Chaaruchandra
Address of Applicant :Centre for Technology Alternatives for Rural Areas (CTARA), Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
4)RAO, Anand B
Address of Applicant :Centre for Technology Alternatives for Rural Areas (CTARA), Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------

(57) Abstract :
Disclosed herein is a Composite Board Framework Based Bicycle, characterized in that the main framework for the bicycle comprising composite boards attached together with joining means with a gap between the composite boards equivalent to the Structured bracket attached on the front fork tube section of the bicycle. The affixation of the said framework with the front wheel and rear wheel, with due alignment to the steering, and rear wheel using joining attachments structured specifically for attaching the composite boards with the rear wheel, provides due stability and rigidity to the bicycle. The framework provides a unique structure and utility appeal that is intended to cut down costs associated with metal framework-based bicycles, increase environmental sustainability, and provide job opportunities to the rural sectors. FIG. 1

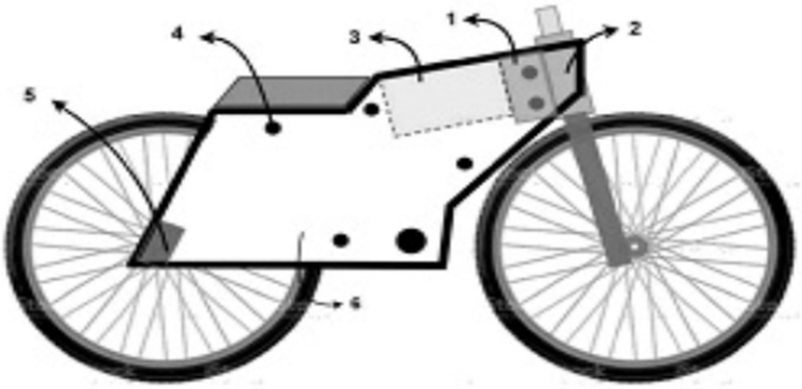


Figure 1

No. of Pages : 18 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/05/2024

(21) Application No.202421040318 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : NANOPARTICULATE COMPOSITION COMPRISING PHLORETIN AND PROCESS OF PREPARATION THEREOF

(51) International classification :B82Y5/00, B82Y30/00, B82Y40/00, A61K9/14, A61K9/51, A61K33/38, A61K31/047, A61K31/12
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Ganesh Raosaheb Godge
Address of Applicant :Dept. Of Pharmaceutics, Dr. V. V. P. F's College of Pharmacy,Vilad Ghat,PO MIDC, Ahmednagar-414111 Ahmednagar ---------- ----------
2)Rutuja Sarjerao Jadhav
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Ganesh Raosaheb Godge
Address of Applicant :Dept. Of Pharmaceutics, Dr. V. V. P. F's College of Pharmacy,Vilad Ghat,PO MIDC, Ahmednagar-414111 Ahmednagar ---------- ----------
2)Rutuja Sarjerao Jadhav
Address of Applicant :Dept. Of Pharmaceutics, Dr. V. V. P. F's College of Pharmacy,Vilad Ghat,PO MIDC, Ahmednagar-414111 Ahmednagar ---------- ----------
3)Ankita Balbhim Mashalkar
Address of Applicant :Dept. Of Pharmaceutics, Dr. V. V. P. F's College of Pharmacy,Vilad Ghat,PO MIDC, Ahmednagar-414111 Ahmednagar ---------- ----------
4)Anuja Lahukumar Chobhe
Address of Applicant :Dept. Of Pharmaceutics, Dr. V. V. P. F's College of Pharmacy,Vilad Ghat,PO MIDC, Ahmednagar-414111 Ahmednagar ---------- ----------
5)Prof. Manish Ashok Raskar
Address of Applicant :Dept. Of Pharmaceutical Chem, Dr. V. V. P. F's College of Pharmacy,Vilad Ghat,PO MIDC, Ahmednagar-414111 Ahmednagar ---------- ----------
6)Dr. Shivanand N. Hiremath
Address of Applicant :PRES's College of Pharmacy, Loni, Maharashtra, India, 413736 Ahmednagar ---------- ----------

(57) Abstract :
The present invention discloses a novel formulation for improving the oral bioavailability of Phloretin, a natural polyphenolic compound with potent anti-cancer properties, by encapsulating it within polymer-coated silver nanoparticles. The formulation aims to enhance the therapeutic efficacy and biocompatibility of Phloretin, particularly for cancer treatment, while minimizing off-target effects and systemic toxicity associated with traditional chemotherapy. The formulation process involves the synthesis of polymeric nanoparticles encapsulating Phloretin and coated with silver nanoparticles, leveraging the mucoadhesive properties of chitosan and the antimicrobial effects of silver.

No. of Pages : 28 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/06/2024

(21) Application No.202421042834 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : COMPOSITION COMPRISING POLYMERIC NANOPARTICLE OF SITAGLIPTIN AND PROCESS OF PREPARATION THEREOF

(51) International classification	:A61K9/51, A61K31/03, A61K31/4965, A61K31/4188, A61K47/10, A61K47/32, B82Y5/00, B82Y30/00
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Ganesh Raosaheb Godge
Address of Applicant :Dept. Of Pharmaceutics, Dr. V. V. P. F's College of Pharmacy,Vilad Ghat,PO MIDC, Ahmednagar-414111, Maharashtra Ahmednagar ---------- ----------
2)Ankita Balbhim Mashalkar
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Ganesh Raosaheb Godge
Address of Applicant :Dept. Of Pharmaceutics, Dr. V. V. P. F's College of Pharmacy,Vilad Ghat,PO MIDC, Ahmednagar-414111, Maharashtra Ahmednagar ---------- ----------
2)Dr. Shivanand N. Hiremath
Address of Applicant :PRES's College of Pharmacy, Loni Maharashtra, India, 413736 Loni ---------- ----------
3)Ankita Balbhim Mashalkar
Address of Applicant :Dept. Of Pharmaceutics, Dr. V. V. P. F's College of Pharmacy,Vilad Ghat,PO MIDC, Ahmednagar-414111, Maharashtra Ahmednagar ---------- ----------
4)Rutuja Sarjerao Jadhav
Address of Applicant :Dept. Of Pharmaceutics, Dr. V. V. P. F's College of Pharmacy,Vilad Ghat,PO MIDC, Ahmednagar-414111, Maharashtra Ahmednagar ---------- ----------
5)Anuja Lahukumar Chobhe
Address of Applicant :Dept. Of Pharmaceutics, Dr. V. V. P. F's College of Pharmacy,Vilad Ghat,PO MIDC, Ahmednagar-414111, Maharashtra Ahmednagar ---------- ----------
6)Prof. Manish Ashok Raskar
Address of Applicant :Dept. Of Dept. Of Pharmaceutical Chem, Dr. V. V. P. F's College of Pharmacy,Vilad Ghat,PO MIDC, Ahmednagar-414111, Maharashtra Ahmednagar ---------- ----------
7)Shrikrushna Chandrakant Bharat
Address of Applicant :At post: Hatgaon, Taluka: Shevgaon. Ahmednagar Maharashtra, India, 414503 Ahmednagar ---------- ----------

(57) Abstract :
The present invention discloses a pharmaceutical composition comprising polymeric nanoparticles of sitagliptin and pharmaceutically acceptable salts thereof. The pharmaceutical composition comprises sitagliptin with hydrophilic polymer and solvents. The nanoparticles are optionally coated with the biotin layer for site specific targeted drug delivery. The present invention is provided in the form of controlled release dosage form. The process for preparation of pharmaceutical composition comprising polymeric nanoparticles of sitagliptin is also provided.

No. of Pages : 29 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :10/06/2024
(21) Application No.202421044715 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : IMMOBILIZED ENZYMES ON MESOPOROUS SILICA (IEMS): A NOVEL TECHNOLOGY FOR REMOVAL OF PHARMACEUTICALS AND PERSONAL CARE PRODUCTS(PPCP) FROM WATER

(51) International classification :B82Y30/00, B82Y40/00, C02F1/26, C02F1/28, C02F1/60, C12N11/14
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP UNIVERSITY NASHIK
3)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. GANESH B. SHEVALKAR
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)MAYURI G. PATIL
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)DR. SREYA KOSANAM
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)DR. LAXMIKANT B. BORSE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)MILIND RAJARAM BHADANE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------

(57) Abstract :
ABSTRACT The invention of Immobilized Enzymes on Mesoporous Silica (IEMS) presents an innovative solution for the effective removal of Pharmaceuticals and Personal Care Products (PPCPs) from water. PPCPs, including medications and hygiene products, have become pervasive contaminants in water bodies, posing risks to both human health and the environment. IEMS leverages the catalytic power of enzymes immobilized on mesoporous silica to degrade PPCPs efficiently. The mesoporous silica, with its high surface area and well-defined pore structure, provides an ideal support for enzyme immobilization through covalent binding, physical adsorption, or encapsulation, enhancing enzyme stability and reusability. This technology ensures the targeted breakdown of PPCPs into harmless byproducts, overcoming the limitations of conventional water treatment methods that fail to eliminate these contaminants effectively. Scalable and adaptable for various water treatment facilities, IEMS meets regulatory standards and supports sustainable water management practices. By offering a comprehensive and eco-friendly approach to water purification, IEMS contributes to the preservation of water quality, protection of aquatic ecosystems, and safeguarding of public health, while also raising awareness about Ihe importance of advanced water treatment technologies.

No. of Pages : 16 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :10/06/2024
(21) Application No.202421044721 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MICROWAVE ASSISTED SYNTHESIS OF SUBSTITUTED CHALCONES AND PHARMACOLOGICAL EVALUATION THEREOF.

(51) International classification :A61K31/121, C07C49/213, C07C49/217, C07C49/205
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP UNIVERSITY NASHIK
3)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. SANDHYA LAXMIKANT BORSE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)DR. LAXMIKANT BANSILAL BORSE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)DR. RAJESH ARJUN AHIRRAO
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)DR. NAYAN ASHOK GUJARATHI
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)HARSHALA DHANRAJ SALAVE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------

(57) Abstract :
ABSTRACT The abstract delineates a method for the microwave-assisted synthesis of substituted flavonoids, predominantly chalcones, along with their subsequent pharmacological evaluation. The innovation offers a rapid and highly efficient approach to synthesizing chalcones under microwave irradiation, resulting in improved yields and shortened reaction times compared to conventional methods. Among the synthesized chalcones, l-[2',4'-dihydroxyphenyl]-3-[4-chlorophenyl]-2-prop6n-l-one and 1-[2',4,dihydroxyphenyl]-3-[2-chlorophenyl]-2-propen-l-one are noted for their noteworthy antioxidant activity. The field of the invention pertains to pharmaceutical technology, particularly focusing on microwave-assisted synthesis of flavonoids and their subsequent biological evaluation. Microwave irradiation has gained prominence in recent years for ils ability to accelerate organic reactions, making it a promising technology for pharmaceutical synthesis. The method described herein not only enhances synthesis efficiency but also aligns with the principles of green chemistry by reducing reaction times and improving product yields. Overall, this invention presents a significant advancement in the synthesis of flavonoid derivatives, offering potential applications in pharmaceuticals, clinical settings, cosmetics, and food products, thus contributing to the broader scientific and medical communities.

No. of Pages : 19 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/05/2024
(21) Application No.202421039851 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A NON-FLOW ZINC BROMINE BATTERY WITH HIGH CAPACITY AND CYCLE LIFE`

(51) International classification :H01G11/22, H01G11/32, H01G11/34, H01G11/40, H01G11/52, H01G11/54, H01G11/56, H01G11/68
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)INDIAN INSTITUTE OF TECHNOLOGY BOMBAY
Address of Applicant :Powai, Mumbai – 400076, Maharashtra, India Mumbai - ---------- ----------
2)SOLON INDIA PRIVATE LIMITED
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)RAMAKRISHNAN, Srinivasan
Address of Applicant :Department of Chemistry, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
2)MOLLICK, Shain Sagar
Address of Applicant :Department of Chemistry, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
3)MANDAL, Titir
Address of Applicant :Department of Chemistry, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------

(57) Abstract :
The present invention relates to a non-flow zinc-bromine battery in a vertical, stackable, bipolar configuration. The zinc-bromine battery comprises pyrolyzed carbon felt as the positive electrode, carbon cloth as the negative electrode and zinc-bromine aqueous solution as the electrolyte with tetraethylammonium chloride as an additive. The battery has the advantages of long cycle life, minimal overpotential and high energy density. Figure 1

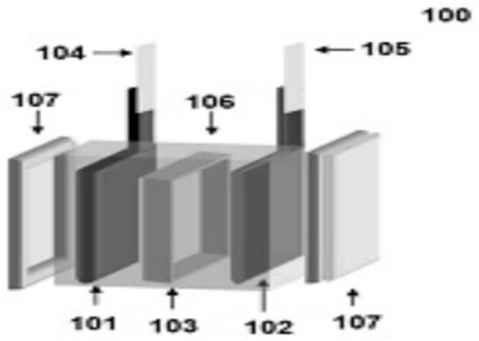


Figure 1

No. of Pages : 21 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/05/2024
(21) Application No.202421041986 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : PUMICE DRONE

(51) International classification :B64U20/70, B64U20/75, B64C39/02, B23K26/36
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)INDIAN INSTITUTE OF TECHNOLOGY BOMBAY
Address of Applicant :Powai, Mumbai – 400076, Maharashtra, India Mumbai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)POOLAN, Karunakara Poopathi Kapuppasamy
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
2)DUBEY, Sudhanshu
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
3)PATEL, Ashik Kumar
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
4)PATIL, Yogesh Dattatray
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
5)PRASAD, Vishnu
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
6)MAURYA, Shubham Subhash
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
7)ACHARYA, Abhijith Padmanbhan
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
8)JAYSAVAL, Shivchand
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------

(57) Abstract :
Disclosed herein is PUMICE-400, a drone made of AISI 304 stainless steel employing laser cutting to provide strength, lightweight, cost-effectiveness, and scalability. Unlike traditional cantilever designs, the PUMICE-400 features a twin quadcopter-octocopter arrangement, which improves structural stability and payload adaptability. The drone's lightweight but durable design makes it useful for a wide range of applications, including inspection, shipping and delivery, military surveillance, animal monitoring, search and rescue operations, agricultural, land surveying, and crowd monitoring. The use of stainless steel and the distinctive design elements add to its strength, manufacturability, and flexibility, making it a potential option in the field of UAV technology. Figure 2

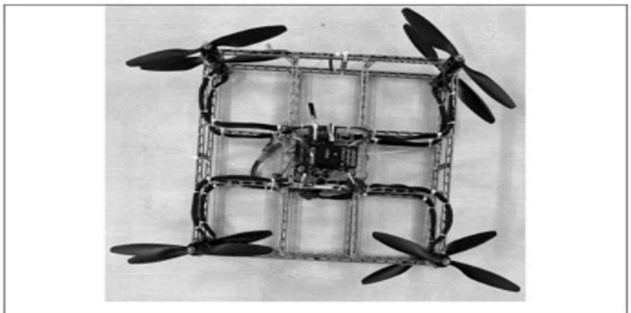


Figure 2: Actual Manufactured Drone
Fig. 2

No. of Pages : 25 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/06/2024
(21) Application No.202421043951 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MAMMALIAN EXPRESSION VECTOR FOR RECOMBINANT PROTEIN PRODUCTION

(51) International classification :C12N15/09, C12N15/85, A61K39/395, C07K16/28
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Institute of Chemical Technology
Address of Applicant :Nathalal Parekh Marg, near Khalsa College, Matunga East, Mumbai, Maharashtra 400019, India Mumbai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Ratnesh Jain
Address of Applicant :Department of Biological sciences and Biotechnology, Institute of Chemical Technology, Nathalal Parekh Marg, Near Khalsa College, Matunga, Mumbai-400019. Mumbai ---------- ----------
2)Sarmishta Majumdar
Address of Applicant :Department of Biological sciences and Biotechnology, Institute of Chemical Technology, Nathalal Parekh Marg, Near Khalsa College, Matunga, Mumbai-400019. Mumbai ---------- ----------
3)Dr. Prajakta Dandekar Jain
Address of Applicant :Department of Biological sciences and Biotechnology, Institute of Chemical Technology, Nathalal Parekh Marg, Near Khalsa College, Matunga, Mumbai-400019. Mumbai ---------- ----------

(57) Abstract :
The present invention relates to nucleic acid vectors and to methods for transfecting mammalian cells with nucleic acid vectors. In particular, the invention relates to a mammalian expression vector for recombinant protein production, comprising Matrix Attachment Region (MAR) elements to increase stable transfection of mammalian cells and to improve the productivity of transformed cells. [Figure 1(a)]

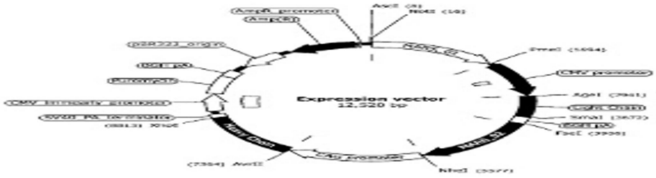


Figure 1(a)

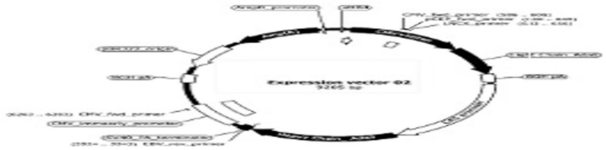


Figure 1(b)

No. of Pages : 44 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :11/06/2024

(21) Application No.202421044932 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DEVANAGARI SCRIPT BASED FANCY NUMBER PLATE DETECTION USING MACHINE LEARNING ALGORITHM.

(51) International classification	:G06N0020000000, G06N0003080000, H04M0003420000, G06N0020100000, G06Q0020020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP UNIVERSITY NASHIK
3)SANDIP INSTITUTE OF ENGINEERING AND MANAGEMENT
4)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. OMKAR S. VAIDYA
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)DR. GAYATRI M. PHADE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)MR. SUSHANT J. PAWAR
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)MR. MAYUR E. INGALE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)DR. BHAGWAT KAKDE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
6)DR. M.V. GADE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
7)MR. AJAY KUMAR MISHRA
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
8)MR. ANKUR SAXENA
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------

(57) Abstract :
ABSTRACT Ensuring vehicles display standard number plates is crucial for identification and road safety. However, existing methods lack efficient detection of fancy number plates, particularly those in Devanagari script. This invention proposes a sophisticated system leveraging machine learning algorithms to automatically identify vehicles with non-compliant number plates. Integrating a portable device with a Raspberry Pi Camera, microprocessor, display, and battery, the system captures vehicle images and employs region of interest (ROI) extraction to isolate number plate areas. Machine learning algorithms, including convolutional neural networks (CNNs), analyze the images for accurate fancy number plate detection in real-time. Upon detection, an email notification system promptly alerts relevant authorities, such as Regional Transport Offices (RTOs) and law enforcement agencies, facilitating swift action. The system's robust training on diverse datasets ensures accurate detection, while a cooling mechanism prevents device overheating. Its methodology involves image capture, ROI extraction, and machine learning analysis, with automated email notifications containing detected number plate details. Integration with crime databases further enhances tracking of vehicles involved in criminal activities.

No. of Pages : 20 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/05/2024
(21) Application No.202421035995 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM AND METHOD FOR BIOGAS AND WATER GENERATION IN RAILWAY BIO-TOILETS

(51) International classification :C12M1/107, C02F3/28, C02F11/04, C02F9/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Pyali Chatterjee
Address of Applicant :Assistant Professor, Faculty of Law, The ICFAI University, Raipur, Chhattisgarh, India, Pin Code-490042 ---------- ----------
2)Ummul Waraah
3)Dr. Esther L Chhangte
4)Dr. Diptirekha Mohapatra
5)Dr. Hina Kausar
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Pyali Chatterjee
Address of Applicant :Assistant Professor, Faculty of Law, The ICFAI University, Raipur, Chhattisgarh, India, Pin Code-490042 ---------- ----------
2)Ummul Waraah
Address of Applicant :Assistant Professor, School of Law, Woxsen University, Kamkole, Sadasivpet, Sangareddy District, Hyderabad - 502 345, Telangana ---------- ----------
3)Dr. Esther L Chhangte
Address of Applicant :Principal, Govt. Mizoram Law College, Affiliation: Mizoram University Tanhril, Mizoram, Pin code 796004 ---------- ----------
4)Dr. Diptirekha Mohapatra
Address of Applicant :Assistant Professor, Post Graduate Department of Law, Affiliation: Sambalpur University, Jtoti Vihar, Sambalpur, Odisha, Pin Code - 768019. ---------- ----------
5)Dr. Hina Kausar
Address of Applicant :Assistant Professor, School of Law, Kandoli Campus, UPES, Dehradun, Pin Code: 248007 ---------- ----------

(57) Abstract :
The present disclosure outlines a novel waste management system tailored for railway bio-toilets, emphasizing anaerobic digestion to generate biogas and treated water. Conventional waste disposal methods in railways are both environmentally detrimental and unhygienic. This system integrates bio-digesters into railway coaches, facilitating the efficient breakdown of human waste. The produced biogas serves multiple purposes, including heating, cooking, and electricity generation, thereby reducing reliance on fossil fuels. Byproduct water undergoes meticulous treatment, involving chlorination and filtration, to ensure compliance with safety and hygiene standards. The treated water is suitable for reuse within the bio-toilet system or for non-potable purposes, promoting water conservation efforts. An automated control system monitors and manages the bio-digester's operations, optimizing efficiency and ensuring safety. This innovative solution offers a sustainable approach to railway sanitation, addressing environmental concerns while enhancing passenger well-being.

No. of Pages : 8 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/05/2024

(21) Application No.202421040844 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ENTERAL FEEDING SYSTEM AND METHOD

(51) International classification :A01K5/02, A61J15/00, A01K5/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Ms. Savita Bansiram Pohekar
Address of Applicant :Sawangi (Meghe), Near Alphonsa High School, Bhendare layout, Wardha 442001 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Ms. Savita Bansiram Pohekar
Address of Applicant :Sawangi (Meghe), Near Alphonsa High School, Bhendare layout, Wardha 442001 ---------- ----------
2)Dr. Ranjana Premnath Sharma
Address of Applicant :Shalinitai Meghe college of nursing, Salod, Wardha 442001 Salod ---------- ----------
3)Dr. Vaishali Devrao Taksande
Address of Applicant :Plot no 22 Dhanwantary Nagar, MIDC, Sewagram road, Wardha 442001 Sewagram ---------- ----------
4)Dr. Jaya Pranaykumar Gawai
Address of Applicant :401, Gokul apartment, Datta residency, Sawangi (meghe), Wardha 442001 Sawangi ---------- ----------

(57) Abstract :
ABSTRACT ENTERAL FEEDING SYSTEM AND METHOD A system (100) and method (500) for controlled feeding and monitoring at least liquid food and water to be supplied to a patient (102) are disclosed. The system (100) includes an enteral device (104). The enteral device (104) is used for feeding the liquid food and water to the patient (102). The enteral device (104) also includes a valve controller (124) configured to control at least one valve (126, 128) connecting the at least one container (108, 110) storing the liquid food and water. The enteral device (104) also includes a microcontroller (122) configured to receive feeding information from a caretaker and to generate at least one control signal based on the feeding information. The valve controller (124) operate the at least one valve (126, 128) and supply the least liquid food and water to the patient (102) based on the control signal. (FIG. 1)

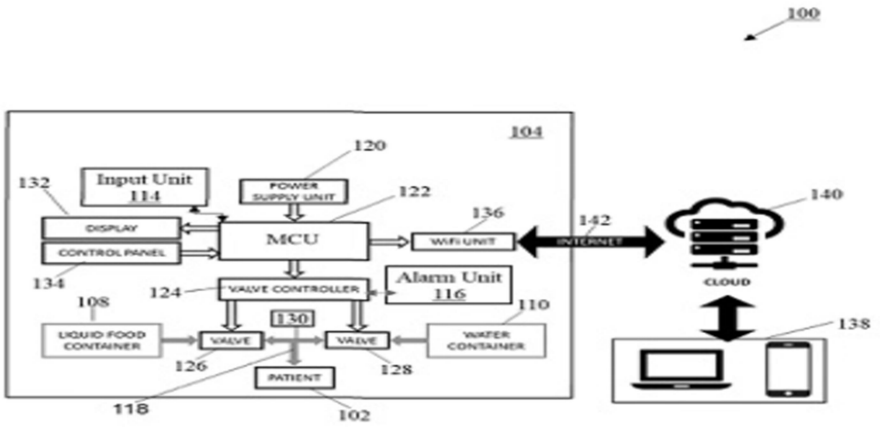


FIG. 1

No. of Pages : 28 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :01/06/2024

(21) Application No.202421042707 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : A DEEP LEARNING-BASED ANALYSIS OF LUNG CANCER'S IMPACT ON CARDIOVASCULAR DISEASE

(51) International classification	:G06N0003080000, A61P0009000000, A61P0035000000, G06K0009620000, A61B0005145000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr. Chandrashekhar Rameshwar Kasar

Address of Applicant :Associate professor, Department of Zoology, S. P. M. Science and Gilani Arts, Commerce College, Ghatanji. Dist. Yavatmal.445301. Yavatmal ---------- ----------

2)Dr.Dhanraj Balbhim Bhure

3)Dr.Sanjay Shamrao Nanware

4)Dr. Suwarna Zilpe

5)Dr. Paresh Ratanlal Patel

6)Dr. Amit chauhan

7)Dr. Dnyaneshwar Buwaji Khamankar

8)Mr. Praneta Ravindra Desale

9)Dr.D.Meena

10)Manikandan R

11)Dr. Shalin S

12)Dr. R. Sabin Begum

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. Chandrashekhar Rameshwar Kasar

Address of Applicant :Associate professor, Department of Zoology, S. P. M. Science and Gilani Arts, Commerce College, Ghatanji. Dist. Yavatmal.445301. Yavatmal ---------- ----------

2)Dr.Dhanraj Balbhim Bhure

Address of Applicant :Associate professor , Department of Zoology Yeshwant Mahavidyalaya, Nanded-431602 Nanded ---------- ----------

3)Dr.Sanjay Shamrao Nanware

Address of Applicant :Professor & Head, Department of Zoology ,Yeshwant Mahavidyalaya, Nanded-431602 . Nanded ---------- ----------

4)Dr. Suwarna Zilpe

Address of Applicant :Associate professor, Department of Zoology.Smt Radhabai Sarda Arts, Commerce & Science College, Anjangaon Surji. Dist. Amravati. 444705 Anjangaon surji. ---------- ----------

5)Dr. Paresh Ratanlal Patel

Address of Applicant :Assistant professor, Department of Zoology ,Lokmanya Tilak Mahavidyalaya, Wani. Pin-445304 Wani ---------- ----------

6)Dr. Amit chauhan

Address of Applicant :Department of life sciences, CHRIST university, Bengaluru, Karnataka, India, 560029 Bengaluru ---------- ----------

7)Dr. Dnyaneshwar Buwaji Khamankar

Address of Applicant :Assistant professor, Department of zoology,Lokmanya Tilak Mahavidyalaya, Wani. Pin-445304 Wani ---------- ----------

8)Mr. Praneta Ravindra Desale

Address of Applicant :SSPM College Of Pharmacy, Dhule, Maharashtra Dhule ---------- ----------

9)Dr.D.Meena

Address of Applicant :Assistant Professor, Department of Biotechnology, AVS College of Arts & Science - Salem Salem ---------- ----------

10)Manikandan R

Address of Applicant :Assistant Professor/ Information Technology,SSM College of Engineering, Komarapalayam,638183 Namakkal ---------- ----------

11)Dr. Shalin S

Address of Applicant :Professor cum Principal, Bishnupur Public School and College of Nursing, Bishnupur, Bankura, West Bengal-722122, India Bishnupur ---------- ----------

12)Dr. R. Sabin Begum

Address of Applicant :Assistant Professor, Computer Applications, B. S. Abdur Rahman crescent Institute of Science and Technology Chennai ---------- ----------

(57) Abstract :

A Deep Learning-Based Analysis of Lung Cancer's Impact on Cardiovascular Disease is the proposed invention. The proposed invention focuses on understanding the functions of correlation between cancer and cardiovascular diseases. The invention focuses on analyzing the parameters of Lung Cancer's Impact on Cardiovascular Disease using algorithms of Deep Learning.

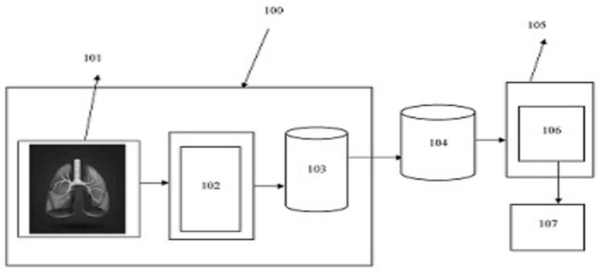


Figure 1: schematic view

No. of Pages : 12 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/06/2024
(21) Application No.202421045617 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : IMPACT OF LONG-DISTANCE INTERACTION INDICATORS ON SPATIOTEMPORAL VARIABILITY OF PRECIPITATION.

(51) International classification	:C12N0005073500, H04N0013243000, A61B0005374000, A61B0008000000, G11B0027280000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP UNIVERSITY NASHIK
3)SANDIP INSTITUTE OF ENGINEERING AND MANAGEMENT
4)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)RAMGOPAL TILAKRAM SAHU
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)JYOTIPRAKASH GIRIDHARLAL NAYAK
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)SAGAR DATTATRAY TURKANE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)ANIKET PATIL
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)SACHIN W. MANJARWAL
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
6)NAGA SESHU BABU
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------

(57) Abstract :
This invention introduces a comprehensive system for analyzing precipitation variability, with a focus on Indian summer monsoon rainfall, by integrating data from diverse sources and employing advanced computational techniques. The system begins with data collection from historical archives, satellite observations, and ground-based sensors. Subsequently, the collected data undergoes preprocessing to ensure accuracy and consistency. The preprocessed data is then subjected to detailed analysis to identify long-distance climatic interactions and patterns associated with Indian summer monsoon rainfall. Insights derived from this analysis are crucial for informed decision-making in various sectors, including water conservation, agriculture, and urban planning. The iterative nature of the analysis allows for refinement and enhancement of the system's predictive capabilities over time. Overall, this invention offers a systematic approach to understanding precipitation variability, providing stakeholders with actionable insights to mitigate the impacts of climate change and optimize resource management strategies.

No. of Pages : 19 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :11/06/2024

(21) Application No.202421044933 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : LORA BASED WATER PUMP CONTROL SYSTEM.

(51) International classification :F04B0049060000, F01P0007160000, B60S0001520000, F04D0015020000, H01M0008120000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP UNIVERSITY NASHIK
3)SANDIP INSTITUTE OF ENGINEERING AND MANAGEMENT
4)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)GAYATRI M. PHADE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)CHETAN VALMIK SURYAWANSHI
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)DHIRAJKUMAR JANKIRAM KAPURE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)SUYOG RAVINDRA KANGUNE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)SUSHANT PAWAR
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
6)MOSAM SANGOLE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
7)YOGESH RISODKAR
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
8)PRIYANKA BHATAMBREKAR
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------

(57) Abstract :
ABSTRACT In rural and remote settings, efficient management of water pumps poses significant challenges, often requiring frequent physical presence for operation and monitoring. In response, we present the LoRa-Based Water Pump Control System, a transformative solution designed to modernize remote pump management across diverse sectors. Leveraging Long Range (LoRa) technology, our system enables seamless communication between a central control unit and remote pump sites over distances of up to 10 kilometers, without incurring substantial maintenance costs. This innovation eliminates the need for constant physical oversight at pump sites, enhancing operational efficiency and reducing manpower requirements. Real-time monitoring of water levels enables intelligent pump control, optimizing water and electricity usage while conserving resources. Moreover, the system incorporates protective features such as automatic shutdown during water scarcity to prevent pump damage and extend equipment lifespan. By offering a comprehensive solution that enhances productivity, reduces operational costs, and promotes resource conservation, the LoRa-Based Water Pump Control System represents a significant advancement in remote pump management technology, with potential applications in agriculture, education, and industrial sectors.

No. of Pages : 16 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :11/06/2024

(21) Application No.202421044934 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : GARBAGE COLLECTION AND SEGREGATION ROBOT.

(51) International classification :B65F1/00, B65F1/14, B25J9/16
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA ---------- ----------
2)SANDIP UNIVERSITY NASHIK
3)SANDIP INSTITUTE OF ENGINEERING AND MANAGEMENT
4)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. GAYATRI M. PHADE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)KULDEEP RAMADHYA RAI
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)ROHITKUMAR RAMAYODHYA RAI
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)TEJAS SANJAY MESTRY
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)SUSHANT J. PAWAR
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
6)DR. MOSAM SANGOLE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
7)YOGESH RISODKAR
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
8)DR. BHAGWAT KAKDE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------

(57) Abstract :
ABSTRACT The abstract of the "Garbage Collection and Segregation Robot" outlines its pivotal role in addressing the escalating challenges of waste management worldwide. Rapid urbanization and industrialization have led to a surge in waste generation, necessitating innovative solutions for efficient disposal and recycling. In response, this invention introduces a fully automated robotic system capable of detecting and segregating garbage based on type, such as metallic and non-metallic materials, as well as wet and dry waste. Utilizing ultrasonic sensors, metal proximity sensors, and moisture sensors, the robot autonomously identifies and categorizes waste, optimizing waste management processes. Controlled by an ESP32 microcontroller and featuring an intuitive IoT interface, the system enables remote operation and monitoring from any location with internet access. Its applications span across various sectors, including educational institutions, local governments, hospitals, industries, complexes, and households. By offering a scalable, adaptable solution to waste management challenges, the "Garbage Collection and Segregation Robot" aims to promote cleanliness, hygiene, and sustainability in urban environments, thus contributing to a healthier, cleaner world.

No. of Pages : 18 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :11/06/2024
(21) Application No.202421044939 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTONOMOUS VEHICLE IDENTIFICATION SYSTEM.

(51) International classification :G08G0001017000, G05D0001000000, G05D0001020000, G06F0021320000, G06K0019070000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA ---------- ----------
2)SANDIP UNIVERSITY NASHIK
3)SANDIP INSTITUTE OF ENGINEERING AND MANAGEMENT
4)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. GAYATRI M. PHADE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)ADHISHREE RAKHLIWAL
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)DEVENDRA DATEY
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)NISHIKANT KHUNE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)ANKUR SAXENA
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
6)KAVITA PATIL
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
7)OMKAR VAIDYA
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------

(57) Abstract :
ABSTRACT The Autonomous Vehicle Identification System presents a groundbreaking solution to the challenges of identifying and notifying owners of unclaimed vehicles. This compact handheld device integrates advanced technologies to streamline the identification process, offering unprecedented efficiency and reliability. Equipped with a camera, microprocessor, display, and buttons, powered by a rechargeable lithium battery, the system employs optical character recognition (OCR) to swiftly scan and process chassis numbers. By accessing a centralized database, it retrieves owner information, expediting the identification process. Crucially, the system autonomously notifies owners via the internet, ensuring secure and efficient communication. By automating and optimizing the vehicle identification process, the system reduces the burden on law enforcement agencies and significantly enhances the likelihood of timely vehicle recovery. Its portability facilitates easy use by traffic officers, enabling quick and effective identification of unauthorized vehicles in various settings. Overall, the Autonomous Vehicle Identification System represents a significant advancement in vehicle identification technology, offering improved efficiency, reliability, and convenience for both authorities and vehicle owners.

No. of Pages : 16 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/05/2024
(21) Application No.202421041662 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A METHOD OF PREPARING POTASSIUM (K)-RICH–IRON (FE)-CONTAINING POLYANION FLUOROPHOSPHATE AS A CATHODE MATERIAL

(51) International classification :H01M4/24, H01M4/58
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)INDIAN INSTITUTE OF TECHNOLOGY BOMBAY
Address of Applicant :Powai, Mumbai – 400076, Maharashtra, India Mumbai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SAHA, Dipannita
Address of Applicant :Department of Metallurgical Engineering & Materials Science, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------
2)MUKHOPADHYAY, Amartya
Address of Applicant :Department of Metallurgical Engineering & Materials Science, Indian Institute of Technology Bombay, Powai, Mumbai 400076, Maharashtra, India Mumbai ---------- ----------

(57) Abstract :
Provided herein is a method for the preparation of a potassium (K)-rich iron (Fe)-based fluorophosphate, having a stochiometric ratio of K: Fe: P of ~ 1.80-2.20, 0.98-1.10, 0.97-1.04 (i.e., a composition of KaFebPcO4F, where, a = 1.80-2.20, b = 0.98-1.10, c = 0.97-1.04), and usage of the same as a high-performance and sustainable cathode material for K-ion batteries. Also provided herein is a cathode prepared by using potassium (K)-rich iron (Fe)-based fluorophosphate.

No. of Pages : 22 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/06/2024
(21) Application No.202421043169 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DRUG-LOADED VEGAN GUMMIES FOR PERSONALIZED DOSING

(51) International classification :A23L21/10, A23L29/20, A23L29/256, A23L29/30, A23G3/34
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Institute of Chemical Technology
Address of Applicant :Nathalal Parekh Marg, near Khalsa College, Matunga East, Mumbai, Maharashtra 400019, India Mumbai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Pankti Ganatra
Address of Applicant :Biological Characterization Laboratory, Department of Biological sciences and Biotechnology, Institute of Chemical Technology, Nathalal Parekh Marg, Near Khalsa College, Matunga, Mumbai-400019. Mumbai ---------- ----------
2)Dr. Ratnesh Jain
Address of Applicant :Department of Biological sciences and Biotechnology, Institute of Chemical Technology, Nathalal Parekh Marg, Near Khalsa College, Matunga, Mumbai-400019. Mumbai ---------- ----------
3)Dr. Prajakta Dandekar Jain
Address of Applicant :Department of Pharmaceutical Sciences and Technology, Institute of Chemical Technology, Nathalal Parekh Marg, Near Khalsa College, Matunga, Mumbai-400019 Mumbai ---------- ----------

(57) Abstract :
The present disclosure provides drug loaded 3D printed vegan gummies for personalised dosing of drugs or active ingredients, and process for preparing the same. The vegan gummies of the present disclosure are semi-solid extrusion (SSE)-based 3D printed, and are pectin-based low-calorie gummies.

No. of Pages : 37 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :05/06/2024

(21) Application No.202421043570 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : SMART PARKING MANAGEMENT SYSTEM

(51) International classification :G08G0001140000, H02J0007000000, G06Q0050300000, G07B0015000000, G06Q0010020000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Jeetendra Kumar
Address of Applicant :Assistant Professor, Department of Computer Science and Application, Atal Bihari Vajpayee Vishwavidyalaya, Infront of Koni Thana, Ratanpur Road, Bilaspur-495009 (C.G.), India Bilaspur ---------- ----------
2)Dr. Rashmi Gupta
3)Dr. Babita Majhi
4)Suraj Sahu
5)Gargee Shukla
6)Dr. Pushplata Pujari
7)Rupesh Naik
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Jeetendra Kumar
Address of Applicant :Assistant Professor, Department of Computer Science and Application, Atal Bihari Vajpayee Vishwavidyalaya, Infront of Koni Thana, Ratanpur Road, Bilaspur-495009 (C.G.), India Bilaspur ---------- ----------
2)Dr. Rashmi Gupta
Address of Applicant :Assistant Professor, Department of Computer Science and Application, Atal Bihari Vajpayee Vishwavidyalaya, Infront of Koni Thana, Ratanpur Road, Bilaspur-495009 (C.G.), India Bilaspur ---------- ----------
3)Dr. Babita Majhi
Address of Applicant :Associate Professor, Department of computer science and Information technology, Guru Ghasidas Vishwavidyalaya, Koni, Bilaspur – 495009 (C.G.), India Bilaspur ---------- ----------
4)Suraj Sahu
Address of Applicant :Student of MSc(cs), Department of Computer Science and Application, Atal Bihari Vajpayee Vishwavidyalaya, Infront of Koni Thana, Ratanpur Road, Bilaspur-495009(C.G.), India Bilaspur ---------- ----------
5)Gargee Shukla
Address of Applicant :Assistant Professor,Computer Science, Govt Bilasa Girls' P.G. College,Bilaspur, Chhattisgarh Bilaspur ---------- ----------
6)Dr. Pushplata Pujari
Address of Applicant :Associate Professor, Department of computer science and Information technology, Guru Ghasidas Vishwavidyalaya, Koni, Bilaspur – 495009 (C.G.), India Bilaspur ---------- ----------
7)Rupesh Naik
Address of Applicant :Research Scholar, Department of computer science and Information technology, Guru Ghasidas Vishwavidyalaya, Koni, Bilaspur – 495009 (C.G.), India Bilaspur ---------- ----------

(57) Abstract :
The present invention discloses a Smart Parking Management System aimed at reducing time and increasing the efficiency of current parking infrastructure. The system employs Arduino UNO, ultrasonic sensors, IR sensors, buzzers, RFID, LCD displays, servo motors, wireless charging modules, and LED lights for direction and indication. It addresses the challenge of efficiently finding empty parking spaces and managing vehicle flow within complex parking structures. IR sensors detect vehicles and provide real-time feedback on parking availability, guiding drivers to vacant spaces. Wireless charging enhances the user experience by allowing convenient, cordless charging of electric vehicles. The system also incorporates RFID technology for secure vehicle access and uses LEDs for directional guidance. The integration of these technologies creates a comprehensive and efficient Smart Parking Management System.

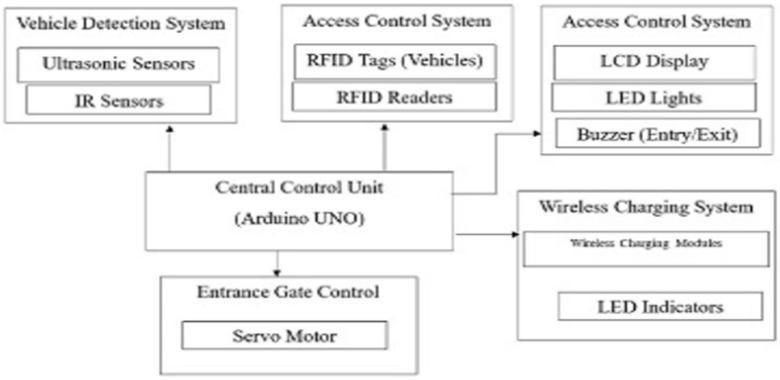


FIGURE 1

No. of Pages : 19 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/06/2024
(21) Application No.202421046343 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A CATALYST FOR ESTERIFICATION AND TRANSESTERIFICATION OF FATTY ACID AND PROCESS OF PREPARATION THEREOF

(51) International classification :C11C0003000000, B01J0031020000, C10L0001020000, B01J0035000000, B01J0021060000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)PAVAN MANOHAR MORE
Address of Applicant :DEPARTMENT OF CHEMISTRY, INSTITUTE OF CHEMICAL TECHNOLOGY, NATHALAL PAREKH MARG, MATUNGA, MUMBAI 400 019, MAHARASHTRA, INDIA Mumbai ---------- ----------
2)JYOTSNA SANJEEV WAGHMARE
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)PAVAN MANOHAR MORE
Address of Applicant :DEPARTMENT OF CHEMISTRY, INSTITUTE OF CHEMICAL TECHNOLOGY, NATHALAL PAREKH MARG, MATUNGA, MUMBAI 400 019, MAHARASHTRA, INDIA Mumbai ---------- ----------
2)JYOTSNA SANJEEV WAGHMARE
Address of Applicant :DEPARTMENT OF OILS, OLEOCHEMICALS AND SURFACTANTS TECHNOLOGY, INSTITUTE OF CHEMICAL TECHNOLOGY, NATHALAL PAREKH MARG, MATUNGA, MUMBAI 400 019, MAHARASHTRA, INDIA Mumbai ---------- ----------
3)ASIF SHAFIQ SHAIKH
Address of Applicant :DEPARTMENT OF OILS, OLEOCHEMICALS AND SURFACTANTS TECHNOLOGY, INSTITUTE OF CHEMICAL TECHNOLOGY, NATHALAL PAREKH MARG, MATUNGA, MUMBAI 400 019, MAHARASHTRA, INDIA Mumbai ---------- ----------
4)BHAGYASHREE LAXMAN MEGHA
Address of Applicant :DEPARTMENT OF CHEMISTRY, INSTITUTE OF CHEMICAL TECHNOLOGY, NATHALAL PAREKH MARG, MATUNGA, MUMBAI 400 019, MAHARASHTRA, INDIA Mumbai ---------- ----------

(57) Abstract :
A CATALYST FOR ESTERIFICATION AND TRANSESTERIFICATION OF FATTY ACID AND PROCESS OF PREPARATION THEREOF The present invention relates to novel catalyst composition for selective esterification and transesterification of fatty acid. Further, the present invention provides a process of preparation of said catalyst and its application for production of biodiesel and many chemical entities. More specifically, the present invention provides a novel heterogeneous catalyst composition for selective production of biodiesel from fatty acid comprising of: 0.5 to 1 mol of sulfated titanium dioxide and 0.5 to 1 mol of manganese-based octahedral molecular sieves; Characterized in that the said catalyst is having acidic sites per gram range between 0.7 to 3.5 mmoles.

No. of Pages : 34 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/06/2024

(21) Application No.202421046346 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DEVELOPMENT AND OPTIMIZATION OF ENZYMATIC PROCESS FOR STARCH SEPARATION FROM CORN AND ITS CHARACTERIZATION

(51) International classification	:A61K31/718, C12P19/04, C08B30/04, C08B30/06
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Gopal Madan Solanke
Address of Applicant :Assistant Professor, Department of Technology, Food Technology Programme, Shivaji University, Kolhapur, Maharashtra, India . ---------- ----------
2)Dr. Ajay Kumar Singh
3)Ms. Samiksha Madan More
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Gopal Madan Solanke
Address of Applicant :Assistant Professor, Department of Technology, Food Technology Programme, Shivaji University, Kolhapur, Maharashtra, India . ---------- ----------
2)Dr. Ajay Kumar Singh
Address of Applicant :Assistant Professor, Department of Processing and Food Engineering, Sam Higginbottom University of Agriculture, Technology and Sciences, Prayagraj, Uttar Pradesh, India . ---------- ----------
3)Ms. Samiksha Madan More
Address of Applicant :M.Tech. in Computer Science and Engineering (Data Science) from Sam Higginbottom University of Agriculture Technology and Sciences, Prayagraj, UP., India . ---------- ----------

(57) Abstract :
The present invention relates to the field of food processing and biotechnology, specifically to an enzymatic process for the efficient separation of high-purity starch from corn. The process has been optimized to maximize yield and efficiency. Response surface methodology (RSM) is employed to optimize the process parameters, including enzyme concentrations, temperature, pH, and reaction time. A series of experiments are conducted to develop a mathematical model that predicts the optimal conditions for maximum starch yield and purity. The optimized process is scaled up from laboratory to pilot-plant scale to evaluate its feasibility for industrial applications. Fig. 1

Fig. 1

No. of Pages : 12 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/06/2024

(21) Application No.202421045666 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : YEAST COLLECTION TANK FOR DISTILLERY WASTEWATER.

(51) International classification :C12M1/00, C12M1/12, C12M1/34
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP UNIVERSITY NASHIK
3)SANDIP INSTITUTE OF ENGINEERING AND MANAGEMENT
4)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)JYOTIPRAKASH GIRIDHARLAL NAYAK
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)RASHMI JYOTRPRAKASH NAYAK
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)ANIKET PATIL
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)RAMGOPAL SAHU
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)SAGAR DATTATRAY TURKANE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
6)SACHIN W. MANJARWAL
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
7)NAGA SESHU BABU TUMMALA
Address of Applicant :SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTER, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK-422213 ---------- ----------
8)VIRENDRA. B. PATIL
Address of Applicant :SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTER, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK-422213 ---------- ----------

(57) Abstract :
ABSTRACT This invention pertains to a highly efficient yeast collection tank designed for the treatment of distillery wastewater. Traditional settling tanks in distillery wastewater treatment plants exhibit low yeast collection efficiency, typically ranging from 40% to 50%, resulting in operational challenges such as foam formation in anaerobic digesters, which disrupts biogas production. The proposed tank features a Zig-Zag Up and Down design comprising four compartments that enhance the separation process. Wastewater enters the first compartment, where a significant portion of yeast solids (40% to 45%) is initially retained. The wastewater then flows sequentially through upward and downward movements across the compartments via strategically placed orifices, ensuring thorough separation at each stage. Each compartment is equipped with a bottom drain pipe and valve system, which is operated daily to discharge the collected yeast solids, significantly improving the yeast collection efficiency to between 85% and 90%. The tank is constructed with concrete walls coated with Fiber Reinforced Plastic (FRP) for durability and corrosion resistance. Notably, the system operates without electrical energy, making it cost-effective and Environmentally friendly. This invention effectively mitigates foam formation in anaerobic digesters, ensuring uninterrupted biogas production and enhancing the overall efficiency and reliability of the distillery wastewater treatment process.

No. of Pages : 17 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/06/2024

(21) Application No.202421045680 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DESIGN & FABRICATION OF SMART CHAIR WITH IOT INTEGRATION FOR ENHANCED USER EXPERIENCE.

(51) International classification :G06Q0010060000, H04L0067120000, B33Y0050000000, G06F0030200000, G06F0030392000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP UNIVERSITY NASHIK
3)SANDIP INSTITUTE OF ENGINEERING AND MANAGEMENT
4)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)VISHWAJIT K. BARBUDHE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)AMIT R. GADEKAR
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)HARSHAL P. PATIL
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)GIRISH A. DASHMUKHE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)AKHILESH KUMAR SHARMA
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
6)ANKITA KARALE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
7)ABHAY GAIDHANI
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------

(57) Abstract :
ABSTRACT The Smart Chair with IoT Integration for Enhanced User Experience represents a cutting-edge advancement in seating technology, designed to meet the evolving needs of modern living environments. This innovative chair combines IoT connectivity, automated ergonomics, health monitoring systems, and climate control features to offer users an unparalleled level of comfort and customization. It aim to alleviate physical strain on users by autonomously adapting to their posture and preferences through advanced sensors and actuators. This ensures optimal ergonomic support and promotes user well-being during prolonged sitting sessions. Moreover, the integration of IoT technology enables seamless customization of the chair's settings via a user-friendly mobile application, empowering individuals to tailor their seating experience according to their preferences.

No. of Pages : 19 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/06/2024
(21) Application No.202421045712 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : CIRCULAR METALLIC TRAY WITH RECTANGULAR DEPRESSION.

(51) International classification :B08B13/00, B08B3/04
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP UNIVERSITY NASHIK
3)SANDIP INSTITUTE OF ENGINEERING AND MANAGEMENT
4)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SAGAR DATTATRAY TURKANE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)JYOTIPRAKASH GIRIDHARLAL NAYAK
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)RAMGOPAL SAHU
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)ANIKET PATIL
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)SACHIN W. MANJARWAL
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
6)NAGA SESHU BABU
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
7)SACHIN MADHAVRAO GUNJAL
Address of Applicant :SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTER, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK-422213 ---------- ----------
8)SUDHIR BHASKARRAO GAYAKE
Address of Applicant :SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTER, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK-422213 ---------- ----------

(57) Abstract :
ABSTRACT The circular metallic tray with a rectangular depression presents a novel solution to the challenges encountered in cleaning and organizing small spare parts during vehicle servicing. This invention features a circular tray constructed from durable metal, boasting a diameter of 45 cm and a height ranging from 10 to 15 cm. At its center lies a rectangular depression, measuring 10 cm by 10 cm by 0.3 cm, covered with a fine wire mesh. This mesh serves as a filter, allowing waste sludge and oil to be collected while retaining small screws, springs, and other spare parts on the tray's surface. Supported by a robust stand made from metallic rods, sized at 15 cm by 15 cm by 5 cm, the tray ensures stability during use. The design eliminates the need for external energy sources, making it eco-friendly and cost-effective. With its multi-user arrangement and user-friendly design, this tray significantly reduces the time and effort required for part cleaning and retrieval, thereby improving operational efficiency in the automobile maintenance industry. Overall, the circular metallic tray with a rectangular depression offers an upgraded alternative to traditional metal trays, enhancing functionality and convenience in vehicle servicing tasks.

No. of Pages : 19 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :10/06/2024
(21) Application No.202421044729 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DESIGN THE TABLET FRIABILITY TEST APPARATUS TO MEASURE THE ROTATION AND CONTROL THE SPEED TO INCREASE PRODUCTION UPTIME BY ACCURACY

(51) International classification :G01N33/15, G01N3/56
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP UNIVERSITY NASHIK
3)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SHWETA HITESH SHAHARE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)DR. MANGESH DINDAYAL NIKOSE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)DR. LAXMIKANT BANSILAL BORSE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)HITESH VISHWANATH SHAHARE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)KIRAN NIPANI
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------

(57) Abstract :
ABSTRACT The invention introduces an advanced friability test apparatus tailored for the pharmaceutical industry to enhance the accuracy and reliability of tablet durability assessments. This apparatus incorporates a digital tachometer and an Arduino-based control system to precisely measure and display the rotation time and speed of the drum, which operates at 25 ± 1 RPM. Featuring a transparent synthetic polymer drum with specific dimensions and a curved projection, the design ensures consistent and accurate tablet tumbling. The system uses a phototransistor and IR diode to count the number of revolutions, with real-time data displayed on an LCD screen. This innovation addresses the limitations of traditional methods by providing a cost-effective, safe, and user-friendly solution, significantly improving the precision of friability measurements. By ensuring accurate control and monitoring, the apparatus reduces testing errors and retesting needs, thereby increasing production uptime and efficiency. The invention is easily integrable into existing production and quality control processes, offering a robust and reliable tool for maintaining high standards in tablet manufacturing. This advanced friability test apparatus thus represents a significant improvement in pharmaceutical quality control technology.

No. of Pages : 17 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/06/2024
(21) Application No.202421046486 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : BLOCKCHAIN-BASED SECURE GOVERNMENT DOCUMENT MANAGEMENT SYSTEM USING HYPERLEDGER FABRIC

(51) International classification	:G06F0021620000, H04L0009320000, G06Q0020380000, G06F0016270000, G06F0021600000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Rajarambapu Institute of Technology, Rajaramnagar
Address of Applicant :A/P-Islampur, Tal-Walwa, Dist.- Sangli, Maharashtra – 415414 ---------- ----------
2)Dr. Amol C. Adamuthe
3)Mr. Swarup Mane
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Amol C. Adamuthe
Address of Applicant :Rajarambapu Institute of Technology, Rajaramnagar. – 415414 ---------- ----------
2)Mr. Swarup Mane
Address of Applicant :Rajarambapu Institute of Technology, Rajaramnagar. – 415414 ---------- ----------

(57) Abstract :
ABSTRACT: Blockchain-Based Secure Government Document Management System Using Hyperledger Fabric This invention presents a method for enhanced government document management using blockchain and Hyperledger Fabric. It involves a decentralized data management network that ensures data security and integrity through robust authentication protocols and encryption technologies. The system utilizes a multi-channel framework for private sub-networks and smart contracts to automate verification processes. Controlled access mechanisms allow authorized personnel to securely update records, while a synchronization mechanism ensures data consistency across all nodes. Attribute-based access control (ABAC) provides fine-grained permissions, dynamically adjusted based on roles. Comprehensive data histories are stored in tamper-resistant ledgers, and all interactions are recorded and audited for transparency and regulatory compliance. This method enhances operational efficiency, trust, and accountability in managing sensitive government documents.

No. of Pages : 17 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/06/2024
(21) Application No.202421046487 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : REMOTE-CONTROLLED MODEL ROCKET LAUNCHING SYSTEM WITH ADVANCED SAFETY AND TELEMETRY FEATURES

(51) International classification :G06Q0010060000, A61N0001372000, F41F0003040000, B64G0005000000, A63B0071060000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Rajarambapu Institute of Technology, Rajaramnagar
Address of Applicant :A/P-Islampur, Tal-Walwa, Dist.- Sangli, Maharashtra – 415414 ---------- ----------
2)Prof. Sachin S. Kumbhar
3)Dr. A. B. Kakade
4)Dr. M. V. Pisal
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Prof. Sachin S. Kumbhar
Address of Applicant :Rajarambapu Institute of Technology, Rajaramnagar. – 415414 ---------- ----------
2)Dr. A. B. Kakade
Address of Applicant :Rajarambapu Institute of Technology, Rajaramnagar. – 415414 ---------- ----------
3)Dr. M. V. Pisal
Address of Applicant :Rajarambapu Institute of Technology, Rajaramnagar. – 415414 ---------- ----------

(57) Abstract :
ABSTRACT: Remote-Controlled Model Rocket Launching System with Advanced Safety and Telemetry Features This invention describes a Remote-Controlled Model Rocket Launching System integrated with advanced technology and user-friendly features to ensure safe, efficient, and precise rocket launches. Key components include a heat-resistant launch pad with adjustable clamps, a tungsten filament bulb and matchstick ignition mechanism, and a control module housing a NodeMCU microcontroller and relay module. Powered by rechargeable batteries, the system operates via the Adafruit.io platform, enabling remote control and real-time telemetry monitoring through a mobile or web interface. The system's design includes adjustable stabilizing legs, protective housing for ignition components, and insulated wires for durability. It facilitates quick setup, easy transportation, and enhanced safety with remote ignition capabilities. This innovative system is ideal for educational demonstrations, recreational launches, and research projects, offering a comprehensive solution for modern model rocketry.

No. of Pages : 20 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/06/2024
(21) Application No.202421045736 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DESIGN OF 4-DOF HUMANOID HAND DESIGN.

(51) International classification :B25J9/00, B25J17/02, B25J9/16, B25J15/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP UNIVERSITY NASHIK
3)SANDIP INSTITUTE OF ENGINEERING AND MANAGEMENT
4)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)RAVI SHANKAR RAI
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)VASIM AKBAR SHAIKH
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)PRATAP SHIVAJI GARUDKAR
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)ABHISHEK PRATAP SINGH
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)RAJU KUMAR THAKUR
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------

(57) Abstract :
ABSTRACT Humanoid robotic hands are pivotal in various industries, offering precision, reliability, and versatility. This invention introduces a novel four-degree-of-freedom humanoid hand design tailored for seamless integration into robotic arms, addressing critical demands for precision, strength, and human-like functionality. Inspired by the mechanics of human hands, the design emphasizes simplicity, durability, and cost-effectiveness, ensuring optimal performance across diverse industrial applications. Key features include a high payload-to-weight ratio, facilitating precise object manipulation with human-like dexterity. The humanoid hand's versatility extends to palletizing, material handling, welding, inspection, and pick & place operations^ enhancing efficiency and adaptability in real-world scenarios. Effective control strategies enable intuitive operation by human operators, fostering enhanced human-robot interaction and usability. Through meticulous design and extensive testing, the invention promises increased efficiency, reliability, and productivity in industrial automation, driving progress across various sectors. Overall, the humanoid hand design represents a significant advancement in robotic technology, offering a seamless blend of form and function for enhanced performance in demanding industrial environments.

No. of Pages : 16 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/06/2024
(21) Application No.202421045747 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : FORMULATION AND EVALUATION OF A POLYHERBAL TABLET FOR MANAGEMENT OF POLYCYSTIC OVARY SYNDROME (PCOS)

(51) International classification :A61P43/00, A61K36/48, A61K36/67, A61K36/8965, A61K9/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VERMA POOJA
Address of Applicant :SMRITI COLLEGE OF PHARMACEUTICAL EDUCATION, 4/1 PIPLIYA KUMAR, MR-11, DEWAS NAKA, INDORE, MADHYA PRADESH, INDIA – 452010 ---------- ----------
2)SINGH HIMANI
3)MALVIYA NEELESH
4)SAXENA RAJIV
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)VERMA POOJA
Address of Applicant :SMRITI COLLEGE OF PHARMACEUTICAL EDUCATION, 4/1 PIPLIYA KUMAR, MR-11, DEWAS NAKA, INDORE, MADHYA PRADESH, INDIA – 452010 ---------- ----------
2)SINGH HIMANI
Address of Applicant :SMRITI COLLEGE OF PHARMACEUTICAL EDUCATION, 4/1 PIPLIYA KUMAR, MR-11, DEWAS NAKA, INDORE, MADHYA PRADESH, INDIA – 452010 ---------- ----------
3)MALVIYA NEELESH
Address of Applicant :SMRITI COLLEGE OF PHARMACEUTICAL EDUCATION, 4/1 PIPLIYA KUMAR, MR-11, DEWAS NAKA, INDORE, MADHYA PRADESH, INDIA – 452010 ---------- ----------
4)SAXENA RAJIV
Address of Applicant :SMRITI COLLEGE OF PHARMACEUTICAL EDUCATION, 4/1 PIPLIYA KUMAR, MR-11, DEWAS NAKA, INDORE, MADHYA PRADESH, INDIA – 452010 ---------- ----------

(57) Abstract :
ABSTRACT OF THE INVENTION This invention concerns a polyherbal extract formulation made from Shatavari {Asparagus racemosus), ashwagandha {Withania sonmifera), and pippali {piper longum) by the direct compression method. The preparation of polyherbal tablet may be used as a stable solid dosage form for the management of PCOS. the plant extract of ashwagandha, Shatavari, Pippali were formed It is usually characterized by polycystic ovaries, chronic anovulation and hyperandrogenism leading to symptoms of irregular menstrual cycles, hirsutism, acne and infertility. PCOS is a could be a complex illness happening due to different etiological variables. The results showed that the formulation F5 had good post compression parameters as compared to other formulations. Among five formulations prepared (F1 to F5) showed appreciable results.

No. of Pages : 18 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/06/2024
(21) Application No.202421045753 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : FORMULATION AND EVALUATION OF HERBAL GRANUALS OF HEMIDESCUS INDICUS (INDIAN SARSAPARILLA) ROOT EXTRACT

(51) International classification :A61K36/24, A61K9/28, A61K47/02, A61K47/12, A61K47/26
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)BANDODIYA KHUSHBOO
Address of Applicant :SMRITI COLLEGE OF PHARMACEUTICAL EDUCATION, 4/1 PIPLIYA KUMAR, MR-11, DEWAS NAKA, INDORE, MADHYA PRADESH, INDIA – 452010 ---------- ----------
2)DUBEY KUSHAGRA
3)MALVIYA NEELESH
4)SAXENA RAJIV
5)DHERE MANISHA
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)BANDODIYA KHUSHBOO
Address of Applicant :SMRITI COLLEGE OF PHARMACEUTICAL EDUCATION, 4/1 PIPLIYA KUMAR, MR-11, DEWAS NAKA, INDORE, MADHYA PRADESH, INDIA – 452010 ---------- ----------
2)DUBEY KUSHAGRA
Address of Applicant :SMRITI COLLEGE OF PHARMACEUTICAL EDUCATION, 4/1 PIPLIYA KUMAR, MR-11, DEWAS NAKA, INDORE, MADHYA PRADESH, INDIA – 452010 ---------- ----------
3)MALVIYA NEELESH
Address of Applicant :SMRITI COLLEGE OF PHARMACEUTICAL EDUCATION, 4/1 PIPLIYA KUMAR, MR-11, DEWAS NAKA, INDORE, MADHYA PRADESH, INDIA – 452010 ---------- ----------
4)SAXENA RAJIV
Address of Applicant :SMRITI COLLEGE OF PHARMACEUTICAL EDUCATION, 4/1 PIPLIYA KUMAR, MR-11, DEWAS NAKA, INDORE, MADHYA PRADESH, INDIA – 452010 ---------- ----------
5)DHERE MANISHA
Address of Applicant :SMRITI COLLEGE OF PHARMACEUTICAL EDUCATION, 4/1 PIPLIYA KUMAR, MR-11, DEWAS NAKA, INDORE, MADHYA PRADESH, INDIA – 452010 ---------- ----------

(57) Abstract :
ABSTRACT OF INVENTION This present study formulated and evaluated of herbal granules of sarasaparilla root extract, as conventional medicines are typically taken by the oral route, same course of administration was used for assessment of antilithiatic consequence of the extracts of Indian sarsaparilla at a dose of 500mg. In the present study, Indian sarsaparilla is having good antioxidant and antiurolithiatic activity, it was proved obviously in this juncture. This present study we can conclude by using this Indian sarsaparilla we can go for herbal formulation.

No. of Pages : 15 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/06/2024
(21) Application No.202421045757 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DESIGN, DEVELOPMENT AND EVALUATION OF ORAL THIN FILMS OF ANTIHYPERTENSIVE DRUG USING BOX BEHNKEN TECHNIQUE

(51) International classification :A61P9/12, A61K31/41, A61K47/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VERMA SURBHI
Address of Applicant :SMRITI COLLEGE OF PHARMACEUTICAL EDUCATION, 4/1 PIPLIYA KUMAR, MR-11, DEWAS NAKA, INDORE, MADHYA PRADESH, INDIA – 452010 ---------- ----------
2)CHAUHAN VISHAKHA
3)MALVIYA NEELESH
4)SAXENA RAJIV
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)VERMA SURBHI
Address of Applicant :SMRITI COLLEGE OF PHARMACEUTICAL EDUCATION, 4/1 PIPLIYA KUMAR, MR-11, DEWAS NAKA, INDORE, MADHYA PRADESH, INDIA – 452010 ---------- ----------
2)CHAUHAN VISHAKHA
Address of Applicant :SMRITI COLLEGE OF PHARMACEUTICAL EDUCATION, 4/1 PIPLIYA KUMAR, MR-11, DEWAS NAKA, INDORE, MADHYA PRADESH, INDIA – 452010 ---------- ----------
3)MALVIYA NEELESH
Address of Applicant :SMRITI COLLEGE OF PHARMACEUTICAL EDUCATION, 4/1 PIPLIYA KUMAR, MR-11, DEWAS NAKA, INDORE, MADHYA PRADESH, INDIA – 452010 ---------- ----------
4)SAXENA RAJIV
Address of Applicant :SMRITI COLLEGE OF PHARMACEUTICAL EDUCATION, 4/1 PIPLIYA KUMAR, MR-11, DEWAS NAKA, INDORE, MADHYA PRADESH, INDIA – 452010 ---------- ----------

(57) Abstract :
ABSTRACT OF THE INVENTION The drug valsartan was evaluated for its physical properties it is observed that is a free-flowing white to off-white powder. The melting point of valsartan drug was found to be 117 to 119°c. The melting point indicates the purity of drug. The absorption maxima of the standard solution was scanned 200-400nm regions on the UV spectrophotometer. The absorption maximum found to be 258nm in methanol and 254 nm in PBS pH 6.8. Valsartan was soluble in water, PBS buffer pH 6.8, Ethanol, Methanol. The FTTR analysis was used for qualitative estimation and identification of functional group present in the compound. HPMC was found to be compatible with valsartan which was confirmed by the FTIR spectroscopy. The film was prepared by Solvent casting method using Co-processed superdisintegrants then evaluated for various parameter Thickness, Weight variation, Folding endurance, Tensile strength, Surface pH, Moisture loss, In-vitro disintegration, In- vitro dissolution. Thickness of the films were measured by the micrometer screw gauge the thickness may be varied from 0.25 tol.4. Weight variation of the oral film ranges from 63-69 mg. Weight variation was found to be maximum for formulation F5. Folding endurance varies from 119 to 140 folds. These show the film's good strength. The surface pH was found to be close to neutral; the average range varies from 6.22- 6.58. Moisture loss was determined by placing the films in desiccator containing calcium carbonate for 72 hours. Moisture loss of the different films was found to vary from 2.5 % to 5.13%. Tensile strength was found to be between 2.11- 5.72. The disintegration time varies from 43 to 58 seconds in different formulations. Maximum time taken in Fl formulation (58sec). It is due to the varying concentration of polymer. In-Vitro dissolution study of valsartan found to be 90.58% with F5 and showing maximum up to 98.99% phosphate buffer 6.8. Films were prepared of Valsartan using HPMC E-l 5 as a film forming agent and PEG 400 as a plasticizer. All the films were found to disintegrate within 58 sec. Among the prepared formulation F5 formulation showed minimum disintegration time of seconds. Valsartan oral thin films were successfully prepared by solvent casting method.

No. of Pages : 18 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :11/06/2024

(21) Application No.202421044942 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTOMATIC BORDER SURVEILLANCE SYSTEM.

(51) International classification	:G08B0013196000, H04N0007180000, G08B0013240000, G16H0050800000, A01G0009280000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP UNIVERSITY NASHIK
3)SANDIP INSTITUTE OF ENGINEERING AND MANAGEMENT
4)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DARSHAN BHARAT PATIL
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)PRASHANT RAJENDRA PATIL
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)YASHODEEP SANJAYSING GIRASE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)BHAGWAT KAKDE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)SUSHANT J. PAWAR
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
6)ANKUR SAXENA
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
7)AJAY KUMAR MISHRA
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
8)GAYATRI M. PHADE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
9)MAYUR E. INGALE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------

(57) Abstract :
ABSTRACT The Automatic Border Surveillance System presents an innovative approach to enhancing national security by leveraging advanced technology for border protection. With diverse terrains and persistent security threats, securing borders remains a paramount challenge. This system aims to address these challenges through a comprehensive surveillance and response mechanism. Key components of the system include a network of sensors for ground-level and aerial threat detection, an integrated alarm system for prompt notification of unauthorized activities, and automated response mechanisms for rapid deployment of defensive measures. Integration of IoT technology enables seamless communication and data transmission between surveillance components and control centers, facilitating real-time monitoring and coordinated response. By utilizing solar power supply, the system ensures sustainability and operational efficiency. The Automatic Border Surveillance System represents a proactive and technologically-driven approach to safeguarding national borders, reducing reliance on manpower, and minimizing risks to personnel. Ultimately, this system is poised to enhance situational awareness, deter intrusions, and effectively respond to emerging threats, thereby bolstering national security and protecting border integrity.

No. of Pages : 17 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/06/2024
(21) Application No.202421045243 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN ARTIFICIAL INTELLIGENCE BASED AUTOMATED WASTE SORTING SYSTEM

(51) International classification	:B03B0009060000, B65F0001140000, B07B0013000000, B65F0003000000, B02C0023080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Vishwanath Karad MIT- World Peace University
Address of Applicant :Kothrud Campus, Paud Road, Pune, Maharashtra, India - 411038 ---------- ----------
2)HINGMIRE, Amruta
3)PUJERI, Uma Ramachandra
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)HINGMIRE, Amruta
Address of Applicant :Dr. Vishwanath Karad MIT World Peace University, School of Computer Engineering and Technology, Kothrud Campus, Paud Road, Pune, Maharashtra, India - 411038 ---------- ----------
2)PUJERI, Uma Ramachandra
Address of Applicant :Dr. Vishwanath Karad MIT World Peace University, School of Computer Engineering and Technology, Kothrud Campus, Paud Road, Pune, Maharashtra, India - 411038 ---------- ----------

(57) Abstract :
The present invention relates to an artificial intelligence-based automated waste sorting system designed to enhance municipal solid waste management. The system comprises a conveyor belt (3) for transporting waste, a camera (6) for capturing real-time images, and an advanced object detection system for identifying and classifying waste materials. Robotic arms (1) with vacuum-based end effectors (2) collect and sort waste into designated bins (5). A next-level segregation model further classifies plastics (7) into polyethylene, polypropylene, and polystyrene. The system features a modular architecture for customization and scalability, continuous monitoring, and incremental learning to adapt to new waste types, ensuring high accuracy and efficiency. The integration of these components addresses urban garbage issues by providing precise, efficient trash identification and sorting. This invention aims to revolutionize waste management practices, promoting sustainability and reducing environmental impact.

No. of Pages : 11 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/06/2024
(21) Application No.202421045276 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM AND METHOD FOR THE SYNTHESIS OF PET IMAGES FROM MULTIMODAL MR IMAGES.

(51) International classification	:G06N0003080000, A61B0006030000, G06N0003040000, G06T0007330000, G06T0007000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Manmohi Dake
Address of Applicant :Nirzar, 10 Vrindavan, Sector A, Panchavati, Pashan, Pune - 411008, Maharashtra, India. Pune ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Manmohi Dake
Address of Applicant :Nirzar, 10 Vrindavan, Sector A, Panchavati, Pashan, Pune - 411008, Maharashtra, India. Pune ---------- ----------

(57) Abstract :
The present invention relates to a system and method for the synthesis of PET images from multimodal MR images. The system (20) comprises a user (21), input/output device(s) (23) and processing unit (24). The method comprises three stages namely, model training stage, validation stage and model deployment stage. The model training stage comprises the steps of creation of the dataset in the form of pairs of images comprising of multimodal MR images (1) and corresponding single or plurality of PET images (2) and model training using a DCGAN workflow that consists of generator network (3) and discriminator network (17). The validation stage is performed to assess the similarity between synthetic and real PET images and the clinical utility of the synthesized PET images. In the model deployment stage, the trained model is loaded and deployed to obtain synthetic PET images (25) from multimodal MR images as input (22).

No. of Pages : 33 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/06/2024
(21) Application No.202421046499 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DIGITAL RHEOSTAT SYSTEM FOR PRECISE RESISTANCE CONTROL IN ELECTRICAL CIRCUITS

(51) International classification	:H01C10/00, H01C1/00, H01C1/082, G01R1/20, G01R27/00
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Rajarambapu Institute of Technology, Rajaramnagar
Address of Applicant :A/P-Islampur, Tal-Walwa, Dist.- Sangli, Maharashtra – 415414 ---------- ----------
2)Prof. Rajanikant A. Metri
3)Prof. Chandrakant L. Bhattar
4)Dr. Arun R. Thorat
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Prof. Rajanikant A. Metri
Address of Applicant :Rajarambapu Institute of Technology, Rajaramnagar. – 415414 ---------- ----------
2)Prof. Chandrakant L. Bhattar
Address of Applicant :Rajarambapu Institute of Technology, Rajaramnagar. – 415414 ---------- ----------
3)Dr. Arun R. Thorat
Address of Applicant :Rajarambapu Institute of Technology, Rajaramnagar. – 415414 ---------- ----------

(57) Abstract :
ABSTRACT: Digital Rheostat System for Precise Resistance Control in Electrical Circuits This invention presents an advanced digital rheostat system designed for precise resistance control, featuring a central processing unit (CPU) that interprets user inputs and adjusts a high-precision variable resistor via a servo motor. It includes a high-resolution digital display, ergonomically designed control knobs, and buttons for accurate user input. The system ensures precise resistance values through a closed-loop mechanism, handling currents ranging from 1-5A. A built-in cooling system with discreet vents and a silent fan maintains optimal operating temperatures. Connectivity options, including USB and wireless, allow for integration with external devices, software updates, data logging, and remote control. The robust power supply unit ensures stable performance, protecting against voltage fluctuations. Encased in durable materials, the DigiRheostat is suitable for laboratory experiments, industrial applications, and environments requiring high precision in resistance control. The system enhances efficiency, reliability, and user convenience.

No. of Pages : 12 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/06/2024
(21) Application No.202421046502 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTONOMOUS ELEVATING ROBOT FOR HOTSPOT DETECTION AND MAINTENANCE OF PHOTOVOLTAIC SOLAR PARKS

(51) International classification	:G05D0001020000, H04N0005330000, G01S0017931000, H02S0050100000, B25J0009160000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Rajarambapu Institute of Technology, Rajaramnagar
Address of Applicant :A/P-Islampur, Tal-Walwa, Dist.- Sangli, Maharashtra – 415414 ---------- ----------
2)Prof. Chandrakant L. Bhattar
3)Prof. Rajanikant A. Metri
4)Dr. Arun R. Thorat
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Prof. Chandrakant L. Bhattar
Address of Applicant :Rajarambapu Institute of Technology, Rajaramnagar. – 415414 ---------- ----------
2)Prof. Rajanikant A. Metri
Address of Applicant :Rajarambapu Institute of Technology, Rajaramnagar. – 415414 ---------- ----------
3)Dr. Arun R. Thorat
Address of Applicant :Rajarambapu Institute of Technology, Rajaramnagar. – 415414 ---------- ----------

(57) Abstract :
ABSTRACT: Autonomous Elevating Robot for Hotspot Detection and Maintenance of Photovoltaic Solar Parks This invention presents an autonomous elevating robot for photovoltaic (PV) parks maintenance and efficiency through advanced diagnostics. It features a robust all-terrain platform and an extendable mast equipped with LiDAR sensors, stereo vision cameras, a thermal imaging camera, and a spectroscopy-based sensor system. The mast's elevation and rotation provide comprehensive panel inspection. The thermal camera detects hotspots, while spectroscopy sensors analyze light reflections to identify contaminants. An onboard AI processes this data in real-time, triggering an automated cleaning system with adjustable brushes and air blowers to remove debris. Integrated control and wireless communication systems enable seamless operation and remote monitoring. The robot autonomously navigates the PV park, performing thorough maintenance with minimal human intervention, thus enhancing the performance and longevity of solar installations.

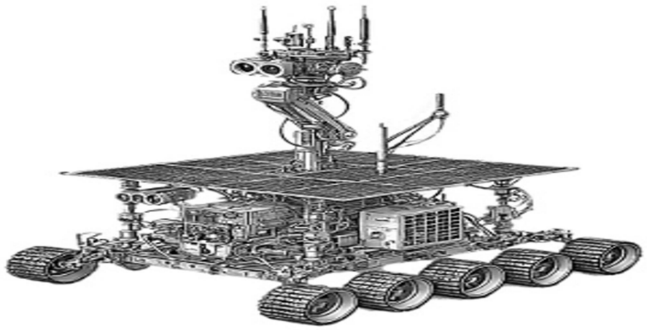


FIGURE – 1

No. of Pages : 25 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/06/2024

(21) Application No.202421046535 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD AND APPARATUS FOR DRYING OF STRAWBERRIES USING MICROWAVE, SOLAR, AND HOT AIR DRYERS

(51) International classification :A23L3/40, A23B7/02, F26B3/02
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Siddharth M Lokhande
Address of Applicant :Assistant Professor, Department of Technology, Food Technology Programme, Shivaji University, Kolhapur, Maharashtra, India . ---------- ----------
2)Dr. A K Sahoo
3)Dr. Gopal Madan Solanke
4)Mr. Patil Samsher Namdev
5)Mr. Arvind B Madavi
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Siddharth M Lokhande
Address of Applicant :Assistant Professor, Department of Technology, Food Technology Programme, Shivaji University, Kolhapur, Maharashtra, India . ---------- ----------
2)Dr. A K Sahoo
Address of Applicant :Associate Professor, Institute of Chemical Technology Mumbai Indian Oil Odisha Campus Bhubaneswar, Odisha, India . ---------- ----------
3)Dr. Gopal Madan Solanke
Address of Applicant :Assistant Professor, Department of Technology, Food Technology Programme, Shivaji University, Kolhapur, Maharashtra, India . ---------- ----------
4)Mr. Patil Samsher Namdev
Address of Applicant :Assistant Professor, School of Allied Health Sciences, Sanjay Ghodawat University Atigre Kolhapur, Maharashtra, India . ---------- ----------
5)Mr. Arvind B Madavi
Address of Applicant :Assistant Professor, Chemical Engineering Department of Technology Shivaji University Kolhapur, Maharashtra, India . ---------- ----------

(57) Abstract :
The present invention relates to a comparative study and optimization of drying method and apparatus for strawberries, utilizing microwave, solar, and hot air driers. The study evaluates the drying kinetics, energy consumption, and quality parameters of the dried fruits, aiming to optimize the drying conditions for each method. Experiments are designed to evaluate the effects of power level, temperature, and drying time on the quality and efficiency of the drying process. Response surface methodology (RSM) is used to optimize drying conditions. The optimal drying method and conditions are identified for strawberries. This invention significantly advances the field of fruit processing by providing a sustainable and effective approach to drying. Fig. 1

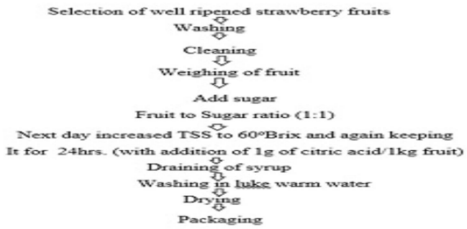


Fig. 1

No. of Pages : 10 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/06/2024

(21) Application No.202421046642 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : "GULSHEP - A DIGESTIVE CHIKKI"

(51) International classification :A61K36/23, A61K36/53, A61K36/67, A61K36/9068, A61P1/14, A23P30/10, A23L33/125, A23C15/14
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)DR. SHIVAJIRAO BACHCHHAV PATIL
Address of Applicant :DYPCMR MBA COLLEGE, GATE NO.1027, NEWALE VASTI, VITTHAL NAGAR, MAHARASHTRA, INDIA - 411062. ---------- ----------
2)PRANITA GANESH JOSHI
3)DR. SUDARSHAN SAVANOOR
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. SHIVAJIRAO BACHCHHAV PATIL
Address of Applicant :DYPCMR MBA COLLEGE, GATE NO.1027, NEWALE VASTI, VITTHAL NAGAR, MAHARASHTRA, INDIA - 411062. ---------- ----------
2)PRANITA GANESH JOSHI
Address of Applicant :DYPCMR MBA COLLEGE, GATE NO.1027, NEWALE VASTI, VITTHAL NAGAR, MAHARASHTRA, INDIA - 411062. ---------- ----------
3)DR. SUDARSHAN SAVANOOR
Address of Applicant :DYPCMR MBA COLLEGE, GATE NO.1027, NEWALE VASTI, VITTHAL NAGAR, MAHARASHTRA, INDIA - 411062. ---------- ----------

(57) Abstract :
Abstract- "Gulshep- A Digestive Chikki" "Gulshep- A Digestive Chikki " is made from 9 ingredients such as Jaggery, Ginger, Fennel seeds. Carom seeds, Cumin seeds, Cardamom, Mint leaves, Betel leaves & ghee. These nine ingredients have tremendous importance in ayurveda. Each ingredient has a unique property to improve our gut health. Gulshep chikki/blocks is working as an appetizer and it is regulating bowel movement to keep gut health happy.

No. of Pages : 6 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/06/2024

(21) Application No.202421046647 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : "HOLYBLET" - TABLET FROM 5 AYURVEDIC INGREDIENTS.

(51) International classification :A61K9/20, A61K45/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)DR. SHIVAJIRAO BACHCHHAV PATIL
Address of Applicant :DYPCMR MBA COLLEGE, GATE NO.1027, NEWALE VASTI, VITTHAL NAGAR, MAHARASHTRA, INDIA - 411062. ---------- ----------
2)PRANITA GANESH JOSHI
3)DR. SUDARSHAN SAVANOOR
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. SHIVAJIRAO BACHCHHAV PATIL
Address of Applicant :DYPCMR MBA COLLEGE, GATE NO.1027, NEWALE VASTI, VITTHAL NAGAR, MAHARASHTRA, INDIA - 411062. ---------- ----------
2)PRANITA GANESH JOSHI
Address of Applicant :DYPCMR MBA COLLEGE, GATE NO.1027, NEWALE VASTI, VITTHAL NAGAR, MAHARASHTRA, INDIA - 411062. ---------- ----------
3)DR. SUDARSHAN SAVANOOR
Address of Applicant :DYPCMR MBA COLLEGE, GATE NO.1027, NEWALE VASTI, VITTHAL NAGAR, MAHARASHTRA, INDIA - 411062. ---------- ----------

(57) Abstract :
bstract- "Holyblet- Tablet from 5 Ayurvedic ingredients" Milk, Curd, Ghee, Rock candy & Honey these 5 ingredients in together, is considered as sacred water (Panchamrut) in the hindu rituals. These ingredients, together, are very much beneficial to human physical and mental health. On these busy days, people do not have time to prepare this Panchamrut. Therefore, if the tablet is available, it will be an easy and comfortable way to consume it.

No. of Pages : 8 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/06/2024

(21) Application No.202421046680 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : "AXLE LESS HOLLOW WHEEL CASTOR"

(51) International classification :B60B33/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)M/S. REGAL CASTORS PRIVATE LIMITED
Address of Applicant :B-F/20, SARAF KASKAR INDUSTRIAL ESTATE, SWAMI VIVEKANAND ROAD, ABOVE A1 DARBAR HOTEL, OSHIVARA, JOGESHWARI WEST, MUMBAI-400 102, MAHARASHTRA, INDIA. ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MR. MASUD MOHAMMED ASIF SHAIKH
Address of Applicant :B-F/20, SARAF KASKAR INDUSTRIAL ESTATE, SWAMI VIVEKANAND ROAD, ABOVE A1 DARBAR HOTEL, OSHIVARA, JOGESHWARI WEST, MUMBAI-400 102, MAHARASHTRA, INDIA. ----------

(57) Abstract :
ABSTRACT "Axle less hollow Wheel castor" disclosed here in this embodiment relates to the field of mechanical engineering. This invention relates to Axle Less Hollow Wheel Castors of the kind having a body adapted to be mounted on an article of furniture or the like for pivoting movement relative to the article about a substantially upright pivot axis; and single wheel or twin wheels mounted on the body for rotation without the use of mounting Axle either made of plastic or metal relative thereto about a rolling axis which is transverse to the pivot axis wherein the peripheral portion of the wheel engages with a floor surface when the castor is in use. Overall assembly of the axle less hollow wheel castor ensures smooth functioning of the stem when installed and fitted in various appliances of hospitals, chairs and other industrial fields.

No. of Pages : 14 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :18/06/2024

(21) Application No.202421046771 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : DEVELOPMENT OF SMART HELMET FOR MINING WORKERS USING INTERNET OF THINGS.

(51) International classification :A42B0003040000, A42B0003300000, G06Q0050020000, G16Y0030000000, G06Q0020300000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)DR. RASHMI JAIN
Address of Applicant :S B JAIN INSTITUTE OF TECHNOLOGY MANAGEMENT AND RESEARCH, NEAR FETRY, KATOL ROAD, NAGPUR - 441501, MAHARASHTRA, INDIA. ---------- ----------
2)DR. MRUDULA NIMBARTE
3)DR. SACHIN JAIN
4)DR. ROSHANI TALMALE
5)MS. HARSHITA WANKHEDE
6)DR. RAHUL PETHE
7)MR. NISARG GANDHEWAR
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. RASHMI JAIN
Address of Applicant :S B JAIN INSTITUTE OF TECHNOLOGY MANAGEMENT AND RESEARCH, NEAR FETRY, KATOL ROAD, NAGPUR - 441501, MAHARASHTRA, INDIA. ---------- ----------
2)DR. MRUDULA NIMBARTE
Address of Applicant :S B JAIN INSTITUTE OF TECHNOLOGY MANAGEMENT AND RESEARCH, NEAR FETRY, KATOL ROAD, NAGPUR - 441501, MAHARASHTRA, INDIA. ---------- ----------
3)DR. SACHIN JAIN
Address of Applicant :OKLAHOMA STATE UNIVERSITY, STILLWATER, OK, USA ---------- ----------
4)DR. ROSHANI TALMALE
Address of Applicant :S B JAIN INSTITUTE OF TECHNOLOGY MANAGEMENT AND RESEARCH, NEAR FETRY, KATOL ROAD, NAGPUR - 441501, MAHARASHTRA, INDIA. ---------- ----------
5)MS. HARSHITA WANKHEDE
Address of Applicant :S B JAIN INSTITUTE OF TECHNOLOGY MANAGEMENT AND RESEARCH, NEAR FETRY, KATOL ROAD, NAGPUR - 441501, MAHARASHTRA, INDIA. ---------- ----------
6)DR. RAHUL PETHE
Address of Applicant :S B JAIN INSTITUTE OF TECHNOLOGY MANAGEMENT AND RESEARCH, NEAR FETRY, KATOL ROAD, NAGPUR - 441501, MAHARASHTRA, INDIA. ---------- ----------
7)MR. NISARG GANDHEWAR
Address of Applicant :RAMDEBABA COLLEGE OF ENGINEERING AND MANAGEMENT NAGPUR 440001 ---------- ----------

(57) Abstract :
ABSTRACT Safety is crucial in all industries, especially in mining, where it is a key concern due to the hazardous conditions! Despite the implementation of safety measures, accidents in underground mines still occur due to factors such as rising temperatures, increased water levels, and methane gas leaks. To address these risks, this project proposes a solution to 10 improve the safety of miners. The core idea is to develop a smart helmet system that continuously monitors the environment for dangerous conditions. The helmet will track parameters such as temperature, humidity, gas levels, and the condition of the helmet itself, including whether it has been removed or damaged by obstacles. This system aims to provide real-time information about the safety status of the miners. A critical component of this safety 15 system is a reliable communication network that ensures constant connectivity between underground miners and the surface control centre. This network must be robust and uninterrupted, regardless of the conditions. To achieve this, the project utilizes a cost-effective LoRa-based wireless communication system. LoRa (Long Range) technology is chosen for its ability to provide long-distance communication with low power consumption, 20 making it suitable for the mining environment. The smart helmet is integrated with IoT (Internet of Things) technology, which has seen significant advancements and widespread application across various fields. In the mining industry, the IoT-enabled helmet will transmit aT m « data to a central monitoring system over the LoRa network. This setup allows for real-time supervision of the miners1 safety and early detection of hazardous events. In the event of an 25 emergency, such as a sudden increase in temperature or the presence of dangerous gas levels, the system can send alerts to both the miners and the surface control centre. Additionally, miners can manually trigger an emergency alert by pressing a panic button on their helmet if they find themselves in danger. This feature ensures that help can be dispatched quickly to 30 underground mines by providing a smart, connected helmet system that monitors environmental conditions and supports reliable communication. This innovative approach aims to reduce the risk of accidents and improve the overall safety of mining operations. By leveraging IoT and LoRa technology, the project offers a modern, cost-effective solution to longstanding safety challenges in the mining industry.

No. of Pages : 21 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :20/06/2024
(21) Application No.202421047362 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN ELECTROSPUN NANOFIBROUS SCAFFOLDS FOR TISSUE REGENERATION AND METHOD OF PREPARATION THEREOF.

(51) International classification :B82Y30/00, A61L27/14,
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SANDIP UNIVERSITY NASHIK
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES
3)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. ABHIJEET DATTATRAY KULKARNI
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)ARCHANA SHANTARAM GADAKH
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)RAJDIP RAVINDRAKUMAR GAJARE
Address of Applicant :SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES, MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------

(57) Abstract :
ABSTRACT The invention pertains to herbal electrospun nanofibrous scaffolds for tissue regeneration, their preparation method, and applications. Herbal nanoparticles are derived from herbal extracts and incorporated into a polymeric solution. This solution is then electrospun to produce nanofibrous scaffolds, which are subsequently characterized for various properties including antimicrobial, anti-inflammatory, and tissue regeneration activities. The scaffolds demonstrate promising wound healing potential, offering a multifunctional approach to wound management. Characterization techniques include scanning electron microscopy, Fourier transform infrared spectroscopy, and thermal analysis. Evaluation of antimicrobial activity against Pseudomonas aeruginosa and Staphylococcus aureus, as well as anti¬inflammatory and tissue regeneration activities, is conducted. The electrospun nanofibrous scaffolds exhibit enhanced wound healing properties due to the incorporation of herbal nanoparticles, making them suitable for acute and chronic wound care applications. Overall, the invention represents a significant advancement in tissue engineering and wound management, providing a versatile and effective solution for promoting tissue regeneration and improving patient outcomes. The continuous release of herbal compounds from the scaffolds enhances the healing process while reducing the need for frequent dressing changes.

No. of Pages : 15 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :20/06/2024
(21) Application No.202421047390 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : PREPARATION AND EVALUATION OF HERBAL HANDWASH FORMULATION.

(51) International classification	:A61K36/185, A61K36/23, A61K36/58, A61K36/9066, A61K36/48, A61K8/97, A61Q19/10, A61P31/04
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)SANDIP UNIVERSITY NASHIK
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES
3)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. SUNITA S. DEORE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)DR. SUMIT R. DEORE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)DR. ABHIJEET D. KULKARNI
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)CHAITALI MANOHAR DHAGE
Address of Applicant :SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES ,MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------

(57) Abstract :
ABSTRACT This study aims to develop and evaluate a herbal handwash formulation as a safer alternative to chemical-based products. Herbal ingredients like Emblica officinalis, Centella asiatica, Azadirachta indica, Curcuma longa, and Glycyrrhiza glabra are selected for their known antimicrobial properties. The formulation process involves extraction of active constituents using methanol and formulation with Sodium Lauryl Sulphate (SLS) to enhance efficacy. Antimicrobial activity against common skin pathogens, including Staphylococcus aureus and Pseudomonas aeruginosa, is evaluated using the Cup-Plate method. Results demonstrate potent antimicrobial activity of the herbal hand wash formulation compared to standard antibiotics. The herbal hand wash offers a safer alternative for hand hygiene, minimizing the risk of adverse effects associated with chemical-based products. The formulation's efficacy in combating microbial infections presents a promising avenue for promoting public health and hygiene. This innovative approach integrates traditional herbal medicine with modern scientific methods, catering to the escalating concerns surrounding hand hygiene practices. Ultimately, the herbal handwash formulation stands as a testament to the potential of natural remedies in providing effective and safe solutions for hand hygiene.

No. of Pages : 15 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :20/06/2024
(21) Application No.202421047411 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : FORMULATION AND CHARACTERIZATION OF NANO-CARRIER BASED GEL FOR NASAL DRUG DELIVERY.

(51) International classification :B82Y5/00, A61K9/12, A61K36/42
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SANDIP UNIVERSITY NASHIK
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES
3)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. ABHIJEET DATTATRAYA KULKARNI
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)VARULE SHUBHAM JALINDAR
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)DR. SUBODH ANIL GANGURDE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)DR.MAKARAND GAMBHIRE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)DR. SUSHIL NARKHEDE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
6)DR. SUMIT DEORE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
7)DR.VISHAL BALKRUSHNA JADHAV
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
8)PAGARE DHANASHRI RAJENDRA
Address of Applicant :SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES ,MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------

(57) Abstract :
ABSTRACT Alzheimer's disease (AD) poses a significant challenge due to its progressive degeneration of brain cells, leading to cognitive decline. Existing treatments offer limited relief, necessitating innovative approaches. Benincasa hispida extract shows promise in AD treatment, yet lacks a dedicated formulation. Leveraging intranasal delivery, this study proposes a novel nano-carrier based gel for Benincasa hispida extract, targeting the central nervous system via the olfactory and trigeminal nerves. Nano-carrier encapsulation enhances bioavailability, efficacy, and nose-to-brain targeting. The gel formulation bypasses the blood-brain barrier, offering a non-invasive route. The method involves extraction, nano-carrier preparation, and gel optimization, with characterization for physicochemical properties and efficacy. This pharmaceutical composition improves solubility, stability, and therapeutic efficacy. Controlled release enhances patient compliance and outcomes. The proposed innovation addresses critical gaps in AD therapy, offering a promising solution for enhanced treatment efficacy and patient care.

No. of Pages : 15 No. of Claims : 4

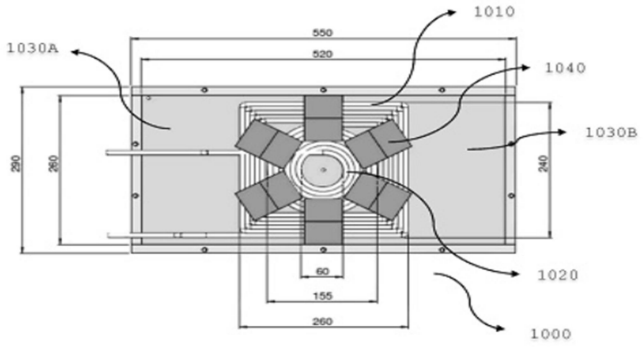
(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/06/2024
(21) Application No.202421046398 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN OVERLOAD INSENSITIVE ENERGY EFFICIENT NOVEL COIL HEAD FOR AUTOMATED INDUCTION CAP SEALING SYSTEM OF CYLINDRICAL AND TAPERED WIDE-MOUTHED CONTAINER

(51) International classification :H01F5/00, H01F5/04, B29C65/36, B65B3/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)ELECTRONICS DEVICES WORLDWIDE PRIVATE LIMITED
Address of Applicant :UNIT 22, MISTRY INDUSTRIAL ESTATE, CROSS ROAD A, MIDC, ANDHERI (EAST), MUMBAI, MAHARASTRA ANDHERI EAST, MUMBAI ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)ARUN KUMAR PAUL
Address of Applicant :UNIT 22, MISTRY INDUSTRIAL ESTATE, CROSS ROAD A, MIDC, ANDHERI (EAST), MUMBAI, INDIA -400093 ANDHERI EAST ---------- ----------
2)SANDEEP B. CHINOY
Address of Applicant :UNIT 22, MISTRY INDUSTRIAL ESTATE, CROSS ROAD A, MIDC, ANDHERI (EAST), MUMBAI, INDIA -400093 ANDHERI EAST ---------- ----------
3)BIKRAM NAHAK
Address of Applicant :UNIT 22, MISTRY INDUSTRIAL ESTATE, CROSS ROAD A, MIDC, ANDHERI (EAST), MUMBAI, INDIA -400093 ANDHERI EAST ---------- ----------
4)VIVEK S. CHINOY
Address of Applicant :UNIT 22, MISTRY INDUSTRIAL ESTATE, CROSS ROAD A, MIDC, ANDHERI (EAST), MUMBAI, INDIA -400093 ANDHERI EAST ---------- ----------

(57) Abstract :
ABSTRACT Title: An overload insensitive energy efficient novel coil head for automated induction cap sealing system of cylindrical and tapered wide-mouthed container. The present invention disclosed an overload insensitive energy efficient novel coil head for automated induction cap sealing system for wide-mouthed container [800] , comprising a multi-geometrically configured concentric turns of coil positioned on a single coil segment, arranged along a planar surface wherein an axis of the planar surface coincides with a conveyor axis [1610] in the direction of the movement of the conveyor belt, wherein a planar spiral shaped inner turns of coil is first arranged in the single coil segment followed by a concentric square shaped outer turns of coil configured around the periphery of the circular shaped inner turns of coil, operatively connected to a power converter circuit. The construction makes the novel coil head energy efficient, overload Insensitive and low power rated coil segment.



No. of Pages : 28 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2024
(21) Application No.202421046988 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DIAMOND SHAPING APPARATUS WITH INTEGRATED ROTATING SPINDLES AND DIE MECHANISM

(51) International classification	:B33Y0030000000, B24D0018000000, B24B0053060000, H02K0015000000, C23C0016270000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Bhikadia Anitaben Gajendrakumar
Address of Applicant :C-1101, Rajgreen Hills, Opp. Pal R.T.O, Pal Patiya, Surat-395009, Gujarat. Surat ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Bhikadia Anitaben Gajendrakumar
Address of Applicant :C-1101, Rajgreen Hills, Opp. Pal R.T.O, Pal Patiya, Surat-395009, Gujarat. Surat ---------- ----------

(57) Abstract :
ABSTRACT DIAMOND SHAPING APPARATUS WITH INTEGRATED ROTATING SPINDLES AND DIE MECHANISM A diamond shaping apparatus (100) designed to enhance precision and efficiency in diamond grinding for jewellery and industrial applications. The apparatus (100) comprises a shaping machine (101) equipped with rotating spindles (102) and diamond-coated wheels, stabilized by arrowhead-shaped structures strategically placed opposite each other. Central to the functionality is a versatile die mechanism that securely houses the diamond and facilitates controlled rotation for precise grinding. The die is designed to mirror the diamond's shape, ensuring a snug fit between two hooks, and includes an integrated rotator mechanism for fine rotational control. The die is also removable, allowing for adjustments or replacements to accommodate various diamond shapes and sizes, ensuring precise shaping and sizing. This innovative design combines traditional diamond cutting techniques with modern technology, providing a sophisticated solution for high-quality diamond shaping. To be published with Fig. 2.

No. of Pages : 28 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :19/06/2024

(21) Application No.202421047019 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : ADVANCED HYDRAULIC DUMP SYSTEM FOR PICKUP TRUCKS WITH ENHANCED EFFICIENCY AND SAFETY

(51) International classification	:H04W0028060000, B60P0001160000, G06Q0010060000, B60P0001280000, A63B0024000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Shailesh Somnath Parkhe
Address of Applicant :SNJB's Shri H H J B Polytechnic, Chandwad, Dist. Nashik 423101 ---------- ----------
2)Dr. Hemraj Ramdas Kumavat
3)Dr. Vishal Ashok Wankhede
4)Sandip Bhausaheb Lokhande
5)Sudhir Eknath Chaudhari
6)Amol Bhausaheb Sonawane
7)Chandrashekhar V Charakpalle
8)Pravin U Sabde
9)Revansidhha S Bukka
10)Pramod N Mantri
11)UdayKumar B Khamkar
12)Rikita Sudhakar Gangurde
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Shailesh Somnath Parkhe
Address of Applicant :SNJB's Shri H H J B Polytechnic, Chandwad, Dist. Nashik 423101 ---------- ----------
2)Dr. Hemraj Ramdas Kumavat
Address of Applicant :R C Patel Institute of Technology, Shirpur, Nimzari Naka, Shahada Road, Tal: Shirpur, Dist: Dhule, 425405 ---------- ----------
3)Dr. Vishal Ashok Wankhede
Address of Applicant :SNJB's Shri H H J B Polytechnic, Chandwad Dist. Nashik 423101 ---------- ----------
4)Sandip Bhausaheb Lokhande
Address of Applicant :A/p Davkhar Nagar, Near Mahale Hospital, Tal.Chandwad. Dist Nashik 423101 ---------- ----------
5)Sudhir Eknath Chaudhari
Address of Applicant :Dadashri, 28-A, Nagai colony, S. N. 10/1/A, Wadel Road, Near Hotel Viraj Dhule 424002 ---------- ----------
6)Amol Bhausaheb Sonawane
Address of Applicant :67 Deokinandan Housing Society At post vidya nagari walwadi shivar Deopur Dhule 424005 ---------- ----------
7)Chandrashekhar V Charakpalle
Address of Applicant :At Post: Alamala, Tal: Ausa, Dist: Latur, MH, - 413520 ---------- ----------
8)Pravin U Sabde
Address of Applicant :Swasti Niwas, Manikrao Jadhav nagar, Near Swagat Mangal Karayalaya, Khadgon Road, Latur, 413512 ---------- ----------
9)Revansidhha S Bukka
Address of Applicant :Flat no. 203, Suryadeep residency, Indrayani Nagar, LIC Colony, Latur, 413512 ---------- ----------
10)Pramod N Mantri
Address of Applicant :Osia-Igloo, Row H no.16, Vivekananadpuram, Dist: Latur, MH - 413512 ---------- ----------
11)UdayKumar B Khamkar
Address of Applicant :Janki Niwas, Sharada Nagar, behind COCSIT college, Ambajogai road, Latur, 413512 - ---------- ----------
12)Rikita Sudhakar Gangurde
Address of Applicant :Plot Number 18B , Kaka Niwas , Gurukul Colony,Behind Bus Stand, A/p Chandwad Tal.Chandwad Dist.Nashik 423101 ---------- ----------

(57) Abstract :

This invention presents an Advanced Hydraulic Dump Mechanism for Pickup Trucks enhances efficiency, safety, and energy conservation in material handling operations. This system includes a hydraulic actuator for lifting and tilting the dump bed, a precisionengineered linkage system for optimal force transfer, and adaptive load sensors for real-time monitoring of weight distribution. An intelligent control unit dynamically adjusts the lifting force and tilt angle based on sensor data, ensuring stability and preventing tipping. The mechanism features a regenerative hydraulic component that captures kinetic energy during bed lowering, storing it in a hydraulic accumulator for reuse, thereby conserving energy and reducing operational costs. Advanced safety features, including emergency stop mechanisms and automatic stabilization controls, ensure secure operations. An integrated diagnostic system continuously monitors component health, providing maintenance alerts to enhance reliability. This innovative system significantly improves operational efficiency and safety for pickup trucks in various material handling applications.

No. of Pages : 23 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2024
(21) Application No.202421047070 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MODEL FOR THE INTEGRATED HEALTH TECH ECOSYSTEM (IHE)

(51) International classification :G16H0050200000, G16H0010600000, G16H0050700000, G16Z0099000000, H04N0021436000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP UNIVERSITY NASHIK
3)SANDIP INSTITUTE OF ENGINEERING AND MANAGEMENT
4)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)CMA RAJENDRA SHIRSAT
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)NEHA WANKHEDE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)NAUSHERWAN RAUNAQUE
Address of Applicant :SANDIP UNIVERSITY, NEELAM VIDYA VIHAR, VILLAGE SIJOUL, P.O. MAILAM, MADHUBANI, BIHAR-847235 ---------- ----------

(57) Abstract :
ABSTRACT The Integrated HealthTech Ecosystem (IHE) model presents a transformative framework for modernizing healthcare delivery through digital integration and collaboration. This model addresses the fragmentation and inefficiencies present in traditional healthcare systems by prioritizing patient empowerment, interoperability, cybersecurity, continual training, regulatory agility, innovation, collaborative culture, community engagement, and transparent care. By granting patients unrestricted access to health records and facilitating informed decision-making, the IHE model empowers individuals to take an active role in their healthcare journey. Interoperability ensures seamless data exchange among diverse healthcare systems, while robust cybersecurity measures protect patient data and instill trust in digital health technologies. Continual training keeps healthcare professionals updated on digital advancements, fostering innovation and adaptability. Regulatory agility enables the integration of emerging technologies while upholding safety standards. Collaboration among healthcare professionals promotes interdisciplinary teamwork and knowledge exchange, enriching patient-centered care. Community engagement leverages digital platforms to connect healthcare organizations with local communities, supporting wellness initiatives and enhancing public health. Transparent care provides clear information on healthcare services, pricing, and quality, empowering informed decision-making. Overall, the IHE model envisions a cohesive, patient-centered, and technologically advanced healthcare ecosystem, promoting accessibility, transparency, and quality of care for patients and communities.

No. of Pages : 16 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :20/06/2024
(21) Application No.202421047431 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DEVELOPMENT OF NOVEL FLUORESCENT BASED OPTICAL BIOSENSORS FOR EARLY DETECTION OF LUNG CANCER BIOMARKERS

(51) International classification :G01N33/574, G01N33/543, G01N33/533, G01N21/64, C12Q1/6825, C12Q1/6886, A61P35/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SANDIP UNIVERSITY NASHIK
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES
3)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)NAGARAJU BANDARU
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)DR.NAGA VENKATA INDIRA DEVI JAJULA
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)DR. MAKARAND S. GAMBHIRE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)NLD BHAVANI
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)LAGU SURENDRA BABU
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
6)S.AMALA
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
7)SAI PRIYANKA
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
8)Y. NAGALAXMI
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
9)SWAPNALI ASHISH PATIL
Address of Applicant :SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES, MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
10)DR. VIVEKANAND KUMAR
Address of Applicant :SANDIP UNIVERSITY, SIJOUL, NEELAM VIDYA VIHAR, VILLAGE SIJOUL, P.O. MAILAM, MADHUBANI, BIHAR-847235 ---------- ----------

(57) Abstract :
ABSTRACT This invention presents an innovative approach for early detection of lung cancer utilizing fluorescent-based optical biosensors. Conventional diagnostic methods often lack the sensitivity required for timely intervention, leading to adverse patient outcomes. The proposed biosensors leverage gold nanoparticles functionalized with lung cancer-specific antibodies and fluorescent probes to detect biomarkers like proteins or microRNAs associated with lung cancer. The synthesis process involves stabilizing gold nanoparticles and coupling them with antibodies targeting specific biomarkers, ensuring heightened sensitivity and specificity. Validation of the biosensor's performance through rigorous analytical parameters further enhances its reliability for clinical use. The biosensors offer advantages including portability, cost-effectiveness, and real-time detection capabilities, facilitating point-of-care testing and broad accessibility. By enabling early diagnosis and monitoring of lung cancer, this innovation has the potential to significantly improve patient outcomes and reduce mortality rates associated with this formidable disease. This technology represents a crucial advancement in lung cancer diagnostics, promising more effective screening and treatment strategies.

No. of Pages : 15 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :20/06/2024
(21) Application No.202421047461 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : PHARMACOGNOSTICAL STUDY, PHYTOCHEMICAL SCREENING AND FORMULATION. DEVELOPMENT FROM ACHRAS SAPOTA. BARK EXTRACT

(51) International classification :A61K9/00, A61K36/185
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SANDIP UNIVERSITY NASHIK
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES
3)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. ABHIJEET DATTATRAYA KULKARNI
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)PRADHYUMNA S. UMBARKAR
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)KRUTIKA H. PARDESHI
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)DR. SUNITA S. DEORE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)SANCHETI VANDANA PRAFULLAKUMAR
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
6)SWATI V. DEORE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
7)MANSI NIVRUTTI PATOLE
Address of Applicant :SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK -422213 ---------- ----------

(57) Abstract :
ABSTRACT The abstract of this invention encapsulates a holistic approach towards exploring the medicinal potential of Achras Sapota bark extract. Through systematic methodologies encompassing pharmacognostical study, phytochemical screening, and formulation development, the aim is to harness the therapeutic properties of this natural resource for managing oxidative stress-related ailments and promoting wound healing. Key components of the research include the collection and authentication of Achras Sapota bark, followed by rigorous evaluation of its botanical characteristics and chemical composition. Phytochemical screening identifies various bioactive compounds present in the bark extract, while formulation development focuses on creating anti¬inflammatory creams. The investigation delves into the antioxidant and wound healing properties of the bark extract, aiming to develop effective natural remedies. Quality control measures ensure consistency and efficacy of formulations, with advanced structural elucidation techniques shedding light on molecular mechanisms underlying observed pharmacological activities.

No. of Pages : 15 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :20/06/2024
(21) Application No.202421047475 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : GREEN SYNTHESIS, FORMULATION AND EVALUATION OF SILVER NANOPARTICLE OF PLANT EXTRACTS FOR HEPATOPROTECTION

(51) International classification :B82Y30/00, A61K9/00, A61K33/38
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SANDIP UNIVERSITY NASHIK
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES
3)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. RAMDAS TUKARAM DOLAS
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)MIRZA NAZISH BAIG
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)DR. ABHIJEET DATTATRAYA KULKARNI
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)DR. SUBODH ANIL GANGURDE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)DR. MAKARAND GAMBHIRE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
6)DR. SUSHIL NARKHEDE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
7)DR. SUMIT DEORE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
8)DR. VISHAL BALKRUSHNA JADHAV
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
9)PALLAVI RAOSAHEB BADHE
Address of Applicant :SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK - 422213 ---------- ----------

(57) Abstract :
ABSTRACT The abstract summarizes a novel approach to address liver diseases using silver nanoparticles synthesized through green chemistry principles with plant extracts. Liver diseases pose significant health risks globally, often associated with conventional treatments' adverse effects. Herbal medicines offer safer alternatives, and integrating nanoscience enhances their efficacy. The invention proposes a green synthesis method for silver nanoparticles, minimizing environmental impact and cost while maximizing therapeutic potential. By utilizing plant extracts as natural reducing agents, the synthesis process becomes eco-friendly and devoid of harmful chemicals. Silver nanoparticles show promise for hepatoprotection, and comprehensive pharmacological studies validate their efficacy and safety. The cost-effective formulation ensures accessibility to a broader population, addressing the need for affordable healthcare solutions. This innovation merges herbal medicine benefits with nanoparticle technology advancements, offering a transformative approach to liver disease management. Sustainability is prioritized, aligning with green chemistry principles and minimizing environmental harm. Overall, the invention presents a promising strategy for liver disease treatment and prevention, emphasizing safety, efficacy, and affordability.

No. of Pages : 18 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :20/06/2024
(21) Application No.202421047492 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN INSTIGATION ON NOVEL COMBINATION FOR DIABETIC NEUROPATHY.

(51) International classification :A61P7/12, A61K36/00, A61K31/015
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SANDIP UNIVERSITY NASHIK
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES
3)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. ABHIJEET DATTATRAYA KULKARNI
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)VARULE SHUBHAM JALINDAR
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)DR. SUBODH ANIL GANGURDE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)DR. SUSHIL NARKHEDE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)DR. SUMIT DEORE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
6)DR. VISHAL BALKRUSHNA JADHAV
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
7)PAGARE DHANASHRI RAJENDRA
Address of Applicant :SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK -422213 ---------- ----------

(57) Abstract :
ABSTRACT Diabetes mellitus presents a global health challenge, with diabetic neuropathy being a common and distressing complication affecting a significant portion of diabetic patients. This condition manifests as chronic pain and numbness, severely impacting quality of life. Current treatments, predominantly involving synthetic drugs like Amitriptyline, often carry adverse effects, necessitating alternative therapeutic strategies. This study proposes a novel approach by investigating the synergistic potential of Chandraprabha Vati, an Ayurvedic formulation, in combination with Amitriptyline for the management of diabetic neuropathy. Chandraprabha Vati is reputed for its antidiabetic and supported by preclinical and clinical evidence, making it a promising candidate for neuropathic pain management. However, its specific efficacy for neuropathy and combined potential with Amitriptyline remain unexplored. Through investigations utilizing a high-fat diet and Streptozocin-induced diabetic rat model, this study aims to evaluate the therapeutic efficacy of Chandraprabha Vati and Amitriptyline, both alone and in combination, in alleviating diabetic neuropathy symptoms. The investigation encompasses various physiological, biochemical, and behavioral assessments to provide insights into a potentially safer and more efficacious treatment regimen for diabetic neuropathy, bridging the gap between traditional Ayurvedic medicine

No. of Pages : 14 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :20/06/2024
(21) Application No.202421047503 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : COMPOSITIONS COMPRISING AN ICONIC LIQUID COMPRISING A NOVEL CATION AND PROCESS FOR MAKING THE SAME.

(51) International classification :C07G99/00, A61K31/14, C07C305/02
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SANDIP UNIVERSITY NASHIK
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES
3)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)ASHWINI SUREKHA SUDAM NILE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)DR. ABHIJEET D. KULKARNI
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)PAGARE DHANASHRI RAJENDRA
Address of Applicant :SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK -422213 ---------- ----------

(57) Abstract :
ABSTRACT The present invention introduces novel ionic liquids (ILs) and surfactants characterized by their environmental sustainability and versatile applications. Central to this innovation is the utilization of a green Quaternary (40) ammonium cation, Cholinium, in combination with biodegradable alkyl sulfate counter-anions derived from renewable sources. A streamlined one-pot metathesis synthesis method ensures simplicity, minimal waste production, and high yield. These green ILs exhibit unique chemical properties, rendering them suitable for diverse applications, including cosmetics, industrial formulations, and chemical processes. The invention extends beyond synthesis to encompass the development of IL-based compositions and products, facilitating their integration across industries. This initiative responds to the growing demand for sustainable alternatives to traditional solvents and surfactants, promoting eco-conscious practices and contributing to environmental preservation. Through the introduction of environmentally friendly ILs and surfactants, the invention aligns with the ethos of green chemistry, aiming to foster a more sustainable future while meeting the evolving needs of various sectors

No. of Pages : 14 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :20/06/2024
(21) Application No.202421047510 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : APPLICATION OF QUALITY BY DESIGN APPROACH FOR DEVELOPMENT & VALIDATION OF STABILITY INDICATING RP-HPLC METHOD FOR LUMATEPERONE YOSYLATE DRUG IN BUIK & IT'S PHARMACEUTICAL DOSAGE FORM

(51) International classification :G01N30/02, G01N30/04, G01N30/16, G01N30/22, G01N30/28, G01N30/36, G01N30/50
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SANDIP UNIVERSITY NASHIK
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES
3)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. RAMDAS TUKARAM DOLAS
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)ARCHANA SHANKAR CHAVAN
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)DR. ABHIJEET DATTATRAYA KULKARNI
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)DR. SUBODH ANIL GANGURDE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)DR. MAKARAND GAMBHIRE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
6)DR. SUSHIL NARKHEDE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
7)DR. SUMIT DEORE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
8)DR. VISHAL BALKRUSHNA JADHAV
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
9)ROSHAN SUDHAKAR PAWAR
Address of Applicant :SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK -422213 ---------- ---------- ----------

(57) Abstract :
ABSTRACT The study aims to develop a robust RP-HPLC method for Lumateperone Tosylate analysis, leveraging the Quality by Design (QbD) approach for optimization. This method addresses limitations of previous techniques by enhancing accuracy, precision, and stability indication. Through systematic optimization of method parameters, including mode, column name, detector, and mobile phase composition, the developed RP-HPLC method demonstrates improved peak separation and efficiency. Validation of the method is conducted according to ICH Q2R1 guidelines, ensuring its suitability for pharmaceutical analysis. Stress testing is performed to assess the method's ability to detect and quantify degradants, affirming its stability-indicating capability. The cost-effectiveness of the method is emphasized throughout its development, enabling widespread adoption in analytical laboratories. Furthermore, the method facilitates comprehensive stability studies of Lumateperone Tosylate, aligning with ICH Q1A(R2) guidelines. Overall, this invention represents a significant advancement in analytical chemistry, providing a reliable, efficient, and cost-effective method for the analysis of Lumateperone Tosylate in both bulk and pharmaceutical dosage forms.

No. of Pages : 15 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :14/06/2024

(21) Application No.202421045971 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SOCIAL EMOTICONS RECOGNITION AND SUGGESTIVE APPLICATION.

(51) International classification	:C07K0014470000, G06Q0010100000, G06F0003020000, C07K0016180000, G06F0003048170
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)MR. SACHDE NIMIT RAJESH
Address of Applicant :1402, VAISHNAVI HEIGHTS, BEHIND DALVI NURSING HOME, V.N. PURAV MARG, SION CHUNABHATTI (EAST), MUMBAI 400022 ---------- ----------
2)DR. UDHWANI ROSHINI MAYUR
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MR. SACHDE NIMIT RAJESH
Address of Applicant :1402, VAISHNAVI HEIGHTS, BEHIND DALVI NURSING HOME, V.N. PURAV MARG, SION CHUNABHATTI (EAST), MUMBAI 400022 ---------- ----------
2)DR. UDHWANI ROSHINI MAYUR
Address of Applicant :PURANIK HOMETOWN, C-705, GHODBANDAR ROAD KASARVADAVLI, THANE, MAHARASHTRA, INDIA, 400615 ---------- ----------

(57) Abstract :
ABSTRACT The Social Emoticon Recognition and Suggestive Mobile Application is an innovative tool designed to enhance communication on social media platforms. By leveraging advanced algorithms, the application interprets the intended meaning and emotions behind user messages, offering accurate and contextually appropriate emoji suggestions. It features real-time clarification of emoji meanings within chats, ensuring users understand the precise sentiments being conveyed and reducing the risk of misunderstandings. Additionally, the application includes a comprehensive emoji dictionary that details the meanings and appropriate usage of each emoji, further aiding users in effective communication. This approach addresses limitations in current emoji suggestion tools, which often rely on basic keyword matching and lack real-time contextual analysis. The primary aim of the application is to facilitate clearer and more nuanced social media interactions by accurately interpreting emotions and providing suitable emoji recommendations. While the app acknowledges challenges in language complexity and cultural variations, its advanced features and comprehensive design offer a significant improvement over existing solutions, enhancing user experience and engagement on social media platforms.

No. of Pages : 17 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/06/2024

(21) Application No.202421049033 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR APPENDING ADDRESSES TO CONTACTS

(51) International classification	:G06F16/35, G06F18/24, G06Q10/10
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Worldbridge Solutions Private Limited
Address of Applicant :2C 1206, Dheeraj Dreams CHS, LBS Marg, Bhandup West, Mumbai - 400078, Maharashtra, India. Mumbai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)PINTO, Johnney Lawrence
Address of Applicant :Worldbridge Solutions Private Limited, 2C 1206, Dheeraj Dreams CHS, LBS Marg, Bhandup West, Mumbai - 400078, Maharashtra, India. Mumbai ---------- ----------

(57) Abstract :
The present disclosure provides a system (108) and a method (300) for appending addresses to contacts. The system (108) receives an information associated with one or more users from a client. The system (108) determines if the information is compliant with a requirement specified by the client. The system (108), in response to a first positive determination, classifies at least one user among the one or more users into one or more categories specified by the client. The system (108) determines using one or more resources, an address associated with said at least one user based on the one or more categories. The system (108) validates the address of said at least one user by comparing the address with an address profile of said at least one user in a public portal. The system (108) helps marketers reach professionals at their home address with a direct post.

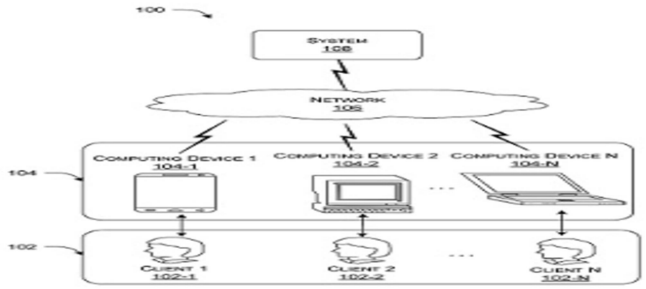


FIG. 1

No. of Pages : 24 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/06/2024
(21) Application No.202421049143 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A TOOTHBRUSH HAVING MULTI HEAD ARRANGEMENT FOR FAST AND EFFECTIVE CLEANING

(51) International classification	:A46B0009040000, A61C0017340000, A46B0005000000, A46B0015000000, A46B0009020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Snehal Dhatrak
Address of Applicant :Flat No 4 Govinda apt Behind Shri Guruji hospital Vivekanand Nagar,Anandwalli Gangapur Road Nashik 422013 Maharashtra INDIA ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Snehal Dhatrak
Address of Applicant :Flat No 4 Govinda apt Behind Shri Guruji hospital Vivekanand Nagar,Anandwalli Gangapur Road Nashik 422013 Maharashtra INDIA ---------- ----------

(57) Abstract :
ABSTRACT A TOOTHBRUSH HAVING MULTI HEAD ARRANGEMENT FOR FAST AND EFFECTIVE CLEANING The invention relates to tooth brushes, and has as its primary object the provision of a tooth brush which insures that substantially all of the surfaces of the teeth will be brushed and cleansed simultaneously. The present invention relates to a toothbrush with three heads that are able to be connected to a handle in such away that they have the ability to clean independently of one another. This toothbrush also allows for the transfer of energy associated with motion to the brush heads. The invention still retains the benefits of multi-headed tooth brushing by allowing for teeth to be cleaned in a fraction of the time required to clean teeth while utilizing traditional single brush head methods, while avoiding the requirement for a user to perform a back and forth motion user dexterity and the pinching of mouth bodies typically associated with multi-headed toothbrushes. The multi head toothbrush optimized for dimension and shape of brush heads, height and position of bunch of bristles protruded from the respective brush heads to create optimized cavity to accommodate tooth from 360-degrees at one point of time.

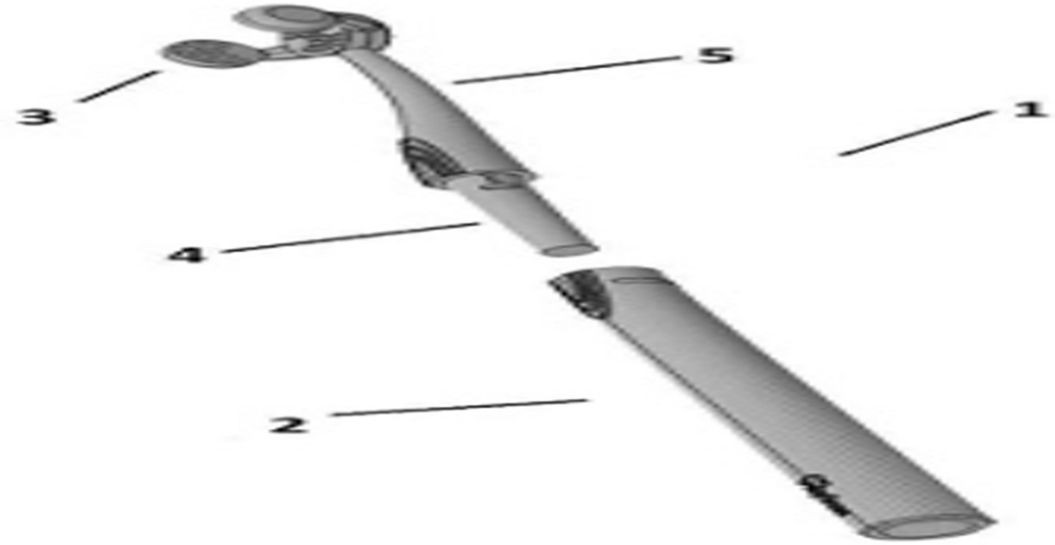


Fig. 1

No. of Pages : 28 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2024
(21) Application No.202421047072 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTOMATIC HELMET DETECTION AND NUMBER PLATE EXTRACTION USING MACHINE LEARNING.

(51) International classification	:G06N0020000000, G06N0003040000, G06N0003080000, A42B0003040000, G06F0030367000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP UNIVERSITY NASHIK
3)SANDIP INSTITUTE OF ENGINEERING AND MANAGEMENT
4)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. NARESH THOUTAM
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)DR. ANKITA KARALE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)PRADIP PATIL
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)RAIS SHAIKH
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)JAYSHREE BHOJ
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------

(57) Abstract :
ABSTRACT The invention presents an advanced system utilizing machine learning and computer vision techniques for helmet detection and license plate extraction. Its primary goals include enhancing safety enforcement, promoting road safety, and improving traffic management. By integrating cutting-edge algorithms such as Convolutional Neural Networks (CNNs) and object detection methods like Faster R-CNN or YOLO, the system achieves real-time detection of helmet-wearing behavior in individuals and accurate extraction of license plate details from vehicle images or video footage. This innovation facilitates prompt enforcement actions, contributing to a safer road environment and more efficient law enforcement operations. Additionally, the system's scalability and adaptability make it suitable for various applications, including traffic management systems, law enforcement operations, parking management, and toll collection. Overall, the invention represents a significant advancement in safety enforcement and traffic regulation, offering a reliable, efficient, and versatile solution for identifying traffic rule offenders and promoting road safety.

No. of Pages : 15 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2024
(21) Application No.202421047077 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : EHR DATA MANAGEMENT SYSTEM USING BLOCKCHAIN.

(51) International classification	:G16H0010600000, H04L0009320000, H04L0009060000, H04L0009080000, G06F0016180000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP UNIVERSITY NASHIK
3)SANDIP INSTITUTE OF ENGINEERING AND MANAGEMENT
4)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. ANKITA KARALE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)VINOD BHAMRE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)ASHISH JAGNEET
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)SUNIL KALE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)PALLAVI CHAUDHRI
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------

(57) Abstract :
ABSTRACT The healthcare sector faces challenges in data security, privacy, and accessibility, particularly with centralized Electronic Health Record (EHR) systems vulnerable to breaches. Blockchain technology offers promising solutions, providing security, privacy, and decentralization. This article proposes a blockchain-based EHR framework, empowering patients with control over their medical records and transparently granting access to doctors. By leveraging blockchain's security features and decentralization, the framework ensures data integrity and confidentiality. Smart contracts facilitate transparent transactions, while features like upgradable contracts and gas-less transactions enhance usability. Patients encrypt their data using public-private key pairs, ensuring only authorized parties access it. The system utilizes IPFS for distributed storage, improving fault tolerance and redundancy. The application simplifies user onboarding and ensures trust through transparent contract verification. It enables patients to manage medical records securely, receive prescriptions digitally, and engage in telemedicine. Future enhancements may include cross-chain compatibility, AI integration for predictive analytics, and token systems for transaction management. Overall, the proposed framework offers a decentralized solution to EHR data management challenges, ensuring security, privacy, and accessibility in healthcare.

No. of Pages : 16 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2024
(21) Application No.202421047081 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SOYBEEN LEAF DISEASE DETECTION

(51) International classification	:G06T0007000000, C12Q0001689500, A61B0003117000, A61B0001040000, A61B0001000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP UNIVERSITY NASHIK
3)SANDIP INSTITUTE OF ENGINEERING AND MANAGEMENT
4)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. ANKITA KARALE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)PALLAVI CHAUDHRI
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)SUNIL KALE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)NARESH THOUTTAM
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)PRAMOD PATIL
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------

(57) Abstract :
ABSTRACT The abstract presents an automated soybean leaf disease detection method leveraging image processing and pattern recognition techniques. Focused on soybean brown spot as the research subject, the method employs various image segmentation algorithms, including OTSU and threshold segmentation under the Lab gray scale map, to accurately identify and separate lesions from soybean leaves. Through a combination of preprocessing steps, such as background removal using the Grabcut algorithm, high-quality images of soybean diseases are obtained, ensuring data integrity for subsequent analysis. Deep learning is introduced to address disease classification, utilizing a convolutional neural network (CNN) with continuous convolutional layers and sparse Max-out activation functions. This CNN architecture enhances feature extraction and nonlinear expression capabilities, crucial for robust disease classification. By training the model on a dataset of soybean brown spot images and validating its performance, the proposed method demonstrates effectiveness in rapid disease diagnosis, efficient field management, and cost reduction. Overall, this research contributes to advancing soybean disease detection, offering a promising approach for improving agricultural productivity and reducing management costs in soybean cultivation.

No. of Pages : 15 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :20/06/2024
(21) Application No.202421047523 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN EFFICIENT FORMULATION TO IMPROVE THE SOLUBILITY AND DRUG RELEASE CHARACTERISTICS OF NOVEL COCRYSTALS OF GABAPENTIN

(51) International classification :A61K9/20, A61K9/28, A61K47/12, A61K31/19, A61K31/194
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SANDIP UNIVERSITY NASHIK
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES
3)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)RAMU SAMINENI
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)DR. MAKARAND SURESH GAMBHIRE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)DR. ASHOK THULLURU
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)DR. SUSHIL PRABHAKAR NARKHEDE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)KAVITA MANISH CHUDHARI
Address of Applicant :SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK -422213 ---------- ----------

(57) Abstract :
ABSTRACT Co-crystals offer a promising strategy to address challenges related to the solubility and oral bioavailability of pharmaceutical drugs. This study focuses on the development and evaluation of Gabapentin (GBP) co-crystals with L-ascorbic acid and acetylsalicylic acid co-formers through a co-grinding method. Four batches of co-crystals are synthesized with varying stoichiometric ratios of 1:1 and 1:3. Comprehensive characterization of the co-crystals is performed using analytical techniques such as FTIR, PXRD, SEM, and physical property assessments. Intrinsic solubility analysis, drug content determination, and in vitro dissolution studies are conducted to assess the performance of the co-crystals compared to the pure drug. Results indicate the formation of intermolecular interactions within the co-crystals, resulting in improved solubility and dissolution rates. SEM analysis reveals particle size reduction, while flow property assessments demonstrate enhanced flow characteristics of the co-crystals. The optimized co-crystal formulation, GBP-ASA CF 4, exhibits significantly higher solubility and dissolution rate compared to the pure Gabapentin. Overall, this study demonstrates the potential of co-crystals to enhance the pharmaceutical properties of Gabapentin, offering a promising avenue for the development of improved therapeutic formulations.

No. of Pages : 15 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :20/06/2024
(21) Application No.202421047559 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : GENERATING AN OPTIMIZED CONSTRAINED LINEAR REGRESSION MODEL

(51) International classification :G06Q30/02, G06Q40/06, G06F17/11, G06N3/0985, G06F18/27
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Asper.AI Inc.
Address of Applicant :One World Trade Center, Suite 76J New York, NY 10007 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)TIWARI, Praveen
Address of Applicant :I 803, Smondo 3, Neotown, Electronic City Phase 1, Bangalore – 560100, Karnataka, India Bangalore ---------- ----------
2)CHANYAL, Amandeep
Address of Applicant :1H, SKYCOURT, Bellandur Railway Station Road, Kadubesanahalli, Bangalore-560103, Karnataka, India Bangalore ---------- ----------
3)SHARMA, Prashant
Address of Applicant :D-11, Lakshmi penthouse, mico layout, Garbhavi palya, Bangalore 560068, Karnataka, India Bangalore ---------- ----------

(57) Abstract :
GENERATING AN OPTIMIZED CONSTRAINED LINEAR REGRESSION (CLR) MODEL The method comprises receiving one or more bounds for each coefficient of independent variables. Further, a steepness value is selected for controlling the velocity of weight updates for each coefficient. Subsequently, an update vector with a length equal to the number of independent variables may be created. Further, the method may comprise iterating until convergence. Each iteration may include computing a gradient for each independent variable based on the gradient, updating values of each coefficient based on the computed gradient, the computed multiplier, a learning rate, and the update vector. Further, the method involves monitoring the CLR optimization process for convergence based on whether a change in the value of the cost function is below a predefined threshold or a maximum number of iterations is reached. Further, the optimized CLR model may be utilized for at least one application within Revenue Growth Management (RGM). [to be published with figure 2]

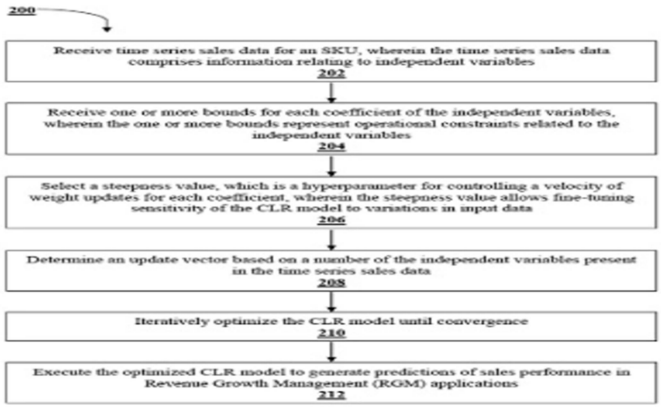


FIG. 2

No. of Pages : 48 No. of Claims : 19

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :21/06/2024
(21) Application No.202421047675 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEMS AND METHODS FOR CONTEXTUAL HYPER-SEARCH AND EXTRACTION OF CONTEXTUAL PATTERNS FROM HYPERLINKED DOCUMENTS

(51) International classification	:G06F0016951000, G06N0020000000, G06F0016955000, G06N0003000000, G06F0016953500
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Nanda Gopal Tirumala
Address of Applicant :8-2-293/82/F/C-48, Road Number 10, Film Nagar, Jubilee Hills, Hyderabad 500 033, India. ---------- ----------
2)Arnab Mukherjee
3)Sushmita Sarkar
4)David Francis Midgley
5)Roger Gordon David Darashah
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Nanda Gopal Tirumala
Address of Applicant :8-2-293/82/F/C-48, Road Number 10, Film Nagar, Jubilee Hills, Hyderabad 500 033, India. ---------- ----------
2)Arnab Mukherjee
Address of Applicant :A 2, Bhagyodaya CHS, Linking Road Extension, Santa Cruz West, Mumbai 400 054, India ---------- ----------
3)Sushmita Sarkar
Address of Applicant :Flat No. 1807, 6/B, Whispering Palms, Lokhandwala Township, Off Akurli Road, Kandivali East, Mumbai 400 101 ---------- ----------
4)David Francis Midgley
Address of Applicant :6 Ter rue de la Grande Prairie, 77590 Chartrettes, FRANCE. ---------- ----------
5)Roger Gordon David Darashah
Address of Applicant :Rua Tomas Ribeiro 45 (5-DTO), Lisbon 1050-225, Portugal ---------- ----------

(57) Abstract :
A method for contextual hyper-search and extraction of contextual patterns from hyperlinked documents includes the steps of, employing a plurality of psychological models to analyze the content of hyperlinked documents, wherein the psychological models are designed to detect underlying motivations, beliefs, and emotions, enabling the extraction of shared contextual patterns of thinking across various groups; and, utilizing a database of extensive lexicons covering a wide range of psychological constructs, the lexicons enabling unconditioned searches across the web, wherein the unconditioned searches are designed to minimize biases and filter bubbles, promoting an open-minded exploration to identify diverse viewpoints.

No. of Pages : 32 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/06/2024
(21) Application No.202421048392 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : VITAMIN C AS A TREATMENT METHOD FOR PREVENTION OF GINGIVAL REPIGMENTATION AFTER LASER DEPIGMENTATION

(51) International classification :A611Q19/00, A61K31/375
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)DR. RIZWAN M SANADI
Address of Applicant :PROFESSOR, DEPARTMENT OF PERIODONTOLOGY, DR GD POL FOUNDATION YMT DENTAL COLLEGE & HOSPITAL, KHARGHAR, SECTOR – 4, NAVI MUMBAI – 410210, MAHARASHTRA ---------- ----------
2)DR. REVATI S DESHMUKH
3)DR. PRAKHAR KAPOOR
4)DR. VIBHA HEGDE
5)DR. MAKSUDANVAR DEVALE
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. RIZWAN M SANADI
Address of Applicant :PROFESSOR, DEPARTMENT OF PERIODONTOLOGY, DR GD POL FOUNDATION YMT DENTAL COLLEGE & HOSPITAL, KHARGHAR, SECTOR – 4, NAVI MUMBAI – 410210, MAHARASHTRA ---------- ----------
2)DR. REVATI S DESHMUKH
Address of Applicant :PROFESSOR & HEAD, DEPARTMENT OF ORAL PATHOLOGY & MICROBIOLOGY, BHARATI VIDYAPEETH DEEMED TO BE UNIVERSITY DENTAL COLLEGE & HOSPITAL, SATARA ROAD, KATRAJ, DHANKAWADI, PUNE – 411043, MAHARASHTRA ---------- ----------
3)DR. PRAKHAR KAPOOR
Address of Applicant :PROFESSOR, DEPARTMENT OF ORAL PATHOLOGY & MICROBIOLOGY, SINHGAD DENTAL COLLEGE & HOSPITAL, PUNE, MAHARASHTRA ---------- ----------
4)DR. VIBHA HEGDE
Address of Applicant :DEAN FACULTY, MAHARASHTRA UNIVERSITY OF HEALTH SCIENCES, NASHIK & PROFESSOR AND HEAD, DEPARTMENT OF CONSERVATIVE DENTISTRY AND ENDODONTICS, DR GD POL FOUNDATION YMT DENTAL COLLEGE AND HOSPITAL, KHARGHAR, SECTOR – 4, NAVI MUMBAI – 410210, MAHARASHTRA ---------- ----------
5)DR. MAKSUDANVAR DEVALE
Address of Applicant :PROFESSOR, DEPT OF PLASTIC SURGERY, LOKMANYA TILAK MUNICIPAL MEDICAL COLLEGE & GENERAL HOSPITAL, SION, MUMBAI – 400022, MAHARASHTRA ---------- ----------

(57) Abstract :
ABSTRACT VITAMIN C AS A TREATMENT METHOD FOR PREVENTION OF GINGIVAL REPIGMENTATION AFTER LASER DEPIGMENTATION 5 A treatment method of vitamin C administration for preventing repigmentation of gingiva after laser depigmentation, comprising the steps of performing a surgical depigmentation of gingiva by using laser under local anesthesia, removing all the pigmented layer of the epithelium, anesthetizing the area with local anesthetic spray after two weeks after the surgery, injecting Vitamin C into the depigmented sites namely Site 'B' by using an insulin syringe and 10 administering multiple injections and repeated after one month and then monthly interval for a period of six months depending on the teeth with gingival pigmentation. The diode laser of wavelength 810nm being used for laser technique at 1-1.2 watt power in contact mode with brush like strokes and saline irrigation. The local anesthetic spray is Lidocaine USP 15% w/w. About 0.1 – 0.2ml of Vitamin C (500mg/ml) being injected into the gingiva in relation to each 15 tooth.

No. of Pages : 12 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :28/06/2024

(21) Application No.202421049798 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : IMPACT OF E- HRM PRACTICES IN THE WORKING ENVIRONMENT OF BANKING SECTOR; AN EMPLOYEE CENTERED ANALYSIS

(51) International classification	:G06Q0010060000, G06Q0010100000, H04L0051020000, G06N0020000000, G06F0021620000
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**

1)Dr. Debjani Guha

Address of Applicant :Assistant Professor, Global Business School and Research Centre, Dr.D.Y.Patil Vidyapeeth, Pimpri, Pune, Pin: 411018, Maharashtra, India. ---------- ----------

2)Dr.Mohsin Shaikh

3)Dr.Sourabh Bhattacharya

4)Dr.Jerusha Irene Chitra D

5)Dr.Chikati Srinu

6)Dr.Lalit Pipliwal

7)Anjali Chawra

8)Mr. Kirubasankar. N

9)Mr. Abhishek Kumar Singh

10)Madhuri Pal

11)Dr.Harikumar Pallathadka

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. Debjani Guha

Address of Applicant :Assistant Professor, Global Business School and Research Centre, Dr.D.Y.Patil Vidyapeeth, Pimpri, Pune, Pin: 411018, Maharashtra, India. ---------- ----------

2)Dr.Mohsin Shaikh

Address of Applicant :Associate Professor, Dr.Vishwanath Karad MIT World Peace University, Pune, Pin: 411038, Maharashtra, India. ---------- ----------

3)Dr.Sourabh Bhattacharya

Address of Applicant :Associate Professor, Haldia Institute of Technology, ICARE Complex, Hatiberia Haldia, Purba Medinipore, Pin: 721657, West Bengal, India. ---------- ----------

4)Dr.Jerusha Irene Chitra D

Address of Applicant :Assistant Professor, Loyola College, Chennai, Pin:600034, Tamilnadu, India. ---------- ----------

5)Dr.Chikati Srinu

Address of Applicant :Assistant Professor, Department of Public Administration & Human Resource Management, Kakatiya University, Warangal, Pin: 506009, Telangana. ---------- ----------

6)Dr.Lalit Pipliwal

Address of Applicant :Professor, Narayana Business School, Ahemdabad, Pin: 382210, Gujarat, India. ---------- ----------

7)Anjali Chawra

Address of Applicant :Assistant Professor, GNIOT Institute of Professional Studies, Knowledge Park 2, Greater Noida, Gautam Buddh Nagar, Pin: 201310, Uttar Pradesh, India. ---------- ----------

8)Mr. Kirubasankar. N

Address of Applicant :Assistant Professor, Sri Manakula Vingayagar Engineering College, Madagadipet, Puducherry, Pin: 605107, Puducherry, India. ---------- ----------

9)Mr. Abhishek Kumar Singh

Address of Applicant :Research Scholar, P.G. Department of Commerce and Business Management, Veer Kunwar Singh University, Katira, Arrah, Pin:802301, Bihar, India. ---------- ----------

10)Madhuri Pal

Address of Applicant :Assistant Professor, GNIOT Institute of Professional Studies, Knowledge Park 2, Greater Noida, Gautam Buddh Nagar, Pin: 201310, Uttar Pradesh, India. ---------- ----------

11)Dr.Harikumar Pallathadka

Address of Applicant :Director and Professor, Manipur International University, Ghari, Imphal, Imphal West, Pin: 795140, Manipur, India. ---------- ----------

(57) Abstract :

ABSTRACT IMPACT OF E- HRM PRACTICES IN THE WORKING ENVIRONMENT OF BANKING SECTOR; AN EMPLOYEE CENTERED ANALYSIS The present invention discloses an Electronic Human Resource Management (E-HRM) system tailored for the banking sector, aimed at enhancing employee satisfaction, productivity, and well-being. The system includes a user-friendly interface facilitating interactions with HR functions such as recruitment, training, performance management, and employee engagement. It integrates AI-powered chatbots for efficient handling of HR queries, machine learning algorithms for predictive analytics in workforce planning, and personalized learning modules based on individual employee data. A robust data protection mechanism ensures the security and confidentiality of employee information, complemented by an iterative feedback system for continual enhancement. This E-HRM system represents a comprehensive solution to optimize HR operations, foster employee development, and promote a supportive work environment within banking institutions.

No. of Pages : 20 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/06/2024
(21) Application No.202421049891 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AI CONTROLLED MONITORING SYSTEM FOR ENERGY MANAGEMENT AND SURVEILLANCE IN RAILWAY SYSTEMS

(51) International classification :H04N0007180000, G08B0013196000, A61M0025100000, G08B0013190000, B01J0019240000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Baderia Global Institute of Engineering and Management
Address of Applicant :Global Square, Raigwan, Patan Rd, Jabalpur, Madhya Pradesh 482002 ---------- ----------
2)Prof. Abhishek Singh
3)Prof. Saurabh Sharma
4)Prof. Zohaib Hasan
5)Prof. Divya Pandey
6)Prof. Pankaj Pali
7)Prof. Khushboo Choubey
8)Rishita Makkar
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Prof. Abhishek Singh
Address of Applicant :Baderia Global Institute of Engineering and Management – 482002 ---------- ----------
2)Prof. Saurabh Sharma
Address of Applicant :Baderia Global Institute of Engineering and Management – 482002 ---------- ----------
3)Prof. Zohaib Hasan
Address of Applicant :Baderia Global Institute of Engineering and Management – 482002 ---------- ----------
4)Prof. Divya Pandey
Address of Applicant :Baderia Global Institute of Engineering and Management – 482002 ---------- ----------
5)Prof. Pankaj Pali
Address of Applicant :Baderia Global Institute of Engineering and Management – 482002 ---------- ----------
6)Prof. Khushboo Choubey
Address of Applicant :Baderia Global Institute of Engineering and Management – 482002 ---------- ----------
7)Rishita Makkar
Address of Applicant :Baderia Global Institute of Engineering and Management – 482002 ---------- ----------

(57) Abstract :
ABSTRACT: AI Controlled Monitoring system for Energy Management and Surveillance in Railway Systems The invention describes AI-Controlled Monitoring System for Energy Management and Advanced Surveillance in Railway Systems efficiently handles security threats through advanced sensors, AI-driven analytics, and real-time monitoring. When an individual loitering on a platform drops a bag and attempts to leave, high-definition CCTV cameras, infrared sensors, and radar-based motion detectors identify the suspicious behavior. The central control station triggers alarms, notifies security personnel, and enhances lighting for visibility. Real-time data guides security to quickly contain the threat. Post-incident, the system compiles data for analysis and updates AI algorithms to improve future responses. This comprehensive system ensures passenger safety and station security through swift, coordinated actions and continuous learning.

No. of Pages : 24 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/06/2024
(21) Application No.202421049892 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MACHINE LEARNING BASED ROBOTIC SYSTEM CLEANING AND DETECTING ROAD CONDITION AND FILLING POTHOLES REDUCING ACCIDENTS

(51) International classification :G06N0020000000, E01C0023060000, G01S0013860000, E01C0011000000, E01H0001080000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Baderia Global Institute of Engineering and Management
Address of Applicant :Global Square, Raigwan, Patan Rd, Jabalpur, Madhya Pradesh 482002 ---------- ----------
2)Prof. Mallika Dwivedi
3)Prof. Saurabh Sharma
4)Prof. Vishal Paranjape
5)Prof. Zeba Vishwakarma
6)Prof. Khushboo Choubey
7)Prof. Jaya Choubey
8)Sushobhit Kumar Sahu
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Prof. Mallika Dwivedi
Address of Applicant :Baderia Global Institute of Engineering and Management - 482002 ---------- ----------
2)Prof. Saurabh Sharma
Address of Applicant :Baderia Global Institute of Engineering and Management - 482002 ---------- ----------
3)Prof. Vishal Paranjape
Address of Applicant :Baderia Global Institute of Engineering and Management - 482002 ---------- ----------
4)Prof. Zeba Vishwakarma
Address of Applicant :Baderia Global Institute of Engineering and Management - 482002 ---------- ----------
5)Prof. Khushboo Choubey
Address of Applicant :Baderia Global Institute of Engineering and Management - 482002 ---------- ----------
6)Prof. Jaya Choubey
Address of Applicant :Baderia Global Institute of Engineering and Management - 482002 ---------- ----------
7)Sushobhit Kumar Sahu
Address of Applicant :Baderia Global Institute of Engineering and Management - 482002 ---------- ----------

(57) Abstract :
ABSTRACT: Machine Learning based Robotic system for cleaning and detecting the condition of the road and filling potholes to reduce accidents. This invention describes a Robotic System for Intelligent Road Cleaning and Pothole Detection using Machine Learning and Sensor Integration designed to enhance road maintenance and safety. This autonomous system integrates a control module with machine learning algorithms to process data from a sophisticated sensor array, including LiDAR, ultrasonic sensors, high-resolution cameras, and infrared sensors. The system features a vacuum suction mechanism with a magnetic unit for comprehensive debris collection, a brush assembly for loosening and directing debris, and a pothole detection and repair unit for real-time road surface assessment and repair. High-torque electric motors provide precise mobility, controlled by real-time data input. The system includes advanced filtration for clean exhaust and a communication module for remote monitoring and control. It offers efficient, adaptive road cleaning and repair, ensuring consistent, safe road conditions.

No. of Pages : 21 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :01/07/2024
(21) Application No.202421050121 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : BOUNDARY LAYER SEPARATION OF AIRFOIL USING VORTEX GENERATOR AT THE NEGATIVE PRESSURE GRADIENT POINT

(51) International classification	:B64C0023060000, F03D0001060000, B64C0027467000, F23C0007000000, B64C0021100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)INDUS UNIVERSITY
Address of Applicant :Indus University, Rancharda, via Shilaj, Ahmedabad-382115, Gujarat Ahmedabad ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr Dhruv Bharat Suthar
Address of Applicant :Bachelor of Technology, Mechanical Engineering, Indus University, Rancharda, Ahmedabad, Gujarat 382115, India Ahmedabad ---------- ----------
2)Mr Shlok Himanshu Thakkar
Address of Applicant :Bachelor of Technology, Mechanical Engineering, Indus University, Rancharda, Ahmedabad, Gujarat 382115, India. Ahmedabad ---------- ----------
3)Mr Niket Jignesh Panchal
Address of Applicant :Bachelor of Technology, Mechanical Engineering, Indus University, Rancharda, Ahmedabad, Gujarat 382115, India. Ahmedabad ---------- ----------
4)Dr Umang J Patdiwala
Address of Applicant :Bachelor of Technology, Mechanical Engineering, Indus University, Rancharda, Ahmedabad, Gujarat 382115, India. Ahmedabad ---------- ----------

(57) Abstract :
ABSTRACT Boundary Layer Separation of airfoil using vortex generator at the negative pressure gradient point The present invention relates to an implement the passive type of boundary layer separation technique over an air foil. The present invention discloses the use of vortex generator as a rotating cylinder, placed tangential to the air foil's upper surface. The vortices created by the vortex generator will provide momentum to the lower part of the boundary layer and it would delay the flow separation. The numerical analysis is carried out on NACA 0012 air foil to find the flow separation point at different operating conditions. The steady-state simulations are performed in solid works software at four different angles of attack. Based on the results, the vortex generator successfully delayed the boundary layer separation point by 15-20 % with the increasing lift coefficient up to 15 %. By elevating the vortex generator's speed, there was a notable enhancement in the lift coefficient, reaching its optimal performance at 1800 RPM.

No. of Pages : 29 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/07/2024
(21) Application No.202421050866 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : WATER TRANSFORMATION DEVICE

(51) International classification	:H02J0009060000, C02F0001000000, H02J0050900000, C02F0001560000, F21Y0115100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Envirogreen Minetech India Pvt. Ltd.
Address of Applicant :R-711, Mahalaxmi Nagar, Indore – 452010, Madhya Pradesh, India Bhopal ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Pramod Kumar Khanna
Address of Applicant :714 Apana Ghar Colony, Ujjain- 456010, MP, India Bhopal ---------- ----------
2)N. Naga Babu
Address of Applicant :11-13-544/1 Road#15, Plot 64, Alkapuri, Hyderabad-500035, Telangana, India Hyderabad ---------- ----------
3)Harsh Ghorawat
Address of Applicant :Plot No-214 Block B 1, Phase-3, J.P Shelters, Bollaram, Alwal, Secunderabad-4500010,Telangana, India Secunderabad ---------- ----------

(57) Abstract :
The present invention relates to a water transformation device (100) for converting unusable water into usable water. The water transformation device (100) comprises a pump (102) is coupled to a steel pipe (104) via a flange (102a), facilitating the smooth flow of water through a steel pipe (104). Further, a plurality of power units (106) is positioned to induce turbulence and collision for impurity removal. A power supply mechanism (108) used to provide a reliable power to the power units (106), ensuring their consistent operation. Additionally, a pressure regulator (110) configured to control water flow within the steel pipe (104), optimizing treatment efficiency via a pressure switch (112), and a power supply indicator (114) equipped with an LED bulb switch (116), to indicate the operational status of the power supply mechanism (108), ensuring consistent and uninterrupted water treatment processes for converting unusable water into usable water.

No. of Pages : 35 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :03/07/2024

(21) Application No.202421050968 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : PHOSPHOR FOR WHITE LIGHT EMITTING DIODE

(51) International classification :C09K0011770000, H01S0003160000, H01S0003170000, G06Q0020340000, B42D0025378000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Shashi Bajinath Pandey
Address of Applicant :Department of Physics, G H Raisoni Institute of Engineering and Technology, Nagpur, Maharashtra, India, 440016 Nagpur ---------- ----------
2)Aparna J Nadgowda
3)Chitra Khade
4)Ashvini Pusdekar
5)Prachita Patil
6)Supriya M. Kshetrapal
7)Esarat J. Ansari
8)Shruti Prabhakar Dhale
9)Akshay Pimpalkar
10)Shruti K. Patle
11)Ashok A. Mistry
12)Nilesh S. Ugemuge
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Shashi Bajinath Pandey
Address of Applicant :Department of Physics, G H Raisoni Institute of Engineering and Technology, Nagpur, Maharashtra, India, 440016 Nagpur ---------- ----------
2)Aparna J Nadgowda
Address of Applicant :Department of Physics, G H Raisoni Institute of Engineering and Technology, Nagpur, Maharashtra, India, 440016 Nagpur ---------- ----------
3)Chitra Khade
Address of Applicant :Department of Physics, G H Raisoni Institute of Engineering and Technology, Nagpur, Maharashtra, India, 440016 Nagpur ---------- ----------
4)Ashvini Pusdekar
Address of Applicant :Department of Physics, Anand Niketan College, Anandwan, Warora, Chandrapur, Maharashtra, India, 442907 Nagpur ---------- ----------
5)Prachita Patil
Address of Applicant :Dr Ambedkar Institute of Management Studies and Research Deekshabhoomi, Nagpur, Maharashtra, India, 440010 Nagpur ---------- ----------
6)Supriya M. Kshetrapal
Address of Applicant :Department of Physics, S.F.S College, Sadar, Nagpur, Maharashtra, India, 440033 Nagpur ---------- ----------
7)Esarat J. Ansari
Address of Applicant :Department of Physics, R.T.M. Nagpur University, Nagpur, Maharashtra, India, 440033 Nagpur ---------- ----------
8)Shruti Prabhakar Dhale
Address of Applicant :Department of Physics, Anand Niketan College, Anandwan, Warora, Chandrapur, Maharashtra, India, 442907 Nagpur ---------- ----------
9)Akshay Pimpalkar
Address of Applicant :Department of Physics, Anand Niketan College, Anandwan, Warora, Chandrapur, Maharashtra, India, 442907 Warora ---------- ----------
10)Shruti K. Patle
Address of Applicant :Department of Applied Physics, Priyadarshini J.L. College of Engineering, Nagpur, Maharashtra, India 440009 Nagpur ---------- ----------
11)Ashok A. Mistry
Address of Applicant :Department of Physics, Anand Niketan College, Anandwan, Warora, Chandrapur, Maharashtra, India, 442907 Anandwan, warora ---------- ----------
12)Nilesh S. Ugemuge
Address of Applicant :Department of Physics, Anand Niketan College, Anandwan, Warora, Chandrapur, Maharashtra, India, 442907 Anandwan, warora ---------- ----------

(57) Abstract :
Phosphor for White Light Emitting Diode has been invented in the present invention. Wherein, the host sensitized emissions of trivalent lanthanide activators Eu3+, Sm3+, Dy3+, Tb3+ and Nd3+, were observed in the Ca3La2W2O12 host. The mechanism of host to activator energy transfer is explained. The host absorption is around 310 nm which arises from the [WO6]-6 group. The relaxed excited state is about 495 nm above the ground state. This state lies quite close to some energy level of these activators as shown in the various energy level diagrams. Phonon assisted Energy transfer from the relaxed excited state to the activator thus becomes possible. It is quite remarkable that the host sensitization is achieved for a variety of trivalent lanthanides. All the phosphors exhibited simple exponential decay with sub-millisecond lifetime.

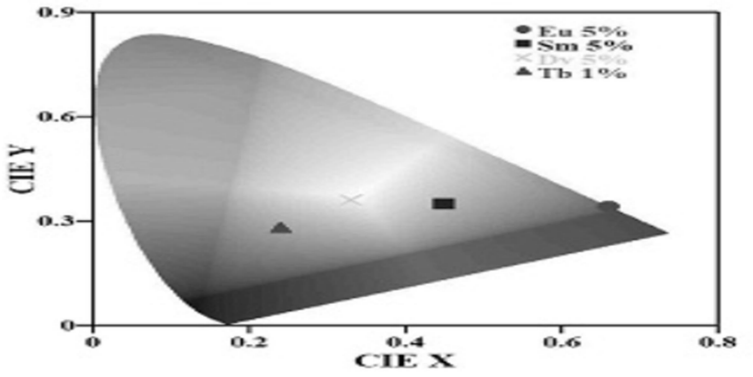


Figure 13

No. of Pages : 30 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :03/07/2024

(21) Application No.202421050980 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD AND SYSTEM TO DESIGINING A BIOSENSORS WITH POROUS DIELECTRIC FOR ENHANCED FLUORESCIENCE

(51) International classification :G01N0021640000, B82Y0020000000, G02B0006122000, C23C0014580000, G02B0006420000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Sri Krishana Singh
Address of Applicant :Faculty of Physics, Department of Physics, Government College Lamta, Balaghat, Madhya Pradesh- 481551, India Balaghat ---------- ----------
2)Dr. Sanjeev Sharma
3)Dr. Manvinder Singh
4)Dr. Subhash Mishra
5)Dr. Govind Narayan Singh
6)Dr. Chandra Mani Tiwari
7)Dr. Arvind Kumar
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Sri Krishana Singh
Address of Applicant :Faculty of Physics, Department of Physics, Government College Lamta, Balaghat, Madhya Pradesh- 481551, India Balaghat ---------- ----------
2)Dr. Sanjeev Sharma
Address of Applicant :Department of Applied Science and Humanities, IMS Engineering College, NH 24, Near Dasna, Adhyatmik Nagar, Ghaziabad, Uttar Pradesh 201015, India Ghaziabad ---------- ----------
3)Dr. Manvinder Singh
Address of Applicant :Department of Applied Science & Humanities, GL Bajaj Institute of Technology and Management, Greater Noida, Uttar Pradesh 201306, India Greater Noida ---------- ----------
4)Dr. Subhash Mishra
Address of Applicant :Department of Mechanical Engineering, IMS Engineering College, NH 24, Near Dasna, Adhyatmik Nagar, Ghaziabad, Uttar Pradesh 201015, India Ghaziabad ---------- ----------
5)Dr. Govind Narayan Singh
Address of Applicant :Assistant Professor & Head Department of Physics, Sudarshan College Lalgaon, Rewa, Madhya Pradesh- 486117, India. Rewa ---------- ----------
6)Dr. Chandra Mani Tiwari
Address of Applicant :Assistant Professor, Department of Physics, A P S University Rewa, Madhya Pradesh- 486001, India. Rewa ---------- ----------
7)Dr. Arvind Kumar
Address of Applicant :Department of Applied Science & Humanities, Accurate Institute of Management and Technology, Greater Noida, Uttar Pradesh 201306, India Greater Noida ---------- ----------

(57) Abstract :
The present invention relates to a biosensor device included a surface for binding to sample molecule to the biosensor in the form of a porous, thin film of dielectric material (TiO2) for enhanced fluorescence. The porous, thin film is in the form of a multitude of nanorods. The approach of depositing a thin film of dielectric nanorods may be applied to any enhanced fluorescence biosensor surface structure, including photonic crystals. The dielectric nanorod structures can be fabricated on the surface of a biosensor by the glancing angle deposition technique.

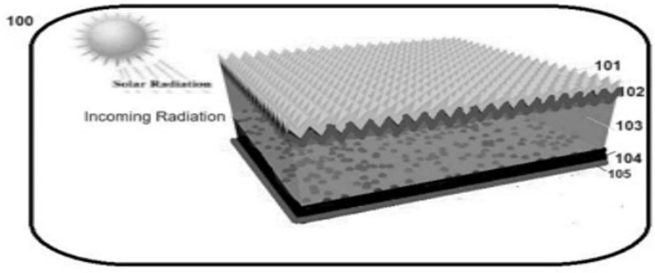


Fig.1 Block diagram of the proposed device

No. of Pages : 23 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/07/2024
(21) Application No.202421051107 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SECURE MULTI-TENANT DATA ISOLATION MECHANISM FOR CLOUD-BASED SERVICES

(51) International classification :G06F0021620000, G06F0021600000, G06F0012140000, H04L0012460000, H04L0067120000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Mr. Ripalkumar Naginbhai Patel
Address of Applicant :Software Developer, 155 Cannelle Ct, Canton, Pin / Zip Code: 48187, Michigan, USA. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr. Ripalkumar Naginbhai Patel
Address of Applicant :Software Developer, 155 Cannelle Ct, Canton, Pin / Zip Code: 48187, Michigan, USA. ---------- ----------

(57) Abstract :
The present invention discloses a Secure Multi-Tenant Data Isolation Mechanism designed to enhance security in cloud-based services. The mechanism employs advanced encryption, access control, network segmentation, and dynamic data masking techniques to ensure robust protection of tenant data within shared cloud environments. Encryption methods utilize tenant-specific keys and strong cryptographic algorithms to secure data-at-rest and data-in-transit, while role-based access controls (RBAC) enforce granular access permissions based on user roles and responsibilities. Network segmentation techniques create isolated zones for each tenant, minimizing the risk of unauthorized access between tenants. Additionally, dynamic data masking selectively obscures sensitive data elements in real-time based on predefined policies, enhancing data privacy and regulatory compliance. The mechanism includes monitoring and auditing capabilities to detect and respond to security incidents promptly. Overall, the Secure Multi-Tenant Data Isolation Mechanism sets a new standard for safeguarding sensitive information in multi-tenant cloud environments, balancing security requirements with operational efficiency and scalability.

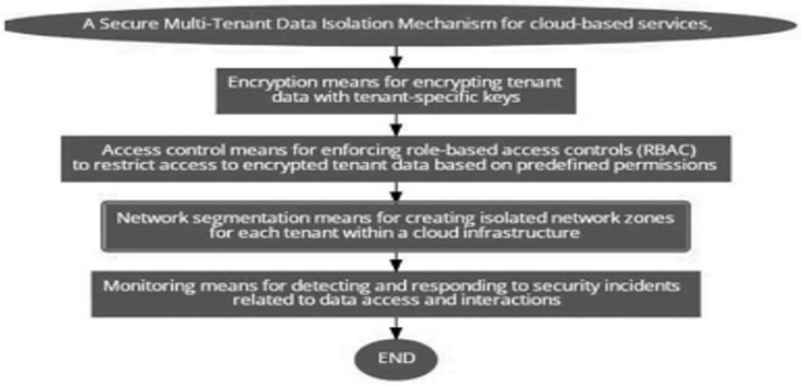


Fig. 1 A Secure Multi-Tenant Data Isolation System for cloud-based services

No. of Pages : 17 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/07/2024

(21) Application No.202421051108 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTOMATED ANOMALY DETECTION AND RESPONSE SYSTEM FOR ENHANCING CLOUD SECURITY

(51) International classification	:G06F0021550000, G06F0021560000, G06N0020000000, A61F0013150000, G06F0021620000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Mr. Hirenkumar Kamleshbhai Mistry
Address of Applicant :Sr. Cloud System Administrator, 1084 N Abbott Ave, Milpitas, Pin / Zip Code: 95035, California, USA. ---------- ----------
2)Mr. Amit Mahendragiri Goswami
3)Mr. Chirag Chandulal Mavani
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr. Hirenkumar Kamleshbhai Mistry
Address of Applicant :Sr. Cloud System Administrator, 1084 N Abbott Ave, Milpitas, Pin / Zip Code: 95035, California, USA. ---------- ----------
2)Mr. Amit Mahendragiri Goswami
Address of Applicant :Sr. Software Engineer, 74 Peregrine Way, Burlington, Pin / Zip Code: 08016, New Jersey, USA. ---------- ----------
3)Mr. Chirag Chandulal Mavani
Address of Applicant :DEVOPS Engineer, 1093 W Stonehaven Drive, N Salt Lake, Pin / Zip Code: 84054, Utah, USA. ---------- ----------

(57) Abstract :
The present invention discloses an automated anomaly detection and response system designed to enhance security in cloud computing environments. Leveraging advanced machine learning algorithms and contextual analysis, the system continuously monitors multiple data sources within the cloud infrastructure to detect deviations indicative of potential security threats. Upon identifying anomalies, predefined response actions are automatically executed to mitigate risks, including alerting administrators, isolating affected resources, and applying corrective measures. A user-friendly interface provides real-time monitoring, customizable response configurations, and comprehensive incident review capabilities. Integrating adaptive response mechanisms and external threat intelligence ensures proactive adjustments to evolving security landscapes, safeguarding cloud assets and maintaining data integrity and confidentiality effectively

Fig. 1 An automated anomaly detection and response system for enhancing cloud security

No. of Pages : 18 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/07/2024
(21) Application No.202421051448 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD FOR INTELLIGENT LEGAL RESEARCH USING AI-POWERED CASE ANALYSIS AND PREDICTION

(51) International classification	:G06N0020000000, G06Q0050180000, G06F0016930000, G06F0040300000, G06N0005040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Ishani Dave
Address of Applicant :Assistant Professor, Faculty of Law, GLS University, Ahmedabad, Gujarat 380006, India ---------- ----------
2)Yamini Atreya
3)Simran Singh
4)Vani Kataria
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Ishani Dave
Address of Applicant :Assistant Professor, Faculty of Law, GLS University, Ahmedabad, Gujarat 380006, India ---------- ----------
2)Yamini Atreya
Address of Applicant :Assistant Professor, School of Law, Manav Rachna University, Faridabad 121004, India ---------- ----------
3)Simran Singh
Address of Applicant :Assistant Professor, School of Law, Manav Rachna University, Faridabad 121004, India ---------- ----------
4)Vani Kataria
Address of Applicant :Research Associate, School of Law, Manav Rachna University, Faridabad 121004, India ---------- ----------

(57) Abstract :
[046] The present invention discloses a method for intelligent legal research using AI-powered case analysis and prediction. The method leverages advanced natural language processing (NLP) and machine learning (ML) techniques to automate the analysis of legal documents, including case law, statutes, and legal articles. By processing textual content and identifying key legal concepts, the invention categorizes and analyzes documents to determine their relevance to specific legal queries. Historical case data is used to train predictive models, enabling the invention to predict potential legal outcomes. The results are presented to legal professionals through an interactive user interface, providing efficient and accurate insights to aid in decision-making and strategy development. This method significantly enhances the efficiency of legal research, reduces time-intensive manual efforts, and improves the precision of legal analysis. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 26 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/07/2024
(21) Application No.202421051450 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR FORMING NOBLE METAL NANOPARTICLES USING GREEN CHEMISTRY TECHNIQUES

(51) International classification :B82Y30/00, B82Y40/00, B01J23/48
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Deepti Pal
Address of Applicant :Assistant Professor, Medi-Caps University, Indore, 453331 ---------- ----------
2)Dr. Gajendra Kumar Inwati
3)Dr. Ravi Bansal
4)Dr. Shivraj Gangadhar Wanale
5)Dr. Parth Malik
6)Dr. Savita Dubey
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Deepti Pal
Address of Applicant :Assistant Professor, Medi-Caps University, Indore, 453331 - ---------- ----------
2)Dr. Gajendra Kumar Inwati
Address of Applicant :School of Chemical Sciences, Devi Ahilya Vishvidyalaya, Indore, 452001, MP, India ---------- ----------
3)Dr. Ravi Bansal
Address of Applicant :School of Chemical Sciences, Devi Ahilya Vishvidyalaya, Indore 452201, MP, India ---------- ----------
4)Dr. Shivraj Gangadhar Wanale
Address of Applicant :Netaji Subhashchandra Bose Art's, Commerce and Science College, Nanded, 431601, Maharashtra, India ---------- ----------
5)Dr. Parth Malik
Address of Applicant :School of Nanoscience, Central University of Gujarat, Gandhinagar, 382030, India ---------- ----------
6)Dr. Savita Dubey
Address of Applicant :Associate Professor, IPSA, Institute of Engineering and Science, Indore, 452012 ---------- ----------

(57) Abstract :
The present invention discloses a system and method for forming noble metal nanoparticles using green chemistry techniques. The system includes a reaction chamber designed for controlled nanoparticle synthesis, employing a green reducing agent derived from natural, non-toxic sources, and a renewable solvent. The method involves dissolving a noble metal salt in the solvent to prepare a precursor solution, adding the green reducing agent solution under continuous stirring, and maintaining optimal reaction conditions to facilitate nanoparticle formation. The synthesized nanoparticles find applications in catalysis, biomedical sciences, and electronics, offering a sustainable and environmentally benign approach to nanoparticle synthesis. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 19 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/07/2024
(21) Application No.202421051456 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SMART IOT-ENABLED ATTENDANCE SYSTEM UTILIZING RFID TECHNOLOGY

(51) International classification :G06Q0010100000, G07C0001100000, G06F0016270000, H04W0012060000, G06K0007100000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Shiburaj Rajendrababu Pappu
Address of Applicant :Rizvi College of Engineering, Off Carter Road, Bandra West, Mumbai ---------- ----------
2)Dhanashree Kangane
3)Varsha Shah
4)Vinita Ameya Vartak
5)Junaid Mandviwala
6)Renuka Nagpure
7)Arunkumar Mishra
8)Jyoti S Mali
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Shiburaj Rajendrababu Pappu
Address of Applicant :Rizvi College of Engineering, Off Carter Road, Bandra West, Mumbai ---------- ----------
2)Dhanashree Kangane
Address of Applicant :Rizvi Educational Complex, Rizvi College of Enigne Off Carter Road,Bandra(W) Mumbai ---------- ----------
3)Varsha Shah
Address of Applicant :Rizvi Educational Complex, Rizvi College of Enigne Off Carter Road,Bandra(W) Mumbai ---------- ----------
4)Vinita Ameya Vartak
Address of Applicant :Rajiv Gandhi Institute of Technology, Juhu Versova Link Road, Behind HDFC Bank Versova, Andheri(West), Mumbai - 400053 Mumbai ---------- ----------
5)Junaid Mandviwala
Address of Applicant :Rizvi Educational Complex, Rizvi College of Enigne Off Carter Road,Bandra(W) Mumbai ---------- ----------
6)Renuka Nagpure
Address of Applicant :Atharva College of Engineering Malad Marve Road, Charkop Naka,Malad (W), Mumbai – 400095 Mumbai ---------- ----------
7)Arunkumar Mishra
Address of Applicant :Rizvi Educational Complex, Rizvi College of Enigne Off Carter Road,Bandra(W) Mumbai ---------- ----------
8)Jyoti S Mali
Address of Applicant :Atharva College of Engineering Malad Marve Road, Charkop Naka,Malad (W), Mumbai – 400095 Mumbai ---------- ----------

(57) Abstract :
The Smart IoT-Enabled Attendance System utilizing RFID Technology presents a cutting-edge solution for automated attendance management. This system leverages IoT capabilities to log attendance via RFID cards, ensuring secure and efficient data handling. Equipped with a Real-Time Clock (RTC) module, the system maintains accurate timestamps, while an SD card provides temporary data storage before synchronization with a remote server. The device connects to WiFi, enabling periodic data syncing to ensure records are consistently up-to-date. The system's setup phase includes network connection, SD card initialization, and user data synchronization from an ERP system. In its operational loop, the system toggles a green LED to indicate readiness, displays the current date and time, processes scanned RFID cards, and syncs attendance data every five minutes. Attendance records are stored as unique files on the SD card, each corresponding to an RFID code, and are periodically sent to the server. Failed sync attempts are automatically retried, ensuring data integrity and reliability. This project showcases an efficient storage and syncing mechanism, combining robust hardware components and optimized software algorithms to provide a seamless and reliable attendance management solution for educational institutions, workplaces, and other environments requiring precise attendance tracking.

No. of Pages : 15 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/06/2024
(21) Application No.202421049288 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTOMATED FOREX TRADING SYSTEM UTILIZING MULTI-MODEL PREDICTIONS.

(51) International classification	:G06Q0040040000, G05B0013040000, G01W0001100000, G02F0001133700, G06Q0020200000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)JOSHI AARNAV
Address of Applicant :SARDAR PATEL INSTITUTE OF TECHNOLOGY, BHAVAN'S CAMPUS, ANDHERI(W), MUMBAI 400058, MAHARASHTRA, INDIA ---------- ----------
2)DANGLE JANHAVI
3)PARAYE MILIND
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)JOSHI AARNAV
Address of Applicant :SARDAR PATEL INSTITUTE OF TECHNOLOGY,MUNSHI NAGAR, BHAVAN'S CAMPUS, ANDHERI(W), MUMBAI 400058, MAHARASHTRA, INDIA ---------- ----------
2)DANGLE JANHAVI
Address of Applicant : SARDAR PATEL INSTITUTE OF TECHNOLOGY,MUNSHI NAGAR, BHAVAN'S CAMPUS, ANDHERI(W), MUMBAI 400058, MAHARASHTRA, INDIA ---------- ----------
3)PARAYE MILIND
Address of Applicant :SARDAR PATEL INSTITUTE OF TECHNOLOGY,MUNSHI NAGAR, BHAVAN'S CAMPUS, ANDHERI(W), MUMBAI 400058, MAHARASHTRA, INDIA ---------- ----------

(57) Abstract :
ABSTRACT AUTOMATED FOREX TRADING SYSTEM UTILIZING MULTI-MODEL PREDICTIONS The Automated forex trading system utilizing multi-model predictions presents a cutting-edge solution to revolutionize forex trading practices. The proposed system integrates an Ensemble Model and an Automated Trading Bot for automated forex trading. The Ensemble Model utilizes advanced machine learning algorithms, including ML1 and ML2, along with a meta-model (MM), to accurately predict future currency prices. The system handles the entire workflow, starting from retrieving and preprocessing historical candle data, training the models, and then periodically fetching new data to update predictions. Based on these predictions and a predefined trading logic, a trading bot autonomously conducts trade execution without the involvement of the user. This ensures continuous trading and the ability to capitalize on market opportunities around the clock. By minimizing the need for manual intervention, this invention provides users with a reliable, efficient, and user-friendly trading solution.

No. of Pages : 15 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/06/2024
(21) Application No.202421049318 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : "A METHOD FOR CONSTRUCTION OF 'RAGA' OR 'MELODIC MODE' OF INDIAN CLASSICAL MUSIC CALLED TWO NEW RAGA NAMED AS 'KEDAR-BHATIYAR 'AND 'PRABHAVATI"

(51) International classification	:G10H0001000000, G06F0016683000, G06N0010000000, A61P0017000000, G06F0016632000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)DR ATINDRA LAXMIKANT SARVADIKAR
Address of Applicant :C-11, DEENDAYAL NAGAR, RASHTRA SARATHI CHS, VEER SAVARKAR ROAD, OPPOSITE LAXMIBAI SCHOOL, MULUND EAST, MUMBAI INDIA 400081. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR ATINDRA LAXMIKANT SARVADIKAR
Address of Applicant :C-11, DEENDAYAL NAGAR, RASHTRA SARATHI CHS, VEER SAVARKAR ROAD, OPPOSITE LAXMIBAI SCHOOL, MULUND EAST, MUMBAI INDIA 400081. ---------- ----------

(57) Abstract :
Abstract Title; "A method for construction of 'raga' or 'melodic mode' of Indian classical music called two new raga named as 'Kedar- Bhatiyar' and 'Prabhavati" In an aspect of the present invention describes a method for construction of 'raga' or 'melodic mode' of Indian classical music called two new raga named as 'Kedar- Bhatiyar' and 'Prabhavati' comprising (iv) creating of fusion of ragas Kedar and Bhatiyar by amalgamating their distinctive elements to create a novel melodic structure; (v) identifying different sets of notes for transition from one raga to other; (vi) selecting proportion of from one raga with other to keep melodic proportion of both ragas;

No. of Pages : 19 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2024
(21) Application No.202421051703 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DESIGN, SYNTHESIS AND EVALUATION OF NOVEL ARYL/HETEROARYL SUBSTITUTED PYRAZOLINES FOR THEIR ANTIOXIDANT ACTIVITY

(51) International classification :A61K31/415, C07D231/06
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Vishal Bharat Babar
Address of Applicant :Professor & Principal, Institute of Pharmaceutical Science and Research for Girls, Swami-Chincholi, Bhigwan-413130, Maharashtra ---------- ----------
2)Dr. Srikanth Kumar Karumanchi
3)Mrs. Dandamudi Alekhya
4)Ms. Tai Pandurang Yele
5)Mrs. Radhika Sugrivu
6)Mrs. Priti Rajendra Kale
7)Ms. Dipalee Jayaram Vhankade
8)Mrs. Rayini Venkata Sai Mounica
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Vishal Bharat Babar
Address of Applicant :Professor & Principal, Institute of Pharmaceutical Science and Research for Girls, Swami-Chincholi, Bhigwan-413130, Maharashtra ---------- ----------
2)Dr. Srikanth Kumar Karumanchi
Address of Applicant :Professor & HOD, Institute of Pharmaceutical Science and Research for Girls, Swami-Chincholi, Bhigwan-413130, Maharashtra. ---------- ----------
3)Mrs. Dandamudi Alekhya
Address of Applicant :Assistant Professor, Krishna University College of Pharmaceutical Sciences and Research, Machilipatnam, Andhra Pradesh ---------- ----------
4)Ms. Tai Pandurang Yele
Address of Applicant :Assistant Professor, Institute of Pharmaceutical Science and Research for Girls, Swami-Chincholi, Bhigwan-413130, Maharashtra. ---------- ----------
5)Mrs. Radhika Sugrivu
Address of Applicant :Associate Professor, Dattakala College of Pharmacy, Swami-Chincholi, Bhigwan-413130, Maharashtra ---------- ----------
6)Mrs. Priti Rajendra Kale
Address of Applicant :Assistant Professor, Dattakala College of Pharmacy, Swami-Chincholi, Bhigwan-413130, Maharashtra. ---------- ----------
7)Ms. Dipalee Jayaram Vhankade
Address of Applicant :Assistant Professor, Anusaya Institute of Pharmacy, Swami-Chincholi, Bhigwan-413130, Maharashtra ---------- ----------
8)Mrs. Rayini Venkata Sai Mounica
Address of Applicant :Associate Professor,QIS College of Pharmacy, Ongole-523272, Andhra Pradesh. ---------- ----------

(57) Abstract :
ABSTRACT The present invention relates to design, synthesis and evaluation of novel aryl/heteroaryl substituted pyrazolines for their antioxidant activity. The synthesis of aryl/heteroaryl substituted pyrazolines from intermediate chalcones by condensation with hydrazine hydrate. The intermediate chalcones were synthesized by reacting several aryl/heteroaryl aldehydes with 4-hydroxy acetophenone. These chalcones were further converted into pyrazoline derivatives using ethanol and a catalytic amount of pyridine. The synthesized pyrazoline compounds were characterized by spectral and physicochemical analysis. The in-vitro antioxidant activity of the compounds was assessed against the standard antioxidant drug ascorbic acid, with compound 4b exhibiting noteworthy antioxidant properties. Molecular docking studies revealed significant binding interactions of compound 4b with the COX isoenzyme protein (PDB ID: 4COX), demonstrating better performance than the conventional ligand indomethacin.

No. of Pages : 18 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/07/2024
(21) Application No.202421051109 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : NOVEL MULTI FIBER REINFORCED ACRYLONITRILE-BUTADIENE-STYRENE (ABS) COMPOSITE AND METHOD OF PREPARING SAME

(51) International classification :C08L55/02, C08K3/40, C08K3/04, C08J5/04, B29C64/118
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Vijaykumar Radadiya
Address of Applicant :401, A-1, Trikam Nagar, Opp. SMC East Zone Office, L.H. Road, Surat, Gujarat – 395006, India Surat ---------- ----------
2)Dr. Rupesh J. Patil
3)Rahul Gaywala
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Vijaykumar Radadiya
Address of Applicant :401, A-1, Trikam Nagar, Opp. SMC East Zone Office, L.H. Road, Surat, Gujarat – 395006, India Surat ---------- ----------
2)Dr. Rupesh J. Patil
Address of Applicant :A2/502, Sun Horizon, Behind NIA Campus, Balewadi, Pune, Maharashtra – 411045, India Pune ---------- ----------
3)Rahul Gaywala
Address of Applicant :71, Haridwar Society, Kalpana Chawla Marg, Adajan, Surat, Gujarat – 395009, India Surat ---------- ----------

(57) Abstract :
This invention introduces a multi-fiber reinforced composite material consisting of an Acrylonitrile-Butadiene-Styrene (ABS) polymer matrix (70-90% by weight), enhanced with carbon fibers and glass fibers (each 5-15% by weight). The unique composition capitalizes on the strength and stiffness of carbon fibers combined with the cost-effectiveness and impact resistance of glass fibers. This multi-fiber reinforcement significantly improves the mechanical properties of the ABS composite. The composite is produced via a dual extruder Fused Deposition Modeling (FDM) 3D printer, which allows precise control over fiber orientation, optimizing the material's properties for diverse applications such as automotive, aerospace, and electronics. This innovation provides a robust material solution adaptable to advanced manufacturing processes.

No. of Pages : 11 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/07/2024
(21) Application No.202421051110 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A CYATHOCLINE PURPUREA COMPOSED SPINEL FERRITE NANOPARTICLES BY SOL-GEL AUTOCOMBUSTION METHOD

(51) International classification :B82Y30/00, C01G49/06
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Minal Harde
Address of Applicant :Progressive Education Society's, Modern College of Pharmacy, Sector 21, Yamunanagar, Nigdi, Pune-411044 Maharashtra, India Pune
---------- ----------
2)Mr. Ajinkya Tanpure
3)Dr. Padmaja Kore
4)Dr. Praveen Chaudhari
5)Progressive Education Society's, Modern College of Pharmacy
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Minal Harde
Address of Applicant :Progressive Education Society's, Modern College of Pharmacy, Sector 21, Yamunanagar, Nigdi, Pune-411044 Maharashtra, India Pune
---------- ----------
2)Mr. Ajinkya Tanpure
Address of Applicant :Progressive Education Society's, Modern College of Pharmacy, Sector 21, Yamunanagar, Nigdi, Pune-411044 Maharashtra, India Pune
---------- ----------
3)Dr. Padmaja Kore
Address of Applicant :Progressive Education Society's, Modern College of Pharmacy, Sector 21, Yamunanagar, Nigdi, Pune-411044 Maharashtra, India Pune
---------- ----------
4)Dr. Praveen Chaudhari
Address of Applicant :Progressive Education Society's, Modern College of Pharmacy, Sector 21, Yamunanagar, Nigdi, Pune-411044 Maharashtra, India Pune
---------- ----------
5)Progressive Education Society's, Modern College of Pharmacy
Address of Applicant :Progressive Education Society's, Modern College of Pharmacy, Sector 21, Yamunanagar, Nigdi, Pune-411044 Maharashtra, India Pune
---------- ----------

(57) Abstract :
Title: A Cyathocline purpurea Composed Spinel Ferrite Nanoparticles by Sol-Gel Autocombustion Method The present invention relates to Cyathocline purpurea composed spinel ferrite nanoparticles prepared through a process consist of aqueous extract of Cyathocline purpurea (Gangotra Flower); ferric nitrate nonahydrate (Fe(NO3)3•9H2O) and cobalt nitrate hexahydrate (Co(NO3)2•6H2O) taken in effective concentration ratio of 2:1, with addition of citric acid and ammonia solution to the neutralize said solution under continuous stirring on the magnetic plate to form gel like preparation decomposed by spontaneous self-ignition or combustion and subsequent heat treatment to prepare powdered spine ferrite ($CoFe_2O_4$) nanoparticle of Cyathocline purpurea, authenticated and evaluated for physical stability through XRD, FTIR, UV, VSM and SEM via EDX analysis, confirms the presence of spherically-shaped $CoFe_2O_4$ nanoparticles and discloses antimicrobial, antioxidant and photo catalytic activity to signify the efficacy of the preparation.

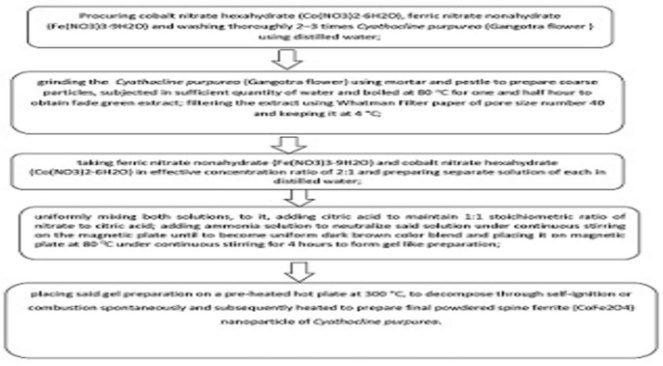


Figure 1: Flow chart of preparation process of *Cyathocline purpurea* composed spinel ferrite nanoparticles

No. of Pages : 30 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/07/2024

(21) Application No.202421051111 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SAUSSUREA OBVALLATA (BRAHMA KAMAL) COMPOSED OF GREEN SYNTHESIS OF IRON OXIDE NANOPARTICLES

(51) International classification :B82Y30/00, C01G49/06, A61K36/28
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Minal Harde
Address of Applicant :Progressive Education Society's, Modern College of Pharmacy, Sector 21, Yamunanagar, Nigdi, Pune-411044 Maharashtra, India Pune
---------- ----------
2)Mr. Ganesh Survase
3)Dr. Padmaja Kore
4)Dr. Praveen Chaudhari
5)Progressive Education Society's, Modern College of Pharmacy
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Minal Harde
Address of Applicant :Progressive Education Society's, Modern College of Pharmacy, Sector 21, Yamunanagar, Nigdi, Pune-411044 Maharashtra, India Pune
---------- ----------
2)Mr. Ganesh Survase
Address of Applicant :Progressive Education Society's, Modern College of Pharmacy, Sector 21, Yamunanagar, Nigdi, Pune-411044 Maharashtra, India Pune
---------- ----------
3)Dr. Padmaja Kore
Address of Applicant :Progressive Education Society's, Modern College of Pharmacy, Sector 21, Yamunanagar, Nigdi, Pune-411044 Maharashtra, India Pune
---------- ----------
4)Dr. Praveen Chaudhari
Address of Applicant :Progressive Education Society's, Modern College of Pharmacy, Sector 21, Yamunanagar, Nigdi, Pune-411044 Maharashtra, India Pune
---------- ----------
5)Progressive Education Society's, Modern College of Pharmacy
Address of Applicant :Progressive Education Society's, Modern College of Pharmacy, Sector 21, Yamunanagar, Nigdi, Pune-411044 Maharashtra, India Pune
---------- ----------

(57) Abstract :
Title: A Saussurea obvallata (Brahma Kamal) Composed of Green Synthesis of Iron Oxide Nanoparticles The present invention relates to Saussurea obvallata composed spinel ferrite nanoparticles prepared through a process consist of aqueous extract of Saussurea obvallata (Brahma Kamal Leaf); ferric nitrate nonahydrate ($Fe(NO3)3•9H2O$) and cobalt nitrate hexahydrate ($Co(NO3)2•6H2O$) taken in effective concentration ratio of 2:1, with addition of citric acid and ammonia solution to the neutralize said solution under continuous stirring on the magnetic plate to form gel like preparation decomposed by spontaneous self-ignition or combustion and subsequent heat treatment to prepare powdered spine ferrite ($CoFe2O4$) nanoparticle of Saussurea obvallata, authenticated and evaluated for physical stability through XRD, FTIR, UV, VSM and SEM via EDX analysis, confirms the presence of spherically-shaped $CoFe2O4$ nanoparticles and discloses antimicrobial, antioxidant and photo catalytic activity to signify the efficacy of the preparation.

No. of Pages : 30 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2024
(21) Application No.202421047088 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : GENDER AND AGE DETECTION USING MACHINE LEARNING.

(51) International classification :G06N0020000000, G06K0009620000, G06N0003080000, B25J0013020000, G06N0020200000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP UNIVERSITY NASHIK
3)SANDIP INSTITUTE OF ENGINEERING AND MANAGEMENT
4)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SUNIL KALE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)PRAMOD PATIL
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)NIVEDITA VIBHANDIK
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
4)AMIT GADEKAR
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
5)ABHAY GAIDHANI
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------

(57) Abstract :
ABSTRACT The abstract for the invention "Gender and Age Detection Using Machine Learning" encapsulates its core objectives, methodologies, and potential applications. Leveraging advancements in machine learning, particularly deep learning algorithms, the system aims to automate the inference of gender and age from facial images or video frames with remarkable accuracy. By harnessing large, diverse datasets annotated with gender and age labels, the system learns intricate patterns and features necessary for precise predictions. The framework encompasses four key stages: dataset acquisition, preprocessing, model selection, and training, ensuring a comprehensive and efficient approach to gender and age detection. The invention addresses the increasing demand for automated demographic analysis across various sectors, including security, marketing, and user experience personalization. Its potential applications are wide-ranging, encompassing targeted advertising, access control systems, retail analytics, social media analysis, and healthcare. By automating gender and age detection, the invention offers enhanced efficiency, accuracy, and scalability, facilitating informed decision-making and improving user experiences in diverse domains. This abstract provides a concise overview of the invention's significance, methodology, and potential impact, highlighting its role in advancing the field of automated demographic inference using machine learning techniques.

No. of Pages : 19 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2024
(21) Application No.202421047094 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : INTELLIGENT NAVIGATION WITH SAFETY, TOURISM, AND ECO-ENHANCED FEATURES.

(51) International classification	:G06Q0050140000, G06F0016332000, G01C0021000000, G05D0001020000, B60L0001000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP UNIVERSITY NASHIK
3)SANDIP INSTITUTE OF ENGINEERING AND MANAGEMENT
4)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. ANKITA KARALE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)SUNIL M. KALE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)PALLAVI CHAUDHRI
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------

(57) Abstract :
ABSTRACT In the dynamic realm of transportation and navigation, the infusion of artificial intelligence (AI) and data-driven technologies has revolutionized travel support and route optimization. This abstract provides a comprehensive glimpse into a range of groundbreaking innovations from various research papers. Al-powered real-time route monitoring employs machine learning algorithms to offer travelers up-to-the-minute traffic updates and dynamic route recommendations. Integration of India's Navic satellite navigation system enhances precision and reliability in navigation applications. Al-driven route optimization algorithms adapt to real-time traffic data and user preferences, providing efficient routes. Emergency alert systems, powered by AI, detect traffic violations, bolstering road safety. Safe guide mechanisms use environmental data to recommend secure routes. Navigation systems suggest nearby events and attractions, enriching travel experiences. Al-driven tourism support delivers localized establishment information. Vehicle health support and predictive maintenance employ AI for proactive monitoring, while AI voice assistants act as multilingual translators for tourists. Eco mode optimizes routes for energy efficiency. Machine learning and AI algorithms process data and adapt to traveler preferences. Data privacy and security are prioritized, and integration and scalability aim to cater to diverse users. User feedback continually enhances navigation systems, offering an improved travel experience. These innovations collectively reshape travel, enhancing efficiency, safety, and sustainability.

No. of Pages : 16 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2024

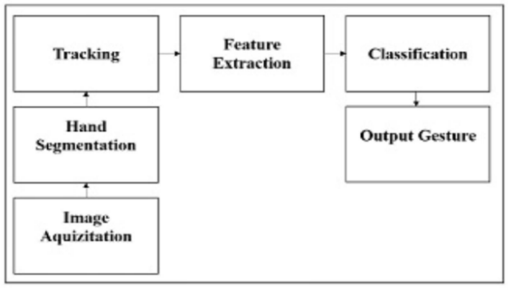
(21) Application No.202421051458 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : GESTURE BASED MACHINE CONTROL SYSTEM

(51) International classification	:G06F0003010000, G06F0003030000, G06F0003038000, G06F0003034600, G06K0009620000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. D. Y. Patil Institute of Technology, Pimpri, Pune
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Atul A. Patil
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
2)Mr. Yash Dulange
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
3)Mr. Prasanna Joshi
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
4)Mr. Yash Chavan
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
5)Mr. Nadim Amir
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------

(57) Abstract :
The availability of the cheap webcams with, at least, sufficient qualities open up new chances concerning the implementation of human computer interaction (HCI) interfaces. Gesture is one among the foremost detailed and powerful approach of communications between human and computer. Hence, there has been a growing interest to form feasible interfaces by directly using the natural communication and management capability of humans. Hand gesture recognition system contains a decent surveillance present days thanks to simple and straightforward intercommunication between human and machine. The main target of developing hand gesture is to make a much better conveyance between human and computer for delivering information. Hand gestures are a kind of nonverbal way to interact that may be employed in several fields. Research and survey papers supported hand gestures have acquire so many alternative techniques, including those supported on sensor technology and computer vision. This paper mainly focuses on a review of the related work readily available hand gesture techniques and introduces their excellence and restrictions under different situations. This paper could be a general summary of hand gesture implementation. It shows all methods that were employed for hand gesture recognition in numerous research papers. The aim of this study is to perform a scientific literature review for identifying the foremost prominent techniques, applications and difficulties in controlling computer using hand gestures.



No. of Pages : 15 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2024

(21) Application No.202421051459 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : IOT BASED ENHANCED BATTERY SAFETY AND MANAGEMENT SYSTEM IN ELECTRIC VEHICLE

(51) International classification	:H02J0007000000, H01M0010420000, H01M0010480000, H01M0010440000, H04L0009320000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. D. Y. Patil Institute of Technology, Pimpri, Pune
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mrs. Anshu Sharma
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
2)Mrs. Rajashree Bhokare
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
3)Ragini Thorat
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
4)Anish A. Kolhe
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
5)Mayur Sonawane
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
6)Sharayu Raut
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------

(57) Abstract :
The project endeavors to tackle the critical challenge of managing battery systems in electric vehicles (EVs) by developing an advanced IoT-based solution. With EVs leading the charge in sustainable transportation, ensuring the safety and durability of their batteries is paramount. This initiative harnesses IoT technology to create a dynamic monitoring and control system for EV batteries. Beyond continuous monitoring of crucial parameters, it proactively safeguards against issues like overcharging and over-discharging. By employing data analytics and machine learning, it offers predictive insights into battery performance and maintenance needs. Drawing from a thorough literature review, including key studies like "IoT-Based Battery Monitoring System for Electric Vehicle" and "A Smart Battery Management System for Electric Vehicles," the project integrates cutting-edge practices. Ultimately, it aims to bolster the sustainability of EVs by fortifying their battery safety and management systems, enhancing reliability, efficiency, and cost-effectiveness.

No. of Pages : 12 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2024

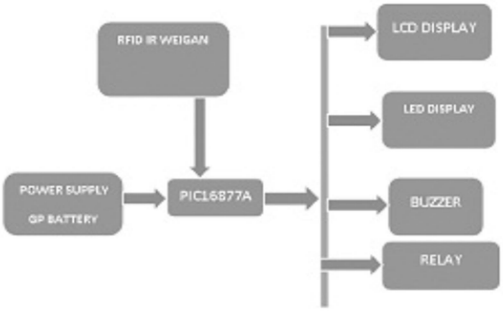
(21) Application No.202421051462 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : BIKE SECURITY SYSTEM USING GPS AND GSM

(51) International classification	:G06F0021620000, G08B0013196000, B60R0025102000, B60R0025100000, B60R0025104000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. D. Y. Patil Institute of Technology, Pimpri, Pune
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mrs.Rutuja Warbhe
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
2)Shubham Khandale
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
3)Yogesh Deshmukh
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
4)Adwait Kumbhar
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
5)Shivdas Kumbhar
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------

(57) Abstract :
Security plays a crucial role in contemporary society, especially when it comes to the safety of both private and public vehicles. While numerous security systems have been implemented, many of these are costly, intricate, and predominantly designed for cars. Several car security systems have integrated advanced biometric techniques like Face Detection and Finger Print Detection to enhance their effectiveness. Some systems also incorporate a tracking feature utilizing the Global Positioning System (GPS) and have the capability to remotely shut down the vehicle's engine through a text message. In the context of motorcycles, basic and affordable security systems typically provide a siren indication, generating loud noise that may disturb people in the vicinity. However, if the owner is at a distance from the motorcycle, they may not be able to hear the alarm. Physical countermeasures, such as padlocks and disc brake locks, are also employed for theft prevention, although they are considered preventive measures, they may not provide sufficient safety.



No. of Pages : 14 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2024
(21) Application No.202421051805 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN IMPROVED DISHWASHER

(51) International classification :A47L15/22, A47L15/42, A47L15/00, A47L15/24
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dharmsinh Desai University
Address of Applicant :College Rd, Nadiad, Gujarat 387001 Nadiad ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Alap Amish Shah
Address of Applicant :502, Lotus Tower – 'C', Gurudev Residency, Opp. Jagdish Farshan, Sama-Savli Road, Vadodara. Vadodara ---------- ----------
2)Dr. Yogesh Kewalram Meghrajani
Address of Applicant :46, Karmvir Villa, Shri Santram Maharaj Deri Road, Nadiad, Gujarat. Nadiad ---------- ----------
3)Teli Saloni Ratanlal
Address of Applicant :18, Shankar park society, near manohar nagar, Nadiad, Kheda, Gujarat, 387001 Nadiad ---------- ----------
4)Baldaniya Mihir Rajeshbhai
Address of Applicant :Plot no - 157, Ward no - 5/a, duplex - b, Adipur, Gandhidham, Kachchh, Gujarat, 370205 Gandhidham ---------- ----------
5)Adhvaryu Parth Paragkumar
Address of Applicant :247, Khedavad ni Khadaki, near Ganesh Cinema, Dakor, Khedavad, Gujarat, 388225 Dakor ---------- ----------

(57) Abstract :
ABSTRACT AN IMPROVED DISHWASHER An improved, effective, and reliable dishwasher that can achieve cleaning in less time by 5 conserving water in each wash cycle. The internal structure of the Dishwasher is modified, by replacing the upper spray arm with multiple water spraying units, the middle spray arm with CPVC pipe structure and brass nozzles and finally the lower spray arm with a linear supporting bar that holds group of jet brass nozzles wherein the linear supporting bar with help of linear actuator can achieve the back-and forth motion during the wash cycle.

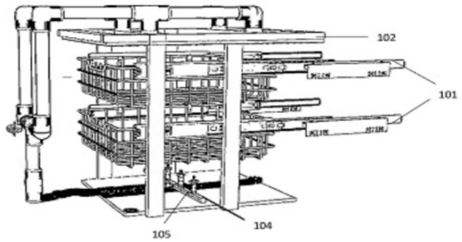


Fig 1a

No. of Pages : 17 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :05/07/2024

(21) Application No.202421051830 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : INTELLIGENT FAULT DETECTION AND DIAGNOSIS IN MECHANICAL SYSTEMS USING AI

(51) International classification	:G05B0023020000, G06Q0010000000, G16H0050700000, B23Q0003000000, H04B0003460000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr.Harish Harsurkar
Address of Applicant :HOD, Department of Mechanical Engineering Vidya Prasarini Sabha's College of Engineering and Technology, Lonavala. Pune -410405. ---------- ----------
2)Prof. Husain Bavasab Shaikh
3)Prof.Priti Tukaram Chorade
4)Prof. Soni R Ragho
5)Prof.Suresh V Reddy
6)Prof. Rashmi S Bhumbare
7)Prof. Sunil D Parge
8)Prof. Tanuja S Hulavale
9)Prof. Kiran Kumar sharikar
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.Harish Harsurkar
Address of Applicant :HOD, Department of Mechanical Engineering Vidya Prasarini Sabha's College of Engineering and Technology, Lonavala. Pune -410405. ---------- ----------
2)Prof. Husain Bavasab Shaikh
Address of Applicant :Assistant Professor, Department of Mechanical Engineering Vidya Prasarini Sabha's College of Engineering and Technology, Lonavala. Pune -410405. ---------- ----------
3)Prof.Priti Tukaram Chorade
Address of Applicant :Assistant Professor, Department of Computer Science Engineering, Vidya Prasarini Sabha's College of Engineering and Technology, Lonavala. Pune -410405. ---------- ----------
4)Prof. Soni R Ragho
Address of Applicant :Assistant Professor, Department of Computer Engineering, Vidya Prasarini Sabha's College of Engineering and Technology, Lonavala. Pune -410405. ---------- ----------
5)Prof.Suresh V Reddy
Address of Applicant :Assistant professor Suman Ramesh Tulsiani Technical Campus - Faculty of Engineering PUNE, Maharashtra, Pincode: 410405 ---------- ----------
6)Prof. Rashmi S Bhumbare
Address of Applicant :Assistant Professor, Department of Electrical Engineering, Vidya Prasarini Sabha's College of Engineering and Technology, Lonavala. Pune -410405. ---------- ----------
7)Prof. Sunil D Parge
Address of Applicant :Assistant Professor, Department of Mechanical Engineering Vidya Prasarini Sabha's College of Engineering and Technology, Lonavala. Pune -410405. ---------- ----------
8)Prof. Tanuja S Hulavale
Address of Applicant :Assistant Professor, Department of Mechanical Engineering Vidya Prasarini Sabha's College of Engineering and Technology, Lonavala. Pune -410405. ---------- ----------
9)Prof. Kiran Kumar sharikar
Address of Applicant :Assistant Professor, Department of Civil Engineering Vidya Prasarini Sabha's College of Engineering and Technology, Lonavala. Pune -410405. ---------- ----------

(57) Abstract :
Intelligent Fault Detection and Diagnosis in Mechanical Systems Using AI ABSTRACT: One method that is model-driven and detects the piece of a system that is not performing properly is called fault-finding diagnostics. For the purpose of fault identification, it makes use of residual generators, in addition to a variety of other methods such as isolation techniques and structural analysis. It is important to note that diagnostic equipment does not measure the signal-to-noise ratio that is still present. Identifying fault-detecting generators is accomplished by residual selection. Approaches known as fault detective diagnostic (FDD) have been investigated and put into practice for a variety of industrial processes. On the other hand, the implementation of FDD approaches is made more complex by industrial operations. It is necessary to have hybrid techniques and intelligent procedures in order to bridge the gap that exists between theoretical methodology and operational implementations. The improvement of fault prognosis, which would enable more accurate prediction of process failures and the avoidance of safety concerns, should be the primary focus of study in the future. In this age of big data, it is imperative that FDD strategies that are both comprehensive and real-time be put into action.

No. of Pages : 10 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :09/07/2024
(21) Application No.202421052552 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : " MOVABLE SHELTERED VEHICLE "

(51) International classification	:A01K15/00, A01M23/00, B60P3/00, A01K1/00
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Hanumant Sudamrao Shelke
Address of Applicant :Address – Hingani, Post. Takalshing Talashti, Dist. Beed, Maharashtra 414203. Phone No - 9673195559 Email ID: - universalanimalwelfare@gmail.com beed ---------- ----------
2)Swati Hanumant Shelke
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Hanumant Sudamrao Shelke
Address of Applicant :Address – Hingani, Post. Takalshing Talashti, Dist. Beed, Maharashtra 414203. Phone No - 9673195559 Email ID: - universalanimalwelfare@gmail.com beed ---------- ----------
2)Swati Hanumant Shelke
Address of Applicant :Hingani, Post. Takalshing Talashti, Dist. Beed, Maharashtra 414203. Phone No - 9673195559 Email ID: - universalanimalwelfare@gmail.com Beed ---------- ----------

(57) Abstract :
ABSTRACT "Movable sheltered vehicle" Accordingly, the Present invention relates to a movable sheltered vehicle with expandable space for keeping dogs and cats sheltered for implementing family planning surgeries in areas where stray dogs population is high, but infrastructure is not available easily. This vehicle has built with unfolding at any convenient place to develop separate spaces as unloading area for dogs, office/record room, medicine room dog cages with 80 dog capacity, dog kitchen, staff kitchen, standard operation theatre, staff room, doctors room, utensils washing area and biomedical wastage area too. As a hospital infrastructure this is a perfect technical solution for central, state and local governments for implementing animal birth control thereby controlling dog population for controlling rabies in humans. Fig 1

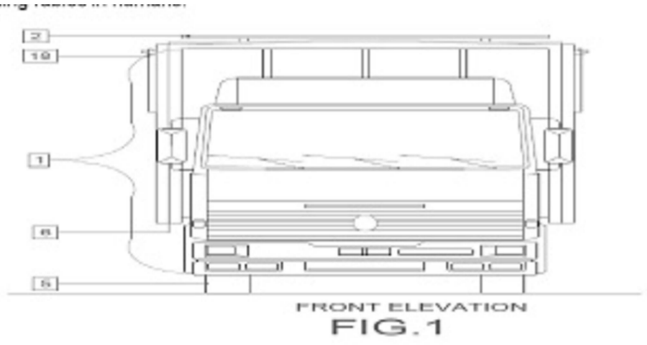


Fig 1

No. of Pages : 14 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :10/07/2024
(21) Application No.202421052829 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A BLENDED NITROGEN FERTILIZER AND PLANT GROWTH PROMOTER AND METHOD OF PREPARATION THEREOF

(51) International classification :C05G3/80, C05G5/12, C05D9/02, C05F11/00, C05F11/02, C05F11/08
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Vishal E. Gawade
Address of Applicant :Research Centre in Environmental Sciences, K.T.H.M College,Nashik, Maharashtra, 422002, India Nashik ---------- ----------
2)Abhijit V. Aher
3)Avinash E. Gawade
4)Manisha S. Girase
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Pravin M. Nalawade
Address of Applicant :Research Centre in Environmental Sciences, KTHM College, Nashik, Maharashtra, 422002, India Nashik ---------- ----------
2)Sunita S. Ghumare
Address of Applicant :Research Centre in Environmental Sciences, KTHM College, Nashik, Maharashtra, 422002, India Nashik ---------- ----------
3)Sudhir Ramchandra Bale
Address of Applicant :Department of Botany, B.P.H.E Society's, Ahmednagar College, Ahmednagar, 414001, Maharashtra ,India Ahmednagar ---------- ---------- -

(57) Abstract :
ABSTRACT A BLENDED NITROGEN FERTILIZER AND PLANT GROWTH PROMOTER AND METHOD OF PREPARATION THEREOF A method (100) for preparation of blended nitrogen fertilizer and plant growth promoter, method (100) comprising steps of: preparing (102) extract of keratins from horn keratins, extraction including steps of: drying, scraping, cleaning through multiple washing (104) of the horns and further drying; grinding (106) of dried scrap to obtain fine powder; defatting (108) powder by treating with hexane chloroform mixture; filtering (110) mixture of hexane chloroform and horn powder through filter paper, further residue is drying; mixing (112) quantity of horn powder with KOH and H2O2then centrifuge the mixture at room temperature with stirring. After that removing (114) of hydrogen peroxide from keratin by adding potassium permanganate solution at ppm in a ratio of H2O2 to obtain keratin hydrolysate; and neutralizing (116) of keratin hydrolysate with nitric acid to achieve pH 7 pH to obtain the blended nitrogen fertilizer and plant growth promoter. [Figure 1]

No. of Pages : 22 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/07/2024
(21) Application No.202421051112 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : FACILE SYNTHESIS OF CO-DOPED FERRITE NANOPARTICLES USING CLITORIA TERNATEA (SHANKHPUSHPI)

(51) International classification :B82Y30/00, C01G49/06, A61K36/48, B82Y30/00, C01G49/06, A61K36/48
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Minal Harde
Address of Applicant :Progressive Education Society's, Modern College of Pharmacy, Sector 21, Yamunanagar, Nigdi, Pune-411044 Maharashtra, India Pune
---------- ----------
2)Ms. Siddhi Waghule
3)Dr. Padmaja Kore
4)Dr. Praveen Chaudhari
5)Progressive Education Society's, Modern College of Pharmacy
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Minal Harde
Address of Applicant :Progressive Education Society's, Modern College of Pharmacy, Sector 21, Yamunanagar, Nigdi, Pune-411044 Maharashtra, India Pune
---------- ----------
2)Ms. Siddhi Waghule
Address of Applicant :Progressive Education Society's, Modern College of Pharmacy, Sector 21, Yamunanagar, Nigdi, Pune-411044 Maharashtra, India Pune
---------- ----------
3)Dr. Padmaja Kore
Address of Applicant :Progressive Education Society's, Modern College of Pharmacy, Sector 21, Yamunanagar, Nigdi, Pune-411044 Maharashtra, India Pune
---------- ----------
4)Dr. Praveen Chaudhari
Address of Applicant :Progressive Education Society's, Modern College of Pharmacy, Sector 21, Yamunanagar, Nigdi, Pune-411044 Maharashtra, India Pune
---------- ----------
5)Progressive Education Society's, Modern College of Pharmacy
Address of Applicant :Progressive Education Society's, Modern College of Pharmacy, Sector 21, Yamunanagar, Nigdi, Pune-411044 Maharashtra, India Pune
---------- ----------

(57) Abstract :
Title: "Facile Synthesis of Co-Doped Ferrite Nanoparticles Using Clitoria ternatea (Shankhpushpi)" The present invention relates to Clitoria ternatea composed spinel ferrite nanoparticles prepared through a process consist of aqueous extract of Clitoria ternatea (Shankhapushpi Leaf); ferric nitrate nonahydrate ($Fe(NO_3)_3 \cdot 9H_2O$) and cobalt nitrate hexahydrate ($Co(NO_3)_2 \cdot 6H_2O$) taken in effective concentration ratio of 2:1, with addition of citric acid and ammonia solution to the neutralize said solution under continuous stirring on the magnetic plate to form gel like preparation decomposed by spontaneous self-ignition or combustion and subsequent heat treatment to prepare powdered spine ferrite ($CoFe_2O_4$) nanoparticle of Clitoria ternatea, authenticated and evaluated for physical stability through XRD, FTIR, UV, VSM and SEM via EDX analysis, confirms the presence of spherically-shaped $CoFe_2O_4$ nanoparticles and discloses antimicrobial, antioxidant and photo catalytic activity to signify the efficacy of the preparation.

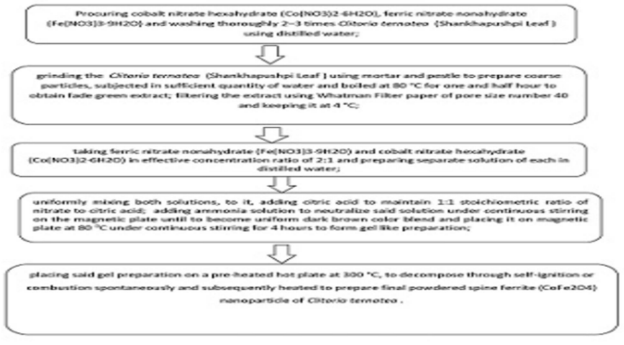


Figure 1: Flow chart of preparation process of *Clitoria ternatea* composed spinel ferrite nanoparticles

No. of Pages : 30 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/07/2024
(21) Application No.202421051117 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : INTRINSIC MODEL FOR CLUSTER REDEVELOPMENT IN MUMBAI.

(51) International classification :G06Q50/08, G06Q50/22, G06Q50/26, G06Q10/06
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Snehal Shirish Ghag
Address of Applicant :Assistant Professor Pillai College of Architecture, New Panvel Dr. K. M. Vasudevan Pillai Campus Plot No. 10, Sector 16 New Panvel – 410 206 Maharashtra, India. Mumbai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Snehal Shirish Ghag
Address of Applicant :Assistant Professor Pillai College of Architecture, New Panvel Dr. K. M. Vasudevan Pillai Campus Plot No. 10, Sector 16 New Panvel – 410 206 Maharashtra, India. Mumbai ---------- ----------

(57) Abstract :
ABSTRACT Affordability of Housing in the city of opportunities, Mumbai is an unresolved issue since decades. Since many years experts endeavoring to put up policy reforms to provide housing for urban poor and middle class segment of the society. The revolutionary policy reforms focused on problem of redevelopment where the land value is high by using tools of free housing or incentivized housing on a piecemeal level. But many projects remain stagnant when it comes to cluster redevelopment. The proposed operative and design model or a prototype shall balance the role of government and developers in this process by introducing formal involvement of communities. Also, proposing the division in the redevelopment and sale component with a working of financial aspects to increase affordability of houses.

No. of Pages : 7 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/07/2024
(21) Application No.202421051123 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR DYNAMIC PRICING OPTIMIZATION IN DIGITAL ADVERTISING NAME

(51) International classification	:G06Q0030020000, G06N0020000000, G06Q0010040000, G06N0007000000, G06Q0030060000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Lala Lajpat Rai Institute of Management, Mumbai
Address of Applicant :Mahalaxmi Mumbai 40003 Mumbai ---------- ----------
2)Dr Gautam Trehan
3)Prof. Kavita Patil
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Gautam Trehan
Address of Applicant :Lala Lajpat Rai Institute of Management Mahalaxmi Mumbai 40003 Mumbai ---------- ----------
2)Prof. Kavita Patil
Address of Applicant :Lala Lajpat Rai Institute of Management Mahalaxmi Mumbai 40003 Mumbai ---------- ----------

(57) Abstract :
ABSTRACT “System and Method for Dynamic Pricing Optimization in Digital Advertising” [600] Our invention “System and Method for Dynamic Pricing Optimization in Digital Advertising” Digital advertising platforms face the challenge of efficiently pricing ad inventory to maximize revenue while accommodating diverse advertiser budgets and preferences. Traditional static pricing models often fail to adapt to real-time market dynamics and user behavior, leading to missed revenue opportunities and suboptimal campaign performance. This paper introduces a system and method for dynamic pricing optimization in digital advertising. The system leverages machine learning algorithms to analyze historical data, current market conditions, and user behavior patterns in real-time. By continuously adjusting ad pricing based on these insights, the system aims to achieve optimal revenue outcomes for publishers while ensuring effective ROI for advertisers. Key components of the system include predictive modeling techniques to forecast ad demand and supply, reinforcement learning algorithms to optimize pricing strategies based on continuous feedback loops, and adaptive algorithms to adjust pricing dynamically in response to changing market conditions and user engagement metrics. Through simulations and case studies, we demonstrate the effectiveness of our approach in improving overall revenue yield for publishers and enhancing campaign performance metrics for advertisers. The system offers a scalable solution that can be integrated into existing digital advertising platforms, providing a competitive edge in the increasingly complex and competitive landscape of online advertising.

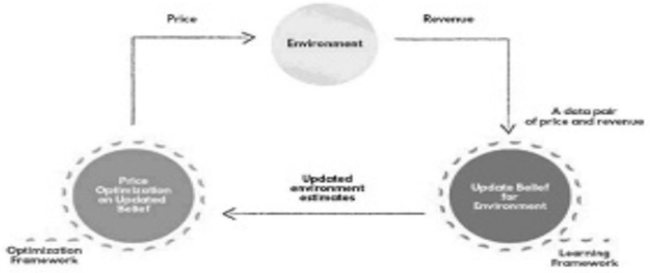


Figure 1: How dynamic pricing model works

No. of Pages : 10 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :11/07/2024

(21) Application No.202421052960 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AI AND IOT-BASED ARTIFICIAL MATERNAL MONITORING SYSTEM FOR SLEEPING BABIES

(51) International classification :A61B0005110000, A61B0005024000, G06F0003010000, A23L0033000000, A61B0005000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)komal TAHILIyaNI
Address of Applicant :13,comfort greens ---------- ----------
2)Ruchi Jain
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)ruchi jain
Address of Applicant :237 jain nager lalghati bhopal ---------- ----------
2)komal TAHILIyaNI
Address of Applicant :13,comfort greens ---------- ----------

(57) Abstract :
The project proposal presents an AI and IOT based monitoring system for a sleeping infant where parent of a new born can monitor and supervise the activity of a new born. Being a parent to a newborn is always stressful. It is difficult to for working women strike a balance between her work and baby, so they are forced to take long leave or have to quit their jobs. This Project will help those mothers to monitor their child activity no matter how far they are. This monitoring system works on 2 sensors i.e. PIR sensor to monitor the physical movements of a baby and the other is noise sensor which detects whether baby is crying or not.

No. of Pages : 14 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :11/07/2024
(21) Application No.202421052981 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : INNOVATION IN TEACHING LEARNING METHODS

(51) International classification	:G09B0019000000, G06Q0050200000, G09B0005000000, G06Q0010060000, G06Q0010100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr Kamalkishore Chhaganlal Vora
Address of Applicant :Consultant, 6D3/3, Siddharth Nagar, Phase 1, Aundh, Pune 411007 ---------- ----------
2)Aatmesh Jain
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Kamalkishore Chhaganlal Vora
Address of Applicant :Consultant, 6D3/3, Siddharth Nagar, Phase 1, Aundh, Pune 411007 ---------- ----------
2)Aatmesh Jain
Address of Applicant :Consultant, D2-1601, Godrej 24 society, next to Wipro, Phase 1, Hinjewadi Rajiv Gandhi Infotech Park, Hinjawadi, Pune 411057 ---------- ----------

(57) Abstract :
The present invention relates to innovation in teaching learning method. The innovation in teaching learning method comprises a planning module, an activation module, an active knowledge transfer module, a consolidation module, feedback mechanism and a continuous improvement module. The planning module configured to prepare teaching materials, set learning objectives, and design interactive activities. The activation module configured to administer pre-reading quizzes and warm-up activities to activate students' prior knowledge. The active knowledge transfer module configured to facilitate interactive lectures, group work, and hands-on activities. The consolidation module configured to conduct review sessions, gather feedback, and encourage reflective activities. The feedback mechanism configured to provide real-time feedback to teachers based on student interactions. The continuous improvement module configured to evaluate and refine teaching methods based on feedback and outcomes.

No. of Pages : 12 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :11/07/2024

(21) Application No.202421053097 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : “AN APPARATUS FOR THE PREPARATION OF PRF MEMBRANES”

(51) International classification	:A61K0035190000, A61L0027360000, B23K0026062200, H04L0009060000, H01L0021670000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Dinesh Harkut
Address of Applicant :Saishraddha Apartment, Christ Colony, Opposite Hotel Galaxy,Camp, Amravati Amravati ---------- ----------
2)Dr. Surekha Rathod
3)Dr. Prachi Rathi
4)Ranjeet Deshmukh Dental College and Research Centre
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Surekha Rathod
Address of Applicant :104, Department of Periodontics and Implantology, Ranjeet Deshmukh Dental College and Research Centre, Digdoh Hills, Hingna Road, Nagpur 440019 Nagpur ---------- ----------
2)Dr. Prachi Rathi
Address of Applicant :104, Department of Periodontics and Implantology, Ranjeet Deshmukh Dental College and Research Centre, Digdoh Hills, Hingna Road, Nagpur 440019 Nagpur ---------- ----------
3)Dr. Dinesh Harkut
Address of Applicant :Saishraddha Apartment, Christ Colony, Opposite Hotel Galaxy,Camp, Amravati 444 602 Amravati ---------- ----------

(57) Abstract :
ABSTRACT AN APPARATUS FOR THE PREPARATION OF PRF MEMBRANES The present invention discloses an apparatus capable of compressing the PRF membrane to a standardized thickness with the optimal amount of pressure required to enhance the membrane's properties. The apparatus for the preparation of PRF membranes minimizes the damage to platelets and growth factors contained in the PRF membranes. The present invention also provides a standardized protocol for preparing PRF membranes to obtain a PRF membrane with good clinical properties.

No. of Pages : 17 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :11/07/2024
(21) Application No.202421053169 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : CLOUD DATA STORAGE PERFORMANCE ANALYSIS USING BLOCK CHAIN

(51) International classification	:G06Q0020060000, H04L0009320000, G06N0020000000, H04L0009060000, H04L0009080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Ms. Priyanka Makarand Patil
Address of Applicant :Assistant Professor F-103,Nakshatra Phase-I,CDC Purna Nagar, Next to Shani Mandir, Chikhali Pradhikaran, chinchwad,Pune-411019 Pune ---------- ----------
2)Dr. Vaibhav Hendre
3)Ms. Sharvari Hendre
4)Dr. Geeta Atkar
5)Dr. Pushpi Rani
6)Dr. Swapnil Vanmore
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Ms. Priyanka Makarand Patil
Address of Applicant :Assistant Professor F-103,Nakshatra Phase-I,CDC Purna Nagar, Next to Shani Mandir, Chikhali Pradhikaran, chinchwad,Pune-411019 Pune ---------- ----------
2)Dr. Vaibhav Hendre
Address of Applicant :Professor C-204 Sun Residency, Opposite Kailas Jeevan, Dhayari, Pune-411041 Pune ---------- ----------
3)Ms. Sharvari Hendre
Address of Applicant :Student C-204 Sun Residency, Opposite Kailas Jeevan, Dhayari, Pune-411041 Pune ---------- ----------
4)Dr. Geeta Atkar
Address of Applicant :Associate Professor A 405, Mantra Blessings, Bhavdi Road, Near Rising star English medium school, Wagholi, Pune 412207 Pune ---------- ----------
5)Dr. Pushpi Rani
Address of Applicant :Associate Professor D106, Ivory society, Baif Road, Wagholi, Pune 412207 Pune ---------- ----------
6)Dr. Swapnil Vanmore
Address of Applicant :Associate Professor Swapnil Vanmore,A/P-Ashta,Ramnagar, tal-Walwa, Dist- Sangli, Pin-416301 Ramnagar ---------- ----------

(57) Abstract :
ABSTRACT The Internet of Things, or IoT, has emerged in a number of significant applications recently. It still has a lot of privacy and security issues, though. Blockchain (BC) technology, the foundation of the Bitcoin cryptocurrency, has been instrumental in the creation of decentralized, massively distributed apps that operate across millions of devices. In this research, we offer a framework with layers, layers of intersection, and self-organization Blockchain Structures (BCS) to build the interaction between IoT and BC for device credibility verification. Each BCS is arranged according to Blockchain technology in this new structure. We outline the process for verifying trustworthiness and demonstrate how it works. This article also provides an efficiency and security analysis, covering reaction time, storage efficiency, and verification. The conductedexperiments have been shown to demonstrate the validity of the proposed method in satisfying the credible requirement achievedby Blockchain technology and certain advantages in storage space and response time.

No. of Pages : 8 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :11/07/2024
(21) Application No.202421053170 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : STREET LIGHTING / LIGHTING ACTIVE PROTECTION SYSTEM

(51) International classification	:F21W0131103000, H02J0013000000, F21S0008080000, F03D0009250000, F21W0131400000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Piyush Naresh Karande
Address of Applicant :Address - Anurup Bunglow Sangam Mahuli phata satara. Pincode - 415003 satara ---------- ----------
2)Aayush Naresh Karande
3)Rupali Naresh Karande
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Piyush Naresh Karande
Address of Applicant :Address - Anurup Bunglow Sangam Mahuli phata satara. Pincode - 415003 satara ---------- ----------
2)Aayush Naresh Karande
Address of Applicant :Address - Sangam Mahuli phata satara Pincode - 415003 satara ---------- ----------
3)Rupali Naresh Karande
Address of Applicant :Address - Sangam Mahuli Phata Satara Pincode - 415003 Satara ---------- ----------

(57) Abstract :
ABSTRACT There Are Various Types of Outdoor Lighting Are Available in The Market Hence We Use This Lighting for Illuminate Our Outdoor Premises Like Roads, Bridges, Grounds, For Lighting Artifacts or Any Type of Architectural Monument Etc.We also use Street Lighting, Industrial High Bay Lamps and Flood Lights for Illuminating Large Space inside the Factory, Ware House and for Manufacturing Facility.Street Lighting Are Also Used for Lighting the Perimeter of Distribution and Transmission Sub Stations And For illuminating The Power Generation Stations and Various Pumping Station Situated near Rivers and Its basins. But There Are One Major Problem at Sub Station Lighting , Industrial Lighting , Pumping Station Lighting , Distribution Station lighting , Transmission Station Lighting And Generating Stations Lighting Because In These Sectors Having Large Amount Of Electrical Energy Requirement For Driving Their Heaters , Motors Etc., Because Of These Heavy Energy Consuming Load When These Equipment's are Running Then They Take Power From Main Power Transformer Situated Near The Premises But Where These Heavy Load Connected There Are Other Small Load Are Connected For Fulfilling Its Energy Demands. But When The Heavy Machineries Are Consuming Energy Then They Could Add Some Impurities In The Input Supply And These Impurities Are Very Harmful For Oher Loads Like Computers, Printers, External And Internal Lightings Etc. We Focus on Problems Occurring for Outdoor and Indoor Lighting Because Of Impurities in Supply And How To Mitigate This with Very Few Cost In Intelligent Manner.

No. of Pages : 8 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :11/07/2024
(21) Application No.202421053171 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : CLOUD DATA ANALYSIS USING MACHINE LEARNING

(51) International classification	:G06F0009500000, G06N0020000000, G06Q0030020000, H04L0067109500, G06N0005020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Ms.ROHINI DEVNIKAR
Address of Applicant :Assistant Professor AARCON, C-1007, Gaikwad Nagar, Punawale - 411033 Punawale ---------- ----------
2)Dr. VAIBHAV HENDRE
3)Ms. SHARVARI HENDRE
4)Dr. SIMRAN KHIANI
5)Dr. SONALI A PATIL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Ms.ROHINI DEVNIKAR
Address of Applicant :Assistant Professor AARCON, C-1007, Gaikwad Nagar, Punawale - 411033 Punawale ---------- ----------
2)Dr. VAIBHAV HENDRE
Address of Applicant :Professor C-204 Sun Residency, Opposite Kailas Jeevan, Dhayari, Pune-411041 Pune ---------- ----------
3)Ms. SHARVARI HENDRE
Address of Applicant :Student C-204 Sun Residency, Opposite Kailas Jeevan, Dhayari, Pune-411041 Pune ---------- ----------
4)Dr. SIMRAN KHIANI
Address of Applicant :Associate Professor D 201 marvel cerise Kharadi Pune - 411014 Pune ---------- ----------
5)Dr. SONALI A PATIL
Address of Applicant :Associate Professor J2 building, Leisure town, near Amanora Firestation, Hadapsar ,Pune- , 411028 Pune ---------- ----------

(57) Abstract :
ABSTRACT Our Invention “Cloud data analysis using machine learning” is related to a Organizations all over the world have been using new cloud technologies in this period in order to digitize, analyze, and eventually obtain the insights and forecasts that propel their enterprises. As big data analysis, cloud computing, and the Internet of Things become more interconnected, new opportunities in the healthcare, e-commerce, and marketing sectors arise. These days, every business must be digitized, yet large expenditures in IT resources (computers, software, memory, and powerful connections), infrastructure, and IT staff to manage them are not practical. A Web framework for independently obtaining, utilizing, and controlling computational resources is provided by cloud computing. A multitude of services are available to customers and organizations via cloud computing thanks to its well-equipped data centers and networked resources. End users may be given dynamic access to resources in order to satisfy their needs. Without worrying about the source, scalability, or resource limitations of cloud services, users or organizations may utilize the whole pool of computational resources. As a result, users and businesses may use cloud resources without having to make any upfront investments—they just have to pay for the services they really utilize.

No. of Pages : 9 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :11/07/2024

(21) Application No.202421053174 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN IOT BASED AUTOMATED ANTIMICROBIAL SUSCEPTIBILITY TESTING DEVICE

(51) International classification	:G16H0010600000, C12Q0001180000, G01N0035000000, C12M0001340000, A61B0005080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Anuradha Ghanshyam More
Address of Applicant :Associate Professor, PES's Modern college of Pharmacy, Nigdi, Pune-411044, Maharashtra ---------- ----------
2)Dr. Padmaja Santosh Kore
3)Dhanashri Pandurang Garud
4)Surbhi Chandrashekar Gupta
5)Shraddha Mohanrao Desai
6)Kshirsagar Tushar Haribhau
7)Yogesh Dhondiram Somwanshi
8)Tejaswini shrimant Basate
9)Akshay Nitin Deo
10)Sanika Sunil Sakale
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Anuradha Ghanshyam More
Address of Applicant :Associate Professor, PES's Modern college of Pharmacy, Nigdi, Pune-411044, Maharashtra ---------- ----------
2)Dr. Padmaja Santosh Kore
Address of Applicant :Associate Professor, PES's Modern college of Pharmacy, Nigdi, Pune-411044, Maharashtra ---------- ----------
3)Dhanashri Pandurang Garud
Address of Applicant :Research Scholar, PES's Modern college of Pharmacy, Nigdi, Pune-411044, Maharashtra ---------- ----------
4)Surbhi Chandrashekar Gupta
Address of Applicant :Assistant professor, PES's Modern college of Pharmacy, Nigdi, Pune-411044, Maharashtra ---------- ----------
5)Shraddha Mohanrao Desai
Address of Applicant :Assistant professor, PES's Modern college of Pharmacy, Nigdi, Pune-411044, Maharashtra ---------- ----------
6)Kshirsagar Tushar Haribhau
Address of Applicant :M PHARM STUDENT , PES's Modern college of Pharmacy, Nigdi, Pune-411044, Maharashtra ---------- ----------
7)Yogesh Dhondiram Somwanshi
Address of Applicant :Students at Final year Bachelor of pharmacy, PES's Modern college of Pharmacy, Nigdi, Pune-411044, Maharashtra ---------- ----------
8)Tejaswini shrimant Basate
Address of Applicant :Student M.Tech (Green Tech), Institute Of Chemical Technology Matunga East Mumbai, Ahmednagar 414003 ---------- ----------
9)Akshay Nitin Deo
Address of Applicant :B pharm student, PES's Modern college of Pharmacy, Nigdi, Pune-411044, Maharashtra ---------- ----------
10)Sanika Sunil Sakale
Address of Applicant :B pharm student, PES's Modern college of Pharmacy, Nigdi, Pune-411044, Maharashtra ---------- ----------

(57) Abstract :
ABSTRACT The present invention relates to an IoT based automated antimicrobial susceptibility testing device (100). the device (100) comprises multiple integrated modules to enhance efficiency and accuracy. the device (100) includes a sample preparation module with automated pipetting, reagent dispensers, and mixing mechanisms; an incubation module with temperature, humidity, and CO2 control; and an optical imaging and analysis module with high-resolution cameras and image processing software. A sensor array module with pH, turbidity, and colorimetric sensors monitors microbial activity. The robotic handling module automates sample movement, while the IoT connectivity module provides real-time data transmission, remote monitoring, and alerts. The data analysis and management module integrate with cloud storage and electronic health records (EHR), and a user interface module offers a touchscreen display and secure access. Power management ensures continuous operation, and robust security features protect data integrity and compliance. This device (100) significantly reduces time, labor, and error in AST, enhancing patient care.

No. of Pages : 12 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2024
(21) Application No.202421047102 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DESIGN & FABRICATION OF SEMI-AUTOMATIC CEMENT PLASTERING MACHINE.

(51) International classification	:E04F0021080000, G06Q0010060000, G06F0030200000, G06F0030392000, B29L0031000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP UNIVERSITY NASHIK
3)SANDIP INSTITUTE OF ENGINEERING AND MANAGEMENT
4)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. TUSHAR SAVALE
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)MANISHA PAGAR
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------

(57) Abstract :
ABSTRACT This abstract introduces a comprehensive framework for Vulnerability-Friendly Tourism Destinations (VFTDs), designed to address the limitations of conventional tourism models and promote inclusivity, accessibility, and sustainability in tourism destinations worldwide. Comprising 18 integrated modules, the framework offers a systematic approach to establish resilient, inclusive, and vibrant VFTD ecosystems. It begins with a rigorous Destination Vulnerability Audit to assess readiness for inclusive tourism and identify areas for improvement. Stakeholder Analysis ensures diverse perspectives are considered, fostering collaboration and inclusivity in decision-making processes. Infrastructure & Facility Enhancement focuses on optimizing destinations for universal accessibility, while Capacity Building enhances tourism personnel skills and empathy. Strategic Development ensures alignment with the needs of diverse traveller demographics, fostering inclusive tourism plans. Collaboration among stakeholders is promoted through Collaborative Frameworks, while Feedback Mechanisms enable refinement based on user feedback. Policy Advocacy & Support seeks regulatory backing, and Monitoring & Continuous Improvement ensures ongoing enhancement. Through Informative Campaigns and Communication & Outreach efforts, the framework educates and promotes the benefits of VFTDs.

No. of Pages : 17 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2024
(21) Application No.202421047121 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : EMBEDDED INFRASTRUCTURE AND TECHNOLOGY WHICH CONTRIBUTE TO ACHIEVING THE DREAM FUTURE CITIES.

(51) International classification	:F03D0009250000, A61M0021000000, C04B0111000000, A63F0003000000, H01Q0001360000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE
Address of Applicant :MAHIRAVANI, TRAMBAKESHWAR ROAD, NASHIK - 422213, MAHARASHTRA, INDIA. ---------- ----------
2)SANDIP UNIVERSITY NASHIK
3)SANDIP INSTITUTE OF ENGINEERING AND MANAGEMENT
4)SANDIP UNIVERSITY, SIJOUL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. SARIKA PATIL
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
2)MANISHA PAGAR
Address of Applicant :SANDIP UNIVERSITY NASHIK, MAHIRAVANI, TRAMBAKESHWAR RD, NASHIK – 422213 ---------- ----------
3)MD KALIMUDDIN ANSARI
Address of Applicant :SANDIP UNIVERSITY, NEELAM VIDYA VIHAR, VILLAGE SIJOUL, P.O. MAILAM, MADHUBANI, BIHAR-847235 ---------- ----------

(57) Abstract :
ABSTRACT The proposed framework envisions an integrated approach to infrastructure development, seamlessly combining Smart, Green, and Grey infrastructures into an optimal Embedded Smart and Green Infrastructure. Smart Infrastructure introduces cutting-edge technologies like smart grids and sensors, offering fast and convenient services accessible through voice commands. Green Infrastructure strategically plans environmentally conscious living, emphasizing renewable energy sources to minimize carbon emissions and create a sustainable, greener environment. Grey Infrastructure undergoes retrofitting to align with eco-friendly principles, ensuring harmony between human development and nature. The framework prioritizes efficiency, sustainability, and community well-being, envisioning future cities that offer advanced technology within a secure and environmentally conscious living environment. Leveraging data-driven embedded systems and advanced technologies like AI, IoT, and Virtual Reality, the framework aims to optimize resource utilization, enhance automation, and reduce environmental impact. This holistic approach fosters healthy living, economic stability, ease of mobility, and transparent governance within urban landscapes. Through the Embedded Smart and Green Infrastructure, the vision is to create future cities that serve as sustainable.

No. of Pages : 16 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2024
(21) Application No.202421047160 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A PLATFORM FOR ORGANIZING AND FACILITATING INTEROPERABILITY OF HEALTH RECORD IN REMOTE ECOSYSTEM

(51) International classification	:G16H0010600000, G06Q0010100000, G16H0050200000, G06N0020000000, G16H0050700000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Arati Hemant Kendurkar
Address of Applicant :House no 96, Rajas society, Katraj, Pune, Maharashtra-411046 Pune ---------- ----------
2)Sheetal Ashok Yadav
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Akshay Hemant Kendurkar
Address of Applicant :House No. 96, Rajas Society, Katraj, Pune, 411046 Pune ---------- ----------
2)Ashok Yadav
Address of Applicant :L904, Trillium, Magarpatta City, Pune, 411028 Pune ---------- ----------

(57) Abstract :
ABSTRACT A Platform for Organizing and Facilitating Interoperability of Health Records in Remote Ecosystem i. Electronic health records (EHRs) are inputted into the system either manually or through automated integration with healthcare databases. ii. The system performs initial preprocessing tasks, such as data cleaning and normalization, to ensure data consistency and quality. iii. Utilizing machine learning algorithms, the system classifies the electronic health records (EHR)based on relevant parameters, such as medical conditions, treatments, and demographics. iv. Advanced statistical resampling techniques are applied to the classified data to enhance data representation and extract meaningful insights. v. Artificial intelligence algorithms analyse the resampled data to identify patterns, trends, and potential health issues, providing real-time guidance and support to users. vi. The platform provides online community health forums where users can connect with others facing similar health challenges, share experiences, and offer support. vii. Strict data privacy features are implemented to safeguard user information, ensuring compliance with regulations and maintaining confidentiality. viii. The system continuously updates itself with the latest advancements in medical knowledge and technology, ensuring accuracy and relevance in recommendations and support. ix. Users can interact with the system through a user-friendly interface, accessing personalized recommendations, participating in community discussions, and seeking assistance as needed. x. The system incorporates user feedback to further refine its algorithms and improve the overall user experience, creating a continuous feedback loop for enhancement. xi. The system generates actionable insights, personalized recommendations, and community-driven support, empowering users to better manage their health and well-being. The present invention provides a novel approach to healthcare data management and analysis through the integration of advanced statistical resampling techniques, artificial intelligence (AI)-powered assistance, and online community engagement. By automating the classification and data extraction processes within electronic health records (EHRs), the system enhances efficiency and accuracy while providing real-time guidance and support to users and predicting future health outcomes based on patient demographics and medical history. Privacy protection measures ensure the confidentiality of user data, while a self-updating mechanism ensures relevance and accuracy in recommendations. Through a user-friendly interface and interactive features, the invention facilitates peer-to-peer connections, enabling users to share experiences, seek advice, and participate in community discussions. The system revolutionizes healthcare data processing, empowering individuals to take control of their health journey with personalized support and community-driven resources.

No. of Pages : 23 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2024

(21) Application No.202421051467 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SOLUTION FOR HEALING OF CONCRETES

(51) International classification :C04B0041000000, G01N0033380000, C04B0041500000, C09D0007400000, C04B0028040000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)RUNGTA COLLEGE OF SCIENCE & TECHNOLOGY, DURG
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
2)DR SAKET RUNGTA
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Tripti Agrawal Jain
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
2)Ms. M S Shilpa
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
3)Ms. Savita Sudhakar
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
4)Ms. S Sweta
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
5)Ms. Priyanka Bhagat
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------

(57) Abstract :
The invention relates to a solution for autonomously healing concrete structures, addressing the challenges of crack formation and deterioration. The proposed technology integrates advanced materials and mechanisms within concrete matrices to enable self-healing capabilities. Key innovations include microcapsules embedded with healing agents that react with moisture ingress to seal cracks, biological agents capable of producing mineral deposits, shape-memory polymers or expansive minerals that expand to fill cracks upon stimuli, and sensor-activated systems triggering healing processes upon crack detection. These technologies aim to enhance the durability and longevity of concrete structures, reducing maintenance costs and environmental impact associated with traditional repair methods. The development represents a significant advancement in construction materials, offering sustainable solutions for improving the resilience and performance of concrete in diverse environmental conditions.

No. of Pages : 16 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2024

(21) Application No.202421051468 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : BIOREMEDIATION SYSTEM UTILIZING ENGINEERED MICROORGANISMS FOR CONTAMINATED SITE CLEANUP

(51) International classification	:C02F0003340000, B09C0001100000, C12N0001200000, B09C0001000000, C02F0101320000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)RUNGTA COLLEGE OF SCIENCE & TECHNOLOGY, DURG
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
2)DR SAKET RUNGTA
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Tripti Agrawal Jain
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
2)Mr. Arpan Dey
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
3)Ms. M S Shilpa
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
4)Ms. Savita Sudhakar
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
5)Ms. S Sweta
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
6)Ms. Priyanka Bhagat
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------

(57) Abstract :
The bioremediation system utilizing engineered microorganisms represents an innovative approach to remediate contaminated sites effectively. Engineered microorganisms, tailored for specific contaminants, are introduced into the contaminated environment via a versatile delivery system. These microorganisms, genetically modified to enhance degradation capabilities, metabolize pollutants such as hydrocarbons, heavy metals, pesticides, and industrial chemicals. The system integrates monitoring sensors to assess contaminant levels and microbial activity, enabling real-time adjustments in nutrient delivery and microbial populations for optimized remediation efficiency. This technology offers a sustainable and cost-effective solution to environmental cleanup challenges, leveraging biological processes to restore contaminated sites to environmentally safe conditions. The bioremediation system's versatility and adaptability make it a promising tool for addressing diverse contamination scenarios, contributing to environmental sustainability and regulatory compliance.

No. of Pages : 19 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2024

(21) Application No.202421051469 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A VOICE-ACTIVATED COMMERCE SYSTEM STREAMLINING PURCHASING PROCESSES AND ACCESSIBILITY

(51) International classification	:G06Q0030060000, G10L0015220000, G10L0015260000, G06T0019000000, G06F0021620000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)RUNGTA COLLEGE OF SCIENCE & TECHNOLOGY, DURG
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
2)DR SAKET RUNGTA
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr. Narender Singh
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
2)Mr. Sant kumar
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
3)Ms. Pinki Yadav
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
4)Ms. Sakshi Dubey
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
5)Mr. Pawan Kumar Verma
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------

(57) Abstract :
The voice-activated commerce system presented herein revolutionizes online shopping by integrating advanced voice recognition and natural language processing technologies with existing e-commerce platforms. This system enables users to interact with online stores through voice commands, enhancing convenience, accessibility, and efficiency. Key components include a voice recognition module for accurate command transcription, a natural language processing engine for interpreting user intents, and seamless integration with e-commerce backends for real-time order processing. Personalized user profiles offer tailored recommendations based on shopping history, while accessibility features cater to diverse user needs. Robust security measures safeguard transactions, ensuring user privacy and data protection.

No. of Pages : 15 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2024

(21) Application No.202421053428 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A HIGH-CAPACITY GREEN ENERGY SYSTEM FOR HEAVY ELECTRIC REQUIREMENTS AND APPLICATION THEREOF

(51) International classification :B60L50/60, B60L50/61, H02J7/14, B60L3/04, H02K7/18, H02K53/00, H02N11/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)JITENDRA BHIKUBHAI PANCHAL (GOHEL)
Address of Applicant :A-91, SUBHADARSHAN APARTMENT, NEAR JYOTIKALASH SOCIETY, OPPOSITE ISRO, SATELLITE, JODHPUR, PRENRNAR TIRTH TEMPLE, AHMEDABAD-380015 Ahmedabad ---------- ----------
2)PANCHAL KALPANABEN AMBALAL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)JITENDRA BHIKUBHAI PANCHAL (GOHEL)
Address of Applicant :A-91, SUBHADARSHAN APARTMENT, NEAR JYOTIKALASH SOCIETY, OPPOSITE ISRO, SATELLITE, JODHPUR, PRENRNAR TIRTH TEMPLE, AHMEDABAD-380015 Ahmedabad ---------- ----------

(57) Abstract :
A High-Capacity Green Energy System for Heavy Electric Requirements and Application Thereof ABSTRACT: The present invention discloses generating electrical energy using components including an EV motor (001), an electric motor (002) operating at 1500 R.P.M. and above, a gearbox (003), a sliding clutch (004), an alternator (005), a Miniature Circuit Breaker (MCB) (006) for overcurrent protection, a 48V rechargeable EV battery (007), and a rubber belt pulley (008). The system operates in a sequential manner where the EV motor (001) initially powers the setup using the 48V rechargeable EV battery (007). After running for a specified duration of 15 minutes or more, the EV motor drives the electric motor (002) via the gearbox (003) to achieve speeds of 1500 R.P.M. and above. Once this speed is attained, the sliding clutch (004) disengages the EV motor (001) from driving the electric motor (002). Subsequently, the alternator (005), connected to the gearbox (003) through the electric motor (002), begins generating electricity after a designated time period. The electricity produced is then routed through a Miniature Circuit Breaker (MCB) (006) to ensure overcurrent protection and is utilized to power the electric motor (002). This system aims to efficiently generate electrical energy through a series of controlled mechanical and electrical processes, utilizing components tailored for this purpose.

FIG.2

No. of Pages : 23 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2024

(21) Application No.202421053429 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : HYBRID SOLAR COOKER

(51) International classification	:F24S20/30, F24S23/70, F24S60/10, A47J27/00
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)RUDRA SOLAR ENERGY PRIVATE LIMITED
Address of Applicant :Plot No 7 Siddhi Ind Estate 2, Dhamatvan, Ahmedabad, Gujarat India-382443 Ahmedabad ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Devang Rameshchandra Joshi
Address of Applicant :D202 Ratnaraaj Residency, New Maninagar Ahmedabad, Gujarat India-382449 Ahmedabad ---------- ----------

(57) Abstract :
Abstract Hybrid Solar Cooker offers the versatility of both outdoor solar cooking and convenient indoor use. Under sunshine, the cooker harnesses the sun's power with an external reflector (12), directing concentrated rays towards the cooking area. A double-glazed glass (3) panel traps the heat like a greenhouse, while internal reflectors act as magnifying glasses for faster cooking. Even after sunset, the cooker utilizes a thick heat-storing plate and a two-stage latent heat storage (6 & 7) system to keep food warm or continue cooking. This stored heat also reduces the need for the backup heater (8) when used indoors. For indoor operation, the cooker offers the flexibility of solar PV, battery, or grid power, with a temperature controller (9) for precise cooking. By utilizing stored heat and reducing heater workload, this hybrid cooker promotes energy efficiency.

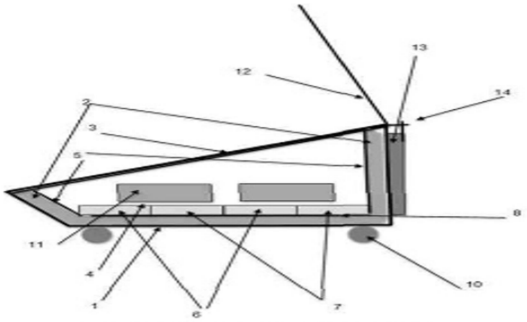


Figure 1: Solar Hybrid Cooker with all components

No. of Pages : 25 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2024

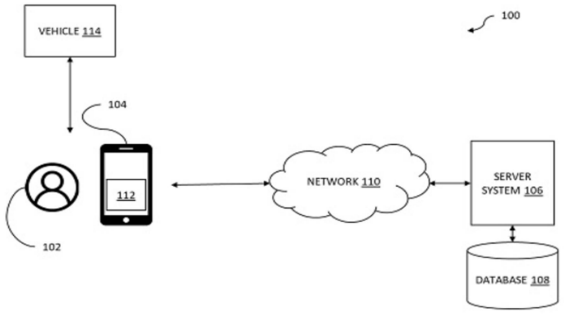
(21) Application No.202421053431 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD AND SYSTEM FOR QUALITY CONTROL OF VEHICLE BASED ON INTELLIGENT CHARACTER RECOGNITION

(51) International classification	:G06N0003080000, G06N0003040000, G06K0009620000, G06F0003023000, G06Q0040040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Mahindra and Mahindra Ltd.
Address of Applicant :Mahindra Towers, Dr. G. M. Bhosale Marg, Worli, Mumbai, Maharashtra, 400018, India Mumbai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)ASKI, Vidyadhar Jinnappa
Address of Applicant :S/O Jinnappa Aski, Kurabagodi, Harugeri (P), Raibag (T), Belagavi (Dt), Karnataka-591220, India Belagavi ---------- ----------
2)SHIVHARE, Sohit Kumar
Address of Applicant :House no: 18/36, Naya Pura Cantt, Guna, Madhya Pradesh, 473001, India Guna ---------- ----------
3)JOSHI, Bhavya
Address of Applicant :E-154, GCW Township, Ultratech Cement Ltd, Kovaya Rajula, Dist. Amreli, Gujarat-365551, India Amreli ---------- ----------

(57) Abstract :
A method and system for intelligent character recognition is disclosed. The method, performed by a server system, includes receiving a plurality of images of at least an alpha-numeric code. The method further includes processing the plurality of images based at least on implementation of a deep-learning model to identify at least one or more characters in the alpha-numeric code. The deep-learning model utilizes bounding boxes to perform said identification. Furthermore, the method includes determining whether the identity of at least one or more characters in the plurality of images are identical or different. Moreover, the method includes performing quality control (QC) check of the vehicle based on matching of at least one or more characters in the plurality of images. Figure 3



No. of Pages : 33 No. of Claims : 18

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :11/07/2024

(21) Application No.202421053189 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AI-ENABLED TOOL FOR CANCER IMAGE CLASSIFICATION

(51) International classification :A61B0006030000, A61B0006000000, G06K0009620000, G06T0007000000, G06N0020000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SAGE University
Address of Applicant :Kailod Kartal, RAU BYPASS, Indore 452020, Madhya Pradesh India Indore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Prashant Jain
Address of Applicant :SAGE University, Kailod Kartal, RAU BYPASS, Indore 452020, Madhya Pradesh India Indore ---------- ----------
2)Dr. Ritu Tandon
Address of Applicant :SAGE University, Kailod Kartal, RAU BYPASS, Indore 452020, Madhya Pradesh India Indore ---------- ----------
3)Dr. Lalji Prasad
Address of Applicant :SAGE University, Kailod Kartal, RAU BYPASS, Indore 452020, Madhya Pradesh India Indore ---------- ----------
4)Prof. Snehlata Mishra
Address of Applicant :SAGE University, Kailod Kartal, RAU BYPASS, Indore 452020, Madhya Pradesh India Indore ---------- ----------
5)Dr. Parag Goyal
Address of Applicant :PARAM MRI Center, Gwalior, Madhya Pradesh 474001 India Gwalior ---------- ----------
6)Mr. Anshul Mishra
Address of Applicant :SAGE University, Kailod Kartal, RAU BYPASS, Indore 452020, Madhya Pradesh India Indore ---------- ----------
7)Mr. Abhishek Pandey
Address of Applicant :SAGE University, Kailod Kartal, RAU BYPASS, Indore 452020, Madhya Pradesh India Indore ---------- ----------

(57) Abstract :
The AI-enabled tool for cancer image classification assists the doctors to predict lung cancer at an early stage using Computer Tomography (CT) scan. The AI-enabled tool for cancer image classification is configured to classify plurality of computed tomography (CT) images and provide information on existence of lung cancer in a patient. The AI enabled tool comprises a memory to store a set of program modules and a processor configured to execute the instructions stored in the program modules (104,106,112,114,116,118). The tool screens at least one of lung cancer images from the plurality of CT scan images uploaded by a user. The screened image is pre-processed, and segmented to extract the feature of the tumor. By performing machine learning algorithm, the tool predicts a probability of lung cancer. Figure 1.

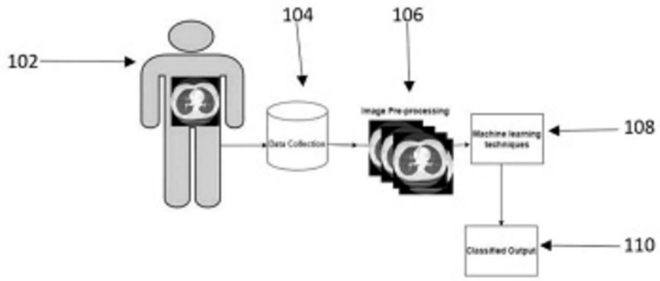


Figure – 1

No. of Pages : 21 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :11/07/2024
(21) Application No.202421053201 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MACHINE LEARNING-DRIVEN INTRUSION DETECTION SYSTEM FOR SECURE WIRELESS NETWORKS USING BLOCKCHAIN

(51) International classification	:G06F0021550000, G06N0020000000, H04L0009060000, G08B0013000000, H04L0009320000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Manoranjan Kumar Sinha
Address of Applicant :Assistant Professor, Department of Electronics Engineering, Medi-Caps University, Indore, Madhya Pradesh, 453331, India ---------- ----------
2)Atulya Gupta
3)Gurpreet Kour Khalsa
4)Rupam Kumari
5)Dr. Sricheta Parui
6)Dr. Vikrant Chole
7)Dr. Chethan K S
8)Prof (Dr) Subhrendu Guha Neogi
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Manoranjan Kumar Sinha
Address of Applicant :Assistant Professor, Department of Electronics Engineering, Medi-Caps University, Indore, Madhya Pradesh, 453331, India ---------- ----------
2)Atulya Gupta
Address of Applicant :Assistant Professor , Department of CSE, SRM Institute of Science and Technology, Delhi-NCR Campus, Ghaziabad, Uttar Pradesh, 201204, India ---------- ----------
3)Gurpreet Kour Khalsa
Address of Applicant :Assistant Professor , Department of CSE, SRM Institute of Science and Technology, Delhi-NCR Campus, Ghaziabad, Uttar Pradesh, 201204, India ---------- ----------
4)Rupam Kumari
Address of Applicant :Assistant Professor , Department of CSE, SRM Institute of Science and Technology, Delhi-NCR Campus, Ghaziabad, Uttar Pradesh, 201204, India ---------- ----------
5)Dr. Sricheta Parui
Address of Applicant :Assistant Professor, Kalinga Institute of Industrial Technology, Deemed to be University, Patia, Bhubaneswar, Odisha, 751024, India ---------- ----------
6)Dr. Vikrant Chole
Address of Applicant :Associate Professor, Amity University Madhya Pradesh, Gwalior, Madhya Pradesh, 474005, India ---------- ----------
7)Dr. Chethan K S
Address of Applicant :Assistant Professor , Department of ECE, RV Institute of Technology and Management, Bangalore, Karnataka, 560076, India ---------- ----------
8)Prof (Dr) Subhrendu Guha Neogi
Address of Applicant :Professor , Department of Computer Science and Engineering, Brainware University, Barasat, Kolkata, West Bengal, 700125, India ---------- ----------

(57) Abstract :
ABSTRACT Machine Learning-driven Intrusion Detection System for Secure Wireless Networks using Blockchain The present invention provides a sophisticated intrusion detection system (IDS) designed to secure wireless networks by integrating machine learning and blockchain technologies. The system includes a data collection module that continuously gathers network traffic data, and a feature extraction module that analyzes and prepares this data for machine learning analysis. The machine learning module utilizes both supervised and unsupervised algorithms to detect patterns and anomalies indicative of security threats, allowing it to identify both known and zero-day attacks. By adapting to new threats in real-time, the system significantly enhances detection capabilities while reducing false positives. To ensure data integrity and prevent tampering, a blockchain module records and verifies network activity on a decentralized ledger. This immutable record-keeping provides a transparent and trustworthy audit trail. Upon detecting potential intrusions, the alert and response module generates real-time alerts and initiates automated responses, such as isolating affected devices or blocking suspicious IP addresses. This combination of machine learning and blockchain creates a robust, adaptive security framework that offers comprehensive protection for wireless networks against a wide range of security threats.

No. of Pages : 14 No. of Claims : 6

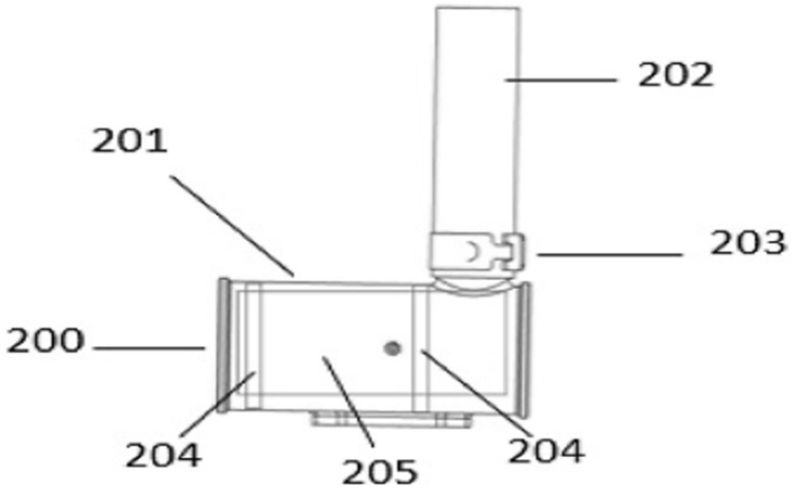
(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2024
(21) Application No.202421053233 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM OF INTEGRATED CATALYTIC MUFFLER FOR HYBRID SYSTEM ENGINES IN HIGH PAYLOAD UAVS AND METHOD OF PREPAERAION THEREOF

(51) International classification :F01N3/28, F01N13/08, F01N3/021, B64U50/10
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Suresh Dattatray Patil
Address of Applicant :At Post Datala, Tal-Malkpaur, Dist. Buldhana, Maharashtra, India Buldhana ---------- ----------
2)Ankita Suresh Patil
3)Joao Vitor Valentin Arruda
4)Murilo Rodrigues Rodelli
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Suresh Dattatray Patil
Address of Applicant :At Post Datala, Tal-Malkpaur, Dist. Buldhana, Maharashtra, India Buldhana ---------- ----------
2)Ankita Suresh Patil
Address of Applicant :At Post Datala, Tal-Malkpaur, Dist. Buldhana, Maharashtra, India Buldhana ---------- ----------
3)Joao Vitor Valentin Arruda
Address of Applicant :Street Padre Jose de Anchieta, No. 270, downtown, Sorocaba/SP, Brazil, CEP: 18.035-350 ---------- ----------
4)Murilo Rodrigues Rodelli
Address of Applicant :Street Padre Jose de Anchieta, No. 270, downtown, Sorocaba/SP, Brazil, CEP: 18.035-350 ---------- ----------

(57) Abstract :
The disclosed integrated catalytic muffler system (100), the muffler is securely placed inside the muffler main housing (201) to protect the internal arrangement of the muffler (200) and catalytic material (205). The muffler outlet extender (202) is configured and arranged to muffler (200) with the help of set fasteners (203). The plurality of ceramic cushion (204) is configured and arranged outside the muffler main housing (201) to prevent excessive heat produced by exhaust gases which are generated by burning of ethanol or methanol or fuel in internal combustion engine. The integrated catalytic muffler system (100) uses a muffler, outlet extender, and ceramic cushion to protect the muffler and catalytic material. The catalytic material (205) is prepared in a Ce/Pt/Al sequence and purifies harmful exhaust gases. The system uses CeO2 and Pt catalysts for effective ethanol and methanol steam reforming and emission reduction.



No. of Pages : 22 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/07/2024

(21) Application No.202421051124 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ROBOTIC AUTOMATION SOLUTIONS FOR MATERIAL HANDLING IN SUPPLY CHAIN LOGISTICS

(51) International classification	:G06Q0010080000, G05D0001020000, G06Q0010060000, B65G0001137000, B65G0001040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Lala Lajpat Rai Institute of Management, Mumbai
Address of Applicant :Mahalaxmi Mumbai 40003 Mumbai ---------- ----------
2)Prof. Kavita Patil
3)Dr Gautam Trehan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Prof. Kavita Patil
Address of Applicant :Lala Lajpat Rai Institute of Management Mahalaxmi Mumbai 40003 Mumbai ---------- ----------
2)Dr Gautam Trehan
Address of Applicant :Lala Lajpat Rai Institute of Management Mahalaxmi Mumbai 40003 Mumbai ---------- ----------

(57) Abstract :
ABSTRACT “Robotic Automation Solutions for Material Handling in Supply Chain Logistics” [600] Our invention “Robotic Automation Solutions for Material Handling in Supply Chain Logistics” Robotic automation has revolutionized material handling within supply chain logistics by offering unprecedented efficiency, reliability, and adaptability. This paper explores the various applications, benefits, and challenges associated with implementing robotic automation solutions in the context of material handling. The integration of robots in supply chain logistics addresses key challenges such as labor shortages, rising operational costs, and the need for enhanced agility in response to market demands. Robots are adept at performing repetitive tasks with precision, consistency, and speed, thereby improving overall operational throughput and reducing error rates. Key robotic automation solutions discussed include autonomous mobile robots (AMRs), robotic arms for palletizing and depalletizing, automated guided vehicles (AGVs), and robotic picking systems. Each of these technologies plays a critical role in streamlining processes from warehousing to distribution centers, contributing to smoother inventory management, faster order fulfillment, and reduced cycle times. Moreover, advancements in artificial intelligence (AI) and machine learning enable robots to learn and adapt in dynamic environments, enhancing their capability to handle complex tasks and navigate unstructured spaces safely. However, challenges such as initial investment costs, integration complexity, and the need for specialized training for personnel remain significant considerations for businesses evaluating robotic automation solutions.

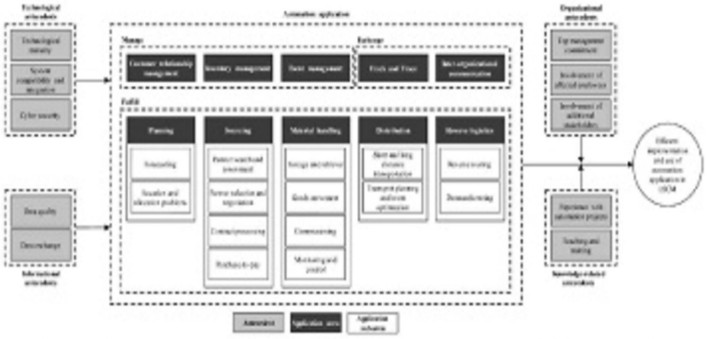


Figure 1: Robotic Automation Solutions for Material Handling in Supply Chain Logistics

No. of Pages : 10 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/07/2024

(21) Application No.202421051178 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : THE SUPERVISOR – AI BASED PROCTORING SYSTEM

(51) International classification :G06Q0050200000, G09B0007020000, G09B0007000000, A61B0005160000, H04N0005232000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. D. Y. Patil Institute of Technology, Pimpri, Pune
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Prof. Subhash Aatmaram Nalawade
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
2)Atharva Khewalkar
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
3)Anuj Walsepatil
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
4)Ritesh Phadtare
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
5)Sakshi Jadhav
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
6)Pratiksha Shinde
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------

(57) Abstract :
The project is online proctoring web application which uses face detection, object detection techniques to detect the cheating attempts during online examination. The system also collects the data for the student stress levels during the examination for analysis. The system continuously captures webcam frames throughout the test and detects the cheating attempts and stress level of students. The students are warned through the popups like out from full screen mode, no face detected, multiple face detected, mobile or laptop detected in frame etc. System auto submits the test after crossing the warning limits. System also authenticates the user through face recognition and then student is able to attempt the test. The stress level data is displayed to teacher in graphical format to analyze the stress levels of students during the test. The technologies used in the projects are Python Flask, MongoDB, OpenCV, HTML, CSS, JavaScript. System involves live monitoring of student during test and emotion detection. It helps to maintain the integrity of the online test and prevent the cheating attempts.

Drawing 1 of 3: Layout of Proctoring system

No. of Pages : 16 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/07/2024
(21) Application No.202421051258 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : PLACE IDENTIFICATION SYSTEM FOR VISUALLY IMPAIRED PEOPLE

(51) International classification :G09B0021000000, A61F0009080000, A61G0007100000, A61H0003060000, G06K0009620000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)S.Sakena Benazer
Address of Applicant :Assistant Professor, Computer Engineering Department, Noble University, Junagadh, Gujarat ---------- ----------
2)Pooja Jha
3)Haritima Mishra
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)S.Sakena Benazer
Address of Applicant :Assistant Professor, Computer Engineering Department, Noble University, Junagadh, Gujarat ---------- ----------
2)Pooja Jha
Address of Applicant :Assistant Professor, Electrical Department, Sandip University, Sijoul Madhubani, Bihar ---------- ----------
3)Haritima Mishra
Address of Applicant :Assistant Professor, Computer Engineering Department, Noble University, Junagadh, Gujarat ---------- ----------

(57) Abstract :
[06] There are increasing buildings with complex design, multi-storey and with large-scaled area. The complicated building layout could lead to certain level of difficulties for the blind or the visually impaired people in path identification in an unfamiliar surrounding such as new shopping complex. In this project we analyzed a usually physically challenged/handicapped people face many problems in this world. Especially while they move from one place to another room in a home, they face many difficulties such as getting inside the object (especially if the person is blind). This project helps in overcoming the above said problems of physically/handicapped people. This project use sensors for indicating the object of the home for the handicapped people. If the signal is from the transmitter (object) and the service matches, the person could able to identify the object for moving. This project has many advantages in its real time application. They are low cost implementation, avoiding of unnecessary accidents etc. Accompanied Drawing [FIG. 1] [FIG. 2] [FIG. 3] [FIG. 4] [FIG. 5] [FIG. 6] [FIG. 7] [FIG. 8] [FIG. 9] [FIG. 10]

No. of Pages : 23 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2024
(21) Application No.202421051470 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DYNAMIC RISK MANAGEMENT FRAMEWORK UTILIZING PROBABILISTIC FORECASTING AND REAL-TIME DATA ANALYSIS

(51) International classification	:G06Q0010060000, G16H0050300000, G06Q0040020000, G06F0021570000, G06Q0040080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)RUNGTA COLLEGE OF SCIENCE & TECHNOLOGY, DURG
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
2)DR SAKET RUNGTA
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr. Narender Singh
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
2)Mrs. Shikha Singh
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
3)Mr. Tusshar Yadav
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
4)Mrs. Nidhi Sahu
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
5)C.S Astha Chaturvedi
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------

(57) Abstract :
A dynamic risk management framework integrates probabilistic forecasting and real-time data analysis to enhance risk assessment and mitigation. It comprises a data collection module, probabilistic forecasting engine, real-time data analysis module, risk assessment and prioritization module, mitigation strategy generator, feedback loop mechanism, and user interface. The framework aggregates data from diverse sources, generates probabilistic forecasts using advanced statistical models, continuously analyzes real-time data for emerging risks, and prioritizes risks based on likelihood, impact, and vulnerability. Dynamic mitigation strategies are proposed and adjusted through a feedback loop. The user interface provides stakeholders with access to insights, recommendations, and interactive tools. This comprehensive approach improves accuracy, responsiveness, and effectiveness in managing risks across various domains, including finance, healthcare, cybersecurity, and natural disaster management.

No. of Pages : 19 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2024
(21) Application No.202421051477 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DESIGN AND IMPLEMENTATION OF A WIRELESS CHARGING SYSTEM FOR ELECTRIC VEHICLE BATTERIES IN REAL-TIME

(51) International classification :H02J50/12, B60L53/12, H02J50/70, H02J7/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. D. Y. Patil Institute of Technology, Pimpri, Pune
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr. Swaraj Kadam
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
2)Mrs. Trupti Dhanadhya
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
3)Mr. Sarthak Ujawane
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
4)Mr. Sangharsh Jambhulkar
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
5)Mr. Nikhil Kumbhar
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
6)Mr. Anurag Rathod
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------

(57) Abstract :
Wireless Power Transfer (WPT) systems facilitate the transmission of electric energy from a source to a load without the need for physical connections. These systems have garnered significant interest in various industrial applications due to their inherent advantages over traditional wired counterparts. Key benefits include the absence of exposed wires, ease of charging, and the ability to transmit power seamlessly even in challenging environmental conditions. The application of WPT technology for charging the on-board batteries of electric vehicles (EVs) has attracted attention from several companies. Ongoing efforts are directed toward the development and enhancement of different associated topologies. In the context of EV charging, the WPT system typically involves burying transmitter coils in the road, while receiver coils are strategically placed within the vehicle. Inductive WPT of the resonant type emerges as a prevalent choice for medium to high-power transfer applications, such as EV charging. This preference is attributed to its demonstrated higher efficiency, making it a reliable solution for effectively transferring power in this specific context.

No. of Pages : 13 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2024
(21) Application No.202421051485 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM FOR CAPTURING CARBON DIOXIDE AND CONVERTING RESOURCES IN STEELWORKS TO PROMOTE SUSTAINABILITY

(51) International classification	:G06Q0010060000, B01D0053620000, B01D0053140000, B01D0053180000, C25B0001040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)RUNGTA COLLEGE OF SCIENCE & TECHNOLOGY, DURG
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
2)DR SAKET RUNGTA
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Tripti Agrawal Jain
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) 491001 ---------- ----------
2)Pratiksha Tamrakar
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) 491001 ---------- ----------
3)Dr. Bhawna Soni
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) 491001 ---------- ----------
4)Mrs. Rinki Dubey
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) 491001 ---------- ----------
5)Ms. Priyadarshini
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) 491001 ---------- ----------

(57) Abstract :
The present invention relates to a system designed to address environmental challenges in the steel industry by capturing carbon dioxide (CO2) emissions from steelworks and converting them into valuable resources. Steel production processes traditionally contribute significantly to global CO2 emissions, necessitating innovative solutions for mitigating environmental impact and promoting sustainability. The system integrates advanced carbon capture technologies with resource conversion processes to efficiently capture CO2 from flue gases and convert it into usable products through chemical, biological, or mineralization processes. By optimizing resource utilization and minimizing greenhouse gas emissions, the invention aims to enhance the environmental performance of steel production while supporting regulatory compliance and economic viability. This integrated approach not only reduces carbon footprint but also fosters sustainable practices within the steel industry, contributing to global efforts for climate change mitigation and environmental stewardship.

No. of Pages : 17 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2024

(21) Application No.202421051486 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AI-POWERED SYSTEM FOR REAL-TIME FACIAL RECOGNITION WITH ENHANCED SECURITY AND PRIVACY

(51) International classification	:G06F0021620000, G06N0003040000, G06N0003080000, G06K0009620000, G06F0021320000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)RUNGTA COLLEGE OF SCIENCE & TECHNOLOGY, DURG
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
2)DR SAKET RUNGTA
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Ashish Kumar Tamrakar
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
2)Mrs. Khusboo Sao
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
3)Mr. Arif Khan
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
4)Mr. Saurav Mishra
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
5)Ms. Barkha Sharma
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
6)Indrajeet Sahu
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------

(57) Abstract :
The AI-Powered System for Real-Time Facial Recognition with Enhanced Security and Privacy pertains to a novel approach in facial recognition technology integrating advanced artificial intelligence (AI) algorithms with robust security and privacy features. The system comprises modules for real-time facial detection, feature extraction, and template matching using convolutional neural networks (CNNs) or similar deep learning models. It ensures data security through encryption of facial data during transmission and storage, while also incorporating privacy protection measures such as anonymization or pseudonymization. The invention aims to address challenges in accuracy, security vulnerabilities, and privacy concerns associated with conventional facial recognition systems. By enhancing both technological capabilities and ethical standards, the system seeks to set new benchmarks for responsible deployment and widespread adoption of facial recognition technology across various sectors.

No. of Pages : 17 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2024
(21) Application No.202421051487 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : QUANTUM COMPUTING SYSTEM FOR SOLVING PREVIOUSLY INTRACTABLE SCIENTIFIC PROBLEMS

(51) International classification	:G06N0010000000, B82Y0010000000, G06N0005000000, H01L0039220000, G06Q0010040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)RUNGTA COLLEGE OF SCIENCE & TECHNOLOGY, DURG
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
2)DR SAKET RUNGTA
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MRS. RUPALI SHIL KUNDU
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
2)MRS. SHERIN KOUSHOR
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
3)MR. ANURAG MISHRA
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
4)MS. SONAL SAHU
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
5)MS. MONISHA
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
6)MRS. AAKANKSHA YADAV
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
7)MS. SONAM
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------

(57) Abstract :
The present invention discloses a quantum computing system designed to address previously unsolvable scientific problems through advanced quantum mechanical principles. The system includes a scalable array of qubits, superconducting qubits in a cryogenic environment, and control electronics for quantum gate operations. Error correction mechanisms ensure reliable computational results by mitigating decoherence and external disturbances. Quantum algorithms optimized for parallel computation leverage quantum superposition and entanglement to achieve exponential speedups over classical algorithms. Applications include cryptography, optimization, and material science simulations, demonstrating the transformative potential of quantum computing in revolutionizing computational capabilities across various industries. This invention represents a significant advancement in quantum computing technology, paving the way for solving complex problems that surpass the capabilities of classical computing systems.

No. of Pages : 16 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2024
(21) Application No.202421051488 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : BIARTIFICIAL PANCREAS SYSTEM FOR AUTOMATED GLUCOSE REGULATION IN DIABETES

(51) International classification :A61P0003100000, A61M0005142000, A61B0005000000, A61B0005145000, A61M0005172000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)RUNGTA COLLEGE OF SCIENCE & TECHNOLOGY, DURG
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
2)DR SAKET RUNGTA
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MS. DIKSHA KAUSHIK
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
2)MS. ANKITA TIWARI
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
3)MR VIKASH RAMTEKE
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
4)MS. NISHA DEWANGAN
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
5)MS. SHOBHA SAHU
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
6)MR. AKASH CHANDRAVANSHI
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------
7)MRS.RITA GUPTA
Address of Applicant :Rungta College of Science & Technology, Rungta Educational Campus, Ganjpara, Durg- 491001 (CG) Ganjpara ---------- ----------

(57) Abstract :
A biartificial pancreas system is disclosed for automated glucose regulation in individuals with diabetes. The system integrates biomimetic sensors, an insulin delivery device, and artificial intelligence algorithms to monitor glucose levels continuously and adjust insulin dosing in real-time. The closed-loop system enhances glucose control, minimizes hypoglycemia risks, and improves patient adherence to therapy. Safety features ensure reliability and user safety, making the system suitable for long-term use in managing diabetes effectively.

No. of Pages : 14 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2024
(21) Application No.202421051489 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : POWER FACTOR CORRECTION USING LANDSMAN CONVERTER

(51) International classification :H02M1/42, G05F1/70, H02J3/01, H02M1/12, H02P23/26
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. D. Y. Patil Institute of Technology, Pimpri, Pune
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mrs.Trupti Dhanadhya
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
2)Mr.Swaraj Kadam
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
3)Ms. Pranali Patil
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
4)Ms. Shaheen Mulani
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
5)Ms. Ankita Zodge
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
6)Mr. Krishna Rampurkar
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------

(57) Abstract :
This study presents a novel configuration of power factor regulation (PFR) based bridgeless Landsman converter feeding a brushless DC motor (BLDCM) drive for lowpower (400 W) white goods applications. The drive's speed control is achieved by adjusting the DC bus voltage of the voltage source inverter (VSI) feeding to a BLDCM. Moreover, low-frequency switching signals are used for electronic commutation of BLDCM, which reduces the switching power losses of six solid-state switches of VSI. The motor is sustained by Voltage Source Inverter (VSI) with a dc-dc converter power factor correction circuit (PFC) as the VSI's ancestor. The Performance of dc-dc converters is examined and the outcomes are talked about to touch base at the most appropriate converter. A reliable, easy plan is in this manner given to accomplish unity power factor and speed direction with exactness. The Landsman Converter performs power factor correction and DC voltage control. The planned PFC converter brings about an enhanced power quality at AC mains in an extensive variety of speed control and info AC voltage. The voltage source inverter (VSI) is utilized as an electronic commutator of BLDC Motor. Keywords: Power Factor Correction, BLDC Motor, Landsman Converter.

No. of Pages : 16 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2024
(21) Application No.202421053455 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : "AN INTRANASAL FORMULATION COMPRISING CURCUMIN AND CINEOLE AND PREPARATION METHOD THEREOF"

(51) International classification :A61K0009000000, A61P0011020000, A61K0031120000, A61P0037080000, A61K0047220000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Bharati Vidyapeeth (Deemed to be University), Poona College of Pharmacy, Pune
Address of Applicant :Poona College of Pharmacy, Erandwane, Bharati Vidyapeeth (Deemed to be University), Pune Pune ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Nilesh Deshmukh
Address of Applicant :Poona College of Pharmacy, Erandwane, Bharati Vidyapeeth (Deemed to be University), Pune -411 038 Pune ---------- ----------
2)Dr. Atmaram P. Pawar
Address of Applicant :Poona College of Pharmacy, Erandwane, Bharati Vidyapeeth (Deemed to be University), Pune -411038 Pune ---------- ----------

(57) Abstract :
ABSTRACT "AN INTRANASAL FORMULATION COMPRISING CURCUMIN AND CINEOLE AND PREPARATION METHOD THEREOF" The present invention relates to a to the field of intranasal formulation formulations for allergic rhinitis. Specifically, it relates to an intranasal formulation comprising curcumin and cineole along with pharmaceutically inert excipients. The invention further describes method for preparation of intranasal formulation.

No. of Pages : 28 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2024
(21) Application No.202421053488 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : GAS ACCENUATED SKIN PENETRATION ENHANCERS PATCH OR G.A.S PATCH - TRANSDERMAL DRUG DELIVERY SYSTEM

(51) International classification	:A61K0009700000, A61K0009000000, A61N0005060000, A61M0037000000, A61B0017000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)KEWAT ROHIT RAMPRASAD
Address of Applicant :L2-303, EMPIRE ESTATE, GATE NO 8, OFF OLD MUMBAI- PUNE HIGHWAY, CHINCHWAD,PUNE-19 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)KEWAT ROHIT RAMPRASAD
Address of Applicant :L2-303, EMPIRE ESTATE, GATE NO 8, OFF OLD MUMBAI- PUNE HIGHWAY, CHINCHWAD,PUNE-19 ---------- ----------

(57) Abstract :
A transdermal drug delivery device with compartments within its own body containing various reactants (1) an (2) separated by a removable seal (3) and communicating through holes (5) through the target drug in adhesive layer (4) is disclosed. The removal of seal by external means leads to the mixing of the reactants and formation of skin penetration enhancers -SPEs in gaseous form (6). These SPEs are funneled through the holes towards the area of target drug delivery. The removable seal if permanent the proposed device is a disposable transdermal patch for one time augmentation of delivery of the target drug. The removable seal if temporary the device is a reusable transdermal drug delivery system secured to the limb with a strap or band. This invention makes use of gaseous SPEs formed within the applied device to augment target drug delivery whereas no prior art has depicted the same earlier.

No. of Pages : 43 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2024

(21) Application No.202421053540 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SMART PANTS FOR THE VISUALLY IMPAIRED USING HAPTIC FEEDBACK

(51) International classification	:G06F0003010000, G09B0021000000, A61H0003060000, G01C0021200000, G08B0006000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Adesh Ajitkumar Chandanshive
Address of Applicant :A128, Ramling Society, Near Indira Nagar Post Office, opposite to ITI, Vijapur Road, Solapur, Maharashtra ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Adesh Ajitkumar Chandanshive
Address of Applicant :A128, Ramling Society, Near Indira Nagar Post Office, opposite to ITI, Vijapur Road, Solapur, Maharashtra, 413004 Solapur ---------- ----------
2)Palapure Nandeshwar Ramchandra
Address of Applicant :At post Mahadev Nagar, Murum, Taluka- Omraga Dharashiv ---------- ----------
3)Suryawanshi Aniket Datta
Address of Applicant :At post Osmanabad Dharashiv ---------- ----------
4)Ghanwat Shreyash Maruti
Address of Applicant :At post Mohol, Near Mohol Railway station, Taluka- Mohol Mohol ---------- ----------
5)Fakir Mujjamil Habibsha
Address of Applicant :At post Ashta Kasar Near Datt Mandir, Taluka-lohara Lohara ---------- ----------
6)Jadhav Swaraj Pravin
Address of Applicant :Adarsh Nagar, Behind Garad Hospital, DIC Road Dharashiv ---------- ----------
7)Bhagare Aditya
Address of Applicant :Gat No.16, Solapur-Tuljapur Road, Tale-Hipparaga, near Mashroom Ganapati Temple, Solapur Solapur ---------- ----------
8)N K Orchid College of Engineering & Technology, Solapur
Address of Applicant :Gat No.16, Solapur-Tuljapur Road, Tale-Hipparaga, near Mashroom Ganapati Temple, Solapur Solapur ---------- ----------

(57) Abstract :
The "Smart Pants for the Visually Impaired Using Haptic Feedback" represent an assistive technology designed to enhance the independence and safety of individuals with visual impairments. These smart pants integrate advanced haptic feedback systems, ultrasonic sensors, and wireless connectivity to provide real-time spatial awareness and navigation assistance. The haptic feedback actuators embedded within the fabric of the pants deliver tactile sensations to the wearer, conveying information about obstacles, proximity to objects, spatial orientation, hand free movement and wayfinding directions. Ultrasonic sensors, collects data about the surroundings, enabling the system to generate customized haptic feedbacks. These smart pants offer a comprehensive solution to empower individuals with visual impairments, fostering greater mobility, confidence, and autonomy in navigating diverse environments. This invention aims to create a wearable device that can translate real-world information into tactile cues, enabling a hands-free, non-intrusive, and intuitive means of obstacle detection and wayfinding Figure 01

DRAWINGS

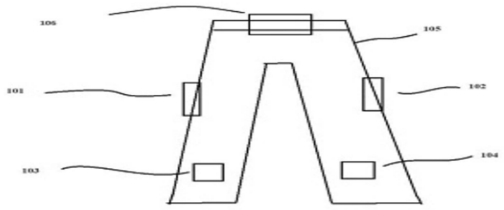


FIGURE 01

No. of Pages : 22 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :12/07/2024

(21) Application No.202421053544 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : AI-ENHANCED SPEECH RECOGNITION FOR VIRTUAL ASSISTANTS

(51) International classification :G06N0003040000, G06N0003080000, G10L0021020800, G06F0040253000, G06N0020000000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Senthilnathan Chidambaranathan
Address of Applicant :Associate Director, Architecture and Design, Virtusa Corporation, USA, New Jersey, 20 Corporate Pl S, Piscataway, NJ 0885. ---------- ----------
2)Arvind Sakharam Sardar
3)Dr. Rvs Praveen
4)Narayanasamy S
5)Sesidhar. DVSR
6)Mustafa Nawaz S M
7)Yogesh Sharma
8)Ganesh Kumar Yadav
9)Mr. Mahesh Swami
10)Ms. Sakshi Kumar
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Senthilnathan Chidambaranathan
Address of Applicant :Associate Director, Architecture and Design, Virtusa Corporation, USA, New Jersey, 20 Corporate Pl S, Piscataway, NJ 0885. ---------- ----------
2)Arvind Sakharam Sardar
Address of Applicant :Assistant Professor, PhD Scholar, AISMSS College of Engineering, SPPU Pune (Computer Science and Engineering), Chh Shahu Maharaj Shikshan Sansthas, Chh. Shahu College of Engineering, Kanchanwadi, Paithan Road, Chh Sambhajinagar. ---------- ----------
3)Dr. Rvs Praveen
Address of Applicant :Director, LTIMINDTREE, APR Pranav Antilia, Villa 55, Praneet Pranav Enclave, Bachupally, Hyderabad, Telangana – 500090. ---------- ----------
4)Narayanasamy S
Address of Applicant :Assistant Professor, J.J College of Engineering and Technology, Trichy, Tamilnadu, India. ---------- ----------
5)Sesidhar. DVSR
Address of Applicant :Assistant Professor, MVSR Engg. College, Hyderabad, Telangana. ---------- ----------
6)Mustafa Nawaz S M
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Sri Sairam Institute of Technology, Chennai, Tamil Nadu. ---------- ----------
7)Yogesh Sharma
Address of Applicant :Assistant Professor, Sinhgad Institute of Management and Computer Application, College Address: Building No 4, Sinhgad Technical Campus, Narhe, Pune 411041. ---------- ----------
8)Ganesh Kumar Yadav
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, JSS Academy of Technical Education, Noida, UP-201301. ---------- ----------
9)Mr. Mahesh Swami
Address of Applicant :Assistant Professor, Computer Science and Engineering, Aravali College of Engineering and Management, Jasana, Faridabad, Haryana, 121101. ---------- ----------
10)Ms. Sakshi Kumar
Address of Applicant :Assistant Professor, HOD, CSE, Aravali College of Engineering and Management, Jasana, Faridabad, 121101, Haryana. ---------- ----------

(57) Abstract :
The present invention discloses an advanced speech recognition system tailored for virtual assistants, designed to enhance accuracy, efficiency, and adaptability across various applications. The system integrates Convolutional Neural Networks (CNNs) and Recurrent Neural Networks (RNNs), specifically Long Short-Term Memory (LSTM) networks, for robust feature extraction and sequence modeling from audio signals. A context-aware processing module maintains a dynamic memory of recent interactions, utilizing attention mechanisms to improve understanding of user context. An adaptive learning mechanism refines system performance through reinforcement learning and user feedback loops, adapting to individual speech patterns and preferences over time. Advanced noise reduction algorithms, including spectral subtraction and deep learning-based denoising methods, enhance speech clarity in diverse environments. Multilingual support, facilitated by language-specific models and transfer learning, ensures accurate recognition across multiple languages and dialects. Real-time processing optimizations, such as model quantization and edge computing, minimize latency for seamless user interactions.

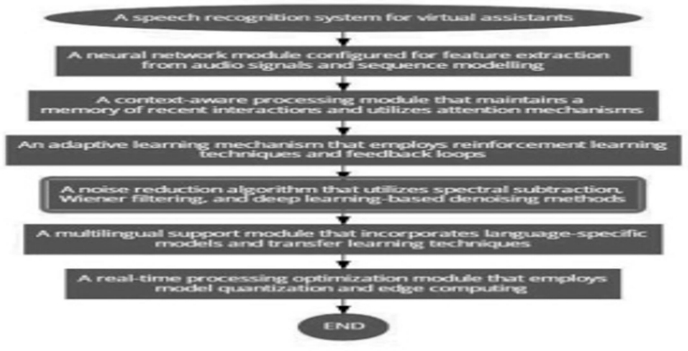


Fig. 1 A speech recognition system for virtual assistants

No. of Pages : 19 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2024
(21) Application No.202421053546 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD AND SYSTEM FOR EARLY DETECTION OF BREAST CANCER USING MULTI-MODAL IMAGING AND AI ANALYSIS

(51) International classification :A61B0005000000, G16H0050200000, A61B0008000000, G16H0030400000, G06T0007000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Ms. Jyoti Pandurang Kshirsagar
Address of Applicant :Research Scholar, Dr. D. Y. Patil Institute of Technology, Pimpri, Pune, Pin: 411018, Maharashtra, India. ---------- ----------
2)Dr. Bhagwan Phulpagar
3)Dr. Pramod Patil
4)Mr. Manish Sopan Shinde
5)Ms. Purva Manish Shinde
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Ms. Jyoti Pandurang Kshirsagar
Address of Applicant :Research Scholar, Dr. D. Y. Patil Institute of Technology, Pimpri, Pune, Pin: 411018, Maharashtra, India. ---------- ----------
2)Dr. Bhagwan Phulpagar
Address of Applicant :Professor, PES, Modern College of Engineering, Pune, Pin: 411005, Maharashtra, India. ---------- ----------
3)Dr. Pramod Patil
Address of Applicant :Professor, Dr. D. Y. Patil Institute of Technology, Pimpri, Pune, Pin: 411018, Maharashtra, India. ---------- ----------
4)Mr. Manish Sopan Shinde
Address of Applicant :Founder and Director, JMS Brilliance Infotech, Pimpri, Pune, Pin: 411018, Maharashtra, India. ---------- ----------
5)Ms. Purva Manish Shinde
Address of Applicant :Student, Jnana Prabodhini Navanagar Vidyalaya (JPNV), Pradhikaran, Nigdi, Pimpri-Chinchwad, Pune, Pin: 411044, Maharashtra, India. ---------- ----------

(57) Abstract :
The present invention discloses a method and system for early detection of breast cancer utilizing multi-modal imaging technologies and artificial intelligence (AI) analysis. The invention integrates data from diverse imaging modalities, including mammography, ultrasound, magnetic resonance imaging (MRI), and optical coherence tomography (OCT), through AI-driven algorithms to enhance diagnostic accuracy. AI-based classification models analyze fused imaging data to detect subtle abnormalities indicative of early-stage breast cancer, providing clinicians with timely diagnostic insights and recommendations for personalized treatment planning. The system's innovative approach aims to improve early detection rates, reduce false negatives, and enhance overall patient outcomes in breast cancer management.

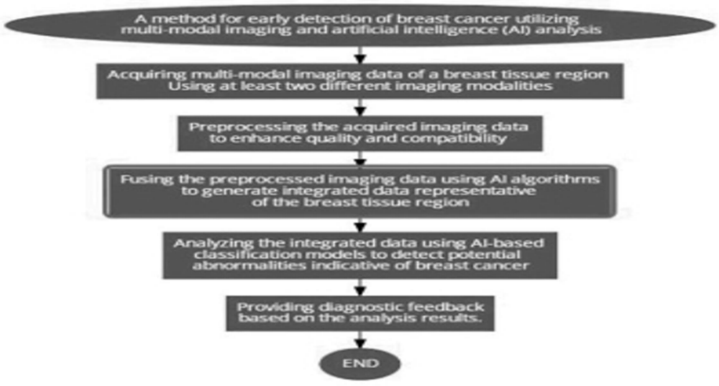


Fig. 1 A method for early detection of breast cancer utilizing multi-modal imaging and artificial intelligence (AI) analysis

No. of Pages : 17 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2024
(21) Application No.202421053547 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR ENHANCING MATHEMATICAL PROBLEM SOLVING USING ARTIFICIAL INTELLIGENCE

(51) International classification	:G06Q0050200000, G09B0019020000, G09B0007020000, G09B0023020000, G09B0005020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Punam M. Lambat
Address of Applicant :Assistant Professor, Tusiramji Gaikwad Patil College of Engineering & Technology, Nagpur, 441108 ---------- ----------
2)Dr. Kalpana N. Pawar
3)Dr. Vidhya T. Chauhan
4)Pranjali Lute
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Punam M. Lambat
Address of Applicant :Assistant Professor, Tusiramji Gaikwad Patil College of Engineering & Technology, Nagpur, 441108 ---------- ----------
2)Dr. Kalpana N. Pawar
Address of Applicant :Professor, Shri Shivaji Education Society, Amravati's Science College, Nagpur, 440012 ---------- ----------
3)Dr. Vidhya T. Chauhan
Address of Applicant :Assistant Professor, Shri Shivaji Education Society, Amravati's Science College, Nagpur, 440012 ---------- ----------
4)Pranjali Lute
Address of Applicant :Assistant Professor, Tulsiramji Gaikwad Patil college of Engineering and Technology, Nagpur, 441108 ---------- ----------

(57) Abstract :
The present invention relates to a system and method for enhancing mathematical problem-solving using artificial intelligence. The system comprises an AI-based platform that offers personalized learning experiences, adaptive problem sets, and real-time feedback to students. The method involves collecting data on students' performance, analyzing this data to identify their strengths and weaknesses, and generating customized learning paths to improve their mathematical abilities. By utilizing advanced AI algorithms and techniques, the system provides tailored support and adaptive learning, aiming to enhance students' problem-solving skills in mathematics and foster a deeper understanding of mathematical concepts. Accompanied Drawing [FIGS. 1-2]

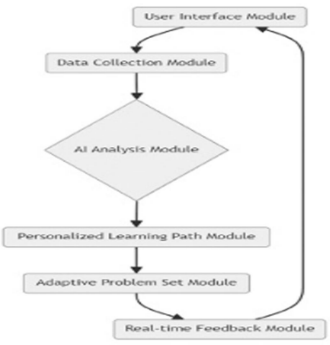


Fig. 1

Fig. 2

No. of Pages : 22 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2024

(21) Application No.202421053548 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN IMPROVED DRAINAGE SYSTEM

(51) International classification	:B01L0003000000, F28D0021000000, F01N0003280000, G01N0033490000, G01N0015140000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Acropolis Institute of Technology & Research
Address of Applicant :Bypass Rd, Mangliya Square, Manglia, Indore, Madhya Pradesh 453771 India Indore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Sachin Mittal
Address of Applicant :Coordinator Innovation & Incubation Cell and Co-Coordinator IDEA Lab, Acropolis Institute of Technology & Research, Bypass Rd, Mangliya Square, Manglia, Indore, Madhya Pradesh 453771 India Indore ---------- ----------
2)Namrata Chandel
Address of Applicant :Associate Professor, Department of Civil Engineering, Acropolis Institute of Technology & Research, Bypass Rd, Mangliya Square, Manglia, Indore, Madhya Pradesh 453771 India Indore ---------- ----------

(57) Abstract :
The present disclosure relates to an improved drainage system (100). The system (100) comprises an inlet channel (102) configured to receive the flowing sewage liquid. The system (100) comprises a first chamber (104) connected to the inlet channel (102). A cross section area of the first chamber (104) is greater than a cross section area of the inlet channel (102) to facilitate reduction in velocity of the flowing sewage liquid, and enable coagulation of sludges from the sewage liquid. Further, the system (100) comprises a second chamber (106) fluidically connected to the first chamber (104), to receive the sewage liquid without sludges. Furthermore, the system (100) comprises a hanging wall (108) is configured in the second chamber (106). The hanging wall (108) is positioned perpendicular to flow direction of the sewage liquid. Moreover, the system (100) comprises an outlet channel (110) connected to the second chamber (106). Figure 1A.

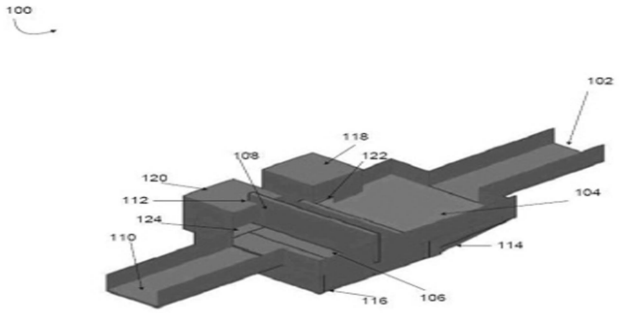


Figure – 1 A

No. of Pages : 20 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :13/07/2024

(21) Application No.202421053553 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : NEUROROBOTS: THE CUTTING EDGE OF REPAIRING NEUROLOGICAL DAMAGE

(51) International classification	:G16B0005000000, B29L0031000000, G01N0033574000, G09B0021000000, C12M0001360000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Pushpraj Singh Rajawat

Address of Applicant :Research Scholar, Department of Psychology, Barkatullah University Bhopal 462026, Madhya Pradesh, India. ---------- ----------

2)Dr. Anitha S

3)Bharathi Gururaj

4)N. Venkatesh

5)Ramesh Mageswaran

6)Syed Nafeesa Thehseen

7)Dr.D.Menaga

8)Dr. C.Ramesh

9)Mohammad Habeeb

10)Dr.Dhanusha.C

11)Dr. Chiluka Ramesh

12)Kirubakaran D

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Pushpraj Singh Rajawat

Address of Applicant :Research Scholar, Department of Psychology, Barkatullah University Bhopal 462026, Madhya Pradesh, India. ---------- ----------

2)Dr. Anitha S

Address of Applicant :Professor & Head, Department of CSE-Cyber Security, ACSCE, Kambipura, Mysore Road, Bangalore 560074, Karnataka, India. ---------- ----------

3)Bharathi Gururaj

Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, ACS College of Engineering, Bangalore-560074, Karnataka, India. ---------- ----------

4)N. Venkatesh

Address of Applicant :Assistant Professor, Aerospace Engineering, SNS College of Technology, Coimbatore - 641035, Tamil Nadu, India. ---------- ----------

5)Ramesh Mageswaran

Address of Applicant :Assistant Professor, Aerospace Engineering, SNS College of Technology, Coimbatore - 641035, Tamil Nadu, India. ---------- ----------

6)Syed Nafeesa Thehseen

Address of Applicant :Assistant Professor, CSE Department, KLM Engineering College, Kadapa, 516003, Andhra Pradesh, India. ---------- ----------

7)Dr.D.Menaga

Address of Applicant :Assistant Professor/Department of Computer Science and Engineering, St. Joseph's Institute of Technology,Chennai,600119, Chengalpattu, Tamil Nadu, India. ---------- ----------

8)Dr. C.Ramesh

Address of Applicant :Professor, Department of Mechanical, M.Kumarasamy College of Engineering, Karur, Tamil Nadu, India ---------- ----------

9)Mohammad Habeeb

Address of Applicant :Assistant Professor, Crescent School of Pharmacy BS Abdur Rahman Crescent Institute of Science and Technology, Chengalpattu, Chennai, Tamil Nadu, India. ---------- ----------

10)Dr.Dhanusha.C

Address of Applicant :Assistant Professor, Department of Software Systems and Computer Science [PG], KG College of Arts and Science, Saravanampatti, Coimbatore. 641035, Tamil Nadu, India. ---------- ----------

11)Dr. Chiluka Ramesh

Address of Applicant :Associate Professor, Department of ECE, Malineni Lakshmaiah Women's Engineering College, Guntur-522017, Andhra Pradesh, India. ---------- ----------

12)Kirubakaran D

Address of Applicant :Professor & Head, Department of EEE, St. Joseph's Institute of Technology, OMR, Chennai - 119, Tamil Nadu, India. ---------- ----------

(57) Abstract :

NEUROROBOTS: THE CUTTING EDGE OF REPAIRING NEUROLOGICAL DAMAGE The method for the development of the field of biomedical research, modeling plays a crucial role in understanding the mechanisms behind diseases and developing treatments for neurological conditions. The current models, including those based on animals and computer simulations, have limitations in their ability to accurately represent human biology and in the range of experiments they can conduct. Robotics, on the other hand, offers a promising alternative for modeling, thanks to its ability to mimic the human body and interact with the physical environment, while also allowing for precise control and monitoring of its parameters. Individuals with severe disabilities could greatly benefit from advanced bionic technology, but the presence of multiple functional impairments could make the integration of such technology challenging. The individual faced challenges in maintaining the cleanliness of the implant, putting on and taking off the prosthetic, and adapting to the electromechanical interface due to his loss of the opposite arm, eye, and vision in the same side, requiring ongoing adjustments to the prosthetic's control system. FIG.1

No. of Pages : 16 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :13/07/2024

(21) Application No.202421053580 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : PREDICTION AND ANALYSIS OF NEXT WEBSITE REQUESTS: A HYBRID APPROACH INTEGRATING FUZZY CLUSTERING AND FUZZY ASSOCIATION RULE MINING

(51) International classification	:G06N0005020000, G06K0009620000, G06Q0030020000, G06N0005040000, G06N0007020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Hardik Ashvinbhai Gangadwala
Address of Applicant :Assistant Professor , Shri Shambhubhai V. Patel College of Computer Science & Business Management, Surat, Gujarat, 395008, India ---------- ----------
2)Dr. Ravi M. Gulati
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Hardik Ashvinbhai Gangadwala
Address of Applicant :Assistant Professor , Shri Shambhubhai V. Patel College of Computer Science & Business Management, Surat, Gujarat, 395008, India ---------- ----------
2)Dr. Ravi M. Gulati
Address of Applicant :Professor , Department of Computer Science, Veer Narmad South Gujarat University, Surat, Gujarat, 395007, India ---------- ----------

(57) Abstract :
ABSTRACT Prediction and Analysis of Next Website Requests: A Hybrid Approach Integrating Fuzzy Clustering and Fuzzy Association Rule Mining This invention presents a novel approach for predicting the next website request made by users through a hybrid method that integrates fuzzy clustering and fuzzy association rule mining. Traditional data mining techniques often struggle with the complexities of web usage data, which involves overlapping user behaviors and quantitative measures that binary methods cannot adequately capture. To address these limitations, this invention introduces a system that utilizes fuzzy clustering to assign data points to multiple clusters with varying degrees of membership, providing a more nuanced and accurate representation of user interactions. The approach leverages fuzzy association rule mining to analyze the fuzzy clusters and extract detailed patterns and relationships from the web usage data. Unlike conventional association rule mining that relies on binary values, fuzzy association rules accommodate quantitative data and the inherent uncertainty in user behaviors. By applying these techniques, the system identifies meaningful patterns that reflect real-world complexities and generates precise predictions about future user requests. The proposed system integrates several modules for real-time data collection, fuzzy clustering, fuzzy association rule mining, and prediction generation. This comprehensive architecture improves the accuracy of user behavior predictions and enhances website performance by offering actionable insights into user preferences and future actions. The innovative combination of fuzzy clustering and fuzzy association rule mining represents a significant advancement in Web Usage Mining, providing a robust framework for understanding and anticipating user needs in a dynamic online environment.

No. of Pages : 15 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/07/2024
(21) Application No.202421053611 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : HYDRAULICALLY ACTUATED ARTIFICIAL LIFTING UNIT

(51) International classification	:E21B0043120000, F04B0047020000, C02F0001440000, B01J0019000000, F04B0049060000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)NILESHKUMAR P RAMANUJ
Address of Applicant :B804, 8th FLOOR. RAJPATH SIESTA, BEHIND TOYOTA SHOWROOM, GONDAL ROAD, KANGASHIYANI, RAJKOT-360022. RAJKOT ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)NILESHKUMAR P RAMANUJ
Address of Applicant :B804, 8th FLOOR. RAJPATH SIESTA, BEHIND TOYOTA SHOWROOM, GONDAL ROAD, KANGASHIYANI, RAJKOT-360022. RAJKOT ---------- ----------

(57) Abstract :
The present invention relates to a hydraulic sucker rod pumping unit (100) designed for lifting liquids from great depths. The hydraulic sucker rod pumping unit (100) is an advanced system designed for lifting liquids from great depths, improving the efficiency and reliability of traditional pumping methods. It comprises an Electric Intellectual Control Panel (1), programmable Control Logic (PLC) (2), Variable Frequency Drive (VFD) (3), HMI Display (4), and both direction Electric Main Motor (5). The unit includes a Main Hydraulic Pump (6), Single Direction Pilot Motor (7), Pilot Hydraulic Pump (8), Manifold Block (9), and various valves and gauges for precise control (10-16). Key components include a Double Acting Cylinder (18), Oil Cooler (22), Oil Storage Tank (25), and advanced safety features like the Return Line Safety Valve (26) and Flow Control Valve (29). The system also integrates an Online Monitoring System (44) for real-time remote operation. Power sources include solar panels, electric three-phase power, or a diesel generator, ensuring versatility. This unit (100) leverages cutting-edge hydraulic technology and sophisticated control systems to offer a robust solution for deep well liquid extraction, promising enhanced efficiency, reliability, and operational flexibility..

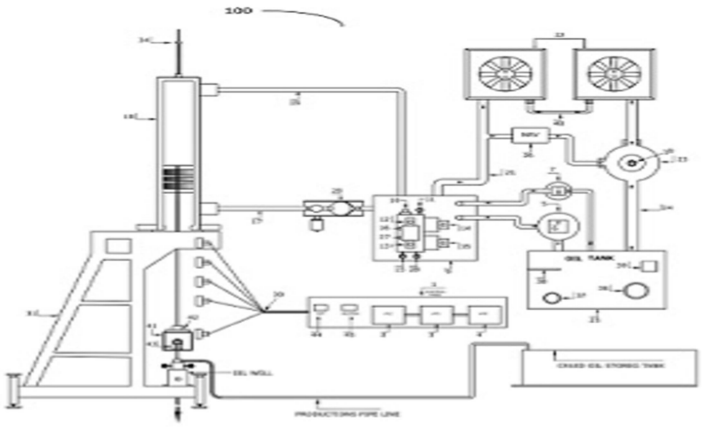


FIGURE 1

No. of Pages : 26 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2024

(21) Application No.202421051499 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : REAL TIME ANALYSIS OF POWER LOSS DUE TO EFFECT OF PARTIAL SHADING ON SOLAR PV PANEL

(51) International classification :H02J3/38, G05F1/67, H02S50/00, G06F113/04, G06F30/20
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. D. Y. Patil Institute of Technology, Pimpri, Pune
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Ms. Ekta Mishra
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
2)Mr Mayur Kale
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
3)Mr. Kunal Walle
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------

(57) Abstract :
Enlarging solar power plants are increasing. This increase is to reduce compatibility with the use of fossil fuel electricity. Utilization of solar power plants is mostly used for street lighting and home industries. Solar power plants must rely on solar irradiation received on solar panels. The output power is also changed by large values from external factors such as partial shading. Photovoltaic (PV) system characteristics are significantly affected by shading conditions and thus the power productivity of the system is subject to vary accordingly. Therefore, this triggers the need for a broad understanding for the power losses caused by partial shading conditions (PSC). This paper presents an indicative analysis of various kinds of PV power losses associated with different shading scenarios, but in practical cases, this power is reduced due to various environmental effects. One of the main factors that is directly responsible for this degradation of output power is partial shading. Partially shaded cells produce less current than other normal cells exposed to sunlight and behave like a reverse biased p-n junction. As a result, it dissipates power instead of generating and gets heated. Consequently, hotspots are generated which results in reduced open circuit voltage. Therefore, the solar PV module produces less output power than it is supposed to. This paper investigates the temperature gradient that exists between a normally exposed cell and a shaded cell and the degradation in output power caused by the partial shading on the solar PV module. For comparative analysis, two identical PV panels have been taken with one of the panels being shaded partially.

No. of Pages : 16 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2024

(21) Application No.202421051520 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : FRUIT MONITORING IN COLD STORAGE SYSTEM USING IOT

(51) International classification :G06Q0010060000, G06Q0010080000, G06Q0030000000, A23B0007154000, G06Q0050020000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. D. Y. Patil Institute of Technology, Pimpri, Pune
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Ms. Rajashree Bhokare
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
2)Mr. Pankaj Kumar
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
3)Mr. Ningareddy Dhangar
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
4)Mr. Balaji Gavhad
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
5)Mr. Umang Jadhav
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
6)Mr. Atharva Pardeshi
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------

(57) Abstract :
Fruit Industry being one of the most important and wide-ranging industries in the world, it comprises a variety of businesses that are either directly or indirectly involved in the processing of fruits. This covers tasks pertaining to the production, distribution, processing, preservation, conservation, and storage of fruit products. Utilizing the Internet of Things (IoT) capabilities is becoming more and more essential for transforming these firms operations. Real-time supply chain process visualization, data collection and company development monitoring are made easier by IoT. Its application in the food sector is especially notable since it helps to ensure food quality, manage unanticipated variability, minimize food waste, and maintain safety requirements. topics of this research project, which focuses on the fruit preservation sector. Ethylene gas and a certain temperature are required for seasonal fruit ripening. To ensure food quality and safety during storage, cold storage a crucial component of food safety management needs careful control over temperature, relative humidity (RH), and air quality in cold rooms (CSR). The use of multifunctional sensors in the Rasberry Pie, which is an IoT-based control system, presents a viable alternative for managing fruit quality after harvest.

No. of Pages : 9 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2024
(21) Application No.202421051531 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MULTI-FACTOR AUTHENTICATION DOOR LOCKING SYSTEM

(51) International classification	:G07C0009000000, G07C0009270000, G06F0021310000, E05B0047000000, G07F0007100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. D. Y. Patil Institute of Technology, Pimpri, Pune
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Prof. Rajashree Bhokare
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
2)Dr. Anshu Sharma
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
3)Rohidas Anantkavlas
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
4)Tejas Gharwade
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
5)Rishikesh Narte
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------
6)Akshay Mujmule
Address of Applicant :Dr. D. Y. Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune Pune ---------- ----------

(57) Abstract :
The present invention relates to a multi-factor authentication door locking system designed to enhance security through the integration of multiple authentication methods. This system comprises a door lock mechanism controlled by an electronic locking unit, which incorporates several authentication modules including biometric recognition (fingerprint, iris scan, facial recognition), personal identification number (PIN) input, and wireless communication with personal devices (e.g., smart-phones, smart-watches). The locking system ensures that access is granted only when multiple factors are verified, providing robust protection against unauthorized entry. The system is equipped with a central processing unit (CPU) that coordinates the authentication process. It verifies input data from various sensors and devices, cross-references them with stored credentials, and activates the locking mechanism if the authentication is successful. Additionally, the system includes a remote monitoring feature, allowing users to manage access and receive alerts via a connected mobile application. This invention addresses the limitations of traditional single-factor authentication methods, offering an advanced security solution suitable for residential, commercial, and institutional applications. The multi-factor authentication door locking system aims to mitigate security breaches and enhance user confidence in the protection of their premises. Furthermore, the system's modular design facilitates future upgrades and integration with emerging technologies, ensuring its adaptability and long-term utility.

No. of Pages : 13 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2024

(21) Application No.202421051537 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD AND SYSTEM FOR SECURE CHATBOT-ASSISTED LEARNING IN EDUCATIONAL ENVIRONMENTS

(51) International classification :G06Q0050200000, H04L0051020000, G09B0007000000, G06F0021620000, G06Q0010100000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)DHAIRYA VYAS
Address of Applicant :C 289 Swaminarayan Nagar Behind Nizampura Depo ---------- ----------
2)Himani S. Patel
3)Gangadiya Harsha
4)Ami M Patel
5)Sachin Patel
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DHAIRYA VYAS
Address of Applicant :C 289 Swaminarayan Nagar Behind Nizampura Depo ---------- ----------
2)Himani S. Patel
Address of Applicant :Assistant Professor Computer Engineering Department, Gujarat Power Engineering and research institute Ahmedabad ---------- ----------
3)Gangadiya Harsha
Address of Applicant :OSD Assistant Professor Gujarat Power Engineering and research institute Ahmedabad ---------- ----------
4)Ami M Patel
Address of Applicant :Lecturer in computer Engineering Department, Sal institute of technology Ahmedabad ---------- ----------
5)Sachin Patel
Address of Applicant :Project Officer, Entrepreneurship Development Institute of India Ahmedabad ---------- ----------

(57) Abstract :
The present invention relates to a method and system for secure chatbot-assisted learning in educational environments, aiming to revolutionize the way educational content is delivered and interacted with by students. The system integrates advanced artificial intelligence (AI) and machine learning algorithms with robust security protocols to create a personalized, interactive, and safe learning experience. The chatbot operates within a secure, encrypted framework that ensures the privacy and integrity of student data, adhering to stringent data protection regulations. It is designed to understand and respond to a wide range of student queries, providing instant feedback and assistance in real-time. The chatbot can tailor educational content to individual learning styles and paces, thereby enhancing comprehension and retention. Additionally, the system includes a sophisticated monitoring and analytics tool that tracks student progress and engagement, providing educators with valuable insights to refine teaching strategies. The secure nature of the chatbot interaction is further bolstered by multi-factor authentication, ensuring that only authorized users can access the system. This secure educational platform supports various forms of content, including text, audio, and video, and is accessible across multiple devices, making learning flexible and convenient. The invention also incorporates features to facilitate collaborative learning, enabling students to engage in group discussions and projects within a secure digital environment. By addressing the critical need for security in digital education tools, this method and system not only enhance the learning experience but also build trust among users, paving the way for widespread adoption in schools, colleges, and other educational institutions.

No. of Pages : 10 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2024
(21) Application No.202421051546 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : FOOT INCLINOMETER

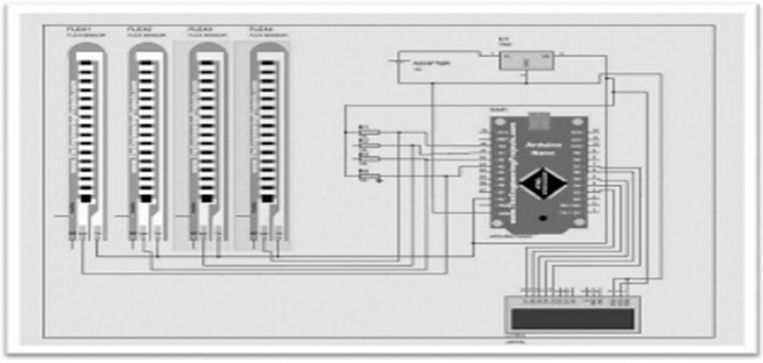
(51) International classification :A61B5/103, A61B5/107
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Siddhi Zabak
Address of Applicant :dvvpf's college of physiotherapy ---------- ----------
2)Dr. Shyam D. Ganvir
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Siddhi Zabak
Address of Applicant :dvvpf's college of physiotherapy ---------- ----------
2)Dr. Shyam D. Ganvir
Address of Applicant :Block-D, Vithalrao Vikhe Patil memorial hospital campus opp. Govt, Milk Dairy, Vadgaon Gupta, M.I.D.C., Ahmednagar Ahmednagar ---------- ----------

(57) Abstract :
ABSTRACT 1) TITLE OF INVENTION: Foot inclinometer 2) Fild of Invention: In Medical and community use to check the foot posture in all age group. 3) BACKGROUND OF INVENTION WITH REGARD TO THE DRAWBACK ASSOCIATED WITH KNOWN ART: Currently there are not many devices to easily measure the foot posture of individuals in the market. Foot is the most important part of mobility and balance in our body. Understanding the significance of proper foot alignment and adopting strategies to maintain it can have a profound impact on our body. Poor foot posture can lead to a chain reaction of misalignments throughout the body, affecting the ankles, knees, hips, spine, and even the neck. Foot posture problems include high arches (supination), flat feet (pronation), and Normal variation. Each ailment has a unique combination of signs and symptoms as well as effects on posture. For instance, supination can result in ankle sprains, stress fractures, and lower back pain, whereas overpronation can result in ankle instability, knee pain, and hip misalignment. Individuals can take proactive measures to address these issues and lessen their impact by being aware of them. The device is based on hypothesis: A hypothesis that foot posture assessment tool is able to detect significant deviation from normal. Foot inclinometer is designed to measure the foot posture more accurately, reducing the manual error which commonly occurs in subjective assessment tool like FPI-6. Most of the physicians are still relying on subjective assessment which are not quantifiable. Working principal: At power on device system will be ON, the operator will give command the patient to stand on the sole (blue is for right foot and black is for left foot) and operator will stick the sensor to Achilles tendon, and calibrate the device and ask the patient to stand still for a min, and the device will show the reading weather the foot is pronated, supinated or neutral and will display. The objective of the device is to make easy operated, low costing unit for measuring foot posture, The device will measure the foot posture through a series of pre-feeded program into software. It is a simple effective device which is made with minimal equipment and easy to operate. 4) OBJECTIVE OF INVENTION: Foot inclinometer device is constructed with following objective to construct a) Cost effective and portable assessment device b) Construct a less space occupying and easily operated device c) Device for diagnostic purpose for foot posture in adults and geriatric d) “Make in India" product for Indian People 5) STATEMENT OF INVENTION: To predict foot posture in individuals using to Foot inclinometer. 6) SUMMARY OF INVENTION – Siddhi S. Zabak, Dr. Shyam D. Ganvir, from Ahmednagar, Maharashtra has made an invention related to – Foot posture assessment i.e. Foot inclinometer it is cost effective, portable, easy in clinical set ups. This device will measure the foot posture of individuals of all ages via sensors.

Foot inclinometer

Fig 1: Circuit Diagram of the device



No. of Pages : 8 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/07/2024
(21) Application No.202421051268 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SANDAL WITH MAGNETIC TRAPEZOIDAL FRAME AND REMOVABLE HEEL ATTACHMENTS

(51) International classification	:A43B0003120000, A43B0003240000, A43B0003100000, E05C0019160000, H02K0001170000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)TWO BROS CONVERTIBLES APPAREL PRIVATE LIMITED
Address of Applicant :2nd Floor, Universal Computer College Building, in front of SP Bungalow, Barapatther, Seoni, Madhya Pradesh - 480661 Seoni ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)YASHRAJ HEDAU
Address of Applicant :Near Ganesh Mandir, Prithviraj Chouhan Ward, Bhairoganj, Seoni, Madhya Pradesh - 480661 Seoni ---------- ----------
2)SHIVAM NIGAM
Address of Applicant :Universal Computer College, Barapather, Seoni, Madhya Pradesh - 480661 Seoni ---------- ----------

(57) Abstract :
A convertible sandal with a magnetic trapezoidal frame and removable heel attachments that allows the user to effortlessly transition between several heel attachments. The convertible sandal includes a trapezoidal frame screwed to the outsole of the sandal, consisting of four small cavities on its outside, where circular-shaped magnets will be affixed. Aligning the longitudinal cuboidal cavity present inside the heel attachment to the bottom of the trapezoidal frame will securely connect the steel plates affixed to the heel attachment with the four magnets present on the trapezoidal frame. In order to detach the heel attachment from the sandal, a sliding force would needed to be exerted to as to slide the magnets with the steel plates present on the heel attachment, to disengage the magnetic lock. This versatile design combines comfort, style, and functionality, offering a practical solution for varied footwear needs.

No. of Pages : 12 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/07/2024

(21) Application No.202428051102 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ELECTRODE SHEET, AND ELECTROCHEMICAL DEVICE AND ELECTRONIC DEVICE COMPRISING SAME

(51) International classification	:H01M0004360000, H01M0010052500, H01M0010040000, H01M0004620000, H01M0004130000
(31) Priority Document No	:202227046354
(32) Priority Date	:16/08/2022
(33) Name of priority country	:----------
(86) International Application No Filing Date	:PCT/CN2020/082932 :02/04/2020
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filed on	:202227046354 :16/08/2022

(71)**Name of Applicant :**
1)Ningde Amperex Technology Limited
Address of Applicant :No.1 Xingang Road Zhangwan Town, Jiaocheng District, Ningde City, Fujian Province, 352100, China ---------- ----------
2)Dongguan Amperex Technology Limited
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Baozhang LI
Address of Applicant :No.1 Xingang Road, Zhangwan Town, Jiaocheng District, Ningde City, Fujian Province, 352100, People's Republic of China ---------- ----------

(57) Abstract :
ABSTRACT ELECTRODE SHEET, AND ELECTROCHEMICAL DEVICE AND ELECTRONIC DEVICE COMPRISING SAME An electrode sheet includes a current collector having a first surface, a first active material layer, a second active material layer having a second active material and an insulation layer. The first active material layer is provided between the current collector and the second active material layer, and covers a first portion of the first surface of the current collector; the insulation layer covers a second portion of the first surface of the current collector. , which is different from the first portion; in the length direction of the electrode sheet, the first active material layer includes a first end and a second end, the insulation layer includes a third end and a fourth end. The first end and the third end are stacked together to form an overlap portion. Fig. 1.

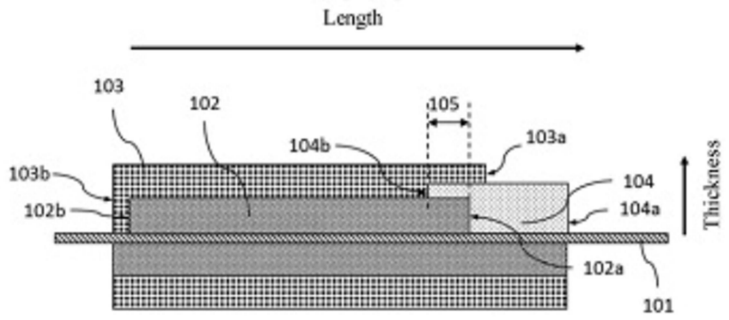


FIG. 1

No. of Pages : 44 No. of Claims : 25

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :05/07/2024

(21) Application No.202421051551 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : PHOTOCATALYTIC NANO MATERIAL FOR EFFICIENT REMOVAL OF ORGANIC POLLUTANTS FROM WATER

(51) International classification :B82Y30/00, B82Y40/00, B01J35/45, B01J35/39, C01G23/047
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)DR. VAIBHAV SURESH ADHAO
Address of Applicant :PROFESSOR, DEPARTMENT OF PHARMACEUTICAL SCIENCES, DR. RAJENDRA GODE COLLEGE OF PHARMACY, MALKAPUR BULDANA ROAD, MALKAPUR, DIST. BULDANA, MAHARASHTRA - 443101, INDIA. ---------- ----------
2)DR. RAJU RAMESH THENGE
3)MR. RITESH RAMESH POPAT
4)MS. JAYA PRAKASH AMBHORE
5)MS. KIRAN PRALHAD GAIKWAD
6)MS. CHANCHAL SANTOSH CHANDAK
7)MR. NISHANT BHIKAJI CHOPADE
8)MS. RUCHA MILIND CHOPADE
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. VAIBHAV SURESH ADHAO
Address of Applicant :PROFESSOR, DEPARTMENT OF PHARMACEUTICAL SCIENCES, DR. RAJENDRA GODE COLLEGE OF PHARMACY, MALKAPUR BULDANA ROAD, MALKAPUR, DIST. BULDANA, MAHARASHTRA - 443101, INDIA. ---------- ----------
2)DR. RAJU RAMESH THENGE
Address of Applicant :PROFESSOR, DEPARTMENT OF PHARMACEUTICAL SCIENCES, DR. RAJENDRA GODE COLLEGE OF PHARMACY, MALKAPUR BULDANA ROAD, MALKAPUR, DIST. BULDANA, MAHARASHTRA - 443101, INDIA. ---------- ----------
3)MR. RITESH RAMESH POPAT
Address of Applicant :ASSOCIATE PROFESSOR, DEPARTMENT OF PHARMACEUTICAL SCIENCES, DR. RAJENDRA GODE COLLEGE OF PHARMACY, MALKAPUR BULDANA ROAD, MALKAPUR, DIST. BULDANA, MAHARASHTRA - 443101, INDIA. ---------- ----------
4)MS. JAYA PRAKASH AMBHORE
Address of Applicant :ASSOCIATE PROFESSOR, DEPARTMENT OF PHARMACEUTICAL SCIENCES, DR. RAJENDRA GODE COLLEGE OF PHARMACY, MALKAPUR BULDANA ROAD, MALKAPUR, DIST. BULDANA, MAHARASHTRA - 443101, INDIA. ---------- ----------
5)MS. KIRAN PRALHAD GAIKWAD
Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF PHARMACEUTICAL SCIENCES, DR. RAJENDRA GODE COLLEGE OF PHARMACY, MALKAPUR BULDANA ROAD, MALKAPUR, DIST. BULDANA, MAHARASHTRA - 443101, INDIA. ---------- ----------
6)MS. CHANCHAL SANTOSH CHANDAK
Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF PHARMACEUTICAL SCIENCES, DR. RAJENDRA GODE COLLEGE OF PHARMACY, MALKAPUR BULDANA ROAD, MALKAPUR, DIST. BULDANA, MAHARASHTRA - 443101, INDIA. ---------- ----------
7)MR. NISHANT BHIKAJI CHOPADE
Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF PHARMACEUTICAL SCIENCES, DR. RAJENDRA GODE COLLEGE OF PHARMACY, MALKAPUR BULDANA ROAD, MALKAPUR, DIST. BULDANA, MAHARASHTRA - 443101, INDIA. ---------- ----------
8)MS. RUCHA MILIND CHOPADE
Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF PHARMACEUTICAL SCIENCES, DR. RAJENDRA GODE COLLEGE OF PHARMACY, MALKAPUR BULDANA ROAD, MALKAPUR, DIST. BULDANA, MAHARASHTRA - 443101, INDIA. ---------- ----------

(57) Abstract :
This invention relates to photocatalytic nanomaterials for efficient water purification, addressing the removal of organic pollutants. It involves nitrogen-doped titanium dioxide (TiO_2) nanoparticles, extending light absorption to the visible spectrum and enhancing photocatalytic performance under natural sunlight. The invention includes composite materials combining TiO_2 with graphene to prevent aggregation and improve electron transport. These materials are immobilized on porous supports to ensure stability and environmental safety. Methods for synthesizing these nanomaterials using sol-gel processes and integrating them into continuous-flow reactors are detailed. The invention provides scalable, cost-effective solutions for municipal wastewater treatment, offering significant environmental and economic benefits.

No. of Pages : 27 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :14/07/2024
(21) Application No.202421053634 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : PRE-FILLABLE MULTI-CHAMBER SYRINGE FOR DELIVERING BENEFICIAL AGENTS

(51) International classification :A61M5/00, A61M5/32, A61M5/315, A61M5/178, A61M5/24
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)DR NILESH N. GOYAL
Address of Applicant :502, Asmita, Meeta Kunj CHSL, 14th Road, Khar West, Mumbai 400052, MAH, India MUMBAI ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR NILESH N. GOYAL
Address of Applicant :502, Asmita, Meeta Kunj CHSL, 14th Road, Khar West, Mumbai 400052, MAH, India MUMBAI ---------- ----------

(57) Abstract :
ABSTRACT Pre-Fillable Multi-Chamber Syringe for Delivering Beneficial Agents The present invention discloses a pre-fillable multi-chamber syringe (100) for delivery of beneficial agents, the syringe (100) has a tubular body (10) extending from a proximal end (12) to a distal end (14) and has a distally movable intermediate plunger (16) disposed therein. The tubular body (10) has a top chamber (20) having a first beneficial agent; and a bottom chamber (30) separated from the top chamber (20) by the distally moveable intermediate plunger (16), the bottom chamber (30) having a second beneficial agent expellable through a needle hub (32).

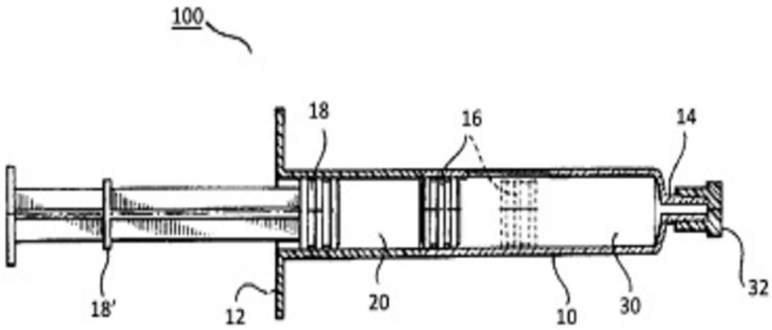


Figure 1

No. of Pages : 18 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :14/07/2024
(21) Application No.202421053649 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN INTEGRATED DRIVE SYSTEM FOR ELECTRIC VEHICLES WITH ENHANCED EFFICIENCY AND PERFORMANCE

(51) International classification :B60L15/20, B60L50/60, B60L50/52
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Mr. Darshan Upendrabhai Thakar
Address of Applicant :Assistant Professor, Electrical Engineering Department, Government Engineering College, Modasa, Pin: 383315, Gujarat, India. ---------- ----------
2)Ms. P. Sudeepika
3)Dr. Vijaykumar Sidramappa Biradar
4)Nimmala Mahesh
5)Mr. Balu Mahandiran S
6)Pantrangi Sathish Kumar
7)Talari Manohar
8)Dr. Jaghannath. K
9)Dr. Belsam Jeba Ananth. M
10)Dr. Ganesh D. Shingade
11)Dr. Harikumar Pallathadka
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr. Darshan Upendrabhai Thakar
Address of Applicant :Assistant Professor, Electrical Engineering Department, Government Engineering College, Modasa, Pin: 383315, Gujarat, India. ---------- ----------
2)Ms. P. Sudeepika
Address of Applicant :Assistant Professor, Anantha Lakshmi Institute of technology and Sciences, Near S.K. University, Itikalapalli(V), Anantapuramu, Pin: 515721, Andhra Pradesh, India. ---------- ----------
3)Dr. Vijaykumar Sidramappa Biradar
Address of Applicant :Associate Professor, N B Navale Sinhgad College of Engineering, Opposite PAH Solapur, University Solapur, Solapur, Pin: 413255, Maharashtra, India. ---------- ----------
4)Nimmala Mahesh
Address of Applicant :Assistant Professor, Pallavi Engineering College, Survey No.209, Swathi Residency Road Kuntloor, Hayathnagar, Kuntloor Village, Hyderabad, Ranga Reddy, Pin:501505, Telangana, India. ---------- ----------
5)Mr. Balu Mahandiran S
Address of Applicant :Assistant Professor, Sri Krishna College of Engineering and Technology, Coimbatore, Pin: 641008, Tamilnadu, India. ---------- ----------
6)Pantrangi Sathish Kumar
Address of Applicant :Assistant Professor, SOET, Sri Padmavathi Mahila Visvavidyalayam, Tirupati, Pin:517502, Andhra Pradesh, India. ---------- ----------
7)Talari Manohar
Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, Anantha Lakshmi Institute of Technology and Sciences, Ananthapuramu, Pin:515721, Andhra Pradesh, India. ---------- ----------
8)Dr. Jaghannath. K
Address of Applicant :Associate Professor, SVS Group of Institutions Hanamkonda, Warangal(U), Pin:506015, Telangana, India. ---------- ----------
9)Dr. Belsam Jeba Ananth. M
Address of Applicant :Associate Professor, Department of Mechatronics Engineering, SRM Institute of Science and Technology, Kattankulathur, Chengalpattu, Pin: 603203, Tamil Nadu, India. ---------- ----------
10)Dr. Ganesh D. Shingade
Address of Applicant :Assistant Professor, MGM University, Jawaharlal Nehru Engineering College, Chh. Sambhajinagar, Chhatrapati Sambhajinagar, Pin:431003, Maharashtra, India. ---------- ----------
11)Dr. Harikumar Pallathadka
Address of Applicant :Director and Professor, Manipur International University, Ghari, Imphal, Imphal West, Pin: 795140, Manipur, India. ---------- ----------

(57) Abstract :
The integrated drive system for electric vehicles described herein represents an advancement in EV technology, combining advanced components and optimized control strategies to achieve superior efficiency and performance. Central to the system are high-efficiency electric motors, power electronics, a sophisticated battery management system, and a dedicated thermal management system, all seamlessly integrated to minimize energy losses and maximize power utilization. Advanced control algorithms govern power distribution and optimize driving dynamics, enhancing acceleration, speed capabilities, and overall energy efficiency. Additionally, the system features a regenerative braking mechanism to recover kinetic energy and extend driving range per charge. Modular and scalable, the system adapts to various vehicle types and applications, offering a versatile solution for enhancing the sustainability and competitiveness of electric vehicles in the automotive market.

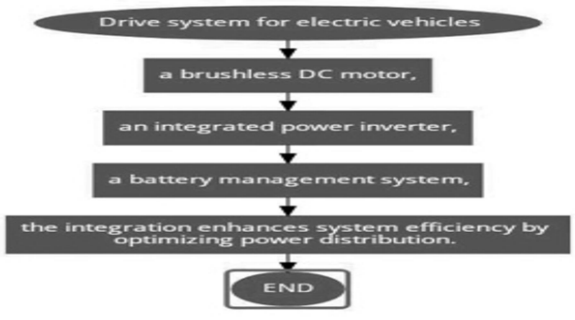


Fig. 1 Drive system for electric vehicles

No. of Pages : 17 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/05/2024
(21) Application No.202427041625 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SOLID BIO-PESTICIDAL COMPOSITION

(51) International classification	:A01N0043400000, A01N0043220000, A01N0043900000, A01N0051000000, A01N0043560000
(31) Priority Document No	:202221074778
(32) Priority Date	:23/12/2022
(33) Name of priority country	:----------
(86) International Application No Filing Date	:PCT/IN2023/051216 :23/12/2023
(87) International Publication No	:WO 2024/134687
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)RATHOD, Rajiv
Address of Applicant :C 53, Vrund Residency, Laxmipura, Gorwa, Vadodara (Gujarat) 390016 ---------- ----------
2)DOSHI, Hiteshkumar Anilkant
3)PUTHENVEETIL KUNJUKRISHNA MENON, Ramdas
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)RATHOD, Rajiv
Address of Applicant :C 53, Vrund Residency, Laxmipura, Gorwa, Vadodara (Gujarat) 390016 ---------- ----------
2)DOSHI, Hiteshkumar Anilkant
Address of Applicant :801 Anmol Residency, Opp. Singhania School, Pokharan Road No. 1, Samata Nagar Thane (Maharashtra) 400 606 ---------- ----------
3)PUTHENVEETIL KUNJUKRISHNA MENON, Ramdas
Address of Applicant :Flat No. 403, Elegant Bldg, Plot No. 18-D, Sector 14, Sanpada Navi Mumbai, 400705 ---------- ----------

(57) Abstract :
The present invention relates to a synergistic solid bio-pesticidal composition comprising: elemental Sulphur in range of 5%w/w to 90% w/w of total composition; Azadirachtin in range of 0.01%w/w to 20% w/w of total composition; and an insecticidal active selected from Chlorantraniliprole, Clothianidin, Emamectin Benzoate, Flonicamid, Imidacloprid, Novaluron, Pyriproxyfen, Pyridalyl, Spinetoram, Spinosad, Spiromesifen, and Thiamethoxam; or salt thereof in range of 0.1%w/w to 50% w/w of total composition; and one or more agrochemically inactive excipients. The bio-pesticidal composition comprises particles in the size range of 0.1 micron to 50 microns. The invention further relates to a method of treating a plant, crop, plant propagation material, locus or parts thereof or the soil with the solid bio-pesticidal composition of the present invention.

No. of Pages : 110 No. of Claims : 17

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/01/2023

(21) Application No.202341001057 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : Insertion device and method of working of the insertion device

(51) International classification :A61B1/00, A61B1/267, A61B5/06, A61M16/04
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)JAWAHARLAL INSTITUTE OF POSTGRADUATE MEDICAL EDUCATION AND RESEARCH (JIPMER)
Address of Applicant :Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Dhanvantri Nagar, Gorimedu, Puducherry, India - 605 006 Gorimedu ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)VASANTHAN TANIGASALAM
Address of Applicant :9, 4th cross street, Dr. Radhakrishnan Nagar, Moolakulam, Puducherry, India - 605010 Moolakulam ---------- ----------

(57) Abstract :
Disclosed is a fixed member (102) that comprising one or more markings (108), and a moving member (104) that is positioned in the fixed member (102) such that the moving member (104) is adapted to move along a length of the fixed member (102), the moving member (104) comprising a bulb (106) that is positioned on a distal end (110) of the moving member (104) a locking means (114) that is positioned on a proximal end (112) of the moving member (104) such that the locking means (114) is adapted to Unlock the moving member (104) upon a user hold a knob (116), and Lock the moving member (104) upon the user releases the knob (116), at an adjacent to a respective marking of the one or more markings (108). The present disclosure also relates a method (200) of working of an insertion device (100). Figure 1.

No. of Pages : 16 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/07/2023
(21) Application No.202341047808 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A COMPUTER-IMPLEMENTED SYSTEM AND METHOD FOR ADVERTISEMENT MONETIZATION

(51) International classification	:G06Q0030020000, G06Q0030060000, G06Q0030000000, H04L0012400000, H04W0016140000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)PEPPTY TECHNOLOGIES PRIVATE LIMITED
Address of Applicant :9-6-192, Ramnagar, Karimnagar - 505001 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)NANDAGIRI AKHILESH
Address of Applicant :9-6-192, Ramnagar, Karimnagar - 505001 ---------- ----------

(57) Abstract :
7. ABSTRACT The present invention discloses a computer-implemented system for advertisement monetization, optimizes ad revenue and user engagement through a comprehensive set of modules. Central to the system is a database module storing advertisement IDs, network settings, and publisher preferences, facilitating efficient management and retrieval of ad-related data. A control module provides a user interface for managing advertisement settings, while an optimization module dynamically prioritizes ad networks based on real-time metrics, historical data and publisher preferences. A mediation module serves as a central hub, processing ad requests according to prioritization set by the optimization module. A reporting module generates detailed reports on ad performance, revenue, and fill rates for each integrated ad network. An Ad load rate control module manages ad request frequency to balance ad load and optimize revenue. This innovative system empowers publishers with tools for strategic ad network management, enhancing transparency, control, and revenue generation in digital advertising. The figure associated with abstract is Fig. 1.

No. of Pages : 22 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :21/07/2023
(21) Application No.202341049316 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR REMOTE PROGRAMMING AND SETUP OF ROBOTIC ARMS USING 3D VISUALIZATION

(51) International classification	:B25J9/16, G06V20/70, G06V20/80, G06T7/00, G06T17/00
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)TENSRAI TECHNOLOGIES PRIVATE LIMITED
Address of Applicant :Flat No 304, 7-2-1773/304, East Crest Apartment, Bunglow 37/A, Sanathnagar, Hyderabad, Telangana-500018, India. Hyderabad ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SAI NIKHIL RAO GONA
Address of Applicant :Flat No 304, 7-2-1773/304, East Crest Apartment, Bunglow 37/A, Sanathnagar, Hyderabad, Telangana-500018, India. Hyderabad ---------- ----------
2)CHALAMALASETTY VENKATA SAI CHARAN
Address of Applicant :1-60/5/ Aspire-A/503, Madhapur, Near lnorbit Mall Road, VTC: Madhapur, PO: Madhapur, Sub District: Serilingampally, District: K.v. Rangareddy, State: Telangana, PIN Code: 500081. Rangareddy ---------- ----------

(57) Abstract :
Exemplary embodiments of the present disclosure are directed towards a system and method for remote programming and setup of robotic arms using 3D visualization. The system includes robotic arm with motors and encoders transmitting positional data to controller device. controller device, equipped with 3D cameras, captures RGB and depth images to create 3D visualization environment. Microcontroller and processing device calibrate the cameras, track the robotic arm, and plan its path using inverse kinematics and path planning algorithms. Users can program and control the robotic arm remotely via a cloud server and user interfaces on computing devices. The remote programming module enables users to select waypoints, input pose and joint control messages, simulate movements in a virtual environment, and adjust paths based on simulations. The finalized control commands are transmitted to the robotic arm controller device for execution, facilitating precise and efficient remote operation of the robotic arm. FIG. 1.

No. of Pages : 40 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :21/07/2023
(21) Application No.202341049318 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : LIDAR SYSTEM AND METHOD FOR AUTONOMOUS MOBILE ROBOTS

(51) International classification	:G01S0007481000, G05D0001020000, H05K0009000000, G01S0017420000, G01S0017931000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)TENSRAI TECHNOLOGIES PRIVATE LIMITED
Address of Applicant :Flat No 304, 7-2-1773/304, East Crest Apartment, Bunglow 37/A, Sanathnagar, Hyderabad, Telangana-500018, India. Hyderabad ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SAI NIKHIL RAO GONA
Address of Applicant :Flat No 304, 7-2-1773/304, East Crest Apartment, Bunglow 37/A, Sanathnagar, Hyderabad, Telangana-500018, India. Hyderabad ---------- ----------
2)CHALAMALASETTY VENKATA SAI CHARAN
Address of Applicant :1-60/5/ Aspire-A/503, Madhapur, Near lnorbit Mall Road, VTC: Madhapur, PO: Madhapur, Sub District: Serilingampally, District: K.v. Rangareddy, State: Telangana, PIN Code: 500081 Rangareddy ---------- ----------

(57) Abstract :
Exemplary embodiments of the present disclosure pertain to a Lidar system and method for autonomous mobile robots, which includes an autonomous mobile robot featuring a payload deck that houses support legs. The system comprises multiple quasi-industrial 2D LIDAR units strategically positioned beneath the payload deck, enabling complete 360-degree coverage for detecting raw LIDAR scan data. A processing device processes this data, determining the positions of the support legs using pre-calibrated values. The processing device identifies and removes the corresponding distance values of the support legs from the scan data to enhance data integrity. Utilizing a DBSCAN clustering algorithm, the system effectively identifies LIDAR point clusters. It establishes threshold values to filter sudden noise or disturbances and calculates variations in distance readings between successive time steps. The iterative filtering process facilitates comprehensive noise removal, improving the reliability of LIDAR data for autonomous navigation and obstacle avoidance. FIG. 1A&FIG.2A.

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :21/07/2023
(21) Application No.202341049324 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : INDOOR AND OUTDOOR NAVIGATION SYSTEM FOR AUTONOMOUS MOBILE ROBOTS AND METHOD EMPLOYED THEREOF

(51) International classification	:G05D0001020000, G01C0021200000, G01C0021160000, B25J0009160000, G01S0017860000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)TENSRAI TECHNOLOGIES PRIVATE LIMITED
Address of Applicant :Flat No 304, 7-2-1773/304, East Crest Apartment, Bunglow 37/A, Sanathnagar, Hyderabad, Telangana-500018, India. Hyderabad ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SAI NIKHIL RAO GONA
Address of Applicant :Flat No 304, 7-2-1773/304, East Crest Apartment, Bunglow 37/A, Sanathnagar, Hyderabad, Telangana-500018, India. Hyderabad ---------- ----------
2)CHALAMALASETTY VENKATA SAI CHARAN
Address of Applicant :1-60/5/ Aspire-A/503, Madhapur, Near lnorbit Mall Road, VTC: Madhapur, PO: Madhapur, Sub District: Serilingampally, District: K.v. Rangareddy, State: Telangana, PIN Code: 500081 Rangareddy ---------- ----------

(57) Abstract :
Exemplary embodiments of the present disclosure are directed towards an indoor and outdoor navigation system for autonomous mobile robots and the methods employed therein. The system comprises a mobile robot equipped with sensors, including IMU, encoders, GPS, and a 3D camera, all managed by a processing device. During indoor navigation, the device utilizes an extended Kalman filter for precise odometry estimation, adapting to outdoor mode with an additional clearance base. User-defined waypoints guide the robot, supported by safety lanes generated through a lane generation algorithm to prevent off-roading in mapless environments. Visual markers facilitate odometry correction for enhanced accuracy, while map-based navigation employs 2D LIDAR sensors for environment mapping. Safety is ensured through obstacle detection and ground removal algorithms, with alerts transmitted via IoT protocols upon detecting obstacles beyond designated safety lanes, thereby enhancing navigation reliability and safety. FIG. 1.

No. of Pages : 47 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :21/07/2023
(21) Application No.202341049350 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTONOMOUS MAPPING SYSTEM WITH HUMAN FEEDBACK FOR AUTONOMOUS MOBILE ROBOTS AND METHOD EMPLOYED THEREOF

(51) International classification :G05D1/02, H04W4/021
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)TENSRAI TECHNOLOGIES PRIVATE LIMITED
Address of Applicant :Flat No 304, 7-2-1773/304, East Crest Apartment, Bunglow 37/A, Sanathnagar, Hyderabad, Telangana-500018, India. Hyderabad ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SAI NIKHIL RAO GONA
Address of Applicant :Flat No 304, 7-2-1773/304, East Crest Apartment, Bunglow 37/A, Sanathnagar, Hyderabad, Telangana-500018, India. Hyderabad ---------- ----------
2)CHALAMALASETTY VENKATA SAI CHARAN
Address of Applicant :1-60/5/ Aspire-A/503, Madhapur, Near lnorbit Mall Road, VTC: Madhapur, PO: Madhapur, Sub District: Serilingampally, District: K.v. Rangareddy, State: Telangana, PIN Code: 500081 Rangareddy ---------- ----------
3)UPPALAPATI HARSHITH
Address of Applicant :Flat No 304, 7-2-1773/304, East Crest Apartment, Bunglow 37/A, Sanathnagar, Hyderabad, Telangana-500018, India. Hyderabad ---------- ----------

(57) Abstract :
Exemplary embodiments of the present disclosure are directed towards an autonomous mapping system designed for autonomous mobile robots, integrating human feedback to enhance exploration and mapping capabilities. The system comprises an autonomous mobile robot equipped with cameras and sensors for capturing environmental data, along with a processing device executing SLAM, frontier detection, and auto-exploration algorithms to autonomously map environments. A computing device, linked to both the robot and a cloud server via a network, features an auto mapping monitoring and controlling module. This module utilizes captured images to create a comprehensive top-down view, applying perspective transform and image stitching algorithms. It facilitates real-time user feedback and commands, enabling users to guide the robot, define virtual no-go zones, and adjust exploration velocities remotely. The processing device of the robot integrates these inputs to dynamically adapt its exploration strategies, including halting, recalibration, and adjusting navigational constraints based on real-time user interactions. FIG. 1.

No. of Pages : 34 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2023
(21) Application No.202341050240 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A TACTILE GLOVE FOR CUTTING HARD OBJECTS

(51) International classification	:B23K0026380000, B23K0026700000, B23K0026080000, B23K0103000000, B23K0026064000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)ADITI ROY
Address of Applicant :R/o: 166, Dhanlakshmi Society, Mahendra Hills, East Marredpally, Secunderabad-500026, Telangana, India Secunderabad ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)ADITI ROY
Address of Applicant :R/o: 166, Dhanlakshmi Society, Mahendra Hills, East Marredpally, Secunderabad-500026, Telangana, India Secunderabad ---------- ----------

(57) Abstract :
The present embodiment provides a tactile glove for cutting hard objects. The tactile glove includes a laser cutting unit, and a laser positioning unit. The laser cutting unit further includes a laser diode, a power source and a control switch. The laser diode is responsible for cutting the hard objects. The laser positioning unit helps in the proper positioning of the laser beam.

No. of Pages : 26 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/07/2023
(21) Application No.202341050919 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A MULTIPLE CONTEXTUAL INFORMATION-BASED ADAPTIVE DEEP LEARNING FOR CONTROLLABLE MAGNETIC RESONANCE IMAGE RECONSTRUCTION

(51) International classification	:A61B5/055, A61B6/03, G06N3/045, G06N3/08, G06T11/00, G06T7/00, G16H30/20, G16H30/40
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)INDIAN INSTITUTE OF TECHNOLOGY MADRAS (IIT MADRAS)
Address of Applicant :The Dean, Industrial Consultancy & Sponsored Research (IC&SR), Indian Institute of Technology Madras, Sardar Patel Road, IIT Post, Chennai 600 036, Tamil Nadu, India Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Mohanasankar Sivaprakasam
Address of Applicant :Department of Electrical Engineering, IIT Madras, Chennai 600036, Tamil Nadu, India Chennai ---------- ----------
2)Sriprabha Ramanarayanan
Address of Applicant :Indian Institute of Technology Madras, Sardar Patel Road, IIT Post, Chennai 600 036, Tamil Nadu, India Chennai ---------- ----------
3)Keerthi Ram
Address of Applicant :Indian Institute of Technology Madras, Sardar Patel Road, IIT Post, Chennai 600 036, Tamil Nadu, India Chennai ---------- ----------

(57) Abstract :
A MULTIPLE CONTEXTUAL INFORMATION-BASED ADAPTIVE WEIGHT LEARNING NEURAL NETWORK FOR CONTROLLABLE MAGNETIC RESONANCE IMAGE RECONSTRUCTION An MRI image reconstruction system (100) enhances MRI image quality and accuracy by integrating an MRI scanner (102) that maps under-sampled k-space measurements to fully sampled MRI image (106). A deep learning model (108), controlled by a processor (110), drives the reconstruction. This model includes a dynamic weight prediction auxiliary network (112) and a base reconstruction convolutional neural network (118). The auxiliary network (112) processes acquisition context (114) to create context-specific weights (116), which the convolutional network (118) uses to process the under-sampled data (106). This process generates a context-specific fully-sampled MRI image. The final reconstructed MRI image (124) is obtained by utilizing the scanner settings or the acquisition context information together with the acquired under-sampled k-space (104) (Refer FIG. 1A).

No. of Pages : 29 No. of Claims : 18

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/07/2023
(21) Application No.202341050990 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEMS AND METHODS FOR GENERATING USER-PERSONA BASED GEO-SPATIAL INSIGHTS AND RECOMMENDATIONS FOR ASSETS

(51) International classification	:G06N0020000000, G06F0016338000, G06N0005040000, G06F0016953500, G06F0016290000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Talking Lands Technologies Private Limited
Address of Applicant :NEW/330 OLD 271, Ashoka Pillar main road, Jayanagar East, Bengaluru, Bengaluru Urban, Karnataka, 560011, India Bangalore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Sriram Chitlur
Address of Applicant :NEW/330 OLD 271, Ashoka Pillar main road, Jayanagar East, Bengaluru, Bengaluru Urban, Karnataka, 560011, India Bangalore ---------- ----------
2)Giridhara Madakashira
Address of Applicant :NEW/330 OLD 271, Ashoka Pillar main road, Jayanagar East, Bengaluru, Bengaluru Urban, Karnataka, 560011, India Bangalore ---------- ----------
3)Roop Chatterjee
Address of Applicant :NEW/330 OLD 271, Ashoka Pillar main road, Jayanagar East, Bengaluru, Bengaluru Urban, Karnataka, 560011, India Bangalore ---------- ----------

(57) Abstract :
ABSTRACT SYSTEMS AND METHODS FOR GENERATING USER-PERSONA BASED GEO-SPATIAL INSIGHTS AND RECOMMENDATIONS FOR ASSETS A system (100) and method for generating user-persona based geo-spatial insights and recommendations for assets is disclosed. The system (100) receives a request for determining desired assets for an end user from a user device 102 and generates a user-specific persona code for the end user based on the predicted human emotion parameters. Further, the system (100) generates a spatial-temporal chromatic identifier for the end user based on at least one of the determined geo-spatial data and the spatial-temporal data. Further, the system (100) correlates the user-specific persona code with the generated spatial-temporal chromatic identifier using an artificial intelligence-based data orchestration model and predicts the desired assets and predicts dynamic pricing values for each of the predicted desired assets using an artificial-intelligence based pricing model. Furthermore, the system (100) outputs the desired assets and the predicted dynamic pricing values for each of the determined desired assets on a user interface. FIG. 1

No. of Pages : 74 No. of Claims : 32

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/07/2023
(21) Application No.202341051068 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : IMPROVING THE QUALITY OF MAGNETIC RESONANCE SCANS AFFECTIVE BY UNDER-SAMPLING FOR MULTIPLE MRI CONTRASTS

(51) International classification :A61B0005055000, G01R0033560000, G01R0033480000, G01R0033565000, G01R0033561000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)INDIAN INSTITUTE OF TECHNOLOGY MADRAS (IIT MADRAS)
Address of Applicant :The Dean, Industrial Consultancy & Sponsored Research (IC&SR), Indian Institute of Technology Madras, Sardar Patel Road, IIT Post, Chennai 600 036, Tamil Nadu, India Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Mohanasankar Sivaprakasam
Address of Applicant :Department of Electrical Engineering, IIT Madras, Chennai 600036, India Chennai ---------- ----------
2)Arun Palla
Address of Applicant :Healthcare Technology Innovation Centre, IT Madras Research Park, Kanagam Road, Taramani, Chennai - 600113, India Chennai ---------- ----------
3)Sriprabha Ramanarayanan
Address of Applicant :Healthcare Technology, Innovation Centre, IT Madras Research Park, Kanagam Road, Taramani, Chennai - 600113, India Chennai ---------- ----------
4)Keerthi Ram
Address of Applicant :Healthcare Technology Innovation Centre, IT Madras Research Park, Kanagam Road, Taramani, Chennai - 600113, India Chennai ---------- ----------

(57) Abstract :
IMPROVING THE QUALITY OF MAGNETIC RESONANCE SCANS AFFECTIVE BY UNDER-SAMPLING FOR MULTIPLE MRI CONTRASTS An AI-based MRI system (100) reconstructs images of different types of contrasts (like T1, T2 MRI) using several components. The MRI scanner (102) generates scanner measurements (102a), acquires under-sampled data (104a), and provides MRI contrast information (104b). A training data preparation module (106) prepares training data consisting of under-sampled and fully sampled data (104a). A partitioning module (108) partitions this data into support and query datasets for each contrast. The kernel modulation weight prediction network (110), controlled by a processor (112), uses the MRI contrast information (104b) to predict kernel modulation weights. The two-level optimization module (118) iteratively refines the weights of the kernel modulation weight prediction network through inner and outer level corrections using the support and query training data. The base reconstruction CNN module (114), also controlled by the processor (112), applies CNN kernel modulation based on the predicted weights to generate a new contrast-specific K-space (116). Finally, the processor (112) combines the scanner measurements (102a) and the new contrast-specific K-space (116) to reconstruct the final image (120) (Refer FIG. 3A)

No. of Pages : 29 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :31/07/2023
(21) Application No.202341051400 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : FLAT HEAT PIPE WITH MICROCAPILLARY WICK

(51) International classification :F28D0015040000, F28D0015020000, H01L0023427000, B23P0015260000, F28F0001020000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Indian Institute of Technology Madras (IIT Madras)
Address of Applicant :The Dean, Industrial Consultancy & Sponsored Research (IC&SR), Indian Institute of Technology Madras, Sardar Patel Road, IIT Post, Chennai, Tamil Nadu, India 600 036 Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Baburaj, Akkappillil Puthanveettil
Address of Applicant :C11, 3rd Loop Road, Delhi Avenue, IIT Madras, Chennai, 600036, India Chennai ---------- ----------
2)Tripathi, Nitish Kumar
Address of Applicant :Room No. 601, Tamiraparani Hostel, IIT Madras, Chennai, 600036, India Chennai ---------- ----------
3)Atre, Chitransh
Address of Applicant :Room No. 602, Tamiraparani Hostel, IIT Madras, Chennai, 600036, India Chennai ---------- ----------

(57) Abstract :
The present invention relates to a heat transfer device (100) for transporting high amounts of heat from a heat-generating electronic component to the ambient environment. The heat transfer device (100) is in the form of a flat heat pipe capable of transporting heat from an evaporator end (102) to a condenser end (104) thereof. The flat heat pipe (100) includes a sealed cavity accommodating one or more stacks of wick structures (106) formed of an array of micro-capillary tubes (108). This structure prevents the wick structure (106) from being displaced during the operation of the flat heat pipe (100), while enabling entry of vapour from interstices (110) present between the micro-capillary tubes (108) into the tubes (108) at the evaporator end (102), and allowing the condensed fluid at the condenser end (104) to enter the interstices (110). This enhances overall performance and reliability of the flat heat pipe (100)

No. of Pages : 17 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :31/07/2023
(21) Application No.202341051465 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD AND APPARATUS FOR ENHANCING THE SCAN QUALITY OF MAGNETIC RESONANCE (MR) IMAGES

(51) International classification	:G01R0033565000, A61B0005055000, G01R0033560000, G01R0033540000, G01R0033480000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)INDIAN INSTITUTE OF TECHNOLOGY MADRAS (IIT MADRAS)
Address of Applicant :The Dean, Industrial Consultancy & Sponsored Research (IC&SR), Indian Institute of Technology Madras, Sardar Patel Road, IIT Post, Chennai 600 036, Tamil Nadu, India Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Mohanasankar Sivaprakasam
Address of Applicant :Indian Institute of Technology Madras, Sardar Patel Road, IIT Post, Chennai 600 036, Tamil Nadu, India Chennai ---------- ----------
2)Arun Palla
Address of Applicant :Indian Institute of Technology Madras, Sardar Patel Road, IIT Post, Chennai 600 036, Tamil Nadu, India Chennai ---------- ----------
3)Sriprabha Ramanarayanan
Address of Applicant :Indian Institute of Technology Madras, Sardar Patel Road, IIT Post, Chennai 600 036, Tamil Nadu, India Chennai ---------- ----------
4)Keerthi Ram
Address of Applicant :Indian Institute of Technology Madras, Sardar Patel Road, IIT Post, Chennai 600 036, Tamil Nadu, India Chennai ---------- ----------

(57) Abstract :
METHOD AND APPARATUS FOR ENHANCING THE SCAN-QUALITY OF MAGNETIC RESONANCE (MR) IMAGES The present invention focuses on enhancing the scan quality of Magnetic Resonance (MR) images by reducing artifacts through a novel deep learning approach. It introduces a Model-Agnostic Meta-Learning (MAML) framework combined with curriculum learning, enabling the system to adaptively learn and restore multiple types of artifacts, such as noise, motion, and undersampling. The method involves receiving an input MR image, processing it through a trained deep learning model, and applying an iterative scheduler component to progressively reduce the magnitude of artifacts. This technique leverages shared knowledge across various artifact types and fine-tunes restoration processes specific to each artifact during training. By improving the clarity and quality of MR images, the invention aids in better image processing, minimizes the need for patient rescans, and enhances MRI workflow efficiency, ultimately leading to a more effective healthcare system.

No. of Pages : 31 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :01/08/2023
(21) Application No.202341051604 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A PORTABLE ELECTRIC DRIVE UNIT THAT CAN ASSIST BICYCLES ALONG WITH SELF-CHARGING FEATURE

(51) International classification :B60K 010000, B60K 070000, B62K 150000, E05B 852400, H04L 270000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)GMR INSTITUTE OF TECHNOLOGY
Address of Applicant :GMR Nagar, Rajam, Andhra Pradesh Rajam ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MR. GOPA DINESH REDDY
Address of Applicant :Department of Mechanical Engineering, GMR Institute of Technology, GMR Nagar, Rajam, Andhra Pradesh- 532127 Rajam ---------- ----------
2)DR A. LAKSHUMU NAIDU
Address of Applicant :Department of Mechanical Engineering, GMR Institute of Technology, GMR Nagar, Rajam, Andhra Pradesh- 532127 Rajam ---------- ----------
3)MISS. GURANA SASIKALA
Address of Applicant :Department of Mechanical Engineering, GMR Institute of Technology, GMR Nagar, Rajam, Andhra Pradesh- 532127 Rajam ---------- ----------
4)DR. V RAMBABU
Address of Applicant :Department of Mechanical Engineering, GMR Institute of Technology, GMR Nagar, Rajam, Andhra Pradesh- 532127 Rajam ---------- ----------

(57) Abstract :
ABSTRACT A PORTABLE ELECTRIC DRIVE UNIT THAT CAN ASSIST BICYCLES ALONG WITH SELF-CHARGING FEATURE The present invention relates to a portable electric drive unit that can assist bicycles along with self-charging feature. The device comprises electric bicycle which makes use of electric energy as the principal source. An ordinary bicycle can be converted into an e-bike by attaching the present device electrical unit which is affordable than buying the whole e-cycle. It can easily be installed manually with less effort. This is user friendly, economical, eco-friendly, and comparatively cheap. This drive unit can easily be attached and detached based on our convenience. Published with Figure 1

No. of Pages : 26 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :17/08/2023

(21) Application No.202341055089 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : ANALYSIS OF BEHAVIOUR BASED ON TRUST BY AI

(51) International classification	:G06F0016245700, G16H0050200000, G06F0016951000, G06N0020000000, G06F0016903000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)V.RAJAKUMARESWARAN
Address of Applicant :45, SECOND FLOOR, CHENKUMAR COMPLEX, PARINAGAR, PALAYAPALAYAM, ERODE, TAMILNADU-638011. ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)V.RAJAKUMARESWARAN
Address of Applicant :45, SECOND FLOOR, CHENKUMAR COMPLEX, PARINAGAR, PALAYAPALAYAM, ERODE, TAMILNADU-638011. ----------

(57) Abstract :

An apparatus, comprising: one or more memories storing processor-executable code; and one or more processors coupled with the one or more memories and individually or collectively operable to execute the code to cause the apparatus to: receive an uplink grant that schedules a transmission of an uplink shared channel using a first number of symbols, the uplink grant identifying at least a first uplink transmission opportunity and a second uplink transmission opportunity during which the uplink shared channel is to be transmitted, wherein the first uplink transmission opportunity includes a second number of symbols less than the first number of symbols allocated for the uplink shared channel, the second number of symbols defining the first uplink transmission opportunity as a non-nominal repetition; multiplex uplink control information (UCI) on the uplink shared channel in the first uplink transmission opportunity based at least in part on the first uplink transmission opportunity including the second number of symbols, wherein the UCI comprises an acknowledgement/negative-acknowledgement (ACK/NACK) feedback; and transmit the uplink shared channel and the UCI comprising the ACK/NACK feedback during the non-nominal repetition in the first uplink transmission opportunity. Fig. 1

No. of Pages : 11 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :21/08/2023

(21) Application No.202341056061 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A MIXING APPARATUS FOR A REACTOR

(51) International classification :A61F0002440000, B05B0011000000, C12M0003000000, G06F0016250000, F16K0031000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VAAYUNEER SCIENCES PRIVATE LIMITED
Address of Applicant :Door no 12, 15-17, Jasmine Enclave, Anna Avenue, third floor backside, Bakthavatsalam Nagar, Adyar, Chennai – 600020, Tamil Nadu, India. ---------- ----------
2)INDIAN INSTITUTE OF TECHNOLOGY MADRAS (IIT MADRAS)
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SAI SARANGA DAS
Address of Applicant :Door no 12, 15-17, Jasmine Enclave, Anna Avenue, Bakthavatsalam Nagar, Adyar, Chennai – 600020, Tamil Nadu, India. Chennai ---------- ----------
2)G. K. SURAISHKUMAR
Address of Applicant :Bhupat and Jyoti Mehta Department of Biotechnology, Indian Institute of Technology, Madras, Sardar Patel Road, IIT Post, Chennai 600036, Tamil Nadu, India. Chennai ---------- ----------

(57) Abstract :
"A MIXING APPARATUS FOR A REACTOR AND A METHOD THEREOF" Present disclosure discloses a mixing apparatus (100) for a reactor (200). The mixing apparatus comprises of a base (102) and at least one wall (104b) extending from the base (102). A first motor (108) is connected to the at least one wall (104b). A fixture (122) is movably mounted on the base and supported by the at least one wall (104b). The fixture is displaceable between a first position (FP) and a second position (SP) along a longitudinal axis (A-A). A second motor (129) is connected to the fixture (122) and defined with a first magnet (130). The second motor (129) is configured to actuate the first magnet (130) to induce the rotation of the second magnet (134). An actuation mechanism (111) is disposed between the first motor (108) and the second motor (129) to displace the fixture (122) between the first position (FP) and the second position (SP) upon actuation of the first motor (108). Fig. 1 is the representative figure.

No. of Pages : 37 No. of Claims : 18

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :31/08/2023
(21) Application No.202341058393 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A GRINDING WHEEL USING LAYERED SILICATE OBTAINED FROM NATURAL RESOURCE AND ITS METHOD OF MANUFACTURING

(51) International classification :B24D0018000000, C09K0003140000, C08K0003340000, C11D0003120000, C04B0028000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)GMR INSTITUTE OF TECHNOLOGY
Address of Applicant :GMR Nagar, Rajam, Andhra Pradesh Rajam ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)ANNEPU LAKSHUMU NAIDU
Address of Applicant :Department of Mechanical Engineering, GMR Institute of Technology, GMR Nagar, Rajam, Andhra Pradesh- 532127 Rajam ---------- ----------
2)KENGUVA HIMANTH KUMAR
Address of Applicant :Department of Mechanical Engineering, GMR Institute of Technology, GMR Nagar, Rajam, Andhra Pradesh- 532127 Rajam ---------- ----------
3)PAMMI SRI VENKATA NARAYANA
Address of Applicant :Department of Basic Science & Humanities, GMR Institute of Technology, GMR Nagar, Rajam, Andhra Pradesh- 532127 Rajam ---------- ----------

(57) Abstract :
ABSTRACT A GRINDING WHEEL USING LAYERED SILICATE OBTAINED FROM NATURAL RESOURCE AND ITS METHOD OF MANUFACTURING The present invention relates to the grinding wheel using layered silicate obtained from natural resource and its method of manufacturing. The invention provides a sustainable and efficient grinding wheels. The use of layered silicate obtained from natural resources provides a sustainable alternative to synthetic abrasives and the layered silicates are naturally occurring minerals that can be responsibly sourced, reducing the environmental impact of grinding wheel production. Published with Figure 1

No. of Pages : 28 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :31/08/2023
(21) Application No.202341058495 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : COMPREHENSIVE CHILLI HARVESTING SYSTEM

(51) International classification :B62D0049060000, A61B0010020000, A01D0045000000, A01D0045100000, A01D0013000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)ACHARYA N.G. RANGA AGRICULTURAL UNIVERSITY
Address of Applicant :Acharya N.G. Ranga Agricultural University, Lam, Guntur District, Andhra Pradesh, India, PIN - 522034. Guntur ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. C. RAMANA
Address of Applicant :Regional Agricultural Research Station, ANGRAU, Tirupati, Andhra Pradesh, India, PIN - 517502 Tirupati ---------- ----------
2)K. SANTOSH KUMAR
Address of Applicant :Dr. NTR College of Agricultural Engineering, ANGRAU, Bapatla, Andhra Pradesh, India, 522101 Bapatla ---------- ----------
3)Dr. D. ANANDA BABU
Address of Applicant :Dr. NTR College of Agricultural Engineering, ANGRAU, Bapatla, Andhra Pradesh, India, PIN - 522101 Bapatla ---------- ----------
4)Dr. T. PRABHAKAR
Address of Applicant :Kakinada Institute of Technology and Science, Divili, Samarlakota, Andhra Pradesh, India, PIN - 533433 Samarlakota ---------- ----------
-

(57) Abstract :
HIGH CLEARANCE SELF PROPELLED CHILLI HARVESTER A system (100) for harvesting chillies, comprising a chilli harvesting device (102) designed for harvesting the chillies, and a high clearance unit (104) serving as a supporting structure for the chilli harvesting device (102) is provided. The chilli harvesting device (102) comprises a double helical roller module (108) configured to have a counter rotating motion of helical rollers, a spiral unit (110) fixed around each of the helical rollers, and a plurality of angular units (112) affixed to the spiral units. The chilli harvesting device (102) further comprises a collection tray (114) to collect and gather the harvested chilli pods, and a crop divider module (116) to guide plants between the helical rollers during forward movement. The chilli harvesting device (102) is integrated to the lower portion of a moving tractor (106) through the high clearance unit (104).

No. of Pages : 27 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/09/2023
(21) Application No.202341059050 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A THREE TIER REINFORCEMENT TECHNIQUE FOR TEACHING MEDICAL DOCUMENTATION & CLINICAL INTERPRETATION

(51) International classification	:G16H0010600000, G16H0015000000, G09B0023280000, G09B0019000000, G16H0040200000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)James Rajesh J
Address of Applicant :New No.8, Old NO. 25 B II cross Pavazha Nagar ---------- ----------
2)Dr. Jothi Marie Feula
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)James Rajesh J
Address of Applicant :New No.8, Old NO. 25 B II cross Pavazha Nagar ---------- ----------
2)Dr. Jothi Marie Feula
Address of Applicant :New No. 8, Old No25 B, 2nd cross, Pavazha Nagar, Puducherry Puducherry ---------- ----------

(57) Abstract :
Medical education is a type of education related to the practice of medicine, which includes both initial training to become a physician (i.e., medical school and internship) and ongoing training. Ineffective medical education has an impact not only on the patient but also on the doctor. Medical documentation and clinical interpretation are critical components of medical education that will equip medical students to be a successful healthcare professional. Documentation includes simple documentation of patient history in case record to documentation of death certificate. It has an impact on knowing the prevalence of a disease in a specific region, its mortality rate, death statistics, and so on. Apart from the aforementioned applications, it also plays an important role in health policy formulation. Another case in point is the prompt and accurate interpretation of clinical investigations. For example, timely and precise interpretation of an ECG can instantaneously save a life. Several modules and step wise techniques are followed to teach and learn hands on practical skills, but there is no established method to teach or learn a documentation skill or a interpretation skill. To fill these gaps, we have opted to develop a novel instructional method for these documentation and interpretation skills. This type of approach is referred to as the "Three-tier teaching reinforcement technique." We will be able to obtain more than 80% accuracy in documentation and interpretation abilities in more than 90% of students using our new instructional learning method. The various steps involved in this teaching learning method are: Pre Requisite –The basic principles of the topic that is going to be taught by three tier technique should have been previously covered in conventional large group theory lecture (i) Tier – I – The topic of interest will be taught to the students through the conventional Practical class as a large group teaching learning method – remembering and understanding are the two components of cognitive domain that is addressed here. (ii) Tier – II - The topic of interest will be taught to the students through hands on workshop session in small group teaching learning method along with critical feedbacks – Applying and analysing components of cognitive domain are addressed here (iii) Tier III– Small group hands on workshop session. The main difference between the tier II small group and tier III small group is the size of the small group. In tier III, a maximum of 5 students only will be accommodated in each of the sub group. This tier will again address analysing and applying components of cognitive domain of learning. Evaluation before and after the tired teaching technique: Pre test with their basic knowledge on the subject of interest. It will be conducted before the Tier-I and it will be evaluated immediately so that scores shall be released immediately. Post test - 1 –After the Tier I teaching method, students will be participating in the first post test on the subject of interest and it will be evaluated immediately so that scores shall be released immediately. Post Test - 2 - After the Tier II small group hands on teaching method, students will be participating in the second post test on the subject of interest and it will be evaluated immediately so that scores shall be released immediately. Categorization of students - After tier II post test evaluation, the students will be categorized into 5 groups based on their scores in the second post test. Group 1 includes students who have scored less than 50% of marks, Group 2 includes students who have scored more than 50% and less than 70%, Group 3 includes students who have scored more than 70% and less than 80%, Group 4 includes students who have scored more than 80% and less than 90%. Group 5 includes students who have scored more than 90% marks. Post test – 3 - After tier III teaching & learning session, we anticipate more than 90% of students to perform well and acquire more than 80% of marks, thus serving the purpose of imparting the required knowledge to almost all the students.

No. of Pages : 4 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/10/2023
(21) Application No.202341067032 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A METHOD TO PREPARE RAW FISH ANALOGUE WITH PLANT BASED PROTEINS

(51) International classification	:C01B0025450000, A23L0023000000, C10L0009100000, G01N0021840000, C01B0017790000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)ANNA UNIVERSITY, CHENNAI
Address of Applicant :THE DIRECTOR, CENTRE FOR INTELLECTUAL PROPERTY RIGHTS(CIPR) CPDE BUILDING ,COLLEGE OF ENGINEERING GUINDY, ANNA UNIVERSITY CHENNAI-600025, SARDAR PATEL ROAD, GUINDY, TAMILNADU, INDIA ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)G. Nandhini Devi
Address of Applicant :Centre for Food Technology, Department of Biotechnology, Anna University, Chennai, Tamil Nadu, India-600025 ---------- ----------
2)Fathima Beevi A
Address of Applicant :Centre for Food Technology, Department of Biotechnology, Anna University, Chennai, Tamil Nadu, India-600025 ---------- ----------
3)Supreetha K
Address of Applicant :Centre for Food Technology, Department of Biotechnology, Anna University, Chennai, Tamil Nadu, India-600025 ---------- ----------

(57) Abstract :
Title: A method to prepare raw fish analogue with plant based proteins The invention relates to a method to prepare raw fish analogue with plant based proteins (100). The pea protein acts as a base ingredient and supplementary ingredients are mung bean protein, extracts from kombu and wakame seaweeds, flaxseed oil, salt, vegan oil and k-carrageenan. Mung bean protein and k-carrageenan influence the texture. Flaxseed oil and seaweed extracts provide fishy flavor. Vegan oil from algae adds on as an essential fatty acid source (DHA and EPA). The process begins with blending dry ingredients, adding oil and extracts. The smooth blend is printed by 3D printer (400) into cuboid of total surface area of forty-six cm2. The printed mixture is steamed for 40 minutes at constant temperature. The final product is evaluated for nutritional properties, textural property, and sensory characteristics along with seer fish to compare the profile of vegan fish and conventional fish. The product showed longer shelf life on frozen storage.

No. of Pages : 15 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :20/10/2023
(21) Application No.202341071975 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : UNIVERSAL LEXICON USING PHONETIC MAP

(51) International classification	:G10L0015187000, G06F0040242000, G10L0015020000, G09B0019080000, G06F0016350000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr Shreekanth Mooroor Prabhu
Address of Applicant :Akshaya Redstone, Villa 14, Whitefield-Hoskote Road, Kannamangala, Bengaluru-560115. ---------- ----------
2)CMR Institute of Technology
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Shreekanth Mooroor Prabhu
Address of Applicant :Akshaya Redstone, Villa 14, Whitefield-Hoskote Road, Kannamangala, Bengaluru-560115. ---------- ----------
2)CMR Institute of Technology
Address of Applicant :132, AECS Layout, ITPL Main Road, Bengakuru-560037 ---------- ----------

(57) Abstract :
ABSTRACT UNIVERSAL LEXICON USING PHONETIC MAP Aspects of present disclosure relate to a universal lexicon using phonetic map. The present disclosure provides a method for generating universal lexicon using phonetic map. The universal lexicon provides a mechanism where words of plurality of languages are stored in single lexicon. Each word is associated with a sequence of sounds each of which has a unique co-ordinate on two-dimensional phonetic map. The phonetic map is constructed using Panini's system of sounds and additional sounds can be added as needed and appropriate co-ordinates can be associated. The invention makes it easier to study more than one language at a time as well as understand inter-relationships between words and appreciate commonality across and similarity among languages. It also makes study of linguistics easier and elegant by using visual maps. For a lay-user it can help to learn a new language which has some commonalities with the language he already knows.

No. of Pages : 22 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/03/2024
(21) Application No.202441016596 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A METHOD OF MITIGATION OF EMI IN SMPS BY DIRECT-SEQUENCE SLOW-FREQUENCY HOPPING SPREAD-SPECTRUM MODULATION

(51) International classification	:H04B0001713000, H04B0001715000, H02M0001120000, H04B0001714300, H04B0001715600
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Rajalakshmi Engineering College
Address of Applicant :Rajalakshmi Nagar, Thandalam, Chennai- 602 105, Tamil Nadu, India. Thandalam ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)RAJALAKSHMI A
Address of Applicant :Professor, Department of Electrical and Electronics Engineering, Rajalakshmi Engineering College, Thandalam, Chennai-602 105, Tamil Nadu, India. Thandalam ---------- ----------
2)KAVITHA ANBUKUMAR
Address of Applicant :Professor, Department of Electrical and Electronics Engineering, College of Engineering Guindy, Anna University, Chennai - 600025, Tamil Nadu, India. Chennai ---------- ----------

(57) Abstract :
A METHOD OF MITIGATION OF EMI IN SMPS BY DIRECT-SEQUENCE SLOW-FREQUENCY HOPPING SPREAD-SPECTRUM MODULATION THROUGH FPGA The present invention relates to the mitigation of EMI in SMPS by implementation of a hybrid modulation technique called the Direct-Sequence Slow-Frequency Hopping Spread-Spectrum Modulation which is implemented through low-cost FPGA, wherein: The predefined pseudo-random sequence generator (100), generates a narrow band signal, d(t) which is then DSSS modulated (101). In DSSS modulation, a wideband modulating signal, Sds(t) is obtained using Binary Phase Shift Keying technique. Secondarily, the number of hopping (1 to k) is set by the Frequency Hop (FH) code generator (105), using which the frequency synthesizer (104) generates a carrier signal which is then modulated with Sds(t) to get hybrid modulated carrier signal, Sdsh(t) which is compared (102) with the reference signal (106) to obtain the switching pulse (103) for the converter. The above are coded into the FPGA (Field Programmable Gate Array) (506) to obtain gate pulse (508) for the DC-DC Cuk converter (503). Fig. 1

No. of Pages : 20 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/03/2024
(21) Application No.202441018353 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DEVICE, SYSTEM AND METHOD FOR IDENTIFYING AQUACULTURE PONDS

(51) International classification	:A01K0063040000, A01K0063000000, H05B0045100000, H04W0084120000, F21Y0115100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Coastal Aquaculture Research Institute P. Ltd.
Address of Applicant :Type II/17, Rajiv Gandhi Salai, Dr. V S I Estate, Thiruvanmiyur, Chennai, Tamil Nadu, India 600041. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Murugan Chidhambaram
Address of Applicant :Coastal Aquaculture Research Institute P. Ltd., Type II/17, Rajiv Gandhi Salai, Dr. V S I Estate, Thiruvanmiyur, Chennai, Tamil Nadu, India 600041. Chennai ---------- ----------

(57) Abstract :
Disclosed is an aquaculture system (100) includes a transceiver (102) that is facilitated to access one or more data from each satellite of one or more satellites and a data processing apparatus (104) that is communicatively coupled with the transceiver (102). The data processing apparatus (104) further includes a processing circuitry (208) that is communicatively coupled with the transceiver (102), and configured to (i) receive one or more data representing geographical parameters from the transceiver (102), (ii) map received geographical parameters with a first set of input parameters to identify one or more divergences and (iii) compare the one or more identified divergences with the second set of pre-stored data to identify one or more aquaculture ponds. The present disclosure also relates to a method (300) for identifying and monitoring aquaculture ponds by way of the aquaculture system (100). Refer Figure 1

No. of Pages : 34 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :01/05/2024

(21) Application No.202441034760 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM AND METHOD FOR DYNAMIC ACQUISITION OF PHYSIOLOGICAL SIGNALS FROM A SUBJECT

(51) International classification :A61B5/16, G06F18/24, G06N20/10, G06N3/08
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SALCIT TECHNOLOGIES PRIVATE LIMITED
Address of Applicant :Jayabheri Silicon County Rd, Hitech City, Kothaguda, Hyderabad, Telangana-500084, India. Hyderabad ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Narayana Rao Sripada
Address of Applicant :Flat No. 408, Sai Dream Castle, Nizampet Road, Kukatpally Hyderabad, Telangana-500090, India. Hyderabad ---------- ----------
2)Venkataramaiah Yechuri
Address of Applicant :5754 173rd Ave SE Bellevue, WA 98006 United States of America. ---------- ----------
3)Manmohan Kumar Sankhla Jain
Address of Applicant :B204, Jayabheri Silicon County Kothaguda, Hyderabad, Telangana- 500084, India. Hyderabad ---------- ----------
4)Gowrisree Rudraraju
Address of Applicant :101 Dandus Recidency Plot No 27 A S Raju Nagar Hyder Nagar Kukatpally Hyderabad Telangana- 500085, India. Hyderabad ---------- ----------
5)Narreddy Harsha Vardhan Reddy
Address of Applicant :Door no:4/180, Beside Junior college, Veerapunayuni Palli, Kadapa Dist, Andhra Pradesh-516321, India. Kadapa ---------- ----------
6)Gottipulla Charishma
Address of Applicant :HNo:1-86, Chodimella, Eluru Mandal, West Godavari District, Andhra Pradesh- 534001, India. West Godavari District ---------- ----------
7)Aadhi sushmitha
Address of Applicant :7-2-454, Mankammathota, Karimnagar, Telangana- 505001, India. Karimnagar ---------- ----------
8)Kattula Durga Madhuri
Address of Applicant :8-38/2 Paatakaalava Mogalthur West Godavari Andhra Pradesh – 534281. India. West Godavari ---------- ----------
9)Shubha Deepti Palreddy
Address of Applicant :#30, Sikhara villas, Bahchupally x road, Hyderabad, Telangana- 500090, India. Hyderabad ---------- ----------
10)Bhoge Nikhil Kumar Reddy
Address of Applicant :5-72-7B KLD Road Vidyaranya Nagar Ananthapuramu Andhra Pradesh, 515004, India. Ananthapuramu ---------- ----------

(57) Abstract :

Disclosed herein is a system and method for acquisition of physiological signals from a subject. The system initiates acquisition of data related to the physiological signal of the subject for a first predefined duration and receives the acquired data from an input device. The system determines, using a Machine Learning (ML) model, a sufficiency level of the acquired data for classifying the physiological signal. The system re-initiates the acquisition of data for a second duration when the sufficiency level is ‘insufficient’ or halts the acquisition of data when the sufficiency level is ‘sufficient’. The second duration is dynamically modified based on the sufficiency level of the acquired data. The system classifies the physiological signal when the acquired data is ‘sufficient’ and transmits a notification to an output device indicating a classification of the physiological signal. Fig. 1

No. of Pages : 35 No. of Claims : 18

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/05/2024
(21) Application No.202441035872 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTHENTICATING MESSAGES PRIOR TO TRANSMISSION FROM A MAIN SYSTEM TO A PLURALITY OF SUBSYSTEMS

(51) International classification	:H04L0009320000, H04W0084180000, H04L0051000000, H04W0016140000, H04L0051224000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Indian Institute of Science
Address of Applicant :C V Raman Road, Bangalore -560012, Karnataka, India Bangalore ---------- ----------
2)Power Grid Corporation of India Ltd.
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Gurunath Gurrala
Address of Applicant :Department of Electrical Engineering, Indian Institute of Science, CV Raman Road, Bangalore-560012, Karnataka, India Bangalore ---------- ----------
2)Bhargav Nerayanoor
Address of Applicant :Powergrid Center of Excellence in Cyber security, FSID, Indian Institute of Science, CV Raman Road, Bangalore-560012, Karnataka, India. Bangalore ---------- ----------

(57) Abstract :
AUTHENTICATING MESSAGES PRIOR TO TRANSMISSION FROM A MAIN SYSTEM TO A PLURALITY OF SUBSYSTEMS A method for processing and transmitting messages transmitted from a main system 110 to a plurality of subsystems 140 is disclosed. The messages 115 are intercepted at an interceptor 120 and processed to identify whether the message 115 is a classified message or a normal message. If the message is a normal message, the message is allowed to be transmitted to the sub-systems. If the message is a classified message, the classified message is stored in a buffer and the user is alerted to authenticate the message and on authentication, the status of the classified message 125 is changed to an authenticated message 132; and then the message is transmitted to at least one of a plurality of sub-systems 140. By requiring authentication of the classified messages, only authorized messages are transmitted to the sub-system, avoiding transmission of potentially harmful or high-impact messages. Figure to be published: Figure 2

No. of Pages : 24 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :15/05/2024

(21) Application No.202441038229 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : A HYBRID OPTIMAL SYSTEM FOR TAILORED REHABILITATION TO EMPOWER PATIENT HEALTH

(51) International classification	:G06N0020000000, G16H0050200000, G16H0020700000, G16H0050700000, G16H0010600000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)S.Hrushikesava raju

Address of Applicant :Jyothi nilayam, Near SB Capital, Ippatam service road, Athmakur, Mangalagiri - 522503 ---------- ----------

2)2. Koneru Lakshmaiah Education Foundation

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)S.Hrushikesava raju

Address of Applicant :Department of Computer science and Engineering, Koneru Lakshmaiah Education Foundation, Green Fields, Vaddeswaram, Guntur district, Andhra Pradesh, India, 522302 Vaddeswaram ---------- ----------

2)Y.Sreeraman

Address of Applicant :Associate Professor, Dept. of CSE, School of Technology, The Apollo University, Chittoor, India-517127, sramany@gmail.com Chittoor ---------- ----------

3)Dr. M Nagaraju

Address of Applicant :Assistant Professor, Department of CSE(AI&ML), Institute of Aeronautical Engineering, Dundigal, Hyderabad, 500 043. Hyderabad ---------- ----------

4)Lakshmanarao Battula

Address of Applicant :Assistant Professor, Department of CSE, Koneru Lakshmaiah Education Foundation, Guntur, Andhra Pradesh, India-522302. Vaddeswaram ---------- ----------

5)Thamodharan Arumugam

Address of Applicant :Assistant Professor, Department of CSE, Koneru Lakshmaiah Education Foundation, Guntur, Andhra Pradesh, India-522302. Vaddeswaram ---------- ----------

6)V.Rajasekhar

Address of Applicant :Assistant Professor, Department of Master of Computer Applications, Rajeev Gandhi Memorial College of Engineering & Technology,Nerawada 'X' Roads, Nandyal, Andhra Pradesh - 518501. Nandyal ---------- ----------

7)Nazma Sultana shaik

Address of Applicant :Assistant Professor, Department of Information Technology, Vignan's Foundation for Science ,Technology & Research, Vadlamudi, Guntur district, Andhra Pradesh, India, 522213. Vadlamudi ---------- ----------

8)Thirukumaran S

Address of Applicant :Assistant professor, Department of computer science and Engineering School of Technology, GITAM University, Gandhi Nagar, Rushikonda, Visakhapatnam, Andhra Pradesh, India, 561203. Visakhapatnam ---------- ----------

9)Lakshminarayana Kodavali

Address of Applicant :Assistant Professor, Department of Computer science and Engineering, Koneru Lakshmaiah Education Foundation, Green Fields, Vaddeswaram, Guntur district, Andhra Pradesh, India, 522302. Vaddeswaram ---------- ----------

10)N. MERRIN PRASANNA

Address of Applicant :Associate Professor, Dept of ECE Annamacharya Institute Of Technology & Sciences(Autonomous),Rajampet, PIN-516216 Rajampet ---------- ----------

11)Bakkala Santha Kumar

Address of Applicant :Assistant Professor, Department of Computer science and Engineering, Koneru Lakshmaiah Education Foundation, Green Fields, Vaddeswaram, Guntur district, Andhra Pradesh, India, 522302. Vaddeswaram ---------- ----------

12)K.Praveen Kumar

Address of Applicant :Assistant Professor, Department of IT&CA, Vignan's Foundation for Science ,Technology & Research, Vadlamudi, Guntur district, Andhra Pradesh, India, 522213. Vadlamudi ---------- ----------

(57) Abstract :

The existing traditional methods focus on a single inability in the course of rehabilitation and are suffering with motivation, and may not address diverse patient needs. To overcome these challenges, an approach is required which address more than single impairment as well as tailored to specific patient needs. This demands a hybrid approach that consists of combination of cognitive and machine learning models. This integration minimizes gaps and improves personalized rehabilitation of individual patient. The combination chooses selectively meta-cognitive methodology with dynamic adaptive training and modified CNN with ensemble strategy. This hybrid system aims to provide comprehensive framework that efficiently caters individual patient. The outcomes of this hybrid system are to get better accuracy and promising efficiency when compared against the traditional approaches. This system addresses factors such as the availability of patient data as open source, minimizes the complexity of the rehabilitation task, effective management of computational resources. Stacking is an ensemble method can be used in personalized rehabilitation would mitigate individual model biases or uncertainties. This would enhance the reliability of this framework as well as adapt to diverse patient needs and preferences.

No. of Pages : 15 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/06/2024
(21) Application No.202441048236 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : IN-SILICO AND IN-VITRO STUDIES ON PLANT GROWTH PROMOTION OF MYCORRHIZAL FUNGI OF POACEAE PLANTS

(51) International classification	:A01G0018100000, C05F0011080000, C12N0001140000, C12N0001200000, C12N0015820000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)GOPINATH B
Address of Applicant :SRI SHAKTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, SRI SHAKTHI NAGAR, L&T BY-PASS CHINNIYAMPALAYAM, COIMBATORE,TAMILNADU-641062. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SHUBHIKSHA M
Address of Applicant :SRI SHAKTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, SRI SHAKTHI NAGAR, L&T BY-PASS CHINNIYAMPALAYAM, COIMBATORE,TAMILNADU-641062. ---------- ----------
2)GOPINATH B
Address of Applicant :SRI SHAKTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, SRI SHAKTHI NAGAR, L&T BY-PASS CHINNIYAMPALAYAM, COIMBATORE,TAMILNADU-641062. ---------- ----------

(57) Abstract :
Mycorrhiza is a fungi which forms a symbiotic relationship with the roots of. upper plants. They help in absorption of phosphorus from the soil and also help in the nitrogen fixation in plants. Mutually, plants return the favor with carbon by the process of photosynthesis. These mycorrhizal colonization not only increases the plant growth but also shows increased tolerance to other pathogenic microbes which affects the plant. The present study was conducted to explore the growth of the plant in presence of mycorrhizal fungi‘ The Poaceae plants consists of mainly Arbuscular Mycorrhiza] fungi (AMF). The culture was grown in pot culture using the rhizospheric soils of Cenchrus ciliaris and Brae-Maria mutica. The spore, hyphae of the colonies and other ectomycon‘hizal colonies were calculated using Simpson’s index. These cultures are then applied to a monocot and a dicot family plants to observe the plant growth rate. The field study is conducted by observing the plant growth after the application ofAM fungi. The fungal culture is then analysed for its sequence by using de novo assembly. The interaction of the plant root and AM fungi is studied by III-silica docking analysis using ligand — receptor interaction. In conclusion, the mycorrhizal activity ofthe plant is increased by the mycorrhizal fungi inoculation which also enhanced the plant growth and disease tolerant level ofthe plant.

No. of Pages : 5 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/06/2024

(21) Application No.202441049715 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MICROENCAPSULATION OF PROBIOTICS WITH MILK BASED EXTRUSION METHOD

(51) International classification	:A61K0009500000, A23L0033135000, A23L0002380000, A23C0009130000, A61K0035744000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)K.GEETHANJALI
Address of Applicant :SRI SHAKTHI INSTITUTE OF ENGINEERING & TECHNOLOGY, COIMBATORE, TAMIL NADU, INDIA, PIN CODE-641062, ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)ARTHI. S
Address of Applicant :SRI SHAKTHI INSTITUTE OF ENGINEERING & TECHNOLOGY, COIMBATORE, TAMIL NADU, INDIA, PIN CODE-641062, ---------- ----------
2)KAVYASHREE. V.M
Address of Applicant :SRI SHAKTHI INSTITUTE OF ENGINEERING & TECHNOLOGY, COIMBATORE, TAMIL NADU, INDIA, PIN CODE-641062 -- --------- ----------
3)NIVETHA.J.D
Address of Applicant :SRI SHAKTHI INSTITUTE OF ENGINEERING & TECHNOLOGY, COIMBATORE, TAMIL NADU, INDIA, PIN CODE-641062 -- --------- ----------
4)HARIJEETH.S.A
Address of Applicant :SRI SHAKTHI INSTITUTE OF ENGINEERING & TECHNOLOGY, COIMBATORE, TAMIL NADU, INDIA, PIN CODE-641062 -- --------- ----------
5)K.GEETHANJALI
Address of Applicant :SRI SHAKTHI INSTITUTE OF ENGINEERING & TECHNOLOGY, COIMBATORE, TAMIL NADU, INDIA, PIN CODE-641062 -- --------- ----------

(57) Abstract :
Probiotics are live microorganisms that contains more health benefits. Probiotics are not uti I ized completely in colony because of low gastric pH. Microencapsulation of probiotics will improve the viability of probiotics and Utilization of probiotics in colony. Probiotics are isolated from goat milk with help of MRS broth. Isolation of probiotics such as Lactobacillus from the culture is done by using cell suspension method with the help of Sodium chloride. Isolated probiotics is microencapsulated by extrusion method using Sodium alginate. Microencapsulation of specific probiotic Lactobacillus is Microencapsulated probiotic enhances the gut health. Microencapsulated probiotics has higher rate of survival. Hence, the probiotics will be protected and uti! ized in the better way.

No. of Pages : 6 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2024
(21) Application No.202441053295 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM FOR DEMODULATING FRINGE ORDER FROM ISOCHROMATIC IMAGES

(51) International classification	:G06N0003040000, G03F0007200000, G06T0007000000, G06N0003080000, G06Q0030060000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)AMRITA VISHWA VIDYAPEETHAM
Address of Applicant :Amritapuri Campus Amritapuri, Clappana PO Kollam 690 525 Kollam ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MOHAN, Vishnu M.S.
Address of Applicant :Pulinthitta Chandravilasom, Poruvazhy, Chathakulam PO, Kollam, Kerala 690520, India Kollam ---------- ----------
2)MOHAN PRASANNA, Hariprasad
Address of Applicant :Prasadam, Panangad PO, Balussery, Nirmallore, Kozhikode Kerala 673612, India Kozhikode ---------- ----------
3)MENON, Vivek
Address of Applicant :10-B, Link Heights, Panampilly Nagar, Kochi 682036, India Kochi ---------- ----------

(57) Abstract :
A SYSTEM FOR DEMODULATING FRINGE ORDER FROM ISOCHROMATIC IMAGES ABSTRACT A system for demodulating fringe order in isochromatic images is disclosed. The system 100 includes a data acquisition module 102 for obtaining photo-elastic images with their corresponding fringe patterns, a processing module 104 for predicting a fringe order pattern of the received images and a loss function module 106 for maintaining continuity of the fringe order generated from the cyclic U-Net model. The received photo-elastic images are provided to the processing module 104 which includes a cyclic U-Net model 108 for predicting the fringe order pattern and the input that has generated a corresponding fringe order pattern. The cyclic U-Net model 108 includes two U-Net components of the cyclic U-Net model create a feedback loop. The system can predict fringe order patterns and validate the accuracy of the predictions. The system optimizes both predictive accuracy and fringe pattern coherence, leading to superior image quality and fidelity. FIG. 1

No. of Pages : 27 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :12/07/2024

(21) Application No.202441053307 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : HUMAN FACE EMOTION DETECTION USING IMAGE PROCESSING

(51) International classification	:G06K0009620000, G06N0020000000, H04N0005232000, G05B0023020000, G06N0020100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)M.JAGAN MOHAN REDDY

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Medchal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: mjmreddy1978@gmail.com & 7013339222 Secunderabad ---------- ----------

2)Malla Reddy Engineering Colleg

3)SPANDANA SMILE

4)NARESH BABU MERUGU

5)P LAVANYA REDDY

6)N CHANDANA

7)N SATEESH

8)D.V.V.BRAHMACHARI

9)DR. M.ROSHINI

10)T KISHORE

11)Dr.Dumpa Vamsi Priya

12)Akondi M.V.G.H.Tejaswini

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)M.JAGAN MOHAN REDDY

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Medchal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: mjmreddy1978@gmail.com & 7013339222 Secunderabad ---------- ----------

2)Malla Reddy Engineering Colleg

Address of Applicant :Malla Reddy Engineering College Dhulapally post via Kompally Maisammaguda Secunderabad -500100 Secunderabad ---------- ----------

3)SPANDANA SMILE

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: spandanasmilen25@gmail.com& 9958620744 Secunderabad ---------- ----------

4)NARESH BABU MERUGU

Address of Applicant :Assistant Professor Computer Science and Engineering(CSE), Sri Vasavi Institute of Engineering and Technology, Nandamuru, Pedana, Krishna District, Pin-521369 State: Andhra Pradesh, Email ID & Contact Number: naresh.sviet@gmail.com & 9848738591 Pedana ---------- ----------

5)P LAVANYA REDDY

Address of Applicant :Assistant Professor Computer Science and Engineering (DS) Dept., Malla Reddy Engineering College of Engineering & Technology, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: lavanyakalyan608@gmail.com & 9052499944 Secunderabad ---------- ----------

6)N CHANDANA

Address of Applicant :Assistant Professor Computer Science and Engineering (DS) Dept., Malla Reddy Engineering College of Engineering & Technology, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: nagalla.chandhu1@gmail.com & 8688792469 Secunderabad ---------- ----------

7)N SATEESH

Address of Applicant :Assistant Professor Computer Science & Engineering (AIML) Dept., Malla Reddy Engineering College of Engineering & Technology, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number:chanduasateesh546@gmail.com & 9398840007 Secunderabad ---------- ----------

8)D.V.V.BRAHMACHARI

Address of Applicant :Assistant Professor Computer Science and Engineering Dept., Universal College of Engineering and Technology, Dokiparru (v) NarasaraoPet Road, Medikonduru (M), Guntur – 522438 State: Andhra Pradesh, Email ID & Contact Number: db.achari72@gmail.com & 9949508458 Narsaraopet ---------- ----------

9)DR. M.ROSHINI

Address of Applicant :Professor Department of CSE ADITYA COLLEGE OF ENGINEERING -517325 Madanapalli State: Andhra Pradesh Email ID & Contact Number: mohammedroshini@gmail.com & 7013138130 Madanapalli ---------- ----------

10)T KISHORE

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Number:thangedikishore@gmail.com & 9985555713 Secunderabad ---------- ----------

11)Dr.Dumpa Vamsi Priya

Address of Applicant :Assistant Professor Basic Science and Humanities Department, Vignan Institute of Information and Technology Duvvada Visakhapatnam-530046 Andhra Pradesh Email ID & Contact Number:vamsipriyabagi@gmail.com & 8309137480 Visakhapatnam ---------- ----------

12)Akondi M.V.G.H.Tejaswini

Address of Applicant :Student, 4th B.Tech Sem-1, Electrical and Electronics Engineering Dept., Srinivasa Institute of Engineering and Technology(A) Cheyyeru, Amalapuram-533216 Andhra Pradesh Email ID & Contact Number: tejaakondi34@gmail.com& 7842854439 Amalapuram ---------- ----------

(57) Abstract :

ABSTRACT The project "Human Face Emotion Recognition Using Image Processing" presents a comprehensive system designed to accurately detect and interpret human emotions from facial expressions. Utilizing advanced image processing techniques and machine learning algorithms, our system offers a robust framework for real-time emotion recognition. The core functionality of the system encompasses several key features. Firstly, it incorporates a camera interface to capture images, providing a user-friendly interaction for seamless integration into various environments. Upon capturing an image, the system employs sophisticated face detection algorithms to identify and isolate facial regions for analysis. Subsequently, the detected faces undergo classification using support vector machine (SVM) models, enabling precise prediction of emotional states with high accuracy. The SVM classifier outputs prediction results, indicating the likelihood of each recognized emotion, which are then presented to the user in a clear and intuitive manner. Furthermore, our system extends its capabilities beyond real-time image capture by providing the option to analyze emotions from pre-existing images. This functionality enhances the versatility and applicability of the system, catering to scenarios where image data is readily available for analysis. In summary, our project represents a significant advancement in the field of emotion recognition technology, offering a practical solution with diverse applications across various domains. By leveraging the synergy between image processing and machine learning, our system provides an efficient and effective means of understanding human emotions, thereby facilitating enhanced human-computer interaction, psychological research, and market analysis.

No. of Pages : 7 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2024
(21) Application No.202441053382 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A METHOD FOR SYNTHESISING ION DOPED NANOBIOGLASS BY A SINGLE-PHASE MICROFLUIDIC DEVICE

(51) International classification :C08F285/00, A61K6/887, C08F220/34, C08F292/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Indian Institute of Technology, Madras (IIT Madras)
Address of Applicant :The Dean, Industrial Consultancy & Sponsored Research (IC&SR), Indian Institute of Technology, Madras (IIT Madras), Sardar Patel Road, IIT Post, Chennai, Tamil Nadu, 600 036, India Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Santra, Tuhin Subhra
Address of Applicant :Department of Engineering Design, Indian Institute of Technology, Madras (IITM), Sardar Patel Road, Chennai – 600036, India Chennai ---------- ----------
2)Rao, Suresh
Address of Applicant :Department of Engineering Design, Indian Institute of Technology, Madras (IITM), Sardar Patel Road, Chennai – 600036, India Chennai ---------- ----------
3)Illath, Kavitha
Address of Applicant :Department of Engineering Design, Indian Institute of Technology, Madras (IITM), Sardar Patel Road, Chennai – 600036, India Chennai ---------- ----------
4)Krishnan, Lakshmi
Address of Applicant :Department of Engineering Design, Indian Institute of Technology, Madras (IITM), Sardar Patel Road, Chennai – 600036, India Chennai ---------- ----------

(57) Abstract :
A METHOD FOR SYNTHESISING ION DOPED NANOBIOGLASS BY A SINGLE-PHASE MICROFLUIDIC DEVICE The present invention relates to a method of synthesis of ion doped bioglass nanoparticles (BGNs) by micro emulsion assisted sol-gel technique. More particularly, the present invention provides a method of synthesizing ion doped BGNs in an efficient, safe, simple, rapid and cost-friendly manner. The ion doped BGNs synthesized are non-agglomerated, toxic free and have a homogenous well-defined spherical morphology without any post-synthesis treatment. The ion doped BGNs synthesised are applied in various fields like diagnostics, pharmaceuticals, and therapeutics.

No. of Pages : 25 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2024
(21) Application No.202441053383 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A MICROFLUIDIC DEVICE FOR SYNTHESIZING GOLD NANOMATERIALS AND A METHOD OF FABRICATION THEREOF

(51) International classification :G01N21/01, G01N21/03, B81C1/00, B82Y30/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Indian Institute of Technology, Madras (IIT Madras)
Address of Applicant :The Dean, Industrial Consultancy & Sponsored Research (IC&SR), Indian Institute of Technology, Madras (IIT Madras), Sardar Patel Road, IIT Post, Chennai, Tamil Nadu, 600 036, India Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Santra, Tuhin Subhra
Address of Applicant :Department of Engineering Design, Indian Institute of Technology, Madras (IITM), Sardar Patel Road, Chennai, 600 036, India Chennai ---------- ----------
2)Illath, Kavitha
Address of Applicant :Department of Engineering Design, Indian Institute of Technology, Madras (IITM), Sardar Patel Road, Chennai, 600 036, India Chennai ---------- ----------
3)Kar, Srabani
Address of Applicant :Department of Engineering Design, Indian Institute of Technology, Madras (IITM), Sardar Patel Road, Chennai, 600 036, India Chennai ---------- ----------
4)Krishnan, Lakshmi
Address of Applicant :Department of Engineering Design, Indian Institute of Technology, Madras (IITM), Sardar Patel Road, Chennai, 600 036, India Chennai ---------- ----------

(57) Abstract :
A MICROFLUIDIC DEVICE FOR SYNTHESIZING GOLD NANOMATERIALS AND A METHOD OF FABRICATION THEREOF The present invention relates to a microfluidic device and a method for fabricating the same. More particularly, the present invention provides a microfluidic device for the controlled synthesis of highly monodispersed various morphologies of gold nanomaterials (Au NMs). The device comprises of inlets (1), a cone-shaped T-junction (2), zig-zag channels (3) with and without corrugations, lengthy parallel microchannels (3) and an outlet (4). The fabricated device further synthesizes Au NMs with same set of reagents, exhibit higher monodispersity, shape, purity, repeatability and reproducibility.

No. of Pages : 29 No. of Claims : 26

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2024

(21) Application No.202441053417 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : "HERBAL NANO PARTICLE OF EUPHORBIACEAE FOR TREATMENT OF HEPATIC DISORDER (DIABETES)"

(51) International classification	:A61P0003100000, A61K0036470000, G16H0050700000, A01H0006380000, A61P0003060000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Mr. Ketan Girish Bhutkar
Address of Applicant :Research Scholar, School of Pharmaceutical Sciences, Vels Institute of Science, Technology and advanced studies (VISTAS) Palllavaram, Chennai 600117 India ---------- ----------
2)Dr. P. Balaji
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr. Ketan Girish Bhutkar
Address of Applicant :Research Scholar, School of Pharmaceutical Sciences, Vels Institute of Science, Technology and advanced studies (VISTAS) Palllavaram, Chennai 600117 India ---------- ----------
2)Dr. P. Balaji
Address of Applicant :Professor, Department of Pharmacology, School of Pharmaceutical Sciences, Vels Institute of Science, Technology and advanced studies (VISTAS) Palllavaram, Chennai 600117 India ---------- ----------

(57) Abstract :
This study explores the development and evaluation of nanoparticle formulations utilizing extracts of Euphorbia thymifolia, a plant known for its potential hypoglycemic and Antidiabetic properties. Herbal medicines, often comprised of single herbs or combinations of multiple herbs, along with animal products and minerals, are widely used for various health conditions. The formulations in this research were chosen based on literature supporting the hypoglycemic effects of Euphorbia thymifolia and practical findings regarding its extractive yields. The investigation focuses on the formulation and assessment of nanoparticles as a novel dosage form derived from these extracts. The findings lend credence to the traditional medicinal use of Euphorbia thymifolia and its potential efficacy in treating diabetes mellitus. Additionally, this research provides insight into the mechanism of action of herbal drugs, thereby offering valuable contributions to the field of natural medicine and diabetes treatment.

No. of Pages : 21 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2024
(21) Application No.202441053423 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : FABRICATION METHOD OF VANADIUM MONOCARBIDE NANOSHEETS AS EFFICIENT ANODE CATALYSTS FOR SINGLE-CHAMBER MICROBIAL FUEL CELLS

(51) International classification :C01B3/26, C01B3/38, C10J3/00, H01M4/90, H01M8/06, H01M8/12
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)National Institute of Technology Calicut
Address of Applicant :NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Aji A. Anappara
Address of Applicant :Professor, Department of Physics, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
2)Dr. Haribabu Krishnan
Address of Applicant :Associate Professor, Department of Chemical Engineering, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
3)Anupama M
Address of Applicant :Research Scholar, Department of Physics, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
4)Juliana John
Address of Applicant :Research Scholar, Department of Chemical Engineering, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
5)Karnapa Ajit
Address of Applicant :Research Scholar, Department of Chemical Engineering, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------

(57) Abstract :
ABSTRACT: Title: Fabrication Method of Vanadium Monocarbide Nanosheets as Efficient Anode Catalysts for Single-Chamber Microbial Fuel Cells The present disclosure proposes a method for synthesizing vanadium monocarbide (VC) nanosheets using a facile and scalable liquid-phase exfoliation process, and their application as high-performance anode catalysts in microbial fuel cells (MFCs) for efficient and environmentally friendly wastewater treatment and bioenergy generation. The method involves dispersing bulk vanadium monocarbide in an aqueous medium to form a suspension. The suspension is then added with a surfactant to aid in VC layer exfoliation and nanosheets dispersion. The suspension is later subjected to controlled stirring at a specified temperature under reflux condition to form VC nanosheets, and subsequently recovering them from the suspension. The process ensures efficient exfoliation and dispersion of VC nanosheets, critical for optimizing their electrocatalytic properties in MFC applications.

No. of Pages : 23 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2024
(21) Application No.202441053435 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN INTRUSION DETECTION SYSTEM IN INTERNET OF THINGS AND A METHOD THEREOF

(51) International classification	:G06K0009620000, G06N0020200000, H04L0067120000, G16H0050200000, G06N0003080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)SRM INSTITUTE OF SCIENCE AND TECHNOLOGY
Address of Applicant :Kattankulathur, Chennai-603203, Tamil Nadu, India Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)CHALICHALAMALA SILPA
Address of Applicant :Department of Computing Technologies, SRM IST, Kattankulathur, Chennai-603203, Tamil Nadu, India Chennai ---------- ----------
2)GOVINDAN NIRANJANA
Address of Applicant :Department of Computing Technologies, SRM IST, Kattankulathur, Chennai-603203, Tamil Nadu, India Chennai ---------- ----------
3)KASARAPU RAMANI
Address of Applicant :Department of Data Science, Mohan Babu University, Sree Sainath Nagar, Tirupati-517102, Andhra Pradesh, India Tirupati ---------- ----------
-

(57) Abstract :
ABSTRACT AN INTRUSION DETECTION SYSTEM IN INTERNET OF THINGS AND A METHOD THEREOF A system (100) for intrusion detection in Internet of Things (IoT) environments is disclosed. The system comprises a data collection module (110) configured to acquire a comprehensive dataset of various attack types targeting IoT. A preprocessing module (120) normalizes the dataset using min-max scaling and applies Adaptive Synthetic Sampling (ADASYN) to generate a synthesized dataset. A feature selection module (130) employs a recursive feature elimination (RFE) model with sequential backward elimination to select relevant features from the synthesized dataset. A feature extraction module (140) extracts these selected features to create a refined dataset. An ensemble classification module (150) combines AdaBoost and Random Forest (RF) models to classify the refined dataset, producing output data. A prediction module (160) uses a Logistic Regression-based Ensemble Classifier on the classified data to predict intrusion detection in IoT.

No. of Pages : 23 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2024
(21) Application No.202441053468 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DEVICE AND METHOD FOR ABNORMAL CELL DETECTION

(51) International classification :H01L0029423000, H01L0029660000, H01L0029786000, H01L0029780000, H01L0029060000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VELLORE INSTITUTE OF TECHNOLOGY, CHENNAI
Address of Applicant :Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)B PRASHANTH KUMAR
Address of Applicant :Assistant Professor Senior Grade, School of Electronics Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
2)SHALINI V
Address of Applicant :Research Scholar, School of Advanced Sciences, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
3)A.BHARATHI SANKAR AMMAIYAPPAN
Address of Applicant :Assistant Professor Senior Grade, School of Electronics Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
4)PAPANASAM
Address of Applicant :Associate Professor, School of Electronics Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------

(57) Abstract :
The present invention discloses a device (100) incorporating gate-all-around Schottky multichannel finFET (GAA-SM-FinFET) (900) and method of fabricating the GAA-SM-finFET (900) to detect one or more biomolecules using SBFinFET (900-1). The device (100) for biomolecule detection uses a gate-all-around Schottky multichannel fin field effect transistor (GAA-SM-FinFET) (900-1). The GAA-SM-FinFET (900-1) includes a substrate (101), a buried oxide layer (102) thereon, and a plurality of GaN fin-structured channels (103) disposed above the oxide layer (102). An oxide layer (105) isolates each fin (103). Spacers (106) define a cavity region (104) around each fin. A source electrode (107) and a drain electrode (108) are disposed on the spacers (106) for current flow. A gate electrode (109) with a GAA structure encircles each fin (103) within the cavity (106-1) to control current flow. The cavity (106-1) receives biomolecules, and changes in SBFinFET parameters (900-1) are measured to detect the presence of the biomolecules.

No. of Pages : 29 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2024

(21) Application No.202441053469 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : CASE MANAGEMENT SYSTEM AND METHOD THEREOF

(51) International classification	:G06Q0050180000, G06Q0010100000, G06Q0010060000, G06K0009620000, G06Q0050300000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Manipal Academy of Higher Education
Address of Applicant :Madhav Nagar, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DIVYA RAO
Address of Applicant :#25, ALN Layout, Manipal - 576104, Karnataka, India. Manipal ---------- ----------
2)SUDIKSHA KOTTACHERY KAMATH
Address of Applicant :6-18-799/1, Shree Nivas Matadakani Road, Mangalore - 575006, Karnataka, India. Mangalore ---------- ----------
3)SANJEEV KUSHAL PENDEKANTI
Address of Applicant :K-1002, Aparna HillPark Lakebreeze, PJR Road, Chandanagar, Hyderabad - 500050, Telangana, India. Hyderabad ---------- ----------
4)SHREYA NAYAK
Address of Applicant :1-1-59A, Kunjibettu, Udupi - 576102, Karnataka, India. Udupi ---------- ----------
5)PIYUSH MISHRA
Address of Applicant :M-14, Housing Colony, Argora, Ranchi - 834002, Jharkhand, India. Ranchi ---------- ----------
6)KARUKONDA MAYUR
Address of Applicant :Flat No. 403A, Namaha Landmark Towers, CG Employees Colony, Near HDFC Bank, Miyapur, Hyderabad - 500049, Telangana, India. Hyderabad ---------- ----------
7)ANANYA NAIR
Address of Applicant :First Floor, 48/28 A, Purna Chandra Mitra Lane, Tollygunge, Kolkata - 700033, West Bengal, India. Kolkata ---------- ----------

(57) Abstract :
Embodiments of the present disclosure relates to a case management system. The system (102) includes a processor (202) embedded with artificial intelligence instructions coupled to a memory (204). The processor (202) is configured to collect a plurality of legal cases. The plurality of legal cases is uploaded into the processor (202) by allocating a keyword to each of the plurality of legal cases. The plurality of legal cases is identified and sorted using a keyword-based prioritization algorithm embedded on the processor (202). Direct case submissions and fee payment are allowed to a professional during a filing process. Case files are managed and case submissions are allowed to a higher professional. Further the present disclosure relates to a method (300) of working of the case management system.

No. of Pages : 20 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2024
(21) Application No.202441053505 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM FOR AUTISM SPECTRUM DISORDER DETECTION

(51) International classification :G06T7/00, G06V10/82, G06T7/10, G06N3/0464, G16H30/40, G06N3/08
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SRM UNIVERSITY
Address of Applicant :Amaravati, Mangalagiri, Andhra Pradesh-522502, India Guntur ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)NALLAMOTHU SAI KARTHIK
Address of Applicant :SRM University-AP, Neerukonda, Mangalagiri Mandal, Guntur-522502, Andhra Pradesh, India Guntur ---------- ----------
2)NITUL DUTTA
Address of Applicant :SRM University-AP, Neerukonda, Mangalagiri Mandal, Guntur-522502, Andhra Pradesh, India Guntur ---------- ----------
3)SURYA SAMNATHA BERI
Address of Applicant :SRM University-AP, Neerukonda, Mangalagiri Mandal, Guntur-522502, Andhra Pradesh, India Guntur ---------- ----------
4)GHEORGHITA GHINEA
Address of Applicant :College of Engineering Design and Physical Sciences, Brunel University London, London UB8 3PH, United Kingdom ---------- ----------

(57) Abstract :
ABSTRACT A SYSTEM FOR AUTISM SPECTRUM DISORDER DETECTION The system (100) for autism spectrum disease detection incorporates a server (102) with a hybrid application (104), comprising several key modules: a capturing module (106) receiving images from image capturing devices (106a), a data collection module (108) gathering a dataset of images (108a) from multiple capturing devices (106a), and a pre-processing module (110) standardizing and normalizing images to generate a standardized dataset. Additionally, a feature extraction module (112) collaborates with the pre-processing module (110) to identify autism-indicative features in standardized images, preparing labeled standardized images stored in the data collection module (108). Furthermore, a data segmentation module (114) segments standardized images into training and testing data, including a training module (114a) for real-time training of a convolutional neural network model and a testing module (114b) to evaluate the convolutional neural network model's accuracy in detecting autism based on testing data.

No. of Pages : 25 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2024

(21) Application No.202441053522 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM FOR ROAD CONDITION MONITORING AND METHOD OF OPERATION THEREOF

(51) International classification	:G05B0023020000, B60W0040060000, G01B0011300000, G08G0001010000, G01C0007040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Indian Institute of Technology Madras (IIT Madras)
Address of Applicant :The Dean, Industrial Consultancy & Sponsored Research (IC&SR), Indian Institute of Technology Madras, Sardar Patel Road, IIT Post, Chennai 600036, Tamil Nadu, India Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)GEORGE Boby
Address of Applicant :Department of Electrical Engineering, Indian Institute of Technology Madras (IIT Madras), Chennai-600036 Chennai ---------- ----------
2)GOONERATNE Chinthaka
Address of Applicant :Department of Electrical Engineering, Indian Institute of Technology Madras (IIT Madras), Chennai-600036 Chennai ---------- ----------
3)DAS Akhil
Address of Applicant :Department of Electrical Engineering, Indian Institute of Technology Madras (IIT Madras), Chennai-600036 Chennai ---------- ----------
4)MEHTA Yash
Address of Applicant :Department of Electrical Engineering, Indian Institute of Technology Madras (IIT Madras), Chennai-600036 Chennai ---------- ----------

(57) Abstract :
SYSTEM FOR ROAD CONDITION MONITORING AND METHOD OF OPERATION THEREOF ABSTRACT OF THE DISCLOSURE The disclosure provides a system (100) for road condition monitoring. The system includes a network of data agents (102) on a road surface (104) to carry a portable device (106) incorporated with a plurality of sensors (108) for collecting raw data. The raw data includes acceleration signal magnitude data (112), geographical location data(114)for at least one run in x, y, z direction and is independent of sensor orientation. The system further includes a computing unit (110) for determining trajectory of predicted irregularities on the road surface. Further, a method (200) for real-time road condition monitoring is disclosed. The method exhibits a strong correlation between the acceleration magnitude signal peaks and the geographical locations of the road surface irregularities. The system and method is a low-cost, flexible and easy-to-deploy sensing platform that accurately monitors road conditions.

No. of Pages : 25 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2024
(21) Application No.202441053537 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ECO-FRIENDLY VENTURIMETER: CHEMICALLY TREATED COIR FIBER REINFORCED BIO-PLA COMPOSITE VIA 3D PRINTING

(51) International classification :B29C0064118000, B33Y0030000000, B29C0064393000, B33Y0050020000, B33Y0080000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Karthik Sathyanarayana
Address of Applicant :Project Co-Ordinator, School of Mechanical Engineering, REVA University, Bengaluru, Karnataka, India 560064. Bengaluru ---------- ----------
2)Dr. Madhu Puttegowda
3)Dr. Sharath Ballupete Nagaraju
4)Mr. Premkumar Bagade Girija Shankar
5)Dr. Madhu Kodigarahalli Somashekara
6)Dr. Jeevan Tamalapura Puttaswamy
7)Dr. Hemanth Thulasi Sathyanarayana
8)Dr. Pradeep Dyavappanakoppalu Govindaswamy
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Karthik Sathyanarayana
Address of Applicant :Project Co-Ordinator, School of Mechanical Engineering, REVA University, Bengaluru, Karnataka, India 560064. Bengaluru ---------- ----------
2)Dr. Madhu Puttegowda
Address of Applicant :Associate Professor, Department of Information Science and Engineering Department of Mechanical Engineering, Malnad College of Engineering, Hassan, Karnataka, India 573202. Hassan ---------- ----------
3)Dr. Sharath Ballupete Nagaraju
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Malnad College of Engineering, Hassan, Karnataka, India 573202. Hassan ---------- ----------
4)Mr. Premkumar Bagade Girija Shankar
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Malnad College of Engineering, Hassan, Karnataka, India 573202. Hassan ---------- ----------
5)Dr. Madhu Kodigarahalli Somashekara
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Malnad College of Engineering, Hassan, Karnataka, India 573202. Hassan ---------- ----------
6)Dr. Jeevan Tamalapura Puttaswamy
Address of Applicant :Associate Professor, Department of Mechanical Engineering, Malnad College of Engineering, Hassan, Karnataka, India 573202. Hassan ---------- ----------
7)Dr. Hemanth Thulasi Sathyanarayana
Address of Applicant :Assistant Professor, Department of Computer Science and Business Systems, Department of Mechanical Engineering, Malnad College of Engineering, Hassan, Karnataka, India 573202. Hassan ---------- ----------
8)Dr. Pradeep Dyavappanakoppalu Govindaswamy
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Malnad College of Engineering, Hassan, Karnataka, India 573202. Hassan ---------- ----------

(57) Abstract :
The invention relates to an eco-friendly venturimeter fabricated from chemically treated coir fiber reinforced bio-based polylactic acid (PLA) composite. The composite is fabricated by chemically treating waste coir fiber (1, 2), grinding it into powder (4), and blending it with pretreated bio-PLA pellets (5, 6). The mixture is extruded (7), chopped (8), and re-extruded (9) to create composite filament (10). A fused deposition modeling (FDM) 3D printer (11) is used to fabricate the venturimeter with specific parameters, including bed temperature of 50.25°C and 80% infill density. The resulting venturimeter (12) has precise dimensions, including a 25 mm internal diameter at entry and exit, 12.5 mm throat diameter, and 305 mm total length. It consists of two sections with different convergence angles and is capable of measuring fluid velocities up to 20 m/s. This sustainable approach combines eco-friendly materials with advanced manufacturing techniques to produce a functional fluid flow measurement device. FIG. 1 and FIG. 2

No. of Pages : 14 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2024
(21) Application No.202441053541 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A MULTI-BIO COATING ORTHOPAEDIC IMPLANT WITH ENHANCED CELL ADHESION AND METHOD FOR PREPARING THE SAME

(51) International classification	:A61F0002300000, A61L0027340000, A61F0002380000, A61L0027300000, A61L0027380000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)National Institute of Technology Calicut
Address of Applicant :NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mohammad Ahad Ansari
Address of Applicant :Post Graduate Student, Department of Mechanical Engineering, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
2)Dr. Jagadeesha T
Address of Applicant :Associate Professor, Department of Mechanical Engineering, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------

(57) Abstract :
ABSTRACT: Title: A Multi-Bio Coating Orthopaedic Implant with Enhanced Cell Adhesion and Method for Preparing the Same The present disclosure proposes a multi-bio coating composition for orthopaedic implants and method for preparing the same. A multi-bio coated-textured orthopaedic implant provide significant advancements in terms of promoting faster healing, improved biocompatibility, and potentially lower costs. The multi-bio coating composition for orthopaedic implants provides enhanced cell adhesion for faster bone healing and improved implant integration with surrounding tissues. The multi-bio coated-textured orthopaedic implant exhibits optimized cell attachment and growth for specific applications. The multi-bio coating composition improves biocompatibility of orthopaedic implants by increasing toughness and tensile strength of the orthopaedic implants. The multi-bio coating composition is non-toxic that provides a favourable environment for cell growth. The multi-bio coated-textured orthopaedic implant exhibits enhanced cell adhesion, which aids in faster bone formation and Osseo integration, potentially leading to shorter recovery times for patients undergoing implant surgery.

No. of Pages : 24 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/07/2024

(21) Application No.202441053550 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : NATURAL COMPOUND AS NOVEL ANTIBACTERIAL AGENT

(51) International classification	:A61K36/24, A61P31/04, C07C215/42
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)MAMIDALA ESTARI
Address of Applicant :kakatiya univesity warangal ---------- ----------
2)KAVITHA, Burgula
3)SHANTHI KUMAR, Vadiga
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MAMIDALA ESTARI
Address of Applicant :kakatiya univesity warangal ---------- ----------
2)KAVITHA, Burgula
Address of Applicant :Department of Zoology, Government Degree College, Nelakondapally, Khammam District-507160, Telangana State, India Khammam ---------- ----------
3)SHANTHI KUMAR, Vadiga
Address of Applicant :Department of Chemistry, SR & BGNR Govt. Arts &Science College (Autonomous), Khammam-507002, Telangana, India Khammam ---------- ----------

(57) Abstract :
The present invention discloses a natural compound, Formula I, and process of preparation which demonstrates potent antibacterial activity against a range of clinically relevant bacterial pathogens, Staphylococcus aureus, Streptococcus pneumoniae, Pseudomonas aeruginosa, and Escherichia coli. Formula I exhibiting a zone of inhibition ranging from 2-4 mm against Staphylococcus aureus compared to 0.5-2 mm for Ampicillin, a 2-4 mm zone for Escherichia coli outperforming Ampicillin's 0.5-1 mm, a 2-3 mm zone for Streptococcus pneumoniae comparable to Ampicillin's 0.5-2 mm, and notably a 3-5 mm zone against the difficult Pseudomonas aeruginosa, significantly exceeding Ampicillin's 0.5-2 mm. These findings suggest the potential of Formula I as a promising antibacterial agent warranting further investigation for therapeutic applications.

No. of Pages : 35 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :13/07/2024

(21) Application No.202441053552 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : SMART CITY WASTE MANAGEMENT: INTEGRATING IOT, WSN, AND MACHINE LEARNING FOR SOLID WASTE IMAGE CLASSIFICATION

(51) International classification	:G06Q0010000000, G06Q0050260000, B65F0001140000, H04L0067120000, H04Q0009000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)AR Arunarani

Address of Applicant :Assistant Professor, Department of Computational Intelligence, School of Computing, College of Engineering, SRM Institute of Science and Technology, KTR Campus, Chennai-603203, Chengalpattu, Tamil Nadu, India. ---------- ----------

2)Dr E Maheswari

3)I Venkata Rameswar Reddy

4)Dr.V.Gowri

5)Dr.S.Thenmozhi

6)Prashantha Kumar K

7)Dr. S. Sakthinathan

8)Dr. Droupti Yadav

9)Suram Swetha

10)K Vijay Sankar

11)K. Aswinkumar

12)Ms. P. Sabeenadevi

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)AR Arunarani

Address of Applicant :Assistant Professor, Department of Computational Intelligence, School of Computing, College of Engineering, SRM Institute of Science and Technology, KTR Campus, Chennai- 603203, Chengalpattu, Tamil Nadu, India. ---------- ----------

2)Dr E Maheswari

Address of Applicant :Associate professor, Department of EEE, Sri Sai Ram Institute of Technology, Chennai, 600044, Kanchipuram, Tamil Nadu, India. ---------- ----------

3)I Venkata Rameswar Reddy

Address of Applicant :Assistant Professor, Department of ECE, G. Pulla Reddy Engineering College (Autonomous), Kurnool-518007, Andhra Pradesh, India. ---------- ----------

4)Dr.V.Gowri

Address of Applicant :Associate professor Department of Civil Engineering SRM Madurai College for Engineering and Technology Nedungulam Main Rd, Pottapalaiyam, Pin. 630611, Sivaganga, Madurai, Tamil Nadu, India. ---------- ----------

5)Dr.S.Thenmozhi

Address of Applicant :Professor, Department of Civil Engineering, St. Joseph's College of Engineering, OMR, Chennai 600 119, Tamil Nadu, India. ---------- ----------

6)Prashantha Kumar K

Address of Applicant :Department of Civil Engineering, Nitte (Deemed to Be University), NMAM Institute of Technology (NMAMIT), Karkala 574110, Udupi, Karnataka, India. ---------- ----------

7)Dr. S. Sakthinathan

Address of Applicant :National Taipei University of Technology (NTUT) No. 1, Section 3, Chung-Hsiao East Road, Taipei, Taiwan 106 (ROC). ---------- ----------

8)Dr. Droupti Yadav

Address of Applicant :Assistant Professor and Coordinator, Department of Environmental Science and Technology, SLSBT, CSJM University, Kanpur, Kanpur. Nagar, Uttar Pradesh, India 208024. ---------- ----------

9)Suram Swetha

Address of Applicant :Assistant professor, Department of CSE, K.L.M.College of Engineering For Women Kadapa, YSR, Andhra Pradesh, India. ---------- ----------

10)K Vijay Sankar

Address of Applicant :Assistant Professor, Department of Civil, Sri Ranganathar Institute of Engineering and Technology, Coimbatore, 641110, Tamil Nadu, India ---------- ----------

11)K. Aswinkumar

Address of Applicant :Assistant Professor, Department of Civil Engineering, Sri Ranganathar Institute of Engineering and Technology, Coimbatore - 641110, Tamil Nadu, India. ---------- ----------

12)Ms. P. Sabeenadevi

Address of Applicant :Assistant Professor, Department of Physics, SNS College of Technology, Coimbatore - 641035, Tamil Nadu, India. ---------- ----------

(57) Abstract :

SMART CITY WASTE MANAGEMENT: INTEGRATING IOT, WSN, AND MACHINE LEARNING FOR SOLID WASTE IMAGE CLASSIFICATION The method for the development of solid waste management is one of the most critical concerns associated with the smart city, as it hurts our society's health and the environment. Solid waste management has shown to be a substantial impediment to the development of smart cities, lowering living standards. Sustainability refers to the conditions that enable natural and societal growth to occur concurrently and productively. We can argue that sustainable growth promotes environmental stability. It helps to keep resources available for future generations. Smart city infrastructure based on the Internet of Things (IoT) paradigm provides significant benefits in terms of real-time garbage monitoring capabilities. Basic sensory monitoring alone, however, is insufficient to provide efficient waste management without sophisticated data analytics. This research examines a multiagent simulation-based methodology for comprehending and evaluating the dynamics of an IoT-enabled smart waste management system. Smart waste management (SWM) include collecting and analyzing data from sensors on smart trash bins (SGBs), managing waste vehicles and municipal infrastructure, and planning and optimizing waste. FIG.1

No. of Pages : 15 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/07/2024

(21) Application No.202441053554 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DESIGN AND CONSTRUCTION OF A CUSP CATOSTROPHE MODEL TO ANALYSE THE STABILITY OF LANDSLIDE

(51) International classification	:G06F0030200000, A61B0090000000, G08B0021100000, C30B0015300000, H04L0001000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr S. BALA PADMAJA
Address of Applicant :Assistant Professor, Department of Civil Engineering, Mahatma Gandhi Institute of Technology, Gandipet, Hyderabad-500075 Telangana, India Hyderabad ---------- ----------
2)Dr G.V. NARASIMHA REDDY
3)M. C. VENKATA SUBBAIAH
4)Dr E. SAIBABA REDDY
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr S. BALA PADMAJA
Address of Applicant :Assistant Professor, Department of Civil Engineering, Mahatma Gandhi Institute of Technology, Gandipet, Hyderabad-500075 Telangana, India Hyderabad ---------- ----------
2)Dr G.V. NARASIMHA REDDY
Address of Applicant :Professor of Civil Engineering and Principal JNTUH University College of Engineering, Science & Technology, Kukatpally, Telangana-500085, India Hyderabad ---------- ----------
3)M. C. VENKATA SUBBAIAH
Address of Applicant :Assistant Professor Department of Civil Engineering St.Peter's Engineering College, Kompally Road, Dullapally, Maisammaguda, Medchal, Hyderabad-500100, Telangana, India Hydearbad ---------- ----------
4)Dr E. SAIBABA REDDY
Address of Applicant :Professor of Civil Engineering and Principal Vidya Jyothi Institute of Technology, Aziz Nagar Gate, C.B. Post Hyderabad–500 075, Telangana, India Hyderabad ---------- ----------

(57) Abstract :
ABSTRACT DESIGN AND CONSTRUCTION OF A CUSP CATOSTROPHE MODEL TO ANALYSE THE STABILITY OF LANDSLIDE The present invention relates to construction of a mechanical displacement based model and analysis of landslides by the cusp catastrophe theory. The model analyzed by the theory specifically explains the displacement criterion that can be easily adapted to describe adapted to describe the instability mechanism of slope leading to catastrophic failure. The displacement criteria was determined by factor of safety of the slope

No. of Pages : 23 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :13/07/2024

(21) Application No.202441053557 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : MACHINE LEARNING-DRIVEN KIDNEY STONE DETECTION AND PREDICTION USING ULTRASONOGRAPHIC IMAGE PROCESSING

(51) International classification :A61B0008080000, G06T0005000000, A61B0008000000, A61P0013120000, G01S0007520000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**

1)K Kavitha

Address of Applicant :Sr. Assistant Professor, Department of CSE-AI&ML, GMR Institute of Technology, Rajam, 532127, Vizianagaram, Andhra Pradesh, India. ---------- ----------

2)DR. Rashmi Mohapatra

3)Dr Subhashini Swaminathan

4)Prasanthi Potnuru

5)Birlangi UshaRani

6)R.Sathishkumar

7)Sudhakar Bathala

8)Dr.K Bala

9)Mr. Praneta Ravindra Desale

10)Mahendra Govindrao Gadge

11)Prof. Akshay Ashok Manikjade

12)Dattatraya B. Nalawade

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)K Kavitha

Address of Applicant :Sr. Assistant Professor, Department of CSE-AI&ML, GMR Institute of Technology, Rajam, 532127, Vizianagaram, Andhra Pradesh, India. ---------- ----------

2)DR. Rashmi Mohapatra

Address of Applicant :Associate Professor Dean, Department of Botany, (School of Comparative Indic Studies and Tribal Science), Kalinga Institute of Social Sciences (KISS), Deemed to be University, Bhubaneswar, Khordha, Odisha - 751024. India. ---------- ----------

3)Dr Subhashini Swaminathan

Address of Applicant :Associate Professor, Department of Biotechnology, School of Bioengineering, College of Engineering and Technology, SRM Institute of Science and Technology, Kattangulathur, Chengalpattu, Tamil Nadu, India. ---------- ----------

4)Prasanthi Potnuru

Address of Applicant :Assistant Professor, Department of IT, Aditya Institute of Technology and Management,Tekkali,532201, Srikakulam, Andhra Pradesh, India. ---------- ----------

5)Birlangi UshaRani

Address of Applicant :Assistant professor, Department of IT, Aditya institute of technology and management, Tekkali, Srikakulam, Andhra Pradesh, India. ---------- ----------

6)R.Sathishkumar

Address of Applicant :Assistant professor, St Joseph's College of Engineering, Chennai, 600119, Tamil Nadu, India. ---------- ----------

7)Sudhakar Bathala

Address of Applicant :Assistant professor, Department of CSE, K L M College of Engineering for Women Kadapa 516005, Y S R Kadapa, Andhra Pradesh, India. ---------- ----------

8)Dr.K Bala

Address of Applicant :Associate Professor, Department of ECE, Annamachrya University, New Boyanapalli Rajam pet, Annamayya, Andhra Pradesh, India. ---------- ----------

9)Mr. Praneta Ravindra Desale

Address of Applicant :Principa,l SSPM College of Pharmacy, Dhule, Maharashtra, India. ---------- ----------

10)Mahendra Govindrao Gadge

Address of Applicant :Assistant professor, Department of Mechanical, Vishwakarma Institute of Information Technology, Pune, 411028, Maharashtra, India. ---------- ----------

11)Prof. Akshay Ashok Manikjade

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Vishwakarma Institute of Information Technology Pune-411048, Maharashtra, India. ---------- ----------

12)Dattatraya B. Nalawade

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Vishwakarma Institute of Information Technology, Pune 411048, Maharashtra, India ---------- ----------

(57) Abstract :

MACHINE LEARNING-DRIVEN KIDNEY STONE DETECTION AND PREDICTION USING ULTRASONOGRAPHIC IMAGE PROCESSING The method for the development of kidney stones (nephrolithiasis) are a frequent urological condition with a high recurrence rate. This is a progressive condition that causes kidney damage, resulting in a persistent and unresolved issue. As a result, detecting kidney stone illness early is critical to preventing irreparable harm. If the stone problem is detected early on, kidney disease can be efficiently addressed. As a result, stone detection is critical for both the therapy of renal disease and the management of recurring stone development. Hence, early identification of kidney stones is vital. Ultrasound imaging is one of the imaging modalities available for diagnosing kidney problems, which might include changes in form and location, as well as swelling of the limb. During surgical procedures, it is critical to identify the real and accurate position of the kidney stones. Kidney stones are difficult to detect via ultrasonic imaging due to their poor contrast and speckle noise. This problem is solved by using appropriate image processing techniques. Medical imaging is the most important type of imaging since it is utilized in very sensitive fields and must be correct. In this project, we start by enhancing the image using the median filter, Gaussian filter, and un-sharp masking. FIG.1

No. of Pages : 14 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :13/07/2024

(21) Application No.202441053572 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : NOVEL PLGA-SPC3 FUNCTIONALIZED GEFITINIB MESOPOROUS SILICA NANO SCAFFOLDS FOR BREAST CANCER THERAPY

(51) International classification	:A61K0009510000, A61P0035000000, A61K0041000000, A61K0047610000, A61K0047690000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)College of Pharmaceutical Sciences, Dayananda Sagar University

Address of Applicant :Dr Sajeev Kumar B, College of Pharmaceutical Sciences, Dayananda Sagar University, CD Sagar building, Shavige Malleshwara Hills Kumaraswamy Layout, Bangalore, Karnataka, India -560078 Bengaluru ---------- ----------

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Sajeev Kumar B

Address of Applicant :College of Pharmaceutical Sciences, Dayananda Sagar University, CD Sagar building, Shavige Malleshwara Hills Kumaraswamy Layout, Bangalore, Karnataka, India -560078 Bengaluru ---------- ----------

2)Ravi Kumar Sah

Address of Applicant :Nirmal Lama Polytechnique Institute Bardibas-11, Mahottari Madhesh Province Nepal Mahottari, Madesh Province ---------- ----------

(57) Abstract :

Abstract The present invention provides a mesoporous silica nano scaffolds (MSNs) developed by novel heat assisted hydrolysis (HAH) technique, and are functionalised using PLGA (PLGA-MSN), further loaded with nanosized Pegylated Gefitinib (PEG-GTB). The surface properties of resultant nanoparticles (GTB-PEG-PLGA-MSN) are further enhanced using lysophosphatidyl choline. The functionalised MSN nano scaffolds could be an ideal carrier for various drug delivery applications as it offers higher bioavailability and improved stability in vivo.

No. of Pages : 29 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/07/2024
(21) Application No.202441053577 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A MACHINE LEARNING BASED GRADIENT BOOSTING REGRESSION APPROACH FOR WIND POWER PRODUCTION FORECASTING

(51) International classification :G06N0020000000, G06N0020200000, F03D0007020000, G06Q0050060000, F03D0009250000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)S.Yamunadevi
Address of Applicant :Assistant Professor, Dr.Mahalingam College of Engineering and Technology, Udumalai Road, Pollachi, Coimbatore ---------- ----------
2)Rini Angeline Vinshia J
3)P.Jessie
4)M.Sivakumar
5)M.Kavitha
6)R.Binisha
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)S.Yamunadevi
Address of Applicant :Assistant Professor, Dr.Mahalingam College of Engineering and Technology, Udumalai Road, Pollachi, Coimbatore ---------- ----------
2)Rini Angeline Vinshia J
Address of Applicant :Assistant Professor, Dr.Mahalingam College of Engineering and Technology, Udumalai Road, Pollachi, Coimbatore ---------- ----------
3)P.Jessie
Address of Applicant :Assistant Professor, Dr.Mahalingam College of Engineering and Technology, Udumalai Road, Pollachi, Coimbatore ---------- ----------
4)M.Sivakumar
Address of Applicant :Assistant Professor, Dr.Mahalingam College of Engineering and Technology, Udumalai Road, Pollachi, Coimbatore ---------- ----------
5)M.Kavitha
Address of Applicant :Assistant Professor, Dr.Mahalingam College of Engineering and Technology, Udumalai Road, Pollachi, Coimbatore ---------- ----------
6)R.Binisha
Address of Applicant :Assistant Professor, Dr.Mahalingam College of Engineering and Technology, Udumalai Road, Pollachi, Coimbatore ---------- ----------

(57) Abstract :
A well-liked boosting technique in machine learning for regression and classification problems is gradient boosting. One type of ensemble learning technique is called boosting, in which the model is trained successively, with each new model attempting to improve upon the one before it. It turns a number of ineffective learners into effective ones. The development and application of wind power have been impeded by the wind's unpredictable and unstable nature. Accurate wind power generation forecasts are essential for the harvesting of wind energy and the maintenance of a safe and stable power system following wind power integration. Consequently, the machine learning-based strategy provides helpful advice for lowering the uncertainty associated with wind power generation. Improving wind velocity forecasting using the WRF model may help increase the accuracy of the RF model's wind power generation prediction.

No. of Pages : 10 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/07/2024
(21) Application No.202441053581 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN OPTIMIZED BATTERY INTEGRATED HYBRID RENEWABLE ENERGY SYSTEM FOR REMOTE RURAL ELECTRIFICATION

(51) International classification :H02J3/38, H02J3/32, G06F113/04
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VENKATESWARA RAO KOLLI
Address of Applicant :ASSOCIATE PROFESSOR,ELECTRONICS AND COMMUNICATION ENGINEERING,MALNAD COLLEGE OF ENGINEERING ---------- ----------
2)Dr. DHAVALA RAJEGOWDA KALPANA
3)Dr. SURESH HASSAN NAGESHARAO
4)Dr. RAJANNA S
5)Dr. M. RAMESH
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. DHAVALA RAJEGOWDA KALPANA
Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, Malnad College of Engineering Salagame Road, Hassan 573202 Hassan ---------- ----------
2)DR. SURESH HASSAN NAGESHARAO
Address of Applicant :Professor, Department of Electrical and Electronics Engineering, Malnad College of Engineering Salagame Road, Hassan 573202 Hassan ---------- ----------
3)DR. RAJANNA S
Address of Applicant :Professor, Department of Electrical and Electronics Engineering, Malnad College of Engineering Salagame Road, Hassan 573202 Hassan ---------- ----------
4)DR. M. RAMESH
Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, Malnad College of Engineering Salagame Road, Hassan 573202 Hassan ---------- ----------

(57) Abstract :
Our Invention “An optimized battery integrated hybrid renewable energy system for remote rural electrification”. Standalone renewable energy systems can meet the electricity needs of remote settlements when it is not cost-effective to use the on-grid power supply. The current study examines a hybrid renewable energy system (HRES) that consists of a diesel generator, batteries, photovoltaic cells, and wind turbines. The load estimation stage is when the energy management plans are used. The analysis reveals that the use of demand side energy management measures lowers the net present cost (NPC) from $55 263 to $34 009. The predictive-dispatch and load-following control techniques are integrated. Three different types of batteries are merged one at a time for study: lead-acid, zinc-bromide, and lithium-ion. Demand side energy management strategies that combine load shifting with strategic conservation yield the best HRES configuration solution, according to the analysis. When compared to the HRES, the NPC is reduced by 37% in the absence of energy management strategies. In Uralagallu panchayat, Sagar Taluk, Shivamogga District, Karnataka, India, demand side energy management schemes combined with an integrated HRES configuration that uses zinc-bromide batteries and predictive dispatch control strategy are the best way to electrify a group of villages. The same HRES design and similar method can be expanded for electrification to similar types of geographical conditions locations.

No. of Pages : 22 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/07/2024

(21) Application No.202441053582 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : PREDICTIVE MAINTENANCE DEVICE FOR INDUSTRIAL EQUIPMENT USING MACHINE LEARNING

(51) International classification	:G06N0020000000, G05B0023020000, G06Q0010060000, G06Q0010040000, G06Q0010000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Saranya .R
Address of Applicant :Assistant professor Department of IT Sri Sairam institute of Technology Tamilnadu, India ---------- ----------
2)Dr. S. Senthilrani
3)Dr.Dinesh S
4)Dr.E Rajasekaran
5)Ms.D.Linett Sophia
6)Dr. Mathan Kumar Mounagurusamy
7)Dr.P.Sundara BalaMurugan
8)Dr M.Sivakumar
9)Dr.S.Sugantha Priya
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Saranya .R
Address of Applicant :Assistant professor Department of IT Sri Sairam institute of Technology Tamilnadu, India ---------- ----------
2)Dr. S. Senthilrani
Address of Applicant :Professor, Department of Electronics Engineering(VLSI Design and Technology), Velammal College of Engineering and Technology, Madurai-625 009. ---------- ----------
3)Dr.Dinesh S
Address of Applicant :Assistant Professor Department of Mechanical Engineering Dhanalakshmi College of Engineering, Dr VPR Nagar, Manimangalam, Tambaram, Chennai 601301, Tamilnadu, India ---------- ----------
4)Dr.E Rajasekaran
Address of Applicant :Professor Department of Science and Humanities V.S.B Engineering College, Karur, Tamilnadu, India ---------- ----------
5)Ms.D.Linett Sophia
Address of Applicant :Assistant professor Department of AI&DS Erode Sengunthar Engineering college, Perundurai, Erode Tamilnadu, India ---------- ----------
6)Dr. Mathan Kumar Mounagurusamy
Address of Applicant :Assistant Professor, Department of Computing Technologies, SRM University , Kattankulathur Campus, Chennai Tamilnadu, India ---------- ----------
7)Dr.P.Sundara BalaMurugan
Address of Applicant :Assistant Professor, Department of Management Studies St.Joseph's Institute of Technology, OMR, Chennai -119. Tamilnadu, India. ---------- ----------
8)Dr M.Sivakumar
Address of Applicant :Professor Department of Electronics and Communication Engineering Dhanalakshmi College of Engineering, Tambaram, Chennai Tamilnadu, India ---------- ----------
9)Dr.S.Sugantha Priya
Address of Applicant :Assistant Professor Department of Computer Science Dr SNS Rajalakshmi College of Arts and Science , Coimbatore Tamilnadu, India ---------- ----------

(57) Abstract :
Abstract This invention presents a predictive maintenance device tailored for industrial equipment, integrating advanced sensor technology and machine learning algorithms to optimize equipment reliability and operational efficiency. The device employs a diverse array of sensors—including vibration, temperature, pressure, and current sensors—to continuously monitor critical operational parameters. Data collected from these sensors is processed through a sophisticated data processing unit, which includes modules for data acquisition, storage, and preprocessing. At its core, a robust machine learning model analyzes the preprocessed data to forecast potential equipment failures and calculate remaining useful life (RUL). This predictive capability enables proactive maintenance interventions, minimizing unplanned downtime and extending equipment lifespan. A user-friendly interface provides operators with real-time insights, including comprehensive visualizations, maintenance recommendations, and alerts based on predictive analytics. Overall, the device enhances industrial maintenance practices by enabling timely and informed decision-making, reducing operational costs, and ensuring optimal equipment performance in diverse industrial settings.

No. of Pages : 16 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/07/2024
(21) Application No.202441053583 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DESIGN OF SINGLE AXIS SERVO MECHANISM FOR CONVEYOR CONTROL

(51) International classification	:G05B0019050000, B65G0043080000, B25J0009160000, G05B0019190000, B26D0007320000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. R. S. Kumar
Address of Applicant :Professor, Department of Earth Science Institute - Annamalai University, Annamalai Nagar, Cuddalore – 608002. Email: rskgeo@gmail.com ---------- ----------
2)Dr.V.Parimala
3)Dr. Hariharan N
4)Dr. S. Vijayabaskar
5)Dr. M. Deepak
6)Mr. J. Manokaran
7)Dr. J. Vijaya
8)Dr. W. Rajan Babu
9)Dr. C. Mohan Raj
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. R. S. Kumar
Address of Applicant :Professor, Department of Earth Science Institute - Annamalai University, Annamalai Nagar, Cuddalore – 608002. Email: rskgeo@gmail.com ---------- ----------
2)Dr.V.Parimala
Address of Applicant :Assistant Professor (Selection Grade), Department of Electrical and Electronics Engineering, KPR Institute of Engineering and Technology, Arasur, Coimbatore – 641407. Email: parimalagk@gmail.com ---------- ----------
3)Dr. Hariharan N
Address of Applicant :Assistant Professor, Department of Science & Humanities (Electrical and Electronics Engineering), R.M.K College of Engineering and Technology, Thiruvallur – 601206. Email: hariharan@rmkcet.ac.in ---------- ----------
4)Dr. S. Vijayabaskar
Address of Applicant :Professor, Department of Electrical and Electronics Engineering, PA College of Engineering and Technology, Pollachi, Coimbatore – 642002. Email: svbkec@gmail.com ---------- ----------
5)Dr. M. Deepak
Address of Applicant :Assistant Professor (Selection Grade), Department of Electrical and Electronics Engineering, KIT – Kalaignar Karunanidhi Institute of Technology , Coimbatore – 641 402 Email: deepak.mohanraj@gmail.com ---------- ----------
6)Mr. J. Manokaran
Address of Applicant :Research Scholar, Department of ECE, SRM Institute of Science and Technology, Kattankulathur , Chengalpattu - 603 203. Email: manoraj3@gmail.com ---------- ----------
7)Dr. J. Vijaya
Address of Applicant :Assistant Professor, Department of Data Science and Artificial Intelligence, DSPM IIIT – Naya Raipur, Atal Nagar, Chhattisgarh – 493661. Email: vijayacsedept@gmail.com ---------- ----------
8)Dr. W. Rajan Babu
Address of Applicant :Professor, Department of EEE, Sri Eshwar College of Engineering, Coimbatore – 641 202. Email : rajanbabu.w@sece.ac.in ---------- ----------
9)Dr. C. Mohan Raj
Address of Applicant :Assistant Professor, Department of Agricultural Engineering, KIT – Kalaignarkarunanidhi Institute of Technology , Coimbatore – 641 402. Email: Mohan.rj3@gmail.com ---------- ----------

(57) Abstract :
This invention presents the design of a single-axis servo mechanism for conveyor control using Mitsubishi Electric components: R04 PLC, RX81P digital input module, RY41P digital output module, RD77MS4 servo amplifier, 100W servo motor, and MRJE4 servo drive. The R04 PLC ensures real-time control, while the RX81P and RY41P modules handle digital I/O for seamless communication. The RD77MS4 and MRJE4 provide precise motion control for the servo motor, enhancing conveyor performance. The system's integration and control algorithms are detailed, showcasing improved conveyor speed and position control, leading to enhanced productivity and efficiency.

No. of Pages : 9 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/07/2024
(21) Application No.202441053584 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A DEVICE FOR MEASUREMENT OF LIQUID LEVEL

(51) International classification	:G01F0023263000, G06F0003044000, A61B0005000000, G06F0003041000, G01R0027260000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Manipal Academy of Higher Education
Address of Applicant :Madhav Nagar, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)JAYALAXMI RAJESH HANNI
Address of Applicant :Associate Professor, Department of Electrical and Electronic Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
2)SANTHOSH KV
Address of Applicant :Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
3)K SOVEET KUMAR PRUSTY
Address of Applicant :Flat No. 2403, Tower 4, Bengal NRI Complex Ltd, URBANA, 783, Anandapur, PO: East Kolkata Township, Kolkata, West Bengal - 700107, India. Kolkata ---------- ----------

(57) Abstract :
Embodiments of the present disclosure relate to a capacitance level sensing device (100) with semi-circular ring electrodes (200) for precise liquid level measurement. The capacitance level sensing device (100) includes a sensing electrode configured to be immersed into a dielectric liquid to obtain a capacitance signal. The capacitance level sensing device (100) further includes a reference electrode forming a capacitor with the sensing electrode. The sensing electrode is provided with the semi-circular rings (200) to expand a sensing area of the sensing electrode and thereby enhance sensitivity of the capacitance level sensing device (100) enabling accurate liquid level measurement with a low response time. The semi-circular rings (200) minimize the effects of electrical noise and external interference, resulting in clearer signals and more reliable readings.

No. of Pages : 18 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/07/2024
(21) Application No.202441053585 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : CAPACITANCE LEVEL SENSING DEVICE FOR LIQUID LEVEL MEASUREMENT

(51) International classification	:G01F0023263000, G06F0003041000, H01L0049020000, G01N0027407000, G06F0003044000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Manipal Academy of Higher Education
Address of Applicant :Madhav Nagar, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)JAYALAXMI RAJESH HANNI
Address of Applicant :Department of Electrical and Electronic Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
2)SANTHOSH KV
Address of Applicant :Department of Instrumentation and Control Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
3)MAHIPAL BUHKYA
Address of Applicant :Department of Electrical and Electronic Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
4)K SOVEET KUMAR PRUSTY
Address of Applicant :Flat No 2403, Tower 4, Bengal NRI Complex Ltd, URBANA, 783, Anandapur, PO: East Kolkata Township, Kolkata, West Bengal - 700107, India. Kolkata ---------- ----------

(57) Abstract :
Embodiments of the present disclosure relate to a capacitance level sensing device (100) with arc electrodes for accurate liquid level measurement. The capacitance level sensing device (100) includes a sensing electrode immersed in a liquid stored in a tank. The liquid acts as a dielectric medium. The sensing electrode is immersed in the liquid to obtain a capacitance signal. The capacitance level sensing device (100) further includes a reference electrode forming a capacitor with the sensing electrode. A surface of the sensing electrode and the reference electrode is arced to increase a surface area of the sensing electrode and the reference electrode thereby enhancing sensitivity of the capacitance level sensing device (100) enabling accurate liquid level measurement with a low response time.

No. of Pages : 18 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/07/2024
(21) Application No.202441053586 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR TILT DETECTION OF A WIND TURBINE TOWER

(51) International classification :F03D0013200000, F03D0007020000, G11B0007095000, H04N0007180000, F03D0017000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Manipal Academy of Higher Education
Address of Applicant :Madhav Nagar, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)VIKASH SINGH
Address of Applicant :Associate Professor, Department of Instrumentation and Control Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
2)ROSHAN KUMAR
Address of Applicant :Associate Professor, Department of Electronic and Information Technology, Miami College, Henan University, Kaifeng, 475004, China. Kaifeng ---------- ----------
3)JYOTINDRANATH CHOUDHARY
Address of Applicant :Palm G-13, Parshwanat Atlantis Park, Near Agora Mall, Sugad, Gandhinagar - 382424, Gujarat, India. Ahmedabad ---------- ----------
4)C.R. SRINIVASHAN
Address of Applicant :Assistant Professor Sr. Scale, Department of Instrumentation and Control Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------

(57) Abstract :
Embodiments of the present disclosure relate to a system (102) and method (300) for tilt detection of a wind turbine tower. The system (102) is configured to receive electrical signals pertaining to a movement of a shaft suspended vertically at the wind turbine tower from one or more encoders (400). Further, the system (102) is configured to analyse the received electrical signals to determine a tilt angle of the wind turbine tower. Further, the system (102) is configured to compare the determined tilt angle with a preset safe range of tilt angles. Furthermore, the system (102) is configured to trigger alert signals based on the comparison and transmit alert messages to a remote monitoring station. The one or more encoders (400) is configured to make the shaft move by a deflection of a calibrated mass (402) for automated tilt detection of the wind turbine tower.

No. of Pages : 27 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/07/2024
(21) Application No.202441053587 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR PLUCKING FARM PRODUCTS FROM SMALL AND MEDIUM TREES

(51) International classification	:G06F0009451000, A63B0024000000, G06T0007000000, A45D0026000000, G06Q0050020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)VELLORE INSTITUTE OF TECHNOLOGY, CHENNAI
Address of Applicant :Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)B V A N S S PRABHAKAR RAO
Address of Applicant :Professor, School of Computer Science and Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------

(57) Abstract :
The present disclosure relates to a system for plucking farm products from small and medium trees. The system (102) receives user input from computing device (108) associated with user (106), user input image pertains to target farm product. The system (102) actuates image-capturing unit (116) to monitor surroundings of environment and capture real-time data, real-time data includes image pertains farm products. The system (102) analyses real-time data based on dataset stored in database (210). The system (102) classifies target farm product from farm products based on user input. The system (102) actuates actuators (118) to regulate telescopic arm (120) to reach desired height of target farm product and enable to pluck and harvest the target farm product into collection bin (128).

No. of Pages : 29 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :13/07/2024

(21) Application No.202441053593 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM FOR DETERMINATION OF SERUM LIPASE FROM FRACTAL DIMENSION OF ULTRASONOGRAPHY OF PANCREAS IMAGE

(51) International classification	:G06T0007480000, A61B0005055000, A61B0005000000, A61B0006000000, C12Q0001689500
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)SREE BALAJI MEDICAL COLLEGE AND HOSPITAL

Address of Applicant :NO 7, WORKS ROAD, CHROMEPET, CHENGALPATTU CHENNAI TAMIL NADU INDIA 600 044 Chennai ---------- ----------

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)DR. KANNAN

Address of Applicant :NO.17, FIRST MAIN ROAD, NAGAPPA NAGAR, CHROMEPET, CHENGALPATTU CHENNAI TAMIL NADU INDIA 600064 Chennai ---------- ----------

2)DR. MURUGAN

Address of Applicant :PROFESSOR AND HOD, DEPARTMENT OF RADIOLOGY, SREE BALAJI MEDICAL COLLEGE AND HOSPITAL, NO 7, WORKS ROAD, CHROMEPET, CHENGALPATTU CHENNAI TAMIL NADU INDIA 600044 Chennai ---------- ----------

3)DR. P SASIKUMAR

Address of Applicant :PLOT NO: 1, BHUVANESHWARI NAGAR, Ist CROSS STREET, VELACHERY, CHENNAI CHENNAI TAMIL NADU INDIA 600042 Chennai ---------- ----------

4)DR. JANAKI

Address of Applicant :NO. 2C, KAMAKODI NAGAR, 1st MAIN ROAD, OPP.TO BALAJI DENTAL COLLEGE, CHENNAI CHENNAI TAMIL NADU INDIA 600 100 Chennai ---------- ----------

5)DR. FRANKLIN

Address of Applicant :CEO, ANNA MEDICAL COLLEGE, MONTAGNE BLANCHE, MAURITIUS Not Applicable ---------- ----------

6)DR. KUMARAVEL

Address of Applicant :DEAN INFORMATION TECHNOLOGY, BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH 173 AGHARAM ROAD SELAIYUR, CHENGALPATTU CHENNAI TAMIL NADU INDIA 600 073 Chennai ---------- ----------

7)DR. SHANTHI B

Address of Applicant :H-103 F-1, 3 rd WARD ROAD, VALMIKI NAGAR, THIRUVANMIYUR CHENNAI CHENNAI TAMIL NADU INDIA 600 041 Chennai ---------- ----------

8)DR. PARIJATHAM

Address of Applicant :ASSOCIATE PROFESSOR, DEPARTMENT OF PHYSIOLOGY, SREE BALAJI MEDICAL COLLEGE AND HOSPITAL, NO 7, WORKS ROAD, CHROMEP??, CHENGALPATTU CHENNAI TAMIL NADU INDIA 600044 Chennai ---------- ----------

9)DR. K PRABHU

Address of Applicant :5, RAGAVENDRA COLONY, NERKUNDRUM ROAD, VIRUGAMBAKKAM, CHENNAI, CHENNAI TAMIL NADU INDIA 600092 Chennai ---------- ----------

10)ANNA SHAJU AYNIKKAL

Address of Applicant :MET'S SCHOOL OF ENGINEERING, APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THRISSUR THRISSUR KERALA INDIA 680732 Thrissur ---------- ----------

11)YUVARAJ A

Address of Applicant :KINGS COLLEGE OF ENGINEERING, PUTHUKOTTAI PUNALKULAM TAMIL NADU INDIA 613 303 Punalkulam ---------- ----------

(57) Abstract :

TITLE: A SYSTEM FOR DETERMINATION OF SERUM LIPASE FROM FRACTAL DIMENSION OF ULTRASONOGRAPHY OF PANCREAS IMAGE APPLICANT: SREE BALAJI MEDICAL COLLEGE AND HOSPITAL ABSTRACT The present invention discloses a system for determining serum lipase level from fractal dimension of pancreas image of a subject under test. The system of the present invention comprising of a. an input device, for inputting values of fractal dimension of the pancreas image of the subject under test in which the fractal dimension computed using an electrically connected ultra-sonogram; b. a characterized ARM microcontroller electrically connected to the input device configured for processing the fractal dimension of the pancreas image and calculating the lipase level of the subject under test by the following processing steps; i. lipase=g(fd)=23744.87*e (-1.0599 * fd)+(-11383.05); where g is a function of one variable fractal dimension; c. a digital output device for receiving the processed data from the microcontroller and for displaying the calculated lipase level values; d. a power supply providing the power to the input, microcontroller, ultra-sonogram and the output device.

No. of Pages : 11 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :13/07/2024

(21) Application No.202441053594 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM FOR DETERMINATION OF SERUM AMYLASE FROM FRACTAL DIMENSION OF ULTRASONOGRAPHY OF PANCREAS IMAGE

(51) International classification	:G06T0007480000, A61B0005000000, A61B0005055000, A61B0006000000, H04N0019900000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)SREE BALAJI MEDICAL COLLEGE AND HOSPITAL
Address of Applicant :NO 7, WORKS ROAD, CHROMEPET, CHENGALPATTU CHENNAI TAMIL NADU INDIA 600 044 Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. KANNAN
Address of Applicant :NO.17, FIRST MAIN ROAD, NAGAPPA NAGAR, CHROMEPET, CHENGALPATTU CHENNAI TAMIL NADU INDIA 600064 Chennai ---------- ----------
2)DR. MURUGAN
Address of Applicant :PROFESSOR AND HOD, DEPARTMENT OF RADIOLOGY, SREE BALAJI MEDICAL COLLEGE AND HOSPITAL, NO 7, WORKS ROAD, CHROMEPET, CHENGALPATTU CHENNAI TAMIL NADU INDIA 600044 Chennai ---------- ----------
3)DR. P SASIKUMAR
Address of Applicant :PLOT NO: 1, BHUVANESHWARI NAGAR, IST CROSS STREET, VELACHERY, CHENNAI CHENNAI TAMIL NADU INDIA 600042 Chennai ---------- ----------
4)DR. JANAKI
Address of Applicant :NO. 2C, KAMAKODI NAGAR, 1st MAIN ROAD, OPP.TO BALAJI DENTAL COLLEGE, CHENNAI CHENNAI TAMIL NADU INDIA 600 100 Chennai ---------- ----------
5)DR. FRANKLIN
Address of Applicant :CEO, ANNA MEDICAL COLLEGE, MONTAGNE BLANCHE, MAURITIUS Not Applicable ---------- ----------
6)DR. KUMARAVEL
Address of Applicant :DEAN INFORMATION TECHNOLOGY, BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH 173 AGHARAM ROAD SELAIYUR, CHENGALPATTU CHENNAI TAMIL NADU INDIA 600 073 Chennai ---------- ----------
7)DR. SHANTHI B
Address of Applicant :H-103 F-1, 3 rd WARD ROAD, VALMIKI NAGAR, THIRUVANMIYUR CHENNAI CHENNAI TAMIL NADU INDIA 600 041 Chennai ---------- ----------
8)DR. PARIJATHAM
Address of Applicant :ASSOCIATE PROFESSOR, DEPARTMENT OF PHYSIOLOGY, SREE BALAJI MEDICAL COLLEGE AND HOSPITAL, NO 7, WORKS ROAD, CHROMEP??, CHENGALPATTU CHENNAI TAMIL NADU INDIA 600044 Chennai ---------- ----------
9)DR. K PRABHU
Address of Applicant :5, RAGAVENDRA COLONY, NERKUNDRUM ROAD, VIRUGAMBAKKAM, CHENNAI, CHENNAI TAMIL NADU INDIA 600092 Chennai ---------- ----------
10)ANNA SHAJU AYNIKKAL
Address of Applicant :MET'S SCHOOL OF ENGINEERING, APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THRISSUR THRISSUR KERALA INDIA 680732 Thrissur ---------- ----------
11)YUVARAJ A
Address of Applicant :KINGS COLLEGE OF ENGINEERING, PUTHUKOTTAI PUNALKULAM TAMIL NADU INDIA 613 303 Punalkulam ---------- ----------

(57) Abstract :
TITLE: A SYSTEM FOR DETERMINATION OF SERUM AMYLASE FROM FRACTAL DIMENSION OF ULTRASONOGRAPHY OF PANCREAS IMAGE APPLICANT: SREE BALAJI MEDICAL COLLEGE AND HOSPITAL ABSTRACT The present invention discloses a system for determining serum amylase level from fractal dimension of pancreas image of a subject under test. The system of the present invention comprises of a. an input device, for inputting values of fractal dimension of the pancreas image of the subject under test in which the fractal dimension computed using an electrically connected ultra-sonogram; b. a characterized ARM microcontroller electrically connected to the input device configured for processing the fractal dimension of the pancreas image and calculating the amylase level of the subject under test by the following processing steps; i. amylase=g(fd)=26803.37*e(-1.047 * fd) + (-13177.3); where g is a function of one variable fractal dimension; c. a digital output device for receiving the processed data from the microcontroller and for displaying the calculated amylase level values; d. a power supply providing the power to the input, microcontroller, ultra-sonogram and the output device.

No. of Pages : 11 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/07/2024

(21) Application No.202441053595 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : BRONCHOSCOPIC AIRWAY DEVICE

(51) International classification :A61B1/267, A61M16/04, A61B1/015
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SREE BALAJI MEDICAL COLLEGE AND HOSPITAL
Address of Applicant :NO 7, WORKS ROAD, CHROMEPET, CHENGALPATTU CHENNAI TAMIL NADU INDIA 600 044 Chennai ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. KRISHNAGOPAL VINOD
Address of Applicant :DEPARTMENT OF ANESTHESIOLOGY, SREE BALAJI MEDICAL COLLEGE AND HOSPITAL, NO 7, WORKS ROAD, CHROMEPET, CHENGALPATTU CHENNAI TAMIL NADU INDIA 600044 Chennai ---------- ----------
2)DR. RAJ MURUGAN
Address of Applicant :DEPARTMENT OF ANESTHESIOLOGY, SREE BALAJI MEDICAL COLLEGE AND HOSPITAL, NO 7, WORKS ROAD, CHROMEPET, CHENGALPATTU CHENNAI TAMIL NADU INDIA 600044 Chennai ---------- ----------
3)DR. K. SHARANYA
Address of Applicant :DEPARTMENT OF MICROBIOLOGY, SREE BALAJI MEDICAL COLLEGE AND HOSPITAL, NO 7, WORKS ROAD, CHROMEPET, CHENGALPATTU CHENNAI TAMIL NADU INDIA 600044 Chennai ---------- ----------

(57) Abstract :
TITLE: BRONCHOSCOPIC AIRWAY DEVICE APPLICANT: SREE BALAJI MEDICAL COLLEGE AND HOSPITAL ABSTRACT The present invention discloses a Bronchoscopic Airway Device[1] for leak proof positive pressure ventilation thereby preventing from drop in oxygen levels during bronchoscopic procedures and alongside extraction of bronchial foreign bodies thereby reducing time for foreign body removal. The device[1] of the present invention comprises of a T-shaped catheter mount[2] having an horizontal arm[3] adapted to receive insertion tube[4] of a bronchoscope[5] and a vertical arm[6] adapted to receive oxygen from an oxygen cylinder, characterized in that one end of the horizontal arm[3] connected to an an I-gel[7] paving a passage for oxygen from the vertical arm[6] to be entered to lungs while performing bronchoscopic procedure and another end of the horizontal arm[3] connected to a 5mm silicone coated laparoscopic washer[8] thereby achieving air tight seal upon receiving the bronchoscope[5] enabling ventilation/oxygenation of lung alongside performing bronchoscopic procedures.

No. of Pages : 14 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :14/07/2024
(21) Application No.202441053612 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR COST-EFFECTIVE AUTHENTICATION IN ONLINE COURSE AND EXAM PROCTORING USING KEYSTROKE BIOMETRICS AND CONTEXTUAL FACTORS ON LAPTOPS AND DESKTOP DEVICES

(51) International classification	:G09B0007000000, G06Q0050200000, G06F0021320000, G06F0021310000, G09B0005000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Jagadamba Gurappa
Address of Applicant :Department of Information Science and Engineering Siddaganga Institute of Technology, Tumakuru-572103 tumkur ---------- ----------
2)Mrs. Chayashree Gurappa
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Jagadamba Gurappa
Address of Applicant :Department of Information Science and Engineering Siddaganga Institute of Technology, Tumakuru-572103 tumkur ---------- ----------
2)Mrs. Chayashree Gurappa
Address of Applicant :Asst. prof. Dept. of ISE, VVCE, P.B. No.206, Kannada Sahithya Parishath Rd, III Stage, Gokulam, Mysuru, Karnataka 570002 Mysore ---------- ----------

(57) Abstract :
ABSTRACT System and Method for Cost-Effective Authentication in Online Course and Exam Proctoring Using Keystroke Biometrics and Contextual Factors on Laptops and Desktop Devices An innovative system and method for cost-effective authentication in online courses and exam proctoring by leveraging keystroke biometrics and contextual factors on laptops and desktop devices. The proposed approach integrates the unique typing patterns of users as a biometric measure to ensure the authenticity of the individual taking the course or exam. Keystroke biometrics involves the analysis of typing rhythms, such as key press duration and inter-key delay, which are distinct to each user and difficult to mimic. In addition to keystroke dynamics, the system incorporates contextual factors such as geolocation, time of access, and device- specific information to enhance the reliability of the authentication process. By combining these biometric and contextual elements, the system provides a robust multi-layered security mechanism that is both cost-effective and user-friendly. The method is designed to operate seamlessly on commonly used hardware, such as laptops and desktop computers, without requiring additional specialized equipment. This makes it an accessible solution for educational institutions and organizations looking to maintain academic integrity in a remote learning environment. The system also addresses privacy concerns by ensuring that biometric data is securely processed and stored.

No. of Pages : 18 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :14/07/2024
(21) Application No.202441053613 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : STEALTHY SHADOWSTRIKE: EMPLOYING AI TO SAFEGUARD CYBER PHYSICAL SYSTEMS AGAINST RANSONWARE ATTACKS

(51) International classification :G06F0021560000, G06F0021550000, G06N0020000000, G06F0021570000, G06N0003040000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Mrs Kavitha S
Address of Applicant :Sri Sairam Institute of Technology, Sairam College Rd, Sai Leo Nagar, West Tambaram, Chennai, Tamil Nadu 600044 chennai ---------- ----------
2)Dr. Jagadamba G
3)Mrs. Divyaharshini G
4)Mr Manish khule
5)Dr.Rakesh Kumar Arora
6)Mrs.D.Thangamari
7)Dr. D. Rajinigirinath
8)Dr.R.Karthick
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mrs Kavitha S
Address of Applicant :Sri Sairam Institute of Technology, Sairam College Rd, Sai Leo Nagar, West Tambaram, Chennai, Tamil Nadu 600044 chennai ---------- ----------
2)Dr. Jagadamba G
Address of Applicant :Asst. Professor, Dept. of Information Science and Engineering, Siddaganga Institute of Technology, Tumakuru Tumkur ---------- ----------
3)Mrs. Divyaharshini G
Address of Applicant :Sri Sairam Institute of Technology, Sairam College Rd, Sai Leo Nagar, West Tambaram, Chennai, Tamil Nadu 600044 chennai ---------- ----------
4)Mr Manish khule
Address of Applicant :Training Specialist, ASET CSE, Amity University Madhya Pradesh 474005 Gwalior ---------- ----------
5)Dr.Rakesh Kumar Arora
Address of Applicant :ADGIPS, FC-26, Shastri Park, New Delhi - 110053 North East Delhi ---------- ----------
6)Mrs.D.Thangamari
Address of Applicant :Assistant Professor, Department of Computer Science Engineering, K.L.N. College of Engineering, Pottapalayam, Sivagangai-630 612. sivaganga ---------- ----------
7)Dr. D. Rajinigirinath
Address of Applicant :Professor and Head, CSE/AI&DS, Sri Muthukumaran Institute of Technology,Mangadu,Chennai-69 chennai ---------- ----------
8)Dr.R.Karthick
Address of Applicant :Associate Professor, Department of Computer Science Engineering, K.L.N. College of Engineering, Pottapalayam, Sivagangai-630 612 chennai ---------- ----------

(57) Abstract :
Stealthy Shadowstrike: Employing AI to Safeguard Cyber Physical Systems against Ransonware Attacks The increasing integration of cyber-physical systems (CPS) in critical infrastructure sectors, such as energy, healthcare, and manufacturing, has elevated the risk of ransomware attacks, necessitating innovative defense mechanisms. This paper presents "Stealthy Shadowstrike," an AI-driven approach designed to fortify CPS against ransomware threats. By leveraging advanced machine learning algorithms and anomaly detection techniques, Stealthy Shadowstrike provides a robust framework for early threat identification and mitigation. The system continuously monitors network traffic and system behavior, utilizing deep learning models to detect deviations indicative of ransomware activity. Once a potential threat is identified, the AI-driven response mechanism is activated, executing a series of predefined countermeasures to isolate and neutralize the threat, thereby minimizing damage and ensuring system integrity. The approach also incorporates adaptive learning capabilities, allowing the system to evolve in response to emerging threats and novel attack vectors. Experimental results demonstrate the efficacy of Stealthy Shadowstrike in real-world scenarios, highlighting its ability to detect and respond to ransomware attacks with high accuracy and minimal false positives.

No. of Pages : 20 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :14/07/2024
(21) Application No.202441053615 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM AND METHOD FOR EARLY PROGNOSIS OF MALIGNANT TUMORS IN CEREBRAL MAGNETIC RESONANCE IMAGES USING MACHINE LEARNING

(51) International classification :G16H0050200000, A61B0005055000, G01R0033560000, G06N0020000000, G16H0030400000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. K Chenna Reddy
Address of Applicant :Professor & HoD, Department of Electronics & Communication Engineering, Brindavan College of Engineering, Bangalore, Karnataka 560063, India ---------- ----------
2)Dr. Sudeshna Surabhi
3)Boban Mathews
4)Aparna Kulkarni
5)Jahnavi D.M.
6)Mamatha N. P.
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. K Chenna Reddy
Address of Applicant :Professor & HoD, Department of Electronics & Communication Engineering, Brindavan College of Engineering, Bangalore, Karnataka 560063, India ---------- ----------
2)Dr. Sudeshna Surabhi
Address of Applicant :Associate Professor, Department of Electronics & Communication Engineering, Brindavan College of Engineering, Bangalore, Karnataka 560063, India ---------- ----------
3)Boban Mathews
Address of Applicant :Assistant Professor, Department of Electronics & Communication Engineering, Brindavan College of Engineering, Bangalore, Karnataka 560063, India ---------- ----------
4)Aparna Kulkarni
Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Brindavan College of Engineering, Bangalore, Karnataka 560063, India ---------- ----------
5)Jahnavi D.M.
Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Brindavan College of Engineering, Bangalore, Karnataka 560063, India ---------- ----------
6)Mamatha N. P.
Address of Applicant :Assistant Professor, Department of Electronics & Communication Engineering, Brindavan College of Engineering, Bangalore, Karnataka 560063, India ---------- ----------

(57) Abstract :
The present invention discloses a system and method for early prognosis of malignant tumors in cerebral magnetic resonance imaging (MRI) scans using machine learning techniques. Cerebral MRI plays a crucial role in diagnosing brain tumors, but accurately distinguishing malignant from benign tumors remains challenging and requires expert interpretation. The proposed system automates this process by employing advanced image processing algorithms and machine learning models to extract and analyze tumor characteristics from MRI scans. By integrating these technologies into a clinical decision support system, the invention aids healthcare professionals in making timely and accurate diagnostic decisions, thereby improving patient outcomes and reducing diagnostic uncertainties associated with cerebral tumors.
Accompanied Drawing [FIGS. 1-2]

No. of Pages : 22 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :14/07/2024

(21) Application No.202441053616 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : PROPOSED WELL SYSTEM FOR WASTE SEGREGATION

(51) International classification :B01D0029150000, B01D0061180000, B01D0029940000, C10L0005440000, B01D0029920000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**

1)Dr. Arun Anoop M

Address of Applicant :Associate Professor, Dept. of Computer Science & Engineering, Vivekananda College of Engineering & Technology, Nehru Nagar, Puttur, Dakshina Kannada, Karnataka, 574203. ---------- ----------

2)Mrs. Chaithanya A P

3)Dr.Karthikeyan P

4)Dr. Mahesh Prasanna K.

5)Dr. Nischaykumar Hegde

6)Mr. Sharad Shandhi Ravi

7)Dr. V Sebastin

8)Ms.Nisha K.V.

9)Ms.Prothibha Das

10)Dr.R.Senthil Kumar

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. Arun Anoop M

Address of Applicant :Associate Professor, Dept. of Computer Science & Engineering, Vivekananda College of Engineering & Technology, Nehru Nagar, Puttur, Dakshina Kannada, Karnataka, 574203. ---------- ----------

2)Mrs. Chaithanya A P

Address of Applicant :Research Scholar, Dept. of Pharmaceutics, Bharath Institute of Higher Education and Research (Deemed to be University), Main Building, Second Floor, # 173 Agharam Road Selaiyur, Chennai - 600 073,Tamil Nadu, India. ---------- ----------

3)Dr.Karthikeyan P

Address of Applicant :Professor, Dept. of Electronics & Communication Engineering, Velammal College of Engineering & Technology, Viraganoor, Madurai to Rameshwaram Highway, Viraganoor, Madurai-625 009, Tamilnadu, India. ---------- ----------

4)Dr. Mahesh Prasanna K.

Address of Applicant :Professor & Principal, Vivekananda College of Engineering & Technology, Nehru Nagar, Puttur, Dakshina Kannada, Karnataka, 574203. ---------- ----------

5)Dr. Nischaykumar Hegde

Address of Applicant :Associate Professor & Head, Dept. of Computer Science & Engineering, Vivekananda College of Engineering & Technology, Nehru Nagar, Puttur, Dakshina Kannada, Karnataka, 574203. ---------- ----------

6)Mr. Sharad Shandhi Ravi

Address of Applicant :Assistant Professor, Dept. of CSE(AIML), AJ Institute of Engineering & Technology, NH-66, Kottara Chowki, Mangaluru, Karnataka, 575006. ---------- ----------

7)Dr. V Sebastin

Address of Applicant :Professor & Head, Dept of Pharmaceutical Chemistry, Malik Deenar College of Pharmacy, Seethangoli, Bela Post, Kasaragod, 671321, Kerala, India. ---------- ----------

8)Ms.Nisha K.V.

Address of Applicant :Associate Professor, Dept. of Pharmaceutics, Malik Deenar College of Pharmacy, Seethangoli, Bela Post, Kasaragod, 671321, Kerala, India. ---------- ----------

9)Ms.Prothibha Das

Address of Applicant :Associate Professor, Dept. of Pharmaceutics, Malik Deenar College of Pharmacy, Seethangoli, Bela Post, Kasaragod, 671321, Kerala, India. ---------- ----------

10)Dr.R.Senthil Kumar

Address of Applicant :Senior Assistant Professor, Dept. of Computer Science & Engineering, Alva's Institute of Engineering and Technology, Shobhavana Campus, Mijar, Moodbidri, Mangalore, Pincode-574225 Karnataka, India. ---------- ----------

(57) Abstract :

The invention relates to an advanced well system designed for efficient waste material collection and management, featuring an embedded sensor for continuous overflow detection, an alarm system for prompt personnel notification, and a wave-generating mechanism to direct waste towards a fixed filter. This system ensures timely intervention to prevent environmental contamination, captures waste particles while allowing filtered water to exit through designated outlets, and offers ease of maintenance through a replaceable filter. The comprehensive design provides a reliable, automated solution for maintaining clean and safe well environments.

No. of Pages : 17 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :14/07/2024

(21) Application No.202441053623 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : DEEP LEARNING-BASED AUTOMATED RADIOLOGICAL ASSESSMENT FOR LUNG CANCER DETECTION

(51) International classification	:G06N0003080000, G06N0003040000, A61B0005000000, G06T0007000000, G16H0050200000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)MANOHARAN K
Address of Applicant :Associate Professor, SNS College of Technology, Saravanampatti ---------- ----------
-
2)Dr. A. Karthika
3)R Parasuram
4)M Parasuraman
5)M Pragadeesh
6)J Rohith Darsan
7)S Sanmugasundari
8)S Saravana Kumar
9)B Shankar Harish
10)S Shobini
11)N R Smirita
12)C K Raghul Krishna
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MANOHARAN K
Address of Applicant :Associate Professor, SNS College of Technology, Saravanampatti ---------- ----------
2)Dr. A. Karthika
Address of Applicant :Assistant Professor, Department of BME, SNS College of Technology, SNS Kalvi Nagar, Saravanampatti, Coimbatore641035, Tamil Nadu, India. ---------- ----------
3)R Parasuram
Address of Applicant :UG Scholar, Department of BME, SNS College of Technology, SNS Kalvi Nagar, Saravanampatti, Coimbatore641035, Tamil Nadu India ---------- ----------
4)M Parasuraman
Address of Applicant :UG Scholar, Department of BME, SNS College of Technology, SNS Kalvi Nagar, Saravanampatti, Coimbatore641035, Tamil Nadu India ---------- ----------
5)M Pragadeesh
Address of Applicant :UG Scholar, Department of BME, SNS College of Technology, SNS Kalvi Nagar, Saravanampatti, Coimbatore641035, Tamil Nadu India ---------- ----------
6)J Rohith Darsan
Address of Applicant :UG Scholar, Department of BME, SNS College of Technology, SNS Kalvi Nagar, Saravanampatti, Coimbatore641035, Tamil Nadu India ---------- ----------
7)S Sanmugasundari
Address of Applicant :UG Scholar, Department of BME, SNS College of Technology, SNS Kalvi Nagar, Saravanampatti, Coimbatore641035, Tamil Nadu India ---------- ----------
8)S Saravana Kumar
Address of Applicant :UG Scholar, Department of BME, SNS College of Technology, SNS Kalvi Nagar, Saravanampatti, Coimbatore641035, Tamil Nadu India ---------- ----------
9)B Shankar Harish
Address of Applicant :UG Scholar, Department of BME, SNS College of Technology, SNS Kalvi Nagar, Saravanampatti, Coimbatore641035, Tamil Nadu India ---------- ----------
10)S Shobini
Address of Applicant :UG Scholar, Department of BME, SNS College of Technology, SNS Kalvi Nagar, Saravanampatti, Coimbatore641035, Tamil Nadu India ---------- ----------
11)N R Smirita
Address of Applicant :UG Scholar, Department of BME, SNS College of Technology, SNS Kalvi Nagar, Saravanampatti, Coimbatore641035, Tamil Nadu India ---------- ----------
12)C K Raghul Krishna
Address of Applicant :UG Scholar, Department of BME, SNS College of Technology, SNS Kalvi Nagar, Saravanampatti, Coimbatore641035, Tamil Nadu India ---------- ----------

(57) Abstract :
This project presents a deep learning-based automated radiological assessment system for early detection of lung cancer. Utilizing a robust convolutional neural network (CNN), the system processes and analyzes chest X-rays and CT scans to identify potential lung cancer indicators with high accuracy. Leveraging a large, annotated dataset, the model is trained to recognize complex patterns and anomalies in medical imaging. Validation and testing on separate datasets ensure reliability and precision. The system offers a user-friendly interface for real-time diagnostic feedback, enhancing clinical decision-making and facilitating early intervention. Continuous learning from new data aims to further improve diagnostic performance and adaptability.

No. of Pages : 9 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :14/07/2024

(21) Application No.202441053624 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : INTRAPRENEURSHIP IN LARGE CORPORATIONS: CULTIVATING INNOVATION AND EMPLOYEE ENTREPRENEURIAL MINDSET

(51) International classification :G06Q0010060000, G16B0040000000, G06Q0030020000, G06Q0010100000, G06F0016280000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. J. Balamurugan
Address of Applicant :Assistant Professor, St.Joseph's College of Engineering, OMR, Chennai, Pin: 600119, Tamil Nadu, India. ---------- ----------
2)Mrs. Kasumurthy Poojitha
3)Dr. Pankaj Adatiya Tiwari
4)Dr. H S Abzal Basha
5)Dr.Maria Fulgen
6)Dr. A. Fathima
7)Dr. Vijay Mahida
8)Priya Kumari Chaurasia
9)Dr. C. Sahila
10)Mr.R. Mohana Ruban
11)Dr. Harikumar Pallathadka
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. J. Balamurugan
Address of Applicant :Assistant Professor, St.Joseph's College of Engineering, OMR, Chennai, Pin: 600119, Tamil Nadu, India. ---------- ----------
2)Mrs. Kasumurthy Poojitha
Address of Applicant :Assistant Professor, Bankatlal Rajaram Boob College of Commerce, Raichur, Pin: 584103, Karnataka, India. ---------- ----------
3)Dr. Pankaj Adatiya Tiwari
Address of Applicant :Assistant Professor, ST. Francis College, Koramangala, Bangalore City University, Bangalore, Pin: 560034, Karnataka, India. ---------- ----------
4)Dr. H S Abzal Basha
Address of Applicant :Assistant Professor, Department of Management Studies, G Pullaiah College of Engineering and Technology (Autonomous), Kurnool, Pin:518002, Andhra Pradesh, India. ---------- ----------
5)Dr.Maria Fulgen
Address of Applicant :Assistant Professor, Sri Ramakrishna College of Arts and Science (Autonomous), Avinashi Road, Nava India, Coimbatore, Pin:641006, Tamilnadu, India. ---------- ----------
6)Dr. A. Fathima
Address of Applicant :Assistant Professor (Senior Grade), BS Abdur Rahman Crescent Institute of Science and Technology, Chennai, Pin:600048, Tamil Nadu, India. ---------- ----------
7)Dr. Vijay Mahida
Address of Applicant :Assistant Professor, Laxmichand Golwala College of Commerce and Economics, M.G. Road, Ghatkopar East, Mumbai, Pin: 400086, Maharashtra, India. ---------- ----------
8)Priya Kumari Chaurasia
Address of Applicant :Assistant Professor, GNIOT Institute of Professional Studies, Knowledge Park 2, Greater Noida, Gautambudh Nagar, Pin: 201310, Uttar Pradesh, India. ---------- ----------
9)Dr. C. Sahila
Address of Applicant :Associate Professor, Department of Commerce, Faculty of Science and Technology, SRM Institute of Science and Technology, Bharathi Salai, Ramapuram, Chennai, Kanchipuram, Pin:600089, Tamilnadu, India. ---------- ----------
10)Mr.R. Mohana Ruban
Address of Applicant :Assistant Professor, Department of Commerce, Faculty of Science and Technology, SRM Institute of Science and Technology, Bharathi Salai, Ramapuram, Chennai, Kanchipuram, Pin:600089, Tamilnadu, India. ---------- ----------
11)Dr. Harikumar Pallathadka
Address of Applicant :Director and Professor, Manipur International University, Ghari, Imphal, Imphal West, Pin: 795140, Manipur, India. ---------- ----------

(57) Abstract :
The invention relates to a method and system for fostering intrapreneurship within large corporations, aimed at cultivating an entrepreneurial mindset among employees to drive internal innovation. It encompasses the identification of potential intrapreneurs using advanced software tools and data analysis, the allocation of necessary resources such as time, workspace, technology, and funding, and the provision of mentoring and training programs. The invention also includes a structured process for evaluating and supporting intrapreneurial projects, along with a robust incentives and recognition system to promote a culture of innovation. Additionally, it addresses the need for cultural and structural changes within the corporation, ensuring an environment conducive to innovation and empowering employees to pursue entrepreneurial projects that contribute to the organization's growth and competitiveness.

No. of Pages : 18 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :14/07/2024

(21) Application No.202441053625 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : INTERACTIVE MATHEMATICS TUTORING: A PERSONALIZED LEARNING JOURNEY WITH ADAPTIVE PATHWAYS

(51) International classification	:G09B0007020000, G06Q0050200000, G09B0019000000, G09B0005020000, G09B0007000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr. R. Suryanarayana

Address of Applicant :Professor, Sri Venkateswara College of Engineering and Technology, Etcherla, Srikakulam, Pin: 532402, Andhra Pradesh, India. ---------- ----------

2)Dr. S. Karthigai Selvam

3)Mrs. P. Deepa

4)Mrs. Akula Swarna Latha

5)Dr. Bonala Madhavi

6)Dr. M. Varalakshmi

7)Dr. K. Venugopal Reddy

8)Dr. Samir Dey

9)Ms. A. Punitha

10)Dr. G. Jayaraman

11)Dr. Harikumar Pallathadka

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. R. Suryanarayana

Address of Applicant :Professor, Sri Venkateswara College of Engineering and Technology, Etcherla, Srikakulam, Pin: 532402, Andhra Pradesh, India. ---------- ----------

2)Dr. S. Karthigai Selvam

Address of Applicant :Associate Professor, N.M.S.S. Vellaichamy Nadar College, Nagamalai, Madurai, Pin: 625019, Tamil Nadu, India. ---------- ----------

3)Mrs. P. Deepa

Address of Applicant :Assistant Professor, N.M.S.S. Vellaichamy Nadar College, Nagamalai, Madurai, Pin: 625019, Tamil Nadu, India. ---------- ----------

4)Mrs. Akula Swarna Latha

Address of Applicant :Assistant Professor, Sphoorthy Engineering College, Nadargul Village, Sagar Road, Near L.B. Nagar, Balapur Mandal, Ranga Reddy, Pin: 501510, Telangana, India. ---------- ----------

5)Dr. Bonala Madhavi

Address of Applicant :Assistant Professor of Mathematics, Government College for Women (Autonomous), Waddepally, Hanamkonda, Pin: 506370, Telangana, India. ---------- ----------

6)Dr. M. Varalakshmi

Address of Applicant :Assistant Professor, Department of Mathematics, Vardhaman College of Engineering, Shamshabad, Hyderabad, Pin: 501218, Telangana, India. ---------- ----------

7)Dr. K. Venugopal Reddy

Address of Applicant :Assistant Professor, Department of Mathematics, Anurag University, Hyderabad, Pin:500088, Telangana, India. ---------- ----------

8)Dr. Samir Dey

Address of Applicant :Associate Professor, Department of Mathematics. JIS University, 81, Nilgaunj Road, Kolkata, Pin: 700109, West Bengal, India. ---------- ----------

9)Ms. A. Punitha

Address of Applicant :Assistant Professor, Vels Institute of Science, Technology and Advanced Studies, Pallavaram, Chennai, Pin: 600 117, Tamil Nadu, India. ---------- ----------

10)Dr. G. Jayaraman

Address of Applicant :Assistant Professor, Vels Institute of Science, Technology and Advanced Studies, Pallavaram, Chennai, Pin: 600 117, Tamil Nadu, India. ---------- ----------

11)Dr. Harikumar Pallathadka

Address of Applicant :Director and Professor, Manipur International University, Ghari, Imphal, Imphal West, Pin: 795140, Manipur, India. ---------- ----------

(57) Abstract :

The interactive mathematics tutoring system described herein represents a cutting-edge approach to personalized education, integrating adaptive learning pathways to tailor educational experiences based on individual student performance and preferences. At its core, the system employs a sophisticated student profiling module to assess initial skill levels and learning styles, generating personalized learning profiles that guide the selection of instructional materials. An adaptive engine continuously analyzes student interactions, dynamically adjusting the difficulty and content of mathematics problems in real-time. The system's diverse content database includes interactive simulations, instructional videos, and textual explanations, catering to various learning styles and facilitating multiple approaches to problem-solving. Real-time feedback mechanisms provide instant guidance and motivational support, while progress tracking tools enable educators and parents to monitor student progress comprehensively. By fostering a supportive, adaptive learning environment, the system aims to enhance engagement, comprehension, and overall academic achievement in mathematics education.

No. of Pages : 18 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :14/07/2024
(21) Application No.202441053626 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A NOVEL HEAT ASSISTED HYDROLYSIS TECHNOLOGY FOR SYNTHESIS OF MESOPOROUS SILICA NANOPARTICLES

(51) International classification	:B01J0035100000, A61K0009510000, C01B0033180000, A61P0035000000, A61K0049000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)College of Pharmaceutical Sciences, Dayananda Sagar University
Address of Applicant :Sajeev Kumar B College of Pharmaceutical Sciences Dayananda Sagar University, CD Sagar building Shavige Malleshwara Hills, Kumaraswamy Layout, Bangalore, Karnataka, India -560078 Bengaluru ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Sajeev Kumar B
Address of Applicant :College of Pharmaceutical Sciences Dayananda Sagar University, CD Sagar building Shavige Malleshwara Hills, Kumaraswamy Layout, Bangalore, Karnataka, India -560078 Bengaluru ---------- ----------
2)Ravi Kumar Sah
Address of Applicant :Nirmal Lama Polytechnique Institute, Bardibas-11, Mahottari, Madhesh Province, Nepal Madhesh Province ---------- ----------

(57) Abstract :
Abstract The present invention provides a novel heat assisted hydrolysis (HAH) technique for the preparation of a Mesoporous silica nano scaffolds which are functionalised using PLGA, further loaded with therapeutic moieties. The preparation method has the advantages of simplicity, mild reaction condition, and cheap experiment raw materials, and the prepared mesoporous silica nanoparticle has the advantages of high specific surface area, high pore volume, and good biological compatibility. The functionalised MSN nano scaffolds could be an ideal carrier for various drug delivery applications as it offers higher Bioavailability and improved stability in vivo.

No. of Pages : 31 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :14/07/2024
(21) Application No.202441053635 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN ENHANCED HYBRID MODEL TO ENHANCE THE DIGITAL LENDING USING BLOCKCHAIN TECHNOLOGY AND ARTIFICIAL INTELLIGENCE

(51) International classification	:G06Q0040020000, H04L0009320000, H04L0009060000, G06Q0040040000, H04W0012000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)ASAMANI AKHILESHWARI
Address of Applicant :45/142-47-3d, Sri Rama Soudham, Ramalingeswara Nagar, Near AP Tourism Guest House, Venkataramana Colony, Kurnool ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)ASAMANI AKHILESHWARI
Address of Applicant :Regd no. 2002550003,Research Scholar, Department of Management, Koneru Lakshmaiah Education Foundation (KLEF), Hyderabad-500075 Hyderabad ---------- ----------
2)Dr.Jayavani Majumdar
Address of Applicant :Associate Professor, Department of Management, Koneru Lakshmaiah Education Foundation (KLEF), Hyderabad Hyderabad ---------- ----------
3)Dr.Varalakshmi Dandu
Address of Applicant :Assistant Professor(a),School of Management Studies, Jawaharlal Nehru Technological University, Ananthapuramu-515002 Anantapur ---------- ----------

(57) Abstract :
The traditional lending procedure often includes middlemen, such as banks or lending institutions, to establish trust and trustworthiness, resulting in additional fees and a delay of several weeks for loan approval. As confidence eroded due to globalisation, third parties and intermediaries emerged as a necessary safety net. Blockchain technology and artificial intelligence can reduce the role of middlemen in digital lending systems. Smart contracts expedite the lending process by encoding all loan terms, conditions, and restrictions into the contract. Programmers can program smart contracts to automatically determine a borrower's interest rate based on their profile or credit score. Therefore, this study seeks to propose a secure one stop hybrid AI and blockchain platform for all the digital lending platforms to safeguard the interests of both borrowers and lenders in order to ensure the effective operation of digital lending technology.

No. of Pages : 11 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/07/2024
(21) Application No.202441053640 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : CONCRETE FORMULATION WITH RECYCLED HDPE-PLASTOSAND COARSE AGGREGATES FOR STANDARD APPLICATIONS

(51) International classification :C04B0028040000, C04B0111000000, H01Q0001240000, C04B0018020000, B28C0005000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Ratod Vinod Kumar
Address of Applicant :Department Of Civil Engineering, University College Of Engineering, Osmania University, Hyderabad, Telangana state India-500007 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Ratod Vinod Kumar
Address of Applicant :Research Scholar, Department of Civil Engineering, University College of Engineering, Osmania University,Amberpet Hyderabad, Telangana, india-500007 HYDERABAD ---------- ----------
2)Dr Dhondy Rupesh Kumar
Address of Applicant :Professor, Department of Civil Engineering, University College of Engineering, Osmania University, amberpet, Hyderabad, Telangana,India-500007 HYDERABAD ---------- ----------
3)Ochiche Andrew Linus
Address of Applicant :Research Scholar, Department of Civil Engineering, University College of Engineering, Osmania University, amberpet, Hyderabad, Telangana,India-500007 HYDERABAD ---------- ----------

(57) Abstract :
The present invention relates to the field of construction materials, specifically to a method and composition for producing concrete using a novel HDPE-plastosand coarse aggregate. The HDPE-plastosand aggregate is created by melting recycled high-density polyethylene (HDPE) plastic at 295- 330 degrees Celsius and mixing it with natural sand to form a rough-textured aggregate. The mix design procedure follows ACI 211.2-98 guidelines for lightweight aggregates due to the reduced specific gravity of the HDPE-plastosand aggregate, which ranges from 1.45 to 1.80. Concrete mixtures were prepared using 53 grade cement, natural sand, water, and the HDPE-plastosand aggregate, with water-cement ratios ranging from 0.25 to 0.70. The prepared concrete samples were cured for 28 days, and their compressive strength was subsequently measured. Results indicated satisfactory performance characteristics suitable for standard applications, leading to the development of compressive strength versus water-cement ratio curves. These curves provide valuable insights and recommendations for future mix designs using plastic aggregates, promoting sustainable construction practices by incorporating recycled materials.

No. of Pages : 14 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :14/07/2024
(21) Application No.202441053641 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : OPTIMIZING AC DRIVE OPERATIONS WITH SINUSOIDAL PWM: A COMPARATIVE STUDY

(51) International classification :H02P27/08, G06F30/20, G06F30/367, H02P29/50, H02M1/12, H02M7/527, H03K7/08
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Banka Sujatha
Address of Applicant :G2 , Satyam Towers,Satyam Heights Rajiv Gandhi Nagar, Bachupally ,Hyderabad ---------- ----------
2)BVRIT HYDERABAD College of Engineering for Women,Hyderabad
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Banka Sujatha
Address of Applicant :G2 , Satyam Towers,Satyam Heights Rajiv Gandhi Nagar, Bachupally ,Hyderabad ---------- ----------
2)BVRIT HYDERABAD College of Engineering for Women,Hyderabad
Address of Applicant :BVRIT HYDERABAD College of Engineering for Women, Rajiv Gandhi Nagar, Bachupally, Hyderabad-500090, Telangana Hyderabad ---------- ----------

(57) Abstract :
This article emphasizes the performance evaluation and simulation of an AC drive system that includes a permanent magnet synchronous motor (PMSM) and an induction motor. Sinusoidal pulse width modulation (SPWM) has become increasingly prevalent in the realm of AC motor control. This relatively sophisticated method employs a triangular carrier wave modulated by a sine wave, and the points of intersection determine the switching points of the power devices in the three-phase, two-level inverter. The emphasis was on the simulation of the power circuits using MATLAB/Simulink software. The output of the inverter contains a large number of voltage harmonics. After studying various types of filters, an appropriate filter at the inverter's output has been designed and incorporated. It eliminates harmonics, and a sinusoidal waveform with a total harmonic distortion (THD) of less than 5% has been obtained. The output, which is nearly sinusoidal, has been fed to an induction motor. The performance of an induction motor drive system was simulated and evaluated for variable speed operation from no load to rated speed under constant torque operation. Another simulation was done by feeding the output of the inverter with a filter to a PMSM motor, and its performance was evaluated. A comparison of induction motor and PMSM motor performance was done for a given load.

No. of Pages : 12 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :14/07/2024

(21) Application No.202441053646 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : PROPELLING THE FUTURE WITH THE LIBERTY ENGINE

(51) International classification	:G06Q0010060000, C08J0005040000, B64C0011000000, B64G0001000000, B60W0010115000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Mr.Steve Cornelius S
Address of Applicant :Easwari Engineering College, Bharathi Salai, Ramapuram, Chennai - 89 Chennai ---------- ----------
2)Mrs.D.Chandrakala
3)Ms. Monadharshini E
4)Mr. Vishwabharathi M
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr.Steve Cornelius S
Address of Applicant :Easwari Engineering College, Bharathi Salai, Ramapuram, Chennai - 89 Chennai ---------- ----------
2)Mrs.D.Chandrakala
Address of Applicant :Easwari Engineering College, Bharathi Salai, Ramapuram, Chennai - 89 Chennai ---------- ----------
3)Ms. Monadharshini E
Address of Applicant :Easwari Engineering College, Bharathi Salai, Ramapuram, Chennai - 89 Tamilnadu Chennai ---------- ----------
4)Mr. Vishwabharathi M
Address of Applicant :Easwari Engineering College, Bharathi Salai, Ramapuram, Chennai - 89 Chennai ---------- ----------

(57) Abstract :
PROPELLING THE FUTURE WITH THE LIBERTY ENGINE "Propelling the Future with the Liberty Engine" embodies a vision of innovation and advancement in aerospace technology. This abstract explores the transformative potential of the Liberty Engine, an emblem of cutting-edge propulsion systems poised to redefine aerospace capabilities. Designed to meet the demands of next-generation aircraft, the Liberty Engine integrates state-of-the-art materials and advanced engineering principles to enhance efficiency, reliability, and performance. By harnessing groundbreaking technologies such as advanced composites, novel fuel systems, and precision engineering, the Liberty Engine promises to revolutionize both civilian and military aviation sectors. Its design focuses on maximizing thrust-to-weight ratios while minimizing environmental impact through reduced emissions and improved fuel efficiency. This abstract examines the Liberty Engine's pivotal role in shaping the future of aerospace by enabling faster, more fuel-efficient travel, expanding operational ranges, and supporting sustainable aviation practices. Furthermore, it underscores the engine's potential to spur economic growth through enhanced air transport capabilities and bolstering global connectivity. As industries increasingly prioritize sustainability and efficiency, the Liberty Engine stands as a beacon of progress, driving forward the frontiers of aerospace engineering.

No. of Pages : 16 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :14/07/2024

(21) Application No.202441053648 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR INTEGRATING ARTIFICIAL INTELLIGENCE IN MARKETING, CONSUMER RESEARCH, AND PSYCHOLOGY

(51) International classification	:G06Q0030020000, G06N0003040000, G06N0020000000, G06N0003020000, G06N0003080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr. K. Nagavani

Address of Applicant :Associate Professor, PG Department of Commerce, Seshadripuram College, #27, Nagappa Street, Seshadripuram, Bengaluru-560020 ---------- ----------

2)Dr. Ankit Garg

3)Ms. Mayuri Tayal

4)Dr. Veenus Tyagi

5)Dr.Gurpreet Kaur

6)Ms. Nisha Sharma

7)Nidhi Nirwan

8)Mr. Ankush Nijhawan

9)Dr. Abhijit Mohanty

10)Shiwani Agarwal

11)Dr. Ritesh Kumar Singhal

12)Dr. Manu Priya Gaur

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. K. Nagavani

Address of Applicant :Associate Professor, PG Department of Commerce, Seshadripuram College, #27, Nagappa Street, Seshadripuram, Bengaluru-560020 ---------- ----------

2)Dr. Ankit Garg

Address of Applicant :Assistant Professor, Department Management, Ajay Kumar Garg Institute of Management, Ghaziabad ---------- ----------

3)Ms. Mayuri Tayal

Address of Applicant :Assistant Professor, IAMR College, Duhai, Ghaziabad ---------- ----------

4)Dr. Veenus Tyagi

Address of Applicant :Associate Professor, IAMR College, Ghaziabad ---------- ----------

5)Dr.Gurpreet Kaur

Address of Applicant :Assistant Professor, University School of Business, Chandigarh University, Punjab ---------- ----------

6)Ms. Nisha Sharma

Address of Applicant :Assistant Professor, Meerut Institute of Engineering and Technology, Meerut ---------- ----------

7)Nidhi Nirwan

Address of Applicant :Assistant Professor, G L Bajaj Institute of Management, Greater Noida ---------- ----------

8)Mr. Ankush Nijhawan

Address of Applicant :Assistant Professor, Department of Commerce, KC School of Management and Computer Applications, Nawanshahr, Punjab ---------- ----------

9)Dr. Abhijit Mohanty

Address of Applicant :Assistant Professor (Guest Faculty), Department of Business Administration, Sambalpur University, Odisha ---------- ----------

10)Shiwani Agarwal

Address of Applicant :Assistant Professor, IIMT Engineering College, Meerut ---------- ----------

11)Dr. Ritesh Kumar Singhal

Address of Applicant :Professor, Management, Ajay Kumar Garg Institute of Management, Ghaziabad ---------- ----------

12)Dr. Manu Priya Gaur

Address of Applicant :Assistant Professor, Management, Ajay Kumar Garg Institute of Management, Ghaziabad ---------- ----------

(57) Abstract :

This patent discloses a system and method for integrating artificial intelligence (AI) into the fields of marketing, consumer research, and psychology. The system leverages advanced AI techniques, including machine learning, neural networks, and big data analytics, to enhance decision-making processes, understand consumer behavior, and improve marketing strategies. By incorporating psychological theories and computational logic, this invention provides a comprehensive framework for AI applications in marketing, ensuring higher precision and effectiveness in targeting and engaging consumers. The system's modules include memory and computational logic, decision-making and cognitive processes, neural networks and machine learning, social media and text mining, social media content analytics, technology acceptance and adoption, and big data and robotic components. This integrated approach addresses existing limitations and offers significant advantages, such as improved decision-making capabilities, enhanced consumer insights, and more effective marketing strategies. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 24 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :14/07/2024
(21) Application No.202441053650 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A FRAMEWORK TO DETECT LUNG CANCER USING MACHINE LEARNING WITH SEVERITY

(51) International classification	:A61B0005000000, G06N0003040000, G16H0050200000, G06K0009620000, G06T0007000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Koneru Lakshmaiah Education Foundation
Address of Applicant :Koneru Lakshmaiah Education Foundation, Hyderabad-500075, Telangana ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr. B. Samirana Acharya
Address of Applicant :Research Scholar, Department of Computer Science and Engineering, Koneru Lakshmaiah Education Foundation, Hyderabad-500075, Telangana ---------- ----------
2)Dr. K. Ramasubramanian
Address of Applicant :Associate Professor, Department of Computer Science and Engineering, Koneru Lakshmaiah Education Foundation, Hyderabad-500075, Telangana ---------- ----------

(57) Abstract :
The present invention discloses a novel framework for detecting lung cancer and assessing its severity using advanced machine learning techniques. Lung cancer is a prevalent and life-threatening disease globally, necessitating early detection for effective treatment and improved patient outcomes. Traditional diagnostic methods often involve invasive procedures and are time-consuming. In contrast, the proposed framework leverages machine learning algorithms, including convolutional neural networks (CNNs) and support vector machines (SVMs), to analyze medical imaging data and patient-specific information. The framework integrates modules for data acquisition, preprocessing, feature extraction, and machine learning-based detection with severity assessment. This enables non-invasive, rapid, and accurate diagnosis of lung cancer, providing medical practitioners with detailed diagnostic reports essential for personalized treatment planning. The invention represents a significant advancement in medical diagnostics, enhancing the efficiency and efficacy of lung cancer detection and management. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 21 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :14/07/2024
(21) Application No.202441053651 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : OPTIMIZING ENERGY EFFICIENCY IN IOT APPLICATIONS USING STT-MRAM: A PROTOTYPING FRAMEWORK AND EVALUATION STUDY

(51) International classification :G11C0011160000, G06F0015780000, G11C0013000000, G06F0012020000, G06F0001320600
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr.N.J.R. Muniraj
Address of Applicant :Professor and Dean, ECE Dept, SNS College of Technology, SNS Kalvi Nagar, Coimbatore, Tamil Nadu- 641035. ---------- ----------
2)Dr. J. Geetha Ramani
3)Mr. M. Jagadesh
4)Dr.V.S.Nishok
5)Mrs.R.Gayathri
6)Ms.L. K. Amritha Sree
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.N.J.R. Muniraj
Address of Applicant :Professor and Dean, ECE Dept, SNS College of Technology, SNS Kalvi Nagar, Coimbatore, Tamil Nadu- 641035. ---------- ----------
2)Dr. J. Geetha Ramani
Address of Applicant :Professor & HOD, ECE Dept, SNS College of Technology, SNS Kalvi Nagar, Coimbatore, Tamil Nadu- 641035. ---------- ----------
3)Mr. M. Jagadesh
Address of Applicant :Assistant Professor, ECE Dept, SNS College of Technology, SNS Kalvi Nagar, Coimbatore, Tamil Nadu- 641035. ---------- ----------
4)Dr.V.S.Nishok
Address of Applicant :Assistant Professor, ECE Dept, SNS College of Technology, SNS Kalvi Nagar, Coimbatore, Tamil Nadu- 641035. ---------- ----------
5)Mrs.R.Gayathri
Address of Applicant :Assistant Professor, ECE Dept, SNS College of Technology, SNS Kalvi Nagar, Coimbatore, Tamil Nadu- 641035. ---------- ----------
6)Ms.L. K. Amritha Sree
Address of Applicant :Student, ECE Dept, SNS College of Technology, SNS Kalvi Nagar, Coimbatore, Tamil Nadu- 641035. ---------- ----------

(57) Abstract :
[06] To improve the energy efficiency of low-power devices used in Internet of Things (IoT) applications, it is essential to explore various strategies and emerging technologies that address the limitations of traditional solutions. Evaluating these new approaches involves determining their ability to meet IoT constraints, optimizing their integration, and understanding their limitations. One promising technology is Spin-Transfer Torque Magnetic Random-Access Memory (STT-MRAM), which offers non-volatility and potential energy efficiency improvements for integrated circuits in embedded applications. This study presents an exploration framework based on an FPGA prototyping platform, FlexNode, where we designed a reference microcontroller architecture. The first step involves validating this reference architecture to ensure its behavioral similarity to conventional microcontrollers. Equipped with an activity monitor, this validated architecture allows for the detection of various events related to memory consumption during the execution of application programs. The collected data is then utilized to estimate and evaluate the energy consumption of the microcontroller under different memory architecture configurations and technologies. By doing so, we aim to determine an optimal combination of these configurations and technologies to enhance energy efficiency for specific IoT applications. This exploration flow provides a detailed and context-aware approach to developing energy-efficient solutions for embedded systems, addressing the current inadequacies of traditional evaluation tools. Accompanied Drawing [FIG. 1] [FIG. 2] [FIG. 3] [FIG. 4] [FIG. 5] [FIG. 6]

No. of Pages : 29 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/07/2024
(21) Application No.202441053652 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : INTERACTIVE TUTOR BOT

(51) International classification :G06Q0050200000, G09B0005020000, G06N0003000000, G06T0019000000, G09B0005060000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)MOHAMMED IMRAN
Address of Applicant :Founder & Director, KOKO AI, Helsinki Finland, H.no: 12-1-581, Syed Ali Guda, Murad nagar, Hyderabad, TS, 500028, India. ---------- ----------
2)Mohammed Abdul Fareed
3)Syed Khawaja Razeeuddin Quadree
4)Mohammed Aftab Ahmed
5)Mohammed Adnan Sameer
6)Syed Shadab Hussain
7)Iliyas Hussain
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MOHAMMED IMRAN
Address of Applicant :Founder & Director, KOKO AI, Helsinki Finland, H.no: 12-1-581, Syed Ali Guda, Murad nagar, Hyderabad, TS, 500028, India. ---------- ----------
2)Mohammed Abdul Fareed
Address of Applicant :Founder & CEO, InteractiveTutorBotH.no: 10-2-9/2 AC Guards, Hyderabad, TS, India. Hyderabad ---------- ----------
3)Syed Khawaja Razeeuddin Quadree
Address of Applicant :H.No: 9-11-367, Jinsi Bazar, Golconda, Hyderabad, TS, India. Hyderbad ---------- ----------
4)Mohammed Aftab Ahmed
Address of Applicant :H.no: 8-3-228/1280/380, Jawahar Nagar, Yusufguda, Hyderabad, TS, India. Hyderabad ---------- ----------
5)Mohammed Adnan Sameer
Address of Applicant :H.no: 4-78, kakatiya nagar colony, kamareddy, TS, India. kamareddy ---------- ----------
6)Syed Shadab Hussain
Address of Applicant :H.no: 18-2-45/A/28, Ghazi Millat Colony, Chandrayangutta, Hyderabad, TS,India, Hyderabad ---------- ----------
7)Iliyas Hussain
Address of Applicant :, H.no: 17-5-237, Dabirpura, near MMT playground, Charminar, Hyderabad, Telangana, Hyderabad ---------- ----------

(57) Abstract :
Exemplary aspects of the present disclosure are directed toward the Interactive Tutor Bot (ITB-100). Wherein Interactive Tutor Bot (ITB-100) is an integration of Artificial Intelligence (AI-101) and augmented Reality (AR-102) with Interactive Tutorship (IT-103) to create a Virtual Classroom (VC-104) experience. Interactive Tutorship (IT-103) uses OnDemand 3D Animated Videos (AV-102a) to explain the topics through Appropriate Device (AD-102b) capable of visualising AV-102a in Augmented Reality (AR-102) to the learners. Further, during the AV-102a presentation, a learner may ask an appropriate question for which IT-103 uses AI-101 to interpret the learner's query using the appropriate Large Language Model (LLM-101a) and searches the query through Data Base (DB- 103c) and plays the appropriate AV-103a through AD-102b. Further, Interactive Tutorship (IT-103) can do Assessment 103d of the learner and provide appropriate Feedback 103e such that the topic can be revised. The bot functions as a tutor, query responder, and feedback provider, and it customises education to individual needs

No. of Pages : 13 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/07/2024

(21) Application No.202441053653 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : CONTROLLED CHARGING HUB FOR USB DEVICES IN ELECTRICAL SWITCHBOARD

(51) International classification :H02B1/015, H01R13/66, H02J7/00, G05F1/10, G08C17/02, H02H5/04, H02H3/08
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Kumar K
Address of Applicant :Sri Venkateswara College of Engineering, Tirupati ---------- ----------
2)Dr. V Lakshmi Devi
3)Dr. A Sudhakar
4)Dr. C Vasavi
5)Pardhavi Sai Sree T
6)Dr. Damodhar Reddy
7)Dr. K Murali Kumar
8)Dr. M Priya
9)Kurava Raju
10)Yelamaneni Hari Krishna
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Kumar K
Address of Applicant :Sri Venkateswara College of Engineering, Tirupati ---------- ----------
2)Dr. V Lakshmi Devi
Address of Applicant :Professor & Head, Department of EEE, Sri Venkateswara College of Engineering, Tirupati, Andhra Pradesh Tirupati ---------- ----------
3)Dr. A Sudhakar
Address of Applicant :Associate Professor, Department of EEE, Sri Venkateswara College of Engineering, Tirupati Tirupati ---------- ----------
4)Dr. C Vasavi
Address of Applicant :Assistant Professor, Department of EEE, School of Engineering and Technology, Sri Padmavati Mahila Visvavidyalayam, Tirupati Tirupati ---------- ----------
5)Pardhavi Sai Sree T
Address of Applicant :Assistant Professor, Department of EEE, School of Engineering and Technology, Sri Padmavati Mahila Visvavidyalayam, Tirupati Tirupati ---------- ----------
6)Dr. Damodhar Reddy
Address of Applicant :Assistant Professor, Department of EEE, Institute of Aeronautical Engineering, Dundigal, Hyderabad. Dundigal ---------- ----------
7)Dr. K Murali Kumar
Address of Applicant :Associate Professor, Department of EEE, Siddharth Institute of Engineering & Technology, Puttur Puttur ---------- ----------
8)Dr. M Priya
Address of Applicant :Associate Professor, Department of EEE, Siddharth Institute of Engineering & Technology, Puttur Puttur ---------- ----------
9)Kurava Raju
Address of Applicant :Assistant Professor, Department of EEE, Sri Venkateswara College of Engineering, Tirupati Tirupati ---------- ----------
10)Yelamaneni Hari Krishna
Address of Applicant :Assistant Professor, Department of EEE, Sri Venkateswara College of Engineering, Tirupati Tirupati ---------- ----------

(57) Abstract :
The concept is about an electrical switchboard that has a controlled charging hub built in for USB devices. The charging hub lets you handle power for multiple USB devices in a centralized and efficient way by allowing controlled charging, such as charging on a schedule and current rating based. Advanced overload protections are built into the system to keep connected devices and the switchboard safe from power spikes and overcurrent situations. Remote management is possible through a web interface or connected app, which lets users direct and keep an eye on the charging process from anywhere. Intelligent power sharing features make sure that charging speeds are just right for each device. To make sure it works well, safety features like short-circuit protection, over-temperature protection, and voltage control are built in. The modular design makes it easy to install and maintain in standard electrical switchboards, making it perfect for use in homes, businesses, and factories. Users are notified and alerted about the status of charging, when it's done, and any problems. This makes it easier for users to handle their devices and makes things more convenient.

No. of Pages : 8 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/07/2024
(21) Application No.202441053659 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DESIGN OF SMART SYSTEM OF PLACEMENT ALGORITHM FOR BALANCED RESOURCE UTILIZATION IN CLOUD DATA CENTRES

(51) International classification	:G06F0009455000, G06F0009500000, H04L0067102300, H04L0067100100, H04W0028080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)AMRITA VISHWA VIDYAPEETHAM
Address of Applicant :Bengaluru Campus, Kasavanahalli, Carmelaram P.O, Bengaluru - 560035, Karnataka, India Bengaluru ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Beena B.M.
Address of Applicant :Associate Professor, Amrita School of Computing, Amrita Vishwa Vidyapeetham, Bengaluru Campus, Kasavanahalli, Carmelaram P.O, Bengaluru - 560035, Karnataka, India Bengaluru ---------- ----------

(57) Abstract :
Cloud computing is a cost-effective model for internet-based computing, leveraging virtualization to share physical machines among numerous virtual machines running extensive user applications. Efficient allocation of virtual machines (VMs) to physical machines (PMs) is crucial for balancing load and ensuring quality of service. However, unpredictable and unequal application loads present significant challenges for resource management in cloud datacenters. This research proposes a novel load balancing algorithm designed for the efficient allocation of VMs to PMs. Implemented in CloudSim, the proposed algorithm is compared with the existing worst-fit algorithm. The results demonstrate that the new algorithm significantly outperforms the worst-fit algorithm in resource management, offering improved load balancing and better utilization of resources.

No. of Pages : 19 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/07/2024
(21) Application No.202441053662 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AI BASED INTELLIGENCE AUTONOMOUS SURVILANCE SYSTEM

(51) International classification :G08B0013196000, H04L0067120000, H04N0021450000, H04N0007180000, H04L0067125000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Revathi R
Address of Applicant :V.S.B COLLEGE OF ENGINEERING TECHNICAL CAMPUS ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)REVATHI R
Address of Applicant :V.S.B.College of Engineering Technical Campus, Eilur Pirivu, Pollachi Main Road, Coimbatore -642109 COIMBATORE ---------- ----------
2)S. ARUN KUMAR
Address of Applicant :V.S.B.College of Engineering Technical Campus, Eilur Pirivu, Pollachi Main Road, Coimbatore -642109 COIMBATORE ---------- ----------
3)DHANYA R
Address of Applicant :V.S.B.College of Engineering Technical Campus, Eilur Pirivu, Pollachi Main Road, Coimbatore -642109 COIMBATORE ---------- ----------
4)KARTHIKEYAN S
Address of Applicant :V.S.B.College of Engineering Technical Campus, Eilur Pirivu, Pollachi Main Road, Coimbatore -642109 COIMBATORE ---------- ----------
5)GOVARTHINI P
Address of Applicant :V.S.B.College of Engineering Technical Campus, Eilur Pirivu, Pollachi Main Road, Coimbatore -642109 COIMBATORE ---------- ----------
6)SMITHA MOL S
Address of Applicant :V.S.B.College of Engineering Technical Campus, Eilur Pirivu, Pollachi Main Road, Coimbatore -642109 COIMBATORE ---------- ----------
7)KALAISELVAN S
Address of Applicant :V.S.B.College of Engineering Technical Campus, Eilur Pirivu, Pollachi Main Road, Coimbatore -642109 COIMBATORE ---------- ----------
8)SELVAKUMAR P
Address of Applicant :V.S.B.College of Engineering Technical Campus, Eilur Pirivu, Pollachi Main Road, Coimbatore -642109 COIMBATORE ---------- ----------

(57) Abstract :
ABSTRACT Industrial disasters have been increasing in frequency, causing significant damage to both humans and industries. This project proposes a system to detect abnormal changes in industrial environments early to prevent such disasters. Surveillance systems play a crucial role in factories by alerting and protecting workers. Mechanical constructions, such as robot designs tailored for navigating harsh environments like heavy dirt or mud, often use caterpillar tracks. These mechanical aspects are essential for completing tasks and dealing with environmental physics. Electricity, typically sourced from batteries, powers these systems. Even petrol-powered machines rely on electricity for processes like combustion initiation, underscoring the importance of safety mechanisms such as batteries in vehicles. Artificial intelligence (AI) enhances these systems by simulating human intelligence through machines. In this project, a robot equipped with sensors monitors indoor industrial environments for parameters like fire, temperature, and toxic gases. Data is continuously updated to a server via IoT, ensuring real-time monitoring and response.

No. of Pages : 13 No. of Claims : 17

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/07/2024
(21) Application No.202441053665 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SELECTIVE DISSOLUTION OF ADDITIVE MANUFACTURING SUPPORT STRUCTURE AND METHOD THEREOF

(51) International classification	:B33Y0010000000, B33Y0030000000, B22F0010200000, B33Y0050020000, B33Y0040000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DEVIPRASAD SHETTY
Address of Applicant :DEPT. MECHANICAL ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
2)DR VIJEESH V
Address of Applicant :DEPT. MECHANICAL ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------

(57) Abstract :
Disclosed herein is a selective dissolution additive manufacturing system (100) that comprises a material deposition unit (102) configured to deposit multiple materials in a layer-by-layer manner to form a structure. The system (100) includes a selective dissolution unit (104) configured to selectively dissolve specific materials from the structure to create clean interfaces between different materials. The system (100) also includes a control unit (106) configured to manage the operations of the material deposition unit (102) and the selective dissolution unit (104), ensuring precise material placement and removal. The system (100) also includes an adaptive process control module (108) within the control unit (106) that adjusts deposition parameters and dissolution rates in real-time based on feedback from sensors. The system (100) also includes a path planning module (110) within the control unit (106) that generates optimized deposition paths for each material layer, enhancing manufacturing efficiency and reducing material waste.

No. of Pages : 28 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :15/07/2024

(21) Application No.202441053673 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : AI ASSISTED ENGINE OIL MONITORING SYSTEM

(51) International classification :G06Q0010060000, B62L0003020000, F02D0041220000, A61K0036540000, G01N0033280000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr.K.SENTHILKUMAR
Address of Applicant :7/25, Moolai Vettu Thottam Keeranatham, Coimbatore ---------- ----------
2)Mr D.Rajesh Kumar
3)P.Leon Dharmadurai
4)Mr. C. Subramanian
5)Mr. C. Asokan
6)Dr. M. M. Moorthi
7)Mr. D. Kubendran
8)Mr. M. Mohamed Ariffuddeen
9)Nidhish A M M
10)Mohamed Safeek Rahuman. P
11)Abinash P
12)Aravind S
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.K.SENTHILKUMAR
Address of Applicant :7/25, Moolai Vettu Thottam Keeranatham, Coimbatore ---------- ----------
2)Mr D.Rajesh Kumar
Address of Applicant :Assistant Professor , Automobile Engineering, SNS College of Technology, SNS Kalvi Nagar, Kurumbapalayam SSKulam, Tamil Nadu, India Coimbatore ---------- ----------
3)P.Leon Dharmadurai
Address of Applicant :Assistant Professor , Automobile Engineering, SNS College of Technology, SNS Kalvi Nagar, Kurumbapalayam SSKulam, Tamil Nadu, India Coimbatore ---------- ----------
4)Mr. C. Subramanian
Address of Applicant :Assistant Professor, Automobile Engineering, SNS College of Technology, SNS Kalvi Nagar, Kurumbapalayam SSKulam, Tamil Nadu, India Coimbatore ---------- ----------
5)Mr. C. Asokan
Address of Applicant :Department of Automobile Engineering, SNS College of Technology, Coimbatore, Tamilnadu, India – 641035 Coimbatore ---------- ----------
6)Dr. M. M. Moorthi
Address of Applicant :Department of Automobile Engineering, SNS College of Technology, Coimbatore, Tamilnadu, India – 641035 Coimbatore ---------- ----------
7)Mr. D. Kubendran
Address of Applicant :Department of Automobile Engineering, SNS College of Technology, Coimbatore, Tamilnadu, India – 641035 Coimbatore ---------- ----------
8)Mr. M. Mohamed Ariffuddeen
Address of Applicant :Department of Automobile Engineering, SNS College of Technology, Coimbatore, Tamilnadu, India – 641035 Coimbatore ---------- ----------
9)Nidhish A M M
Address of Applicant :Department of Automobile Engineering, SNS College of Technology, Coimbatore, Tamilnadu, India – 641035 Coimbatore ---------- ----------
10)Mohamed Safeek Rahuman. P
Address of Applicant :Department of Automobile Engineering, SNS College of Technology, Coimbatore, Tamilnadu, India – 641035 Coimbatore ---------- ----------
11)Abinash P
Address of Applicant :Department of Automobile Engineering, SNS College of Technology, Coimbatore, Tamilnadu, India – 641035 Coimbatore ---------- ----------
12)Aravind S
Address of Applicant :Department of Automobile Engineering, SNS College of Technology, Coimbatore, Tamilnadu, India – 641035 Coimbatore ---------- ----------

(57) Abstract :
The world of transportation is rapidly evolving, with an increasing emphasis on efficiency, sustainability, and user experience. Two-wheelers, such as motorcycles and scooters, play a vital role in urban mobility, offering a convenient and agile means of transportation. To further enhance the performance, longevity, and safety of two-wheelers, this project focuses on the development of a cutting-edge solution: Real-Time Engine Oil Monitoring and Fuel Level Monitoring. By harnessing the power of real-time data analysis and intelligent monitoring, this project aims to revolutionize the way we manage and optimize the operation of two-wheelers. In the following sections, we will delve into the details of this innovative system, its significance, and the anticipated benefits it brings to both riders and the environment.

No. of Pages : 11 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :15/07/2024

(21) Application No.202441053679 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : GROWTH AND PERFORMANCES OF MICRO, SMALL AND MEDIUM ENTERPRISES IN INDIA

(51) International classification :G06Q0010060000, G06Q0040020000, A61K0048000000, F23L0015040000, A61K0036740000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Gnaneshwar Koorella
Address of Applicant :Assistant Professor, Department of Management Studies, Guru Nanak Institute of Technology, Ibrahimpatnam, Hyderabad, Telangana-501506, India. Hyderabad ---------- ----------
2)Minal Maheshwari
3)Dr Ch Sudipta Kishore Nanda
4)Dolmita Shailendra
5)Dr. Aruna V
6)Dr. Nagalakshmi M.V.N.
7)Y.V.N. Sai Sri Charan
8)Dr. Shaman Gupta
9)Dr.Akshaya Kumar Mohanty
10)Dr.E.Muthukumar
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Gnaneshwar Koorella
Address of Applicant :Assistant Professor, Department of Management Studies, Guru Nanak Institute of Technology, Ibrahimpatnam, Hyderabad, Telangana-501506, India. Hyderabad ---------- ----------
2)Minal Maheshwari
Address of Applicant :Assistant Professor, Department of Information Technology, Asian School of Business, Plot A2, Sec-125, Noida, Uttar Praesh-201303, India. Noida ---------- ----------
3)Dr Ch Sudipta Kishore Nanda
Address of Applicant :Assistant Professor – II, Department of Commerce, School of Tribal Resource Management, KISS Deemed to be University, Higher Education Campus, Campus -4 , Po - KIIT, Bhubaneswar, Pin - 751024, India. Bhubaneswar ---------- ----------
4)Dolmita Shailendra
Address of Applicant :Assistant Professor, Department of Commerce, Mangalmay Institute of Management and Technology , 8, Knowledge Park-II , Greater Noida, Uttar Pradesh-201310, India. Greater Noida ---------- ----------
5)Dr. Aruna V
Address of Applicant :Assistant Professor, Department of MBA, St. Joseph Institute of Technology, OMR, Chennai, Tamilnadu-600119, India. Chennai ---------- ----------
6)Dr. Nagalakshmi M.V.N.
Address of Applicant :Assistant Professor, Faculty of Management, S.R.M. Institute of Science and Technology, Tamilnadu-603203, India. Kattankolathur ---------- ----------
7)Y.V.N. Sai Sri Charan
Address of Applicant :DMTS - Distinguished Member of Technical Staff, Department of Technology, Data Services Limited, Hyderabad, Telangana-500049, India. Hyderabad ---------- ----------
8)Dr. Shaman Gupta
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, M.M.Engineering College, MM(DU) Mullana, Haryana-133207, India. Mullana ---------- ----------
9)Dr.Akshaya Kumar Mohanty
Address of Applicant :Associate Professor, Department of Economics, School of Economics Management and Information Sciences, Mizoram University, Tanhril, Aizawl, Mizoram-796004, India. Aizawl ---------- ----------
10)Dr.E.Muthukumar
Address of Applicant :Professor, Department of MBA, Nehru College of Management, Thirumalayampalayam, Coimbatore, Tamilnadu-641105, India. Coimbatore ---------- ----------

(57) Abstract :
GROWTH AND PERFORMANCES OF MICRO, SMALL AND MEDIUM ENTERPRISES IN INDIA ABSTRACT Recent years have seen a growing recognition of the significance of micro, small, and medium-sized enterprises (MSME) in both developed and developing nations. This recognition is based on the MSME's important contribution to the achievement of a variety of socio-economic goals, including the promotion of exports, higher growth in employment, and the encouragement of entrepreneurial endeavors. They play a significant role in played a significant part in the industrial growth of any nation. The micro, small, and medium-sized enterprise (MSME) sector is a significant contributor to the expansion of the Indian economy, making it an essential pillar of the Indian economy. The purpose of this article is to bring attention to the current situation of the performance of micro, small, and medium-sized enterprises (MSMEs) in India, specifically with regard to the growth of employment, the growth of the number of units, the market value of fixed assets, and the gross value of output of the MSME Manufacturing sector. The contribution of micro, small, and medium-sized enterprises (MSMEs) to India's gross domestic product was also investigated, as were the numerous internal and external challenges that MSMEs confront. It has been determined that this industry is making a considerable contribution to the country's gross domestic product, as well as to employment and manufacturing production. A number of challenges are faced by micro, small, and medium-sized enterprises (MSMEs) in India. These challenges include a lack of access to adequate and timely banking financing, an absence of relevant technology, inefficient marketing due to limited resources, and a lack of accessibility to trained labor.

No. of Pages : 11 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/07/2024

(21) Application No.202441053680 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A 2D PLOTTING/WRITING MACHINE SYSTEM

(51) International classification :E21B0043120000, H02P0023140000, G05B0015020000, C08L0051040000, B29C0049420000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. SHARATH CHANDRA H. S
Address of Applicant :DEPARTMENT OF MECHANICAL ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
2)DR. DIVIJESH P
Address of Applicant :DEPARTMENT OF MECHANICAL ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
3)MOHAMMED HUSSAIN
Address of Applicant :DEPARTMENT OF MECHANICAL ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------

(57) Abstract :
Disclosed herein is a design and fabrication of numerically controlled 2D plotting/writing machine system (100) comprises a body frame (102) constructed from plywood, characterized by its high-quality finish, smoothness, resistance to water and moisture, increased stability, high impact resistance, high strength-to-weight ratio, and excellent chemical resistance. The system includes a servo motor (104) configured to control the z-axis for lifting the pen up and down. The system also includes a NEMA stepper motor (106) providing step movements. The system also includes a motor driver (108) to transmit signals from an Arduino to a CNC shield. The system also includes a heat sinker (110) designed to mitigate heating issues on the motor driver. The system also includes an Arduino (112) programmed to send G-codes for controlling the machine.

No. of Pages : 29 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :15/07/2024

(21) Application No.202441053692 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : DESIGN AND IMPLEMENTATION OF IOT BASED LOW COST, EFFECTIVE LEARNING MECHANISM FOR EMPOWERING STEM EDUCATION IN INDIA

(51) International classification	:G06Q0050200000, G09B0019000000, G06N0020000000, H04L0067120000, H04W0004700000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr. Sajitha A V

Address of Applicant :Associate Professor, Department of Computer Applications, Mohandas College of Engineering And Technology, Anad, Nedumangad, Thiruvananthapuram-695544, Kerala, India. Thiruvananthapuram ---------- ----------

2)Dr. A. Pio Albina

3)Dr. Dayal Pyari

4)Dr. Jumisree Sarmah Pathak

5)Ms. Naeema Nazar

6)Prof. Amit Kumar Patil

7)Dr. B Asraf Yasmin

8)Dr. Nidhi M B

9)Dr. M. Kowsalya

10)Dr. Sameer Sharma

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. Sajitha A V

Address of Applicant :Associate Professor, Department of Computer Applications, Mohandas College of Engineering And Technology, Anad, Nedumangad, Thiruvananthapuram-695544, Kerala, India. Thiruvananthapuram ---------- ----------

2)Dr. A. Pio Albina

Address of Applicant :Assistant Professor, Department of Mathematics, Alagappa University College of Education, Alagappa University, Karaikudi-630002, Tamil Nadu, India. Karaikudi ---------- ----------

3)Dr. Dayal Pyari

Address of Applicant :Associate Professor, Department of Education, Amity Institute of Education, Amity University, Noida-201313, Uttar Pradesh, India. Noida ---------- ----------

4)Dr. Jumisree Sarmah Pathak

Address of Applicant :Assistant Professor, Department of Physics, Indian Institute of Teacher Education, Gandhi Nagar-382016, Gujarat, India. Gandhi Nagar ---------- ----------

5)Ms. Naeema Nazar

Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, VISAT Engineering College, Mutholapuram Post, Elanji, Ernakulam-686665, Kerala, India. Ernakulam ---------- ----------

6)Prof. Amit Kumar Patil

Address of Applicant :Assistant Professor, Department of ECE, MIT Art, Design & Technology University, Pune-412201, Maharashtra India. Pune ---------- ----------

7)Dr. B Asraf Yasmin

Address of Applicant :Assistant Professor, Department of MCA, Sri Muthu Kumaran Institute of Technology, Mangadu, Chennai-600122, Tamil Nadu, India. Chennai ---------- ----------

8)Dr. Nidhi M B

Address of Applicant :Professor, Department of Mechanical, MBCET, Nalanchira, Trivandrum-695015, Kerala, India. Trivandrum ---------- ----------

9)Dr. M. Kowsalya

Address of Applicant :Assistant Professor, Department of Commerce with International Business, Dr. N. G. P. Arts and Science College, Coimbatore-641006, Tamil Nadu, India. Coimbatore ---------- ----------

10)Dr. Sameer Sharma

Address of Applicant :Associate Professor, Department of Mechanical Engineering, M.M. Engineering College, MM(DU) Mullana, Ambala-133203, Haryana, India. Ambala ---------- ----------

(57) Abstract :

DESIGN AND IMPLEMENTATION OF IOT BASED LOW COST, EFFECTIVE LEARNING MECHANISM FOR EMPOWERING STEM EDUCATION IN INDIA ABSTRACT In order to facilitate STEM education in India, this invention details the planning and implementation of an inexpensive, effective learning mechanism that is based on the internet of things (IoT). Our goal is to ensure that students from all economic backgrounds have equal access to high-quality STEM education by leveraging the Internet of Things (IoT). The proposed invention integrates low-cost Internet of Things (IoT) devices, sensors, and cloud-based platforms to provide dynamic and interesting classrooms. Active learning and higher academic performance are fostered by these technological advancements, which allow for remote monitoring, customised feedback, and real-time data collection. In order to gain broad adoption in schools and other educational institutions, the implementation prioritises scalability, usability, and cost-effectiveness. Students' involvement and understanding of STEM concepts were found to grow significantly in the preliminary pilot curriculum. Closing educational gaps, promoting creativity, and equipping students for future technological breakthroughs are all possible outcomes of this invention.

No. of Pages : 13 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/07/2024
(21) Application No.202441053705 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A NOVEL ALTERNATIVE FUEL INJECTION SYSTEM AND METHOD FOR INTERNAL COMBUSTION ENGINES

(51) International classification	:F02D0041000000, F02D0041400000, F02D0019080000, F02D0019060000, F02B0075120000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)K N Karthick
Address of Applicant :Assistant Professor, Mechanical Engineering Department, Bannari Amman Institute of Technology, Sathyamangalam-638401 ---------- ----------
2)Dr.P.Booma Devi
3)Dr. Dharmendra Kumar
4)Dr.P.Sreenivas
5)Dr.M.Rajeshwaran
6)Mr. Sharun. V
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)K N Karthick
Address of Applicant :Assistant Professor, Mechanical Engineering Department, Bannari Amman Institute of Technology, Sathyamangalam-638401 ---------- ----------
2)Dr.P.Booma Devi
Address of Applicant :Professor, Department of Aeronautical Engineering, Rajadhani Institute of Engineering and Technology, Trivandrum, Kerala 695102, India ---------- ----------
3)Dr. Dharmendra Kumar
Address of Applicant :Assistant Professor, Mechanical Engineering Dept., Usha Martin University, Ranchi 835103 ---------- ----------
4)Dr.P.Sreenivas
Address of Applicant :Associate Professor, Mechanical Engineering Dept., KSRMCE Kadapa, Andhra Pradesh ---------- ----------
5)Dr.M.Rajeshwaran
Address of Applicant :Professor/Dept. of Mechanical Engg., Mohamed Sathak Engineering College, Kilakarai-623806, Ramanathapuram District, Tamil Nadu, India ---------- ----------
6)Mr. Sharun. V
Address of Applicant :Assistant Professor, Mechanical, Panimalar Engineering College, Chennai, 600123 ---------- ----------

(57) Abstract :
The present invention introduces a novel alternative fuel injection system and method designed to enhance the performance and environmental sustainability of internal combustion engines. Traditional reliance on fossil fuels necessitates a shift towards alternative fuels for reduced emissions and increased energy security. The proposed system integrates advanced injector technology, variable injection timing mechanisms, and real-time sensor feedback to optimize combustion dynamics. This approach improves fuel atomization, enhances combustion stability, and reduces pollutants while maintaining or improving engine performance parameters such as power output and fuel efficiency. The system accommodates various alternative fuels, including biofuels, hydrogen, natural gas, and ethanol, supporting a range of applications from automotive vehicles to stationary power generators. By enabling efficient utilization of alternative fuels, the invention contributes to the advancement of sustainable energy solutions in transportation and industrial sectors. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 22 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/07/2024
(21) Application No.202441053717 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SOLAR POWERED RC LAWN CUTTERAND VACUUM CLEANER USING 8051 MICRO CONTROLLER

(51) International classification :G06Q0010060000, A01D0043063000, A01D0101000000, H04L0009400000, A01D0034680000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Karpagam College of Engineering
Address of Applicant :Myleripalayam Village, Othakkal Mandapam Post, Coimbatore 641 032 Coimbatore ---------- ----------
2)Karpagam Academy of Higher Education
3)Dr. S. Deepa
4)Arun V
5)Jiyath Rashiq S
6)Keerthiraj V S
7)Lalidhesh J
8)Pavan Kumar S
9)Gokul S
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. S. Deepa
Address of Applicant :Associate Professor, Department of ECE, Karpagam College of Engineering, Othakkal Mandapam Post, Coimbatore 641032 Coimbatore ---------- ----------
2)Arun V
Address of Applicant :Department of ECE, Karpagam College of Engineering, Othakkal Mandapam Post, Coimbatore 641032 Coimbatore ---------- ----------
3)Jiyath Rashiq S
Address of Applicant :Department of ECE, Karpagam College of Engineering, Othakkal Mandapam Post, Coimbatore 641032 Coimbatore ---------- ----------
4)Keerthiraj V S
Address of Applicant :Department of ECE, Karpagam College of Engineering, Othakkal Mandapam Post, Coimbatore 641032 Coimbatore ---------- ----------
5)Lalidhesh J
Address of Applicant :Department of ECE, Karpagam College of Engineering, Othakkal Mandapam Post, Coimbatore 641032 Coimbatore ---------- ----------
6)Pavan Kumar S
Address of Applicant :Department of ECE, Karpagam College of Engineering, Othakkal Mandapam Post, Coimbatore 641032 Coimbatore ---------- ----------
7)Gokul S
Address of Applicant :Department of ECE, Karpagam College of Engineering, Othakkal Mandapam Post, Coimbatore 641032 Coimbatore ---------- ----------

(57) Abstract :
The Solar-powered RC lawn cutter and vacuum cleaner is a revolutionary innovation that is poised to change the way we maintain our lawns and clean up debris. This system is designed to be eco- friendly and efficient. With the rise in concern over climate change and sustainability, this device is a timely solution to address the environmental impact of lawn care. In this project, wireless control allows the user to direct the device around the lawn and vacuum up debris with ease, reducing the need for manual labour. With the ability to cut grass and clean up debris in a single pass, this system can save time and effort. One of the key features of this system is its use of solar energy. By harnessing the power of the sun, the device reduces its carbon footprint in terms of non-renewable resources and reliance on fossil fuels. This design also allows for a longer battery life and can be charged manually via charging port. The Solar-powered RC lawn cutter and vacuum cleaner is an ideal solution for gardeners looking to improving the efficiency of their lawn maintenance. With its innovative design and advanced features, this device is poised to transform the industry and become a must have for anyone looking to maintain a healthy, beautiful lawn.

No. of Pages : 9 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/07/2024

(21) Application No.202441053718 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : PRECISION AGRICULTURE WITH AI

(51) International classification :G06Q0050020000, A01G0025160000, G01N0033240000, H04L0067120000, G06Q0010060000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Karpagam College of Engineering
Address of Applicant :Myleripalayam Village, Othakkal Mandapam Post, Coimbatore 641 032 Coimbatore ---------- ----------
2)Karpagam Academy of Higher Education
3)Dr. S. Deepa
4)Lalidhesh J
5)Gokula Krishna C K
6)Sudarsun S
7)Vishwa S
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. S. Deepa
Address of Applicant :Associate Professor, Department of ECE, Karpagam College of Engineering, Othakkal Mandapam Post, Coimbatore 641032 Coimbatore ---------- ----------
2)Lalidhesh J
Address of Applicant :Student, Department of ECE, Karpagam College of Engineering Othakkal Mandapam Post, Coimbatore 641032 Coimbatore ---------- ----------
3)Gokula Krishna C K
Address of Applicant :Student, Department of ECE, Karpagam College of Engineering Othakkal Mandapam Post, Coimbatore 641032 Coimbatore ---------- ----------
4)Sudarsun S
Address of Applicant :Student, Department of ECE, Karpagam College of Engineering Othakkal Mandapam Post, Coimbatore 641032 Coimbatore ---------- ----------
5)Vishwa S
Address of Applicant :Student, Department of ECE, Karpagam College of Engineering Othakkal Mandapam Post, Coimbatore 641032 Coimbatore ---------- ----------

(57) Abstract :
Precision agriculture, empowered by advancements in AI and IoT technologies, offers a promising solution for optimizing resource usage while enhancing crop yields. This project presents an integrated system designed to address the challenges of water management in agriculture through the utilization of Raspberry Pi 3 B+ and ESP8266 microcontrollers for data processing and sensor data reading respectively. The system employs a combination of soil moisture, temperature, and humidity sensors to collect real- time environmental data from the field. Leveraging linear regression algorithms, the system analyzes this data to predict soil moisture levels and determine optimal irrigation schedules. By incorporating AI-driven decision-making, the system can adaptively adjust irrigation to meet the specific needs of crops, thereby conserving water and promoting sustainable agricultural practices. Experimental evaluations demonstrate the efficacy of the system in improving water efficiency and enhancing crop health, offering a practical and cost-effective solution for precision irrigation in agriculture.

No. of Pages : 13 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/07/2024
(21) Application No.202441053727 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : LUNG NODULES SEGMENTATION AND CLASSIFICATION FROM CT IMAGES

(51) International classification	:G06T0007000000, G06K0009620000, G06N0003040000, G06T0007110000, G06N0003080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Asiya
Address of Applicant :Research Scholar ,CSE Department at Noorul Islam Centre for Higher Education ,Kumaracoil, Kanyakumari District, Tamil Nadu -629 180 ---------- ----------
2)Dr.N.Sugitha
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Asiya
Address of Applicant :Research Scholar ,CSE Department at Noorul Islam Centre for Higher Education ,Kumaracoil, Kanyakumari District, Tamil Nadu -629 180 ---------- ----------
2)Dr.N.Sugitha
Address of Applicant :Associate Professor Department of Electronics and Communication Engineering Saveetha Engineering College Saveetha Nagar, Thandalam, Chennai-602 105 ---------- ----------

(57) Abstract :
LUNG NODULES SEGMENTATION AND CLASSIFICATION FROM CT IMAGES The main design of the present invention discloses the lung nodules segmentation and classification from CT images, which comprises the image processing and Fully Convolutional Network (FCN). The present invention focuses on the segmentation and classification of lung nodules from CT images to identify malignant nodules. CT images from various medical centers in a specific region are securely transferred and standardized for quality. The segmentation process identifies lung structures and potential nodules based on size, shape, and intensity. Using a parallel architecture with Convolutional Neural Networks (CNNs), the system analyzes these segmented regions, classifying nodules into categories such as normal, smaller than 3mm, and larger than 3mm. The classified results are shared with public health sectors, providing valuable epidemiological insights to aid in public health policy development and resource allocation to combat lung cancer.

No. of Pages : 22 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/07/2024
(21) Application No.202441053740 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR AN INNOVATIVE DEEP LEARNING APPROACH TO PROSTATE CANCER PREDICTION FROM MRI IMAGES

(51) International classification :G06T7/00, G06N3/08, G16H50/30, G16H30/40, G06T7/10, G06N3/0464
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Tejaswini B
Address of Applicant :Assistant Professor, Department of Information Science and Engineering, East Point College of Engineering and Technology, Bangalore-560049, Karnataka, India ---------- ----------
2)Dr. Suma R
3)Ms. Ashwini S
4)Dr. Udayabalanbalasingham
5)Dr. Yathiraj G R
6)Dr. Rangaraju B V
7)Dr. Chandramouli H
8)Mamatha G
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Tejaswini B
Address of Applicant :Assistant Professor, Department of Information Science and Engineering, East Point College of Engineering and Technology, Bangalore-560049, Karnataka, India ---------- ----------
2)Dr. Suma R
Address of Applicant :Professor, Department of Information Science and Engineering, Sri Siddhartha Institute of Technology, Tumakuru, Karnataka 572105, India ---------- ----------
3)Ms. Ashwini S
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Dr. APJ Abdul Kalam School of Engineering, Garden City University, Bengaluru, Karnataka 560049, India ---------- ----------
4)Dr. Udayabalanbalasingham
Address of Applicant :Associate Professor, Department of Information Science and Engineering, East Point College of Engineering and Technology, Bangalore 560049, Karnataka, India ---------- ----------
5)Dr. Yathiraj G R
Address of Applicant :Associate Professor, Department of Computer Science and Engineering, Coorg Institute of Technology, Ponnampet, Kodagu, Karnataka-571216, India ---------- ----------
6)Dr. Rangaraju B V
Address of Applicant :Associate Professor, Department of Mathematics, East Point College of Engineering and Technology, Bengaluru 560049, Karnataka, India ---------- ----------
7)Dr. Chandramouli H
Address of Applicant :Professor, Department of Computer Science and Engineering, East Point College of Engineering and Technology, Bengaluru 560049, Karnataka, India ---------- ----------
8)Mamatha G
Address of Applicant :Assistant Professor, Department of Information Science and Engineering, East Point College of Engineering and Technology, Bengaluru 560049, Karnataka, India ---------- ----------

(57) Abstract :
The present invention discloses a novel system and method for predicting prostate cancer from MRI images using advanced deep learning techniques. Prostate cancer is a prevalent health concern, and early detection is crucial for effective treatment. Magnetic Resonance Imaging (MRI) offers detailed visualization of prostate abnormalities but requires specialized interpretation. This invention addresses these challenges by leveraging a convolutional neural network (CNN) trained on a database of labeled MRI images to predict the likelihood of prostate cancer. The system includes modules for image preprocessing, model training, prediction generation, and user interface for intuitive interaction. Results are presented through a user-friendly interface, aiding clinicians in making informed diagnostic decisions. This innovative approach aims to improve diagnostic accuracy and facilitate early intervention in prostate cancer management. Accompanied Drawing [FIGS. 1-4]

No. of Pages : 21 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :15/07/2024

(21) Application No.202441053751 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : RECOGNIZING THE CARD FRAUD USING MACHINE LANGUAGE METHODS

(51) International classification	:G06Q0020400000, G06N0020000000, G06K0009620000, G06Q0030000000, G06N0020100000
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**

1)Dr. Kanchana P

Address of Applicant :Assistant Professor, Department of Commerce, SRM Institute of Science and Technology, Faculty of Science and Humanities, Vadapalani campus, Chennai, Tamilnadu-600026, India. Chennai ---------- ----------

2)Shanta H Biradar

3)Dr. Kabirdoss Devi

4)Dr. Priya Sethuraman

5)Prof.Pramod Prakash Khandare

6)Priyanka Sharma

7)G. S. Jackulin Asha

8)Dr. M. Murali Krishnan

9)R Kalaivani

10)Vijetha Bhat

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. Kanchana P

Address of Applicant :Assistant Professor, Department of Commerce, SRM Institute of Science and Technology, Faculty of Science and Humanities, Vadapalani campus, Chennai, Tamilnadu-600026, India. Chennai ---------- ----------

2)Shanta H Biradar

Address of Applicant :Assistant Professor, Department of Information Science and Engineering, Sir M Visvesvaraya Institute of Technology, Bengaluru, Karnataka-562157, India. Bengaluru ---------- ----------

3)Dr. Kabirdoss Devi

Address of Applicant :Associate Professor, Department of Management Studies, Vels Institute of Science, Technology and Advanced Studies, Pallavaram, Tamilnadu-600117, India. Pallavaram ---------- ----------

4)Dr. Priya Sethuraman

Address of Applicant :Professor, Department of MBA, St. Joseph's Institute of Technology, Chennai, Tamilnadu-600119, India. Chennai ---------- ----------

5)Prof.Pramod Prakash Khandare

Address of Applicant :Principal, Department of Computer Technology, Shriram Institute of Engineering & Technology (Polytechnic), Pani Tal-Malshiras, Dist –Solapur, Maharastra-413113, India. Solapur ---------- ----------

6)Priyanka Sharma

Address of Applicant :Assistant Professor, Department of MCA, JSS Academy of Technical Education, c 20/1 Noida sec 62-201309, Uttar Pradesh, India. Noida ---------- ----------

7)G. S. Jackulin Asha

Address of Applicant :Assistant Professor. Department of AI and DS, St. Joseph College of Engineering, Sriperumbudur, Chennai, Tamilnadu-602117, India. Chennai ---------- ----------

8)Dr. M. Murali Krishnan

Address of Applicant :Assistant Professor, Department of Management Studies, Dr. N. G. P. Institute of Technology, Coimbatore, Tamilnadu-641048, India. Coimbatore ---------- ----------

9)R Kalaivani

Address of Applicant :Assistant Professor, PG & Research Department of Commerce, Sri Ramakrishna College of Arts and Science, Nava India, Peelamedu, Coimbatore, Tamilnadu- 641004, India. Coimbatore ---------- ----------

10)Vijetha Bhat

Address of Applicant :Assistant Professor, Department of MCA, Canara College, Kodailbail, MGRoad, Mangalore, Karnataka, India. Mangalore ---------- ----------

(57) Abstract :

Recognizing the Card Fraud Using Machine Language Methods ABSTRACT Over the course of time, fraudulent interactions on the internet have resulted in significant harm and losses for individuals as well as for many organizations. The proliferation of cutting-edge technology and internet connectivity across the globe has contributed to an increase in the number of incidents of online fraud. It is necessary to build reliable fraud detection technologies in order to compensate for these losses. The implementation of machine learning and statistical methods is an essential component in accurately identifying fraudulent transactions. On the other hand, the implementation of fraud detection models presents some obstacles, including restricted data availability, sensitive data, and uneven class distributions between classes. Drawing inferences and developing new models in this field are made more difficult by the fact that records are kept confidential. Using the Credit Card Fraud dataset, this study investigates a number of different algorithms that are suitable for categorizing transactions as either genuine or fraudulent. Due to the fact that the dataset was severely imbalanced, the SMOTE method was utilized for the purpose of oversampling in order to achieve the desired effect of reducing the class distribution imbalance. In addition to that, the dataset was segmented into training data and test data, and feature selection was carried out. In the studies, NB, RF, and MLP algorithms were applied, and all of them displayed a high level of accuracy when it came to identifying fraudulent credit card activity. In comparison to those of other methods, the MLP method attained an accuracy of 99.95%.

No. of Pages : 10 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/07/2024
(21) Application No.202441053754 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SMART IGNITE KNOB

(51) International classification :F24C0003120000, F23N0001000000, F23N0005200000, A61B0006030000, C10N0020020000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. GIRISHA JOSHI
Address of Applicant :DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------

(57) Abstract :
Disclosed herein is an energy conservation system (100) for enhanced fuel efficiency, (102) comprising a control knob (103) configured with multiple position, wherein the position include an off position (104) immediately following a minimum flame position (105) to prevent the knob form passing through a maximum flame position (106) when turning off the stove, an intermediate ignition position (107) between the minimum flame position (105) and a maximum position (106), calibrated to provide sufficient gas pressure for ignition without requiring the maximum flame setting, a gas regulator (108) configured to work with the control knob (103) to regulate gas flow according to the define position.

No. of Pages : 27 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :15/07/2024

(21) Application No.202441053783 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : ARASAR ROTOR

(51) International classification	:H02K0001140000, H02K0053000000, E05B0047060000, F16H0031000000, F03B0013160000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)P. Praveen Kumar
Address of Applicant :NO.33,V.G.P PON NAGAR,SEMBAKKAM,CHENNAI,TAMILNADU,INDIA. PIN:600073 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P. Praveen Kumar
Address of Applicant :NO.33,V.G.P PON NAGAR,SEMBAKKAM,CHENNAI,TAMIL NADU,INDIA. PIN:600073 ---------- ----------

(57) Abstract :
ARASAR Rotor ARASAR elaborated as Alternative Repel Attract Solenoid Accelerated Rotor. The title defines the technology behind ARASAR Rotor. ARASAR Rotor is an alternative technology to a traditional motor. A motor has an electromagnetic or permanent magnet stator and a rotor. ARASAR Rotor doesn't have a stator. It works only with Rotary disks. ARASAR Rotor uses solenoid coils and permanent magnet plungers attached to the rotary prevents tile b-ackward-movement ofthe rotary disk. Therefore the rotary disC-move in one direction creating a rotation. The speed and rotation ofthe ARASAR Rotor is controlled using H Bridge and microcontroller. Polarity of the voltage doesn't effect ARASAR Rotor. Even if the polarity is interchanged, the rotor always rotates in one direction. Photographs I Diagrams of the working model./ proof of concept has been attached herewith.

No. of Pages : 3 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :15/07/2024

(21) Application No.202441053798 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : MILITARY SECURITY SYSTEM IDENTIFICATION OF TRESPASSERS USING ULTRASONIC SENSOR

(51) International classification	:G06Q0020400000, H04W0004020000, G08B0013196000, E06B0009680000, H04W0012033000
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**

1)Malla Reddy Engineering College

Address of Applicant :Malla Reddy Engineering College Dhulapally post via Kompally Maisammaguda Secunderabad -500100 Secunderabad ---------- ----------

2)Dr.P.Sarala

3)Mr. M.Madhusudhan Reddy

4)Dr. P. Venkata kishore

5)Dr.M.Dilip Kumar

6)N.Pavan Sandeep

7)Patil Venkat

8)Vemula Vamshi

9)A.Vamshi Krishna

10)P SRAVAN KUMAR

11)Appari Lakshmi Kalyani

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Malla Reddy Engineering College

Address of Applicant :Malla Reddy Engineering College Dhulapally post via Kompally Maisammaguda Secunderabad -500100 Secunderabad ---------- ----------

2)Dr.P.Sarala

Address of Applicant :Associate Professor Electrical and Electronics Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State:Telangana Email ID & Contact Number: drpsarala@mrec.ac.in& 9912373645 Secunderabad ---------- ----------

3)Mr. M.Madhusudhan Reddy

Address of Applicant :Associate Professor Electrical and Electronics Engineering Dept., KV Subba Reddy Institute of Technology, Dupadu , Kurnool. State: Andhra Pradesh Email ID & Contact Number: Mmsr244@gmail.com & 9949213068 Dupau, kurnool ---------- ----------

4)Dr. P. Venkata kishore

Address of Applicant :Professor Electrical and Electronics Engineering Dept., St.Peters Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State:Telangana Email ID & Contact Number: pvkishorehod@gmail.com & 8185943977 Secunderabad ---------- ----------

5)Dr.M.Dilip Kumar

Address of Applicant :Associate Professor Electrical and Electronics Engineering Dept., St.Peters Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State:Telangana Email ID & Contact Number: manikdilip@gmail.com& 8008299199 Secunderabad ---------- ----------

6)N.Pavan Sandeep

Address of Applicant :student Electrical and Electronics Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State:Telangana. Email ID & Contact Number: nkps709@gmail.com& 9000143709 Secunderabad ---------- ----------

7)Patil Venkat

Address of Applicant :Student Electrical and Electronics Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State:Telangana. Email ID & Contact Number: venkatpatil2010@gmail.com & 7517521957 Secunderabad ---------- ----------

8)Vemula Vamshi

Address of Applicant :student Electrical and Electronics Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State:Telangana. Email ID & Contact Number:vemulavamshi3619@gmail.com & 6302363205 Secunderabad ---------- ----------

9)A.Vamshi Krishna

Address of Applicant :Lecturer Electrical and Electronics Engineering Dept., Government Polytechnic, Narayankhed,502286 State:Telangana Email ID & Contact Number:vamshi257@gmail.com& 9492254284 Narayankhed ---------- ----------

10)P SRAVAN KUMAR

Address of Applicant :Associate Professor Nizamabad ,503245 State: Telangana Email ID & Contact Number: sravanmtech@gmail.com & 9848453411 Nizamabad ---------- ----------

11)Appari Lakshmi Kalyani

Address of Applicant :Student, 4th B.Tech Sem-1, Electrical and Electronics Engineering Dept., Srinivasa Institute of Engineering and Technology(A) Cheyyeru, Amalapuram-533216 Andhra Pradesh Email ID & Contact Number: kalyaniappari8@gmail.com& 7901063866 Amalapuram ---------- ----------

(57) Abstract :

Unknowingly, terrorists breach our borders. It is not feasible for our troops to constantly monitor the borders. Being able to identify terrorists at borders automatically is a crucial security requirement. In this project, we suggest a system that uses an infrared sensor to identify terrorists, uses WiFi to take their picture, and notifies the appropriate administrator. The process will end on its own if the admin declines to shoot the terrorist. If the admin agrees to shoot the terrorist, a notification is sent back to the robot via the server to kill that person. Security officers can now efficiently and affordably detect terrorists by using this technique.

No. of Pages : 7 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/07/2024
(21) Application No.202441053810 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ARECANUT COLLECTING DEVICE

(51) International classification	:A01D0046220000, A01D0046260000, A01D0046240000, A01D0091040000, A01D0051000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Mangalore Institute of Technology & Engineering
Address of Applicant :Badaga Mijar, Moodabidri Moodabicdri ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr. SANTHOSH ACHARYA
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Mangalore Institute of Technology & Engineering, Badaga Mijar, Moodabidri, Moodabidri ---------- ----------
2)Dr. MOHAN KUMAR
Address of Applicant :Associate Professor, Department of Mechanical Engineering, Mangalore Institute of Technology & Engineering, Badaga Mijar, Moodabidri Moodabidri ---------- ----------
3)Dr. NEELAKANTHA V LONDE
Address of Applicant :Professor, Department of Mechanical Engineering, Mangalore Institute of Technology & Engineering, Badaga Mijar, Moodabidri Moodabidri ---------- ----------

(57) Abstract :
Arecanut is a commercial agricultural product, not a food product but used mainly for chewing purpose. Arecanut tree grows tall about 40 to 60 feet high. The arecanut fruits fall down once they ripe. Arecanut is a hard seed inside its fruit. Collecting these individual arecanut fruits from the ground is a tedious task as each fruit is to be collected one by one.. To pick and collect each fruit, one has to physically bend down about 90 degree, which is strainful to repeat for long period. In an acre, about 1000kg of arecanut can be grown. Hence one can imagine, how much times (200 numbers/kg *1000kg) one has to bend down to collect all fruits in an acre. In one stretch of physically bending to pick the arecanuts, only a maximum of 4-5 number of arecanut fruits can be collected by hand. So collecting each arecanut fruit is a tedious and laborious work and results in fatigue. This old practice of collecting arecanut from ground is continuously followed from centuries and no device is developed effectively yet. This product is designed to avoid bending manually about 90° and facilitate easy collection of arecanut fruits.

No. of Pages : 11 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/07/2024
(21) Application No.202441053818 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A MULTI-LEVELED BIODEGRADABLE FILTRATION SYSTEM

(51) International classification :A01K0063040000, C02F0003060000, A01G0009020000, A61P0025240000, A61P0025080000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR.SHANMUKHA SHETTY
Address of Applicant :DEPARTMENT OF CIVIL ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
2)PRADEEP KARANTH
Address of Applicant :DEPARTMENT OF CIVIL ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
3)THUSHAR S SHETTY
Address of Applicant :DEPARTMENT OF CIVIL ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
4)DR. PUSHPARAJ A NAIK
Address of Applicant :DEPARTMENT OF CIVIL ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
5)DR. KUMAR ANIL H S
Address of Applicant :DEPARTMENT OF BIOTECHNOLOGY, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------

(57) Abstract :
Disclosed herein is a multi-layered biodegradable filtration system (100). The system (100) comprising a water tap (102). The system (100) also comprising housing (122) having a biofilter bed assembly (104) connected to the water tap (102) and the biofilter bed assembly (104) configured to contain biological materials that filters out particulates, the biofilter bed assembly (104) contains at least three biofilter beds. The housing (122) also comprising a multi-level aerator (106) arranged in layered manner with the biofilter bed assembly (104) and the multi-level aerator (106) configured to control water flow and disperse water into fine droplets. The system (100) also comprising at least two clamps (108) mounted over the housing (122) and the clamps (108) configured to attach the hosing (122) to the water tap (102).

No. of Pages : 26 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/07/2024

(21) Application No.202441053821 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM AND A METHOD TO STORE HEAT ENERGY IN A VEHICLE

(51) International classification	:H01M0006360000, F28D0020020000, F28D0020000000, F01N0005020000, F25B0049020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Daimler Truck AG
Address of Applicant :Fasanenweg 10, 70771 Leinfelden-Echterdingen, Germany ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Saurabh Shah
Address of Applicant :E1004, NCC Maple Heights Outer Ring Road Bengaluru 560016, Karnataka India Bengaluru ---------- ----------
2)Babu Rao Ponangi
Address of Applicant :3-42/1, Near Old Ramalyam Street, Kuchimpudi, Andhra Pradesh 534450, India Kuchimpudi ---------- ----------
3)Sunil Meduri
Address of Applicant :Flat no 212 MC Sarovar Annex, Medahalli, Bengaluru 560049, Karnataka, India Bengaluru ---------- ----------
4)Shivakumar B Bhadrakali
Address of Applicant :Plot No 475, Ramteerth Nagar, Belagavi, Karnataka 590016, India Belagavi ---------- ----------
5)Gaurav Bali
Address of Applicant :C/O KAWAL Bali, Bali Electrical Store, Railway Road Doiwala, DEHRADUN 248140, UTTARAKHAND, INDIA DEHRADUN ---------- ----------

(57) Abstract :
A SYSTEM AND A METHOD TO STORE HEAT ENERGY IN A VEHICLE A system (100) and a method (700) to store heat energy in a vehicle is disclosed. The system comprises a PCM (Phase Change Material) thermal battery (300), a plurality of heat sources (110, 120, 130, 140, 150), at least one sensor, and a controller (500). The at least one sensor is provisioned in each of the plurality of heat sources and is configured to determine available heat energy in the plurality of heat sources. The controller is communicatively coupled with the at least one sensor and the PCM thermal battery and is configured to transmit the available heat energy selectively from at least one of the plurality of heat sources to the PCM thermal battery when the available heat energy in a respective heat source of the plurality of heat sources is in a pre-defined threshold range. FIG. 1 is a representative figure

No. of Pages : 33 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/07/2024
(21) Application No.202441053847 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : CNN BASED PARKINSON'S DISEASE CLASSIFER

(71)**Name of Applicant :**
1)Sai Vidya Institute of Technology
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru Bengaluru ---------- ----------
2)Dr. A M Padma Reddy
3)Dr. M S Ganesha Prasad
4)Dr. Vani B P
5)Prof. Kalyani K
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Vani B P
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru Bengaluru ---------- ----------
2)Prof. Kalyani K
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru Bengaluru ---------- ----------
3)Dr. Y Jayasimha
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru Bengaluru ---------- ----------
4)Dr. Venkatesha M
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru Bengaluru ---------- ----------
5)Dr. Chaya B M
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru Bengaluru ---------- ----------
6)Prof. N Ajay Kumar
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru Bengaluru ---------- ----------
7)Prof. Manjuvani K M
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru Bengaluru ---------- ----------
8)Prof. Prabha K
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru Bengaluru ---------- ----------
9)Prof. Nisha S K
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru Bengaluru ---------- ----------
10)Prof. Advaith P R
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru Bengaluru ---------- ----------
11)Prof. Shashank S Bhagwat
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru Bengaluru ---------- ----------
12)Dr. Pavithra G S
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru Bengaluru ---------- ----------
13)Prof. Darshan R V
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru Bengaluru ---------- ----------
14)Dr. Suryanarayana N K
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru Bengaluru ---------- ----------
15)Prof. Nagayya S Hiremath
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru Bengaluru ---------- ----------
16)Prof. Nayana K
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru Bengaluru ---------- ----------
17)Prof. Divya T M
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru Bengaluru ---------- ----------
18)Prof. Tejashree S
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru Bengaluru ---------- ----------
19)Prof. Akshith Monnappa K
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru Bengaluru ---------- ----------
20)Prof. Shruthi N
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru Bengaluru ---------- ----------
21)Prof. Amulya H G
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru Bengaluru ---------- ----------
22)Prof. Soumya L N
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru Bengaluru ---------- ----------

(51) International classification :G06N3/0464, G06T7/00, G06N20/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(57) Abstract :
Human specific disorders such as epilepsy, Parkinson's, Alzheimer's, and brain ailments have increased in the last few years. Important neurons, or nerve cells, in the brain malfunction and degenerate, which is a hallmark of Parkinson's disease. Less dopa stat is generated in the brain when the metal intensifies, making a person inert and unable to regulate regular motions. A novel approach for automatically classifying magnetic resonance imaging (MRI) into categories of normal and Parkinson's disease (PD) is then used, based on the degree of the medical specialty deficiencies. The suggested method obtains T2 (spin-spin relaxation time)—weighted MR pictures of the potential patients, and bar graph choices and grey level co-occurrence matrix (GLCM) options are created for the purpose of classifying the MRI knowledge. Using the options, it received as input, the CNN classifier divides the data into conventional and progressive divisions. The system has excellent accuracy and performance.

No. of Pages : 10 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/07/2024
(21) Application No.202441053917 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A CONVOLUTION TSETLIN MACHINE ARCHITECTURE-BASED SYSTEM

(51) International classification	:G06N20/00, G06N3/063, B82Y25/00
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Indian Institute of Technology Hyderabad
Address of Applicant :IIT Hyderabad Road, Near NH-65, Sangareddy, Kandi, Telangana-502284, India ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)KISHORE C
Address of Applicant :IIT Hyderabad Road, Near NH-65, Sangareddy, Kandi, Hyderabad 502284, India. Hyderabad ---------- ----------
2)SANTHOSH SIVASUBRAMANI
Address of Applicant :IIT Hyderabad Road, Near NH-65, Sangareddy, Kandi, Hyderabad 502284, India. Hyderabad ---------- ----------
3)AMIT ACHARYYA
Address of Applicant :IIT Hyderabad Road, Near NH-65, Sangareddy, Kandi, Hyderabad 502284, India. Hyderabad ---------- ----------

(57) Abstract :
The present subject matter relates to a convolution tsetlin machine architecture based system (200). The system (200) comprises an input engine (201), onr or more filters (202) and one or more majority gates (203). The input engine (201) configured to receive one or more input arrays having one or more input pattern. The one or more filters (202) configured to process the one or more input arrays to generate one or more initial outputs. The one or more majority gates (203) are configured to process the one or more initial outputs to generate one or more final outputs. The one or more majority gates (203) comprises a plurality of nanomagnets configured to process the one or more initial outputs upon coming in contact with an external magnetic field. {Figure 2}

No. of Pages : 30 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/07/2024
(21) Application No.202441053925 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DUAL-BAND MILLIMETRE WAVE ANTENNA STRUCTURE

(51) International classification	:H01Q0001240000, H01Q0001480000, H01Q0001380000, H01L0023660000, H01Q0005371000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Manipal Academy of Higher Education
Address of Applicant :Madhav Nagar, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)PRAVEEN KUMAR
Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
2)GOUTHAM SIMHA G D
Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------

(57) Abstract :
The present disclosure relates to a dual-band millimetre wave (mmWave) antenna structure (100). The antenna structure (100) includes a substrate (102) and a radiator (104). The radiator (104) is of a semi-concentric circle shape etched with semi-circular slots (106) to modify radiation pattern of the antenna structure (100). The radiator (104) is placed on top of the substrate (102. The antenna structure (100) includes a ground plane (108) positioned beneath the substrate (102) opposite the radiator (104) configured to enhance impedance matching and reduce unwanted reflections. The antenna structure (100) includes a transmission line coupled to the radiator (104). The transmission line is configured to transmit and receive signal in a first frequency band in a range of 17.4-26.3 GHz and a second frequency band in a range of 36.1-42.5 GHz.

No. of Pages : 14 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/07/2024
(21) Application No.202441053937 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTO RETRY CIRCUIT BREAKER FOR ENHANCED PERFORMANCE IN MICRO SERVICE APPLICATIONS

(51) International classification :H02H3/06, H01H71/72, G05B23/02, G01R31/327
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Punithavathy E
Address of Applicant :Assistant Professor, Department of Computer Applications, Madras Christian College, Chennai ---------- ----------
2)Dr.N.Priya
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Punithavathy E
Address of Applicant :Assistant Professor, Department of Computer Applications, Madras Christian College, Chennai ---------- ----------
2)Dr.N.Priya
Address of Applicant :Associate Professor, Research Department of Computer Science, S.D.N.B Vaishnav College for Women, Chennai ---------- ----------

(57) Abstract :
The proposed invention, the Auto Retry Circuit Breaker (ARCB), enhances resilience and performance in cloud-based distributed systems and microservice architectures. By automating the configuration of circuit breakers and incorporating an intelligent auto-retry mechanism, the ARCB dynamically adjusts its behavior based on real-time performance data. This eliminates manual parameter settings, reduces downtime, and optimizes resource utilization. The ARCB continuously monitors service performance, adjusts circuit breaker parameters, and retries requests intelligently to ensure rapid recovery from transient failures. It aligns with modern DevOps practices, supports hybrid and multi-cloud environments, and integrates with existing monitoring tools. The ARCB's adaptive resilience mechanisms enhance system reliability, support service level agreements, and provide valuable insights into service health, making it a critical innovation for robust cloud applications.

No. of Pages : 28 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :15/07/2024

(21) Application No.202441053947 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : AI-POWERED SYSTEM FOR REAL-TIME DISEASE PREDICTION AND PERSONALIZED HEALTHCARE INTERVENTIONS USING WEARABLE IOT SENSORS

(51) International classification	:A61B5/00, G16H50/20, G16H50/30, G06N20/00, G06N3/04, G16H10/60
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Jayaraj N

Address of Applicant :Assistant Professor, Department of Electronics & Communication Engineering, The Oxford College of Engineering, Bangalore, Karnataka, 560068, India ---------- ----------

2)Mounika Nalluri

3)Aruna Sri Rongali

4)Deepika Shrikant Kale

5)Dr. Nirmalkumar S. Benni

6)Prithwijit Mukherjee

7)Dr. Najmuddin Aamer

8)Amit Kumar Mishra

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Jayaraj N

Address of Applicant :Assistant Professor, Department of Electronics & Communication Engineering, The Oxford College of Engineering, Bangalore, Karnataka, 560068, India ---------- ----------

2)Mounika Nalluri

Address of Applicant :Software Engineer , Department of Information Technology (Masters in Information Systems), Murray State University, 72713, USA ---------- ----------

3)Aruna Sri Rongali

Address of Applicant :Senior Software engineer, Graduate Doctoral Information Technology, Graduate Information Technology Emphasis, Information Technology, Ph.D, University of the Cumberlands, 63005, USA ---------- ----------

4)Deepika Shrikant Kale

Address of Applicant :Staff Software Engineer in Test, Software Testing in Healthcare, University of Cincinnati, Guardant Health, 888 N San Mateo Dr, Apt B205, San Mateo, California, 94401, USA ---------- ----------

5)Dr. Nirmalkumar S. Benni

Address of Applicant :Associate Professor , Information Science & Engineering, RNS Institute of Technology, Channasandra, Bengaluru, Karnataka, 560 098, India ---------- ----------

6)Prithwijit Mukherjee

Address of Applicant :Research Scholar , Institute of Radio Physics and Electronics, University of Calcutta, Kolkata, West Bengal, 700073, India ---------- ----------

7)Dr. Najmuddin Aamer

Address of Applicant :Professor , Computer Science and Engineering Department, Bharat Ratna Indira Gandhi College of Engineering, Solapur, Maharashtra, 413255, Ind ---------- ----------

8)Amit Kumar Mishra

Address of Applicant :Assistant professor, Electronics & Telecommunication Department, Sandip Institute of Engineering and Management Nashik, Maharashtra, 422213, India ---------- ----------

(57) Abstract :

ABSTRACT AI-Powered System for Real-Time Disease Prediction and Personalized Healthcare Interventions using Wearable IoT Sensors The present invention discloses an AI-powered system designed for real-time disease prediction and personalized healthcare interventions using wearable IoT sensors. This system comprises several key components: wearable IoT sensors for continuous physiological monitoring, a data processing unit for collecting and preprocessing the sensor data, an AI engine for real-time data analysis and disease prediction, a personalized healthcare intervention module for tailored recommendations, and a user interface for displaying information and receiving user input. The wearable IoT sensors track parameters such as heart rate, blood pressure, glucose levels, body temperature, and activity levels, ensuring comprehensive health monitoring. The data processing unit is responsible for cleaning, normalizing, and performing preliminary analysis on the raw sensor data before it is analyzed by the AI engine. The AI engine, utilizing machine learning algorithms such as neural networks, decision trees, and support vector machines, analyzes the preprocessed data to detect patterns and anomalies indicative of potential diseases and health conditions. This real-time analysis enables early disease prediction and timely interventions, improving health outcomes and reducing the burden on traditional healthcare systems. The personalized healthcare intervention module generates customized recommendations and alerts based on the AI engine's analysis. These interventions can include lifestyle and dietary suggestions, medication reminders, scheduling of medical appointments, and emergency alerts to healthcare providers or caregivers. The user interface, accessible via smartphones, tablets, or dedicated devices, displays real-time health data, AI analysis results, and personalized recommendations, allowing users to easily understand and manage their health. This system represents a significant advancement in healthcare technology, offering a proactive approach to disease management and personalized healthcare. Reference Figure 1: [001] Sensor Data Collection (100): Wearable IoT sensors continuously monitor physiological parameters such as heart rate, blood pressure, glucose levels, body temperature, and activity levels. The sensors transmit raw data wirelessly to the data processing unit via Bluetooth, Wi-Fi, or cellular networks. [002] Data Preprocessing & Transmission (101): The data processing unit receives the raw sensor data and performs essential preprocessing tasks. Data cleaning: Removes noise and artifacts from the raw data. Data normalization: Standardizes the data for uniformity. Preliminary analysis: Detects any immediate anomalies. The preprocessed data is formatted and transmitted to the AI engine for further analysis. This transmission can occur in real-time or at scheduled intervals, depending on the system configuration. [003] AI Analysis (102): The AI engine analyzes the preprocessed data using machine learning algorithms such as neural networks, decision trees, and support vector machines. The AI engine identifies patterns and anomalies in the data that may indicate the onset of diseases or health conditions. Real-time analysis allows for immediate detection and prediction of potential health issues. [004] Intervention Generation (103): Based on the AI analysis, the personalized healthcare intervention module generates tailored recommendations and alerts. Interventions may include lifestyle and dietary suggestions, medication reminders, scheduling of medical appointments, and emergency alerts to healthcare providers or caregivers. [005] User Interaction (104): The user interface displays real-time health data, AI analysis results, and personalized recommendations. Users can interact with the interface via smartphones, tablets, or dedicated health monitoring devices. Users can input additional information such as symptoms, medication intake, and lifestyle habits, enhancing the accuracy of the AI analysis. [006] Healthcare Provider Integration (105): The system can integrate with existing healthcare systems and Electronic Health Records (EHRs). This integration facilitates communication and data sharing between patients and healthcare providers, ensuring that health data is accessible and actionable.

No. of Pages : 14 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :15/07/2024

(21) Application No.202441053962 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : SOLAR TRACKING SYSTEM WITH ARDUINO BY MIMICKING SUNFLOWER MOVEMENTS

(51) International classification :G05F1/67, G05B19/02, H02S20/32, H02S40/30, H02S50/00, F24S30/45, H02J13/00, G08C17/02

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)DR. SHANTAKUMAR PATIL
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064, Karnataka Bengaluru ---------- ----------
2)DR. VINOD DESAI
3)DR. AJAY V.G
4)DR. VARUN E
5)DR. TEJASHWINI N
6)SALMA ITAGI
7)ASHWINI S. S
8)POORNIMA GOWDA H. S
9)MANJUSHA P. K
10)KISHORE P. J
11)YASHAS H. M
12)S G DHANUSH KUMAR
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. SHANTAKUMAR PATIL
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064, Karnataka Bengaluru ---------- ----------
2)DR. VINOD DESAI
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064, Karnataka Bengaluru ---------- ----------
3)DR. AJAY V.G
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064, Karnataka Bengaluru ---------- ----------
4)DR. VARUN E
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064, Karnataka Bengaluru ---------- ----------
5)DR. TEJASHWINI N
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064, Karnataka Bengaluru ---------- ----------
6)SALMA ITAGI
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064, Karnataka Bengaluru ---------- ----------
7)ASHWINI S. S
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064, Karnataka Bengaluru ---------- ----------
8)POORNIMA GOWDA H. S
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064, Karnataka Bengaluru ---------- ----------
9)MANJUSHA P. K
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064, Karnataka Bengaluru ---------- ----------
10)KISHORE P. J
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064, Karnataka Bengaluru ---------- ----------
11)YASHAS H. M
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064, Karnataka Bengaluru ---------- ----------
12)S G DHANUSH KUMAR
Address of Applicant :Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064, Karnataka Bengaluru ---------- ----------

(57) Abstract :
SOLAR TRACKING SYSTEM WITH ARDUINO BY MIMICKING SUNFLOWER MOVEMENTS A solar tracking system with arduino by mimicking sunflower movement includes a dualaxis tracking mechanism controlled by arduino, allowing a plurality of solar panels to follow the sun's path with precise angular adjustments for increasing energy efficiency, multiple light sensors or light intensity sensors being integrated to detect sunlight direction and intensity, enabling the arduino to calculate optimal positioning for maximum solar energy absorption, a self-calibrating solar tracker is configured to obtain a feedback from light sensors and positional encoders to continuously fine-tune the solar panel orientation to reduce manual calibration requirements, a wireless communication module or unit being integrated with the arduino to monitor remotely and control of the solar tracking system via smartphones or other network based devices and a real-time data logging module or unit is configured to record the solar panel angles, light intensity, and energy output, enabling detailed performance analysis and optimization. [To be published with Figure. 1]

No. of Pages : 15 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/07/2024

(21) Application No.202441054002 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ADAPTIVE CYBERSECURITY FRAMEWORK FOR IOT-ENABLED MANUFACTURING SYSTEMS

(51) International classification	:G06F0021550000, G06N0020000000, G06F0021620000, G06F0021600000, G06F0021310000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr.M.Azhagiri
Address of Applicant :Associate Professor Department of Computer Science and Engineering SRM Institute of Science and Technology, Ramapuram Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.M.Azhagiri
Address of Applicant :Associate Professor Department of Computer Science and Engineering SRM Institute of Science and Technology, Ramapuram Chennai ---------- ----------
2)Ms.Jayalakshmi P
Address of Applicant :Assistant Professor Department of Computer Science and Engineering SRM Institute of Science and Technology, Ramapuram Chennai ---------- ----------
3)Ms.Ramya K
Address of Applicant :Assistant Professor Department of Computer Science and Engineering SRM Institute of Science and Technology, Ramapuram Chennai ---------- ----------
4)Ms.Aarthi S
Address of Applicant :Assistant Professor Department of Computer Science and Engineering SRM Institute of Science and Technology, Ramapuram Chennai ---------- ----------
5)Ms. Gowthamy J
Address of Applicant :Assistant Professor Department of Computer science and Engineering SRM Institute of Science and Technology, Ramapuram Chennai ---------- ----------

(57) Abstract :
This patent introduces an adaptive cybersecurity framework specifically designed for IoT-integrated manufacturing environments. The framework employs a multi-layered security approach, incorporating machine learning algorithms, behavioral analytics, intrusion detection and prevention systems (IDPS), secure communication protocols, and robust endpoint protection. By continuously analyzing network traffic and device behavior, the framework dynamically adapts to emerging cyber threats, providing real-time detection and mitigation. It features a centralized security management console for comprehensive oversight and control, ensuring only authorized devices access the network through Network Access Control (NAC). Additionally, the framework includes encrypted data storage and secure communication protocols to safeguard sensitive information. This innovative system offers robust, adaptive protection tailored to the unique security challenges of industrial IoT environments, enhancing the resilience and security of critical manufacturing systems.

No. of Pages : 8 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :15/07/2024

(21) Application No.202441054006 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : VALUE BASED LEARNING IN THE CURRENT INDIAN EDUCATIONAL FRAMEWORK

(51) International classification	:G06Q0050200000, G09B0019000000, G09B0007000000, G09B0005080000, G09B0007020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr. Sharefa Noufina K P

Address of Applicant :Assistant Professor, Department of Education, Keyi Sahib Training College, Thaliparamba, Kannur-670142, Kerala, India. Kannur ---------- ----------

2)Dr. S. Vijayarani

3)Dr. Stephen Babu

4)Dr. Pratima Mishra

5)Dr. Priya Sethuraman

6)Dr. C. Shanmuga Priya

7)Dr. R. Priyadharshini

8)Dr. A. Narmadha

9)Dr. Gajanethi Swathi Kumari

10)Dr. D. Suganthi

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. Sharefa Noufina K P

Address of Applicant :Assistant Professor, Department of Education, Keyi Sahib Training College, Thaliparamba, Kannur-670142, Kerala, India. Kannur ---------- ----------

2)Dr. S. Vijayarani

Address of Applicant :Associate Professor, Department of MBA, SRM Institute of Science and Technology, Ramapuram, Chennai – 600089, Tamil Nadu, India. Chennai ---------- ----------

3)Dr. Stephen Babu

Address of Applicant :Assistant Professor, Department of Psychology and Counselling, St Joseph's University, Langford Road, Bangalore-560017, Karnataka, India. Bangalore ---------- ----------

4)Dr. Pratima Mishra

Address of Applicant :Associate Professor, Department of Med, H.G.M. Azam College of Education, Dr. P. A. Inamdar University, 115B, D-Flats CME Dapodi, Pune-411031, Maharashtra, India. Pune ---------- ----------

5)Dr. Priya Sethuraman

Address of Applicant :Professor, Department of MBA, St. Joseph's Institute of Technology, Kanchipuram-600119, Tamil Nadu, India. Kanchipuram ---------- ----------

6)Dr. C. Shanmuga Priya

Address of Applicant :Assistant Professor & Head, Department of English & Foreign Languages, SRM Institute of Science and Technology, Deemed to be University, Tiruchirappalli - 621105, Tamil Nadu, India. Tiruchirappalli ---------- ----------

7)Dr. R. Priyadharshini

Address of Applicant :Assistant Professor, Department of MBA, Vels Institute of Science, Technology and Advanced Studies, Pallavaram, Chennai-600117, Tamil Nadu, India. Chennai ---------- ----------

8)Dr. A. Narmadha

Address of Applicant :Assistant Professor, Department of MBA, Vels Institute of Science, Technology and Advanced Studies, Pallavaram, Chennai-600117, Tamil Nadu, India. Chennai ---------- ----------

9)Dr. Gajanethi Swathi Kumari

Address of Applicant :Assistant Professor, Department of Business Management, Symbiosis International University, Hyderabad-500053, Telangana, India. Hyderabad ---------- ----------

10)Dr. D. Suganthi

Address of Applicant :Professor, Department of Business Administration, Hindusthan College of Arts and Science, Coimbatore-641028, Tamil Nadu, India. Coimbatore ---------- ----------

(57) Abstract :

VALUE BASED LEARNING IN THE CURRENT INDIAN EDUCATIONAL FRAMEWORK ABSTRACT Recently, the Indian education system has prioritized value-based learning to enhance the holistic development of students. This invention integrates moral and ethical instruction with traditional academic subjects to cultivate individuals who possess both extensive knowledge and robust character, as well as a sense of social responsibility. The present educational policies and curricula, under the guidance of the National Education Policy 2020, aim to integrate values such as integrity, empathy, respect, and environmental consciousness into the process of learning. Indian schools and higher education institutions strive to create an educational atmosphere that promotes critical thinking, cultural comprehension, and ethical decision-making. This is achieved through a blend of classroom teaching, extracurricular involvement, and community participation. The transition towards value-based education is considered crucial for equipping students with the skills and knowledge needed to effectively navigate and actively participate in an ever more complex and interconnected global society.

No. of Pages : 12 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/07/2024
(21) Application No.202441054011 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM WITH DYNAMIC ROADWAY DIVIDERS AND METHOD THEREOF

(51) International classification :E01F15/00, E01F9/594, E01F15/12, G08G1/04, G08G1/0969
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. S Alagu
Address of Applicant :Teaching Fellow, Department of Electronics Engineering, MIT Campus, Anna University, Chrompet Chennai ---------- ----------
2)S Arun Prasad
3)Dr. S. Chithra
4)B Vasanthan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. S Alagu
Address of Applicant :Teaching Fellow, Department of Electronics Engineering, MIT Campus, Anna University, Chrompet Chennai ---------- ----------
2)S Arun Prasad
Address of Applicant :Teaching Fellow Department of Automobile Engineering, MIT Campus, Anna University. Chrompet Chennai ---------- ----------
3)Dr. S. Chithra
Address of Applicant :Associate Professor, Department of Computer Technology, Madras Institute of Technology Anna University Chennai Chennai ---------- ----------
4)B Vasanthan
Address of Applicant :Assistant Professor, Department of Automobile Engineering, MIT Campus, Anna University. Chrompet. Chennai ---------- ----------

(57) Abstract :
Title: A with dynamic roadway dividers and thereof The present invention (100) discusses a with dynamic roadway dividers having a plurality of movable barrier elements/ divider, a plurality of computer vision cameras, where the computer vision cameras are configured to monitor traffic conditions, an LCD display in which the LCD display provides real-time information of the traffic to the users, a buzzer, a central control and a motor driver, where the central control coordinates adjustments of divider positions based on traffic conditions with integration of inputs from cameras. Also, the present invention discusses a for managing traffic using a movable roadway divider has the steps of monitoring traffic conditions using computer vision, where the uses high quality cameras along with training and validation process, adjusting divider position based on monitored conditions, displaying real-time information via an LCD display and verifying safety and reset mechanism. Main Illustrative : Figure 1

No. of Pages : 12 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :15/07/2024

(21) Application No.202441054014 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : NAVIGATING THE GREEN TRANSITION: ADVANCED POWER MANAGEMENT STRATEGIES FOR RENEWABLE ENERGY GRIDS

(51) International classification :H02J3/38, H02J3/00, G06Q50/06, G06Q10/04, G06F113/04, G06N20/00

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. N V Sarathbabu Goriparti
Address of Applicant :Associate Professor, Ramachandra College of Engineering, Eluru, Pin: 534007, Andhra Pradesh, India. ---------- ----------
2)Dr. K. Amritha
3)Dr. Sneha Sultana
4)Dr. Sourav Paul
5)Siva Kumar M
6)Mr. M. Shankar
7)Talari Manohar
8)Mrs. D. Divya
9)Dr. Suvarna Patil
10)Ms. S. Saranya
11)Dr. Harikumar Pallathadka
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. N V Sarathbabu Goriparti
Address of Applicant :Associate Professor, Ramachandra College of Engineering, Eluru, Pin: 534007, Andhra Pradesh, India. ---------- ----------
2)Dr. K. Amritha
Address of Applicant :Associated Professor, BVRIT HYDERABAD College of Engineering for Women, Bachupally, Medchal, Hyderabad, Pin: 500090, Telangana, India. ---------- ----------
3)Dr. Sneha Sultana
Address of Applicant :Assistant Professor, Department of Electrical Engineering, Dr. B. C. Roy Engineering College, Durgapur, Pin: 713206, West Bengal, India. ---------- ----------
4)Dr. Sourav Paul
Address of Applicant :Assistant Professor, Department of Electrical Engineering, Dr. B. C. Roy Engineering College, Durgapur, Pin: 713206, West Bengal, India. ---------- ----------
5)Siva Kumar M
Address of Applicant :Assistant Professor, SOET, Sri Padmavathi Mahila Visvavidyalayam, Tirupati, Pin: 517502, Andhra Pradesh, India. ---------- ----------
6)Mr. M. Shankar
Address of Applicant :Assistant Professor, Nalla Narasimha Reddy Education Society's Group of Institutions - Integrated campus, Korremula X Road, Choudaryguda, Medchal Malkajgiri Dist, Pin:500088, Telangana, India. ---------- ----------
7)Talari Manohar
Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, Anantha Lakshmi Institute of Technology and Sciences, Ananthapuramu, Pin:515721, Andhra Pradesh, India. ---------- ----------
8)Mrs. D. Divya
Address of Applicant :Assistant Professor, St.Peter's Engineering College, Maisammaguda, Medchal, Hyderabad, Pin: 500100, Telangana, India. ---------- ----------
9)Dr. Suvarna Patil
Address of Applicant :Assistant Professor, Bharati Vidyapeeth (Deemed to Be University), Institute of Management and Rural Development Administration, Rajwada Chowk, Sangli, Pin: 416416, Maharashtra, India. ---------- ----------
10)Ms. S. Saranya
Address of Applicant :Assistant Professor, Department of Graphics and Creative Design, Dr. SNS Rajalakshmi College of Arts and Science, Coimbatore, Pin: 641049, Tamilnadu, India. ---------- ----------
11)Dr. Harikumar Pallathadka
Address of Applicant :Director and Professor, Manipur International University, Ghari, Imphal, Imphal West, Pin: 795140, Manipur, India. ---------- ----------

(57) Abstract :
The present invention introduces advanced power management strategies tailored for renewable energy grids, aiming to optimize efficiency, stability, and reliability during the transition towards sustainable energy solutions. Leveraging state-of-the-art technologies in data analytics, predictive modeling, and real-time control systems, the invention enhances grid resilience by dynamically monitoring and adjusting renewable energy generation and distribution. By integrating predictive algorithms and innovative hardware components, the invention supports seamless integration of renewable energy sources into existing grid infrastructures, promoting sustainable development and environmental stewardship in the global energy sector.

No. of Pages : 16 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202441054019 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : WATER RE-CYCLING AND RE-GENERATION SYSTEM

(51) International classification :C02F0009000000, F25B0021020000, E03B0003280000, C02F0001000000, F24F0005000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Thiagarajar College of Engineering
Address of Applicant :Thiagarajar College of Engineering Thiruparankundram ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)HARIHARAN J R
Address of Applicant :Thiagarajar College of Engineering Thiruparankundram Madurai ---------- ----------
2)PRAVEEEN KUMAR S A
Address of Applicant :Thiagarajar College of Engineering Thiruparankundram Madurai ---------- ----------
3)GOPI SANKAR M
Address of Applicant :Thiagarajar College of Engineering Thiruparankundram Madurai ---------- ----------
4)KAVITHA D
Address of Applicant :Thiagarajar College of Engineering Thiruparankundram Madurai ---------- ----------
5)AROCKIA EDWIN XAVIER S
Address of Applicant :Thiagarajar College of Engineering Thiruparankundram Madurai ---------- ----------
6)CHARLES RAJA S
Address of Applicant :Thiagarajar College of Engineering Thiruparankundram Madurai ---------- ----------

(57) Abstract :
The present invention discloses a water re-cycling and re-generation system[1] for recycling of water from waste water and generation of water from atmospheric air. The water re-cycling and re-generation system[1] of the present invention comprises of filtration chamber[2], hot water chamber[3], cold water chamber[4] and generated water chamber[5] integrated parallelly thereby forming an unitary structure, a Peltier refrigeration system[6], plurality of pump motors[7] and power supply[8] characterized in that a. the filtration chamber[2] having an inlet[9] and outlet[10] adapted to receive waste water through the inlet[9]; b. the Peltier refrigeration system[6] adapted to receive the filtered water using a DC pump[15]; c. the generated water chamber[5] comprises of coiled copper tube[17] with inlet[18] and outlet[19] adapted to receive the cool water from the cold water chamber[4]; d. the power supply[8] adapted to supply power to the Peltier refrigeration system[6] and the motors[7] upon activation.

No. of Pages : 21 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202441054020 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SMART IOT TECHNOLOGY FOR EFFICIENT DRY AND WET WASTE SEGREGATION

(51) International classification	:B65F0001140000, B65F0001000000, G06Q0050260000, B65F0003000000, B65F0001160000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr M Ranjeeth
Address of Applicant :Flat Number 301, Bhuvi Residency, Near Praneeth Pranav Enclave, Bachupally ---------- ----------
2)BVRIT HYDERABAD College of Engineering for Women
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)M Ranjeeth
Address of Applicant :BVRIT HYDERABAD College of Engineering for Women, Rajiv Gandhi Nagar, Bachupally, Hyderabad-500090, Telangana. Hyderabad ---------- ----------
2)Dr V Manohar
Address of Applicant :Department of ECE, Vaagdevi Engineering College (Autonomous), Warangal-506004, Telangana, India. Warangal ---------- ----------
3)Mrs B Jaya
Address of Applicant :Department of ECE, Vaagdevi Engineering College (Autonomous), Warangal-506004, Telangana, India. Warangal ---------- ----------
4)Dr. T. Sammaiah
Address of Applicant :Jyothishmathi Institute of Technology and Science (Autonomous), Karimnagar-505481, Telangana, India. Karimnagar ---------- ----------

(57) Abstract :
Effective waste management solutions are required for the fast urbanization and rising garbage creation. The automatic separation of dry and wet garbage system will improve waste management procedures. In our project, we are implementing IoT based (Arduino) system for the automated segregation of wastage. This system achieves precise garbage classification through the use of sensor technology and intelligent processing algorithms. The system detects and distinguishes between dry and wet garbage based on factors like moisture content, weight, and odor using a network of sensors installed in waste containers. Moreover, the project addresses the urgent need for an efficient waste segregation process to enhance recycling efforts and promote environmental sustainability. By integrating IoT technology, the system aims to automate the waste segregation process, minimizing manual intervention and reducing errors. This report encapsulates the project's goals, the methodology employed, and the key findings, showcasing the potential of IoT in revolutionizing waste management practices. Finally, this IoT-based dry and wet waste segregation system project provides a potentially effective response to the problems associated with urban waste management.

No. of Pages : 17 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202441054023 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A MACHINE LEARNING-BASED SYSTEM FOR AUTOMATED CLASSIFICATION AND DETECTION OF PATHOGENS IN BIOSENSOR DATA

(51) International classification	:G06N0020000000, G06N0003040000, G06K0009620000, G06N0003080000, G01N0033543000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Vaishnavi Prashanth Selva Perumal
Address of Applicant :Associate Professor and Head(I/C), Public Health Dentistry, Tagore Dental College and Hospital, Chennai, Tamil Nadu, India - 600127 ---------- ----------
2)Dr. Soundarya Prabhakar
3)Dr. Pallavi Ammu Thomas
4)Prof. Bhavesh A. Oza
5)Parthasarathi Balasamudram Chandrasekhar
6)Dr. E. Ahila Devi
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Vaishnavi Prashanth Selva Perumal
Address of Applicant :Associate Professor and Head(I/C), Public Health Dentistry, Tagore Dental College and Hospital, Chennai, Tamil Nadu, India - 600127 ---------- ----------
2)Dr. Soundarya Prabhakar
Address of Applicant :Senior Lecturer, Tagore Dental College and Hospital, Chennai, Tamil Nadu, India - 60012 ---------- ----------
3)Dr. Pallavi Ammu Thomas
Address of Applicant :Senior Lecturer, Department of Public Health Dentistry, Tagore Dental College and Hospital, Chennai, Tamil Nadu, India - 600127 ---------- ----------
4)Prof. Bhavesh A. Oza
Address of Applicant :Assistant Professor, Computer Engineering Department, L D College of Engineering, Ahmedabad, Gujarat, India - 380015 ---------- ----------
5)Parthasarathi Balasamudram Chandrasekhar
Address of Applicant :Research Associate, Molecular Genetics Lab, Directorate of Poultry Research Institute, Hyderabad, Telangana, India ---------- ----------
6)Dr. E. Ahila Devi
Address of Applicant :Associate Professor, Department of CSE, St. Joseph's College of Engineering, OMR, Chennai, Tamil Nadu, India - 119 ---------- ----------

(57) Abstract :
The present invention relates to a machine learning-based system for automated classification and detection of pathogens in biosensor data. Utilizing advanced biosensors and real-time data acquisition, the system processes biological samples through signal processing, normalization, and feature extraction techniques. Machine learning models, such as CNNs, RNNs, and ensemble methods, are trained on a comprehensive dataset to accurately classify and detect pathogens. The system integrates these models with biosensor hardware, providing real-time analysis and alert mechanisms to notify stakeholders upon pathogen detection. The system architecture is modular and scalable, featuring a biosensor interface module, data preprocessing unit, machine learning engine, database management system, user interface, alert and reporting module, and cloud integration. This design ensures robust communication, data integrity, and accessibility, supporting seamless data flow from acquisition to classification and storage. The cloud integration facilitates scalability and remote access, making the system adaptable to various applications in healthcare, environmental monitoring, and biosecurity, representing a significant advancement over traditional pathogen detection methods.

No. of Pages : 11 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024

(21) Application No.202441054033 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : FULL-BODY HEALTH MONITORING WEARABLE DEVICE

(51) International classification :A61B0005000000, A61B0005020500, A61B0005110000, G16H0050300000, A61B0005024000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES
Address of Applicant :SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES, SAVEETHA NAGAR, THANDALAM, CHENNAI-602105. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.MARY JOY KINOL
Address of Applicant :SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES, SAVEETHA NAGAR, THANDALAM, CHENNAI-602105. ---------- ----------
2)Dr.SELVIN PRADEEP
Address of Applicant :SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES, SAVEETHA NAGAR, THANDALAM, CHENNAI-602105. ---------- ----------
3)Dr.RAMYA MOHAN
Address of Applicant :SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES, SAVEETHA NAGAR, THANDALAM, CHENNAI-602105. ---------- ----------

(57) Abstract :
This invention relates to a wearable device designed for comprehensive monitoring of an individual's health parameters. The device incorporates multiple sensors to track vital signs, physical activity, and environmental factors. The collected data is processed using advanced algorithms to provide real-time health insights and alerts. The device aims to enhance personal healthcare by offering continuous monitoring, preventive insights, and easy integration with healthcare providers.

No. of Pages : 7 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202441054036 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN EFFICIENT AND ECO-FRIENDLY PROCEDURE FOR ELECTROPHILIC THIOCYANATION OF ANILINES AND 1-(SUBSTITUTED BENZYLIDENE)-2-PHENYL HYDRAZINES

(51) International classification	:G01N0033680000, C07C0331040000, C07F0007180000, C07D0249120000, C23F0011140000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Mallikarjunaswamy A M M
Address of Applicant :(a). NAME: Mallikarjunaswamy A M M (b). NATIONALITY: INDIAN (c). ADDRESS: Research Scholar School of Applied Sciences, Department of Chemistry, REVA university, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bengaluru Karnataka- 560064 Phone: 7829430480 Email: ammmallikarjunaswamy5@gmail.com Bengaluru ---------- ----------
2)Dr. Lakshmi. B
3)Dr. V Damodara Reddy
4)Dr. Gouthami Kuruvalli
5)REVA University
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mallikarjunaswamy A M M
Address of Applicant :(a). NAME: Mallikarjunaswamy A M M (b). NATIONALITY: INDIAN (c). ADDRESS: Research Scholar School of Applied Sciences, Department of Chemistry, REVA university, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bengaluru Karnataka- 560064 Phone: 7829430480 Email: ammmallikarjunaswamy5@gmail.com Bengaluru ---------- ----------
2)Dr. Lakshmi. B
Address of Applicant :(a). NAME: Dr. Lakshmi. B (b). NATIONALITY: INDIAN (c). ADDRESS: Professor School of Applied Sciences, Department of Chemistry, REVA university, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bengaluru Karnataka- 560064 Phone:9902632762; Email:lakshmib28@gmail.com Bengaluru ---------- ----------
3)Dr. V Damodara Reddy
Address of Applicant :(a). NAME: Dr. V Damodara Reddy (b). NATIONALITY: INDIAN (c). ADDRESS: Associate Professor School of Applied Sciences, Department of Chemistry, REVA university, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bengaluru Karnataka- 560064 Phone:8919208971; Email: reddidamodar@gmail.com Bengaluru ---------- ----------
4)Dr. Gouthami Kuruvalli
Address of Applicant :(a). NAME: Dr. Gouthami Kuruvalli (b). NATIONALITY: INDIAN (c). ADDRESS: Research Associate School of Applied Sciences, Department of Biotechnology, REVA university, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bengaluru Karnataka -560064 Phone: 9901090004 Email: gouthuswami@gmail.com Bengaluru ---------- ----------

(57) Abstract :
Thiocyanates form an important class of organic compounds commonly found in natural products that exhibit excellent antimicrobial activity. The electrophilic thiocyanation is one of the most effective methods of introducing a -SCN functional group to the parent organic molecule. In this work, we explored an eco-friendly and highly efficient method for thiocyanation of anilines and 1-(substituted benzylidene)-2-phenylhydrazines using commercially available N-bromoscuccinimide (NBS) and potassium thiocyanate (KSCN). The optimized protocol afforded thiocyanates with good regioselectivity and excellent yields in comparison to the available methods.

No. of Pages : 23 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202441054059 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : “VISUAL STIMULI CLASSIFICATION USING EEG SIGNALS FOR EFFICIENT HUMAN-COMPUTER INTERACTION”

(51) International classification	:A61B0005000000, G06K0009620000, A61B0005369000, G06N0003040000, G06N0020000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Mahantesh K
Address of Applicant :Dept. of ECE, SJBIT, BGSHEC, Kengeri ---------- ----------
2)Dr. D N Chandrappa
3)Mr. Darshan B D
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Mahantesh K
Address of Applicant :Dept. of ECE, SJBIT, BGSHEC, Kengeri ---------- ----------
2)Dr. D N Chandrappa
Address of Applicant :Professor& Head Department of ECE, SJB Institute of Technology, Bangalore Bangalore ---------- ----------
3)Mr. Darshan B D
Address of Applicant :Assistent Professor, Dept. of ECE, SJB Institute of Technology, Bangalore Bangalore ---------- ----------

(57) Abstract :
Humans show excellent performance, still unreachable by machines, in interpreting visual scenes. Despite the recent rediscovery of Neural Networks has led to a significant performance improvement in automated visual classification, their generalization capabilities are not at the human level, since they learn a discriminative feature space, which strictly depends on the employed training dataset rather than on more general principles. This project report explores the semantic classification of images-based processing of electroencephalogram (EEG) signals generated by the viewer’s brain. In our work, the main focus is on the specific task of analyzing the EEG signals generated in the brain when an image is seen, so that the type of object represented in the image can be distinguished. Proposed methodology aims at translating an input multichannel temporal EEG sequence into a low dimensional feature vector summarizing the relevant content of the input sequence, simply concatenate time sequences from multiple channels into a single feature vector, ignoring temporal dynamics, which instead, contains in fundamental information for EEG activity understanding. Features extracted are given for different machine learning algorithms such as Logistic Regression, KNN & SGD for classification in order to achieve improved classification accuracy of EEG signals and evaluation. We use a 128-channel EEG with active electrodes to record brain activity of several subjects while looking at images of 40 ImageNet object classes. As for automated object categorization, the key contribution is to extract information (features) from EEG signals in order to classify or differentiate them based on the images used to trigger brain activity based on different machine learning approaches.

No. of Pages : 13 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :16/07/2024

(21) Application No.202441054083 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : STARCH-BASED AND CELLULOSE-BASED BIOPOLYMER FOR SUSTAINABLE FOOD PACKAGING

(51) International classification	:C08L0003020000, C08L0003000000, C08L0067040000, C08L0101160000, C08L0001020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES
Address of Applicant :SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES, SAVEETHA NAGAR, THANDALAM, CHENNAI-602105. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.S.MANIKANDAN
Address of Applicant :SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES, SAVEETHA NAGAR, THANDALAM, CHENNAI-602105. ---------- ----------
2)MEERA RAVIKUMAR
Address of Applicant :SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES, SAVEETHA NAGAR, THANDALAM, CHENNAI-602105. ---------- ----------
3)Dr.RAMYA MOHAN
Address of Applicant :SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES, SAVEETHA NAGAR, THANDALAM, CHENNAI-602105. ---------- ----------

(57) Abstract :
The project "Starch-Based and Cellulose-Based Biopolymers for Sustainable Food Packaging" aims to develop eco-friendly packaging solutions by leveraging renewable sources such as corn, potatoes, and cellulose from plant cell walls. Through extraction and purification processes, starch and cellulose are transformed into biopolymers with enhanced mechanical strength and barrier properties. Formulation optimization involves the strategic addition of additives to tailor the biopolymers for specific packaging needs, while rigorous testing ensures desired properties such as flexibility and biodegradability. Innovative processing techniques like film casting and 3D printing are explored to scale up production, while pilot-scale manufacturing trials ensure consistency and quality. The project evaluates environmental impact through biodegradation studies and life cycle assessments, demonstrating the sustainability of starch-based and cellulose-based biopolymer packaging. Overall, this research contributes to the advancement of renewable, biodegradable alternatives to conventional plastics, promoting a transition towards a more sustainable and circular economy in the food packaging industry.

No. of Pages : 6 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :16/07/2024

(21) Application No.202441054099 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : WATER NET A NETWORK FOR MONITORING AND ASSESSING WATER QUALITY FOR DRINKING AND IRRIGATION PURPOSES

(51) International classification :G06Q0010060000, G01N0033180000, G06Q0010100000, G06Q0050020000, H04W0004700000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**

1)CH.V SATYANARAYANA

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: satyach8592@gmail.com & 9701426350 Secunderabad ---------- ----------

2)Malla Reddy Engineering College

3)Mrs. ANDOL MAMATHA

4)DR. M.ROSHINI

5)INAGANTI BHAVANA

6)SAILAJA CHIGURUPATI

7)MUNNANGI SURESH

8)Guntakal Bariki Veeresh

9)DR. UDDANTI MOHAN SRINIVAS

10)Dr Velagapudi Sreenivas

11)BATTULA SRINIVAS

12)MUNIGALA MAHESHNATH

13)JANAPAREDDI SANYASAMMA

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)CH.V SATYANARAYANA

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: satyach8592@gmail.com & 9701426350 Secunderabad ---------- ----------

2)Malla Reddy Engineering College

Address of Applicant :Malla Reddy Engineering College Dhulapally post via Kompally Maisammaguda Secunderabad -500100 Secunderabad ---------- ----------

3)Mrs. ANDOL MAMATHA

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: andolmamatha9@gmail.com & 8639432671 Secunderabad ---------- ----------

4)DR. M.ROSHINI

Address of Applicant :Professor ADITYA COLLEGE OF ENGINEERING -517325 Madanapalli State:AndhraPradesh Email ID & Contact Number: mohammedroshini@gmail.com & 7013138130 Madanapalli ---------- ----------

5)INAGANTI BHAVANA

Address of Applicant :Professor Computer ScienceandEngineering(CBDS) Dept., Bapatla Engineering College, Bapatla(Post. 522101) State:Andhra Pradesh. Email ID & Contact Number: bhavana.inaganti999@gmail.com & 9490633547 Bapatla ---------- ----------

6)SAILAJA CHIGURUPATI

Address of Applicant :Student Department of Computer Science and Engineering, Koneru Lakshmaiah University-AP, Vaddeswaram, Guntur District, 522302. State: Andhra Pradesh Email ID & Contact Number: sailu.ch1089@gmail.com & 9363369999 Vijayawada ---------- ----------

7)MUNNANGI SURESH

Address of Applicant :Assistant Professor Computer Science and Engineering Dept Narasaraopet Engineering College, yellamanda (post),Narasaraopet (mandal), palnadu(distrct)-522601, State: Andhra Pradesh Email ID & Contact Number: Sureshmunnangi55@gmail.com & 9704242616 Narsaraopet ---------- ----------

8)Guntakal Bariki Veeresh

Address of Applicant :Assistant Professor Computer Science and Engineering., K.S.R.M College of Engineering (Autonomous),Kadapa, Pincode -516003, State: Andhra Pradesh Email ID & Contact Number: veereshksrm@gmail.com & 7075047766 Cuddapah ---------- ----------

9)DR. UDDANTI MOHAN SRINIVAS

Address of Applicant :Professor Computer Science and Engineering(AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State:Telangana Email ID & Contact Number: umohansrinivas@gmail.com & 9052760536 Secunderabad ---------- ----------

10)Dr Velagapudi Sreenivas

Address of Applicant :Professor Department of CSE, SRKIT, Vijayawada, A.P, India-521108 State: Andhra Pradesh Email ID & Contact Number: Velagapudisreenivas@gmail.com & 7093701543 Vijayawada ---------- ----------

11)BATTULA SRINIVAS

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: srinivasb0544@gmail.com & 9666887975 secunderabad ---------- ----------

12)MUNIGALA MAHESHNATH

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: Munigalamahesh321@gmail.com & 9052753601 Secunderabad ---------- ----------

13)JANAPAREDDI SANYASAMMA

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number :saroja509828@gmail.com & 8919147648 Secunderabad ---------- ----------

(57) Abstract :

ABSTRACT In an era marked by escalating concerns over water scarcity and pollution, ensuring access to clean water for drinking and irrigation is paramount. This project introduces WATERNET, a comprehensive network designed to monitor and facilitate access to water quality data for both drinking and irrigation purposes. WATERNET integrates cutting-edge sensors and IoT devices strategically deployed across water bodies and distribution networks. These sensors continuously collect real-time data on various parameters crucial for assessing water quality, including pH levels, dissolved oxygen content, turbidity, temperature, and presence of contaminants. Through intuitive dashboards, stakeholders, including water authorities, farmers, and communities, can easily visualize water quality metrics and make informed decisions. The platform also supports data sharing and collaboration, fostering collective efforts towards sustainable water management. Moreover, WATERNET offers a user-friendly interface accessible via web and mobile applications. Through intuitive dashboards, stakeholders, including water authorities, farmers, and communities, can easily visualize water quality metrics and make informed decisions. The platform also supports data sharing and collaboration, fostering collective efforts towards sustainable water management. The implementation of WATERNET holds promise for revolutionizing water quality monitoring and management practices. By enhancing transparency, efficiency, and responsiveness, it empowers stakeholders to address water-related challenges with agility and precision. Ultimately, WATERNET contributes to the broader goal of ensuring equitable access to safe and reliable water resources, promoting human well- being, and fostering environmental sustainability.

No. of Pages : 7 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :16/07/2024

(21) Application No.202441054131 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : SINGLE-IMAGE SUPER RESOLUTION

(51) International classification	:G06N0003040000, G06N0003080000, G06T0003400000, G06T0005000000, G06K0009620000
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**

1)THANGEDI KISHORE

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number:thangedikishore@gmail.com & 9985555713 Secunderabad ---------- ----------

2)Malla Reddy Engineering College

3)NERELLA VIVEK

4)D.V.V.BRAHMACHARI

5)Dr. M. AJAY KUMAR

6)CHINTHALA KEERTHI

7)E AVYAKTHA

8)NARESH BABU MERUGU

9)SUDHAKAR REDDY NARALA

10)M JAGAN MOHAN REDDY

11)NALLURI VENKATA MADHU BINDU

12)RONGALA RAVI

13)MUNIGALA MAHESHNATH

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)THANGEDI KISHORE

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number:thangedikishore@gmail.com & 9985555713 Secunderabad ---------- ----------

2)Malla Reddy Engineering College

Address of Applicant :Malla Reddy Engineering College Dhulapally post via Kompally Maisammaguda Secunderabad -500100 Secunderabad ---------- ----------

3)NERELLA VIVEK

Address of Applicant :Assistant Professor Computer Science and Engineering Dept., Malla Reddy College of Engineering for Women , Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: nerella.vivek16@gmail.com & 9866244443 Secunderabad ---------- ----------

4)D.V.V.BRAHMACHARI

Address of Applicant :Assistant Professor Computer Science and Engineering Dept., Universal College of Engineering and Technology, Dokiparru (v) NarasaraoPet Road, Medikonduru (M), Guntur – 522438 State: Andhra Pradesh, Email ID & Contact Number: db.achari72@gmail.com & 9949508458 Narsaraopet ---------- ----------

5)Dr. M. AJAY KUMAR

Address of Applicant :Associate Professor Electronics and communication Engineering Engineering Dept., Malla Reddy College of Engineering for Women , Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana. Email ID & Contact Number: ajayajju126@gmail.com & 7386766694 Secunderabad ---------- ----------

6)CHINTHALA KEERTHI

Address of Applicant :Assistant Professor Electronics and Communication Engineering Dept., Malla Reddy College of Engineering for Women, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana. Email ID & Contact Number: keerthureddychinthala@gmail.com & 7893351795 Secunderabad ---------- ----------

7)E AVYAKTHA

Address of Applicant :Assistant Professor Computer Science and Engineering Dept., Malla Reddy College of Engineering for Women , Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: TELANGANA. Email ID & Contact Number: avyaktha17 @gmail.com & 8790439965 Secunderabad ---------- ----------

8)NARESH BABU MERUGU

Address of Applicant :Assistant Professor Computer Science and Engineering(CSE), Sri Vasavi Institute of Engineering and Technology, Nandamuru, Pedana, Krishna District, Pin-521369 State: Andhra Pradesh. Email ID & Contact Number: naresh.sviet@gmail.com & 9848738591 Pedana ---------- ----------

9)SUDHAKAR REDDY NARALA

Address of Applicant :Assistant Professor Computer Science and Engineering Dept., Prasad V Potluri Siddhartha Institute of Technology, Chalasani Nagar, Kanuru, Vijayawada, 520007 State: Andhra Pradesh. Email ID & Contact Number: nsudhakar@pvpsiddhartha.ac.in & 9866385245 Vijayawada ---------- ----------

10)M JAGAN MOHAN REDDY

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: mjmreddy1978@gmail.com & 7013339222 Secunderabad ---------- ----------

11)NALLURI VENKATA MADHU BINDU

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: svmadhu.sms@gmail.com & 9494511759 Secunderabad ---------- ----------

12)RONGALA RAVI

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: raviecet5815@gmail.com & 6300281759 Secunderabad ---------- ----------

13)MUNIGALA MAHESHNATH

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: Munigalamahesh321@gmail.com & 9052753601 Secunderabad ---------- ----------

(57) Abstract :

ABSTRACT The paragraph discusses advancements in single-image superresolution (SISR) achieved through deep convolutional neural networks (CNNs). While CNN-based approaches have significantly improved image quality in terms of peak signal-to-noise ratio (PSNR) and structural similarity (SSIM), they often demand substantial computing power, hindering their practical use. Additionally, many existing CNN models fail to fully utilize intermediate features crucial for precise image reconstruction. To tackle these challenges, the article introduces MADNet, a novel lightweight network design.MADNet focuses on enhancing multiscale feature expression and learning feature correlations efficiently. It introduces a Residual Multiscale Module with Attention Mechanism (RMAM) to bolster the representation of informative multicale features. This module helps in capturing diverse features across different scales, allowing for a more comprehensive understanding of the input image. Moreover, MADNet incorporates a Dual Residual-Path Block (DRPB) to leverage hierarchical features extracted from the original low-resolution images. By integrating these features at multiple levels, MADNet ensures a richer understanding of the image content, which aids in more accurate super resolution. MADNet utilizes dense connections between blocks to enhance information flow and facilitate feature reuse effectively.These connections enable seamless communication between different layers, promoting feature propagation and enhancing the overall performance of the network.Importantly, comparative evaluations show that MADNet outperforms existing models while utilizing significantly fewer computational resources, as measured by multiadds and parameters. This efficiency makes MADNet a promising solution for real-world applications where computational resources are limited.

No. of Pages : 10 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202441054143 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : LPG GAS STOVE AUTOMATED SAFETY SYSTEM

(51) International classification :F24C0015200000, F24C0003120000, F17C0013040000, F24C0015100000, F24C0003000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)THIAGARAJAR COLLEGE OF ENGINEERING
Address of Applicant :Thiagarajar College of Engineering, Madurai-625015. TAMILNADU Madurai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Yoga Varshan A R
Address of Applicant :4/247,Annai Sathya nagar 4th st,Iravathanallur,Madurai-625009, Tamil Nadu. Madurai ---------- ----------
2)Siva surya S
Address of Applicant :54,MGR nagar, Thiruppuvanam, sivagangai- 630611, Tamil Nadu. Sivagangai ---------- ----------
3)Fenish S
Address of Applicant :12-63, padarnilam, Manavalakurichi post,Kanyakumari-629252, Tamil Nadu. Kanyakumari ---------- ----------
4)Dr.M.Meenakshi Devi
Address of Applicant :Assistant Professor, EEE, Thiagarajar College of Engineering, Madurai-625015 Madurai ---------- ----------
5)Dr C K Babulal
Address of Applicant :Professor, EEE, Thiagarajar College of Engineering, Madurai-625015. Madurai ---------- ----------
6)Dr.R.Rajan Prakash
Address of Applicant :Associate Professor, EEE, Thiagarajar College of Engineering, Madurai-625015 Madurai ---------- ----------

(57) Abstract :
The present invention discloses a LPG Gas Stove Automated Safety system[1] for preventing accidents, for automation during cooking and for monitoring fuel consumption. The system[1] of the present invention comprises of gas stove[2] having servo motor[3] integrated to stove knob[4] and connected to a gas cylinder[5] with servo motor[6] integrated to cylinder regulator[7] characterized in that a microcontroller[8] integrated to a sensor[9], a limit switch[10], a ten second delay timer circuit[11], potentiometers[13], knob timer control unit[14] and an LCD display[19].

No. of Pages : 17 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :16/07/2024

(21) Application No.202441054153 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : DETECTION OF PHISHING WEBSITE USING SVM AND LIGHT GBM

(51) International classification :G06N0020000000, A61F0013150000, G06F0021570000, B32B0037100000, C12N0015100000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**

1)RONGALA RAVI

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: raviecet5815@gmail.com & 6300281759 Secunderabad ---------- ----------

2)Malla Reddy Engineering College

3)SIGIRISETTY ANUSHA

4)AGASTY. SUBHA. DHANA LAKSHMI

5)ARATI BEHERA

6)PRANEETHA SURAPANENI

7)SUDHAKAR REDDY NARALA

8)P. Anantha Lakshmi

9)Ms. Makina Venkata Lavanya

10)Dr. M. Amulya

11)CH.V SATYANARAYANA

12)JANAPAREDDI SANYASAMMA

13)DR. KAVITHA NALLAMOTHU

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)RONGALA RAVI

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: raviecet5815@gmail.com & 6300281759 Secunderabad ---------- ----------

2)Malla Reddy Engineering College

Address of Applicant :Malla Reddy Engineering College Dhulapally post via Kompally Maisammaguda Secunderabad -500100 Secunderabad ---------- ----------

3)SIGIRISETTY ANUSHA

Address of Applicant :Assistant Professor Computer Science and Engineering(AI) Dept., Shri Vishnu Engineering College for Women Vishnupur, Bhimavaram -534202 State: Andhra Pradesh Email ID & Contact Number: sanushaai@svecw.edu.in & 9505755788 Bhimavaram ---------- ----------

4)AGASTY. SUBHA. DHANA LAKSHMI

Address of Applicant :Assistant Professor Information Technology Dept., Giet Engineering College,NH - 16, Chaitanya Knowledge City,Rajahmundry - 533296, Andhra Pradesh,Pin-521369 Email ID & Contact Number: dhana.lakshmi637@gmail.com & 8919363123 Rajahmundry ---------- ----------

5)ARATI BEHERA

Address of Applicant :Ph.D Scholar SRM University, Department of Computer Science and Engineering, Mangalagiri, Pin: 522240 State:Andhra Pradesh Email ID & Contact Number: arti.devine@gmail.com & 8249303792 Amaravathi ---------- ----------

6)PRANEETHA SURAPANENI

Address of Applicant :Research Scholar Cyber Security and IOT Lab, Department of Computer Science and Engineering, School of Engineering and Applied Sciences (SEAS), SRM University-AP, Amaravati, 522240, Andhra Pradesh, India. State:Andhra Pradesh Email ID & Contact Number: kilarupraneetha@gmail.com & 9966404893 Amaravathi ---------- ----------

7)SUDHAKAR REDDY NARALA

Address of Applicant :Assistant Professor Computer Science and Engineering Dept., Prasad V Potluri Siddhartha Institute of Technology, Chalasani Nagar, Kanuru, Vijayawada, 520007 State: Andhra Pradesh. Email ID & Contact Number: nsudhakar@pvpsiddhartha.ac.in & 9866385245 Vijayawada ---------- ----------

8)P. Anantha Lakshmi

Address of Applicant :Assistant Professor . Dept of Computer Applications Gayatri Vidya Parishad College of Degree and PG Courses(A) Rushikonda, Visakhapatnam -530045 State: Andhra Pradesh. Email ID & Contact Number: anantha.paluri@gmail.com & 9492219089 Visakahpatnam ---------- ----------

9)Ms. Makina Venkata Lavanya

Address of Applicant :Student Department of Statistics, Andhra University, Visakhapatnam - 530003 State: Andhra Pradesh. Email ID & Contact Number: lavanya.mv9@gmail.com & 9502563100 Visakhapatnam ---------- ----------

10)Dr. M. Amulya

Address of Applicant :Assistant Professor Humanities and Sciences (Mathematics) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State:Telangana Email ID: amulya.mothrapu@gmail.com ContactNumber:9550659292 Secunderabad ---------- ----------

11)CH.V SATYANARAYANA

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number:satyach8592 @gmail.com & 9701426350 Secunderabad ---------- ----------

12)JANAPAREDDI SANYASAMMA

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number:saroja509828@gmail.com & 8919147648 Secunderabad ---------- ----------

13)DR. KAVITHA NALLAMOTHU

Address of Applicant :Associate Professor Computer Science and Engineering Dept., Narasimha Reddy Engineering College, Maisammaguda, Mechal-Malkajgiri-500100. State:Telangana Email ID & Contact Number: kavitha.chundi@gmail.com & 9703966992 Secunderabad ---------- ----------

(57) Abstract :

ombat phishing attacks effectively. By leveraging advanced machine learning algorithms and prioritizing ethical considerations, our system empowers organizations to safeguard their digital assets and uphold the integrity of their online operations in an increasingly complex threat landscape.

No. of Pages : 7 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202441054160 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN INTELLIGENT DATA QUALITY MANAGEMENT SYSTEM FOR ENHANCED AI/ML MODEL PERFORMANCE ACROSS VARIOUS INDUSTRIES

(51) International classification	:G06F0016215000, G06Q0010060000, G06F0016230000, G06Q0010100000, G16H0010600000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Mr. Robin Verma
Address of Applicant :Independent Researcher, 712, Aparna Hights 2, botanical garden road, kondapur, Hyderabad-500084 ---------- ----------
2)Mr Amit Verma
3)Mr Saigurudatta Pamulaparthyvenkata
4)Mr Rajiv Avacharmal
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr. Robin Verma
Address of Applicant :Independent Researcher, 712, Aparna Hights 2, botanical garden road, kondapur, Hyderabad-500084 ---------- ----------
2)Mr Amit Verma
Address of Applicant :Independent Researcher, 66-d, Beauty Avenue, Phase-5, Punjab, Amritsar- 143001 ---------- ----------
3)Mr Saigurudatta Pamulaparthyvenkata
Address of Applicant :Independent Researcher, United States, Bryan, Texas 77807 ---------- ----------
4)Mr Rajiv Avacharmal
Address of Applicant :Independent Researcher, 24688 Verdant Drive, Farmington Hills, Michigan, USA ---------- ----------

(57) Abstract :
ABSTRACT The present invention relates to an intelligent data quality management system (100) for enhanced artificial intelligent/machine leaning model diverse applications across multiple sectors. The system (100) comprises the Data Ingestion Module, Data Profiling Module, Data Cleansing Module, Data Enrichment Module, Data Validation Module, Data Governance Module, Data Monitoring and Reporting Module, and the AI and ML Integration Module. The Intelligent Data Quality Management System (100) (DQMS) is designed to address the comprehensive needs of AI and ML applications by ensuring high data quality through an integrated approach. The system (100) ensures high-quality data for AI and ML models, enhancing their accuracy, efficiency, and reliability across multiple sectors. The system (100) is designed to automatically detect and correct data quality issues, integrate external data sources for enrichment, and continuously monitor data quality metrics.

No. of Pages : 18 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024

(21) Application No.202441054179 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : BLOCKCHAIN-BASED SOLUTIONS FOR COST -EFFECTIVE E-COMMERCE SUPPLY CHAIN MANAGEMENT.

(51) International classification	:G06Q0010080000, H04L0009320000, G06Q0030060000, G06Q0010060000, G06Q0020380000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. SHIBI.B
Address of Applicant :ASST. PROFESSOR, B.COM, BHARATA MATA COLLEGE AUTONOMOUS, THRIKKAKARA, ERNAKULAM, KERALA-682021, INDIA Ernakulam ---------- ----------
2)Ms. ASHA JOHN
3)Ms.JULIE P J
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. SHIBI.B
Address of Applicant :ASST. PROFESSOR, B.COM, BHARATA MATA COLLEGE AUTONOMOUS, THRIKKAKARA, ERNAKULAM, KERALA-682021, INDIA Ernakulam ---------- ----------
2)Ms. ASHA JOHN
Address of Applicant :ASST. PROFESSOR, B.COM , BHARATA MATA COLLEGE AUTONOMOUS, THRIKKAKARA, ERNAKULAM, KERALA – 682021, INDIA Ernakulam ---------- ----------
3)Ms.JULIE P J
Address of Applicant :ASST. PROFESSOR, B.COM , BHARATA MATA COLLEGE AUTONOMOUS, THRIKKAKARA, ERNAKULAM, KERALA-682021, INDIA Ernakulam ---------- ----------

(57) Abstract :
ABSTRACT Blockchain-Based solutions for cost -effective E-Commerce supply chain management. Blockchain technology, a decentralized and secure ledger system, holds immense potential for the cost-effective management of E-commerce supply chain. By providing a transparent and tamper-proof record of every transaction, blockchain can improve supply chain efficiency and reduce costs. Firstly, blockchain eliminates the need for intermediaries such as banks and payment processors, reducing transaction fees and thus lowering costs for both the buyer and seller. Additionally, the use of smart contracts in blockchain can automate the fulfillment process, eliminating the need for manual verification and reducing errors and delays. Moreover, blockchain enables real-time tracking of goods at every stage of the supply chain, providing transparency and traceability. This not only reduces the risk of fraud and enhances customer trust but also allows for quicker identification and resolution of supply chain issues, reducing costs associated with returns and disputes. Furthermore, the use of blockchain can streamline inventory management by providing real-time updates on inventory levels and reducing the risk of overstocking or stockouts. This can lead to improved logistics planning and reduced warehousing costs. Moreover, blockchain-based solutions can greatly improve the efficiency of supply chain processes. Smart contracts, a key feature of blockchain technology, facilitate automated execution of agreements and enable faster and more accurate transactions, eliminating the need for manual processing. This reduces the overall operational costs associated with supply chain management. Additionally, the use of blockchain can address the issue of counterfeit products in e-commerce supply chains. By tracking and authenticating products on the blockchain, retailers can ensure that they are receiving genuine products from their suppliers, thereby reducing the financial impacts of fraudulent goods. Overall, blockchain-based solutions hold great potential for cost-effective E-commerce supply chain management by streamlining processes, reducing the need for intermediaries, and increasing transparency and security.

No. of Pages : 12 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202441054183 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MACHINE LEARNING BASED IOT PLATFORM FOR REMOTE PATIENT MONITORING AND HEALTHCARE DATA ANALYSIS

(51) International classification	:G16H0010600000, G16H0040670000, A61B0005000000, G06N0020000000, G16H0050200000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr.R. Kalyani, Vidya Jyothi Institute of Technology
Address of Applicant :Associate Professor, Dept of AIML, Vidya Jyothi Institute of Technology, JNTUH, Telegana, Aziz Nagar Gate, C.B.Post, Hyderabad-500 075 Hyderabad ---------- ----------
2)Dr.A.Muthuraj, SRM TRP Engineering College
3)Mr.K. Sayooj Devadas, Galgotias University
4)Mr.V. Vijey Nathan, SRM TRP Engineering College
5)Mr.M.Jaiganesh SRM TRP Engineering College
6)Mrs. M. Subasri, SRM TRP Engineering College
7)Mr.S.Sathish Kumar, JB Institute of Engineering & Technology
8)Mr.R.Srinivasan, Galgotias University
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.R. Kalyani, Vidya Jyothi Institute of Technology
Address of Applicant :Associate Professor, Dept of AIML, Vidya Jyothi Institute of Technology, JNTUH, Telegana, Aziz Nagar Gate, C.B.Post, Hyderabad-500 075 Hyderabad ---------- ----------
2)Dr.A.Muthuraj, SRM TRP Engineering College
Address of Applicant :Assistant Professor, Department of CSE, SRM TRP Engineering College, NH 45, Mannachanallur, Taluk, Irungalur, Tiruchirapalli Tamil Nadu 621105 Tiruchirapalli ---------- ----------
3)Mr.K. Sayooj Devadas, Galgotias University
Address of Applicant :Assistant Professor, School of Computer Science and Engineering, Galgotias University, Plot No. 2, Yamuna Expy, opposite Buddha International Circuit, Sector 17A, Greater Noida, Uttar Pradesh 203201 Greater Noida ---------- ----------
4)Mr.V. Vijey Nathan, SRM TRP Engineering College
Address of Applicant :Assistant Professor, Department of CSE, SRM TRP Engineering College, NH 45, Mannachanallur, Taluk, Irungalur, Tiruchirapalli Tamil Nadu 621105 Tiruchirapalli ---------- ----------
5)Mr.M.Jaiganesh SRM TRP Engineering College
Address of Applicant :Assistant Professor, Department of CSE, SRM TRP Engineering College, NH 45, Mannachanallur, Taluk, Irungalur, Tiruchirapalli Tamil Nadu 621105 Tiruchirapalli ---------- ----------
6)Mrs. M. Subasri, SRM TRP Engineering College
Address of Applicant :Assistant Professor, Department of CSE, SRM TRP Engineering College, NH 45, Mannachanallur, Taluk, Irungalur, Tiruchirapalli Tamil Nadu 621105 Tiruchirapalli ---------- ----------
7)Mr.S.Sathish Kumar, JB Institute of Engineering & Technology
Address of Applicant :Assistant Professor, Department of Artificial Intelligence and Machine Learning, JB Institute of Engineering & Technology, Hyderabad 500075, Telangana, India Hyderabad ---------- ----------
8)Mr.R.Srinivasan, Galgotias University
Address of Applicant :Assistant Professor, School of Computer Science and Engineering, Galgotias University, Plot No. 2, Yamuna Expy, opposite Buddha International Circuit, Sector 17A, Greater Noida, Uttar Pradesh 203201 Greater Noida ---------- ----------

(57) Abstract :
A machine learning-based Internet of Things (IoT) platform is presented for remote patient monitoring and healthcare data analysis. The platform integrates IoT sensors and wearable devices to capture physiological data, employing secure data transmission protocols to protect patient privacy. Advanced machine learning algorithms analyze the captured data, providing predictive analytics and early prognosis. The platform generates clinically relevant summaries, known as Personalized Health Motifs (PHMs), translating complex sensor data into actionable information for healthcare providers. With ethical and cultural considerations, seamless EHR integration, and a user-friendly interface, this innovation improves patient care and enables timely interventions.

No. of Pages : 8 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202441054211 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : HOMEMADE REFRIGERATOR DEODORIZER

(51) International classification :F25D0017040000, A61L0009010000, F25D0025020000, A61L0009014000, B01D0053040000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Saveetha Institute Of MedicalAnd Technical Sciences
Address of Applicant :SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES, SAVEETHA NAGAR, THANDALAM, CHENNAI-602105. patents.sdc@saveetha.com 9884293869 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr M Arun
Address of Applicant :SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES, SAVEETHA NAGAR, THANDALAM, CHENNAI-602105. patents.sdc@saveetha.com 9884293869 ---------- ----------
2)Dr Senthil Kumar j
Address of Applicant :SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES, SAVEETHA NAGAR, THANDALAM, CHENNAI-602105. patents.sdc@saveetha.com 9884293869 ---------- ----------
3)Dr Ramya Mohan
Address of Applicant :SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES, SAVEETHA NAGAR, THANDALAM, CHENNAI-602105. patents.sdc@saveetha.com 9884293869 ---------- ----------

(57) Abstract :
In every household, the refrigerator is a vital appliance for storing food and keeping it fresh. However, over time, various food odors can accumulate, leading to an unpleasant smell inside the refrigerator. To combat this issue and maintain a fresh-smelling fridge, the use of refrigerator deodorizers is essential. Refrigerator deodorizers are specially designed to absorb and neutralize odors, ensuring that your fridge remains clean and odor-free. While there are numerous commercial deodorizers available on the market, a simple and cost- effective solution can be made at home using common household ingredients like baking soda and activated charcoal. Ozone is generated by utilizing atmospheric oxygen, in the disinfection process, surplus oxygen molecules recombine into oxygen after approximately 30 minutes. This method eliminates the issue of secondary pollution commonly associated with disinfectants, as there is no residue left behind. Additionally, it eliminates the need for post-disinfection cleaning. The Refrigerator Deodorizer efficiently eliminates unpleasant odors through air reactions, extending the freshness of various fruits and vegetables while effectively combating mildew, fishy odors, and other unwanted smells.

No. of Pages : 6 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202441054291 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : METAL ORGANIC FRAMEWORK BASED NANOFIBER MEMBRANE FOR WASTE WATER REMEDIATION

(51) International classification	:G06N0003040000, G06N0003080000, G01S0019070000, H04L0007000000, A61B0005316000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)POKKUNURI PARDHA SARADHI
Address of Applicant :Department of ECE, Koneru Lakshmaiah Education Foundation, Vaddeswaram, AP, India ---------- ----------
2)Koneru Lakshmaiah Education Foundation
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mallika Yarrakula
Address of Applicant :Department of ECE, Koneru Lakshmaiah Education Foundation, Guntur, Andhra Pradesh, India, Pin: 522302 Guntur ---------- ----------
2)Prabakaran N
Address of Applicant :Department of ECE, Koneru Lakshmaiah Education Foundation, Guntur, Andhra Pradesh, India, Pin: 522302 Guntur ---------- ----------
3)J R K Kumar Dabbakuti
Address of Applicant :Department of ECE, Koneru Lakshmaiah Education Foundation, Guntur, Andhra Pradesh, India, Pin: 522302 Guntur ---------- ----------
4)P.Pardhasaradhi
Address of Applicant :Professor, Department of ECE, Koneru Lakshmaiah Education Foundation, Guntur, Andhra Pradesh, India, Pin: 522302 Guntur ---------- ----------

(57) Abstract :
This invention introduces an innovative approach to signal processing and forecasting using subspace-based methods, particularly tailored for ionospheric Total Electron Content (TEC) predictions. At the core of this methodology is the integration of Singular Spectrum Analysis (SSA), Linear Recurrent Formula (LRF), and Artificial Neural Networks (ANN), forming a robust SSA-LRF-ANN framework. This hybrid model leverages the strengths of each component: SSA for decomposing and reconstructing the TEC time series data by distinguishing between signal and noise subspaces, LRF for parameter estimation and forecasting, and ANN for refining the residuals and capturing complex nonlinear patterns. The application of this framework is demonstrated using GPS-derived TEC data from the Bangalore grid (13.02° North and 77.57° East) during sunspot cycle 25 (2020). This novel SSA-LRF-ANN approach substantially improves TEC forecasting, providing more accurate and reliable predictions critical for enhancing GPS accuracy and other Earth Observation applications. The presented numerical results validate the practical implementation and effectiveness of the proposed methodology, making it a promising tool for advanced time series forecasting in various domains.

No. of Pages : 17 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202441054345 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD FOR ENHANCING STUDENT SUCCESS THROUGH SELECTION, CLASSIFIER PERFORMANCE, AND INTERPRETABILITY IN PREDICTING ACADEMIC PERFORMANCE

(51) International classification	:G06Q0050200000, G06N0020000000, G06N0003040000, G06K0009620000, G06F0111100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Safira Begum
Address of Applicant :Assistant Professor, Department of BCA, HKBK Degree College, Bangalore, Karnataka, Pin Code: 560045 Bangalore ---------- ----------
2)Dr. Ashok Maragondanahalli Venkatesh
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Safira Begum
Address of Applicant :Assistant Professor, Department of BCA, HKBK Degree College, Bangalore, Karnataka, Pin Code: 560045 Bangalore ---------- ----------
2)Dr. Ashok Maragondanahalli Venkatesh
Address of Applicant :Principal, HKBK Degree College, Bangalore, Karnataka, Pin Code: 560045 Bangalore ---------- ----------

(57) Abstract :
The present invention relates to the integrates the Slime Mould Algorithm (SMA) for feature selection with a Forest Optimization-based Neural Network (FO-NN) classifier to predict student performance accurately. SMA optimizes feature subsets from diverse institutional datasets encompassing demographic, socio-economic, and academic variables. These selected features enhance the interpretability and efficiency of predictive models by reducing dataset dimensionality. The FO-NN employs forest optimization to iteratively optimize neural network architectures, ensuring robust modeling of complex relationships in student data. Evaluation metrics such as accuracy, precision, and F1-score validate the FO-NN's predictive efficacy across various student profiles. This method supports educational institutions in proactive intervention strategies by predicting student outcomes effectively, aiding in personalized educational support and resource allocation. The standardized simulation parameters ensure methodological rigor and applicability in diverse educational contexts.

No. of Pages : 20 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :16/07/2024

(21) Application No.202441054383 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : AI BASED ENHANCED NATURAL LANGUAGE PROCESSING SYSTEM FOR CUSTOMER SERVICE AUTOMATION

(51) International classification :H04L0051020000, G06F0040300000, G06Q0030000000, H04M0003510000, G06F0040284000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr K S Vishvaksenan
Address of Applicant :Professor, Department of Electronic and communication Engineering, SRM Institute of Science and Technology , Trichy, Irungalur, Tamilnadu, India. ---------- ----------
2)K V Oppili Srinivasan
3)Prasanna Guduru
4)Dr.M.Sakthivel Murugan
5)Bickey Kumar Shah
6)Ms Josephine Ruth Fenitha
7)VINU S
8)Mr.K.Karthikeyan
9)Nandhini D
10)S.VIJAYALAKSHMI
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr K S Vishvaksenan
Address of Applicant :Professor, Department of Electronic and communication Engineering, SRM Institute of Science and Technology , Trichy, Irungalur, Tamilnadu, India. ---------- ----------
2)K V Oppili Srinivasan
Address of Applicant :BTECH CSE - III YEAR Department of Computer Science and Engineering SRM Institute of Science and Technology , Trichy, Irungalur, Tamilnadu, India. ---------- ----------
3)Prasanna Guduru
Address of Applicant :Assistant professor (guest faculty) Department of Computer Science, National Sanskrit University Tirupati Andhra Pradesh India ---------- ----------
4)Dr.M.Sakthivel Murugan
Address of Applicant :Professor in-charge, Corporate Secretaryship, University of Madras, Dhanraj Baid Jain College, Thoraipakkam, Chennai – 600 097. Tamil Nadu India ---------- ----------
5)Bickey Kumar Shah
Address of Applicant :Scholar Department of Computer Engineering Delhi Technological University Delhi North West India ---------- ----------
6)Ms Josephine Ruth Fenitha
Address of Applicant :Assistant Professor Department of Information Technology, Sri SaiRam Institute of Technology, Sai Leo Nagar , Tambaram Chennai Tamil Nadu India ---------- ----------
7)VINU S
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, St. Joseph's College of Engineering (Autonomous) Anna University OMR, Chennai 600119 Tamilnadu India, ---------- ----------
8)Mr.K.Karthikeyan
Address of Applicant :Assistant Professor Department of Computer Science and Engineering, SNS College Of Engineering, Coimbatore Anna University, Chennai Tamil Nadu Coimbatore India ---------- ----------
9)Nandhini D
Address of Applicant :Assistant professor Department of Computer Science and Technology SNS College of Engineering SNS Kalvi Nagar, Sathy Main Road, NH-209, Vazhiyampalayam, Saravanampatti, Coimbatore, 641107 Tamilnadu India ---------- ----------
10)S.VIJAYALAKSHMI
Address of Applicant :Assistant professor Department of Computer Science and Technology SNS College of Engineering SNS Kalvi Nagar, Sathy Main Road, NH-209, Vazhiyampalayam, Saravanampatti, Coimbatore, 641107 Tamilnadu India ---------- ----------

(57) Abstract :
AI based Enhanced Natural Language Processing System for Customer Service Automation ABSTRACT: The demand for automated customer support strategies in consumer-oriented environments has increased significantly in recent years. Conversational artificial intelligence has been enabled to interpret human language and respond to consumer inquiries automatically without human intervention as a result of the advancement of Natural Language Processing (NLP). NLP chatbots are now capable of providing customers with prompt responses, thereby eliminating the necessity for customers to communicate with human representatives. This application has been implemented in a diverse array of corporate sectors, such as banking, manufacturing, education, law, and healthcare, to name a few. The fast-paced corporate world of today has been transformed by natural language processing (NLP), which has revolutionised the manner in which customer care representatives communicate with consumers. By leveraging the capabilities of artificial intelligence and language comprehension, Natural Language Processing Customer Services has transformed the manner in which organisations engage with their consumers, analyse their inquiries, and respond to them. This article addresses natural language processing (NLP) customer service, process streamlining, and the improvement of overall client service experiences.

No. of Pages : 10 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202441054386 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : VERTICAL BIKE PARKING SYSTEM

(51) International classification :E04H6/06, E04H6/12, E04H6/18, E04H6/32, E04H6/34, E04H6/42
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Mr. Manikandan.P
Address of Applicant :No.10, 3rd Cross, Thiruvenkadam Nagar, Ganapathy, Coimbatore Coimbatore ---------- ----------
2)Mr. Praveen Kumar Selvaraj
3)Ms.M.K.Sahana
4)Mr. B.K.Saravanan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr. Manikandan.P
Address of Applicant :No.10, 3rd Cross, Thiruvenkadam Nagar, Ganapathy, Coimbatore Coimbatore ---------- ----------
2)Mr. Praveen Kumar Selvaraj
Address of Applicant :17/126, Varatharajalu Nagar, 6th Street, Ganapathy, Coimbatore Coimbatore ---------- ----------
3)Ms.M.K.Sahana
Address of Applicant :No.10, 3rd Cross, Thiruvenkadam Nagar, Ganapathy, Coimbatore Coimbatore ---------- ----------
4)Mr. B.K.Saravanan
Address of Applicant :Department of Mechanical Engineering, KPR Institute of Engineering and Technology, Arasur, Coimbatore Coimbatore ---------- ----------

(57) Abstract :
The present invention is a vertical bike parking system with the embodiments. Once a user has to travel through a ramp (2) in a VBPS (1) to park bike in a platform (4). The operator will hold the bike (3) position using the custom build ratchet mechanism (7). This ensure the bike (3) position and prevents from toppling during motion. A sorter arm with paddock and pneumatic suspension (8) with them take the bike along platform (4) to the empty position in the structure using the automation control embedded with sensors (9) using a motor or a chain driven system (10). A sorter arm with paddock and pneumatic suspension (8) based on the drive system either gasoline or electrical type and overall weight to positioning the bike (3) with lower weight on top and bulk ones in lower side by the aid of load sensor for load based positioning and a spring loaded pneumatic suspension for soft landing while delivering the bike (3).

No. of Pages : 13 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202441054395 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A PROCESS OF PREPARATION OF SILICA-RICH CHERTHALA SAND-BASED JANUS NANOPARTICLES AND PRODUCT THEREOF

(51) International classification :A61K0009510000, B01J0021080000, H01M0008101100, B01J0013140000, C01B0033120000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)AVINASHILINGAM INSTITUTE FOR HOME SCIENCE AND HIGHER EDUCATION FOR WOMEN
Address of Applicant :BHARATHI PARK ROAD TATABAD, NEAR FOREST COLLEGE CAMPUS, SAIBABA COLONY, COIMBATORE COIMBATORE TAMIL NADU INDIA 641043 Coimbatore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. LALITHA POTTAIL
Address of Applicant :DIRECTOR RESEARCH AND DEVELOPMENT, PROFESSOR OF CHEMISTRY, AVINASHILINGAM INSTITUTE FOR HOME SCIENCE AND HIGHER EDUCATION FOR WOMEN, BHARATHI PARK ROAD TATABAD, NEAR FOREST COLLEGE CAMPUS, SAIBABA COLONY, COIMBATORE COIMBATORE TAMIL NADU INDIA 641043 Coimbatore ---------- ----------
2)MS. PON NIVETHA AMBIHESWARAN
Address of Applicant :RESEARCH SCHOLAR, DEPARTMENT OF CHEMISTRY, AVINASHILINGAM INSTITUTE FOR HOME SCIENCE AND HIGHER EDUCATION FOR WOMEN, BHARATHI PARK ROAD TATABAD, NEAR FOREST COLLEGE CAMPUS, SAIBABA COLONY, COIMBATORE COIMBATORE TAMIL NADU INDIA 641043 Coimbatore ---------- ----------

(57) Abstract :
TITLE: A PROCESS OF PREPARATION OF SILICA-RICH CHERTHALA SAND-BASED JANUS NANOPARTICLES AND PRODUCT THEREOF APPLICANT: AVINASHILINGAM INSTITUTE FOR HOME SCIENCE AND HIGHER EDUCATION FOR WOMEN ABSTRACT The present invention discloses a process of preparation of Amphiphilic Janus nanosand from silica-rich, naturally abundant Cherthala sand. The process of the present invention comprises of following steps; a. preparation of silica nanoparticles comprising of slow speed ball milling by loading, hot-acid leached and aqueous washed, dry Cherthala sand and balls to form silica nanoparticles; b. preparation of nanosand-embedded wax colloidosomes comprises of melting of paraffin wax in the silica-nanoparticles dispersed in distilled water followed by magnetically stirring to form nanosand-stabilized oil-in-water Pickering emulsion and cooling the emulsion and collecting solidified wax droplets by filtration and washing with water to form nanosand-embedded wax colloidosomes and c. preparation of Amphiphilic Janus nanosand comprises of hydrophobically modifying partially exposed silica surface on the colloidosomes by reacting with methyl trichlorosilane(MTS) in methanol followed by filtering, washing with pure methanol and dissolving the colloidosomes in chloroform to release asymmetrically modified silica Janus particles.

No. of Pages : 25 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202441054399 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A NOVEL COST EFFECTIVE METHOD IN DETECTING THE MICROSCOPIC URINARY SEDIMENTS MORPHOLOGY EMPLOYING GREEN COLOUR POWDER

(51) International classification	:G01N0033493000, G01N0001300000, G01N0021840000, C12Q0001040000, B82Y0040000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)SREE BALAJI MEDICAL COLLEGE AND HOSPITAL
Address of Applicant :NO 7, WORKS ROAD, CHROMEPET, CHENGALPATTU CHENNAI TAMIL NADU INDIA 600 044 Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. PREETHI M
Address of Applicant :SREE BALAJI MEDICAL COLLEGE AND HOSPITAL NO 7, WORKS ROAD, CHROMEPET, CHENGALPATTU CHENNAI TAMIL NADU INDIA 600044 Chennai ---------- ----------

(57) Abstract :
TITLE: A NOVEL COST EFFECTIVE METHOD IN DETECTING THE MICROSCOPIC URINARY SEDIMENTS MORPHOLOGY EMPLOYING GREEN COLOUR POWDER APPLICANT: SREE BALAJI MEDICAL COLLEGE AND HOSPITAL ABSTRACT The present invention discloses a novel, cost effective, simple, rapid and easy method in determining urinary sediments morphology in urine sample thereby assisting to identify and categorize crystal, cast, bacteria, fungi and other cells. The method of the present invention comprises of following steps; a. centrifuging urine sample to form supernatant and residue of urinary sediments in which the supernatant is discarded; b. dissolving pistachio powder with water to form staining solution; c. adding the staining solution to the residue of urinary sediment and mixing for 5 minutes followed by observing under microscope in 45x to determine urinary sediments morphology.

No. of Pages : 15 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202441054407 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A MODULAR ADAPTIVE LOAD-BEARING STRUCTURAL SYSTEM

(51) International classification	:A61B0017000000, H04L0047100000, H04L0043000000, H02N0002180000, G01M0005000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)SSK NEXGENTECH INNOVATIONS
Address of Applicant :FLAT NO: 105, LILLY BLOCK D, NAGARJUNA DREAM LAND, DOOLAPALLY ROAD, QUTHBULLAPUR, KOMPALLY, Hyderabad, Telangana, 500100 Hyderabad ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)BASAVA VAMSI KRISHNA
Address of Applicant :FLAT NO: 105, LILLY BLOCK D, NAGARJUNA DREAM LAND, DOOLAPALLY ROAD, QUTHBULLAPUR, KOMPALLY, Hyderabad, Telangana, 500100 Hyderabad ---------- ----------
2)Bandaru Sai Lakshmi Surya Anupama
Address of Applicant :FLAT NO: 105, LILLY BLOCK D, NAGARJUNA DREAM LAND, DOOLAPALLY ROAD, QUTHBULLAPUR, KOMPALLY, Hyderabad, Telangana, 500100 Hyderabad ---------- ----------

(57) Abstract :
7. ABSTRACT The present invention discloses a modular adaptive load-bearing structural system (100) designed to enhance load distribution, stability, and adaptability in varying environmental conditions is disclosed. The system comprises a central load-bearing core (102) made of high-strength alloy, radial load-transfer beams (104) constructed from nano-enhanced composite materials, and peripheral support columns (106) utilizing self-healing materials. Adaptive connectors (108) with integrated sensors (118) and actuators (114) enable dynamic adjustments between structural components. A real-time monitoring and adaptive feedback subsystem employ sensors (118) for measuring load, vibration, temperature, and humidity, controlled by a data processing unit with algorithms for optimal load distribution. Material enhancements include composite materials with nano-particles and self-healing capabilities. An adaptive load management algorithm (500) initializes sensors (118) and actuators (114), continuously monitors structural conditions, and adjusts components in real-time based on environmental changes. Integration of an energy harvesting subsystem and remote monitoring capability further enhances system efficiency and operational resilience. The figure associated with abstract is Fig. 1.

No. of Pages : 23 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202441054417 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SMART READ DEVICE FOR OBJECT AUTHENTICATION AND METHOD THEREOF

(51) International classification :F04B0023020000, A61B0005110000, A61N0005060000, G07D0007120500, G07D0007128000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Manipal Academy of Higher Education
Address of Applicant :Madhav Nagar, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P J ANAND
Address of Applicant :Senior Manager, R&D, Manipal Technologies Limited, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
2)DHANYA SUNIL
Address of Applicant :Professor, Department of Chemistry, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
3)MAHESHA M G
Address of Applicant :Associate Professor, Department of Physics, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
4)ASHOK RAO
Address of Applicant :Senior Professor, Department of Physics, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------

(57) Abstract :
The present disclosure relates to a smart read device for object authentication. The device (100) includes a switch, an UV light unit (102), an IR light unit (104), a microcontroller (106), a photo detector (108), and a sound unit (110). The microcontroller (106) embedded with authentication instructions is programmed to activate the UV light unit (102) and the IR light unit (104) alternatively for a predefined time period to emit a series of radiations onto the printed region to induce characteristic emission colours. The photo detector (108) is configured to detect the emission colours with predefined light conditions from the printed region with a unique ink. Advantageously, the present invention relates to a customizable and programmable, compact, handheld, single unit visual/thermal combi-reader for product/document authentication.

No. of Pages : 19 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202441054418 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : BIODEGRADABLE JUTE COMPOSITE AND PROCESS OF FABRICATION THEREOF

(51) International classification	:C12N0015520000, G06Q0010080000, B65D0065460000, A61F0013150000, C08K0003040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Manipal Academy of Higher Education
Address of Applicant :Madhav Nagar, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)NAGARAJ KAMATH
Address of Applicant :Assistant Professor, Department of Media Technology, Manipal Institute of Technology,Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
2)SRINIVAS SHENOY H
Address of Applicant :Assistant Professor, Senior Scale, Department of Mechanical and Industrial Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
3)SUDHA D KAMATH
Address of Applicant :Professor, & HoD, Department of Physics, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
4)VIKASH MISHRA
Address of Applicant :Assistant Professor, Department of Physics, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
5)BALAJI S
Address of Applicant :Professor and HoD, Department of Biotechnology, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
6)SANJANA
Address of Applicant :II Sem M. Tech Student, Department of Biotechnology, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
7)SUPRITHA
Address of Applicant :II Sem M. Tech Student, Department of Biotechnology, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
8)KIRAN R
Address of Applicant :Research Scholar, Department of Physics, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
9)SRINIVAS KINI
Address of Applicant :Professor and HoD, Department of Chemical Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
10)TEJAS
Address of Applicant :Research Scholar, Department of Physics, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------

(57) Abstract :
A biodegradable jute composite and process of fabrication thereof is provided. The biodegradable jute composite includes a resin with a natural extract and jute fibers. The natural extract utilized in the biodegradable jute composite is waste flower extract, thereby converting organic waste into valuable resources. The biodegradable jute composite is eco-friendly composite aims to replace synthetic composites, addressing environmental concerns related to non-biodegradable waste and high carbon footprints. The biodegradable jute composite is suitable for applications in structural partitions, gardening, packaging, waste segregation, acoustic materials, and medical devices. The invention contributes to sustainability, cost-efficiency, and the circular economy, providing a safer and more environmentally friendly alternative for various industries by utilizing renewable resources and promoting waste management.

No. of Pages : 23 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202441054419 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : HEXAGONAL ULTRA WIDE BAND ANTENNA STRUCTURE FOR 5G APPLICATIONS

(51) International classification	:H01Q0001240000, H01Q0001380000, H01Q0009040000, H01Q0009420000, H05K0001160000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Manipal Academy of Higher Education
Address of Applicant :Madhav Nagar, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)OM PRAKASH KUMAR
Address of Applicant :Department of Electronics and Communication Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
2)TANWEER
Address of Applicant :Department of Electronics and Communication Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
3)PRAVEEN KUMAR
Address of Applicant :Department of Electronics and Communication Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
4)SHWETA VINCENT
Address of Applicant :Department of Mechatronics, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
5)SAMEENA BEGUM PATHAN
Address of Applicant :Department of Information and Communication Technology, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------

(57) Abstract :
The present disclosure relates to a hexagonal ultra wide band antenna structure. The antenna structure includes a substrate (102), a radiator (104), a T-shape stub (106) and a ground plane (108). The radiator (104) of hexagonal shape is etched with a T-shape stub (106) to modify radiation pattern of the antenna structure (100), placed on top of the substrate (102). The ground plane (108) positioned beneath the substrate (102) opposite the radiator (104) is configured to enhance impedance matching and reduce unwanted reflections. The transmission line is coupled to the radiator (104). The transmission line is configured to transmit and receive signal in a frequency band in a range of 4.2 to 10.1 GHz. Advantageously, the present invention relates to a hexagonal ultra wide band antenna structure that achieves improved impedance matching, wider bandwidth, and efficient radiation patterns crucial for 5G communication.

No. of Pages : 15 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202441054420 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DEVICE FOR MEDICAL WOUND DRESSING

(51) International classification :A61F13/02, A61F13/05, A61M1/00, A61F13/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Manipal Academy of Higher Education
Address of Applicant :Madhav Nagar, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)YOGEESH DATTAKUMAR KAMAT
Address of Applicant :Managing Director, Gati Gait and Posture Private Limited, 7-1-85/3, Padumane Nagar, Sulthan Bathery Road, Mangalore - 575003, Karnataka, India. Mangalore ---------- ----------
2)ANAND PAI
Address of Applicant :Associate Professor, Department of Aeronautical and Automobile Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
3)SHUBHAM BHUSARI
Address of Applicant :3rd Year MBBS Part-1, Kasturba Medical College Mangalore, Lighthouse Hill Road, Mangalore, Karnataka - 575001, India. Mangalore ---------- ----------

(57) Abstract :
The present disclosure relates generally to the field of medical devices. More specifically the present disclosure relates to a device for medical wound dressing. The device (100) includes an outer transparent layer (102) with an adhesive film (104) and a foam strip (106). The outer transparent layer (102) includes an adhesive film (104) placed near to outer edges of the outer transparent layer (102) for secure adhesion to the skin surrounding a wound. The foam strip (106) is configured to heal the wound. The groove (108) is adapted to contact top surface of the foam strip (106). The suction port (110) is configured to connect to a suction device for removing air from the foam strip (106) and wound area. Advantageously, the present invention relates to a hands-free dressing device that is highly absorbent and transparent for easy external wound edge inspection while acting as a barrier from external agents.

No. of Pages : 16 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202441054421 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN APPARATUS FOR MONITORING QUALITY OF SANITIZER FLUIDS

(51) International classification :A61B0005000000, G01N0033280000, B26B0019380000, C12P0007060000, C12N0015113000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Manipal Academy of Higher Education
Address of Applicant :Madhav Nagar, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)NARESH KUMAR MANI
Address of Applicant :Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, Karnataka, 576104, India. Manipal ---------- ----------
2)PRATHAM JOSHI
Address of Applicant :Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, Karnataka, 576104, India. Manipal ---------- ----------
3)AKHIYA SHINDE
Address of Applicant :Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, Karnataka, 576104, India. Manipal ---------- ----------
4)ANUSHA PRABHU B
Address of Applicant :Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, Karnataka, 576104, India. Manipal ---------- ----------
5)BIBHU RANJAN SARANGI
Address of Applicant :Indian Institute of Technology, Palakkad, Nila Campus, Kanjikode West, Palakkad, Kerala - 678623, India. Palakkad ---------- ----------

(57) Abstract :
Embodiments of the present disclosure relates to an apparatus (100) provided with a thread-based wearable sensor (102) for monitoring the quality of sanitizer fluids. The apparatus (100) is configured to detect dye displacement by adding a dye to a specific region of the wearable thread-based sensor (102). Further, the apparatus (100) is configured to analyse the detected dye displacement by adding a sample sanitizer fluid to the dyed region. Furthermore, the apparatus (100) is configured to detect concentration of ethanol in the sample sanitizer fluid based on the analysis. The dye displacement pertains to a migration distance measurement of the dye on the wearable thread-based sensor (102) that directly corresponds to the concentration of ethanol in the sample sanitizer fluid.

No. of Pages : 19 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202441054446 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTOFUSA FUSA PROCESS FLOW TOOL (AUTOPRO TOOL)

(51) International classification	:G06Q0010060000, G06Q0010100000, G06F0011360000, G06Q0030000000, H04L0043045000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Sivakumar Jeevanandam
Address of Applicant :AutoFuSa Consultancy Services Pvt Limited, No 338/2A, Sivasubramaniam Nagar , Near Mount Raindrop Apartments, Kalapatti Road, Coimbatore -641048 Coimbatore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Sivakumar Jeevanandam
Address of Applicant :AutoFuSa Consultancy Services Pvt Limited, No 338/2A, Sivasubramaniam Nagar , Near Mount Raindrop Apartments, Kalapatti Road, Coimbatore -641048 Coimbatore ---------- ----------

(57) Abstract :
The ISO 26262-2018 Functional Safety standard has been enhanced using a diagrammatic format to define roles and responsibilities with necessary specifications. This approach integrates industry best practices and insights gained from 30 years of experience in various organizations, addressing process challenges effectively. Historically, the industry relied on textual procedures, leading to potential ambiguities. The AutoPro tool revolutionizes this by providing clear, diagrammatic representations that guide developers step-by-step. AutoPro's globally accessible flow diagrams ensure that all team members can adhere to standardized procedures, enhancing overall safety and compliance within the organization.

No. of Pages : 9 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202441054447 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A BIOCATALYTIC SYSTEM AND METHOD FOR PRODUCTION OF TERMINAL ALKENES

(51) International classification	:C12N0009880000, C12N0009040000, C12P0005020000, C12Q0001000000, C12N0009020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)INDIAN INSTITUTE OF SCIENCE
Address of Applicant :INDIAN INSTITUTE OF SCIENCE, BANGALORE, Karnataka 560012, India ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DAS, Debasis
Address of Applicant :INDIAN INSTITUTE OF SCIENCE, BANGALORE, Karnataka 560012, India ---------- ----------
2)IQBAL, Tabish
Address of Applicant :INDIAN INSTITUTE OF SCIENCE, BANGALORE, Karnataka 560012, India ---------- ----------
3)MURUGAN, Subhashini
Address of Applicant :INDIAN INSTITUTE OF SCIENCE, BANGALORE, Karnataka 560012, India ---------- ----------

(57) Abstract :
ABSTRACT A BIOCATALYTIC SYSTEM AND METHOD FOR PRODUCTION OF TERMINAL ALKENES The present disclosure relates to a system and method for producing terminal alkenes. The system comprises a fatty acid decarboxylase selected from UndB decarboxylase or a variant 5 thereof; a nicotinamide-cofactor; at least one redox couple for transferring electrons from the nicotinamide cofactor to the fatty acid decarboxylase; and a regeneration system comprising a nicotinamide-cofactor dependent dehydrogenase enzyme, and a substrate. The present disclosure provides a scalable, cost effective, and efficient system and method of producing terminal alkenes by oxidative decarboxylation of fatty acids.

No. of Pages : 44 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024
(21) Application No.202441054477 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM FOR IMPROVING CHILDREN'S SKILLS

(51) International classification	:A63B0024000000, A63B0071060000, G16H0020300000, G06T0007730000, H04N0021472000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)PES UNIVERSITY
Address of Applicant :100 FEET RING ROAD, BANASHANKARI STAGE III, DWARAKA NAGAR, BANASHANKARI, BENGALURU URBEN BENGALURU KARNATAKA INDIA 560085 Bengaluru ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)PREET KANWAL
Address of Applicant :ASSOCIATE PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, PES UNIVERSITY, BENGALURU URBEN BENGALURU, KARNATAKA INDIA 560085 Bengaluru ---------- ----------
2)PRASAD HONNAVALLI
Address of Applicant :DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, PES UNIVERSITY, BENGALURU URBEN BENGALURU, KARNATAKA, INDIA 560085 Bengaluru ---------- ----------

(57) Abstract :
TITLE: A SYSTEM FOR IMPROVING CHILDREN'S SKILLS APPLICANT: PES UNIVERSITY ABSTRACT The present invention discloses a system to enhance physical activity of young children amidst addiction of playing videogames. The system of the present invention comprises of a computing device embedded with a camera characterized in that the computing device embedded with application of CNN-trained model inbuilt with database encompassing video games and exercise activity and allow user to play videogame for a programmed period and cease the activation of playing the videogame once the programmed period reached and initiate exercise activity employing 3D avatar to be acted/mimicked by user and capture video of the user's action to extract spatial feature frames in the captured video and process the extracted frames to compare action and to provide feedback and generate results and if the user result is correct allowing the user to continue playing video games else allowing the user to retry the exercise activity until result is correct.

No. of Pages : 11 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024
(21) Application No.202441054479 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DEVELOPMENT OF NOVEL BIOMATERIALS OR BIOACTIVE SCAFFOLDS DESIGNED FOR ENHANCED PERIODONTAL TISSUE REGENERATION, INCORPORATING GROWTH FACTORS OR STEM CELLS TO PROMOTE FASTER AND MORE EFFECTIVE HEALING OF PERIODONTAL DEFECTS

(51) International classification	:A61L0027100000, A61L0027560000, A61P0019020000, A61L0027540000, A61P0001020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Bhavna Jha kukreja
Address of Applicant :Assistant Professor of Periodontology, Preventive Dental sciences Department, College of Dentistry, Gulf Medical University Ajman UAE-4184 ---------- ----------
2)Dr. Pankaj Kukreja
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Bhavna Jha kukreja
Address of Applicant :Assistant Professor of Periodontology, Preventive Dental sciences Department, College of Dentistry, Gulf Medical University Ajman UAE-4184 ---------- ----------
2)Dr. Pankaj Kukreja
Address of Applicant :Assistant Professor of Oral and Maxillofacial Surgery, Department of Biomedical and Dental Sciences, Faculty of Dentistry, Al-Baha University, Al Aqiq Campus, Kingdom of Saudi Arabia-65779 ---------- ----------

(57) Abstract :
The present invention introduces a novel bioactive glass composition specifically designed to enhance bone regeneration in periodontal defects. The bioactive glass features an optimized ratio of silicon, calcium, and phosphate, promoting superior osteoconductivity and osteoinductivity. In vitro studies demonstrate accelerated osteoblast proliferation and differentiation, while in vivo experiments show significant improvements in bone density and structural integrity compared to conventional materials. This innovative bioactive glass provides a promising therapeutic option for clinicians aiming to restore periodontal health and function, potentially revolutionizing periodontal regenerative procedures.

No. of Pages : 6 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024

(21) Application No.202441054497 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : BLOCKCHAIN BASED CERTIFICATE AUTHENTICATION SYSTEM

(51) International classification :H04L0009320000, G06F0021640000, G06Q0010100000, G06Q0050180000, G06F0021620000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Jubilant J Kizhakkethottam
Address of Applicant :Kizhakkethottam House, Poonjar ---------- ----------
2)Dr. Jubilant J Kizhakkethottam
3)C Jacob Thomas
4)David M Vadakkedam
5)Daya Rachel Koshy
6)Jobin Philip
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Jubilant J Kizhakkethottam
Address of Applicant :Kizhakkethottam House, Poonjar ---------- ----------
2)Dr. Jubilant J Kizhakkethottam
Address of Applicant :SAINTGITS College of Engineering Kottukulam Hills, Pathamuttom Kottayam, KERALA,INDIA ---------- ----------
3)C Jacob Thomas
Address of Applicant :SAINTGITS College of Engineering Kottukulam Hills, Pathamuttom Kottayam, KERALA.INDIA ---------- ----------
4)David M Vadakkedam
Address of Applicant :SAINTGITS College of Engineering Kottukulam Hills, Pathamuttom Kottayam, KERALA,INDIA ---------- ----------
5)Daya Rachel Koshy
Address of Applicant :SAINTGITS College of Engineering Kottukulam Hills, Pathamuttom Kottayam, KERALA,INDIA ---------- ----------
6)Jobin Philip
Address of Applicant :SAINTGITS College of Engineering Kottukulam Hills, Pathamuttom Kottayam, KERALA,INDIA ---------- ----------

(57) Abstract :
Certificates and documents are subjected to tampering, corruption, and forgery. This project shows a blockchain based application using the Solana platform and IPFS to store, verify and authenticate certificates. The decentralized application provides esteemed universities and organizations to streamline the certificate issuing and verification process of certificates. This paper describes the implementation of our proposed solution - By assigning roles to various staff in the organization to streamline certification issuance and approval process and thereby reducing human errors, the approved certificate credentials will be encrypted and stored using blockchain and IPFS.

No. of Pages : 24 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024
(21) Application No.202441054510 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTOMATED FOOD DISPENSING SYSTEM WITH INTEGRATED MOBILE APPLICATION AND HMI INTERFACE

(51) International classification	:G06Q0030020000, G06Q0030060000, A47F0010060000, A01K0005020000, A01K0061850000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)HARIPRASATH R
Address of Applicant :BLOCK NO 13, PLOT NO 7, HIG,CMDA, GUDALUR, MARAIMALAI NAGAR ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)HARIPRASATH R
Address of Applicant :BLOCK NO 13, PLOT NO 7, HIG,CMDA, GUDALUR, MARAIMALAI NAGAR ---------- ----------

(57) Abstract :
The present invention deals with an improved athletic food dispensing system that addresses the issue of efficiency, hygiene, and convenience of the food services in Colleges, and Corporate entities. The machine contains a food collection chamber provided at the user's end and a principal assembly operatively observable at the control end. These are the food dispenser, a vertical linear electric actuator that transports the food dispenser, as well as a horizontal actuator that uses a motor to slide the food plate mainly from the back-end to the user-end. The whole system is protected employing an exceptionally fabricated housing that maintains both security and appearance. The feeder and dispenser contain several types of meals depending on the customer's order and move them accurately into place with the assistance of vertical linear actuator. A direct action is horizontal movement of the food plate that greatly facilitates timely presentation of food to clients. This process is largely self-driven and therefore exposure of workers to contamination is kept at a bare minimum. Mobile applications and localized HMI systems are synchronously inclined to control of the machine for order placement and order management. Imagine that each client was issued an identification number available through the mobile application or an RFID tag, in order to pick up the order. Orders are worked out on a Token basis. Also, the order history is saved in the machine and can be used in targeting offers and promotions that may improve customer experience.

No. of Pages : 19 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/07/2024
(21) Application No.202441054535 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SMART EXPIRY DATE DISPLAY CONTAINERS

(51) International classification	:B65D0051240000, H05B0001020000, A61J0001060000, G16H0050300000, G16H0040670000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)NALLAMILLI SRI VENKATA SRINIVASA REDDY
Address of Applicant :S/O Nallamilli Satyanarayana Reddy 2-17 Mogalipalem, Bandanapudi Sivaru, Kajuluru Mandalam ---------- ----------
2)HemanthaKumar Chappa
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)NALLAMILLI SRI VENKATA SRINIVASA REDDY
Address of Applicant :S/O Nallamilli Satyanarayana Reddy 2-17 Mogalipalem, Bandanapudi Sivaru, Kajuluru Mandalam ---------- ----------
2)HemanthaKumar Chappa
Address of Applicant :Assistant Professor in EEE Department, GMR Institute of Technology, Rajam, Andhra Pradesh ---------- ----------

(57) Abstract :
The invention relates to a container designed for the storage of groceries and medicines, equipped with an external label or digital display that clearly shows the expiry date of the contents. This innovation aims to prevent the mixing of old and new products, ensuring that items are consumed within their safe period, thereby reducing waste and preventing potential health risks.

No. of Pages : 10 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024

(21) Application No.202441054544 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A GPS ENHANCED LIFE JACKET SYSTEM

(51) International classification :G05B0019042000, G06Q0010040000, A61B0005010000, H02J0007000000, H01Q0001220000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY
Address of Applicant :YAMNAMPET, GHATKESAR HYDERABAD - 501 301 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)KODAVATIGANTI KALYANI
Address of Applicant :STUDENT OF SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY, YAMNAMPET, GHATKESAR HYDERABAD - 501 301 HYDERABAD ---------- ----------
2)HARSHITH KONADADI
Address of Applicant :STUDENT OF SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY, YAMNAMPET, GHATKESAR HYDERABAD - 501 301 HYDERABAD ---------- ----------
3)E RENISH
Address of Applicant :STUDENT OF SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY, YAMNAMPET, GHATKESAR HYDERABAD - 501 301 HYDERABAD ---------- ----------
4)M PURNNAA MANNOJ
Address of Applicant :STUDENT OF SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY, YAMNAMPET, GHATKESAR HYDERABAD - 501 301 HYDERABAD ---------- ----------
5)DR. ARUNA VARANASI
Address of Applicant :PROFESSOR AND HEAD OF CSE DEPARTMENT, SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY, YAMNAMPET, GHATKESAR HYDERABAD - 501 301 HYDERABAD ---------- ----------

(57) Abstract :
A GPS enhanced life jacket system (100) comprises a GPS module (102) having an antenna, connectors, memory, intermediate frequency filters, mixer, low noise amplifier, RF filters, communication interface to provide location information to the system The system also includes a microcontroller (104) comprising a processor, memory, input and output peripherals to provide control and automation. The system also includes a sensor (106) comprising sensing elements, transducer, signal conditioner to detect and respond to changes in the physical environment. The system also includes a communication module (108) and a user interface (110) comprising visual elements, software, output devices, input devices.to help the users to interact with the system. The system also includes a power source (112) comprising a battery, battery management, power regulator, power distribution unit, and charging circuit to operate the system. The system also includes a GPS antenna (114), a communication antenna (116) and an inflatable chamber (118).

No. of Pages : 17 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :17/07/2024

(21) Application No.202441054585 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : HYBRID PROPULSION SYSTEM FOR ELECTRIC VEHICLES

(51) International classification	:B60W20/10, B60W10/26, B60L8/00, B60K16/00, H02J7/00, B60L15/20
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr Chandrashekhar Badachi

Address of Applicant :Associate Professor, Department of Electrical and Electronics Engineering, M S Ramaiah Institute of Technology, Bangalore, Karnataka – 560054, India. Bangalore ---------- ----------

2)Mrs. Ponrekha M

3)Dr.Tulsidas D

4)Dr Karikalan L

5)Mrs.B.Christyjuliet

6)Mr.R.Thangaraj

7)Mrs.Jeevitha Kandasamy

8)S V Dharani Kumar

9)Dr Ashok Kumar R

10)Gowtham M

11)Ms. S. Thenmozhi

12)Mrs.Sumithara Arunagirinathan

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr Chandrashekhar Badachi

Address of Applicant :Associate Professor, Department of Electrical and Electronics Engineering, M S Ramaiah Institute of Technology, Bangalore, Karnataka – 560054, India. Bangalore ---------- ----------

2)Mrs. Ponrekha M

Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore, Tamil Nadu - 641 021, India. Coimbatore ---------- ----------

3)Dr.Tulsidas D

Address of Applicant :Professor, Department of Mechanical Engg, Sapthagiri College of Engineering, Bangalore, Karnataka - 560057, India. Bangalore ---------- ----------

4)Dr Karikalan L

Address of Applicant :Professor and Head, Department of Automobile Engineering, VISTAS (VELS UNIVERSITY), Pallavaram, Chennai, Tamil Nadu - 600117, India. Chennai ---------- ----------

5)Mrs.B.Christyjuliet

Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, SNS College of Technology, Coimbatore, Tamil Nadu – 641006, India. Coimbatore ---------- ----------

6)Mr.R.Thangaraj

Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, Coimbatore Institute of Engineering and Technology, Coimbatore, Tamil Nadu – 637101, India. Coimbatore ---------- ----------

7)Mrs.Jeevitha Kandasamy

Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, Sri Krishna College of Technology, Coimbatore, Tamil Nadu, India. Coimbatore ---------- ----------

8)S V Dharani Kumar

Address of Applicant :Assistant Professor, Department of Biomedical Engineering, GRT institute of engineering and technology, Tiruttani, Thiruvallur, Tamil Nadu – 631209, India. Thiruvallur ---------- ----------

9)Dr Ashok Kumar R

Address of Applicant :Associate Professor, Department of Electrical and Electronics Engineering, GRT institute of engineering and technology, Tiruttani, Thiruvallur, Tamil Nadu – 631209, India. Thiruvallur ---------- ----------

10)Gowtham M

Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, Karpagam Institute of Technology, S.F.NO.247, 248, L&T Bypass Road, Seerapalayam, Bodipalayam, Coimbatore, Tamil Nadu – 641 105, India. Coimbatore ---------- ----------

11)Ms. S. Thenmozhi

Address of Applicant :Assistant Professor, Department of Electronics and communication Engineering, Easa College of Engineering and Technology, Palakkad Main Road, Navakkarai, Coimbatore, India – 641105, India. Coimbatore ---------- ----------

12)Mrs.Sumithara Arunagirinathan

Address of Applicant :Research scholar, Department of Electrical and Electronics Engineering, Government College of Technology, Coimbatore, Indian, India. Coimbatore ---------- ----------

(57) Abstract :

Hybrid Propulsion System for Electric Vehicles ABSTRACT The expanding utilization of reactive energy, in addition to the increased environmental damage that has been caused as a result of this utilization, has provided a significant push for the growth and development of automobiles that are efficient in their use of energy. This impetus has been provided by the fact that the utilization of reactive energy has increased. There is a significant empirical problem that is being posed to the globe, and hybrid electric vehicles, also known as HEVs, are demonstrating that they are a feasible answer to this problem as they have progressed from their infancy to their current level. The fact that the earth is being subjected to a substantial amount of energy is the source of this problem. High-efficiency vehicles (HEVs) not only deliver higher energy efficiency and reduced emigration, which are both following environmental legislation, but they also lessen the impact that these rising prices have on customers. This is because HEVs reduce the amount of emigrations that occur, which is a consequence of higher energy prices. Vehicles that are categorized as hybrid electric vehicles (HEVs) combine the capabilities of an internal combustion engine with those of an electrical machine to provide propulsion. The energy storage system, the motor, the bidirectional motor, and the maximum power point trackers (MPPT, in the case of solar-powered HEVs) are the five fundamental components that comprise hybrid electric vehicles (HEVs). Another component that is essential to the construction of HEVs is the bidirectional motor. When it comes to high-efficiency vehicles (HEVs), the performance of these components and the armature make a significant contribution to the overall performance of the vehicle. The purpose of this paper is to provide a comprehensive ivention of the essential factors that are utilized in hybrid electric vehicles (HEVs), including their infrastructures, which have both advantages and disadvantages, the selection of a bidirectional motor to achieve high effectiveness, the combination of an ultracapacitor with a battery to extend the life of the battery, the part of the traction motors, and their suitability for a specific operation, and the selection of a bidirectional motor to achieve high effectiveness. The concept of incorporating solar cells into hybrid electric vehicles is one that is relatively new and has been the topic of a great deal of discussion. Within the scope of this ivention, a variety of maximum power point tracking (MPPT) strategies that are utilized for solar-powered hybrid electric vehicles (HEVs) as well as the advantages that these techniques provide are also examined.

No. of Pages : 12 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024
(21) Application No.202441054587 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SMART SHOES SYSTEM

(51) International classification :G01C0022000000, G06Q0030020000, H04N0007180000, H04L0012280000, A63C0017060000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY
Address of Applicant :YAMNAMPET, GHATKESAR HYDERABAD - 501 301 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)PATLAVATH SAI KIRAN
Address of Applicant :STUDENT OF SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY, YAMNAMPET, GHATKESAR HYDERABAD - 501 301 HYDERABAD ---------- ----------
2)SAKET GUMUDAVELLI
Address of Applicant :STUDENT OF SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY, YAMNAMPET, GHATKESAR HYDERABAD - 501 301 HYDERABAD ---------- ----------
3)V S V S ATHUL
Address of Applicant :STUDENT OF SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY, YAMNAMPET, GHATKESAR HYDERABAD - 501 301 HYDERABAD ---------- ----------
4)KEERTHI TALASILA
Address of Applicant :STUDENT OF SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY, YAMNAMPET, GHATKESAR HYDERABAD - 501 301 HYDERABAD ---------- ----------
5)ALOOR CHINMAYA SAI GANESH
Address of Applicant :INCUBATION MANAGER OF SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY, YAMNAMPET, GHATKESAR HYDERABAD - 501 301 HYDERABAD ---------- ----------
6)DR. SHRUTI BHARGAVA CHOUBEY
Address of Applicant :DEAN INNOVATION OF SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY, YAMNAMPET, GHATKESAR HYDERABAD - 501 301 HYDERABAD ---------- ----------
7)DR. S. P. V. SUBBA RAO
Address of Applicant :PROFESSOR AND HEAD OF ECE DEPARTMENT, SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY, YAMNAMPET, GHATKESAR HYDERABAD - 501 301 HYDERABAD ---------- ----------

(57) Abstract :
Disclosed herein is a smart shoes system with remote control wheels with App based control (100) is a testament to the ever-evolving nature of technology comprising a smart shoe apparatus to create a smart and connected footwear system. A plurality of wheels attached to the sole of the footwear structure. A remote-control unit (102) equipped with communication means. A mobile application (104) installed on a user device to provide an intuitive interface for users to remotely control various aspects of the smart shoe. A sensor array embedded within the smart shoe to detect and gather data about the shoe's environment and the user's movement. A fitness tracking system (106) integrated into the smart shoe, monitors and records relevant metrics such as steps taken, distance travelled, and calories burned during use. A processing unit (108) within the smart shoe to interpret data from the sensor array and adjust the operation of the wheels accordingly.

No. of Pages : 24 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024

(21) Application No.202441054589 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A DENTAL APPLIANCE TO PROMOTE THE CESSATION OF NAIL-BITING HABIT

(51) International classification	:A61C7/08, A61C7/12, A61C7/28, A61C3/00, A61C7/14
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Sharon Vincent
Address of Applicant :C/o George Abraham, Chakkappillil, South Marady, Muvattupuzha, Marady (Part), Thekkenmarady, Ernakulam, Kerala - 686673 Ernakulam ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Sharon Vincent
Address of Applicant :C/o George Abraham, Chakkappillil, South Marady, Muvattupuzha, Marady (Part), Thekkenmarady, Ernakulam, Kerala - 686673 Ernakulam ---------- ----------

(57) Abstract :
The present invention relates to a dental appliance (100) and a system created by utilizing the appliance (100) to promote the cessation of nail-biting habits in paediatric patients. The appliance (100) comprises a plurality of pre-formed wire bands (104), a stainless-steel orthodontic wire (103), and an acrylic bite plane (102) having multiple occlusal rounded spikes (101) embedded within it. The preformed stainless-steel bands (104) serve as anchors for the stainless-steel orthodontic wire (103) and are meticulously soldered onto the bands (104) while also being contoured along the alveolar ridge of the maxillary deciduous second molars. The occlusal rounded spikes (101) separate the anterior teeth from the incisors by extending over the incisors to prevent the edge-to-edge contact force typically associated with nail biting. The strategic placement of the components of the appliance (100) introduces a physical deterrent through occlusal rounded spikes (101) to create a comprehensive system that interrupts the habitual behavior of nail biting in pediatric patients.

No. of Pages : 21 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :17/07/2024

(21) Application No.202441054590 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD AND APPARATUS FOR ENHANCING COMFORT AND DURABILITY IN TEXTILES USING ADVANCED FIBER BLENDING TECHNIQUES

(51) International classification	:C08J0005040000, C08K0009040000, C08J0005240000, D03D0013000000, D02G0003400000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr. M. Arice Mary

Address of Applicant :Associate Professor cum Head, Department of Textile and Fashion Designing & Costume Design and Fashion, Vivekanandha College of Arts and Sciences for Women (Autonomous), Tiruchengode, Tamil Nadu, India. Tiruchengode ---------- ----------

2)Mr. K. Sivasankaran

3)M. L. Vijayalakshmi

4)Ms. R. Kousika

5)Mrs. L. Subashini

6)Mrs. P. Rupa

7)Mr. M. Raju

8)Ms. R. Jayaprabha

9)Mr. G. Saravana Kumar

10)P. E. Monisha

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. M. Arice Mary

Address of Applicant :Associate Professor cum Head, Department of Textile and Fashion Designing & Costume Design and Fashion, Vivekanandha College of Arts and Sciences for Women (Autonomous), Tiruchengode, Tamil Nadu, India. Tiruchengode ---------- ----------

2)Mr. K. Sivasankaran

Address of Applicant :Assistant Professor, Department of Textile and Fashion Designing & Costume Design and Fashion, Vivekanandha College of Arts and Sciences for Women (Autonomous), Tiruchengode, Tamil Nadu, India. Tiruchengode ---------- ----------

3)M. L. Vijayalakshmi

Address of Applicant :Assistant Professor cum Head, Department of Textile and Fashion Designing & Costume Design and Fashion, Vivekanandha Arts and Science College for Women, Sankari, Tamil Nadu, India. Sankari ---------- ----------

4)Ms. R. Kousika

Address of Applicant :Tutor, Department of Textile and Fashion Designing & Costume Design and Fashion, Vivekananda College of Arts and Sciences for Women (Autonomous), Tiruchengode, Tamil Nadu, India. Tiruchengode ---------- ----------

5)Mrs. L. Subashini

Address of Applicant :Assistant Professor, Department of Textile and Fashion Designing & Costume Design and Fashion, Vivekanandha College of Arts and Sciences for Women (Autonomous), Tiruchengode, Tamil Nadu, India. Tiruchengode ---------- ----------

6)Mrs. P. Rupa

Address of Applicant :Assistant Professor, Department of Textile and Fashion Designing & Costume Design and Fashion, Vivekanandha College of Arts and Sciences for Women (Autonomous), Tiruchengode, Tamil Nadu, India. Tiruchengode ---------- ----------

7)Mr. M. Raju

Address of Applicant :Assistant Professor, Department of Textile and Fashion Designing & Costume Design and Fashion, Vivekanandha College of Arts and Sciences for Women (Autonomous), Tiruchengode, Tamil Nadu, India. Tiruchengode ---------- ----------

8)Ms. R. Jayaprabha

Address of Applicant :Assistant Professor, Department of Textile and Fashion Designing & Costume Design and Fashion, Vivekananda College of Arts and Sciences for Women (Autonomous), Tiruchengode, Tamil Nadu, India. Tiruchengode ---------- ----------

9)Mr. G. Saravana Kumar

Address of Applicant :Assistant Professor, Department of Textile and Fashion Designing & Costume Design and Fashion, Vivekananda College of Arts and Sciences for Women (Autonomous), Tiruchengode, Tamil Nadu, India. Tiruchengode ---------- ----------

10)P. E. Monisha

Address of Applicant :Assistant Professor, Department of Textile and Fashion Designing & Costume Design and Fashion, Vivekanandha College of Arts and Sciences for Women (Autonomous), Tiruchengode, Tamil Nadu, India. Tiruchengode ---------- ----------

(57) Abstract :

Method and Apparatus for Enhancing Comfort and Durability in Textiles Using Advanced Fiber Blending Techniques ABSTRACT Over the past ten years, there has been a notable decrease in the adverse impacts on the environment due to the gradual integration of natural fibers into polymer composites. The creation of eco-friendly materials in woven form has garnered increasing attention in recent decades. Natural fibers made of lignocellulosic resources make up these materials. Applications for these materials are numerous and include flooring, ballistic materials, automotive parts, home appliances, aerospace components, and structural and non-structural composites. One of the most promising materials for hybridization or substitution with synthetic polymeric materials in the creation of natural fiber polymer composites (NFPCs) is woven textiles. Additionally, woven textiles are growing in popularity. Because of their exceptional mechanical properties, these woven materials are highly flexible and can be tailored to meet specific needs thanks to their unique weaving structures. This invention's goal is to offer a thorough assessment of the literature on woven materials in light of the possible advantages that woven materials may have for the NFPC fabrication process. Some of the topics that were covered included the dimensions of the production process, the qualities of the fabric, and the yarn's features. These elements have an impact on the characteristics of the woven NFRC that results. Furthermore, an invention was provided of past and present invention projects of the creation of woven non-woven polymer composites (NFPCs) from a range of polymer matrices, including polyester, epoxy, polypropylene, and polylactic acid, as well as the characteristics of the resulting composites. Finally, but just as importantly, the field's applications, challenges, and current prospects were discussed.

No. of Pages : 9 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :17/07/2024

(21) Application No.202441054615 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : CURRICULUM OPPORTUNITIES FOR COMPUTATIONAL THINKING AND MACHINE LEARNING IN MATHEMATICS

(51) International classification	:G06N0020000000, G06K0009620000, G09B0019020000, G06N0003020000, G06N0003080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr Rayala Venkat

Address of Applicant :Associate Professor, Department of (CSE-AIML), St. Peter's Engineering College, Hyderabad, pin:500100 Hyderabad ---------- ----------

2)Sandeep Reddy Gudimetla

3)D Y Kiran Kumar

4)Amruta Kundalik Mule

5)Dr.S.A.Khapre

6)Dr.Deepak Kartikey

7)Salla Harini Yadav

8)Dr.Sharada K A

9)G Kanishka

10)Sathya Rubavathi.K

11)Dr.R.Rajesh Kanna

12)Thulasimani T

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr Rayala Venkat

Address of Applicant :Associate Professor, Department of (CSE-AIML), St. Peter's Engineering College, Hyderabad, pin:500100 Hyderabad ---------- ----------

2)Sandeep Reddy Gudimetla

Address of Applicant :HCL America, Designation Consultant, 2401 Internet Blvd #200, Frisco, TX 75034 ---------- ----------

3)D Y Kiran Kumar

Address of Applicant :Research Scholar, Department of EEE, Amrita Vishwa Vidyapeetham, Bengaluru, Karnataka-560035 Bengaluru ---------- ----------

4)Amruta Kundalik Mule

Address of Applicant :Assistant Professor, Department of First Year Engineering, Dr.D.Y.Patil Institute of Technology Pimpri Pune 411018 Pune ---------- ----------

5)Dr.S.A.Khapre

Address of Applicant :P.R.Pote Patil College of Engineering and Management, Kathor Road. Amravati ---------- ----------

6)Dr.Deepak Kartikey

Address of Applicant :Department of Mathematics, Govt. S.S.P. College, Waraseoni, Balaghat, Madhya Pradesh-481331, India. Waraseoni ---------- ----------

7)Salla Harini Yadav

Address of Applicant :Assistant professor, Department of CSE, Kandula Lakshumma College of Engineering for Women, Kadapa Kadapa ---------- ----------

8)Dr.Sharada K A

Address of Applicant :Professor, Department of Computer Science and Engineering, HKBK College of Engineering, Bengaluru, 560045 Bengaluru ---------- ----------

9)G Kanishka

Address of Applicant :Assistant Professor, Department of CSE (Cyber Security), Madanapalle Institute of Technology & Science, Madanapalle,517325 Madanapalle ---------- ----------

10)Sathya Rubavathi.K

Address of Applicant :Assistant Professor, Department of CSBS, Akshaya College of Engineering and Technology, Coimbatore Coimbatore ---------- ----------

11)Dr.R.Rajesh Kanna

Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, M.Kumarasamy College of Engineering, Thalavapalayam, Pin code: 639113 Karur ---------- ----------

12)Thulasimani T

Address of Applicant :Associate Professor, Department of Mathematics, Bannari Amman Institute of Technology, Sathy - 638401 Sathy ---------- ----------

(57) Abstract :

Curriculum opportunities for computational thinking and machine learning in mathematics is the proposed invention. The proposed invention focuses on understanding the functions of machine learning approach in mathematics. The invention focuses on analysing the parameters of curriculum opportunities in computational thinking.

No. of Pages : 13 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024
(21) Application No.202441054648 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DEVICE FOR STABILIZING VEHICLE DYNAMICS BY GENERATING AERODYNAMIC FORCES, AND METHOD THEREOF

(51) International classification	:H02M0003335000, B63H0009061000, B60T0008175500, B60T0008360000, B62D0006000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)VELLORE INSTITUTE OF TECHNOLOGY, CHENNAI
Address of Applicant :Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SHYREZZ AHMED KHAN I
Address of Applicant :UG Student, School of Mechanical Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
2)S KARTHICK
Address of Applicant :UG Student, School of Mechanical Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
3)G. VINAYAGAMURTHY
Address of Applicant :Associate Professor, Center for Innovation and Product Development, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------

(57) Abstract :
The present disclosure relates to a device for stabilizing vehicle dynamics by generating aerodynamic forces. The device (102) includes primary wing (104) coupled to secondary wing (106) includes identical aerodynamic profile, primary wing (104) pertains to nonfunctioning stationary wing, and secondary wing (106) pertains to functioning wing. The device (102) includes hydraulic assembly (108) operatively coupled to primary wing (104) and secondary wing (106) through control unit (122), control unit (122) actuates hydraulic assembly (108) based manual input and automatic input during lateral acceleration, and longitudinal acceleration of vehicle (302). The hydraulic assembly (108) enables movement of secondary wing (106) to generate aerodynamic force and stabilize vehicle dynamics.

No. of Pages : 24 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024
(21) Application No.202441054649 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : NEON RING ULTRA WIDE BAND MILLIMETRE WAVE ANTENNA STRUCTURE

(51) International classification :H01Q0001240000, H01Q0001380000, H01Q0009420000, H01Q0009040000, H01Q0013100000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Manipal Academy of Higher Education
Address of Applicant :Madhav Nagar, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)PRAVEEN KUMAR
Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
2)GOUTHAM SIMHA G D
Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
3)SIDDARAJ U
Address of Applicant :Assistant Professor - Senior Scale, Department of Electrical and Electronics Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
4)PALLAVI M
Address of Applicant :Assistant Professor, Department of Aeronautical and Automobile Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------

(57) Abstract :
The present disclosure relates to a neon ring ultra wide band millimetre wave antenna structure (100). The antenna structure (100) includes a substrate (102), a radiator (104), a ground plane (108) and a transmission line. The radiator (104) is of neon ring shape to modify radiation pattern of the antenna structure (100). The radiator (104) is placed on top of the substrate (102). The ground plane (108) is positioned beneath the substrate (102) opposite the radiator (104) configured to enhance impedance matching and reduce unwanted reflections. A top portion of the ground plane (108) is etched with a slot (106) at a middle. The transmission line is configured to transmit and receive signal in a first frequency band of 22 GHz and a second frequency band of 33.1 GHz.

No. of Pages : 15 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :17/07/2024

(21) Application No.202441054671 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : ANALYSIS OF HOW BANK SUPPORT E-COMMERCE BUSINESS IN INDIA

(51) International classification :G06Q0030060000, G06Q0040020000, G06Q0020400000, G06Q0030020000, G06Q0020120000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. VISWANATHAN.P
Address of Applicant :ASSISTANT PROFESSOR , COMMERCE , REVA UNIVERSITY, BENGALURU -560064, KARNATAKA , INDIA Bengaluru ---------- ----------
2)Prof. HARISHA G
3)Mrs. MONALISA PATTANAYAK
4)Dr.S.LAKSHMI
5)Ms. CHARUL CHATURVEDI
6)Ms.SWARNAM S
7)Dr . S.BASKARAN
8)Dr. RUCHI GARG
9)Mr. M I MOHAMED IBRAHIM
10)Mr. ANIMESH KUMAR SHARMA
11)Dr. M.H.N. BADHUSHA
12)Dr. SHIKHA SINGH
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. VISWANATHAN.P
Address of Applicant :ASSISTANT PROFESSOR , COMMERCE , REVA UNIVERSITY, BENGALURU - 560064, KARNATAKA , INDIA Bengaluru ---------- ----------
2)Prof. HARISHA G
Address of Applicant :ASSISTANT PROFESSOR, SCHOOL OF COMMERCE, REVA UNIVERSITY BANGALORE - 560064 Bangalore ---------- ----------
3)Mrs. MONALISA PATTANAYAK
Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF MANAGEMENT STUDIES (DMS) , MAJHIGHARIANI INSTITUTE OF TECHNOLOGY AND SCIENCE (MITS), RAYAGADA, ODISHA, INDIA- 765017 Rayagada ---------- ----------
4)Dr.S.LAKSHMI
Address of Applicant :ASSISTANT PROFESSOR, MBA, SRM INSTITUTE OF SCIENCE AND TECHNOLOGY, RAMAPURAM, CHENNAI, TAMILNADU, INDIA Chennai ---------- ----------
5)Ms. CHARUL CHATURVEDI
Address of Applicant :ASSISTANT PROFESSOR, MANAGEMENTSANJEEV AGRAWAL GLOBAL EDUCATIONAL UNIVERSITY, BHOPAL, MADHYA PRADESH-462022, INDIA Bhopal ---------- ----------
6)Ms.SWARNAM S
Address of Applicant :ASSISTANT PROFESSOR , MBA, SNS COLLEGE OF TECHNOLOGY , COIMBATORE , TAMILNADU – 641035, INDIA Coimbatore ---------- ----------
7)Dr . S.BASKARAN
Address of Applicant :PROFESSOR, MBA, DR. AMBEDKAR INSTITUTE OF TECHNOLOGY, BANGALORE, KARNATAKA-560056, INDIA Bangalore ---------- ----------
8)Dr. RUCHI GARG
Address of Applicant :ASSISTANT PROFESSOR , COMMERCE AND MANAGEMENT , NIRWAN UNIVERSITY JAIPUR , RAJASTHAN -303305, INDIA Jaipur ---------- ----------
9)Mr. M I MOHAMED IBRAHIM
Address of Applicant :ASSISTANT PROFESSOR, BUSINESS ADMINISTRATION , JAMAL MOHAMED COLLEGE (AUTONOMOUS), TIRUCHIRAPALLI, TAMILNADU- 620020 Tiruchirapalli ---------- ----------
10)Mr. ANIMESH KUMAR SHARMA
Address of Applicant :RESEARCH SCHOLAR, MITTAL SCHOOL OF BUSINESS, LOVELY PROFESSIONAL UNIVERSITY, PHAGWARA, PUNJAB – 144411, INDIA Phagwara ---------- ----------
11)Dr. M.H.N. BADHUSHA
Address of Applicant :ASSISTANT PROFESSOR , PG & RESEARCH DEPARTMENT OF COMMERCE, JAMAL MOHAMED COLLEGE (AUTONOMOUS) , (AFFILIATED TO BHARATHIDASAN UNIVERSITY), TIRUCHIRAPPALLI, TAMIL NADU- 620 020, INDIA Tiruchirappalli ---------- ----------
12)Dr. SHIKHA SINGH
Address of Applicant :ASSISTANT PROFESSOR, MANAGEMENT, AJEENKYA D Y PATIL UNIVERSITY, PUNE, MAHARASHTRA- 412105 Pune ---------- ----------

(57) Abstract :
ABSTRACT ANALYSIS OF HOW BANK SUPPORT E-COMMERCE BUSINESS IN INDIA E-commerce business has been growing rapidly in India due to the increasing use of internet and smartphones. To support this growth, banks play a crucial role by providing necessary services and infrastructure. Firstly, banks offer online payment solutions such as credit/debit card processing, net banking, and mobile wallets, which are essential for e-commerce transactions. This provides convenience and security to both customers and merchants. Secondly, banks offer loans and financing options to e-commerce businesses, enabling them to expand and invest in their operations. Moreover, they provide business accounts to manage transactions and offer cash management solutions for efficient cash flow. Additionally, banks also provide support in the form of advisory services and market insights to aid e-commerce businesses in making informed decisions. They also offer risk management services to minimize fraud and ensure smooth transactions. Overall, banks play a crucial role in supporting the growth of e-commerce businesses in India with their financial and technological services. E-commerce, or the buying and selling of goods and services online, has rapidly gained popularity in India over the past decade. This growth can be attributed to the increasing penetration of internet and smartphones in the country. However, the success of e-commerce businesses in India is also greatly influenced by the support provided by banks. Firstly, banks in India have developed various payment and transaction systems that make online shopping more convenient for customers. These include debit and credit card facilities, internet banking, and mobile wallets. These payment options provide customers with a secure and hassle-free shopping experience, thus encouraging more people to shop online. Additionally, banks also offer loans and credit facilities to e-commerce businesses, enabling them to invest in technology and infrastructure to improve their operations. This allows e-commerce companies to expand their reach and offer better service to customers, ultimately contributing to the growth of the industry. Furthermore, banks also play a crucial role in mitigating the risks associated with online transactions through fraud detection and prevention mechanisms. This boosts customer confidence in the online shopping process and encourages more people to adopt e-commerce. In conclusion, banks in India play a vital role in supporting the growth of e-commerce businesses through the provision of secure and convenient payment options, financial assistance, and risk-mitigation measures. This support has been instrumental in driving the success of the e-commerce industry in India.

No. of Pages : 10 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024

(21) Application No.202441054693 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : IMPORTANCE OF MARKETING RESEARCH IN ENHANCING THE SERVICE LEVEL OF MANUFACTURING COMPANY

(51) International classification :G06Q0030020000, G06Q0010060000, G06Q0030060000, G06N0005000000, G06N0020200000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. N.JAYANTHI
Address of Applicant :ASSOCIATE PROFESSOR AND HOD, DEPARTMENT OF COMMERCE, PERIYAR MANIAMMAI INSTITUTE OF SCIENCE AND TECHNOLOGY (DEEMED TO BE UNIVERSITY), VALLAM, THANJAVUR Thanjavur ---------- ----------
2)Mrs. MONALISA PATTANAYAK
3)Dr. HARISH.M
4)Dr. V.KANNAN
5)Mr.J LOGESHWARAN
6)Dr.T.V.AMBULI
7)Mr. K VIJAYA SEKHAR REDDY
8)Mr. NAVNIT KUMAR SHUKLA
9)Dr. N VENKATESH
10)Dr. AYUSHI GAUR
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. N.JAYANTHI
Address of Applicant :ASSOCIATE PROFESSOR AND HOD, DEPARTMENT OF COMMERCE, PERIYAR MANIAMMAI INSTITUTE OF SCIENCE AND TECHNOLOGY (DEEMED TO BE UNIVERSITY), VALLAM, THANJAVUR Thanjavur ---------- ----------
2)Mrs. MONALISA PATTANAYAK
Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF MANAGEMENT STUDIES (DMS) , MAJHIGHARIANI INSTITUTE OF TECHNOLOGY AND SCIENCE (MITS), RAYAGADA, ODISHA, INDIA- 765017 Rayagada ---------- ----------
3)Dr. HARISH.M
Address of Applicant :ASSISTANT PROFESSOR, BACHELOR OF BUSINESS ADMINISTRATION, SRM INSTITUTE OF SCIENCE AND TECHNOLOGY. RAMAPURAM, CHENNAI-600089 Chennai ---------- ----------
4)Dr. V.KANNAN
Address of Applicant :MANAGING DIRECTOR, CLDC RESEARCH AND DEVELOPMENT, NO.997, METTUPALAYAM ROAD, NEAR X-CUT SIGNAL, R.S.PURAM, COIMBATORE, TAMIL NADU - 641002. INDIA (BHARAT) Coimbatore ---------- ----------
5)Mr.J LOGESHWARAN
Address of Applicant :RESEARCH SCHOLAR, DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, SRI ESHWAR COLLEGE OF ENGINEERING, COIMBATORE-TAMIL NADU, INDIA Coimbatore ---------- ----------
6)Dr.T.V.AMBULI
Address of Applicant :ASSOCIATE PROFESSOR, COMMERCE, SRM INSTITUTE OF SCIENCE AND TECHNOLOGY, RAMAPURAM, CHENNAI, TAMILNADU, 600 012, INDIA Chennai ---------- ----------
7)Mr. K VIJAYA SEKHAR REDDY
Address of Applicant :ASSISTANT PROFESSOR, MBA, INSTITUTE OF AERONAUTICAL ENGINEERING , DUNDIGAL, HYDERABAD , TELANGANA- 500043, INDIA Hyderabad ---------- ----------
8)Mr. NAVNIT KUMAR SHUKLA
Address of Applicant :ASSISTANT PROFESSOR, UTTARANCHAL INSTITUTE OF MANAGEMENT, UTTARANCHAL INSTITUTE OF MANAGEMENT, UTTARANCHAL UNIVERSITY, DEHRADUN, UTTARAKHAND-248007, INDIA Dehradun ---------- ----------
9)Dr. N VENKATESH
Address of Applicant :PROFESSOR AND HEAD, CHEMICAL ENGINEERING, ST. JOSEPHS COLLEGE OF ENGINEERING, SEMMENCHERRY, TAMILNADU Chennai ---------- ----------
10)Dr. AYUSHI GAUR
Address of Applicant :ASSISTANT PROFESSOR, SCHOOL OF MANAGEMENT, IMS UNISON UNIVERSITY, DEHRADUN, UTTARAKHAND- 248009, INDIA Dehradun ---------- ----------

(57) Abstract :
ABSTRACT Importance of Marketing research in enhancing the service level of manufacturing company Marketing research is a crucial component in the success of any manufacturing company. It involves collecting and analyzing data to better understand consumer needs, preferences, and behavior. This information is then used to develop effective marketing strategies and improve the service level of the company. Through marketing research, a manufacturing company can gain insights into the target market, their purchasing patterns, and their satisfaction level with the company's products and services. This knowledge allows the company to tailor its offerings to meet the specific needs and wants of its customers, ultimately enhancing the service level. Moreover, marketing research helps in identifying emerging trends and market opportunities, enabling the company to stay competitive and adapt to changing consumer demands. This leads to improved customer satisfaction, loyalty, and retention, which ultimately leads to increased sales and revenue. In conclusion, marketing research is essential for a manufacturing company to stay ahead in the market and provide high-quality services to its customers. It provides valuable insights that drive strategic decision-making and ensure the company's long-term success.

No. of Pages : 12 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024

(21) Application No.202441054720 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ADAPTIVE SENSOR NETWORKS FOR MACHINERY HEALTH MONITORING

(51) International classification :G06N0020000000, G05B0023020000, G06F0011300000, G01H0001000000, G06Q0010060000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Ramya G
Address of Applicant :Associate Professor Department of EEE, Faculty of Engineering & Technology, SRM Institute of Science & Technology, Ramapuram campus Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Ramya G
Address of Applicant :Associate Professor Department of EEE, Faculty of Engineering & Technology, SRM Institute of Science & Technology, Ramapuram campus Chennai ---------- ----------
2)Dr.Ushus.S.Kumar
Address of Applicant :Assistant Professor Dept. of Biomedical Engineering SRM Institute of Science and Technology (formerly known as SRM University) Ramapuram Campus Bharathi Salai, Ramapuram Chennai ---------- ----------
3)Dr. G. Sasikala
Address of Applicant :Professor Department of ECE Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology Chennai ---------- ----------
4)Dr.Saranya.R
Address of Applicant :Assistant Professor Department of Biotechnology SRM INSTITUTE OF SCIENCE AND TECHNOLOGY. Ramapuram campus Chennai ---------- ----------
5)Ms.P.Padmapriya
Address of Applicant :Assistant Professor, Department of Biomedical Engineering, SRM Institute of Science and Technology (formerly known as SRM University) Ramapuram Campus Bharathi Salai, Ramapuram Chennai ---------- ----------
6)Dr.J.Saminathan
Address of Applicant :Assistant Professor, Department of Biomedical Engineering, SRM Institute of Science and Technology (formerly known as SRM University) Ramapuram Campus Bharathi Salai, Ramapuram Chennai ---------- ----------

(57) Abstract :
The adaptive sensor network system revolutionizes machinery health monitoring in industrial settings by dynamically adjusting sensor configurations based on real-time data feedback. It comprises a network of sensors distributed across machinery components, continuously capturing and transmitting critical parameters like temperature, vibration, pressure, and acoustics. Each sensor autonomously adapts its sampling rates and sensitivity levels in response to changes in operational conditions, ensuring precise and timely data collection. Integrated with advanced machine learning algorithms on a central processing unit (CPU) or edge computing device, the system analyzes this data in real-time. By leveraging historical datasets, the algorithms identify patterns and anomalies indicative of potential machinery failures. This proactive approach enables maintenance personnel to initiate predictive maintenance actions promptly, minimizing downtime and optimizing operational efficiency. The system not only enhances monitoring accuracy but also supports sustainable industrial practices by reducing maintenance costs and extending machinery lifespan, thereby boosting overall productivity and reliability in industrial environments

No. of Pages : 9 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024

(21) Application No.202441054722 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AI-POWERED E-GOVERNANCE SYSTEM

(51) International classification	:G06Q0050260000, G06N0003080000, G06N0003040000, H04L0001180000, G08B0027000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Heren Chellam G
Address of Applicant :Associate Professor, Department of Computer Science, Rani Anna Government College for Women, Gandhi Nagar, Tirunelveli, Tamil Nadu, India, Pin Code:627008 Tirunelveli ---------- ----------
2)Dr. Y. Angel Blessy
3)Dr. V. Roseline
4)Mrs. A. Mahalekshmi
5)Mrs. L. S. Subbulakshmi
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Heren Chellam G
Address of Applicant :Associate Professor, Department of Computer Science, Rani Anna Government College for Women, Gandhi Nagar, Tirunelveli, Tamil Nadu, India, Pin Code:627008 Tirunelveli ---------- ----------
2)Dr. Y. Angel Blessy
Address of Applicant :Assistant Professor, Government Arts and Science College, Nagercoil, Tamil Nadu, India Pin Code:629004 Nagercoil ---------- ----------
3)Dr. V. Roseline
Address of Applicant :Assistant Professor & Head, PG Department of Computer Science, Sadakathullah Appa College, Rahmath Nagar, Tirunelveli, Tamil Nadu India Pin Code:627011 Tirunelveli ---------- ----------
4)Mrs. A. Mahalekshmi
Address of Applicant :Research Scholar, Rani Anna Government College for Women, Gandhi Nagar, Tirunelveli, Tamil Nadu, India, Pin Code:627008 Tirunelveli ---------- ----------
5)Mrs. L. S. Subbulakshmi
Address of Applicant :Assistant Professor, Department of Information Technology, Sadakathullah Appa College, Rahmath Nagar, Tirunelveli, Tamil Nadu, India Pin Code:627011 Tirunelveli ---------- ----------

(57) Abstract :
The present invention relates to AI-Powered E-Governance System Utilizing DL Algorithms for Improved Citizen Interaction and Participation. This invention explores the use of Deep Learning (DL) algorithms in enhancing e-governance systems to improve citizen interaction and participation. By leveraging advanced AI technologies, the invention aims to provide personalized, efficient, and transparent services, thereby fostering a more engaged and responsive relationship between citizens and government entities.

No. of Pages : 15 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024

(21) Application No.202441054724 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DEVELOPMENT OF A REAL-TIME IV FLUID MONITORING SYSTEM: THE SAPHENOUS SURVEIL TECHNIQUE

(51) International classification	:A61M0005168000, G16H0040200000, A61B0005000000, G16H0040630000, G16H0070000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Jeffery R
Address of Applicant :SRM Institute of Science and Technology, Ramapuram Campus Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Jeffery R
Address of Applicant :SRM Institute of Science and Technology, Ramapuram Campus Chennai ---------- ----------
2)Dr. Roopa M
Address of Applicant :Associate Professor SRM Institute of Science and Technology, Ramapuram Campus Chennai ---------- ----------
3)Soumya K
Address of Applicant :SRM Institute of Science and Technology, Ramapuram Campus Chennai ---------- ----------
4)Pranaov R J
Address of Applicant :SRM Institute of Science and Technology, Ramapuram Campus Chennai ---------- ----------
5)Rachel Tania A
Address of Applicant :415, South cotton Road East, Thoothukudi-628001 Chennai ---------- ----------
6)S Vishnu Vardhan
Address of Applicant :SRM Institute of Science and Technology, Ramapuram Campus Chennai ---------- ----------
7)Madhavan V
Address of Applicant :SRM Institute of Science and Technology, Ramapuram Campus Chennai ---------- ----------
8)A Sanjay Kumar
Address of Applicant :SRM Institute of Science and Technology, Ramapuram Campus Chennai ---------- ----------
9)Sri Ram B
Address of Applicant :SRM Institute of Science and Technology, Ramapuram Campus Chennai ---------- ----------

(57) Abstract :
Intravenous (IV) fluids have been essential in clinical settings for over a century, making careful administration crucial due to potential side effects. Recently, the medical community has emphasized the need for advanced IV monitoring to prevent risks such as unnoticed blood reversal in the tubes, which can cause serious clinical issues. Traditional methods to address this problem are not practical in today's healthcare environment. Our research focuses on utilizing modern technology to create a continuous IV monitoring system that uses pressure measurements to notify relevant personnel about the patient's IV status. The proposed system, named the "Saphenous Surveil Technique," measures the IV fluid level with a weight cell, which is compared to a predefined threshold set by the patient's attendant. When the IV fluid reaches this level, an automated text message is sent to the attendant's WhatsApp account and the nurse control room, and an alarm is triggered to ensure prompt attention. This innovative system streamlines the IV monitoring process and enhances patient safety, potentially saving lives.

No. of Pages : 7 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :17/07/2024

(21) Application No.202441054733 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : SYNTHESIS AND INTEGRATION OF HETEROSTRUCTURED NANOMATERIALS FOR HIGH-EFFICIENCY PHOTOCATALYTIC APPLICATIONS

(51) International classification	:B01J0035000000, C25B0001550000, C02F0001720000, C01B0003040000, C25B0001040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr. K. Neeraja

Address of Applicant :Professor, Department of Physics, Narasaraopeta Engineering College, Narasaraopet, Palnadu District, Andhra Pradesh, India, Pincode: 522601 ---------- ----------

2)Dr. P. N. V. V. L. Pramila Rani

3)Dr. Santha Kumari Kambala

4)Mr. S. Srinivasarao

5)Dr. Poli Reddy V

6)Dr.N.Giridhar Babu

7)Dr. K. Ephraim Babu

8)Mr. G.S. John

9)Dr. T. Anjaneyulu

10)Dr. K. Sreenivasulu

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. K. Neeraja

Address of Applicant :Professor, Department of Physics, Narasaraopeta Engineering College, Narasaraopet, Palnadu District, Andhra Pradesh, India, Pincode: 522601 ---------- ----------

2)Dr. P. N. V. V. L. Pramila Rani

Address of Applicant :Assistant Professor, Department of Chemistry, Narasaraopeta Engineering College, Narasaraopet, Palnadu District, Andhra Pradesh, India, Pincode: 522601 ---------- ----------

3)Dr. Santha Kumari Kambala

Address of Applicant :Associate Professor, Department of Chemistry, Narasaraopeta Engineering College, Narasaraopet, Palnadu District, Andhra Pradesh, India, Pincode: 522601 ---------- ----------

4)Mr. S. Srinivasarao

Address of Applicant :Assistant Professor, Department of Physics, Narasaraopeta Engineering College, Narasaraopet, Palnadu District, Andhra Pradesh, India, Pincode: 522601 ---------- ----------

5)Dr. Poli Reddy V

Address of Applicant :Associate Professor, Department of Physics, Narasaraopeta Engineering College, Narasaraopet, Palnadu District, Andhra Pradesh, India, Pincode: 522601 ---------- ----------

6)Dr.N.Giridhar Babu

Address of Applicant :Associate Professor, Department of Physics, Narasaraopeta Engineering College, Narasaraopet, Palnadu District, Andhra Pradesh, India, Pincode: 522601 ---------- ----------

7)Dr. K. Ephraim Babu

Address of Applicant :Assistant Professor (Ad-hoc), Department of Physics, Adikavi Nannaya University Campus, Tadepalligudem, West Godavari District, Andhra Pradesh, India, Pincode: 534101 ---------- ----------

8)Mr. G.S. John

Address of Applicant :Assistant Professor, Department of Physics, Narasaraopeta Engineering College, Narasaraopet, Palnadu District, Andhra Pradesh, India, Pincode: 522601 ---------- ----------

9)Dr. T. Anjaneyulu

Address of Applicant :Professor, Department of Physics, Narasaraopeta Engineering College, Narasaraopet, Palnadu District, Andhra Pradesh, India, Pincode: 522601 ---------- ----------

10)Dr. K. Sreenivasulu

Address of Applicant :Associate Professor, Department of Environmental Science, Narasaraopeta Engineering College, Narasaraopet, Palnadu District, Andhra Pradesh, India Pincode: 522601 ---------- ----------

(57) Abstract :

The invention pertains to the synthesis and integration of heterostructured nanomaterials for high-efficiency photocatalytic applications. These nanomaterials, comprising a core material with a narrow bandgap and a shell material with a wide bandgap, enhance light absorption and charge separation. Advanced synthesis methods, such as sol-gel and hydrothermal processes, ensure precise control over their properties. Applications include water splitting for hydrogen production and degradation of organic pollutants. The heterostructured nanomaterials are integrated into photocatalytic systems and reactors, maintaining stability and activity under visible light. This invention addresses the limitations of traditional photocatalysts, offering sustainable solutions for energy conversion and environmental remediation.

No. of Pages : 28 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :17/07/2024

(21) Application No.202441054734 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : ADVANCED FLUID DYNAMICS SIMULATION SYSTEM FOR REAL-TIME ANALYSIS

(51) International classification :G06F30/28, G06N20/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Mr. Ravichandra Honnalli
Address of Applicant :Assistant Professor, Department of Civil Engineering, Ballari Institute of Technology & Management, Ballari, Karnataka, India, Pincode: 583104 ---------- ----------
2)Dr. Shankar Rangnath Raut
3)Dr. Sangeetha P Mulgund
4)Mr. Keshavaraj M Girinivas
5)Dr. Radheshyam R. Sharma
6)Dr. V. Vishnupriya
7)Dr. R. Ajitha
8)Ms. D. Jayabrindha
9)Ms. V. Amudhamalar
10)Dr. R. Vijayalakshmi
11)Mr. K.S. Kamaraj
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr. Ravichandra Honnalli
Address of Applicant :Assistant Professor, Department of Civil Engineering, Ballari Institute of Technology & Management, Ballari, Karnataka, India, Pincode: 583104 ---------- ----------
2)Dr. Shankar Rangnath Raut
Address of Applicant :Associate Professor, Department of Mathematics, Navgan Shikshan Sanstha Rajuri (N), Mrs. Kesharbai Sonajirao Kshirsagar Alias Kaku Arts, Science and Commerce College, Beed, Maharashtra, India, Pincode: 431122 ---------- ----------
3)Dr. Sangeetha P Mulgund
Address of Applicant :Assistant Professor, Department of Civil Engineering, Sapthagiri NPS University, Bangalore, Karnataka, India, Pincode: 560057 ---------- ----------
4)Mr. Keshavaraj M Girinivas
Address of Applicant :Research Scholar, Department of Civil Engineering, Basaveshwar Engineering College, Bagalkote, Karnataka, India, Pincode: 587102 ---------- ----------
5)Dr. Radheshyam R. Sharma
Address of Applicant :Assistant Professor, Department of Mathematics & Statistics, Podar World College, Andheri West, Mumbai, Maharashtra, India, Pincode: 400049 ---------- ----------
6)Dr. V. Vishnupriya
Address of Applicant :Associate Professor in Mathematics, Department of Science and Humanities, DMI College of Engineering, Palanchur, Chennai, Tamilnadu, India, Pincode: 600123 ---------- ----------
7)Dr. R. Ajitha
Address of Applicant :Assistant Professor in Mathematics, Department of Science and Humanities, DMI College of Engineering, Palanchur, Chennai, Tamilnadu, India, Pincode: 600123 ---------- ----------
8)Ms. D. Jayabrindha
Address of Applicant :Assistant Professor, Department of Mathematics, VET College of Arts and Science (Co-Education) College, Erode, Tamilnadu, India, Pincode: 638 012 ---------- ----------
9)Ms. V. Amudhamalar
Address of Applicant :Assistant Professor, Department of Mathematics, VET College of Arts and Science (Co-Education) College, Erode, Tamilnadu, India, Pincode: 638 012 ---------- ----------
10)Dr. R. Vijayalakshmi
Address of Applicant :Associate Professor, Department of Mathematics, Sri Venkateswara College of Engineering (Autonomous), Karakambaadi Road, Tirupati, Andhra Pradesh, India, Pincode: 517507 ---------- ----------
11)Mr. K.S. Kamaraj
Address of Applicant :Assistant Professor in Mathematics, Department of Science and Humanities, DMI College of Engineering, Palanchur, Chennai, Tamilnadu, India, Pincode: 600123 ---------- ----------

(57) Abstract :
The proposed invention is an advanced fluid dynamics simulation system designed for real-time analysis and predictive modeling across various scientific and engineering applications. Utilizing high-performance computing (HPC) and integrating artificial intelligence (AI) and machine learning (ML) techniques, this system provides accurate and instantaneous simulations. It significantly enhances the decision-making process by enabling rapid iteration and optimization of designs. Enhanced visualization tools allow users to interact with and manipulate simulation parameters in real-time. The system's scalable, cloud-based architecture facilitates collaborative work and can handle both small-scale and large-scale simulations, making it a versatile tool for industries such as aerospace, automotive, environmental science, and biomedical engineering. By reducing the need for physical prototypes and extensive testing, the system promotes more efficient, sustainable, and cost-effective engineering practices.

No. of Pages : 29 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :17/07/2024

(21) Application No.202441054735 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR NUMERICAL SIMULATION OF MAGNETOHYDRODYNAMIC (MHD) PHENOMENA USING ANALYTICAL MODELS

(51) International classification	:G06F0030230000, G06Q0010060000, G06F0111100000, G06F0030200000, H02K0044100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr. M V D N S Madhavi

Address of Applicant :Assistant Professor, Department of Mathematics, Velagapudi Ramakrishna Siddhartha Engineering College, Deemed to be University, Kanuru, Vijayawada, Andhra Pradesh, India, Pincode: 520007 ---------- ----------

2)Dr. D. Rajani

3)Dr. Tata Sivaiah

4)Dr. K. Buvaneswari

5)Dr. SK. Mastan

6)Dr. P V S Sairam

7)Dr. Lakshmi Pavani D

8)Dr. Jetti Madhavi

9)Dr. R. Vijayalakshmi

10)Dr. Nainaru Tarakaramu

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. M V D N S Madhavi

Address of Applicant :Assistant Professor, Department of Mathematics, Velagapudi Ramakrishna Siddhartha Engineering College, Deemed to be University, Kanuru, Vijayawada, Andhra Pradesh, India, Pincode: 520007 ---------- ----------

2)Dr. D. Rajani

Address of Applicant :Assistant Professor, Department of Mathematics, Velagapudi Ramakrishna Siddhartha Engineering College, Deemed to be University, Kanuru, Vijayawada, Andhra Pradesh, India, Pincode: 520007 ---------- ----------

3)Dr. Tata Sivaiah

Address of Applicant :Assistant Professor, Department of Humanities and Sciences, Guru Nanak Institute of Technology (GNIT), Ibrahimpatnam, Telangana, India, Pincode: 501506 ---------- ----------

4)Dr. K. Buvaneswari

Address of Applicant :Assistant Professor, Department of Mathematics, Sona College of Technology, Salem, Tamilnadu, Pincode: 636 005 ---------- ----------

5)Dr. SK. Mastan

Address of Applicant :Associate Professor, Department of Mathematics, Ramireddy Subbarami Reddy Engineering College, Kadanuthala, Bogole (M), Kavali, S.P.S.R Nellore (Dist), Andhrapradesh, India, Pincode: 524142 ---------- ----------

6)Dr. P V S Sairam

Address of Applicant :Professor, Department of Physics, Andhra Loyola College, Vijayawada, Andhra Pradesh, India, Pincode: 520010 ---------- ----------

7)Dr. Lakshmi Pavani D

Address of Applicant :Assistant Professor, Department of Physics, SIES Graduate School of Technology, Navi Mumbai, Maharashtra, India, Pincode: 400706 ---------- ----------

8)Dr. Jetti Madhavi

Address of Applicant :Associate Professor, Department of Mathematics, Malla Reddy Engineering College, Hyderabad, Telangana, India, Pincode:500100 ---------- ----------

9)Dr. R. Vijayalakshmi

Address of Applicant :Assosciate Professor, Department of Mathematics, Sri Venkateswara College of Engineering (Autonomous), Karakambaadi Road, Tirupati, Andhra Pradesh, India Pincode: 517507 ---------- ----------

10)Dr. Nainaru Tarakaramu

Address of Applicant :Assistant Professor, Department of Mathematics, Mohan Babu University, Sree Sainath Nagar, Tirupati, Andhra Pradesh, India, Pincode: 517102 ---------- ----------

(57) Abstract :

The proposed invention is a system and method for simulating magnetohydrodynamic (MHD) phenomena, integrating analytical models with numerical methods to enhance simulation accuracy and efficiency. The system utilizes analytical models to provide precise initial conditions and boundary treatments, improving stability and convergence. Adaptive mesh refinement algorithms dynamically adjust the computational grid, focusing resources on critical regions. Advanced solvers for induction and momentum equations handle fluid-magnetic field coupling, while enhanced subgrid-scale models accurately represent MHD turbulence. Validation and verification tools ensure simulation reliability. The user-friendly interface and visualization tools facilitate educational use and allow customization of simulation parameters. This invention significantly advances the understanding and control of MHD phenomena, with applications in astrophysics, fusion research, and industrial processes.

No. of Pages : 27 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :17/07/2024

(21) Application No.202441054737 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : EFFICIENT RK2 SOLVER FOR NONLINEAR CONTROL SYSTEMS IN AEROSPACE ENGINEERING

(51) International classification	:B64G0001240000, G06F0030150000, G06F0017100000, G05D0001080000, H04N0019147000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr. Tata Sivaiah

Address of Applicant :Assistant Professor, Department of Humanities and Sciences, Guru Nanak Institute of Technology (GNIT), Ibrahimpatnam, Telangana, India, Pincode: 501506 ---------- ----------

2)Mrs. S Madhavi

3)Dr. Ch. Srinivasulu

4)Mr. Kandikatla Chittibabu

5)Dr. Madasi Sajani Lavanya

6)Dr. Nellore Manoj Kumar

7)Dr. Radheshyam R. Sharma

8)Dr. G.S. Murugapandian

9)Dr. K. Venkatachalam

10)Dr. R. Vijayalakshmi

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. Tata Sivaiah

Address of Applicant :Assistant Professor, Department of Humanities and Sciences, Guru Nanak Institute of Technology (GNIT), Ibrahimpatnam, Telangana, India, Pincode: 501506 ---------- ----------

2)Mrs. S Madhavi

Address of Applicant :Assistant Professor, Department of ECE, St Peter's Engineering College, Hyderabad, Telangana, India, Pincode:500100 ---------- ----------

3)Dr. Ch. Srinivasulu

Address of Applicant :Lecturer in Mathematics, Department of Mathematics, Government College (Autonomous), Rajahmundry, East Godavari Dt, Andhra Pradesh, India, Pincode: 533015 ---------- ----------

4)Mr. Kandikatla Chittibabu

Address of Applicant :Lecturer in Mathematics, Govt. Degree College, Mummidivaram, Dr.B.R.Ambedkar Konaseema District, Andhra Pradesh, India, Pincode: 533216 ---------- ----------

5)Dr. Madasi Sajani Lavanya

Address of Applicant :Lecturer in Mathematics, Government College (Autonomous), Rajahmundry, East Godavari Dt, Andhra Pradesh, India, Pincode: 533015 ---------- ----------

6)Dr. Nellore Manoj Kumar

Address of Applicant :Independent Researcher, Founder & CEO, Infinite-Research Organization, B.O, 15-225, Gollapalem, Venkatagiri, Tirupati District, Andhra Pradesh, India, Pincode: 524132 ---------- ----------

7)Dr. Radheshyam R. Sharma

Address of Applicant :Assistant Professor, Department of Mathematics & Statistics, Podar World College, Andheri West, Mumbai, Maharashtra, India, Pincode: 400049 ---------- ----------

8)Dr. G.S. Murugapandian

Address of Applicant :Assistant Professor, Department of Mathematics, Nandha Engineering College, Erode, Tamilnadu, India. Pincode: 638 052 ---------- ----------

9)Dr. K. Venkatachalam

Address of Applicant :Assistant Professor, Department of Mathematics, Nandha Engineering College (Autonomous), Erode, Tamil Nadu, India, Pincode: 638 052 ---------- ----------

10)Dr. R. Vijayalakshmi

Address of Applicant :Associate Professor, Department of Mathematics, Sri Venkateswara College of Engineering (Autonomous), Karakambaadi Road, Tirupati, Andhra Pradesh, India, Pincode: 517507 ---------- ----------

(57) Abstract :

The proposed invention relates to an efficient second-order Runge-Kutta (RK2) solver for nonlinear control systems in aerospace engineering. This solver features adaptive step-sizing, error estimation, and parallel computation capabilities, designed to address the complexities of nonlinear dynamics in aerospace applications. By dynamically adjusting computational steps and incorporating robust error correction, the solver enhances accuracy and stability. It leverages modern multi-core processors and GPUs for real-time performance, ensuring swift and precise control decisions. The modular and robust design ensures integration with existing systems, supporting various aerospace applications from UAV navigation to satellite attitude control.

No. of Pages : 29 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024
(21) Application No.202441054738 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A MATHEMATICAL MODEL IN GRAPH THEORY FOR BIOLOGICAL CLASSIFICATION

(51) International classification :G16B0040000000, G16B0020000000, G16B0040200000, G16B0005000000, G01N0015100000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr.P.Rajiniganth
Address of Applicant :Associate Professor, Department of Mathematics, School of Engineering and Technology, Dhanalakshmi Srinivasan University, Samayapuram, Trichy, Tamilnadu, India ---------- ----------
2)Dr.T.Aparna
3)Dr.G.Rohini
4)Sakthi Ramalingam
5)I.Igno Mary
6)Dr.S.Sandhiya
7)S.Poongkodi
8)Dr.R.Ramkumar
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.P.Rajiniganth
Address of Applicant :Associate Professor, Department of Mathematics, School of Engineering and Technology, Dhanalakshmi Srinivasan University, Samayapuram, Trichy, Tamilnadu, India ---------- ----------
2)Dr.T.Aparna
Address of Applicant :Assistant Professor, Department of Mathematics, School of Engineering and Technology, Dhanalakshmi Srinivasan University, Samayapuram, Tiruchirapalli, Tamilnadu, India ---------- ----------
3)Dr.G.Rohini
Address of Applicant :Professor, Department of Electronics and Communication Engineering, St.Joseph's Institute of Technology, Chennai, Tamilnadu, India ---------- ----------
4)Sakthi Ramalingam
Address of Applicant :Assistant Professor, Department of Science and Humanities, R.M.K College of Engineering and Technology, Puduvoyal, Thiruvallur, Tamil Nadu, India ---------- ----------
5)I.Igno Mary
Address of Applicant :Assistant Professor, Department of Mathematics, School of Engineering and Technology, Dhanalakshmi Srinivasan University, Samayapuram, Tiruchirapalli, Tamilnadu, India ---------- ----------
6)Dr.S.Sandhiya
Address of Applicant :Assistant Professor, Department of Mathematics, Vels Institute of Science, Technology & Advanced Studies (VISTAS) Pallavaram, Chennai, Tamil Nadu, India ---------- ----------
7)S.Poongkodi
Address of Applicant :Assistant Professor, Department of Mathematics, Oasys Institute of Technology, Pulivalam, Trichy, Tamilnadu, India ---------- ----------
8)Dr.R.Ramkumar
Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, School of Engineering and Technology, Dhanalakshmi Srinivasan University, Samayapuram, Tiruchirapalli, Tamilnadu, India ---------- ----------

(57) Abstract :
The present invention introduces a novel mathematical model utilizing graph theory for the classification of biological entities. Traditional methods of biological classification often face challenges in handling the complexity and volume of biological data. In contrast, the proposed model represents biological entities as nodes and their relationships as edges in a graph structure. Various graph-based algorithms are employed to analyze the graph, facilitating accurate and efficient classification based on biological characteristics. The invention is exemplified by its application in classifying plant species using genetic data, demonstrating its potential to revolutionize biological classification methodologies across diverse domains. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 22 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024
(21) Application No.202441054739 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : IMMUNOMODULATORY HYDROGEL COMPOSITION WITH SINAPIC ACID TO PREVENT ALLOGENEIC STEM CELL REJECTION

(51) International classification :A61L27/52, A61L27/20, A61L26/00, A61K31/19, A61K31/722, A61K47/36, A61P19/10
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)INDIAN INSTITUTE OF TECHNOLOGY MADRAS (IIT Madras)
Address of Applicant :The Dean, Industrial Consultancy & Sponsored Research [IC&SR], Indian Institute of Technology Madras, Sardar Patel Road, IIT P.O, Chennai, Tamil Nadu, 600 036, India Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)VIMALRAJ SELVARAJ
Address of Applicant :No 5C, Bharath Street, Balaiah Garden, Madipakkam, Chennai-600091, India Chennai ---------- ----------
2)SWATHI SUDHAKAR
Address of Applicant :Department of Applied Mechanics and Biomedical Engineering, Indian Institute of Technology Madras, Chennai-600036, Tamil Nadu, India Chennai ---------- ----------
3)SWAMINATHAN RAMAKRISHNAN
Address of Applicant :Department of Applied Mechanics and Biomedical Engineering, Indian Institute of Technology Madras, Chennai-600036, Tamil Nadu, India Chennai ---------- ----------
4)SARAVANAN SEKARAN
Address of Applicant :No.26, Sarathapuram second st, Mylapore, Tamil Nadu, 600004, India Chennai ---------- ----------

(57) Abstract :
The current invention discloses a biodegradable, chitosan-based immunomodulatory hydrogel comprising sinapic acid for allogeneic stem cell delivery. The hydrogel-sinapic acid composition disclosed herein facilitates sustained release of stem cells at the site of interest, and also mitigates host immune response against allogeneic mesenchymal stem cells thus preventing rejection of the stem cells by the host immune cells, thus prolonging survival of transplanted stem cells. This hydrogel composition can be used for tissue repair and effectively treating conditions like osteoporosis.

No. of Pages : 27 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202441054742 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : REGULATED BREATHING PRACTICE DEVICE

(51) International classification	:A61B0005000000, A63B0023180000, A61B0005080000, G09B0015000000, G09B0019060000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Sasipalli Venkata Sanyasi Rao
Address of Applicant :8-18-50 Sri Rama Colony, Cantonment Post, Vizianagaram ---------- ----------
2)Sasipalli Tejeswarsai
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Sasipalli Venkata Sanyasi Rao
Address of Applicant :8-18-50 Sri Rama Colony, Cantonment Post, Vizianagaram ---------- ----------
2)Sasipalli Tejeswarsai
Address of Applicant :8-18-50 Sri Rama Colony Cantonment Post Vizianagaram Town Vizianagaram ---------- ----------

(57) Abstract :
Breathing is done naturally without any thought. Such breathing can be regulated to get more health benefits. A guided device is developed, which helps in breathing practice. With this device, practitioner does not need to wear or no physical contact with the device is required. The device consists of a Scale, an Indicator and a Controller with selection switches. The scale contains numbers which indicate number of cycles (breath count) per minute. The indicator moves from bottom 0 up to the selected breath count. The controller switches are arranged to select the breath count before start the practice, and Start / Stop switch. The controller will control the movement of indicator as per the user selection of breath count. A base is set to erect the scale and the indicator can be either moving LED light strip or a mechanically moving symbol attached to DC motor. The DC motor operates as per the instructions from the controller. Selection switches of breath count (10, 12, 14, 16, 18, 20) or two buttons to navigate any number between 10 – 20 by an increment/decrement of 1 are arranged. A small display to display the selected number. DC power supply is arranged to operate the device. By using this device practitioners can practice Uniform Breathing in Varied (slow/fast) breathing and without attaching the device to the body. Practitioner can keep the device at a reasonable distance (say 5 feet) away from his position and follow the indicator and practice breathing in and out. This idea and concepts are same for physical hardware device as well software mobile and desktop applications with small and big screens.

No. of Pages : 20 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2024
(21) Application No.202441054757 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : PHOTONICS-BASED NON-INVASIVE BLOOD GLUCOSE MONITORING SYSTEM

(51) International classification :A61B5/145, A61B5/1455, A61B5/00, G06N3/08, G16H40/67, G16H10/60
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Aditya Institute of Technology and Management (A)
Address of Applicant :Tekkali, K. Kotturu, Pin code: 532201, Andhra Pradesh, India ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Gunda Swathi
Address of Applicant :Assistant Professor, BS&H, Aditya Institute of Technology and Management, Tekkali, K. Kotturu, Srikakulam, Pin: 532201, Andhra Pradesh, India. ---------- ----------
2)Mr. Ravi Kumar Kalabarigi
Address of Applicant :Assistant Professor, BS&H, Aditya Institute of Technology and Management, Tekkali, K. Kotturu, Srikakulam, Pin: 532201, Andhra Pradesh, India. ---------- ----------
3)Dr. T. Gunavardana Naidu
Address of Applicant :Assistant Professor, BS&H, Aditya Institute of Technology and Management, Tekkali, K. Kotturu, Srikakulam, Pin: 532201, Andhra Pradesh, India. ---------- ----------
4)Mr. P. Suresh Patnaik
Address of Applicant :Assistant Professor, BS&H, Aditya Institute of Technology and Management, Tekkali, K. Kotturu, Srikakulam, Pin: 532201, Andhra Pradesh, India. ---------- ----------
5)Mrs. Allu Udayasri
Address of Applicant :Assistant Professor, BS&H, Aditya Institute of Technology and Management, Tekkali, K. Kotturu, Srikakulam, Pin: 532201, Andhra Pradesh, India. ---------- ----------
6)Dr. S. Hariprasad
Address of Applicant :Assistant Professor, BS&H, Aditya Institute of Technology and Management, Tekkali, K. Kotturu, Srikakulam, Pin: 532201, Andhra Pradesh, India. ---------- ----------
7)Dr. S. K. Alla
Address of Applicant :Associate Professor, BS&H, Aditya Institute of Technology and Management, Tekkali, K. Kotturu, Srikakulam, Pin: 532201, Andhra Pradesh, India. ---------- ----------
8)Mr. N. Nageswararao
Address of Applicant :Assistant Professor, BS&H, Aditya Institute of Technology and Management, Tekkali, K. Kotturu, Srikakulam, Pin: 532201, Andhra Pradesh, India. ---------- ----------

(57) Abstract :
The present invention discloses a photonics-based non-invasive blood glucose monitoring system designed to measure blood glucose levels accurately and continuously without the need for invasive procedures. The system features a multi-wavelength sensor array that emits and detects light at near-infrared (NIR), mid-infrared (MIR), and visible spectra to capture a comprehensive profile of glucose-related optical signatures in interstitial fluid. Advanced signal processing algorithms and data fusion techniques are employed to analyze the detected light signals and quantify glucose levels, improving accuracy and reliability. The system includes a dynamic calibration mechanism to adjust parameters based on individual patient characteristics and environmental conditions. It also features a user-friendly interface for real-time glucose monitoring, data logging, and trend analysis, with enhanced connectivity for remote monitoring and integration with electronic health records (EHR). The modular design of the system allows for various form factors, including wearable devices, patches, and handheld monitors, providing a versatile and user-adaptable solution for non-invasive glucose monitoring and diabetes management.

No. of Pages : 17 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202441054765 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ENHANCING DATA GOVERNANCE THROUGH EXPLAINABLE AI: BRIDGING TRANSPARENCY AND AUTOMATION

(51) International classification	:G06N0020000000, G06N0005040000, G06N0003040000, G06Q0010060000, G01S0005000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Arunkumar Thirunagalingam
Address of Applicant :3028 Lakefield Dr, Little Elm, TX, 75068 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Arunkumar Thirunagalingam
Address of Applicant :3028 Lakefield Dr, Little Elm, TX, 75068 ---------- ----------

(57) Abstract :
This invention leverages Explainable AI (XAI) to significantly enhance data governance by providing transparent and accountable automation of data management processes. The system utilizes advanced AI algorithms to monitor, evaluate, and improve data quality in real-time, ensuring compliance with regulatory standards and maintaining high data integrity. By integrating XAI, the system offers clear explanations for automated decisions and actions, enabling stakeholders to understand and trust the data governance mechanisms in place. This innovative approach not only increases efficiency and accuracy but also fosters greater confidence in data governance practices, making it a valuable tool for organizations managing complex data environments.

No. of Pages : 17 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024

(21) Application No.202441054779 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : HALOGENATED CHALCONES AS INHA INHIBITORS FOR THE TREATMENT OF MYCOBACTERIUM TUBERCULOSIS

(51) International classification	:A61P0031060000, C07C0049840000, A61K0031550000, C07C0045740000, A61P0019100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Dhivya. L. S
Address of Applicant :Assistant Professor, Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Dr.M.G.R Educational and Research Institute, Vellapanchavadi, Chennai- 600077, Tamilnadu, India ---------- ----------
2)Dr. G. Rajakumar
3)Dr. Saravanan Pandiaraj
4)Dr. N. Harikrishnan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Dhivya. L. S
Address of Applicant :Assistant Professor, Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Dr.M.G.R Educational and Research Institute, Vellapanchavadi, Chennai- 600077, Tamilnadu, India ---------- ----------
2)Dr. G. Rajakumar
Address of Applicant :Associate Professor, Centre for Nanobioscience, Department of Orthodontics, Saveetha Dental College and Hospitals, Saveetha Institute of Medical and Technical Sciences, (SIMATS), Saveetha University, Chennai - 600077, Tamilnadu, India ---------- ----------
3)Dr. Saravanan Pandiaraj
Address of Applicant :Assistant Professor, Department of Self-Development Skills, King Saud University, P.O. Box 2455, Riyadh 11451, Saudi Arabia ---------- ----------
4)Dr. N. Harikrishnan
Address of Applicant :Professor, Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Dr.M.G.R Educational and Research Institute, Vellapanchavadi, Chennai - 600077, Tamilnadu, India ---------- ----------

(57) Abstract :
The present invention discloses novel halogenated chalcones as inhibitors of enoyl-acyl carrier protein reductase (INHA) for the treatment of Mycobacterium tuberculosis (M. tuberculosis). These halogenated chalcones exhibit potent inhibitory activity against INHA, disrupting the fatty acid synthesis pathway essential for bacterial survival. The invention includes halogenated chalcones with substituents selected from hydrogen, fluorine, chlorine, bromine, and iodine. Preferred embodiments include compounds such as 3,5-Dichloro-4'-fluorochalcone, 2,4-Dibromo-3'-chlorochalcone, and 4-Iodo-2',4'-difluorochalcone. The halogenated chalcones can be synthesized via Claisen-Schmidt condensation and formulated into pharmaceutical compositions for various administration routes. Experimental data demonstrates the compounds' efficacy in inhibiting INHA and killing M. tuberculosis, including drug-resistant strains. This invention provides a promising new therapeutic approach for the treatment of tuberculosis. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 20 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202441054783 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : REAL-TIME FRAUD PREVENTION IN DIGITAL BANKING A CLOUD AND AI PERSPECTIVE

(51) International classification	:G06Q0020400000, G06K0009620000, G06N0020000000, G06N0007000000, G06F0021620000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Jeyasri Sekar
Address of Applicant :Senior Software Engineer IT Department Aquilanz LLC, 216 N Commerce street, Aurora, Illinois, USA ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Jeyasri Sekar
Address of Applicant :Senior Software Engineer IT Department Aquilanz LLC, 216 N Commerce street, Aurora, Illinois, USA ---------- ----------

(57) Abstract :
REAL-TIME FRAUD PREVENTION IN DIGITAL BANKING A CLOUD AND AI PERSPECTIVE ABSTRACT: Real-time fraud prevention in digital banking involves employing advanced technologies such as machine learning and cloud infrastructure to detect and mitigate fraudulent transactions instantly, safeguarding financial institutions and customers from potential financial losses and security breaches. Some challenges in real-time fraud prevention in digital banking include handling large volumes of data in real-time, ensuring the accuracy and reliability of machine learning models, addressing evolving fraud tactics, balancing between false positives and false negatives, and maintaining compliance with regulatory requirements regarding data privacy and security. This paper developed a comprehensive approach to detect and mitigate fraudulent transactions in real-time using cloud-based infrastructure and advanced artificial intelligence techniques. The process begins with data collection from various sources, followed by preprocessing to ensure data integrity and completeness. Feature extraction techniques, including dimensionality reduction, are applied to identify key attributes indicative of fraudulent behavior. Feature selection is optimized using Improved Red Piranha Optimization (IRPO) to enhance model performance. Subsequently, machine learning models, such as Support Vector Machines (SVM), and Naïve Bayes (NB) are developed and deployed to classify transactions as fraudulent or legitimate. By leveraging cloud computing and AI, this framework enables timely detection and prevention of fraudulent activities, contributing to the security and trustworthiness of digital banking systems.

No. of Pages : 8 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202441054799 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DUAL SURVEILLANCE CAMERA WITH INTEGRAL SPLIT SCREEN MONITOR FOR CONFIDENTIAL OBSERVATION WITH

(51) International classification	:H04N0007180000, G08B0013196000, G06F0021320000, H04N0005225000, G07C0009000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)CHENNAI INSTITUTE OF TECHNOLOGY
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI-600069. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P. SRIRAM
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI-600069. ---------- ----------
2)Dr.P.JAYAKUMAR
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI-600069. ---------- ----------

(57) Abstract :
The titled invention discloses a dual surveillance camera system with an integrated split screen monitor for confidential observation and authenticated activation. The system comprises a biometric input feed(2) for secure access, a keypad (3)for data entry and control functions, two cameras(8) (10) for capturing images and videos from different perspectives, adjustable telescopic columns(4) (5) and swiveling bases(6) (7) for diverse image capture, a video recorder(15) for recording and storing footage, a USB port(13) for connecting external devices, an loT interface(14) for remote access and control, and a monitor for simultaneous viewing of both camera feeds. The system provides a secure, flexible, and convenient surveillance solution that addresses the limitations of traditional surveillance systems. The invention provides a secure and flexible means of surveillance, allowing for adjustable positioning and angle of the camera, and ensuring that only authorized users can ,access the recorded footage through biometric authentication. The integral monitor simplifies the setup process and allows for easy viewing of the recorded footage on-site. The invention is ideal for use in office settings where confidential events may occur.

No. of Pages : 18 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024

(21) Application No.202441054800 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : LUMINESCENT MICRONEEDLE PATCH FOR BIOMEDICAL APPLICATIONS

(51) International classification	:A61M0037000000, A61K0009000000, A61P0017140000, A61M0005168000, A61K0047360000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Chettinad Academy of Research and Education
Address of Applicant :Chettinad Hospital and Research Institute, Chettinad Academy of Research and Education, Rajiv Gandhi Salai, Kelambakkam, Chengalpattu, Tamil Nadu-603103, India Kelambakkam ---------- ----------
2)Sathyaraj Weslen Vedakumari
3)Lokesh Prabakaran
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Sathyaraj Weslen Vedakumari
Address of Applicant :Chettinad Hospital and Research Institute, Chettinad Academy of Research and Education, Rajiv Gandhi Salai, Kelambakkam, Chengalpattu, Tamil Nadu-603103, India Kelambakkam ---------- ----------
2)Lokesh Prabakaran
Address of Applicant :Chettinad Hospital and Research Institute, Chettinad Academy of Research and Education, Rajiv Gandhi Salai, Kelambakkam, Chengalpattu, Tamil Nadu-603103, India Kelambakkam ---------- ----------

(57) Abstract :
Luminescent microneedle patch with pyramid-shaped needles and sharp ends that were orderly arranged in 15 x 15 array fashion were prepared. A total of 225 needles were present on a 0.8 cm x 0.8 cm patch with the average height and tip-to-tip spacing of the microneedles as 420 µm and 488 µm. The luminescent microneedle patch showed UV absorption peak at 194 nm and 275 nm; They were prepared using sericin, hyaluronic acid, and nanosilver. microneedle patch can be used of biomedical applications such as tissue engineering, drug delivery, treating alopecia and wounds.

No. of Pages : 28 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024

(21) Application No.202441054815 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : RISK MANAGEMENT ALGORITHM FOR FINANCIAL MARKETS

(51) International classification :G06N0020000000, G06Q0040060000, G06F0040300000, G06Q0010060000, G06N0005040000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Laxmana Rao Goranta
Address of Applicant :Associate Professor, School of Commerce and Management Studies, Dayananda Sagar University, Bangalore, India. ---------- ----------
2)Dr. Siddanagouda Policepatil
3)Dr. Raju BPG
4)Mr. Chethan Raj K
5)Mr. Mahabub Basha S
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Laxmana Rao Goranta
Address of Applicant :Associate Professor, School of Commerce and Management Studies, Dayananda Sagar University, Bangalore, India. ---------- ----------
2)Dr. Siddanagouda Policepatil
Address of Applicant :Assistant Professor (Selection grade), Department of Commerce (DOC), Manipal Academy of Higher Education (MAHE), Bengaluru Campus, Bengaluru - 560064, Karnataka, India. ---------- ----------
3)Dr. Raju BPG
Address of Applicant :Professor of Practice, Management, Al-Ameen Institute of Management, Bangalore. ---------- ----------
4)Mr. Chethan Raj K
Address of Applicant :Assistant Professor, Department of MBA, Akash Institute of Engineering and Technology, Bangalore North, India. ---------- ----------
5)Mr. Mahabub Basha S
Address of Applicant :Assistant Professor, Department of Commerce and Management, International Institute of Business Studies, Bengaluru - 562110. ---------- ----------

(57) Abstract :
The present invention relates to a computer-implemented method for managing risks in financial markets, designed to enhance the accuracy and efficiency of risk identification, assessment, and mitigation. The method involves collecting and aggregating data from diverse sources, including market feeds, historical trends, economic indicators, and textual data. Advanced machine learning models process this data to identify patterns and anomalies indicative of potential risks. The algorithm assesses the likelihood and impact of these risks through statistical analysis and predictive analytics, dynamically adjusting portfolio allocations and recommending mitigation strategies. Real-time monitoring and updating of risk assessments ensure timely and proactive responses to market changes. Additionally, the method integrates natural language processing for sentiment analysis, blockchain technology for enhanced security and automation, and decentralized oracle networks for data validation. Visual representations of risk exposures, scenario analyses, and recommended actions provide users with intuitive and actionable insights, thereby optimizing financial stability and performance.

No. of Pages : 18 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202441054816 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : BLOCKCHAIN-ENHANCED INVOICE RECEIPT AND MANAGEMENT PLATFORM

(51) International classification :G06Q0030040000, H04L0009320000, H04L0009080000, H04L0009300000, G06Q0040000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Mr.C.Sathiyavel
Address of Applicant :Research Associate,Dr.A.P.J.Abdulkalam Research and development Centre,Marichetti Halli - Village and Post. ---------- ----------
2)Dr.M.IndraPriya
3)Dr.S.Saravanan
4)Mrs.S.K.Sudha
5)Dr.T.S.Senthil Kumar
6)Dr.B.Karthikeyan
7)Mr.K.Dhandapani
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr.C.Sathiyavel
Address of Applicant :Research Associate,Dr.A.P.J.Abdulkalam Research and development Centre,Marichetti Halli - Village and Post. ---------- ----------
2)Dr.M.IndraPriya
Address of Applicant :Assistant Professor, Department of Banking & Insurance KPR College of Arts and Science and Research, Avinashi Road, Arasur, Coimbatore – 641 407 ---------- ----------
3)Dr.S.Saravanan
Address of Applicant :Assistant Professor, Department of B.Com CS & AF Hindusthan College of Arts and Science, Coimbatore – 641 028 ---------- ----------
4)Mrs.S.K.Sudha
Address of Applicant :Assistant Professor, Department of Commerce ,NPR Arts and Science College, NPR Nagar, Natham, Dindigul – 624 401. ---------- ----------
5)Dr.T.S.Senthil Kumar
Address of Applicant :Assistant Professor, PG and Research Department of Commerce,Salem Sowdeswari college (Govt. Aided), Salem – 63010 ---------- ----------
6)Dr.B.Karthikeyan
Address of Applicant :Assistant Professor, Department of Commerce With IT & BI Hindusthan College of Arts and Science, Coimbatore – 641 028 ---------- ----------
7)Mr.K.Dhandapani
Address of Applicant :Assistant Professor, Department of Business Administration with Computer Applications, Kathir College of Arts and Science, Neelambur, Coimbatore – 641 062. ---------- ----------

(57) Abstract :
The invention presents a digital invoice receiving platform and method based on blockchain technology within the realm of blockchain universal finance. This innovative approach combines asymmetric and symmetric encryption techniques throughout the receiving process. The identity authentication of the main system party receiving the invoice is achieved via an asymmetric encryption algorithm, while verification of invoice issuing information employs a symmetric encryption algorithm. Both the buyer and seller possess public and private key pairs, denoted as (p1, q1) for the buyer and (p2, q2) for the seller. A critical aspect involves conducting a preliminary treatment on the surface of the digital invoice, ensuring that only one party has mastery over the public and private key pairs, thereby enhancing security and privacy. Additionally, intelligent contracts are integrated into the blockchain platform to automate the auditing processes traditionally undertaken by tax handling departments, reducing time costs and increasing handling efficiency. This invention optimizes the overall efficiency of invoice management while ensuring enhanced privacy and security throughout the process.

No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202441054818 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MACHINE LEARNING FRAMEWORK FOR PREDICTIVE ANALYTICS IN RETAIL SUPPLY CHAIN MANAGEMENT

(51) International classification	:G06N0020000000, G06K0009620000, G06N0003040000, G16H0020100000, G06N0005020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)U. HARITA
Address of Applicant :COMPUTER SCIENCE AND ENGINEERING, KONERU LAKSHMAIAH EDUCATION FOUNDATION, GUNTUR, ANDHRA PRADESH, INDIA Guntur ---------- ----------
2)MOULANA MOHAMMED
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)U. HARITA
Address of Applicant :COMPUTER SCIENCE AND ENGINEERING, KONERU LAKSHMAIAH EDUCATION FOUNDATION, GUNTUR, ANDHRA PRADESH, INDIA Guntur ---------- ----------
2)MOULANA MOHAMMED
Address of Applicant :COMPUTER SCIENCE AND ENGINEERING, KONERU LAKSHMAIAH EDUCATION FOUNDATION, GUNTUR, ANDHRA PRADESH, INDIA Guntur ---------- ----------

(57) Abstract :
MACHINE LEARNING FRAMEWORK FOR PREDICTIVE ANALYTICS IN RETAIL SUPPLY CHAIN MANAGEMENT Abstract The present disclosure provides a machine learning framework for predictive analytics in retail supply chain management, comprising a data collection module to gather data from sources; a data preprocessing module to clean, normalize, and transform the gathered data into a format suitable for analysis; a feature extraction module to identify and extract relevant features from the preprocessed data; a machine learning model training module to train one or more machine learning models using the extracted features; a predictive analytics module to generate predictive insights based on the trained machine learning models; a visualization module to present the predictive insights in a user-friendly format; a feedback loop module to continuously update and refine the machine learning models based on new data and user feedback. Fig. 1

No. of Pages : 28 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024

(21) Application No.202441054821 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SOLAR POWERED SNACK VENDING MACHINE

(51) International classification	:H02S0040380000, F21S0009030000, H02J0007350000, H02S0010100000, F03D0009000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Needhu Varghese
Address of Applicant :Christ College of Engineering Irinjalakuda Kerala 680125 Irinjalakuda ---------- ----------
2)Ivin Enasu Chungath
3)Daniel T S
4)Dheeraj Kumar
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Needhu Varghese
Address of Applicant :Christ College of Engineering Irinjalakuda Kerala 680125 Irinjalakuda ---------- ----------
2)Ivin Enasu Chungath
Address of Applicant :Christ College of Engineering Irinjalakuda Kerala 680125 Irinjalakuda ---------- ----------
3)Daniel T S
Address of Applicant :Christ College of Engineering Irinjalakuda Kerala 680125 Irinjalakuda ---------- ----------
4)Dheeraj Kumar
Address of Applicant :Christ College of Engineering Irinjalakuda Kerala 680125 Irinjalakuda ---------- ----------

(57) Abstract :
The solar-powered snack vending machine represents a sustainable and eco-friendly innovation in the realm of vending technology. By harnessing solar energy through strategically positioned solar panels, the machine operates autonomously, reducing reliance on traditional power sources and minimizing its carbon footprint. Integrated energy storage systems ensure uninterrupted functionality, even during periods of low sunlight. This innovative approach not only promotes environmental stewardship but also showcases the potential for renewable energy applications in everyday consumer services. This project outlines the design and implementation of a solar-powered snack vending machine, aiming to combine sustainability with modern convenience. The vending machine incorporates solar panels to harness solar energy, promoting eco-friendly and energy- efficient operation. These panels are strategically positioned on the top or sides of the machine to maximize sunlight exposure. The harvested solar energy is then converted into electricity to power the various functions of the vending machine. To ensure continuous operation during periods of low sunlight, the machine incorporates energy storage systems, such as rechargeable batteries. This solar-powered snack vending machine not only offers a sustainable alternative to conventional vending machines but also serves as a practical application of renewable energy in everyday scenarios. The machine must be self-sustaining (completely solar powered and durable against the elements), simple to operate, reliable with low maintenance, and inexpensive to procure and operate. Bulk vending machines are usually cheaper than soda or snack machines because they don’t need electricity or refrigeration. Some operators give part of their earnings to charity, which helps them get free spots to put their machines. For people who have full-time jobs, bulk vending can be better because the places where you can put them, like stores or restaurants, are often open when you’re free in the evenings and on weekends.

No. of Pages : 7 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :18/07/2024

(21) Application No.202441054832 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : A VOLATILE AND ESSENTIAL OILS BASED CONTROLLED-RELEASE DRUG DELIVERY SYSTEM AND METHOD THEREOF

(51) International classification :A61K0036324000, A61K0036534000, A61K0036530000, A61K0036610000, A61P0031000000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Dommaraju R Aruna Kumari
Address of Applicant :Associate Professor, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------
2)Dr. Allagadda Rekha Devi
3)N Bhavana
4)Gattamaneni Sneha
5)Dr. Mudduluru Niranjan Babu
6)Dr. Saravanakumar Kasimedu
7)Dr. Palagati Sucharitha
8)Vadamala Prudhvi Raj
9)Yelamanda Jagadeesh
10)Kogilathota Tarun Kumar Reddy
11)B Delhipriya
12)Kunchala Venkata Abhiram
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Dommaraju R Aruna Kumari
Address of Applicant :Associate Professor, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------
2)Dr. Allagadda Rekha Devi
Address of Applicant :Associate Professor, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------
3)N Bhavana
Address of Applicant :Student, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------
4)Gattamaneni Sneha
Address of Applicant :Student, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------
5)Dr. Mudduluru Niranjan Babu
Address of Applicant :Principal and Professor, Department of Pharmacognosy, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------
6)Dr. Saravanakumar Kasimedu
Address of Applicant :Director (Academics) and Professor, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------
7)Dr. Palagati Sucharitha
Address of Applicant :Associate Professor, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------
8)Vadamala Prudhvi Raj
Address of Applicant :Associate Professor, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------
9)Yelamanda Jagadeesh
Address of Applicant :Assistant Professor, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------
10)Kogilathota Tarun Kumar Reddy
Address of Applicant :Student, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati – 517561, Andhra Pradesh, India. Tirupati ---------- ----------
11)B Delhipriya
Address of Applicant :Student, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------
12)Kunchala Venkata Abhiram
Address of Applicant :Student, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------

(57) Abstract :
The present invention relates to a controlled-release drug delivery system designed to incorporate volatile oils and essential oils (104) for enhanced therapeutic efficacy. The system comprises a core containing a pharmaceutical agent and a volatile oil (104) selected from tea tree oil, oregano oil, lavender oil, and peppermint oil. The core is surrounded by a polymeric coating that modulates the release of the volatile oil (104) and pharmaceutical agent over a predetermined period, thereby providing sustained therapeutic effects. The delivery system may also include essential oils (104) such as eucalyptus oil, chamomile oil, and frankincense oil to further enhance its antimicrobial, anti-inflammatory, and analgesic properties. The invention also discloses methods for preparing the controlled-release drug delivery system and methods for treating patients using this system. The unique combination of volatile oils, essential oils (104) and controlled-release technology offers significant advantages in terms of improved patient compliance and treatment outcomes for various medical conditions.

No. of Pages : 17 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :18/07/2024

(21) Application No.202441054834 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : A METHOD FOR LUNG CANCER PREDICTION USING HYBRID PATCH PROCESSING AND DEEP LEARNING MODELS

(51) International classification :G06K0009620000, G06N0003080000, G06T0005000000, G06T0007000000, G06N0003040000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**

1)Vignan Institute of Technology and Science, Hyderabad (Autonomous)
Address of Applicant :Pochampally Road, B Pochampally, Hyderabad, Telangana 508284 Email: principal.vgnt@vignanits.ac.in Mobile: 9000234587 Hyderabad ---------- ----------

2)Dr Vijayalakshmi Chintamaneni

3)Ms. Revuri Swapna

4)Dr Katapaka Yadaiah

5)Mr. Papani Srinivas

6)Mr. Chadala Raja Sai Harsha

7)Mr. Mogili Siva

8)Mrs. B. Swathi

9)Ms. Kooragayala Sukeerthi

10)Ms. B. Suneetha

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Vignan Institute of Technology and Science, Hyderabad (Autonomous)
Address of Applicant :Pochampally Road, B Pochampally, Hyderabad, Telangana 508284 Email: principal.vgnt@vignanits.ac.in Mobile: 9000234587 Hyderabad ---------- ----------

2)Dr Vijayalakshmi Chintamaneni
Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, Vignan Institute of Technology and Science, Pochampally Road, B Pochampally, Hyderabad, Telangana 508284. Email: vijji.lnctphd@gmail.com Mobile: 8309627838 Hyderabad ---------- ----------

3)Ms. Revuri Swapna
Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Vignan Institute of Technology and Science, Pochampally Road, B Pochampally, Hyderabad, Telangana 508284. Email: swapna.revuri@gmail.com Mobile: 9963352192 Hyderabad ---------- ----------

4)Dr Katapaka Yadaiah
Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, Vignan Institute of Technology and Science, Pochampally Road, B Pochampally, Hyderabad, Telangana 508284. Email: yadesh.k@gmail.com Mobile: 9866507437 Hyderabad ---------- ----------

5)Mr. Papani Srinivas
Address of Applicant :Assistant Professor, Department of Electronics and Instrumentation Engineering (EIE), Vignan Institute of Technology and Science, Pochampally Road, B Pochampally, Hyderabad, Telangana 508284 Email: psrinivas@vignanits.ac.in Mobile: 9490128369 Hyderabad ---------- ----------

6)Mr. Chadala Raja Sai Harsha
Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Vignan Institute of Technology and Science, Pochampally Road, B Pochampally, Hyderabad, Telangana 508284. Email: chadalaharsha@gmail.com Mobile: 9949703960 Hyderabad ---------- ----------

7)Mr. Mogili Siva
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering (Data Science), Vignan Institute of Technology and Science, Pochampally Road, B Pochampally, Hyderabad, Telangana 508284. Email: msiva438@gmail.com Mobile: 9502229014 Hyderabad ---------- ----------

8)Mrs. B. Swathi
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Vignan Institute of Technology and Science, Pochampally Road, B Pochampally, Hyderabad, Telangana 508284. Email: swathibonam10@gmail.com Mobile: 9652090209 Hyderabad ---------- ----------

9)Ms. Kooragayala Sukeerthi
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Vignan Institute of Technology and Science, Pochampally Road, B Pochampally, Hyderabad, Telangana 508284. Email: sukeerthi.kooragayala@gmail.com Mobile: 9347960043 Hyderabad ---------- ----------

10)Ms. B. Suneetha
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Vignan Institute of Technology and Science, Pochampally Road, B Pochampally, Hyderabad, Telangana 508284. suneetha.m.tech7@gmail.com Mobile: 9553622568 Hyderabad ---------- ----------

(57) Abstract :

This invention introduces a hybrid model for lung cancer detection using CT images, integrating traditional image processing methods with advanced deep learning techniques. The method begins with image enhancement via median filtering to remove noise, followed by patch processing to improve image quality. Segmentation of enhanced images is performed using K-means clustering, refined by Particle Swarm Optimization (PSO) for precise tumor isolation. A Convolutional Neural Network (CNN) is employed for feature extraction and classification, categorizing tumors as benign, malignant, or normal. The system's performance is evaluated using metrics such as Mean Squared Error (MSE), Peak Signal-to-Noise Ratio (PSNR), accuracy, sensitivity, and specificity. The hybrid model significantly enhances detection accuracy and reduces computational time compared to existing methods. This comprehensive approach combines the strengths of traditional image processing and modern deep learning, providing a robust, efficient solution suitable for clinical applications. The integration of these techniques offers improved early detection, contributing to better patient outcomes through timely diagnosis and treatment.

No. of Pages : 19 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :18/07/2024

(21) Application No.202441054837 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : A CONTROLLED-RELEASE PHARMACEUTICAL FORMULATION OF POSACONAZOLE ENCAPSULATED IN ETHYL CELLULOSE NANOCAPSULES

(51) International classification :A61K0009000000, A61K0031496000, A61K0009510000, A61K0009500000, A61P0031100000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**

1)Yelamanda Jagadeesh
Address of Applicant :Assistant Professor, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------

2)Vadamala Prudhvi Raj

3)Dr. Saravanakumar Kasimedu

4)Yedoti Kusuma

5)Dr. Palagati Sucharitha

6)Chirumanu Ramadevi

7)Dr. Allagadda Rekha Devi

8)Dr. Dommaraju R. Aruna Kumari

9)Dr. Mudduluru Niranjan Babu

10)Dr. Nagaveni Pommala

11)Mallikarjuna Gandla

12)Divya Lakshmipathi

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Yelamanda Jagadeesh
Address of Applicant :Assistant Professor, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------

2)Vadamala Prudhvi Raj
Address of Applicant :Associate Professor, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati -517561, Andhra Pradesh, India. Tirupati ---------- ----------

3)Dr. Saravanakumar Kasimedu
Address of Applicant :Director (Academics) and Professor, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------

4)Yedoti Kusuma
Address of Applicant :Student, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------

5)Dr. Palagati Sucharitha
Address of Applicant :Associate Professor, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------

6)Chirumanu Ramadevi
Address of Applicant :Associate Professor, Sree Venkateswara College of Pharmacy (Autonomous), Kodavaluru Mandalam, North Rajupalem, SPSR Nellore - 524366 Andhra Pradesh, India. Nellore ---------- ----------

7)Dr. Allagadda Rekha Devi
Address of Applicant :Associate Professor, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------

8)Dr. Dommaraju R. Aruna Kumari
Address of Applicant :Associate Professor, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------

9)Dr. Mudduluru Niranjan Babu
Address of Applicant :Principal, Department of Pharmacognosy, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------

10)Dr. Nagaveni Pommala
Address of Applicant :Academic Consultant, S. V. U. College of Pharmaceutical Sciences, S. V. University, Tirupati – 517502, Andhra Pradesh, India. Tirupati ---------- ----------

11)Mallikarjuna Gandla
Address of Applicant :Associate Professor, Department of Pharmacology, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------

12)Divya Lakshmipathi
Address of Applicant :Assistant Professor, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------

(57) Abstract :
The present invention relates to a pharmaceutical formulation comprising nanocapsules (102) containing Posaconazole (104) and ethyl cellulose (108). The nanocapsules (102) are designed to provide controlled release of Posaconazole (104), enhancing its therapeutic efficacy and reducing the frequency of administration. The formulation may optionally include hydroxypropyl methylcellulose (HPMC) (106) to further modulate the release profile. The nanocapsules (102) are prepared using an interfacial deposition technique, ensuring uniform size distribution within the range of 100 nm to 300 nm. The controlled-release properties of the formulation are particularly advantageous for the treatment of invasive Aspergillus and Candida infections, providing sustained drug release over at least 24 hours, thereby improving patient compliance and therapeutic outcomes. The method of preparation involves dissolving Posaconazole (104) in a solvent, mixing it with ethyl cellulose and, optionally, HPMC (106), followed by emulsification and solvent evaporation to form the nanocapsules (102).

No. of Pages : 21 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :18/07/2024

(21) Application No.202441054838 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : AN INVENTION RELATED TO DESIGNED ONLINE PLATFORM FOR FARMERS TO SELL THEIR PRODUCED PRODUCTS TO THE FINAL CONSUMERS THROUGH THE APP.

(51) International classification	:G06Q0030060000, G06Q0010080000, G06Q0030020000, G06Q0050020000, G06Q0020320000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)PRAKASH GOBARI
Address of Applicant :Prakash Gobari, S/O : Shrishail, #99, Musalamari Mallapur Ka , Ta : Gokak, Dist : Belagavi Karnataka 591101 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)PRAKASH GOBARI
Address of Applicant :Prakash Gobari, S/O : Shrishail, #99, Musalamari Mallapur Ka , Ta : Gokak, Dist : Belagavi Karnataka 591101 ---------- ----------

(57) Abstract :
This invention is related to the agriculture field, in today's digital world the agriculture remains a cornerstone of global economies, yet farmers often face challenges in accessing markets and achieving fair prices for their produce, and final users or consumers of agri products they are spending more money for buying the agricultural products and that price is high compared to producers price (farmers price) because this is having the big supply chain to reach the agri products from farmers to final users. For this we introducing an online platform it describes here in revolutionizes the traditional supply chain of agri products by directly connecting farmers with end-users. For this we introducing an mobile application for both (farmers and final user). The app serves as a dedicated platform where farmers can showcase their products, eliminating intermediaries and ensuring fair prices. This technology offers to final users in terms of seamless purchasing experience, through a user-friendly interface, customers can browse a diverse range of freshly harvested agri products, place orders with ease, and enjoy doorstep delivery, ensuring both convenience and freshness. By leveraging cutting-edge technology, such as geolocation and secure payment systems, the app provides a seamless and secure transaction experience for both sellers and buyers. Technical specialization includes robust backend infrastructure for inventory management, real- time updates, and personalized customer interactions, ensuring efficiency and user satisfaction. This innovative approach supports to the farmers to do the agriculture without having fear (in terms of fair price for their crops) and also promotes healthier eating habits and fosters community resilience.

No. of Pages : 22 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202441054841 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A METHOD FOR DETECTING ACCIDENT PRONE AREA BASED ON POTHOLES USING IMAGE PROCESSING ALGORITHMS

(51) International classification	:G06T0007130000, E01C0023060000, E01C0011000000, H04L0067100000, E01C0007180000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Mohan Babu University
Address of Applicant :IPR Cell, Mohan Babu University (Erstwhile Sree Vidyanikethan Institute of Management) Tirupati, Andhra Pradesh India - 517102 Tirupati ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Ms. Achanti Sunita
Address of Applicant :Assistant Professor, School of Commerce and Management, Mohan Babu University (Erstwhile Sree Vidyanikethan Institute of Management) Tirupati ---------- ----------
2)Ms. Kaluva Jaya Deepthi
Address of Applicant :Assistant Professor, Department of Artificial Intelligence & Machine Learning, School of Computing, Mohan Babu University (Erstwhile Sree Vidyanikethan Engineering College) Tirupati ---------- ----------

(57) Abstract :
The present invention is related to a road damage detection system focused on identifying potholes to enhance safety for two-wheeler riders. Employing the Werner D Street algorithm for image processing, potholes are accurately identified, with Raspberry Pi, particularly the Raspberry Pi Zero 2 W, utilized for image capture. Testing across varied conditions yielded an 80% success rate in pothole detection. The system first locates roadway holes, then employs an algorithm to identify key features indicative of potholes, followed by live video capture and subsequent edge detection using the Canny method. Position information is obtained from the GPS U-block NEO-6m for precise geo-tagging, with latitude and longitude data linked to the Google Maps API script in GM Lib. Connection to Arduino and data storage in CSV files on a micro-SD card breakout board complete the process. This integrated approach offers a robust solution for real-time pothole detection and geo-tagging, contributing to road safety.

No. of Pages : 26 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :18/07/2024

(21) Application No.202441054867 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : PNUEMATIC BASED IDIYAPPAM MAKER

(51) International classification :G06Q0030060000, G06F0030000000, B22D0011000000, B21D0043000000, B28B0013060000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Karthi Nallasivam
Address of Applicant :61/10, MOKKAIYAMPALAYAM, VILLARASAMPATTI POST, ERODE ---------- ----------
2)Dr.P.Vivekanandan
3)Dr.T.Prakash
4)Mr.M.Anand
5)Mr.R.Sambasivam
6)Ms.P.Kalaiselvi
7)Ms.P.Radhika
8)Mr.M.Michael Jones
9)Ms.J.Swathi
10)Mr.P.Balaji
11)Mr.A.S.Natraj Athreya
12)Mr.M.Vignesh
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Karthi Nallasivam
Address of Applicant :61/10, MOKKAIYAMPALAYAM, VILLARASAMPATTI POST, ERODE ---------- ----------
2)Dr.P.Vivekanandan
Address of Applicant :SNS COLLEGE OF TECHNOLOGY, VAZHIYAMPALAYAM, SARAVANAMPATTI POST, COIMBATORE COIMBATORE ---------- ----------
3)Dr.T.Prakash
Address of Applicant :SNS COLLEGE OF TECHNOLOGY, VAZHIYAMPALAYAM, SARAVANAMPATTI POST, COIMBATORE COIMBATORE ---------- ----------
4)Mr.M.Anand
Address of Applicant :SNS COLLEGE OF TECHNOLOGY, VAZHIYAMPALAYAM, SARAVANAMPATTI POST, COIMBATORE Coimbatore ---------- ----------
5)Mr.R.Sambasivam
Address of Applicant :SNS COLLEGE OF TECHNOLOGY, VAZHIYAMPALAYAM, SARAVANAMPATTI POST, COIMBATORE Coimbatore ---------- ----------
6)Ms.P.Kalaiselvi
Address of Applicant :SNS COLLEGE OF TECHNOLOGY, VAZHIYAMPALAYAM, SARAVANAMPATTI POST, COIMBATORE Coimbatore ---------- ----------
7)Ms.P.Radhika
Address of Applicant :SNS COLLEGE OF TECHNOLOGY, VAZHIYAMPALAYAM, SARAVANAMPATTI POST, COIMBATORE Coimbatore ---------- ----------
8)Mr.M.Michael Jones
Address of Applicant :SNS COLLEGE OF TECHNOLOGY, VAZHIYAMPALAYAM, SARAVANAMPATTI POST, COIMBATORE Coimbatore ---------- ----------
9)Ms.J.Swathi
Address of Applicant :SNS COLLEGE OF TECHNOLOGY, VAZHIYAMPALAYAM, SARAVANAMPATTI POST, COIMBATORE Coimbatore ---------- ----------
10)Mr.P.Balaji
Address of Applicant :SNS COLLEGE OF TECHNOLOGY, VAZHIYAMPALAYAM, SARAVANAMPATTI POST, COIMBATORE Coimbatore ---------- ----------
11)Mr.A.S.Natraj Athreya
Address of Applicant :SNS COLLEGE OF TECHNOLOGY, VAZHIYAMPALAYAM, SARAVANAMPATTI POST, COIMBATORE Coimbatore ---------- ----------
12)Mr.M.Vignesh
Address of Applicant :SNS COLLEGE OF TECHNOLOGY, VAZHIYAMPALAYAM, SARAVANAMPATTI POST, COIMBATORE Coimbatore ---------- ----------

(57) Abstract :
This project presents the design and development of an innovative Idiyappam maker utilizing a pneumatic cylinder to automate the Idiyappam extrusion process. Idiyappam, a traditional South Indian dish made from rice flour, is typically prepared by manually pressing the dough through a sieve to create thin, noodle-like strands. This process can be labor-intensive and time-consuming, making it less practical for large-scale production or for individuals with limited physical strength. The goal of this project was to create a device that simplifies and streamlines the Idiyappam-making process, making it more accessible and efficient for a wider range of users. The Idiyappam maker designed in this project integrates a pneumatic cylinder as the core component of the extrusion mechanism. Pneumatic cylinders are known for their ability to provide consistent and controllable force, making them an ideal choice for this application. By utilizing a pneumatic cylinder, the device can apply uniform pressure to the dough, ensuring that the resulting Idiyappam strands are of consistent thickness and quality. This automated approach reduces the need for manual intervention, allowing users to produce Idiyappam with minimal effort. The design process involved several key stages, including the selection of appropriate materials, the development of a robust and reliable extrusion mechanism, and the integration of control systems to manage the pneumatic cylinder's operation. Various prototypes were created and tested to refine the design and ensure that the final product met the desired performance criteria. Initial testing demonstrated that the machine was capable of producing high-quality Idiyappam with a consistent texture and appearance. The device's user-friendly interface and automated operation made it easy to use, even for individuals with little to no experience in Idiyappam making.

No. of Pages : 9 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202441054889 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : WRITING INSTRUMENT WITH FLEXIBLE LENGTH FOR COMPACT STORAGE

(51) International classification :B43K0025020000, B43K0007000000, B43K0023000000, B43K0029000000, B43K0023008000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Mangalore Institute of Technology & Engineering
Address of Applicant :Badaga Mijar, Moodabidri Moodabidri ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr. Yuvaraj K B
Address of Applicant :Department of Mechanical Engineering, Mangalore Institute of Technology & Engineering, Badaga Mijar -574225 Moodabidri ---------- ----------
2)Mr. Arun Krishnan
Address of Applicant :Department of Mechanical Engineering, Mangalore Institute of Technology & Engineering, Badaga Mijar -574225 Moodabidri ---------- ----------
3)Mr. Sridhar D R
Address of Applicant :Department of Mechanical Engineering, Mangalore Institute of Technology & Engineering, Badaga Mijar -574225 Moodabidri ---------- ----------
4)Mr. Manoj Kumar B V
Address of Applicant :Department of Mechanical Engineering, Mangalore Institute of Technology & Engineering, Badaga Mijar -574225 Moodabidri ---------- ----------
5)Mr. Prakyath K H
Address of Applicant :Department of Mechanical Engineering, Mangalore Institute of Technology & Engineering, Badaga Mijar -574225 Moodabidri ---------- ----------

(57) Abstract :
This patent proposal introduces an innovative extendable writing instrument designed for convenient storage in small shirt pockets while ensuring writing comfort through adjustable length. The writing instrument features a retractable barrel equipped with an extend and retract mechanism, allowing users to tailor the writing instrument's length to their preference or pocket size. This design addresses the need for a compact and adaptable writing instrument suitable for everyday use, providing a practical solution for individuals seeking versatility in their writing tools. The writing instrument's operation includes three main positions: a compressed position for storage, an extended position for comfortable writing, and a default position that allows the writing instrument to return to its compact form. The primary objective of the invention is to balance portability with writing comfort by creating a writing instrument that is easy to store in small spaces while remaining comfortable for extended use. This extendable writing instrument design combines convenience and functionality, offering a reliable and adaptable writing tool suitable for a wide range of users, from professionals to students. The cost difference compared to standard writing instruments is minimal, making it an affordable enhancement that addresses common issues associated with traditional writing instruments and meets the practical needs of modern users.

No. of Pages : 16 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202441054891 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : HEALTHCARE MANAGEMENT USING SMART GLASSES WITH ADAPTIVE LENSES

(51) International classification	:G16H0040670000, G16H0010600000, G02B0027010000, G16H0040630000, A61B0005000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Mr.Darshan P
Address of Applicant :Assistant Professor, Department of Computer Applications, Rajarajeswari College of Engineering, Mysore Road, Bengaluru. Ramohalli cross, Kumbalgodu, Mysore Road, Bengaluru, Karnataka, India, Pin code-560 074. ---------- ----------
2)Mr. Deeraj. C
3)Mr.Jai Shankar M
4)Dr.Sasi Kumar.B
5)Mrs. Pushpalatha.G
6)Dr. M. Karuppasamy
7)Dr. Subburaj
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr.Darshan P
Address of Applicant :Assistant Professor, Department of Computer Applications, Rajarajeswari College of Engineering, Mysore Road, Bengaluru. Ramohalli cross, Kumbalgodu, Mysore Road, Bengaluru, Karnataka, India, Pin code-560 074. ---------- ----------
2)Mr. Deeraj. C
Address of Applicant :Assistant Professor, Masters of Computer Application, Rajarajeswari college of Engineering, Mysore Road, Bengaluru. Mysore Road, Bengaluru, Karnataka, India, Pin code-560 074. ---------- ----------
3)Mr.Jai Shankar M
Address of Applicant :Assistant Professor, Department of Computer Applications, Rajarajeswari college of Engineering, Mysore Road, Bengaluru. Mysore Road, Bengaluru, Karnataka, India, Pin code-560 074. ---------- ----------
4)Dr.Sasi Kumar.B
Address of Applicant : Assistant professor, Department of MCA, Rajarajeswari college of Engineering, Mysore Road, Bengaluru. Mysore Road, Bengaluru, Karnataka, India, Pin code-560 074. ---------- ----------
5)Mrs. Pushpalatha.G
Address of Applicant :Assistant Professor, Department of Computer Applications, Rajarajeswari college of Engineering, Mysore Road, Bengaluru. Mysore Road, Bengaluru, Karnataka, India, Pin code-560 074. ---------- ----------
6)Dr. M. Karuppasamy
Address of Applicant :Associate Professor, Department of Computer Science Engineering, Rajarajeswari College of Engineering, LMysore Road, Bengaluru. Mysore Road, Bengaluru, Karnataka, India, Pin code-560 074. ---------- ----------
7)Dr. Subburaj
Address of Applicant :Associate Professor, Department of MCA, Rajarajeswari college of Engineering, Mysore Road, Bengaluru, Mysore Road, Bengaluru, Karnataka, India, Pin code-560 074. ---------- ----------

(57) Abstract :
Healthcare Management using Smart glasses with Adaptive lenses ABSTRACT Healthcare management using smart glasses with adaptive lenses introduces a paradigm shift in medical practice by integrating advanced optical technologies with smart functionalities. These glasses incorporate adaptive lens. technology, including auto-focusing and adaptive tinting, to provide personalized vision correction in real-time. This capability enhances visual clarity and comfort for individuals with varying vision needs, optimizing their daily activities and. healthcare experiences. Beyond vision enhancement, smart glasses with adaptive lenses play a crucial role in healthcare management through innovative applications. They facilitate remote diagnostics and telemedicine by leveraging high-resolution cameras and augmented reality (AR) overlays. Medical professionals can conduct virtual consultations, perform remote examinations, and access patient records seamlessly, improving accessibility to healthcare services and reducing geographical barriers. Moreover, these glasses integrate health monitoring sensors that track vital signs, eye health metrics, and patient biometrics. This continuous monitoring enables early detection of health issues, supports chronic disease management, and enhances patient safety through timely interventions. The integration of AR technology also enhances medical education and training, offering interactive simulations and real-time guidance during procedures.

No. of Pages : 7 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024

(21) Application No.202441054901 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ADVANCED CYBER THREAT DETECTION USING AI AND IMAGE PROCESSING TECHNIQUES

(51) International classification	:G06N0020000000, G06F0021550000, G06K0009620000, G06F0021570000, G06N0003080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. A.Srisaila
Address of Applicant :Assistant Professor, Department of Information Technology, V.R.Siddhartha Engineering College, Kanur, Vijayawada.- 522006 Vijayawada ---------- ----------
2)Mr. Samrat Krishna Gaddam
3)Mr. Naga Prasada Rao Thota
4)Dr. Katakam Venkateswara Rao
5)Mr. Ranganadha Rao. Goli
6)Mr. Nikhilesh Katakam
7)Dr. Ganji Ramanjaiah
8)Mr. Ananda Babu Rudrubati
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. A.Srisaila
Address of Applicant :Assistant Professor, Department of Information Technology, V.R.Siddhartha Engineering College, Kanur, Vijayawada.- 522006 Vijayawada ---------- ----------
2)Mr. Samrat Krishna Gaddam
Address of Applicant :Assistant Professor P.B.Siddhartha College of Arts & Science, Vijayawada – 520010 Vijayawada ---------- ----------
3)Mr. Naga Prasada Rao Thota
Address of Applicant :HOD in Computer Science A.G & S.G Siddhartha College of Arts & Science, Vuyyuru -521165 Vijayawada ---------- ----------
4)Dr. Katakam Venkateswara Rao
Address of Applicant :Assistant Professor, Dept of Computer science and Engineering, Koneru lakshmaiah Education Foundation , Vaddeswaram, Guntur D.T - 522 502 Guntur ---------- ----------
5)Mr. Ranganadha Rao. Goli
Address of Applicant :Associate Professor, Dept of AI&ML, Universal college of engineering and technology, Dokiparru, Guntur - 522438 Guntur ---------- ----------
6)Mr. Nikhilesh Katakam
Address of Applicant :Student, Master of Science –Northern Arizona University. Door No:2-5-393; UdyogaNagar 3rd line, Guntur-522002 Guntur ---------- ----------
7)Dr. Ganji Ramanjaiah
Address of Applicant :Associate Professor, Dept. Of Computer Science & Engineering (Data Science), R V R & J C College of Engineering, Chowdavaram, Guntur- 522019, Andhra Pradesh, India. Guntur ---------- ----------
8)Mr. Ananda Babu Rudrubati
Address of Applicant :Assistant Professor, Dept. Of Computer Science & Engineering (AI & DS), Kallam Haranadhareddy Institute Of Technology, Guntur – 522019 Guntur ---------- ----------

(57) Abstract :
Advanced Cyber Threat Detection Using AI and Image Processing Techniques The rapid evolution of cyber threats necessitates advanced detection techniques to safeguard sensitive information and maintain digital integrity. This paper explores the integration of artificial intelligence (AI) and image processing techniques to enhance cyber threat detection capabilities. AI, with its machine learning and deep learning algorithms, can analyze vast datasets to identify patterns indicative of cyber threats. By incorporating image processing techniques, the system can detect anomalies in visual data representations of network traffic and system activities. This dual approach leverages AI's predictive analytics and image processing's ability to interpret complex visual data, creating a robust framework for early threat detection. The proposed method involves training AI models on historical cyber-attack data, enabling them to recognize and respond to new, evolving threats in real-time. Image processing techniques enhance this by converting network data into visual formats, allowing the AI to detect subtle, often overlooked anomalies. The integration of these technologies not only improves detection accuracy but also reduces false positives, ensuring that security teams can focus on genuine threats. This approach provides a comprehensive defense mechanism, capable of adapting to the ever-changing cyber threat landscape.

No. of Pages : 22 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202441054903 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DETECTION OF NUMEROUS-CHEST DISEASE UTILIZING MULTI-SCALE ALIGNMENT GRAPH CAPSULE BINARY LIGHT SPECTRUM DUAL ATTENTION NEURAL NETWORK

(51) International classification	:G06N0003040000, G06N0003080000, G06T0007000000, G16H0040630000, G16H0050200000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Koneru Lakshmaiah Education Foundation_____
Address of Applicant :KL IPFC, Koneru Lakshmaiah Education Foundation (Deemed To Be University), Vaddeswaram, Guntur District, Andhra Pradesh, India. Pin Code: 522302 Guntur ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mrs. Asha Latha Thandu
Address of Applicant :Research Scholar, Department of Computer Science and Engineering, Koneru Lakshmaiah Education Foundation (Deemed To Be University), Vaddeswaram, Guntur District, Andhra Pradesh, India. Pin Code: 522302 Guntur ---------- ----------
2)Dr. Pradeepini Gera
Address of Applicant :Professor, Department of Computer Science and Engineering, Koneru Lakshmaiah Education Foundation (Deemed To Be University), Vaddeswaram, Guntur District, Andhra Pradesh, India. Pin Code: 522302 Guntur ---------- ----------

(57) Abstract :
Detection of Numerous-Chest disease utilizing Multi-Scale Alignment Graph Capsule Binary Light Spectrum Dual Attention Neural network The detection of numerous chest diseases is critical for timely and effective medical intervention. To address this need, we introduce a novel approach termed Multi-Scale Alignment Graph Capsule Binary Light Spectrum Dual Attention Neural Network (MAGCBLSDANN). This advanced neural network model integrates several state-of-the-art techniques to enhance diagnostic accuracy. The Multi-Scale Alignment (MSA) component ensures that features from different scales are coherently aligned, capturing both macro and micro-level details essential for accurate disease detection. The Graph Capsule Network (GCN) enhances spatial feature representation by modeling the relational information between different regions of the chest X-ray images. Binary Light Spectrum (BLS) analysis contributes by improving contrast and highlighting subtle abnormalities that might be missed by traditional imaging techniques. Furthermore, the Dual Attention Mechanism (DAM) integrates both channel and spatial attention modules, allowing the network to focus on the most relevant features and regions of the images. This dual attention system significantly improves the model's ability to differentiate between various chest diseases by emphasizing critical patterns. Extensive experiments on large-scale chest X-ray datasets demonstrate that MAGCBLSDANN outperforms existing methods, achieving superior accuracy.

No. of Pages : 16 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :18/07/2024

(21) Application No.202441054952 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM AND METHOD FOR REAL-TIME IMAGE CLASSIFICATION USING DEEP LEARNING ALGORITHMS

(51) International classification	:G06N0003080000, G06K0009620000, G06N0003040000, G06T0005000000, H04N0007180000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Mrs.U.Saritha

Address of Applicant :Assistant Professor, CMR Technical Campus, Hyderabad, Medchal, Telangana, India. Pin Code:501401 ---------- ----------

2)Dr.Nagagopiraju Vullam

3)Mr.Amit Ghosh

4)Mrs.Rakheeba Taseen

5)Mrs.Haseeba Yaseen

6)Mrs.Nagendram Gella

7)Dr.Alampally Sreedevi

8)Dr.Bommineedi Lakshmana Kumar

9)Mr.Karuna Kumar.V

10)Mr.Vijay Kumar Gottipati

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Mrs.U.Saritha

Address of Applicant :Assistant Professor, CMR Technical Campus, Hyderabad, Medchal, Telangana, India. Pin Code:501401 ---------- ----------

2)Dr.Nagagopiraju Vullam

Address of Applicant :Professor, Department Of CSE, Chalapathi Institute of Engineering and Technology, Guntur, Andhra Pradesh, India. Pin Code:522034 ---------- ----------

3)Mr.Amit Ghosh

Address of Applicant :Assistant Professor, Department of CSE, Vignan's Lara Institute of Technology Science, Vadlamudi, Andhra Pradesh, India. Pin Code:522213 ---------- ----------

4)Mrs.Rakheeba Taseen

Address of Applicant :Assistant Professor, School of Computer Science and Engineering, Presidency University, Bangalore, Karnataka, India. Pin Code:560064 ---------- ----------

5)Mrs.Haseeba Yaseen

Address of Applicant :Assistant Professor, Department of Information Technology, Vasavi College of Engineering, Ibrahim Bagh, Hyderabad, Telangana, India. Pin Code: 500031 ---------- ----------

6)Mrs.Nagendram Gella

Address of Applicant :Assistant Professor, Department of Information Technology and CSE (Artificial Intelligence), Narasaraopeta Engineering College (Autonomous), Narasaraopet, Palnadu District, Andhra Pradesh, India. Pin Code:522601 ---------- ----------

7)Dr.Alampally Sreedevi

Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Koneru Lakshmaiah Education Foundation, Moinabad Road, Aziznagar, Hyderabad, Telangana, India. Pin Code:500075 ---------- ----------

8)Dr.Bommineedi Lakshmana Kumar

Address of Applicant :Assistant Professor, Department of CSE, Malla Reddy Engineering College, Dulapally Road, Maisammaguda, Kompally, Rangareddy District, Secunderabad, Hyderabad, Telangana, India. Pin Code:500100 ---------- ----------

9)Mr.Karuna Kumar.V

Address of Applicant :Assistant Professor, Department of CSE, Narasaraopeta Engineering College, Narasaraopeta, Palnadu District, Andhra Pradesh, India. Pin Code:522601 ---------- ----------

10)Mr.Vijay Kumar Gottipati

Address of Applicant :Associate Professor, Department of CSE, A.M Reddy Memorial College of Engineering and Technology, Narasaraopet, Palnadu District, Andhra Pradesh, India. Pin Code:522601 ---------- ----------

(57) Abstract :

The present invention provides a system and method for real-time image classification using deep learning algorithms. The system comprises an image acquisition module, a preprocessing module, a deep learning-based classification module, and an output module. The image acquisition module captures real-time images from cameras or other image sensors. The preprocessing module enhances these images through operations such as noise reduction, contrast adjustment, normalization, and resizing. The deep learning-based classification module employs a convolutional neural network (CNN) to classify the preprocessed images accurately. The output module then displays the classification results or triggers actions based on these results, ensuring real-time responsiveness. This invention significantly improves the accuracy and speed of image classification, making it suitable for various real-time applications such as security monitoring, healthcare diagnostics, and autonomous vehicles. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 21 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202441054990 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTOMATICALLY OPERATING RAINWATER GUTTER COVER WITH LEAF GUARD AND RAINWATER FILTER

(51) International classification	:E04D0013076000, E03B0003020000, E03F0005100000, G06F0016220000, E04D0013080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)PUNCHAPPADATH SUKUMARAN SATHEESAN
Address of Applicant :KGP 11/163, PAPPAMPILLIL HOUSE, KAMBILIKANDAM, PARATHODE-IDUKKI P.O. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)PUNCHAPPADATH SUKUMARAN SATHEESAN
Address of Applicant :KGP 11/163, PAPPAMPILLIL HOUSE, KAMBILIKANDAM, PARATHODE-IDUKKI P.O. ---------- ----------

(57) Abstract :
This invention is about a system which controls rainwater gutter and its automation. The automated cover opens when rain begins and closes when the rain ends. The leaf guard prevents dried leaves and waste materials which are coming along with rainwater. The gutter cover remains closed in non-rainy seasons. This automation keeps the gutter clean and neat. Otherwise, unwanted materials like dried leaves and wooden parts enter the gutter and block the free flow of rainwater. The user should manually clean the gutter before rain begins. Along with the gutter setting a filter is manifested, by using this filter unit the user can store filtered rainwater for future use.

No. of Pages : 20 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202441055028 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AI-ENHANCED TIRE LIFE PREDICTION SYSTEM FOR OPTIMIZED DURABILITY, FUEL EFFICIENCY, AND ENVIRONMENTAL IMPACT REDUCTION

(51) International classification :G06N0020000000, B60C0001000000, G06Q0010000000, G06Q0010040000, G06F0030200000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Mr. Robin Verma
Address of Applicant :Mr. Robin Verma Independent Researcher Aparna Hights 2, Botanical Garden Road, Kondapur, Hyderabad – 500084, Telangana rvermparof@gmail.com M: 7658027096 ---------- ----------
2)Mr. Amit Verma
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr. Robin Verma
Address of Applicant :Mr. Robin Verma Independent Researcher Aparna Hights 2, Botanical Garden Road, Kondapur, Hyderabad – 500084, Telangana rvermparof@gmail.com M: 7658027096 ---------- ----------
2)Mr. Amit Verma
Address of Applicant :Mr. Amit Verma Independent Researcher 66-D, Beauty Avenue, Phase-5, Amritsar-143001, Punjab mr_amitverma@yahoo.co.in M: 8295777990 ---------- ----------

(57) Abstract :
The present invention relates to an AI-enhanced tire life prediction system designed to optimize durability, fuel efficiency, and environmental impact. The system leverages advanced data engineering techniques to collect, store, clean, and preprocess data from various tires operating under diverse weather conditions and driving environments. Machine learning algorithms are then employed to develop predictive models for tire life, continuously learning and improving their accuracy over time. Additionally, AI algorithms analyze data on rolling resistance, tread patterns, and tire composition to suggest design modifications that enhance fuel efficiency and reduce carbon emissions. This comprehensive approach embodies the vision of Product Leader Amit Verma, a pioneer in tire life cycle management, and showcases the technological expertise of the technology leader Robin Verma in utilizing cutting-edge data engineering and machine learning technologies. The invention provides a robust framework for predicting tire life, optimizing tire designs, and contributing to environmental sustainability.

No. of Pages : 18 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202441055085 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD OF CONFIGURING STEP AND INTERCEPTOR FOR A PLANING HULL

(51) International classification	:B63B0001180000, B63B0001200000, B63B0001320000, B63B0039060000, A61F0007100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)ACADEMY OF MARITIME EDUCATION AND TRAINING (AMET) DEEMED TO BE UNIVERSITY
Address of Applicant :135, Kanathur, East coast road, Chennai - 603112 Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Suneela Jangam
Address of Applicant :Department of Naval Architecture and Offshore Engineering, Academy of Maritime Education and Training, 135, Kanathur, East coast road, Chennai - 603112 Chennai ---------- ----------
2)C. Sarath Chandra Reddy
Address of Applicant :Symbiosys Technologies, IT park, Visakhapatnam - 530045 Andhra Pradesh Visakhapatnam ---------- ----------

(57) Abstract :
ABSTRACT Method of configuring step and interceptor for a planing hull comprising installing the interceptor and step configuration system for the planing hull which produces lift on the vessel and in turn reduces trim of the vessel. The said method comprises attaching an extra aft-lift for a single stepped hull and inserting a slender plate interceptor on the transom of the boat, alters the local flow close to the stern.

No. of Pages : 14 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :18/07/2024

(21) Application No.202441055088 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD AND SYSTEM FOR AUTONOMOUS DATA ANALYSIS USING ARTIFICIAL INTELLIGENCE

(51) International classification	:G06N0020000000, G06N0005040000, G06K0009620000, G06Q0010060000, G06N0007000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr. Sheetalrani R Kawale

Address of Applicant :DESIGNATION: Assistant Professor DEPARTMENT of Computer Science COLLEGE FULL NAME Karnataka State Akkamahadevi Women University, Vijayapura CITY: Vijayapura STATE: Karnataka PIN CODE: 586105 ---------- ----------

2)Dr. Shilpa K Gowda

3)Dr. SRIDHARA S.B

4)Dr. Pullela SVVSR Kumar

5)Mrs. Deepti Prasanna. Tata

6)Mrs. K. Umamaheswari

7)Mrs.A.Vinora

8)Dr.Suparna Sharma

9)AMITAVA KAR

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. Sheetalrani R Kawale

Address of Applicant :DESIGNATION: Assistant Professor DEPARTMENT of Computer Science COLLEGE FULL NAME Karnataka State Akkamahadevi Women University, Vijayapura CITY: Vijayapura STATE: Karnataka PIN CODE: 586105 ---------- ----------

2)Dr. Shilpa K Gowda

Address of Applicant :Associate professor Electronics and communication Sjb institute of technology No.67, BGS Health & Education City, Dr.Vishnuvardhan Rd, Kengeri, Bengaluru, Karnataka 560060 ---------- ----------

3)Dr. SRIDHARA S.B

Address of Applicant :Professor and HOD, Dept of Computer science and Engineering, Amruta Institute of Engineering and Management Sciences, Bidadi, Bengaluru-562109 ---------- ----------

4)Dr. Pullela SVVSR Kumar

Address of Applicant :DESIGNATION: Professor DEPARTMENT: Computer Science & Engineering COLLEGE FULL NAME : Aditya College of Engineering and Technology, Surampalem CITY: Surampalem STATE: Andhra Pradesh PIN CODE: 533437 ---------- ----------

5)Mrs. Deepti Prasanna. Tata

Address of Applicant :DESIGNATION: Asst. Prof DEPARTMENT: Electrical and Electronics Engineering COLLEGE FULL NAME : SIR C R Reddy College of Engineering CITY: Eluru STATE: Andhra Pradesh PIN CODE: 534007 ---------- ----------

6)Mrs. K. Umamaheswari

Address of Applicant :DESIGNATION: Assistant Professor DEPARTMENT: Information Technology COLLEGE FULL NAME : V.S.B. ENGINEERING COLLEGE CITY: KARUR STATE: TAMILNADU PIN CODE:639111 ---------- ----------

7)Mrs.A.Vinora

Address of Applicant :Designation: Assistant Professor Department: Information technology College name: Velammal College of Engineering and Technology, Rameshwaram road, Viraganoor, Madurai - 625009 ---------- ----------

8)Dr.Suparna Sharma

Address of Applicant :DESIGNATION: Associate Professor DEPARTMENT:Humanities COLLEGE FULL NAME :BABA FARID COLLEGE CITY:Bhatinda STATE:Punjab PIN 151002 ---------- ----------

9)AMITAVA KAR

Address of Applicant :DESIGNATION: ASSOCIATE PROFESSOR DEPARTMENT: IT COLLEGE FULL NAME : GOPAL NARAYAN SINGH UNIVERSITY CITY: SASARAM STATE: BIHAR DISTRICT: ROHTAS PIN CODE: 821305 COUNTRY : INDIA ---------- ----------

(57) Abstract :

Method and System for Autonomous Data Analysis Using Artificial Intelligence ABSTRACT The present invention relates to a method and system for autonomous data analysis using artificial intelligence (AI). The system is designed to handle large datasets from various sources, process and analyze them without human intervention, and generate actionable insights with high accuracy and efficiency. The invention comprises five key modules: Data Collection, Data Preprocessing, Model Training, Analysis, and Interface. The Data Collection module gathers data from diverse sources, ensuring real-time updates and comprehensive datasets. The Data Preprocessing module cleans and organizes the data through noise removal, normalization, and handling missing values, ensuring the data is suitable for analysis. The Model Training module employs advanced machine learning algorithms to train models on the preprocessed data, incorporating techniques such as cross-validation and hyperparameter optimization for optimal performance. The Analysis module applies the trained models to the data, generating insights through various analytical tasks, including pattern identification, anomaly detection, and trend prediction. The Interface module presents the results through interactive dashboards, reports, and visualizations, allowing users to explore and understand the insights. This invention significantly reduces the time and expertise required for data analysis, making advanced analytical tools accessible to a broader range of users and enhancing decision-making processes across multiple domains.

No. of Pages : 20 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/07/2024

(21) Application No.202441055101 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM FOR RECYCLING OF CHALK STICKS FROM UNUSED CHALK FRAGMENTS

(51) International classification	:A47J0031400000, C02F0009000000, B02C0018140000, C02F0001000000, A47J0042400000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)K.RAMAKRISHNAN COLLEGE OF ENGINEERING
Address of Applicant :The Principal, K.Ramakrishnan College of Engineering, NH-45, Samayapuram, Trichy, Tamil Nadu, India- 621112 Trichy ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr. N. R. Nagarajan
Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, K.Ramakrishnan College of Engineering, Samayapuram- 621112, India Trichy ---------- ----------
2)Mr. T. Muruganantham
Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, K.Ramakrishnan College of Engineering, Samayapuram- 621112, India Trichy ---------- ----------
3)VASUDHEVAN.G
Address of Applicant :Student, Department of Electronics and Communication Engineering, K.Ramakrishnan College of Engineering, Samayapuram- 621112, India Trichy ---------- ----------
4)SHREERAM.RR
Address of Applicant :Student, Department of Electronics and Communication Engineering, K.Ramakrishnan College of Engineering, Samayapuram- 621112, India Trichy ---------- ----------
5)MOHAMED ADHIL.M
Address of Applicant :Student, Department of Electronics and Communication Engineering, K.Ramakrishnan College of Engineering, Samayapuram- 621112, India Trichy ---------- ----------
6)PRAVEEN.A
Address of Applicant :Student, Department of Electronics and Communication Engineering, K.Ramakrishnan College of Engineering, Samayapuram- 621112, India Trichy ---------- ----------

(57) Abstract :
ABSTRACT A SYSTEM FOR RECYCLING OF CHALK STICKS FROM UNUSED CHALK FRAGMENTS The present invention discloses a system (20) for recycling of chalk sticks from unused chalk fragments to dispose the waste properly for eliminating the pollutions. The recycling system comprises a holder (11) is configured to install/hang the system at any location of the side wall for easily obtaining the chalk sticks by feeding the unused chalk fragments for recycling. The chalk collection feeder (1) is provided for feeding the unused chalk fragments on its top area without the presence of any foreign materials. The grinding chamber (2) is configured to grind the unused chalk material in uniform sized powder form using the rotation of motor and plurality of blades. The mesh screen is eliminating the impurities/large particles presence in the chalk powder. The blending chamber is configured to mix the chalk powder with water in a predefined ratio to prepare the chalk paste. The moulding chamber is configured to create the chalk sticks from the chalk paste by means of external pressure. The drying chamber (6) is configured to eliminate the moisture content from the moulded chalk sticks by means of an infrared heating element. The programmable logic control unit is configured to control and coordinate the operation of the parts/components. The human machine interface module (8) is configured to control/operate the system from one or more remote locations for supervising the facets of the recycling process. The portable system (20) will help to recycle the chalk fragments for making it as the chalk stick in an effective manner. Fig 1

No. of Pages : 25 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/07/2024
(21) Application No.202441055103 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SCREEN-PRINTED AG-DOPED MNO2 FLEXIBLE THERMOELECTRIC GENERATOR FOR BOOSTING THERMOELECTRIC OUTPUT

(51) International classification :H01L0035340000, H01L0035320000, C09D0011106000, C09D0011102000, H01L0035160000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Manipal Academy of Higher Education
Address of Applicant :Madhav Nagar, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MANASA R SHANKAR
Address of Applicant :Department of Physics, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
2)ASHWATHA NARAYANA PRABHU
Address of Applicant :Department of Physics, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
3)RAMAKRISHNA NAYAK
Address of Applicant :Department of Humanities and Management, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
4)MOHAMMAD SAQUIB
Address of Applicant :Department of Chemistry, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------

(57) Abstract :
The present disclosure discloses a method for fabricating a flexible thermoelectric generator (FTEG) for boosting thermoelectric output, which includes a flexible substrate, a thermoelectric material layer, and an electrode layer. The flexible substrate is a transparent polyester terephthalate (PET) film with a thickness of 100 µm. The thermoelectric material layer, consisting of an MnO2 compound doped with silver (Ag) and having a thickness of 0.081 mm, is deposited on the substrate. An electrode layer made of silver (Ag) is applied on top using a screen printing technique. This process involves coating the ink onto a mesh-like stencil with a 120/cm mesh count and pressing a squeegee to create a thin, uniform layer. The ink, prepared by dissolving 20% cellulose acetate propionate (CAP) in 80% dimethylformamide (DMF) solvent, includes multiple overprints of MnO2 and Ag-doped MnO2 inks with an optimal viscosity range of 996-1273 cP.

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/07/2024
(21) Application No.202441055105 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : INDEX MODULATION BASED ON PILOT LOCATION FOR AN ORTHOGONAL TIME FREQUENCY SPACE BASED DUAL FUNCTION RADAR AND COMMUNICATION SYSTEM

(51) International classification :H04L27/00, H04B7/06
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Indian Institute of Science
Address of Applicant :C V Raman Road, Bangalore – 560012, Karnataka, India. Bangalore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)KUMAR, Ajay
Address of Applicant :SP1.05, Signal Processing Building, ECE department, Indian Institute of Science, C V Raman Road, Bangalore - 560012, Karnataka, India. Bangalore ---------- ----------
2)MAJHI, Sudhan
Address of Applicant :SP1.05, Signal Processing Building, ECE department, Indian Institute of Science, C V Raman Road, Bangalore - 560012, Karnataka, India. Bangalore ---------- ----------

(57) Abstract :
Embodiments of the present disclosure relate to a method and system for transmitting data over a communication network, and especially governed at the transmitter end by receiving information bits sequence from an information source, splitting the information bits received into two streams, the first stream including information symbols and the second stream including pilot symbols, selecting location of pilot symbols in an OTFS grid associated with the second stream, inserting pilot symbols at the selected location in the OTFS grid associated with the second strea, combining information symbols from the first stream and pilot symbols from the second stream forming the complete grid, converting the symbols to a time domain and transmitting the signals to a destination over a communication network..

No. of Pages : 18 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/07/2024
(21) Application No.202441055106 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : NANOPARTICULATE DRUG DELIVERY SYSTEM LOADED WITH FLUOROQUINOLONE ANTIBIOTICS, AND A METHOD OF PREPARATION THEREOF

(51) International classification :A61K0009127000, A61K0031470900, A61K0009000000, A61P0031040000, A61K0047690000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Manipal Academy of Higher Education
Address of Applicant :Madhav Nagar, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)JESIL MATHEW A
Address of Applicant :Department of Pharmaceutical Biotechnology, Manipal College of Pharmaceutical Sciences, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
2)NABEEL ABDULRAHMAN
Address of Applicant :Department of Pharmaceutical Biotechnology, Manipal College of Pharmaceutical Sciences, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
3)ATULYA M
Address of Applicant :Department of Pharmaceutical Biotechnology, Manipal College of Pharmaceutical Sciences, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
4)RAFWANA IBRAHIM
Address of Applicant :Department of Pharmaceutical Biotechnology, Manipal College of Pharmaceutical Sciences, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------

(57) Abstract :
The present invention relates to a nanoparticulate drug delivery system comprising fluoroquinolone antibiotics. Specifically, the present invention also relates to nano-liposomes comprising a lipid bilayer having a surface and a core prepared using phosphatidylcholine, and cholesterol, wherein the fluoroquinolone antibiotics Moxifloxacin and/or Gemifloxacin are loaded inside the core of the nano-liposomes.

No. of Pages : 25 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :19/07/2024

(21) Application No.202441055118 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : AI-DRIVEN AUTONOMOUS NETWORK MANAGEMENT AND OPTIMIZATION FOR WIRELESS NETWORKS

(51) International classification	:G06N0020000000, G06N0003080000, G06N0007000000, G06N0005040000, H04W0072040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Chinnaiahgari Silpa

Address of Applicant :Associate Professor Department of Electronics and Communication Engineering, Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally),Medchal-Malkajgiri-500100. State:Telangana Email ID:srsilpavasu@gmail.com Number:9490421721 Secunderabad ---------- ----------

2)Malla Reddy Engineering College

3)Dr.A.Vani

4)Dr.B.Anitha

5)Dr.P.Anitha

6)Leelavathi Rudraksha

7)Supraja Veerabomma

8)Aruna Valasa

9)Dr.B.Mythily Devi

10)N.V.K. Mahalakshmi

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Chinnaiahgari Silpa

Address of Applicant :Associate Professor Department of Electronics and Communication Engineering, Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally),Medchal-Malkajgiri-500100. State:Telangana Email ID:srsilpavasu@gmail.com Number:9490421721 Secunderabad ---------- ----------

2)Malla Reddy Engineering College

Address of Applicant :Malla Reddy Engineering College Dhulapally post via Kompally Maisammaguda Secunderabad -500100 Secunderabad ---------- ----------

3)Dr.A.Vani

Address of Applicant :Assistant Professor Department of Electronics and Communication Engineering Chaitanya Bharathi Institute of Technology,Hyderabad-500075 State:Telangana Email ID: avani_ece@cbit.ac.in Number:9440079310 hyderabad ---------- ----------

4)Dr.B.Anitha

Address of Applicant :Associate Professor Department of Electronics and Communication Engineering Gurunanak Institutions Technical Campus, Hyderabad-501506, State: Telangana Email ID: anitha.shanala@gmail.com Number: 8374659596 Hyderabad ---------- ----------

5)Dr.P.Anitha

Address of Applicant :Associate professor Department of DS & IT Malla Reddy University, Hyderabad-500100 State:Telangana Email ID: anithakrishna77p@gmail.com Number:8712831094 Secunderabad ---------- ----------

6)Leelavathi Rudraksha

Address of Applicant :Assistant Professor Department of Electronics and Communication Engineering Vasavi College of Engineering, Hyderabad - 500031 State: Telangana Email ID: r.leelavathi@staff.vce.ac.in Number:8143672172 Hyderabad ---------- ----------

7)Supraja Veerabomma

Address of Applicant :Assistant Professor Department of Electronics and Communication Engineering G.pullaiah College of Engineering and Technology Kurnool - 518002 State: Andhra Pradesh Assistant Professor Email ID: suprajaece10@gmail.com Number: 9440973020 Kurnool ---------- ----------

8)Aruna Valasa

Address of Applicant :Assistant Professor Department of Electronics and Communication Engineering Vasavi College of Engineering, Hyderabad - 500031 State: Telangana Email ID: v.aruna@ staff.vce.ac.in Number: 9701797479 hyderabad ---------- ----------

9)Dr.B.Mythily Devi

Address of Applicant :Assistant Professor Department of Electronics and Communication Engineering Gurunanak Institutions Technical Campus, Hyderabad-501506, State: Telangana Email ID: m4mythily@gmail.com Number: 8985858946 Hyderabad ---------- ----------

10)N.V.K. Mahalakshmi

Address of Applicant :Assistant Professor Department of Electronics and Communication Engineering, Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally),Medchal-Malkajgiri-500100. State:Telangana Email ID: mahalakshminvk.nvk@gmail.com Number:Assistant Professor Department of Electronics and Communication Engineering, Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally),Medchal-Malkajgiri-500100. State:Telangana Email ID: mahalakshminvk.nvk@gmail.com Number:9440820273 Secunderabd ---------- ----------

(57) Abstract :

ABSTRACT The exponential growth in wireless communications necessitates advanced management and optimization techniques to handle the increasing complexity and demands of modern networks. This research proposes an AI-driven autonomous network management and optimization framework for wireless networks, aimed at enhancing performance, reliability, and user experience. The system leverages cutting-edge Artificial Intelligence (AI) techniques, including machine learning and deep learning, to automate network configuration, dynamic resource allocation, fault detection, and recovery processes. By employing real-time data processing and adaptive algorithms, the framework ensures optimal utilization of network resources, reduces latency, and maximizes throughput. Key components include AI models for predictive maintenance, user behavior analysis, and security threat mitigation, which collectively contribute to a resilient and secure network infrastructure. The proposed solution is designed to be scalable, interoperable with existing and future network technologies, and compliant with regulatory standards. Extensive testing in both simulated and real-world environments demonstrates the system's capability to autonomously manage network operations, providing significant improvements in energy efficiency, fault recovery times, and overall Quality of Service (QoS). This AI-driven approach represents a transformative advancement in the field of wireless communications, offering a robust solution to meet the evolving challenges and demands of next-generation networks.

No. of Pages : 9 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/07/2024
(21) Application No.202441055132 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MACHINE LEARNING MODEL FOR FINANCIAL RISK ASSESSMENT

(51) International classification :G06N0020000000, G06Q0040020000, G06Q0010060000, G06Q0040060000, G06N0003080000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Raghupathi Thota
Address of Applicant :Raghupathi Thota Staff software engineer Charles Schwab , U.S raghupathi1240@gmail.com +1(816)908-7845 ---------- ----------
2)Dr. Piyush Kumar Pareek
3)Nitte Meenakshi Institute of Technology
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Raghupathi Thota
Address of Applicant :Raghupathi Thota Staff software engineer Charles Schwab , U.S raghupathi1240@gmail.com +1(816)908-7845 ---------- ----------
2)Dr. Piyush Kumar Pareek
Address of Applicant :Dr. Piyush Kumar Pareek, Professor and Head (AI-ML & IPR CELL), Nitte Meenakshi Institute of Technology, Yelahanka, Bengaluru-560064, Karnataka, India 7022574966 piyushkumarpareek88@gmail.com ---------- ----------
3)Nitte Meenakshi Institute of Technology
Address of Applicant :Nitte Meenakshi Institute of Technology, Yelahanka, Bengaluru-560064, Karnataka, India 7022574966 piyushkumarpareek88@gmail.com ---------- ----------

(57) Abstract :
Abstract of the Invention Title: Machine Learning Model for Financial Risk Assessment The invention relates to a machine learning model designed to assess financial risk by analyzing financial data, including market trends and company performance. The system comprises: • a data collection module for interfacing with various financial data providers to collect real-time and historical financial data, including market trends and company performance metrics; • a data preprocessing module for ensuring the accuracy and consistency of the collected data by removing anomalies and extracting relevant features for analysis; • a machine learning engine that includes supervised learning models, unsupervised learning models, and reinforcement learning models for analyzing financial data, predicting risk levels, and optimizing risk assessment strategies; • a strategy development module for creating and testing various risk assessment strategies using historical data and evaluating their performance; • a decision-making module for converting insights from the machine learning engine into actionable risk scores and investment recommendations, and applying risk management techniques; • a user interface module for providing users with a comprehensive view of system performance, risk scores, and investment recommendations, along with customization options; • a security and compliance module for ensuring secure access to the system and compliance with relevant regulations; • an integration module for providing interfaces to integrate the risk assessment system with other financial tools and platforms. The present invention ensures continuous learning from financial data, dynamic adaptation of risk assessment strategies, efficient data processing, robust security, and compliance, thereby optimizing the accuracy and reliability of financial risk assessment and investment recommendations.

No. of Pages : 13 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/07/2024
(21) Application No.202441055133 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTOMATED TRADING SYSTEM BASED ON MACHINE LEARNING

(51) International classification	:G06Q0040040000, G06N0020000000, G06Q0040060000, G06N0003080000, G06Q0040020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Raghupathi Thota
Address of Applicant :Raghupathi Thota Staff software engineer Charles Schwab , U.S raghupathi1240@gmail.com +1(816)908-7845 ---------- ----------
2)Dr. Piyush Kumar Pareek
3)Nitte Meenakshi Institute of Technology, Bengaluru
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Raghupathi Thota
Address of Applicant :Raghupathi Thota Staff software engineer Charles Schwab , U.S raghupathi1240@gmail.com +1(816)908-7845 ---------- ----------
2)Dr. Piyush Kumar Pareek
Address of Applicant :Dr. Piyush Kumar Pareek, Professor and Head (AI-ML & IPR CELL), Nitte Meenakshi Institute of Technology, Yelahanka, Bengaluru-560064, Karnataka, India 7022574966 piyushkumarpareek88@gmail.com ---------- ----------
3)Nitte Meenakshi Institute of Technology, Bengaluru
Address of Applicant :Nitte Meenakshi Institute of Technology, Yelahanka, Bengaluru-560064, Karnataka, India 7022574966 piyushkumarpareek88@gmail.com ---------- ----------

(57) Abstract :
Abstract of the Invention The invention relates to an advanced automated trading system that leverages machine learning algorithms to analyze market data, execute trades, and adapt trading strategies in real-time to optimize trading performance. The system comprises of: • a data collection module for interfacing with various market data providers to collect real-time and historical market data, including prices, volumes, and other relevant financial metrics; • a data preprocessing module for ensuring the accuracy and consistency of the collected data by removing anomalies and extracting relevant features for analysis; • a machine learning engine that includes supervised learning models, unsupervised learning models, and reinforcement learning models for analyzing market data, predicting price movements, and optimizing trading strategies; • a strategy development module for creating and testing various trading strategies using historical data and evaluating their performance; • a decision-making module for converting insights from the machine learning engine into actionable trading signals and applying risk management techniques; • a trade execution module for managing the execution of trades based on generated signals and optimizing trade execution; • a monitoring and adaptation module for continuously monitoring market conditions and system performance, providing real-time analytics and adjusting strategies dynamically; • a user interface module for providing users with a comprehensive view of system performance, trading activities, and customization options; • a security and compliance module for ensuring secure access to the system and compliance with relevant regulations; • an integration module for providing interfaces to integrate the trading system with other financial tools and platforms. The present invention ensures continuous learning from market trends, dynamic strategy adaptation, efficient trade execution, robust risk management, and comprehensive user interaction, thereby optimizing trading performance and maximizing returns.

No. of Pages : 24 No. of Claims : 5

5
5
(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :19/07/2024

(21) Application No.202441055143 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : HIGH-PERFORMANCE AQUEOUS ZINC-ION BATTERIES USING MOF MATERIALS

(51) International classification	:H01M0004380000, H01G0011360000, H01M0010054000, B01J0031160000, G06Q0020400000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Malla Reddy Engineering College
Address of Applicant :Malla Reddy Engineering College Dhulapally post via Kompally Maisammaguda Secunderabad -500100 Secunderabad ---------- ----------
2)I. Yamini Saraswathi
3)CH.GIRIDHAR
4)Soumi Laha
5)S. Chandrasekhar
6)Pandu Naidu Chilla
7)Saik Rafi
8)Raja Reddy Duvvuru
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Malla Reddy Engineering College
Address of Applicant :Malla Reddy Engineering College Dhulapally post via Kompally Maisammaguda Secunderabad -500100 Secunderabad ---------- ----------
2)I. Yamini Saraswathi
Address of Applicant :Assistant professor Chemistry Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telengana Email ID & Contact Number: yaminipratap.dasari@gmail.com & 9014520481 Secunderabad ---------- ----------
3)CH.GIRIDHAR
Address of Applicant :Associate professor Chemistry department Mallareddy Engineering College Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telengana Email ID & Contact Number: giridharsvu@gmail.com & 9502957627 Secunderabad ---------- ----------
4)Soumi Laha
Address of Applicant :Associate Professor Chemistry Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State:Telangana Email ID & Contact Number:soumilaha@mrec.ac.in & 9440523248 Secunderabad ---------- ----------
5)S. Chandrasekhar
Address of Applicant :Assistant Professor Chemistry Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State:Telangana Email ID & Contact Number:somsole.chandra@gmail.com & 9550698874 Secunderabad ---------- ----------
6)Pandu Naidu Chilla
Address of Applicant :Assistant Professor Department of chemistry Rajiv Gandhi University of Knowledge Technologies Srikakulam State: Andhra Pradesh Email ID & Contact Number: andunaiduch@gmail.com & 9948631732 Srikakulam ---------- ----------
7)Saik Rafi
Address of Applicant :Associate Professor Electrical and Electronics Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number:tejche786@gmail.com & 9398299383 Secunderabad ---------- ----------
8)Raja Reddy Duvvuru
Address of Applicant :Associate Professor Electrical and Electronics Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State:Telangana Email ID & Contact Number:drreddy@mrec.ac.in & 8331847201 Secunderabad ---------- ----------

(57) Abstract :
The invention of high-performance aqueous zinc-ion batteries (ZIBs) using metal-organic framework (MOF) materials presents a transformative approach to energy storage, addressing critical limitations of existing technologies. This innovation leverages the unique properties of MOFs—such as high surface area, tunable porosity, and chemical stability—to enhance the electrochemical performance of ZIBs. The primary objectives include increasing energy density and capacity, improving cycle life and stability, enabling fast charge-discharge rates, and ensuring safety and environmental friendliness. MOF-based ZIBs promise significant advantages in various applications, including consumer electronics, electric vehicles, grid energy storage, industrial power backup, portable power banks, telecommunications infrastructure, wearable technology, military and aerospace applications, IoT devices, medical devices, and renewable energy systems. This comprehensive approach involves optimized synthesis and selection of MOFs, innovative electrode design, advanced electrolyte development, thorough characterization and testing, and scalable production methods. The result is a new generation of batteries that offer superior performance, cost-effectiveness, and sustainability, paving the way for widespread commercial adoption and contributing to the advancement of modern energy storage solutions.

No. of Pages : 8 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/07/2024
(21) Application No.202441055161 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MACHINE LEARNING IN FINANCE: PREDICTING STOCK MARKET TRENDS

(51) International classification :G06K0009620000, G06N0020000000, G06Q0040040000, G06F0040300000, G06N0005040000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr D Hemanath
Address of Applicant :Assistant Professor, Department of MBA, Bharat Institute of Engineering and Technology, Hyderabad, Telangana, India. Hyderabad ---------- ----------
2)M.Ramu
3)Dr. Kawerinder Singh Sidhu
4)Durga Prasad Singh Samanta
5)D N Murali Krishna Rao
6)Pankaj Kunekar
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr D Hemanath
Address of Applicant :Assistant Professor, Department of MBA, Bharat Institute of Engineering and Technology, Hyderabad, Telangana, India. Hyderabad ---------- ----------
2)M.Ramu
Address of Applicant :Assistant Professor, Department of Management Studies, VFSTR Deemed to be University, Vadlamudi, Guntur, Andhra Pradesh, India. Guntur ---------- ----------
3)Dr. Kawerinder Singh Sidhu
Address of Applicant :Assistant Professor, UIM, Uttaranchal University, Dehradun (Uttarakhand), India. Dehradun ---------- ----------
4)Durga Prasad Singh Samanta
Address of Applicant :Assistant Professor, Department of Amity Business School, Amity University, Bengaluru, Karnataka, India. Bengaluru ---------- ----------
5)D N Murali Krishna Rao
Address of Applicant :Research Scholar, Jawaharlal Nehru Technological University, Hyderabad, Telangana, India. Hyderabad ---------- ----------
6)Pankaj Kunekar
Address of Applicant :Assistant Professor, Department of Information Technology, Vishwakarma Institute of Technology, Pune, Maharashtra, India. Pune ---------- ----------

(57) Abstract :
Machine Learning in Finance: Predicting Stock Market Trends ABSTRACT It is becoming an increasingly common practice to use Machine Learning (ML) and Sentiment Analysis (SA) to the data that is obtained from microblogging services. The purpose of this tactic is to develop forecasts regarding the stock market by utilizing the information that is gathered from these websites. Through the utilization of data obtained from StockTwits and SA on Twitter, the objective of this invention was to construct a model that can accurately predict the movement of share prices. In the course of working on this project, this model was completed. We were able to analyze and validate this strategy by applying it to Microsoft stock by using data on price movement and sentiment. To ensure that the strategy was successful, this was done to guarantee its success. We obtained tweets from Twitter and StockTwits, in addition to financial data from Yahoo Finance, to fulfill the aim of assembling our findings. Seven distinct machine-learning classification models were ultimately developed to analyze tweets. SA was utilized to accomplish this. During this investigation, the models that were utilized were K-Nearest Neighbours (KNN), Support Vector Machine (SVM), Logistic Regression (LR), Naïve Bayes (NB), Decision Tree (DT), Random Forest (RF), and Multilayer Perceptron (MLP). The primary distinguishing characteristic of this work is that it incorporates the retrieval of additional variables from social media, including public emotion, to improve the accuracy of stock prediction. In addition to combining a variety of various machine learning and statistical analysis methods, it places a particular emphasis on the retrieval of these features. It was determined that the valence-aware dictionary Reasoner (VADER) and Support Vector Machine (SVM) were the most effective tools for analyzing tweets. The results of this invention were the most advantageous. 76.3% was the highest conceivable F-score, while 67% was the highest possible Area Under Curve (AUC) value. Both of these numbers were attainable. These are the highest possible numbers that might be considered.

No. of Pages : 11 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/07/2024
(21) Application No.202441055164 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : NOVEL APPROACH TO STUDY THE PLASTIC DEFORMATION BEHAVIOUR OF MATERIALS

(51) International classification	:G06F0030230000, G01N0003420000, G06F0030200000, E21B0047000000, E21B0049000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. B.Sridhar Babu
Address of Applicant :Professor Mechanical Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Medchal-Malkajgiri-500100. State:Telangana Email ID & Contact Number:bsridhar8477@gmail.com& 9247969234 Secunderabad ---------- ----------
2)Malla Reddy Engineering College
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. B.Sridhar Babu
Address of Applicant :Professor Mechanical Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Medchal-Malkajgiri-500100. State:Telangana Email ID & Contact Number:bsridhar8477@gmail.com& 9247969234 Secunderabad ---------- ----------
2)Dr K Chandra Shekar
Address of Applicant :Professor Vignan Institute of technology and science, Deshmukhi, Near Ramoji film city, Hyderabad-508284 State: Telangana Email ID & Contact Number: kcschandra2003@gmail.com& 9849505037 Hyderabad ---------- ----------
3)Dr Harinadh Vemanaboina
Address of Applicant :Associate Professor Mechanical Engineering Dept., VEMU institute of Technology, Chittoor-517112 State: Andhra Pradesh Email ID & Contact Number: harinadhvh@gmail.com 8555869687 Chittoor ---------- ----------
4)Mrs M Radhika
Address of Applicant :Assistant Professor Department of Mechanical Engineering, Vignan Institute of technology and science, Deshmukhi, Near Ramoji film city, Hyderabad-508284 State: Telangana Email ID & Contact Number: mandalaradhika77@gmail.com,9440510372 Hyderabad ---------- ----------
5)Ms Polepalli Madhavi
Address of Applicant :Assistant Professor Department of Mechanical Engineering, Vignan Institute of technology and science, Deshmukhi, Near Ramoji film city, Hyderabad-508284 State: Telangana Email ID & Contact Number:madhavipolepalli569@gmail.com,9948255283 Hyderabad ---------- ----------

(57) Abstract :
Abstract A numerical analysis of spherical indentation was conducted to study the temperature dependence (300-673K) of the constraint factor (CF) in Ti-6Al-4V and Haynes alloy. Plastic properties, including flow stress and strain hardening exponent, were determined from load versus indenter penetration depth profiles generated using a finite element (FE) model and Dao's reverse analysis approach. The upward flow around the residual impression, as a function of average strain, which describes the strain hardening behavior of the alloy, was also investigated. Simulated CF values were used to predict high strain-rate plastic flow behavior, taking dynamic indentation data into account. A strong correlation was found between the simulation data and experimental results reported in the literature. The FE model developed in this study can be applied to simulate the flow behavior of metallic materials.

No. of Pages : 5 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/07/2024

(21) Application No.202441055169 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AIR QUALITY MONITORING SYSTEM (AQMS)

(51) International classification	:F24F0110700000, G01N0033000000, A61B0005110000, F24F0110660000, G01N0015060000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Chennai Institute of Technology
Address of Applicant :Sarathy Nagar, Kundrathur, Chennai-600069, Tamil Nadu, India. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. V. Dhinakaran
Address of Applicant :Chennai Institute of Technology, Sarathy Nagar, Kundrathur, Chennai-600069 Chennai ---------- ----------
2)P. Pradeep Castro
Address of Applicant :Chennai Institute of Technology, Sarathy Nagar, Kundrathur, Chennai-600069 Chennai ---------- ----------
3)V. Murugan
Address of Applicant :Chennai Institute of Technology, Sarathy Nagar, Kundrathur, Chennai-600069 Chennai ---------- ----------
4)Anzer Akzen S
Address of Applicant :Chennai Institute of Technology, Sarathy Nagar, Kundrathur, Chennai-600069 Chennai ---------- ----------

(57) Abstract :
ABSTRACT AIR QUALITY MONITORING SYSTEM (AQMS) A System for managing air quality includes a sensor (101) integrated with a microcontroller (102) to receive data on various air quality parameters in a given environment. It predicts adverse air quality events based on this data and provides an alert to indicate the environment quality score. This score is determined using at least a portion of the collected sensor data. Fig.1A

No. of Pages : 19 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/07/2024
(21) Application No.202441055170 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM AND METHOD FOR SECURE DATA PROCESSING USING HOMOMORPHIC ENCRYPTION TECHNIQUES

(51) International classification	:H04L0009000000, G06F0021620000, H04L0009080000, G06F0021600000, G09C0001000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Sreenivasulu Reddy L
Address of Applicant :Associate Professor, Department of Mathematics, School of Advanced Sciences, Kalasalingam Academy of Research and Education, Krishnankoil, Tamilnadu, India, Pincode 626126 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Sreenivasulu Reddy L
Address of Applicant :Associate Professor, Department of Mathematics, School of Advanced Sciences, Kalasalingam Academy of Research and Education, Krishnankoil, Tamilnadu, India, Pincode 626126 ---------- ----------

(57) Abstract :
The present invention relates to a system and method for secure data processing using homomorphic encryption techniques. The system includes a homomorphic encryption module that encrypts input data, a secure computation module that performs operations on the encrypted data without decryption, and a decryption module that decrypts the processed encrypted data to yield the final result. Additionally, an optimization module is included to enhance the efficiency and performance of homomorphic encryption operations. This method ensures data privacy and security by allowing computations on encrypted data, thus mitigating the risks associated with traditional decryption methods during data processing. The invention is particularly suitable for applications in cloud computing, financial services, and healthcare where data security is paramount. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 20 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/07/2024
(21) Application No.202441055194 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ILLUMINATED SURGICAL BLADE WITH INTEGRATED LIGHTING SYSTEM AND METHOD THEREOF

(51) International classification :A61B0090300000, A61B0017000000, F21V0023040000, A61B0005000000, A61B0001060000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. NAIR KARTHIKA SURESHKUMAR
Address of Applicant :A B SHETTY MEMORIAL INSTITUTE OF DENTAL SCIENCES, NITTE DEEMED TO BE UNIVERSITY, 6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 Udupi ---------- ----------
2)PROF (DR.) AMITHA RAMESH
Address of Applicant :A B SHETTY MEMORIAL INSTITUTE OF DENTAL SCIENCES, NITTE DEEMED TO BE UNIVERSITY, 6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 Udupi ---------- ----------

(57) Abstract :
Disclosed herein is an illuminated surgical blade with integrated lighting system and method thereof (100) that comprises a a surgical blade (102) configured to make incisions in biological tissue. The system (100) includes a light source (104) integrated within the surgical blade (102), wherein the light source (104) ensures consistent and shadow-free illumination a power supply (108) configured to provide energy to the light source (104). The system (100) also includes a control unit (112) configured to regulate the intensity and duration of the illumination provided by the light source (104), wherein the control unit (112) optimizes the lighting conditions in real-time based on feedback from sensors (114) monitoring the surgical environment.

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/07/2024
(21) Application No.202441055214 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : UNDERWATER POLLUTION TRACKING SENSORS BASED DEVICES

(51) International classification :H04W0084180000, G03G0015000000, H04W0004380000, G16B0005000000, H04L0041140000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dayananda Sagar College of Engineering
Address of Applicant :Kumaraswamy Layout, Bengaluru - 560111, Karnataka, India Bengaluru ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Arpita Paul Chowdhury
Address of Applicant :Assistant Professor, Department of Chemistry, Dayananda Sagar College of Engineering, Kumaraswamy Layout, Bengaluru - 560111, Karnataka, India Bengaluru ---------- ----------
2)Dr. K. Keshavamurthy
Address of Applicant :Assistant Professor, Department of Physics, Dayananda Sagar College of Engineering, Kumaraswamy Layout, Bengaluru - 560111, Karnataka, India Bengaluru ---------- ----------
3)Dr. Dinamani M
Address of Applicant :Associate Professor, Department of Chemistry, Dayananda Sagar College of Engineering, Kumaraswamy Layout, Bengaluru - 560111, Karnataka, India Bengaluru ---------- ----------
4)Dr. H. N. Sowmya
Address of Applicant :Associate Professor, Department of Civil Engineering, Dayananda Sagar College of Engineering, Kumaraswamy Layout, Bengaluru - 560111, Karnataka, India Bengaluru ---------- ----------
5)Dr. Vidya G
Address of Applicant :Assistant Professor, Department of Chemistry, Dayananda Sagar College of Engineering, Kumaraswamy Layout, Bengaluru - 560111, Karnataka, India Bengaluru ---------- ----------
6)Dr. Neethu Urs
Address of Applicant :Professor, Department of Civil Engineering, Dayananda Sagar College of Engineering, Kumaraswamy Layout, Bengaluru - 560111, Karnataka, India Bengaluru ---------- ----------
7)Dr. Reshma E K
Address of Applicant :Assistant Professor, Department of Civil Engineering, Dayananda Sagar College of Engineering, Kumaraswamy Layout, Bengaluru - 560111, Karnataka, India Bengaluru ---------- ----------
8)Mrs. Meghashree M
Address of Applicant :Assistant Professor, Department of Civil Engineering, Dayananda Sagar College of Engineering, Kumaraswamy Layout, Bengaluru - 560111, Karnataka, India Bengaluru ---------- ----------

(57) Abstract :
Wireless Sensor Networks (WSNs) are crucial in various applications and the development of new-generation technology. In 5G technology, a key feature is the connectivity with registered and unregistered networks, enabling remote automation and diverse applications such as motion detection and object tracking. This work proposes an underwater object tracking technique to predict the movement of a mobile sensor node. A simulation demonstrates a 2D-UASN architecture with randomly positioned static sensor nodes and a mobile sensor node with random mobility. Statistical analysis is used to predict the node's next position. Experiments measure the predictive accuracy in two scenarios: varying the number of nodes in a fixed 1000x1000 area, and varying the simulation area with a fixed number of nodes. Results show that in large areas with low node density, detection accuracy is significantly lower compared to dense networks. The trend from dense to less dense areas shows a decreasing prediction accuracy.

No. of Pages : 17 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :20/07/2024
(21) Application No.202441055445 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ENHANCED VORICONAZOLE ANALYSIS THROUGH FE³? COMPLEXATION USING UV-VISIBLE SPECTROPHOTOMETRY

(51) International classification :G01N0021330000, G01N0030020000, G01N0021310000, A61P0031100000, C09K0011560000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Naga Raju
Address of Applicant :Sir C R Reddy College of Pharmaceutical Sciences ---------- ----------
2)Yamuna Sankranthi
3)Sravani Koralla
4)Mrudula raj Vanga
5)Kotte Raju
6)Jajili Eluru
7)K Shailaja
8)M Tulasi Maheswari Chitti
9)Rakurthi J S D Pavan Kumar
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Naga Raju
Address of Applicant :Sir C R Reddy College of Pharmaceutical Sciences ---------- ----------
2)Yamuna Sankranthi
Address of Applicant :Sir C. R. Reddy College of Pharmaceutical Sciences Eluru -- --------- ----------
3)Sravani Koralla
Address of Applicant :Sir C. R. Reddy College of Pharmaceutical sciences Eluru -- --------- ----------
4)Mrudula raj Vanga
Address of Applicant :Sir C. R. Reddy college of Pharmaceutical Sciences Eluru -- --------- ----------
5)Kotte Raju
Address of Applicant :Sir C. R. Reddy college of Pharmaceutical Sciences Eluru -- --------- ----------
6)Jajili Eluru
Address of Applicant :Sir C. R. Reddy college of Pharmaceutical Sciences Eluru -- --------- ----------
7)K Shailaja
Address of Applicant :Sir C. R. Reddy college of Pharmaceutical Sciences Eluru -- --------- ----------
8)M Tulasi Maheswari Chitti
Address of Applicant :Sir C. R. Reddy college of Pharmaceutical Sciences Eluru -- --------- ----------
9)Rakurthi J S D Pavan Kumar
Address of Applicant :Sir C. R. Reddy college of Pharmaceutical Sciences Eluru -- --------- ----------

(57) Abstract :
Abstract: This study presents a novel, sensitive, and cost-effective method for the quantitative determination of Voriconazole, an antifungal drug, using Ultraviolet-Visible (UV-Vis) spectrophotometry in conjunction with Fe³? complexation. Current methods, such as High-Performance Liquid Chromatography (HPLC), are both expensive and time-consuming, while existing UV-Vis techniques often lack the necessary sensitivity. The proposed method involves forming a colored complex between Voriconazole and Fe³? ions, which exhibits maximum absorbance at 510 nm. A series of standard Voriconazole solutions were prepared to construct a calibration curve. The absorbance of unknown samples was measured post-complexation, and their Voriconazole concentrations were estimated using the calibration curve. The method demonstrates high sensitivity with a Beer's law limit of 1-5 µg/ml, good accuracy and precision with recoveries above 100%, and %RSD below 2%. It is applicable to various sample matrices with minimal interference, making it an excellent alternative to more cumbersome and costly techniques. This method provides a reliable and efficient solution for Voriconazole analysis in diverse samples, including pharmaceutical formulations, biological fluids, and food products.

No. of Pages : 5 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :20/07/2024
(21) Application No.202441055459 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DEVICE AND METHOD FOR SHORT CIRCUIT PROTECTION OF BATTERY PACK

(51) International classification	:H01M0050200000, H01M0050240000, H01M0010420000, B60L0003000000, H01M0010613000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)JAMUNA THUMMALA
Address of Applicant :37, Teeswater way, Milton Keynes, MK8 1BF, United Kingdom ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)JAMUNA THUMMALA
Address of Applicant :37, Teeswater way, Milton Keynes, MK8 1BF, United Kingdom ---------- ----------

(57) Abstract :
ABSTRACT DEVICE AND METHOD FOR SHORT CIRCUIT PROTECTION OF BATTERY PACK The present disclosure relates to an electrical disconnect device (100) and method aimed at enhancing the safety and reliability of battery packs (110) utilised in electric vehicles and energy storage systems. The electrical disconnect device (100) and the method (200) protects the battery pack (110) from an internal short circuit caused by leaked coolant or water intrusion into a battery housing. The electrical disconnect device (100) internally disconnects the series connection of battery cells (102) inside a battery pack (110) to protect the battery cells (102) from abusive currents caused by conductive liquids like flood water or battery coolant. The electrical disconnect device (100) is activated when wetness is detected inside the battery housing and protects the battery cells (102) from entering into a thermally hazardous event by significantly reducing the magnitude of fault current.

No. of Pages : 23 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :20/07/2024
(21) Application No.202441055466 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : VEHICLE MONITORING SYSTEM

(51) International classification :G06Q0030020000, H04N0007180000, G08B0013196000, G08B0021020000, B60Q0009000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MRS. NIJU RAJAN
Address of Applicant :DEPT. OF ECE, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE-574110, KARNATAKA, INDIA Udupi ---------- ----------
2)DR. DURGA PRASAD
Address of Applicant :DEPT. OF ECE, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE-574110, KARNATAKA, INDIA Udupi ---------- ----------
3)MR. KIRAN NAIK
Address of Applicant :DEPT. OF ECE, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE-574110, KARNATAKA, INDIA Udupi ---------- ----------
4)MR. PRASAD
Address of Applicant :DEPT. OF ECE, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE-574110, KARNATAKA, INDIA Udupi ---------- ----------
5)MR. LIKHIL K S
Address of Applicant :DEPT. OF ECE, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE-574110, KARNATAKA, INDIA Udupi ---------- ----------
6)MS. DHANALAXMI
Address of Applicant :DEPT. OF ECE, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE-574110, KARNATAKA, INDIA Udupi ---------- ----------

(57) Abstract :
Disclosed herein is a vehicle monitoring system (100) for safety and surveillance in the automotive industry comprising an ESPCAM(102) module configured to perform real-time face detection for identifying the vehicle driver and an ESP32 module (104) configured to control a GSM communication module (106) and a control unit configured to continuously scan for the presence of the driver's face using the ESPCAM module (102) to trigger an alert if the driver's face is not detected and then transmit an alert message to a registered owner via the GSM communication module (106) and an ignition switch (110) configured to start the vehicle monitoring system (100)and a buzzer (108) configured to give the alarm and lastly a notification module (112) configured to receive the alert message from the control unit and notify the registered owner of any detected security breach or suspicious activity.

No. of Pages : 23 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :20/07/2024
(21) Application No.202441055467 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : PRECISION PAYLOAD RELEASE SYSTEM FOR MULTIROTOR DRONES

(51) International classification	:B64C0039020000, G05D0001000000, G01C0023000000, A63H0027000000, B64C0027080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. VEERESHA R K
Address of Applicant :ROBOTICS AND ARTIFICIAL INTELLIGENCE, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA udupi ---------- ----------
2)MRS. SHILPA KAREGOUDRA
Address of Applicant :COMPUTER SCIENCE AND ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA udupi ---------- ----------
3)ANINDYA HEGDE K
Address of Applicant :ROBOTICS AND ARTIFICIAL INTELLIGENCE, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA udupi ---------- ----------
4)BHOOMIKA
Address of Applicant :ROBOTICS AND ARTIFICIAL INTELLIGENCE, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA udupi ---------- ----------
5)SINCHANA.S.H
Address of Applicant :ROBOTICS AND ARTIFICIAL INTELLIGENCE, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA udupi ---------- ----------
6)SANKETH K K
Address of Applicant :ROBOTICS AND ARTIFICIAL INTELLIGENCE, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA udupi ---------- ----------

(57) Abstract :
Disclosed herein is a precision payload release system (100) for multirotor drones comprises a drone unit (122) with a glass fiber-reinforced composite body (102). A central control unit (104), powered by a power supply unit (124) processes commands from the communication module (128) and sensors module (126) to control the servo motors module (106), which actuates the payload door (114) through a control horn (108), a control rod (120) and connecting rods unit (110) with a hinge module (112) allowing smooth pivoting, while a servo plate (116) ensures stable mounting of the servo motors module (106). Link stoppers unit (118) prevents excessive movement while the communication module (128) enables remote control. The failsafe mechanism (130) secures payload, while the payload securing mechanism (132) stabilizes it. A shock absorber module (134) mitigates impact forces during flight, and a display unit (136) offers visual status updates on system (100) operations.

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :20/07/2024
(21) Application No.202441055468 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A GUIDED LEARNING PROCESS (GLP) SYSTEM

(51) International classification	:G09B0007000000, G09B0005020000, G09B0007020000, G06Q0050200000, G06Q0010100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR MITHRA N HEGDE
Address of Applicant :AB SHETTY MEMORIAL INSTITUTE OF DENTAL SCIENCES, NITTE (DEEMED TO BE UNIVERSITY), DERALAKATTE, MANGALURU, KARNATAKA 575018 Udupi ---------- ----------
2)DR. ADITYA SHETTY
Address of Applicant :AB SHETTY MEMORIAL INSTITUTE OF DENTAL SCIENCES, NITTE (DEEMED TO BE UNIVERSITY), DERALAKATTE, MANGALURU, KARNATAKA 575018 Udupi ---------- ----------
3)DR. RAKSHA BHAT
Address of Applicant :AB SHETTY MEMORIAL INSTITUTE OF DENTAL SCIENCES, NITTE (DEEMED TO BE UNIVERSITY), DERALAKATTE, MANGALURU, KARNATAKA 575018 Udupi ---------- ----------
4)DR. NISHMITHA N HEGDE
Address of Applicant :AB SHETTY MEMORIAL INSTITUTE OF DENTAL SCIENCES, NITTE (DEEMED TO BE UNIVERSITY), DERALAKATTE, MANGALURU, KARNATAKA 575018 Udupi ---------- ----------

(57) Abstract :
Disclosed herein is a guided learning process (GLP) system (100) comprises designated guides (102) assigned to each group of students to provide guidance and mentorship. The system includes curriculum development module (104) for identifying and selecting essential topics for clinical management that are inadequately covered in the existing curriculum. The system also includes small group format (106) for arranging students into small groups to facilitate personalized attention and interactive learning. The system also includes active engagement module (108) for encouraging active participation and engagement through discussions, activities, and hands-on exercises to reinforce learning and deepen understanding. The system also includes progress monitoring unit (110) for instructors to gauge learner progress and provide timely feedback for improvement.

No. of Pages : 22 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :20/07/2024
(21) Application No.202441055469 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : PREPARATION OF HEPTANITRO-BIPYRAZOLE (HNBP) AS HIGH-DENSE OXIDIZER

(51) International classification	:C07D0401140000, C07C0201080000, A61K0031419600, C07D0413120000, C07D0403040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Akhila K. Sahoo
Address of Applicant :School of Chemistry, University of Hyderabad, CR Rao Road, Hyderabad- 500046, Telangana, India Hyderabad ---------- ----------
2)Srinivas Vangara
3)Aswini K. Sahoo
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Akhila K. Sahoo
Address of Applicant :School of Chemistry, University of Hyderabad, CR Rao Road, Hyderabad- 500046, Telangana, India Hyderabad ---------- ----------
2)Srinivas Vangara
Address of Applicant :Advanced Center of Research in High Energy Materials, University of Hyderabad, CR Rao Road, Hyderabad- 500046, Telangana, India Hyderabad ---------- ----------
3)Aswini K. Sahoo
Address of Applicant :Advanced Center of Research in High Energy Materials, University of Hyderabad, CR Rao Road, Hyderabad- 500046, Telangana, India Hyderabad ---------- ----------

(57) Abstract :
ABSTRACT PREPARATION OF HEPTANITRO-BIPYRAZOLE (HNBP) AS HIGH-DENSE OXIDIZER The present invention relates to a method for preparing heptanitro-bipyrazole (HNBP) designated as IV from commercially available 4-iodo-pyrazole reagents in three reaction steps. The overall process involves three synthetic steps: preparation of 4-iodo-1-(methoxymethyl)-1H-pyrazole through N-protection of 4-iodo-pyrazole; next, the Pd-catalyzed homocoupling of the 4-iodo-1-(methoxymethyl)-1H-pyrazole followed by the nitration to make tetranitro-bipyrazole (TNBP); finally, HNBP is synthesized from TNBP. The Pd-catalyzed homocoupling of 4-iodo-1-(methoxymethyl)-1H-pyrazole (I) has led to II, which subsequently exposed to nitration to deliver tetranitro-bipyrazole (III). Next, the base mediated N-protection of III with chloroacetone followed by the nitration of the crude intermediate afforded heptanitro-bipyrazole (IV). The overall synthetic paradigm is schematically presented here.

No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :20/07/2024
(21) Application No.202441055480 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : PRIVACY-BASED PERSONALIZED WEB SEARCH FOR SEARCH ENGINE OPTIMIZATION

(51) International classification	:G16B0025100000, G16B0025000000, G06K0009620000, C12Q0001683700, G16B0040000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr Karthi S
Address of Applicant :V.S.B. Engineering College, Karur ---------- ----------
2)PRABAKARAN S
3)Arivarasan S
4)Srinath Yadhav K
5)Saranya R
6)Suganya R
7)Geetha S
8)Latha P
9)Gunasekaran S
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)PRABAKARAN S
Address of Applicant :V.S.B. ENGINEERING COLLEGE, KARUR ---------- ---------- ----------
2)Arivarasan S
Address of Applicant :V.S.B. ENGINEERING COLLEGE, KARUR ---------- ---------- ----------
3)Srinath Yadhav K
Address of Applicant :V.S.B. ENGINEERING COLLEGE, KARUR ---------- ---------- ----------
4)Saranya R
Address of Applicant :V.S.B. ENGINEERING COLLEGE, KARUR ---------- ---------- ----------
5)Suganya R
Address of Applicant :V.S.B. ENGINEERING COLLEGE, KARUR ---------- ---------- ----------
6)Geetha S
Address of Applicant :V.S.B. ENGINEERING COLLEGE, KARUR ---------- ---------- ----------
7)Latha P
Address of Applicant :V.S.B. ENGINEERING COLLEGE, KARUR ---------- ---------- ----------
8)Gunasekaran S
Address of Applicant :V.S.B. ENGINEERING COLLEGE, KARUR ---------- ---------- ----------
9)Dr.S.KARTHI
Address of Applicant :V.S.B. ENGINEERING COLLEGE, KARUR KARUR ---------- ---------- ----------

(57) Abstract :
The DNA microarray technology has modernized the approach of biology research in such a way that scientists can now measure the expression levels of thousands of genes simultaneously in a single experiment. Gene expression profiles, which represent the state of a cell at a molecular level, have great potential as a medical diagnosis tool. Diseases classification with gene expression data is known to include the keys for addressing the fundamental harms relating to diagnosis and discovery. The recent introduction of DNA microarray technique has complete simultaneous monitoring large number of gene expressions possible. With this large quantity of gene expression data, experts have started to discover the possibilities of disease classification using gene expression data. Quite a large number of methods have been planned in recent years with hopeful results. But there are still a set of issues which need to be address and understood. In order to gain insight into the disease classification difficulty, it is necessary to get a closer look at the problem, the proposed solutions and the associated issues all together. In this project, we present a comprehensive searching method, clustering method and classification method such as Pattern similarity search, Spatial Expectation Maximization, K nearest neighbour classification and estimate them based on their evaluation time, classification accuracy and ability to reveal biologically meaningful gene information. Based on our multiclass classification method to diagnosis the diseases such as Cancer (Lung, Blood, Breast, and Skin) diseases and other diseases and also find severity levels of diseases and also prescribe the medicine for affected diseases. Our experimental results show that classifier performance through graphs with improved accuracy.. Through this project work, it was attained PO1 to PO12 and also gained PSO1,PSO2 and PSO3.

No. of Pages : 7 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024

(21) Application No.202441055548 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : GRAMMAR CORRECTION ALGORITHM FOR IMPROVING WRITING SKILLS

(51) International classification	:G06F0040253000, G06F0040211000, G06F0040232000, G06N0005040000, G06F0040205000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. R. Naganathan
Address of Applicant :Assistant Professor, Department of English, SRM Madurai College For Engineering And Technology, Pottapalayam Sivagangai, Tamil Nadu, India. Sivaganga ---------- ----------
2)Ms. K. Aruna
3)Mrs. R. Isvariya
4)Ms. M. Nagalakshmi
5)Mr. R. Ragland Rajkumar
6)Mr. J. Bimal Roy
7)Dr. P. Sulochana
8)Dr. P. Shanmuga Priya
9)Dr. Ragupathi Ramasamy
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. R. Naganathan
Address of Applicant :Assistant Professor, Department of English, SRM Madurai College For Engineering And Technology, Pottapalayam Sivagangai, Tamil Nadu, India. Sivaganga ---------- ----------
2)Ms. K. Aruna
Address of Applicant :Assistant Professor of English, Department of Science and Humanities, Faculty of Engineering, Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu, India. Coimbatore ---------- ----------
3)Mrs. R. Isvariya
Address of Applicant :Assistant Professor of English, NPR college of Engineering and Technology, Natham, Dindigul, Tamil Nadu, India. Dindigul ---------- ----------
4)Ms. M. Nagalakshmi
Address of Applicant :Assistant Professor of English, NPR college of Engineering and Technology, Natham, Dindigul, Tamil Nadu, India. Dindigul ---------- ----------
5)Mr. R. Ragland Rajkumar
Address of Applicant :Assistant Professor of English, NPR college of Engineering and Technology, Natham, Dindigul, Tamil Nadu, India. Dindigul ---------- ----------
6)Mr. J. Bimal Roy
Address of Applicant :Assistant Professor of English, SRM Madurai college for Engineering and Technology, Pottapalayam, Sivagangai, Tamil Nadu, India. Sivaganga ---------- ----------
7)Dr. P. Sulochana
Address of Applicant :Assistant Professor of English, NPR college of Engineering and Technology, Natham, Dindigul, Tamil Nadu, India. Dindigul ---------- ----------
8)Dr. P. Shanmuga Priya
Address of Applicant :Assistant Professor of English, GTN Arts College, Dindigul, Tamil Nadu, India. Dindigul ---------- ----------
9)Dr. Ragupathi Ramasamy
Address of Applicant :Associate Professor of English, M. Kumarasamy college of Engineering, Karur, Thalavapalayam, Tamil Nadu, India. Karur ---------- ----------

(57) Abstract :
GRAMMAR CORRECTION ALGORITHM FOR IMPROVING WRITING SKILLS ABSTRACT The Grammar Correction Algorithm for Enhancing Writing Proficiency is a software that assists users in enhancing their writing abilities by identifying and rectifying grammatical errors. This tool use sophisticated natural language processing (NLP) methodologies and machine learning models to assess text and detect prevalent errors such as incorrect verb tense, subject-verb disagreement, punctuation mistakes, and sentence structure issues. The method improves the quality of text by providing immediate feedback and ideas for improvement. Additionally, it aids users in developing a better understanding of basic grammatical rules over time. This tool is particularly beneficial for students, professionals, and anyone who are not native speakers and desire to enhance their writing abilities and produce more proficient and impactful communication.

No. of Pages : 13 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :22/07/2024

(21) Application No.202441055549 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : INTELLIGENT AI BASED SOLID WASTE RECYCLE AND REUSE MONITORING DEVICE

(51) International classification :B65F0001140000, G06Q0050260000, G06Q0010000000, G06Q0010080000, B65F0001160000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**

1)Dr. Sabaresan Venugopal

Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, St. Joseph's Institute of Technology, Old Mahabalipuram Rd, Kamaraj Nagar, Semmancheri, Chennai- 600119, Tamil Nadu, India. Chennai ---------- ----------

2)Nitin Chakole

3)Aarthi D

4)Kandasamy. V

5)Dr. Sreeja B P

6)Shweta Kanojia

7)S. Kerthy

8)Dr. Anupam Jain

9)Gowtham M

10)Dr. S. Subatra Devi

11)Mrs. M. S. Bennet Praba

12)Dr. Priti Gupta

13)Dr. S. Russia

14)Dr. D. Rajinigirinath

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. Sabaresan Venugopal

Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, St. Joseph's Institute of Technology, Old Mahabalipuram Rd, Kamaraj Nagar, Semmancheri, Chennai- 600119, Tamil Nadu, India. Chennai ---------- ----------

2)Nitin Chakole

Address of Applicant :Assistant Professor, Department of Electronics and Telecommunication Engineering, Shri Ramdeobaba College of Engineering and Management, Nagpur, Maharashtra, India. Nagpur ---------- ----------

3)AARTHI D

Address of Applicant :Assistant Professor, Department of Computer Science And Engineering, Karpagam College of Engineering, Myleripalayam, Othakkalmandapam, Coimbatore- 641032, Tamil Nadu, India. Coimbatore ---------- ----------

4)Kandasamy. V

Address of Applicant :Assistant Professor, Department of Information Technology, Panimalar Engineering College, Bangalore Trunk Road, Varadharajapuram, Poonamallee, Chennai – 600123, Tamil Nadu, India. Chennai ---------- ----------

5)Dr. Sreeja B P

Address of Applicant :Assistant Professor, Department of IT, Karpagam College of Engineering, Coimbatore-641032, Tamil Nadu, India. Coimbatore ---------- ----------

6)Shweta Kanojia

Address of Applicant :Assistant Professor, Department of Computer Science, Sadabai Raisoni Women's College, Riaan tower sadar, Nagpur, Maharashtra, India. Nagpur ---------- ----------

7)S. Kerthy

Address of Applicant :Assistant Professor, Department of Information Technology, Jeppiaar Institute of Technology, Kunnam, Sunguvarchatram, Chennai, Tamil Nadu, India. Chennai ---------- ----------

8)Dr. Anupam Jain

Address of Applicant :Associate Professor, Department of Commerce and Management, Poddar International College, Mansarovar, Jaipur, Rajasthan, India. Jaipur ---------- ----------

9)Gowtham M

Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, Karpagam Institute of Technology, S.F.NO.247, 248, L&T Bypass Road, Seerapalayam Village, Bodipalayam Post, Coimbatore – 641105, Tamil Nadu, India. Coimbatore ---------- ----------

10)Dr. S. Subatra Devi

Address of Applicant :Professor of Computer Applications, Dr. MGR Educational and Research Institute, Deemed to be university, Chennai, Tamil Nadu, India. Chennai ---------- ----------

11)Mrs. M. S. Bennet Praba

Address of Applicant :Assistant Professor, Department of CSE, SRMIST, Ramapuram, Kattankulathur, Chengalpattu, Chennai, Tamil Nadu, India. Chennai ---------- ----------

12)Dr. Priti Gupta

Address of Applicant :Asst. Professor, Department of Environmental Studies, Thakur College of Science and Commerce, Kandivali east Mumbai, Maharashtra, India. Mumbai ---------- ----------

13)Dr. S. Russia

Address of Applicant :Professor, Department of CSE, Velalar College of Engineering and Technology, Thindal, Erode, Tamil Nadu, India. Erode ---------- ----------

14)Dr. D. Rajinigirinath

Address of Applicant :Professor and Head, Department of CSE / AI & DS, Sri Muthukumaran Institute of Technology, Mangadu, Chennai-69, Tamil Nadu, India. Chennai ---------- ----------

(57) Abstract :

INTELLIGENT AI BASED SOLID WASTE RECYCLE AND REUSE MONITORING DEVICE ABSTRACT Problems with pollution, waste management, and recycling are exacerbated by the ever-increasing global garbage output; as a result, cutting-edge technology like artificial intelligence are required to improve the waste ecosystem. We take a look at the ways AI is being used in various waste-related domains, such as smart bins, waste-sorting robots, models for waste generation, tracking and monitoring of waste, plastic pyrolysis, logistics, disposal, illegal dumping, resource recovery, smart cities, process efficiency, cost savings, public health, and identification of fossil and modern materials. With the use of AI, waste management can shorten transportation distance by 36.8%, save 13.35% in expenditures, and save 28.22% in time. With an accuracy rate of 72.8% to 99.5%, AI can detect and categorize trash. Coupling chemical analysis with artificial intelligence improves waste pyrolysis, estimates carbon emissions, and energy conversion. Additionally, we detail how smart city waste management systems could benefit from AI in terms of increased efficiency and decreased expenditure.

No. of Pages : 15 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :22/07/2024

(21) Application No.202441055550 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : ENTREPRENEURSHIP TRAINING AND FACTORS THAT AFFECT THE INTEREST IN ENTREPRENEURSHIP

(51) International classification	:G06Q0010060000, G09B0019000000, G06Q0050200000, G09B0007020000, G06Q0050260000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr. V. K. Veerakumar

Address of Applicant :Associate Professor and Head, Pg and Research Department of Commerce CA, Nandha Arts and Science College, Erode-638052, Tamil Nadu, India. Erode ---------- ----------

2)Ms. A. Aaziya

3)Dr. Ch. Sudipta Kishore Nanda

4)R. Raajalakshmi

5)Dr. Sudha S

6)Veenashri M

7)Dr. Nagalakshmi M.V.N.

8)Dr. G. Venkateshwaran

9)Dr. Gajanethi Swathi Kumari

10)Dr. E. Muthukumar

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. V. K. Veerakumar

Address of Applicant :Associate Professor and Head, Pg and Research Department of Commerce CA, Nandha Arts and Science College, Erode-638052, Tamil Nadu, India. Erode ---------- ----------

2)Ms. A. Aaziya

Address of Applicant :Assistant Professor (Senior Grade), Department of Management, Nehru Institute of Engineering and Technology, Nehru Gardens, Nehru College Road, T. M Palayam, Coimbatore-641105, Tamil Nadu, India. Coimbatore ---------- ----------

3)Dr. Ch. Sudipta Kishore Nanda

Address of Applicant :Assistant Professor – II, Department of Commerce, School of Tribal Resource Management, Kiss Deemed to be University, Higher Education Campus, Campus - 4, Po - Kiit, Bhubaneswar-751024, India. Bhubaneswar ---------- ----------

4)R. Raajalakshmi

Address of Applicant :Assistant Professor, Department of MBA, Vels Institute of Science, Technology and Advanced Studies, Pallavaram, Chennai-600043, Tamil Nadu, India. Chennai ---------- ----------

5)Dr. Sudha S

Address of Applicant :Professor, Department of MBA, VISTAS, Pallavaram, Chennai-600075, Tamil Nadu, India. Chennai ---------- ----------

6)Veenashri M

Address of Applicant :Assistant Professor, Department of Business Administration, A. V. P. College of Arts and Science, Thirumuruganpoondi, Tirupur-641652, Tamil Nadu, India. Tiruppur ---------- ----------

7)Dr. Nagalakshmi M.V.N.

Address of Applicant :Assistant Professor, Faculty of Management, Department of Management, S. R. M. Institute of Science and Technology, Kanchipuram-603203, Tamil Nadu, India. Kanchipuram ---------- ----------

8)Dr. G. Venkateshwaran

Address of Applicant :Assistant Professor, Department of Management Studies, Velammal College of Engineering and Technology, Madurai-625009, Tamil Nadu, India. Madurai ---------- ----------

9)Dr. Gajanethi Swathi Kumari

Address of Applicant :Assistant Professor, Department of Business Management, Symbiosis International University, Hyderabad-500053, Telangana, India. Hyderabad ---------- ----------

10)Dr. E. Muthukumar

Address of Applicant :Professor, Department of MBA, Nehru College of Management, Thirumalayampalayam, Coimbatore – 641105, Tamil Nadu, India. Coimbatore ---------- ----------

(57) Abstract :

ENTREPRENEURSHIP TRAINING AND FACTORS THAT AFFECT THE INTEREST IN ENTREPRENEURSHIP ABSTRACT An examination of how entrepreneurship training programs might inspire more people to take the entrepreneurial plunge is the focus of this invention. It delves into several factors that impact an individual's inclination for entrepreneurship, such as their personality traits, financial situation, availability of resources, and the educational setting. By analyzing data collected from students, we can determine how effective entrepreneurship training programs are. Results show that people are more interested in starting their own firms, and they also give light on how training can be adapted to address the unique needs and challenges of aspiring entrepreneurs. Educators, policymakers, and organizations can use our findings to help cultivate a thriving entrepreneurial ecosystem.

No. of Pages : 12 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024

(21) Application No.202441055554 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ELECTRONIC TRAVEL AID FOR THE VISUALLY IMPAIRED USING AUDITORY FEEDBACK

(51) International classification	:G09B0021000000, A61H0003060000, G06F0003160000, G10L0013000000, G06N0003080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. K. E. Ch. Vidyasagar
Address of Applicant :Assistant Professor, Department of Biomedical Engineering, University College of Engineering (A), Osmania University, Hyderabad, Telangana Hyderabad ---------- ----------
2)Dr. D. Suman
3)Mr. Ganji N V Shiva Prasad
4)Mr. Motukuri Ramakrishna
5)Ms. Koppadi Meghana
6)Ms. K. Sireesha
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. K. E. Ch. Vidyasagar
Address of Applicant :Assistant Professor, Department of Biomedical Engineering, University College of Engineering (A), Osmania University, Hyderabad, Telangana Hyderabad ---------- ----------
2)Dr. D. Suman
Address of Applicant :Associate Professor, Department of Biomedical Engineering, University College of Engineering (A), Osmania University, Hyderabad, Telangana Hyderabad ---------- ----------
3)Mr. Ganji N V Shiva Prasad
Address of Applicant :Department of Biomedical Engineering, University College of Engineering (A), Osmania University, Hyderabad, Telangana Hyderabad ---------- ----------
4)Mr. Motukuri Ramakrishna
Address of Applicant :Department of Biomedical Engineering, University College of Engineering (A), Osmania University, Hyderabad, Telangana Hyderabad ---------- ----------
5)Ms. Koppadi Meghana
Address of Applicant :Department of Biomedical Engineering, University College of Engineering (A), Osmania University, Hyderabad, Telangana Hyderabad ---------- ----------
6)Ms. K. Sireesha
Address of Applicant :Department of Biomedical Engineering, University College of Engineering (A), Osmania University, Hyderabad, Telangana Hyderabad ---------- ----------

(57) Abstract :
7. ABSTRACT The present invention relates to an electronic travel aid for the visually impaired using auditory feedback. Utilizing a single-camera and machine learning algorithms, the device identifies obstacles in real-time and provides distance estimates audibly, enabling independent navigation. Optical Character Recognition (OCR) capability further enhances usability by converting text from signboards into audio signals and it also recognizes Indian currency and give audio feedback in regional languages. This compact and efficient system employs deep learning techniques and real-time processing to assist users in navigating their surroundings safely. The figure associated with abstract is Fig. 1.

No. of Pages : 24 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024

(21) Application No.202441055555 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD FOR PREDICTING PATIENT RETENTION RATE AND SYSTEM THEREOF

(51) International classification	:G06Q0030020000, G16H0020400000, G01N0033574000, H04N0021637300, G01N0021250000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Sri Sathya Sai Institute of Higher Learning
Address of Applicant :Sri Sathya Sai Institute of Higher Learning (SSSIHL), Vidyagiri Prasanthi Nilayam, Puttaparthi -515134, Andhra Pradesh, India Puttaparthi ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Krishna Kiran Vamsi Dasu
Address of Applicant :Sri Sathya Sai Institute of Higher Learning (SSSIHL), Vidyagiri Prasanthi Nilayam, Puttaparthi -515134, Andhra Pradesh, India Puttaparthi ---------- ----------
2)Seshasai Nath Chinagudaba
Address of Applicant :Sri Sathya Sai Institute of Higher Learning (SSSIHL), Vidyagiri Prasanthi Nilayam, Puttaparthi-515134, Andhra Pradesh, India Puttaparthi ---------- ----------
3)Sai Sadashiva J Kundurmutt
Address of Applicant :Sri Sathya Sai Institute of Higher Learning (SSSIHL), Vidyagiri Prasanthi Nilayam, Puttaparthi -515134, Andhra Pradesh, India Puttaparthi ---------- ----------
4)Dr. Darshan Gera
Address of Applicant :Sri Sathya Sai Institute of Higher Learning (SSSIHL), Vidyagiri Prasanthi Nilayam, Puttaparthi-515134, Andhra Pradesh, India Puttaparthi ---------- ----------
5)Dr. Uma Shankar S
Address of Applicant :National Tuberculosis Institute (NTI), Rajiv Gandhi Nagar, Bangalore- 560097, Karnataka, India Bangalore ---------- ----------
6)Dr. Somashekar N
Address of Applicant :National Tuberculosis Institute (NTI), Rajiv Gandhi Nagar, Bangalore- 560097, Karnataka, India Bangalore ---------- ----------
7)Dr. Vineet Kumar Chadda
Address of Applicant :National Tuberculosis Institute (NTI), Rajiv Gandhi Nagar, Bangalore- 560097, Karnataka, India Bangalore ---------- ----------
8)Dr. Sharath B N.
Address of Applicant :ESI Medical College (ESIMC), Rajiv Gandhi Nagar, Bangalore- 560097, Karnataka, India Bangalore ---------- ----------

(57) Abstract :
ABSTRACT METHOD FOR PREDICTING PATIENT RETENTION RATE AND SYSTEM THEREOF The present disclosure relates to a system (100) and a method (400) for predicting patient retention rate. The system (100) includes a server (104) communicatively coupled to a database (110) and a user device (102). The method (400) includes receiving (402) a set of parameters corresponding to the tuberculosis patient using a first user interface of a user device (102) and determining (404) the patient retention rate based on the set of parameters.

No. of Pages : 17 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055557 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SOLENOID-BASED REFRESHABLE BRAILLE DISPLAY

(51) International classification :G09B0021000000, G06F0003010000, G09B0021020000, H04W0004800000, B41J0003320000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY
Address of Applicant :Vignana Jyothi Nagar, Pragathi Nagar, Nizampet (S.O), Hyderabad 500 090 Telangana State, India Hyderabad ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. D. Ramesh Reddy
Address of Applicant :Vignana Jyothi Nagar, Pragathi Nagar, Nizampet (S.O), Hyderabad 500 090 Telangana State, India Hyderabad ---------- ----------
2)Sathvik Kunuru
Address of Applicant :Vignana Jyothi Nagar, Pragathi Nagar, Nizampet (S.O), Hyderabad 500 090 Telangana State, India Hyderabad ---------- ----------
3)Adha Siddharth
Address of Applicant :Vignana Jyothi Nagar, Pragathi Nagar, Nizampet (S.O), Hyderabad 500 090 Telangana State, India Hyderabad ---------- ----------

(57) Abstract :
The present invention encompasses a system designed for the conversion of text data into Braille format and its representation on a tactile display device. The system comprises a plurality of ring magnets, solenoids, Braille pixels, small controller circuits, and a microcontroller equipped with Bluetooth support. Leveraging solenoid-based technology, this innovative system processes text data received through Bluetooth connectivity and translates it into Braille characters. These characters are then tacitly represented on the device through the manipulation of solenoids within individual Braille pixels. This advancement in Braille display technology enhances accessibility for individuals with visual impairments, offering a seamless and efficient method for the tactile rendering of textual content. Figure 1

No. of Pages : 27 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055566 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYNERGISTIC COMBINATION FORMULATION OF OCIMUM GRATISSIMUM LEAF EXTRACT AND ZINC FOR THE MANAGEMENT OF TOXICITY

(51) International classification :A61K0036530000, A61K0008978900, A61P0043000000, A23L0033105000, A61K0009000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Lavanya Yaidikar
Address of Applicant :Associate Professor and HOD, Department of Pharmacology, Seven Hills College of Pharmacy (Autonomous), Tirupati- 517561, Andhra Pradesh, India Tirupati ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Lavanya Yaidikar
Address of Applicant :Associate Professor and HOD, Department of Pharmacology, Seven Hills College of Pharmacy (Autonomous), Tirupati- 517561, Andhra Pradesh, India Tirupati ---------- ----------
2)Lokesh Babu Pathapalem
Address of Applicant :M.Pharmacy, Project Student, Department of Pharmacology, Seven Hills College of Pharmacy (Autonomous), Tirupati- 517561, Andhra Pradesh, India Tirupati ---------- ----------
3)Sowmya Gundla
Address of Applicant :M.Pharmacy, Project Student, Department of Pharmacology, Seven Hills College of Pharmacy (Autonomous), Tirupati- 517561, Andhra Pradesh, India Tirupati ---------- ----------
4)Charitha Amasa
Address of Applicant :M.Pharmacy, Project Student, Department of Pharmacology, Seven Hills College of Pharmacy (Autonomous), Tirupati- 517561, Andhra Pradesh, India Tirupati ---------- ----------

(57) Abstract :
The present invention relates to a synergistic combination formulation, comprising: plant extract of Ocimum gratissimum and Zinc for the management of Cadmium induced toxicity. The synergistic combination formulation of extract of Ocimum gratissimum and zinc; wherein the ratio of extract of Ocimum gratissimum and zinc is 1:10 and wherein the leaf extract of Ocimum gratissimum is used. The process for the preparation of extract of Ocimum gratissimum, comprising, collecting and gently rinsing fresh leaves of Ocimum. gratissimum and air drying at room temperature; grinding the dried leaves into fine powder; extracting the extract by milling 100gm plant material with 500ml of distilled water; shaking the mixture thoroughly and allowing to stand for 48hours with intermittent shaking to increase the rate of extraction; filtering the extract through Whatman filter paper No.1 and concentrating at low temperature of 30-40ºC under reduced pressure of 40-45Psi using a rotary evaporator to obtain the extract of plant Ocimum gratissimum. The synergistic combination formulation of Ocimum gratissimum leaf extract and zinc, wherein the treatment group received a daily administration of 25mg/kg of Zinc and 250mg/kg body weight of the extract for 21 days to Male Albino rats by oral route.

No. of Pages : 17 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :22/07/2024

(21) Application No.202441055601 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : AN EXPERIMENTAL INVESTIGATION ON INFLUENCE OF FILLER MATERIAL ON DAMPING PROPERTIES OF HYBRID COMPOSITES

(51) International classification	:B32B0005020000, B32B0015020000, B32B0027300000, B32B0005280000, B29C0070080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)G ASHWIN PRABHU

Address of Applicant :No. 11, Thirumagal Nagar, II Street, Karthick Avenue, Flat No. F1, First Floor, "Sai Guru Appartments", Chitlapakkam ---------- ----------

2)B P VIJAYKUMAR

3)Dr. J PAUL CHANDRA KUMAR

4)Dr. P THARANIYA

5)U AMARESH

6)MAYURI S MHASKE

7)A S JAGADHEESWARI

8)Dr. R GEORGE SAHAYA NIXON

9)M PREMKUMAR

10)Dr. FAZIL NALBAND

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)B P VIJAYKUMAR

Address of Applicant :Assistant Professor, Department of MechanicalEngineering, Ballari Institute of Technology & Management, Hospet Rd, Near Allipura, Karnataka, Ballari, 583104 ---------- ----------

2)Dr. J PAUL CHANDRA KUMAR

Address of Applicant :Associate Professor, Department of Mechanical Engineering, Jeppiaar Engineering College, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai 600119 ---------- ----------

3)Dr. P THARANIYA

Address of Applicant :Assistant Professor, Department of Mathematics, Rajalakshmi Institute of Technology, Kuthambakkam, Post, Chembarambakkam, Tamil Nadu 600124 ---------- ----------

4)U AMARESH

Address of Applicant :Dean (Student Affairs) / HOD, Department of Mechanical Engineering, Sanjay Gandhi Polytechnic, Vidya Soudha, 29, Infantry Road, Housing Board Colony, Sanjay Gandhi Nagar, Ballari, Karnataka 583104 ---------- ----------

5)MAYURI S MHASKE

Address of Applicant :Assistant Professor, Department of Mechatronics Engineering, Marathwada MitraMandal's Institute of Technology, Wadgaon Shinde Road, Lohegaon,Pune, Maharashtra 411047 ---------- ----------

6)A S JAGADHEESWARI

Address of Applicant :Assistant Professor, Department of Civil Engineering, Akshaya college of Engineering and Technology, Bhagavathipalayam, Kinathukadavu, Coimbatore, TamilNadu 642109 ---------- ----------

7)Dr. R GEORGE SAHAYA NIXON

Address of Applicant :Associate Professor, Department of Mechanical Engineering, St. Joseph's College of Engineering, Old Mahabalipuram Road, Chennai 600119, Tamil Nadu, India ---------- ----------

8)M PREMKUMAR

Address of Applicant :Research Scholar, Department of MechanicalEngineering, Anna University Chennai, Tamil Nadu, 600025 ---------- ----------

9)Dr. FAZIL NALBAND

Address of Applicant :Research Scholar, Department of MechanicalEngineering, Ballari Institute of Technology & Management, Hospet Rd, near Allipura, Karnataka, Ballari, 583104 ---------- ----------

10)G ASHWINPRABHU

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, St. Joseph's College of Engineering, Old Mahabalipuram Road, Chennai 600119, Tamil Nadu,India ---------- ----------

(57) Abstract :

This paper presents an in-depth experimental investigation into the influence of filler material on the damping properties of hybrid composites. The study primarily focuses on laminated composite materials, chosen for their low weight, high stiffness, and superior strength-to-weight ratios. The damping properties of these materials are evaluated using the Vacuum Infusion Process (VIP), a cost-effective method for creating high-quality composite parts. The materials used in the study include basalt, stainless steel wire mesh, and silicon carbide. Basalt, known for its high strength, durability, and cost-effectiveness, is a primary choice. Stainless steel wire mesh, chosen for its hardness in abrasive machining processes, and silicon carbide, selected for its hardness and resistance to corrosion, creep, and fatigue, are also integral to the study. The fabrication of these composites involves various methods, including open mould process, closed mould process, and continuous process. The hybrid laminated composites are then cut using water-jet and abrasive water-jet machining, chosen for their ability to cut a variety of materials without producing heat or deflection. The hybrid laminates are subjected to a cantilever type damping test to evaluate their damping properties. The results suggest that the hybrid laminate with basalt fibre and 1.5% Silicon carbide exhibits superior damping properties and higher natural frequencies compared to all other laminates. In conclusion, the study finds that the hybrid laminate with basalt fibre and 1.5% Silicon carbide is the most promising in terms of damping properties and natural frequencies, showing a variation of 3 – 10 % in natural frequency when compared to other laminates. This research provides valuable insights into the potential of hybrid laminates for applications requiring high strength and stiffness.

No. of Pages : 15 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :22/07/2024

(21) Application No.202441055620 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : INTELLIGENT ALERT SYSTEM WITH GPS LOCATION FOR VEHICLE ACCIDENT AND FIRE DETECTION

(51) International classification :B60K0028060000, H04W0004900000, G08B0025010000, B60Q0009000000, G08B0021040000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Aalim Muhammed Salegh College of Engineering
Address of Applicant :Avadi-IAF, Muthapudupet, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. R. LA VANYA
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ---------- ----------
2)G.K. MONICA
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ---------- ----------
3)M. SANGAVI
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ---------- ----------
4)S.K. ASHWATHY
Address of Applicant :Lecturer, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ---------- ----------
5)E. MUKUNDHAN
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ---------- ----------
6)A. RAJASEKAR
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ---------- ----------
7)N. S. JULIE JOAN
Address of Applicant :Research Scholar, Computer science Engineering, Anna University, Chennai, Tamilnadu, India, Pin code-600025, ---------- ----------
8)A. MOHAMED FAZIL
Address of Applicant :Student, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ---------- ----------
9)K. SREE DHARSHINI
Address of Applicant :Student, Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ---------- ----------
10)M. N. SHAHIRA BANU
Address of Applicant :Student, Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ---------- ----------

(57) Abstract :
TITLE: INTELLIGENT ALERT SYSTEM WITH GPS LOCATION FOR VEHICLE ACCIDENT AND FIRE DETECTION ABSTRACT In order to detect occurrences of impaired driving, this work develops an upgraded version of the Vehicle Accident and Fire Alert System (VAFAS) that includes an alcohol sensor. The proposed system has a sophisticated alcohol detection mechanism using cutting edge sensor technology in addition to its previous accident and fire detection functions. This improvement makes it possible for the system to detect cases of intoxicated driving; greatly increasing road safety. In order to monitor driver impairment and identify accidents, an alcohol sensor-based accident detection system combines a number of sensors such as alcohol sensor, piezon sensor, flame sensor and technologies. By detecting alcohol impairment before an accident occurs, the system can prevent potential incidents. Alcohol sensor continuously monitors the air in the vehicle's cabin, when the sensor detects alcohol above a certain threshold; the device triggers an alert that provides exact GPS coordinates of the vehicle's location and notifies emergency services and designated contacts. The alert system seeks to improve road safety, lessen the dangers of drunk driving, and accelerate emergency response times. Ccommunication module is developed and integrated with VAFAS to send an alert SMS message to pre-configured emergency contacts and services, including the vehicle GPS coordinate. Emergency services receive the alert with location data, which allows them to respond quickly to the incident. VAFAS offers a proactive strategy to lower traffic accidents, save lives, and reduce property damage by fusing fire and accident detection with alcohol sensing capabilities. DATE: 15/07/2024 Signature: NAME : 1. Dr. R. LAV ANYA 2. G.K. MONICA 3. M.SANGAVI 4. S.K. ASHWATHY 5. E.MUKUNDHAN 6. A. RAJASEKAR 7. N.S. JULIE JOAN 8. A. MOHAMED FAZIL 9. K. SREE DHARSHINI 10. M. N. SHAHIRA BANU

No. of Pages : 15 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055621 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : INTELLIGENT IOT FRAMEWORK FOR HELMET-LESS RIDER ENGINE INTERLOCKING SYSTEM

(51) International classification :G06Q0010060000, G06Q0050260000, A42B0003040000, A42B0003300000, G16H0050200000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Aalim Muhammed Salegh College of Engineering
Address of Applicant :Avadi-IAF, Muthapudupet, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)G.K. MONICA
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ---------- ----------
2)Dr. R. LAVANYA
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ---------- ----------
3)N. S. JULIE JOAN
Address of Applicant :Research scholar, Computer Science Engineering, Anna University, Chennai, Tamilnadu, India, Pin code- 600025 ---------- ----------
4)E. MUKUNDHAN
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ---------- ----------
5)M. SANGAVI
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ---------- ----------
6)S.K. ASHWATHY
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ---------- ----------
7)A. RAJASEKAR
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ---------- ----------
8)ANITHAR
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ---------- ----------
9)AKILA SHERIN A
Address of Applicant :Student, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ---------- ----------
10)SHEIK HASEENA S
Address of Applicant :Student, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ---------- ----------

(57) Abstract :
TITLE: INTELLIGENT IOT FRAMEWORK FOR HELMET-LESS RIDER ENGINE INTERLOCKING SYSTEM ABSTRACT Our smart IoT concept aims to improve road safety by using an interactive motor for helmetless drivers. The system uses IoT technology and advanced sensors to monitor passengers behavior and ensure compliance with helmet regulations. Real-time inspection data will trigger engine interaction if it detects that the rider is not wearing a helmet or is not running properly. Notifications are sent to passengers and authorities to take immediate action. With continuous analysis and data-driven insights, our framework provides a comprehensive solution to manage safety and reduce motorcycle-related incidents. Our equipment is adapted to ensure compatibility with different motorcycle models and environments, ensuring wide use and efficient operation. Our system uses YOLO for helmet violations and non-violations. The system works even if there is more than one person on the motorcycle and one of them is not wearing a helmet. We prioritize the privacy and security of passenger information and take reasonable precautions to protect sensitive information. By collaborating with government agencies and motorcycle manufacturers, our framework has the potential to improve safety management, ultimately reducing motorcycle crashes and saving lives. DATE: 15/07/2024 Signature: NAME 1. G.K. MONICA 2. Dr. R. LAVANYA 3. N. S. JULIE JOAN 4. E.MUKUNDHAN 5. M.SANGAVI 6. S.K. ASHWATHY 7. A. RAJASEKAR 8. ANITHAR 9. AKILA SHERIN A 10. SHEIK HASEENA S

No. of Pages : 14 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024

(21) Application No.202441055632 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : GYROSCOPIC PATIENT SUPPORT SYSTEM FOR PARTIALLY PARALYZED PATIENT

(51) International classification	:A61B0005000000, G16H0040670000, A61B0005145000, A61B0001040000, A61B0005110000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)AALIM MUHAMMED SALEGH COLLEGE OF ENGINEERING
Address of Applicant :AVADI-IAF, MUTHAPUDUPET, CHENNAI-600055.
---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)A. RAJASEKAR
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai-600055. ---------- ----------
2)Dr. R. LAVANYA
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai-600055. ---------- ----------
3)G.K. MONICA
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai-600055. ---------- ----------
4)E. MUKUNDHAN
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai-600055. ---------- ----------
5)N. S. JULIE JOAN
Address of Applicant :Research Scholar, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai-600055. ---------- ----------
6)S.K. ASHWATHY
Address of Applicant :Lecturer, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai-600055. ---------- ----------
7)SANGAVI.M
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai-600055. ---------- ----------
8)SATISH S
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai-600055. ---------- ----------
9)KHAJA MOHIDEEN K
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai-600055. ---------- ----------

(57) Abstract :
Paralyzed patients, the current system includes a controller and monitoring system, which leads to problems with communication and medical care. To avoid this type of issue we induced a new system. Healthcare systems are a veritably important part of the frugality of any country and for public health. In this data pace of life, it's delicate for people to be constantly available for their near bones who might need them while they're suffering from the difficulties. For the physiological discomfort, some supporting system will help the case. A recent check of the world health association estimated roughly 5.6 million people were paralyzed representing.9 of the population roughly 1 among 50. Health surveillance of the paralyzed in the hospitals reveals that there are numerous exercises, stimulation, and drugs to guard the paralyzed people. To overcome these problems a monitoring system is introduced, which is used to check the cases' health conditions. In this monitoring system, 3 axis accelerometer (gyroscope) is used for analogy signals. Hcl2 transmitter and receiver are used to transmit the analogy signals and convert them into a digital signal. The dispatches are transmitted to the caretaker by using GSM.

No. of Pages : 14 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055634 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ELECTRIC VEHICLE MODELLING THROUGH MACHINE LEARNING BY FOURIER TRANSFORM

(51) International classification :G06N0020000000, B60W0040090000, G06N0005000000, G06N0003080000, G06N0007000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr.Thiyagarajan Kittappa
Address of Applicant :Professor, Department of Maths, Rajalakshmi Institute of Technology, Tamilnadu, India, Pin code- 600124. ---------- ----------
2)Mr.Bharath S
3)Dr.N.Subashini
4)Dr.P.Balasubramanian
5)Mahendiran C R
6)Dr.N.P.Gopinath
7)V.Loganathan
8)John De Britto C
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.Thiyagarajan Kittappa
Address of Applicant :Professor, Department of Maths, Rajalakshmi Institute of Technology, Tamilnadu, India, Pin code- 600124. ---------- ----------
2)Mr.Bharath S
Address of Applicant :Assistant Professor- Department of ECE, Rajalakshmi Institute of Technology, Tamilnadu, India, Pin code-600124. ---------- ----------
3)Dr.N.Subashini
Address of Applicant :Assistant Professor- Department of Maths, Sathyabama Institute of Science and Technology, Chennai, Tamilnadu, India, Pin code-600 119. ---------- ----------
4)Dr.P.Balasubramanian
Address of Applicant :Associate Professor- Department of Maths, AAA College of Engineering and Technology, Sivakasi, TAMILNADU, INDIA, Pin code-626123. ---------- ----------
5)Mahendiran C R
Address of Applicant :Assistant Professor-EEE, V.R.S. College of Engineering and Technology, Tamilnadu, India. Chennai, Tamilnadu, India, Pin code-600119. ---------- ----------
6)Dr.N.P.Gopinath
Address of Applicant :Assistant Professor-EEE, St.Joseph's Institute of Technology, Chennai, Tamilnadu, India, Pin code- 600119. ---------- ----------
7)V.Loganathan
Address of Applicant :Research Scholar, Anna University, Chennai, Tamilnadu, India, Pin code-600025. ---------- ----------
8)John De Britto C
Address of Applicant :Assistant Professor-EEE, SAVEETHA ENGINEERING COLLEGE, CHENNAI, TAMILNADU, INDIA, Pin code-602105, Email: yjohnde@gmail.com ---------- ----------

(57) Abstract :
Electric Vehicle Modelling through Machine Learning by Fourier Transform Abstract -The PATENT describes the new concept of EV modelling encompassed by machine learning and Fourier transforms integration. It becomes difficult for traditional models to effectively capture vehicle complexities, which stem from factors such as battery dynamics or diverse driving patterns. The ML algorithms, much to their hypothesized capabilities, comprising deep learning, learn these intricate relationships from real-world data (battery voltage, current, driving data, etc.). This captures the nonlinear and dynamical EV behaviors in this model, raising its accuracy compared to the traditional methods. Fourier transforms are a signal processing technique that decomposes any signal into its basis frequencies. Their application to cycles of driving—speed or acceleration sequences—reveals the driving style. Finally, these frequency-domain features can help the ML model infer how disparate driving styles impact energy consumption and thus range. This combined approach has substantial advantages in terms of accuracy. The model can project with a high degree of accuracy EV range, energy consumption, and battery performance since it has captured complex relationships. Data-driven insight: Model analysis could give several valuable insights into the most influencing factors on EV behaviour, which, in turn, will definitely help in the design of batteries and control strategies in the near future. Flexibility and adaptability: It can learn from new data constantly and update its characteristics in response to alterations in driving patterns, weather, or EV technologies. This work provides a roadmap toward a new class of EV models that are not only precise but also useful in terms of insightfulness for EV performance optimization and range improvement. Keywords- Electric Vehicle, Machine Learning, Fourier Transform, Optimization, Training and Testing Data.

No. of Pages : 8 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055637 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A NANOFORMULATION OF EPIGALLOCATECHIN-3-GALLATE DERIVATIVE AND METHOD OF PREPARATION THEREOF

(51) International classification : A61K31/353, A61K47/32, A61K9/51, A61P35/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)INSTITUTE OF TECHNOLOGY PALAKKAD
Address of Applicant :Nila Campus, Kanjikode West, Pudussery P. O., Palakkad- 678623, Kerala, India Palakkad ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SADHUKHAN, Sushabhan
Address of Applicant :Indian Institute of Technology Palakkad, Nila Campus, Kanjikode West, Pudussery P. O., Palakkad-678623, Kerala India Palakkad ---------- ----------
2)CHATHANGA D, Shabin N.
Address of Applicant :Indian Institute of Technology Palakkad, Nila Campus, Kanjikode West, Pudussery P. O., Palakkad- 678623, Kerala India Palakkad ---------- ----------
3)VIJAYAN, Vishnu N.
Address of Applicant :Indian Institute of Technology Palakkad, Nila Campus, Kanjikode West, Pudussery P. O., Palakkad- 678623, Kerala India Palakkad ---------- ----------
4)SAHADEVAN, Revathy
Address of Applicant :Indian Institute of Technology Palakkad, Nila Campus, Kanjikode West, Pudussery P. O., Palakkad- 678623, Kerala India Palakkad ---------- ----------

(57) Abstract :
The present invention discloses a nanoformulation and its method of preparation thereof. The nanoformulation is epigallocatechin-3-gallate (EGCG) derivative (4?-Cn EGCG) with an alkyl chain at 4? position, where the EGCG derivatives is coated with silver nanoparticles and the method of preparation includes the synthesis of 4?-Cn EGCG derivatives (n=14, 16) followed by the synthesis of silver nanoparticles of 4?-Cn EGCG. The nanoformulation display enhanced water solubility and bioavailability and have broad spectrum antibacterial and antibiofilm activity.

No. of Pages : 31 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055639 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : RECHARGED AESTHETICS : ELECTRIC VEHICLES SPARK A FUTURISTIC DESIGN REVOLUTION

(51) International classification :G06Q0010100000, B60L0053630000, A61P0035000000, B60L0053620000, B60L0053660000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SAVEETHA ENGINEERING COLLEGE
Address of Applicant :SAVEETHA ENGINEERING COLLEGE,SAVEETHA NAGAR, THANDALAM,CHENNAI-602105. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)JOHN DE BRITTO C
Address of Applicant :ASSISTANT PROFESSOR- EEE, SAVEETHA ENGINEERING COLLEGE,SAVEETHA NAGAR, THANDALAM,CHENNAI-602105. ---------- ----------

(57) Abstract :
Electric vehicles are much more than a change in fuel source; they are going to be the spark that ignites a design revolution of a bygone era. We outline in this paper how key characteristics unique to EVs make a monumental difference in traditional automotive design. We will investigate how these very same innovations are leading toward: Streamlined Exteriors: Because EVs focus on efficiency, they have taken to sleeker and more aerodynamic • profiles, redesigning the silhouette of the car altogether. Reimagined Interiors: The absence of large engines makes EV interiors all about spaciousness and comfort, like moving living spaces. Tech-Centric User Experiences: Seamlessness in the integration of technology will come to the fore in creating intuitive, personalized interactions between the driver and the vehicle. The paper will further show how the EV revolution goes beyond the car design to charging infrastructure, urban landscapes, and probably even beyond transport. The changed wording gives what the role of EVs is in changing not just cars but changes everything, with a view into a reimagined future.

No. of Pages : 9 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024

(21) Application No.202441055641 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DEEP LEARNING BASED FIRE DETECTION, ALERT AND SUPPRESSION SYSTEM

(51) International classification	:H04W0084180000, G08B0025000000, G08B0017000000, G08B0017100000, G08B0017120000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Aalim Muhammed Salegh College of Engineering
Address of Applicant :Aalim Muhammed Salegh College of Engineering, Avadi-IAF, Muthapudupet, Chennai, Tamilnadu, India, Pin code-600055. ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)M. SANGAVI
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ----------
2)Dr. R. LAVANYA
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ----------
3)G.K. MONICA
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ----------
4)S.K. ASHWATHY
Address of Applicant :Lecturer, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ----------
5)E. MUKUNDHAN
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ----------
6)A. RAJASEKAR
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ----------
7)JULIE JOANNS
Address of Applicant :Research Scholar, Computer science Engineering, Anna University, Chennai, Tamilnadu, India, Pin code- 600025 ----------
8)SATISH S
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ----------
9)KHAJA MOHIDEEN K
Address of Applicant :Assistant Professor, Information Technology, Aalim Muhammed Salegh College of Engineering, Chennai, Tamilnadu, India, Pin code-600055. ----------

(57) Abstract :
TITLE: DEEP LEARNING BASED FIRE DETECTION, ALERT AND SUPPRESSION SYSTEM ABSTRACT 22-^_ul-2024/95643/202441055641/Form 2(Title Page) Fire alarm systems are essential in alerting people before fire engulfs their homes. However, fire alarm systems, today, require a lot of wiring and labour to be installed. This discourages users from installing them in their homes. Therefore, we are proposing an IoT based wireless fire alarm system that is easy to install. The proposed system is an ad-hoc network that consists of several nodes distributed over the house. Each of these nodes consists of a microcontroller (ESP8266 node MCU) connected to smoke, temperature, humidity, flame, Methane and Carbon Monoxide (CO) sensors that continuously sense the surrounding environment to detect the presence of fire. The nodes create their own Wi-Fi network. These nodes communicate with a centralized node implemented with a Raspberry Pi microcontroller integrated with a 4G module. Once fire is detected by a node, it sends a signal to a centralized node that is triggered to send an SMS to the fire department and the user, call the user and alert the house by producing a local alarm. The user can also get information about the status of his home via sending an SMS to the system. The sensing nodes create a mesh network, and they are linked to the central node via a bridge node. Communication between the bridge node and the sensing node is through Message Queuing Telemetry Transport (MQTT) protocol. A prototype was developed for the proposed system, and it carried out the desired functionalities successfully with an average delay of less than 30 seconds. DATE: 18/07/2024 Signature: NAME : 1. M.SANGAVI 2. Dr. R. LA VANYA 3. G.K. MONICA 4. E.MUKUNDHAN 5. S.K. ASHWATHY 6. Mr. A. RAJASEKAR 7. JULIE JOAN NS 8. S.SATISH 9. KHAJA MOHEDEEN K

No. of Pages : 14 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055667 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A METHOD OF ECO-FRIENDLY BUILDING MATERIALS

(51) International classification :B29L0031000000, C04B0028020000, B29K0067000000, B29B0017000000, C08J0011060000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR.BHOJARAJA BE
Address of Applicant :CIVIL ENGINEERING DEPARTMENT, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
2)VAIBHAV K VIDYAPATI
Address of Applicant :CIVIL ENGINEERING DEPARTMENT, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
3)SANJAY ANAND G
Address of Applicant :CIVIL ENGINEERING DEPARTMENT, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
4)SHASHANK S AMBIG
Address of Applicant :CIVIL ENGINEERING DEPARTMENT, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
5)RUSHYANTH TG
Address of Applicant :CIVIL ENGINEERING DEPARTMENT, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------

(57) Abstract :
Disclosed herein is a method of eco-friendly building materials using recycled plastic waste with waste foundry sand along with the cement (100) comprises collecting polyethylene terephthalate (PET) bottles, waste foundry sand, and cement (102). The method includes fixing the proportions of PET bottles, foundry sand, and cement (104) to achieve desired mechanical properties and engineering strength. The method also includes chopping the collected PET bottles into smaller pieces (106). The method also includes melting the chopped PET bottles to form a molten plastic (108). The method also includes adding the waste foundry sand and cement to the molten plastic to create a homogenous mixture (110). The method also includes transferring the mixture into moulds (112), including but not limited to standard size brick moulds, interlocking moulds, cladding tiles moulds, or kerb stones moulds. The method also includes curing the molded mixture to form solid building materials (114).

No. of Pages : 22 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055678 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN ARTIFICIAL INTELLIGENCE (AI)-BASED PERSONALIZED USER INTERACTION SYSTEM FOR ADAPTIVE OPERATIONS AND SECURE DATA SHARING

(51) International classification :G06N0020000000, G06N0005040000, G10L0015260000, G06Q0050000000, A63F0013670000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Mohammed Ali Hussain
Address of Applicant :Professor and Assoc. Dean R&D, KLEF (Deemed to be University), Guntur- 522302, Andhra Pradesh, India. Guntur ---------- ----------
2)Sukender Reddy Mallreddy
3)Yeshwanth Vasa
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Mohammed Ali Hussain
Address of Applicant :Professor and Assoc. Dean R&D, KLEF (Deemed to be University), Guntur- 522302, Andhra Pradesh, India. Guntur ---------- ----------
2)Sukender Reddy Mallreddy
Address of Applicant :Salesforce Consultant, City of Dallas, 1621 Trellis Dr, Prosper, Texas, USA. ---------- ----------
3)Yeshwanth Vasa
Address of Applicant :Vice President in Technology, Miracles Tek LLC, 10068 S Woodside ct, Franklin, WI, 53132, USA. ---------- ----------

(57) Abstract :
ABSTRACT: Title: An Artificial Intelligence (AI)-based Personalized User Interaction System for Adaptive Operations and Secure Data Sharing The present disclosure proposes an artificial intelligence (AI)-based personalized user interaction system (100) that encompasses a variety of data types and are utilized in diverse scenarios, especially those involving databases that index full-text records and Internet or Intranet data. The artificial intelligence (AI)-based personalized user interaction system (100) comprises a computing device (102) having a processor (104) and a memory (106) for storing one or more instructions executable by the processor (104). In addition, the processor (104) is configured to execute plurality of modules (108) for performing multiple operations. The plurality of modules (108) comprises a data transmission module (110), a processing module (112), a display module (114) and a combining module (116). The proposed AI-based personalized user interaction system (100) improves the efficiency of finding and accessing information.

No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055679 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN ADVANCED SYSTEM AND METHOD FOR DIAGNOSING MENTAL HEALTH CONDITIONS USING ELECTROENCEPHALOGRAM SIGNAL ANALYSIS

(51) International classification	:A61B0005000000, G16H0050200000, A61B0005369000, A61B0005160000, G16H0050300000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)National Institute of Technology Calicut
Address of Applicant :NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Subha D Puthankattil
Address of Applicant :Associate Professor, Department of Electrical Engineering, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
2)Aswin Sekhar C S
Address of Applicant :B-Tech Student, Department of Electronics & Communication Engineering, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
3)Amal Raj
Address of Applicant :B-Tech Student, Department of Electronics & Communication Engineering, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------

(57) Abstract :
ABSTRACT: Title: An Advanced System and Method for Diagnosing Mental Health Conditions Using Electroencephalogram Signal Analysis The present disclosure proposes an advanced system (100) for diagnosing mental health conditions, specifically schizophrenia (SZ), major depressive disorder (MDD), and identifying healthy controls through electroencephalogram signal analysis while enhancing the efficiency of diagnosing these mental health conditions. The advanced system (100) comprises a data acquisition module (110), an analyzing module (114), a diagnostic module (116), and a user interface module (118). The data acquisition module (110) is configured to receive electroencephalogram (EEG) data from at least one patient. The analyzing module (114) is configured to analyze the EEG data and detect patterns indicative of mental health conditions. The diagnostic module (116) is configured to generate one or more comprehensive diagnostic reports based on the analyzed EEG data. The user interface module (118) is configured for displaying the generated one or more comprehensive diagnostic reports.

No. of Pages : 28 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055680 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYNTHESIS OF AZLACTONES THROUGH MICROWAVE IRRADIATION USING ZIRCONIUM-PHOSPHORUS CO-DOPED TITANIUM OXIDE NANO PHOTOCATALYST

(51) International classification :B01J0035000000, B01J0021060000, B82Y0030000000, B82Y0005000000, A61K0008290000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Andhra University
Address of Applicant :Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. B. B. V. Sailaja
Address of Applicant :Professor, Department of Chemistry, Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------
2)B. Lakshmi Rekha
Address of Applicant :Research Scholar, Department of Chemistry, Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------
3)Dr. V. Christopher
Address of Applicant :Assistant Professor, Department of Chemistry, Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------
4)G. Ganapathi Rao
Address of Applicant :Assistant Professor, Institute of Aeronautical Engineering, Dundigal, Hyderabad-500043, Telangana, India. Hyderabad ---------- ----------

(57) Abstract :
ABSTRACT: Title: Synthesis of Azlactones through Microwave Irradiation Using Zirconium-Phosphorus Co-Doped Titanium Oxide Nano Photocatalyst The present disclosure proposes a novel and efficient method for azlactones synthesis through microwave irradiation using zirconium (Zr) and phosphorus (P) co-doped titanium dioxide (TiO2) nano photocatalyst, thereby achieving efficient yields in significantly shorter time intervals. The method reduces reaction time from at least 1-2 hr to just 3-5 min, thereby offering a substantial improvement over conventional method. The method utilizes a novel zirconium (Zr) and phosphorus (P) co-doped titanium dioxide (TiO2) nano photocatalyst, which achieves efficient yields at least 96 %, thereby ensuring high product purity and reducing the need for additional purification process. The method adheres to green chemistry principles by minimizing the use of toxic reagents and reducing waste, thereby making the process safer and more sustainable.

No. of Pages : 37 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055684 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : LEVERAGING DATA ANALYTICS: K-MEANS CLUSTERING AND PCA FOR ENHANCED FACILITY MANAGEMENT

(51) International classification	:G06Q0010060000, G06Q0010080000, G06K0009620000, G06Q0010000000, G05B0023020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)BTP Madhav
Address of Applicant :Department of ECE, Koneru Lakshmaiah Education Foundation, Vaddeswaram, AP, India ---------- ----------
2)Koneru Lakshmaiah Education Foundation
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)VULLANKI SRI SRAVAN
Address of Applicant :Koneru Lakshmaiah Education Foundation Vaddeswaram ---------- ----------
2)VULLANKI RAJESH
Address of Applicant :Koneru Lakshmaiah Education Foundation Vaddeswaram ---------- ----------
3)K.J. BRAHMA CHARI
Address of Applicant :Koneru Lakshmaiah Education Foundation Vaddeswaram ---------- ----------
4)N.NANDA PRAKASH
Address of Applicant :Koneru Lakshmaiah Education Foundation Vaddeswaram ---------- ----------
5)B T P Madhav
Address of Applicant :Koneru Lakshmaiah Education Foundation Vaddeswaram ---------- ----------

(57) Abstract :
CLR Facility Services Pvt. is a premier integrated facilities management company in India, specializing in digital innovation to enhance operational efficiency and productivity across various sectors. As a B2B enterprise, CLR Facility Services caters to a diverse clientele, ensuring optimal performance in facility management. However, the organization faces significant challenges in the areas of manpower, machinery, and materials. Manpower issues are prevalent, with the company struggling to find and retain qualified staff, particularly for specialized tasks. High turnover rates result in inconsistent service quality, undermining client satisfaction and operational stability. Addressing this requires a strategic approach to workforce management, including better training programs, competitive compensation packages, and a supportive work environment to enhance employee retention. Machinery-related challenges also pose a significant threat to facility management operations. Machinery breakdowns lead to operational disruptions and costly downtime. Ensuring regular maintenance and timely upgrades of equipment is essential to minimize these risks. Implementing predictive maintenance technologies can help in early detection of potential issues, thereby preventing unexpected failures and ensuring smooth operations. Materials management is another critical area where CLR Facility Services faces difficulties. Shortages or delays in procuring necessary materials can hinder maintenance and cleaning tasks, leading to inefficiencies and client dissatisfaction. Effective inventory management practices are crucial to avoid such problems. This includes adopting advanced inventory tracking systems and establishing reliable supplier relationships to ensure a steady supply of required materials. Descriptive statistics like mean, variance, and standard deviation are provided for material stock. This helps in exploring how CLR can leverage K-Means clustering to group similar data points (e.g., employees by experience) and Principal Component Analysis (PCA) to identify key factors impacting operations. By analyzing data relationships, CLR can optimize resource allocation and decision-making for improved efficiency and growth.

No. of Pages : 12 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055713 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ZIP-TAG AERATOR AND BIOFILTER WATER PURIFICATION SYSTEM

(51) International classification :A01K0063040000, C02F0001280000, C02F0003020000, C02F0101200000, C02F0003200000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SHANMUKHA SHETTY
Address of Applicant :DEPT OF CIVIL ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA udupi ---------- ----------
2)PRADEEP KARANTH
Address of Applicant :DEPT OF CIVIL ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA udupi ---------- ----------
3)THUSHAR S SHETTY
Address of Applicant :DEPT OF CIVIL ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA udupi ---------- ----------
4)DR. ARUN KUMAR BHAT
Address of Applicant :DEPT OF CIVIL ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA udupi ---------- ----------
5)DR. SARANYA P
Address of Applicant :DEPT OF CIVIL ENGINEERING, NITK, SURATHKAL - 575025, KARNATAKA, INDIA SURATHKAL ---------- ----------

(57) Abstract :
Disclosed herein is a zip-tag aerator and biofilter water purification system (100) that comprises an aerator body (102) crafted from a flexible material for a water-tight connection with a tap, the aerator body (102) incorporating a multi-layered aeration system (104) for introducing air into the water stream, a hose section (106) on the aerator body (102) designed for attachment of a zip-tag mechanism (108), The zip-tag mechanism (108) constructed from a sturdy material, the zip-tag mechanism (108) threadedly engageable with the hose section (106) for securing the aerator body (102) to a tap of varying sizes and shapes, a multi-layered biofilter system (110) positioned within the aerator body (102), wherein the multi-layered biofilter system (110) includes layers for removing particulate matter, microbes, volatile organic compounds, and some heavy metals from water.

No. of Pages : 24 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055742 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTOMATIC FAULT ALERTING AND PHASE SELECTOR DEVICE

(51) International classification :H02J3/00, H02J3/26, G01R19/165, G05B19/04, H02J9/06
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)KARTHIK
Address of Applicant :DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA UDUPI ---------- ----------

(57) Abstract :
Disclosed herein is an automatic fault alerting and phase selector device (100), the device (100) comprising a plurality of input phases (102) configured to carry 230V each between natural lines. A microcontroller (104), connected to the plurality of input phases (102) configured to process the input received from the plurality of input phases (102). The microcontroller (104) further comprises a monitoring module (106) configured to measure the voltage across the plurality of phases. The device (100) further comprises a user device (132) configured to remotely provide real-time data to the user and further provide information about the faults in the plurality of input phases (102).

No. of Pages : 26 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055750 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : UNIVERSAL WATER TAP AERATOR AND BIOFILTER SYSTEM

(51) International classification :A01K0063040000, E03C0001084000, E03C0001080000, A23K0010300000, B01D0053850000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SHANMUKHA SHETTY
Address of Applicant :DEPT OF CIVIL ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
2)PRADEEP KARANTH
Address of Applicant :DEPT OF CIVIL ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
3)THUSHAR S SHETTY
Address of Applicant :DEPT OF CIVIL ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
4)DR. ARUN KUMAR BHAT
Address of Applicant :DEPT OF CIVIL ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
5)SHETTY SRINATH K
Address of Applicant :DEPT OF CIVIL ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
6)DR. KUMAR ANIL H S
Address of Applicant :DEPT OF BIOTECHNOLOGY ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
7)DR. SARANYA P
Address of Applicant :DEPT OF CIVIL ENGINEERING, NITK, SURATHKAL - 575025, KARNATAKA, INDIA Udupi ---------- ----------

(57) Abstract :
Disclosed herein is a universal water tap aerator and biofilter system (100) that comprises a clamp-type attachment mechanism (102) configured to secure the system to a water tap without requiring modifications to the tap, a multi-layer biofilter unit (104) comprising at least one layer of coconut fibre and at least one layer of water hyacinth roots, a clay aerator unit (106) integrated with the biofilter unit, a universal design for retrofitting onto existing water taps.

No. of Pages : 23 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055752 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : INTELLIGENT LOITERING DETECTION SYSTEM

(51) International classification	:H04N0007180000, G08B0013196000, G06T0007110000, G08B0003100000, G06T0007194000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)B N M Institute of Technology
Address of Applicant :12th Main Road, 27th Cross, Banashankari Stage II, Banashankari, Bengaluru, Karnataka 560070 ---------- ----------
2)Adimulam Koushik
3)Aishwarya G S
4)Anughna R Chandra
5)Dr. Sunitha R
6)Jayashree
7)Dr. Sheba Selvam
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Adimulam Koushik
Address of Applicant :Student, Department of Artificial Intelligence and Engineering, B N M Institute of Technology, 12th Main Road, 27th Cross, Banashankari Stage II, Banashankari, Bengaluru, Karnataka 560070 ---------- ----------
2)Aishwarya G S
Address of Applicant :Student, Department of Artificial Intelligence and Engineering, B N M Institute of Technology, 12th Main Road, 27th Cross, Banashankari Stage II, Banashankari, Bengaluru, Karnataka 560070 ---------- ----------
3)Anughna R Chandra
Address of Applicant :Student, Department of Artificial Intelligence and Engineering, B N M Institute of Technology, 12th Main Road, 27th Cross, Banashankari Stage II, Banashankari, Bengaluru, Karnataka 560070 ---------- ----------
4)Dr. Sunitha R
Address of Applicant :Associate Professor, Department of Artificial Intelligence and Engineering, B N M Institute of Technology, 12th Main Road, 27th Cross, Banashankari Stage II, Banashankari, Bengaluru, Karnataka 560070 ---------- ----------
5)Jayashree
Address of Applicant :Assistant Professor, Department of Artificial Intelligence and Engineering, B N M Institute of Technology, 12th Main Road, 27th Cross, Banashankari Stage II, Banashankari, Bengaluru, Karnataka 560070 ---------- ----------
6)Dr. Sheba Selvam
Address of Applicant :Professor and Head, Department of Artificial Intelligence and Engineering, B N M Institute of Technology, 12th Main Road, 27th Cross, Banashankari Stage II, Banashankari, Bengaluru, Karnataka 560070 ---------- ----------

(57) Abstract :
The present invention relates to an intelligent loitering detection system. The system (100) comprises a camera, a computing device, a deep learning-based object detection module, a variance analysis module, a threshold module and an alerting module. The camera for capturing video footage of a monitored area. The computing device configured to process the captured video footage. The deep learning-based object detection module. The variance analysis module integrated into the computing device to analyze spatial and temporal movements of the tracked persons. The threshold module integrated into the computing device to compare the computed variance metrics against predefined thresholds indicative of loitering behavior. The alerting module integrated into the computing device to send real-time notifications to designated personnel upon detection of loitering behavior based on the comparison results from the threshold module.

No. of Pages : 20 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024

(21) Application No.202441055753 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : HOLOGRAM BASED VIRTUAL ZOO

(51) International classification	:G06F0003010000, G03H0001220000, H04N0021422000, H04N0021485000, G06F0003023000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)B N M Institute of Technology
Address of Applicant :12th Main Road, 27th Cross, Banashankari Stage II, Banashankari, Bengaluru, Karnataka 560070 ---------- ----------
2)Lahari V Ravindranath
3)Lisha Kushalappa C S
4)Lithisha P S
5)Dr. Sunitha R
6)Mrs. Pavithra
7)Dr. Sheba Selvam
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Lahari V Ravindranath
Address of Applicant :Student, Department of Artificial Intelligence and Engineering, B N M Institute of Technology, 12th Main Road, 27th Cross, Banashankari Stage II, Banashankari, Bengaluru, Karnataka 560070 ---------- ----------
2)Lisha Kushalappa C S
Address of Applicant :Student, Department of Artificial Intelligence and Engineering, B N M Institute of Technology, 12th Main Road, 27th Cross, Banashankari Stage II, Banashankari, Bengaluru, Karnataka 560070 ---------- ----------
3)Lithisha P S
Address of Applicant :Student, Department of Artificial Intelligence and Engineering, B N M Institute of Technology, 12th Main Road, 27th Cross, Banashankari Stage II, Banashankari, Bengaluru, Karnataka 560070 ---------- ----------
4)Dr. Sunitha R
Address of Applicant :Associate Professor, Department of Artificial Intelligence and Engineering, B N M Institute of Technology, 12th Main Road, 27th Cross, Banashankari Stage II, Banashankari, Bengaluru, Karnataka 560070 ---------- ----------
5)Mrs. Pavithra
Address of Applicant :Assistant Professor, Department of Artificial Intelligence and Engineering, B N M Institute of Technology, 12th Main Road, 27th Cross, Banashankari Stage II, Banashankari, Bengaluru, Karnataka 560070 ---------- ----------
6)Dr. Sheba Selvam
Address of Applicant :Professor and Head, Department of Artificial Intelligence and Engineering, B N M Institute of Technology, 12th Main Road, 27th Cross, Banashankari Stage II, Banashankari, Bengaluru, Karnataka 560070 ---------- ----------

(57) Abstract :
The present invention relates to a hologram based virtual zoo. The system (100) comprises a holographic display, an integrated camera, a display device, a sound system, and a software component. The holographic display constructed from acrylic sheets forming a pyramid. The display device positioned at the base of the pyramid for projecting images upward. The integrated camera for capturing hand gestures. The sound system connected to the display device for audio output. The software component comprising a video playback module for synchronizing holographic video content with the display device; an audio playback module for playing sound in synchronization with the video content; and a hand gesture detection module using OpenCV for regulating sound volume based on detected hand gestures.

No. of Pages : 15 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055756 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : CORE CUTTING WASTEWATER SLUDGE COLLECTING DEVICE

(51) International classification :B23Q0011000000, C02F0001000000, C02F0001680000, C02F0101200000, B01D0017000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Bhuvaneswari Krishnan
Address of Applicant :2B RAMANIYAM MANASORAVAR 44 TO 55 FIRST CROSS STREET BESANT NAGAR CHENNAI 600090 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Bhuvaneswari Krishnan
Address of Applicant :2B RAMANIYAM MANASORAVAR 44 TO 55 FIRST CROSS STREET BESANT NAGAR CHENNAI 600090 ---------- ----------

(57) Abstract :
The invention relates to a wastewater sludge collecting device intended for a core cutting Machine that has the following parts: 1. Electric motor 2. Frame 3. Base 4. Machine shaft that houses the tool bit of varying size 5. Input water supply motor with supply tube 6. Wastewater Sludge collecting device 7. Water chamber 8. Filter in the water chamber The WasteWater sludge Device is housed on the frame which comprises a cylindrical tube made from plastic, metal or fiber with both sides open.One side of the tube contains a lip. And the other end of the cylindrical tube has a rubber liner which acts as a gasket and seals the wall and the and the cylindrical tube. The WasteWater sludge Device has a drain hole with a drain hose along with the functionality for support via the Frame of the Core cutting machine. This invention also addresses the reusability of the water that is used for the core cutting process. The invention is related to a device that collects waste water which consists of clean water and brick, concrete, AAC block, TMT metal rod cuttings. This waste water is termed as Sludge. A core Cutting machine is comprised of an electric motor, machine shaft that houses various sizes tool bits, frame, base and water motor pump.The waste water sludge device is fixed onto the frame through bolts, fastened to the bolt with nuts and washers and is fit flush onto the wall where the core cutting occurs. This invention also relates to a filter mechanism in the clean water supply chamber that is fed with the waste water through the tube from the waste Waste Water sludge Device. The invention relates to the collection of the waste water sludge with the use of the waste water sludge device during the core cutting process. The invention also relates to the filtering of the sludge water which can be reused after filtration. At present, the core cutting machine is mounted on the wall with a tie rod fitted through the base of the core cutting machine.When the machine is turned on the water motor pump is also turned on. The water motor injects water into the core cutting tool bit. The water's functionality is to cool the core cutting tool bit during the time when the core cutting tool cuts the wall to be drilled. As the core cutting machine drives the core cutting tool bit into the area to be drilled, the water mixes with the drilled material to create a wet sludge mix which spills out with high pressure due to the force of the core cutting process applied by the machine on the surface of the area to be drilled. This wet sludge is splattered in the nearby areas at high velocities which results in the adjacent areas surrounding the drilling needing heavy rework such as repainting of walls, replacement of false ceilings, damage of wooden interiors, huge clean up, prone to slip and fall injuries. As can be seen, a sludge containment device is needed which can contain the spreading of the sludge during the core cutting process instead of causing damage to the adjacent areas near to the core cutting process. The collection device contains a cylindrical object which is open on both ends and can be made of plastic, metal or fiber material.. One end is fitted with a rubber tube which acts as a gasket. The cylinder contains four holes. Two of the holes are used to connect the frame and the tube so that it has support to stay upright on the wall.The other two holes act as a drain hole and can be connected to a drain hole which will lead into the water reservoir chamber. The cylindrical object is notched on one side and can be separated into two pieces so as to facilitate drilling on the corners.

No. of Pages : 7 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055759 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTOMATED CODE OPTIMIZATION TECHNIQUES FOR HIGH-PERFORMANCE COMPUTING

(51) International classification	:G06N0020000000, G06F0008410000, G06Q0030020000, G06F0011340000, G06F0030332300
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Mr.Venkata Sathya Kumar Koppisetti
Address of Applicant :Consulting SAP Solution Architect VIT Vellore Campus, 2042 Link Dr Buffalo Grove IL 60089 Vellore - 632 014. Tamilnadu, India ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr.Venkata Sathya Kumar Koppisetti
Address of Applicant :Consulting SAP Solution Architect VIT Vellore Campus, 2042 Link Dr Buffalo Grove IL 60089 Vellore - 632 014. Tamilnadu, India ---------- ----------

(57) Abstract :
Abstract: The invention provides an automated system for optimizing code in high-performance computing (HPC) environments. The system integrates a Code Analyzer that performs both static and dynamic analysis to identify inefficiencies. An Optimization Engine then applies advanced techniques, including loop unrolling, vectorization, and parallelization, based on insights from the analysis. A Machine Learning Model predicts the most effective optimization strategies using a dataset of optimized code and performance metrics. The Code Transformer modifies the code according to these strategies while ensuring functional correctness through formal verification. Finally, a Performance Evaluator benchmarks the optimized code against performance criteria and provides feedback to refine the machine learning model's predictions. This system automates and streamlines the optimization process, reducing manual effort and adapting to various hardware architectures and workload conditions, ultimately enhancing HPC application performance efficiently and effectively.

No. of Pages : 15 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024

(21) Application No.202441055760 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SCALABLE DEEP LEARNING SOLUTIONS FOR COMPREHENSIVE PATIENT HEALTH MONITORING

(51) International classification	:G16H0010600000, A61B0005000000, G16H0040670000, G06N0003080000, G06T0007000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Saveetha Engineering College
Address of Applicant :Saveetha Engineering College, Chennai - 602105 District: Kanchipuram State: Tamilnadu Country: India ---------- ----------
2)Ms. K. Kausalya
3)Ms. Shikha
4)Ms. P. Bhanupriya
5)Dr. C. Lakshmi
6)Dr. R. Hema
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Ms. K. Kausalya
Address of Applicant :Assistant Professor, Department of Artificial Intelligence and Data Science, Saveetha Engineering College, Chennai - 602105 District: Kanchipuram State: Tamilnadu Country: India ---------- ----------
2)Ms. Shikha
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering (Cyber Security), Saveetha Engineering College, Chennai - 602105 District: Kanchipuram State: Tamilnadu Country: India ---------- ----------
3)Ms. P. Bhanupriya
Address of Applicant :Assistant Professor, Department of ECE, Saveetha Engineering College, Chennai - 602105 District: Kanchipuram State: Tamilnadu Country: India ---------- ----------
4)Dr. C. Lakshmi
Address of Applicant :Assistant professor, Department of ECE, Saveetha Engineering College, Chennai - 602105 District: Kanchipuram State: Tamilnadu Country: India ---------- ----------
5)Dr. R. Hema
Address of Applicant :Associate Professor, Department of ECE, Saveetha Engineering College, Chennai - 602105 District: Kanchipuram State: Tamilnadu Country: India ---------- ----------

(57) Abstract :
Scalable Deep Learning Solutions for Comprehensive Patient Health Monitoring ABSTRACT: Machine learning (ML) and deep learning (DL) have become the most effective methods for addressing a diverse array of issues in intelligent healthcare applications in recent years. These challenges encompass a variety of areas, such as the analysis of medical images, the prediction of diseases, and the discovery of medications. Furthermore, the potential for both machine learning and deep learning to contribute to the field of healthcare is promising, given the progress that has been made in these disciplines. The origin and dissemination of maladies are a significant source of concern in the rapidly changing technical and evolutionary environment of today. It is anticipated that the quality of healthcare for patients will be improved and personalized medicine will be advanced through the use of predictive modeling with data from electronic health records (EHR). The framework offers a novel approach to remote patient monitoring by combining intelligent digital health solutions with latency-aware edge computing autoscaling. The "SDH" enables the real-time monitoring of critical health data by leveraging application autoscaling and Internet of Things (IoT) technology. The following parameters are included: body temperature, blood pressure, oxygen saturation, and electrocardiogram (ECG).The subsequent paper provides a comprehensive examination of scalable deep learning platforms and the methods by which they are employed in the medical field. The introduction emphasizes the most critical elements, followed by a concise overview of the medical environment.

No. of Pages : 10 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055761 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : HYBRID SUPERCAPACITOR SYSTEM AND METHOD FOR ENERGY MAXIMIZATION

(51) International classification :H02J0007000000, C12N0005078900, B60W0030180000, B60L0053100000, F15B0021140000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VIT-AP University
Address of Applicant :Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)VIPU VINAYAK V J
Address of Applicant :Research Scholar, School of Advanced Sciences, Department of Physics, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
2)S K KHADHEER PASHA
Address of Applicant :Assistant Professor Grade 2, School of Advanced Sciences, Department of Physics, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
3)V.R.K MURTHY
Address of Applicant :Emeritus Professor, School of Advanced Sciences, Department of Physics, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------

(57) Abstract :
The present disclosure relates to a system (100) for integrating a high energy density polymer nanocomposite (PNC) based hybrid supercapacitor (HSC) within an electric vehicle (EV), the system includes a high energy density PNC based HSC (102) formed by 2D MXene and intrinsically conducting polymer (ICP). An electric motor (104) is configured to drive the EV, the electric motor being connected to the HSC (102) for energy transfer during propulsion. A regenerative braking unit (106) is configured to recover kinetic energy during braking and convert into electrical energy, wherein the electrical energy is stored in the HSC (102), a fast-charging unit (108) configured to rapidly recharge the HSC (102) and an energy storage integrated in the HSC configured to balance energy storage and distribution, optimizing performance and longevity of the HSC (102).

No. of Pages : 19 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055762 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD AND APPARATUS FOR NANOSHEET TRANSISTOR CURRENT-VOLTAGE CHARACTERISTIC PREDICTOR

(51) International classification	:H01L0029423000, H01L0029786000, G06N0020000000, H01L0029775000, H01L0029060000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)VELLORE INSTITUTE OF TECHNOLOGY, CHENNAI
Address of Applicant :Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)KAUSTAB GHOSH
Address of Applicant :Professor, School of Electronics Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
2)CHOKKA SRITANUJA
Address of Applicant :PG Student, School of Electronics Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------

(57) Abstract :
The present disclosure relates to an apparatus (100) for predicting the current-voltage characteristics of a nanosheet transistor (200), the apparatus that includes one or more processors (110) to receive structural parameters and electrical parameters of the nanosheet transistor. Calculate a Hamiltonian matrix of the nanosheet transistor, the Hamiltonian matrix constituting the source, drain, and channel regions of the nanosheet transistor. Compute a self-consistent simulation of an equation containing the Hamiltonian matrix and Poisson equation comprising the potential profile of the nanosheet transistor. Calculate a non-equilibrium Green's function containing the Hamiltonian matrix and the potential profile of the nanosheet transistor. Calculate drain current of the nanosheet transistor for various applied voltages, pertaining to drain-to-source and gate-to-source voltage and train a decision tree of a machine learning model for faster prediction of the current-voltage characteristics of the nanosheet transistor.

No. of Pages : 29 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055763 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MOLYBDENUM DISULFIDE (MOS2)-BASED SCHOTTKY TUNNEL FIELD EFFECT TRANSISTOR, DEVICE AND METHOD FOR ABNORMAL CELL DETECTION

(51) International classification	:H01L0029739000, G01N0033543000, H01L0029060000, A61B0005145000, H01L0029812000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)VELLORE INSTITUTE OF TECHNOLOGY, CHENNAI
Address of Applicant :Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)B PRASHANTH KUMAR
Address of Applicant :Assistant Professor Senior Grade, School of Electronics Engineering (SENSE), Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
2)A. ARIVARASI
Address of Applicant :Assistant Professor Senior Grade, School of Electronics Engineering (SENSE), Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
3)ANUSUYA P
Address of Applicant :Research Scholar, School of Advanced Sciences (SAS), Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------

(57) Abstract :
The present invention discloses a dual source -dual gate Schottky tunnel field effect transistor (DS-DG-STFET) (800), a device (100) incorporating the DS-DG-STFET (800) to detect one or more biomolecules and a method (200) for fabricating the DS-DG-STFET (800) for abnormal cell detection. The invention discloses a device (100) for detecting biomolecules utilizing a dual source-dual gate Schottky Tunnel Field Effect Transistor (DS-DG-STFET) (800). The DS-DG-STFET (800) comprises a substrate (101), a channel layer (102) disposed on the substrate (101), first and second source electrodes (103, 104) positioned on opposing sides of the channel layer (102), first and second gate electrodes (105, 106) defining nanogap regions (105-1, 106-1), and a drain electrode (107) for current collection. The nanogap regions (105-1, 106-1) are designed to accommodate biomolecules. The presence of biomolecules in the nanogaps influences the electrical characteristics of the STFET (700), allowing detection based on measured changes in these parameters.

No. of Pages : 28 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055863 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : GEOTAGGING OF PLANTATION IN CATCHMENT AREA

(51) International classification :B64C0039020000, G06Q0050020000, A01B0079000000, A01C0021000000, G06F0016290000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Sri Krishna College of Engineering and Technology
Address of Applicant :Sri Krishna College of Engineering and Technology Bk Pudur , Kuniamuthur Coimbatore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Geethamani R
Address of Applicant :Associate Professor Electrical and Electronics Engineering Sri Krishna College of Engineering and Technology Bk Pudur , Kuniamuthur Coimbatore ---------- ----------
2)Padma Priya S R
Address of Applicant :Student Electrical and Electronics Engineering Sri Krishna College of Engineering and Technology Bk Pudur , Kuniamuthur Coimbatore ---------- ----------
3)Santhipkumar S
Address of Applicant :Student Electrical and Electronics Engineering Sri Krishna College of Engineering and Technology Bk Pudur , Kuniamuthur Coimbatore ---------- ----------
4)Sasipriya S
Address of Applicant :Student Electrical and Electronics Engineering Sri Krishna College of Engineering and Technology Bk Pudur , Kuniamuthur Coimbatore ---------- ----------
5)Srivisweswara M S
Address of Applicant :Student Electrical and Electronics Engineering Sri Krishna College of Engineering and Technology Bk Pudur , Kuniamuthur Coimbatore ---------- ----------
6)Haricharan R
Address of Applicant :Student Electrical and Electronics Engineering Sri Krishna College of Engineering and Technology Bk Pudur , Kuniamuthur Coimbatore ---------- ----------
7)Saran R
Address of Applicant :Student Electrical and Electronics Engineering Sri Krishna College of Engineering and Technology Bk Pudur , Kuniamuthur Coimbatore ---------- ----------

(57) Abstract :
Our project revolves around the development of a First Person View (FVP) drone equipped with a multispectral camera for precision agriculture applications. The drone is utilized for geotagging specific areas and capturing high-resolution multispectral images. The collected data is then processed using ArcGIS software to analyze the Enhanced Vegetation Index (EVI), a critical indicator of plant health and growth. This integrated approach offers a cost-effective and efficient solution for monitoring vegetation dynamics, allowing for timely and informed agricultural management decisions. The combination of advanced drone technology and geospatial analysis tools facilitates accurate and real-time assessment of plant conditions, contributing to improved crop yield and sustainable agricultural practices.

No. of Pages : 6 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055864 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : CALM FRAMEWORK FOR HOLISTIC PROJECT EXECUTION

(51) International classification	:G06Q0010060000, G06Q0050260000, G06Q0010100000, G06Q0040080000, G06Q0090000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dineshkumar Munikrishnan
Address of Applicant :President, 4D Consulting An der Olmuhle 5, Hattersheim 65795 Germany ---------- ----------
2)Dr.Prabha R
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dineshkumar Munikrishnan
Address of Applicant :President, 4D Consulting An der Olmuhle 5, Hattersheim 65795 Germany ---------- ----------
2)Dr.Prabha R
Address of Applicant :Associate Professor, Computer Science Engineering, T.John Institute of Technology, 88/1 Gottigere, Bannerghatta Rd, Bangalore, 560083 ---------- ----------

(57) Abstract :
The CALM framework is an innovative method for attaining organisational success by executing tasks effectively. It examines the conventional difficulties encountered during project implementation and introduces the CALM framework, which consists of the Create, Approve, Lead, and Measure components, as a comprehensive solution. This thesis seeks to provide organisations with the essential information and skills to successfully apply CALM and achieve exceptional execution outcomes. It does so by incorporating comprehensive explanations, practical examples, and potential advantages. The framework tackles prevalent challenges such as fragmented endeavours, ambiguity, insufficient guidance, and responsive actions by offering a thorough plan for implementation. Each process, including Create, Approve, Lead, and Measure, is specifically designed to establish a robust groundwork, obtain essential authorizations, enable teams, and guarantee ongoing enhancement through judgements based on data. The create phase concentrates on establishing explicit objectives, formulating a comprehensive strategy, and involving stakeholders to guarantee agreement and prompt detection of possible obstacles. The Approvephase encompasses obtaining official authorizations, establishing alignment with strategic objectives, evaluating potential hazards, and assigning essential resources. The Lead phase prioritises proficient leadership, precise communication, training, and nurturing a cooperative culture to enhance optimal performance. The Measure phase include the establishment of key performance indicators, the determination of benchmarks, the collection and analysis of data, and the implementation of data-driven adjustments to enhance execution. The CALM framework not only advocates for a systematic and repetitive process for carefully planned, implemented, and evaluated projects, but also highlights the significance of measurement in every stage. Organisations can anticipate higher efficiency, heightened effectiveness, enhanced accountability, proactive risk management, and better decision-making by implementing the CALM framework. This article presents the CALM framework as a beneficial tool for organisations aiming to enhance their execution capabilities in different industries.

No. of Pages : 8 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055867 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : QUANTUM COMPUTING-ASSISTED MACHINE LEARNING SYSTEM AND METHOD

(51) International classification	:G06N0010000000, G06N0020000000, G06N0003040000, G06N0003063000, G06F0003060000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)J. B. Institute of Engineering and Technology
Address of Applicant :Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Sreenivasulu Gonuguntla
Address of Applicant :Associate Professor, Department of Computer Science and Engineering, Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
2)Dr. Matam Bheemalingaiah
Address of Applicant :Professor, Department of Computer Science and Engineering, Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
3)Mrs. Savaram Gayathri Devi
Address of Applicant :Associate Professor, Department of Computer Science and Engineering, Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
4)Mrs. Ganna Swapna
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
5)Mrs. Gollapalli Bharathi
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
6)Mrs. Shameena begum Phatan
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------

(57) Abstract :
The invention discloses a system and method for enhancing machine learning processes through quantum computing. The system integrates classical machine learning algorithms with quantum computing capabilities to accelerate training times, improve model accuracy, and handle larger datasets. It comprises a classical computing module, a quantum computing module with a quantum processor, an integration layer for seamless communication, and a user interface for system management. The method involves data preparation, initial model training, quantum-assisted computation, model refinement, and deployment, leveraging quantum computing's potential to advance machine learning applications. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 21 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055868 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MACHINE LEARNING-BASED ADAPTIVE LEARNING PATH SYSTEM AND METHOD

(51) International classification	:G06Q0050200000, G06N0020000000, G06F0016953500, G09B0005000000, G06Q0010060000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)J. B. Institute of Engineering and Technology
Address of Applicant :Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr. Ramesh Babu Arumbaka
Address of Applicant :Associate Professor, Department of Computer Science and Engineering, Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
2)Dr. Putti Srinivasa Rao
Address of Applicant :Professor, Department of Computer Science and Engineering, Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
3)Mr. Himagiri Danapana
Address of Applicant :Associate Professor, Department of Computer Science and Engineering, Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
4)Mr. Neelam Thirumalarao
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
5)Mr. Badana Upendra
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
6)Mrs. Saudampalli Pavani
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------

(57) Abstract :
The present invention discloses a machine learning-based adaptive learning path system and method designed to personalize educational experiences based on individual learner profiles. The system includes a learner profile module that gathers and updates data on learner demographics, preferences, and performance; a content analysis module that evaluates and tags educational content; a recommendation engine that employs machine learning algorithms to generate customized learning paths; and a feedback loop that continuously refines these paths based on real-time engagement and performance data. The method involves initializing the learner profile, generating a personalized learning path, monitoring learner engagement and assessments, collecting feedback, and iteratively adjusting the learning path to ensure continuous improvement and optimization of the educational journey. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 22 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055869 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AI-DRIVEN THREAT DETECTION SYSTEM AND METHOD FOR CYBERSECURITY

(51) International classification :G06N0020000000, G06F0021550000, G06N0003080000, G06F0021560000, G06N0005040000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)J. B. Institute of Engineering and Technology
Address of Applicant :Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. G. Arun Sampaul Thomas
Address of Applicant :Associate Professor & HOD, Department of Artificial Intelligence & Machine Learning, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
2)Mr. S. Sathish Kumar
Address of Applicant :Assistant Professor, Department of Artificial Intelligence & Machine Learning, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
3)Dr. Amit Gupta
Address of Applicant :Associate Professor, Department of Artificial Intelligence & Machine Learning, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
4)Mrs. Sabnekar Asha Jyothi
Address of Applicant :Assistant Professor, Department of Artificial Intelligence & Machine Learning, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
5)Ms. Maryam Fatima Farooqui
Address of Applicant :Assistant Professor, Department of Artificial Intelligence & Machine Learning, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
6)Mrs. Novera Habeeb
Address of Applicant :Assistant Professor, Department of Artificial Intelligence & Machine Learning, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------

(57) Abstract :
The present invention discloses an AI-driven threat detection system and method designed to enhance cybersecurity measures. In response to the escalating sophistication of cyber threats, traditional detection methods often prove inadequate. This system integrates advanced machine learning algorithms, deep learning models, and comprehensive data analytics to detect and preemptively mitigate cybersecurity threats in real-time. Key components include modules for data collection from diverse sources, feature extraction to identify potential threats, and an AI and machine learning engine trained on extensive datasets of historical attack patterns. The system employs anomaly detection, predictive analytics, and behavioral analysis to enhance threat detection accuracy. Upon identifying a threat, the system executes automated response actions, such as isolating affected systems and alerting security personnel. A user-friendly interface provides real-time monitoring, detailed threat analysis reports, and operational status updates. Continuous learning and adaptation ensure the system's effectiveness against evolving cyber threats, offering robust protection for digital environments. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 20 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :22/07/2024

(21) Application No.202441055870 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM AND METHOD FOR AI-DRIVEN RISK MANAGEMENT IN FINANCIAL MARKETS

(51) International classification :G06Q0040040000, G06Q0010060000, G06Q0040060000, G06N0005040000, G06N0020000000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)J. B. Institute of Engineering and Technology
Address of Applicant :Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. P. Subrahmanyam
Address of Applicant :Associate Professor & HoD, MBA Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------
2)Dr. Danda Udaya Shekhar
Address of Applicant :Associate Professor, MBA Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------
3)Dr. Chiralu Aitha
Address of Applicant :Associate Professor, MBA Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------
4)Mr. Fasi Ur Rehman
Address of Applicant :Assistant Professor, MBA Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------
5)Mr. S. Venkat Reddy
Address of Applicant :Assistant Professor, MBA Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------
6)Mrs. D. Mounika
Address of Applicant :Assistant Professor, MBA Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------
7)Mrs. P. Nivedita
Address of Applicant :Assistant Professor, MBA Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------
8)Mrs. M.A.Sharmila
Address of Applicant :Assistant Professor, MBA Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------
9)Mr. D. Pradeep Kumar
Address of Applicant :Assistant Professor, MBA Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------
10)Ms. A. Jyothsna
Address of Applicant :Assistant Professor, MBA Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------

(57) Abstract :
The invention presents a novel system and method for AI-driven risk management in financial markets, addressing the challenges of volatility and complexity inherent in modern financial environments. The system integrates advanced artificial intelligence algorithms with real-time data analytics to identify, assess, and mitigate risks effectively. Key components include data collection from diverse sources, data processing for accuracy and relevance, AI-driven risk assessment using both numerical and textual data analysis, predictive analytics for forecasting market trends, automated decision-making based on risk profiles, real-time execution of risk mitigation strategies, and continuous monitoring and feedback for adaptive refinement of strategies. This innovative approach enhances the precision and timeliness of risk management, offering financial institutions and investors a robust tool to navigate dynamic market conditions with confidence and efficiency. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 22 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024

(21) Application No.202441055871 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : BEHAVIORAL BIOMETRICS AUTHENTICATION SYSTEM AND METHOD FOR SECURE CLOUD COMPUTING

(51) International classification	:G06F0021320000, G06F0021310000, G06F0021570000, G06F0021550000, H04L0043060000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)J. B. Institute of Engineering and Technology
Address of Applicant :Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Putti Srinivasa Rao Arumbaka
Address of Applicant :Professor, Department of Computer Science and Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------
2)Mr. Anil Made
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------
3)Ms. Karanam Pooja
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------
4)Mr. Shoeb Irfan
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------
5)Mr. G. Gopala Krishna
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------
6)Dr. Sreenivasulu Gonuguntla
Address of Applicant :Associate Professor, Department of Computer Science and Engineering, Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------

(57) Abstract :
The present invention introduces a Behavioral Biometrics Authentication System and Method designed to bolster security within cloud computing environments. Traditional authentication methods, such as passwords, are increasingly susceptible to breaches, necessitating advanced solutions. Leveraging behavioral biometrics, the system captures and analyzes unique user behavior patterns, including keystroke dynamics, mouse movements, and touch interactions, to create individualized behavioral profiles. These profiles are used for real-time user authentication, ensuring secure access to cloud resources. An integrated Anomaly Detection Module continuously monitors user behavior for deviations, promptly triggering alerts upon detecting suspicious activities. The system further integrates seamlessly with existing cloud security frameworks, offering enhanced protection against unauthorized access while optimizing user experience through non-intrusive authentication methods. This invention represents a significant advancement in cloud security technology, addressing critical vulnerabilities with a robust and adaptive authentication solution. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 21 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024

(21) Application No.202441055872 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM AND METHOD FOR AUTOMATED GRADING OF MATHEMATICAL SOLUTIONS USING MACHINE LEARNING

(51) International classification	:G06N0020000000, G06T0005000000, G09B0007020000, G09B0007000000, G06T0007000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)J. B. Institute of Engineering and Technology
Address of Applicant :Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. B. V. Swarnalathamma
Address of Applicant :Associate Professor, Mathematics Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
2)Mr. K. Mallesh Kumar
Address of Applicant :Assistant Professor, Mathematics Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
3)Mr. G. Nagadhar
Address of Applicant :Assistant Professor, Mathematics Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
4)Mrs. Tasleem Sultana
Address of Applicant :Assistant Professor, Mathematics Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
5)Mr. K. Laxmi Narayana
Address of Applicant :Assistant Professor, Mathematics Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
6)Mrs. D. Ashwini
Address of Applicant :Assistant Professor, Mathematics Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------

(57) Abstract :
The present invention discloses a system and method for automated grading of mathematical solutions using machine learning. Traditional methods of grading mathematical solutions are often labor-intensive and prone to subjectivity, leading to inconsistencies in assessment. This automated system addresses these challenges by employing a combination of data preprocessing techniques, a trained machine learning model, and a feedback mechanism to evaluate and provide instant feedback on mathematical submissions. The system includes modules for receiving and preprocessing solutions in various formats, applying a machine learning model to assess correctness based on a dataset of graded solutions, and delivering detailed feedback to users. By automating the grading process, the invention enhances efficiency, consistency, and objectivity in assessing mathematical proficiency, benefiting educators and students alike in academic settings. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 18 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024

(21) Application No.202441055873 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A METHOD FOR NON-INVASIVE MEASUREMENT OF BRAIN ACTIVITY USING MAGNETOENCEPHALOGRAPHY (MEG)

(51) International classification	:A61B0005000000, A61B0005245000, A61B0005055000, A61B0005246000, G01R0033563000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)J. B. Institute of Engineering and Technology
Address of Applicant :Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. K. Venkatesham
Address of Applicant :Assistant Professor, Physics Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
2)J. Venkat Reddy
Address of Applicant :Assistant Professor, Physics Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
3)Shaik Allahudheen
Address of Applicant :Assistant Professor, Physics Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
4)Ch. Ranjit Kumar
Address of Applicant :Assistant Professor, Physics Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
5)M. Bali Reddy
Address of Applicant :Assistant Professor, Chemistry Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------

(57) Abstract :
The present invention discloses a method and system for non-invasive measurement of brain activity using magnetoencephalography (MEG). Traditional neuroimaging techniques often face limitations in temporal and spatial resolution, whereas MEG offers superior temporal resolution by measuring magnetic fields generated by neural activity. The method involves positioning a MEG sensor array near the scalp to capture magnetic signals, preprocessing these signals to enhance data quality, and analyzing them for detailed insights into brain dynamics. A key innovation includes real-time monitoring and visualization capabilities, facilitating applications in clinical diagnostics, neuroscience research, and cognitive assessment. The system's modular design integrates signal acquisition, preprocessing, analysis software, and a user-friendly interface for comprehensive brain activity assessment. This invention aims to enhance accessibility, affordability, and usability of MEG technology, thereby advancing understanding and treatment of neurological conditions. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 20 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024

(21) Application No.202441055874 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM FOR SOCIALLY ADAPTIVE ENGLISH LANGUAGE LEARNING COMMUNITIES

(51) International classification :G09B0019060000, H04L0067306000, G06Q0050000000, G06N0020000000, G09B0005060000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)J. B. Institute of Engineering and Technology
Address of Applicant :Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Nilamadhab Panda
Address of Applicant :Professor, English Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
2)Mr. Ch. Shravan Kumar
Address of Applicant :Assistant Professor, English Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
3)Mr. V. Gouri Shankar
Address of Applicant :Assistant Professor, English Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
4)Ms. Annie S Dev
Address of Applicant :Assistant Professor, English Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
5)Mrs. Sangeetha
Address of Applicant :Assistant Professor, English Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
6)Ms. R. Jyothsna
Address of Applicant :Assistant Professor, English Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
7)Ms. M. Surekha
Address of Applicant :Assistant Professor, English Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------

(57) Abstract :
The present invention discloses a system designed to foster socially adaptive English language learning communities. Traditional language learning methods often lack effective social interaction and personalized learning experiences. This system addresses these challenges by integrating advanced technologies to create a dynamic platform. Key components include user profile management, content delivery, social interaction features, an adaptive learning engine, and assessment tools. Leveraging machine learning and real-time feedback mechanisms, the system tailors learning materials and peer interactions based on individual proficiency levels and learning goals. By promoting collaborative learning environments and providing personalized feedback, the invention enhances language acquisition efficiency and user engagement. This innovative approach aims to revolutionize how individuals learn English, offering a scalable solution adaptable to diverse learner needs and preferences. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 22 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055875 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD FOR PREDICTIVE MAINTENANCE IN INDUSTRIAL IOT USING MACHINE LEARNING ALGORITHMS

(51) International classification	:G06N0020000000, G06Q0010000000, G05B0023020000, G06N0003080000, H04L0067120000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)J. B. Institute of Engineering and Technology
Address of Applicant :Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Kavuri Roshan
Address of Applicant :Associate Professor & HoD, Artificial Intelligence & Data Science Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
2)Deshabattini Damodar
Address of Applicant :Assistant Professor, Artificial Intelligence & Data Science Departmentt, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
3)Shruti S Soma
Address of Applicant :Assistant Professor, Artificial Intelligence & Data Science Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
4)Jhansi Rani Gaddam
Address of Applicant :Assistant Professor, Artificial Intelligence & Data Science Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
5)Theegalapally Rajesh Kumar
Address of Applicant :Assistant Professor, Artificial Intelligence & Data Science Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
6)Mr. Made Anil
Address of Applicant :Assistant Professor, Computer Science and Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------

(57) Abstract :
The present invention proposes a method for predictive maintenance in Industrial Internet of Things (IIoT) environments using machine learning algorithms. By leveraging real-time data from IoT sensors installed on industrial equipment, the method preprocesses and analyzes this data to predict potential equipment failures before they occur. Through the integration of machine learning models, the invention aims to optimize maintenance schedules, enhance equipment reliability, and minimize unplanned downtimes. The system includes modules for data collection, preprocessing, machine learning model training, prediction generation, and maintenance scheduling, supported by a user interface for efficient monitoring and decision-making by maintenance personnel. This method represents a significant advancement in enhancing operational efficiency and reducing maintenance costs in industrial settings. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 19 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :22/07/2024

(21) Application No.202441055876 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : AI-POWERED TALENT ACQUISITION AND RETENTION SYSTEMS

(51) International classification	:G06Q0010100000, G06Q0010060000, G06N0020000000, G06N0020200000, G06N0005020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)J. B. Institute of Engineering and Technology

Address of Applicant :Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. Danda Udaya Shekhar

Address of Applicant :Associate Professor, MBA Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------

2)Dr. P. Subrahmanyam

Address of Applicant :Associate Professor & HoD, MBA Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------

3)Dr. Chiralu Aitha

Address of Applicant :Associate Professor, MBA Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------

4)Mr. Fasi Ur Rehman

Address of Applicant :Assistant Professor, MBA Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------

5)Mr. S. Venkat Reddy

Address of Applicant :Assistant Professor, MBA Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------

6)Mrs. D. Mounika

Address of Applicant :Assistant Professor, MBA Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------

7)Mrs. P. Nivedita

Address of Applicant :Assistant Professor, MBA Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------

8)Mrs. M.A.Sharmila

Address of Applicant :Assistant Professor, MBA Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------

9)Mr. D. Pradeep Kumar

Address of Applicant :Assistant Professor, MBA Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------

10)Ms. A. Jyothsna

Address of Applicant :Assistant Professor, MBA Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075 ---------- ----------

(57) Abstract :

The present invention discloses an AI-powered talent acquisition and retention system designed to revolutionize human resource management. Leveraging advanced machine learning algorithms, natural language processing (NLP), and predictive analytics, the system automates and optimizes the hiring process and employee retention strategies. Key components include data ingestion from diverse sources, preprocessing for data standardization, candidate-job matching algorithms, and proactive turnover risk analysis. The system offers intuitive interfaces for HR professionals to manage recruitment, schedule interviews, and implement personalized retention strategies. This innovation aims to significantly improve efficiency, reduce bias, and enhance workforce stability in organizations across various industries. Accompanied Drawing [FIGS. 1-5]

No. of Pages : 23 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024

(21) Application No.202441055879 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ENHANCED SHOCK ABSORPTION SYSTEM FOR AUTOMOTIVE SUSPENSION

(51) International classification :B60G0017015000, B60G0007000000, F16F0009460000, B60G0017016500, B60W0010220000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)J. B. Institute of Engineering and Technology
Address of Applicant :Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. P. C. Krishnamachary
Address of Applicant :Professor & Principal, Department of Mechanical Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
2)Dr. Anoop Kumar Shukla
Address of Applicant :Professor & HOD, Department of Mechanical Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
3)Dr. Chintakindi Sanjay
Address of Applicant :Professor & Director, Department of Mechanical Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
4)Mr.J.Nagaraju
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
5)Mr.V.Srinivasa Rao
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
6)Mr.J. Narendra Kumar
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
7)Mrs.Patangay Seema Rani
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------

(57) Abstract :
The Enhanced Shock Absorption System for Automotive Suspension disclosed herein integrates advanced materials and innovative design elements to enhance vehicle stability, comfort, and handling. This system utilizes smart materials with variable damping properties, a multi-chamber hydraulic mechanism, and real-time electronic control to dynamically adjust suspension performance. Sensors monitor road conditions, vehicle dynamics, and load distribution, enabling the electronic control unit (ECU) to optimize damping characteristics and hydraulic operations in real-time. The system's adaptability across diverse driving environments improves ride comfort, handling precision, and overall vehicle safety, marking a significant advancement in automotive suspension technology. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 20 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024

(21) Application No.202441055880 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : OPTICAL FIBER COMMUNICATION SYSTEM WITH IMPROVED BANDWIDTH UTILIZATION

(51) International classification	:H04J0014020000, H04L0027340000, H04B0010250700, H04Q0011000000, H04B0010250000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)J. B. Institute of Engineering and Technology
Address of Applicant :Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Anindya Jana
Address of Applicant :Professor, Department of Electronics & Communication Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075. ---------- ----------
2)Dr. Himanshu Sharma
Address of Applicant :Associate Professor, Department of Electronics & Communication Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
3)Mr. Rajkumar D Bhure
Address of Applicant :Associate Professor, Department of Electronics & Communication Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad (M), R.R. District, Hyderabad, Telangana, India - 500075. ---------- ----------
4)Mrs. K. Sneha Latha
Address of Applicant :Associate Professor, Department of Electronics & Communication Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
5)Mr. N. Ramesh Babu
Address of Applicant :Associate Professor, Department of Electronics & Communication Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
6)Mr. B. Shravan Kumar
Address of Applicant :Assistant Professor, Department of Electronics & Communication Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------

(57) Abstract :
The present invention discloses an optical fiber communication system designed to enhance bandwidth utilization through innovative techniques. Employing Dense Wavelength Division Multiplexing (DWDM), Quadrature Amplitude Modulation (QAM), dynamic wavelength allocation, and intelligent data traffic management, the system optimizes spectral resources in real-time. This approach improves data throughput, reduces latency and interference, and ensures efficient transmission across optical networks. Scalable and adaptable, the system addresses the growing demands of high-speed data communication, marking a significant advancement in optical fiber technology. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 19 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024

(21) Application No.202441055881 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DYNAMIC VOLTAGE AND FREQUENCY SCALING FOR POWER MANAGEMENT IN MICROPROCESSORS

(51) International classification :G06F1/32, G06F1/324, G06N20/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number:NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)J. B. Institute of Engineering and Technology
Address of Applicant :Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Md. Salauddin
Address of Applicant :Associate Professor, Department of Electronics & Communication Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
2)Dr. Towheed Sultana
Address of Applicant :Professor & HOD, Department of Electronics & Communication Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad (M), R.R. District, Hyderabad, Telangana, India - 500075. ---------- ----------
3)Dr. Prasantha Kumar Pradhan
Address of Applicant :Professor, Department of Electronics & Communication Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad (M), R.R. District, Hyderabad, Telangana, India - 500075. ---------- ----------
4)Ms. B Sowmya
Address of Applicant :Assistant Professor, Department of Electronics & Communication Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad (M), R.R. District, Hyderabad, Telangana, India - 500075. ---------- ----------
5)Mr. Bijaya Kumar Muni
Address of Applicant :Assistant Professor, Department of Electronics & Communication Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad (M), R.R. District, Hyderabad, Telangana, India - 500075. ---------- ----------
6)Mr. B. Kishore Kumar
Address of Applicant :Assistant Professor, Department of Electronics & Communication Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad (M), R.R. District, Hyderabad, Telangana, India - 500075. ---------- ----------

(57) Abstract :
The present invention discloses a dynamic voltage and frequency scaling (DVFS) system and method for optimizing power management in microprocessors. Traditional approaches to DVFS often suffer from limitations in responsiveness and adaptability to varying workloads. In contrast, the proposed system integrates a DVFS controller with a machine learning module to predict workload trends accurately. This enables real-time adjustments of voltage and frequency settings based on current and predicted workload conditions, thereby achieving significant improvements in power efficiency without compromising performance. Experimental results demonstrate substantial reductions in power consumption alongside enhanced stability in microprocessor performance, validating the efficacy of the proposed DVFS system. Accompanied Drawing [FIGS. 1-3]

No. of Pages : 19 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024

(21) Application No.202441055882 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : HIGH-VOLTAGE DIRECT CURRENT (HVDC) TRANSMISSION SYSTEMS WITH IMPROVED STABILITY

(51) International classification :H02J1/00, H02J1/02, H02J3/36, G06F113/04, G05B23/02, G06N20/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)J. B. Institute of Engineering and Technology
Address of Applicant :Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. P. Duraipandy
Address of Applicant :Associate Professor & HOD, Electrical and Electronics Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad (M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
2)Dr. T. Rajesh
Address of Applicant :Associate Professor, Electrical and Electronics Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad (M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
3)Mr. M. Vinod Kumar
Address of Applicant :Assistant Professor, Electrical and Electronics Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad (M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
4)Mr. S. Rathna Kumar
Address of Applicant :Assistant Professor, Electrical and Electronics Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad (M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
5)Mr. Ch. Shravan Kumar Reddy
Address of Applicant :Assistant Professor, Electrical and Electronics Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad (M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
6)Mrs. K. Laxmi Prasanna
Address of Applicant :Assistant Professor, Electrical and Electronics Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad (M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
7)Mrs. T. Shailaja
Address of Applicant :Assistant Professor, Electrical and Electronics Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad (M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------

(57) Abstract :
The present invention discloses a High-Voltage Direct Current (HVDC) transmission system engineered to enhance stability and reliability. This innovative system integrates advanced control algorithms that dynamically adjust power flows and voltage levels, real-time monitoring for continuous tracking of critical operational metrics, and adaptive response mechanisms to swiftly counteract disturbances and maintain grid stability. Additionally, the system incorporates harmonic suppression techniques to minimize distortions and improve power quality, along with redundancy and fault tolerance capabilities to ensure uninterrupted operation even under adverse conditions. These combined features significantly improve the overall performance and dependability of HVDC transmission networks, making them more resilient and efficient for modern electrical grids. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 20 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024

(21) Application No.202441055883 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MODULAR CONSTRUCTION SYSTEM FOR RAPID DEPLOYMENT STRUCTURES

(51) International classification :E04B0001343000, E04H0001120000, E04B0001348000, E04B0001344000, C02F0001320000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)J. B. Institute of Engineering and Technology
Address of Applicant :Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. P. C. Krishnamachary
Address of Applicant :Professor & Principal, Department of Mechanical Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
2)Dr. Anoop Kumar Shukla
Address of Applicant :Professor & HOD, Department of Mechanical Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
3)Dr. Chintakindi Sanjay
Address of Applicant :Professor & Director, Department of Mechanical Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
4)Mr.J.Nagaraju
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
5)Mr.V.Srinivasa Rao
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
6)Mr.G.Narasimhulu
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
7)Mr.G.Gopinath
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
8)Mrs.Patangay Seema Rani
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------

(57) Abstract :
The present invention discloses a modular construction system tailored for rapid deployment structures, facilitating efficient assembly and disassembly in various applications such as disaster relief, military operations, and temporary housing. The system comprises standardized panels with interlocking edges, reinforced frames with standardized connection points, and interlocking connectors for secure assembly. Adjustable base plates and ground anchors ensure stability on diverse terrains. Optional roof panels and insulation layers enhance weather resistance and thermal performance. Integrated electrical conduits and modular plumbing components further streamline deployment. This invention offers scalability, versatility, and durability through its lightweight, transportable modules, addressing critical challenges in rapid construction scenarios. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 19 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024

(21) Application No.202441055884 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : BLOCKCHAIN-POWERED HEALTH RECORDS MANAGEMENT SYSTEM AND METHOD

(51) International classification	:G16H0010600000, H04L0009320000, G06F0021620000, G06F0016230000, G06Q0010100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)J. B. Institute of Engineering and Technology
Address of Applicant :Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Narsappa Reddy
Address of Applicant :Associate Professor & HOD, Electronics and Computer Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
2)Mr. N. Thirupathi
Address of Applicant :Associate Professor, Electronics and Computer Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
3)Dr. Md Asif
Address of Applicant :Assistant Professor, Electronics and Computer Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
4)Mrs. M. Anusha
Address of Applicant :Assistant Professor, Electronics and Computer Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
5)Mrs. V. Prashanthi
Address of Applicant :Assistant Professor, Electronics and Computer Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
6)Mr. M. Syambabu
Address of Applicant :Assistant Professor, Electronics and Computer Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
7)Ms. V. Vijaya Sree Swarupa
Address of Applicant :Assistant Professor, Electronics and Computer Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
8)Mr. Bheemana Bhuvan
Address of Applicant :Assistant Professor, Electronics and Computer Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
9)Mrs. Ninganolla Madhuri
Address of Applicant :Assistant Professor, Electronics and Computer Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------

(57) Abstract :
The present invention relates to a blockchain-powered health records management system and method, designed to ensure secure, transparent, and tamper-proof handling of health records. The system comprises a blockchain network for storing transactions related to health records, a health records database linked to these blockchain transactions, and smart contracts for managing access permissions and data sharing. The method includes steps for creating and storing health records in the database, generating and validating blockchain transactions, and linking health records to blockchain transactions. Accessing and sharing health records is controlled through smart contracts, which verify permissions and log access events on the blockchain. This invention provides enhanced security, transparency, integrity, and efficiency in the management of health records, addressing key challenges in the healthcare industry. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024

(21) Application No.202441055885 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : REAL-TIME STRUCTURAL HEALTH MONITORING SYSTEMS FOR HIGH-RISE BUILDINGS

(51) International classification	:G01M0005000000, G07C0005000000, G06F0021640000, F24F0011300000, H04N0007180000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)J. B. Institute of Engineering and Technology
Address of Applicant :Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Naresh Bhukya
Address of Applicant :Assistant Professor, Civil Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
2)Dr. Suresh Ranga
Address of Applicant :Assistant Professor, Civil Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
3)Mr. Maruthi
Address of Applicant :Assistant Professor, Civil Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
4)Ms. Geetha Kurakula
Address of Applicant :Assistant Professor, Civil Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
5)Mr. Anil Kumar Butti
Address of Applicant :Assistant Professor, Civil Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------
6)Mrs. B. Bhuvaneshwari
Address of Applicant :Assistant Professor, Civil Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075. ---------- ----------

(57) Abstract :
The present invention discloses a real-time structural health monitoring system designed for high-rise buildings. The system integrates a network of sensors including accelerometers, strain gauges, tiltmeters, temperature sensors, and humidity sensors strategically placed throughout the building structure. Data from these sensors is processed by a central processing unit (CPU) equipped with advanced algorithms and machine learning capabilities. A robust communication network facilitates real-time data transmission to a user interface accessible via computer or mobile devices. The system continuously monitors structural parameters, detects anomalies, and generates alerts to building managers and engineers, enabling proactive maintenance and enhancing the safety of occupants. By providing comprehensive real-time insights into the structural integrity of high-rise buildings, the invention aims to mitigate risks associated with structural failures and optimize maintenance practices. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 22 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202441055886 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SMART CITY INFRASTRUCTURE WITH INTEGRATED RENEWABLE ENERGY SOLUTIONS

(51) International classification	:H02J3/38, G06Q50/06, G16Y10/35, G06N20/00, G05B23/02
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)J. B. Institute of Engineering and Technology
Address of Applicant :Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Suresh Ranga
Address of Applicant :Assistant Professor, Civil Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
2)Dr. Aditya Kamineni
Address of Applicant :Associate Professor & HOD, Civil Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
3)Mr. Prashanth Hugar
Address of Applicant :Assistant Professor, Civil Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
4)Mr. Chakali Rajashekar
Address of Applicant :Assistant Professor, Civil Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
5)Mrs. B. Bhuvaneshwari
Address of Applicant :Assistant Professor, Civil Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
6)Ms. Geetha Kurakula
Address of Applicant :Assistant Professor, Civil Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------

(57) Abstract :
The present invention discloses a novel system for Smart City Infrastructure with Integrated Renewable Energy Solutions. The system addresses the challenges of urban energy consumption and environmental sustainability by integrating renewable energy sources seamlessly into urban infrastructure. Key components include renewable energy generation systems, energy storage solutions, smart grids for efficient distribution, and IoT-enabled monitoring and control mechanisms. The system utilizes advanced data analytics and AI algorithms to optimize energy usage and enhance the resilience of urban energy grids. This innovation aims to transform cities into sustainable, efficient, and resilient hubs of modern living. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 19 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024

(21) Application No.202441055887 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : HIGH-EFFICIENCY POWER CONVERSION SYSTEMS FOR RENEWABLE ENERGY INTEGRATION

(51) International classification	:H02J3/38, G05F1/67, G06N20/00, G06F113/04, H02J13/00
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)J. B. Institute of Engineering and Technology
Address of Applicant :Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. J. Kartigeyan
Address of Applicant :Associate Professor, Electrical and Electronics Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075. ---------- ----------
2)Mr. G. Upendra Rao
Address of Applicant :Assistant Professor, Electrical and Electronics Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075. ---------- ----------
3)Mr. K. Giri Babu
Address of Applicant :Assistant Professor, Electrical and Electronics Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075. ---------- ----------
4)Mr. A. Shivararama Krishna
Address of Applicant :Assistant Professor, Electrical and Electronics Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075. ---------- ----------
5)Ms. K. Babitha
Address of Applicant :Assistant Professor, Electrical and Electronics Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075. ---------- ----------
6)Mrs. A. Rajitha
Address of Applicant :Assistant Professor, Electrical and Electronics Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075. ---------- ----------
7)Mrs. A. Lavanya
Address of Applicant :Assistant Professor, Electrical and Electronics Engineering Department, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India - 500075. ---------- ----------

(57) Abstract :
The present invention relates to a high-efficiency power conversion system designed for the integration of renewable energy sources into electrical grids. The system maximizes energy capture, minimizes conversion losses, and ensures stable power delivery through the use of advanced power electronics, innovative control algorithms, and efficient energy storage solutions. Key components include renewable energy input modules with maximum power point tracking (MPPT) units, high-efficiency inverters and converters employing advanced semiconductor materials, and energy storage modules such as lithium-ion batteries and supercapacitors. A sophisticated control and monitoring system dynamically manages power flow, optimizing energy capture and ensuring stable grid integration, while a grid interface module provides seamless synchronization and fault protection. The system's modular and scalable design allows for easy expansion and compatibility with various renewable energy sources and smart grid technologies, making it suitable for residential, commercial, utility-scale, and off-grid applications. This invention represents a significant advancement in renewable energy integration, offering a sustainable and efficient solution to meet the growing demand for clean energy. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 20 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024

(21) Application No.202441055888 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM AND METHOD FOR SECURE CLOUD DATA STORAGE AND RETRIEVAL USING BLOCKCHAIN TECHNOLOGY

(51) International classification	:H04L0009320000, G06F0021620000, H04L0067109700, H04L0009060000, G06F0021640000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)J. B. Institute of Engineering and Technology
Address of Applicant :Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Gurrampally Kumar
Address of Applicant :Assistant Professor, Department of Information Technology, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
2)M. A. Muneer
Address of Applicant :Assistant Professor, Department of Information Technology, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
3)Jagadam Jyotsna
Address of Applicant :Assistant Professor, Department of Information Technology, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
4)V. Krishna Reddy
Address of Applicant :Assistant Professor, Department of Information Technology, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
5)H. Praveen
Address of Applicant :Assistant Professor, Department of Information Technology, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------
6)T Rakesh
Address of Applicant :Assistant Professor, Department of Information Technology, J. B. Institute of Engineering and Technology, Bhaskar Nagar, Yenkapally (V), Moinabad(M), R.R. District, Hyderabad, Telangana, India -500075 ---------- ----------

(57) Abstract :
The present invention introduces a novel system and method for secure cloud data storage and retrieval using blockchain technology. In this system, user devices interact with a blockchain-based cloud storage network through smart contracts and an encryption module. Data undergoes encryption prior to storage, and each transaction generates a blockchain entry for verification. The decentralized nature of the blockchain network ensures data integrity, while smart contracts automate and enforce secure data transactions. This innovative approach enhances data security, confidentiality, and auditability, making it suitable for modern cloud computing environments requiring robust protection against unauthorized access and data breaches. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024

(21) Application No.202441055889 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : BIODEGRADABLE NANOPARTICLES FOR CONTROLLED RELEASE OF THERAPEUTIC AGENTS IN THE TREATMENT OF CHRONIC DISEASES

(51) International classification :A61P0035000000, A61K0009000000, A61K0047690000, C07K0007060000, A61K0009510000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. J. Daisy Rani
Address of Applicant :Assistant Professor, Department of Chemistry, SRM Institute of Science and Technology (Deemed to be University), Ramapuram Campus, Chennai, Tamilnadu, India, Pincode: 600089 ---------- ----------
2)Dr. C. Jayashree
3)Dr. G. Kaladevi
4)Dr. A. Shalini
5)Dr. E. Pandian
6)Dr. Vasthi Gnana Rani
7)Dr. G. Venkat Kumar
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. J. Daisy Rani
Address of Applicant :Assistant Professor, Department of Chemistry, SRM Institute of Science and Technology (Deemed to be University), Ramapuram Campus, Chennai, Tamilnadu, India, Pincode: 600089 ---------- ----------
2)Dr. C. Jayashree
Address of Applicant :Assistant Professor, Department of Chemistry, SRM Institute of Science and Technology (Deemed to be University), Ramapuram Campus, Chennai, Tamilnadu, India, Pincode: 600089 ---------- ----------
3)Dr. G. Kaladevi
Address of Applicant :Assistant Professor, Department of Chemistry, SRM Institute of Science and Technology (Deemed to be University), Ramapuram Campus, Chennai, Tamilnadu, India, Pincode: 600089 ---------- ----------
4)Dr. A. Shalini
Address of Applicant :Assistant Professor, Department of Chemistry, SRM Institute of Science and Technology (Deemed to be University), Ramapuram Campus, Chennai, Tamilnadu, India, Pincode: 600089 ---------- ----------
5)Dr. E. Pandian
Address of Applicant :Assistant Professor, Department of Chemistry, SRM Institute of Science and Technology (Deemed to be University), Ramapuram Campus, Chennai, Tamilnadu, India, Pincode: 600089 ---------- ----------
6)Dr. Vasthi Gnana Rani
Address of Applicant :Assistant Professor, Department of Chemistry, SRM Institute of Science and Technology (Deemed to be University), Ramapuram Campus, Chennai, Tamilnadu, India, Pincode: 600089 ---------- ----------
7)Dr. G. Venkat Kumar
Address of Applicant :Assistant Professor, Department of Chemistry, SRM Institute of Science and Technology (Deemed to be University), Ramapuram Campus, Chennai, Tamilnadu, India, Pincode: 600089 ---------- ----------

(57) Abstract :
The invention relates to biodegradable nanoparticles designed for the controlled release of therapeutic agents, targeting chronic diseases such as cancer, diabetes, cardiovascular diseases, and neurodegenerative disorders. Composed of biocompatible polymers like PLA, PGA, and PLGA, these nanoparticles ensure sustained and targeted drug delivery, enhancing therapeutic efficacy while minimizing side effects. Surface modifications with targeting ligands enable selective binding to specific cells, and stimuli-responsive release mechanisms ensure precise drug delivery in response to physiological conditions. Capable of encapsulating diverse therapeutic agents, including small molecules, proteins, peptides, and nucleic acids, these nanoparticles offer versatility and scalability in production. The invention addresses the limitations of traditional drug delivery systems, providing a promising solution for personalized and environmentally sustainable chronic disease management.

No. of Pages : 27 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024

(21) Application No.202441055892 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTOMATIC SEGREGATION OF E-COMMERCE PRODUCTS WITH 7DOF ARM INTEGRATED WITH AI

(51) International classification	:B25J0009160000, G06N0020000000, B25J0011000000, G06N0005000000, G06N0003040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Bobba Bharath Reddy
Address of Applicant :Join botics, Robotic engineer, Bangalore, Karnataka ---------- ----------
2)Dr. Bhargav Prajwal pathri
3)Murali Krishna Thirunathi
4)Mr. Krishna Vamshi Ganduri
5)Sharath Akarapu
6)Dr.N.R.N.V. Gowripathi Rao
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Bobba Bharath Reddy
Address of Applicant :Join botics, Robotic engineer, Bangalore, Karnataka ---------- ----------
2)Dr. Bhargav Prajwal pathri
Address of Applicant :Professor, School of Technology, Woxsen University, Telangana ---------- ----------
3)Murali Krishna Thirunathi
Address of Applicant :School of Technology,Woxsen University, Hyderabad ---------- ----------
4)Mr. Krishna Vamshi Ganduri
Address of Applicant :PhD Scholar, school of Technology, Woxsen University, Telangana ---------- ----------
5)Sharath Akarapu
Address of Applicant :Assistant Profesor, Dept. of Mechanical Engineering,Balaji Institute of Technology and Science,Laknepally,Narsampet,Warangal, Telangana-506331 ---------- ----------
6)Dr.N.R.N.V. Gowripathi Rao
Address of Applicant :Assistant Professor, Department of Agricultural Engineering, Faculty of Agricultural Sciences, Rajiv Gandhi University, Doimukh, Arunachal Pradesh ---------- ----------

(57) Abstract :
This invention presents an advanced system for the automatic segregation of e-commerce products and postal items using a 7-degree-of-freedom (7DOF) robotic arm integrated with artificial intelligence (AI). The system efficiently sorts items based on their destination state, pin code, and address. Initially, the AI model scans product receipts, converting handwritten or typed text into digital form for further processing. Machine learning (ML) algorithms classify the extracted text, sending signals to the robotic arm for precise sorting and handling. This innovative solution enhances efficiency and accuracy across logistics, postal services, and e-commerce applications.

No. of Pages : 19 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441055894 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD FOR THE PREPARATION OF DARK CHOCOLATE BLENDED WITH CHICKEN EGG SHELL POWDER — A WASTE VALORIZATION PROCESS

(51) International classification :A23G1/30, A23G1/32
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Hindustan Institute of Technology and Science
Address of Applicant :Dr. SudalaiMuthu T Hindustan Institute of Technology and Science, P.O. No.1, Rajiv Gandhi Salai (OMR), Padur, Kelambakkam, Chennai, Tamilnadu, 603 103. E-mail: ipcell@hindustanuniv.ac.in Mobile: +91 9786143504 Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P. Mohana Keerthi
Address of Applicant :Student, Hindustan Institute of Technology and Science, P.O. No.1, Rajiv Gandhi Salai (OMR), Padur, Kelambakkam, Chennai, Tamilnadu, 603 103. Chennai ---------- ----------
2)Konduru Susriya
Address of Applicant :Student, Hindustan Institute of Technology and Science, P.O. No.1, Rajiv Gandhi Salai (OMR), Padur, Kelambakkam, Chennai, Tamilnadu, 603 103. Chennai ---------- ----------
3)B.Madhave Soniya
Address of Applicant :Student, Hindustan Institute of Technology and Science, P.O. No.1, Rajiv Gandhi Salai (OMR), Padur, Kelambakkam, Chennai, Tamilnadu, 603 103. Chennai ---------- ----------
4)Sankarganesh, P
Address of Applicant :Dept. FT, Hindustan Institute of Technology and Science, P.O. No.1, Rajiv Gandhi Salai (OMR), Padur, Kelambakkam, Chennai, Tamilnadu, 603 103. Chennai ---------- ----------

(57) Abstract :
Chicken eggshell is the major waste product of the poultry industry. In this study, dark chocolate was prepared by adding Chicken Egg Shell Powder (CESP). In brief, the cocoa powder used to make the chocolate was sup-plemented with eggshell powder at three different levels: 3%, 5%, and 7%. Any microbial development on the surface of the eggshell is destroyed during the 30-minute boiling process. The results showed that adding egg-shell powder to chocolate significantly increased the calcium content. The physicochemical characteristics and sensory qualities of chocolate vary in a distinctive way as a result of the composition of eggshell powder. Ac-cording to results, 3% chicken eggshell powder supplemented dark chocolate has a greater level of calcium, good sensory qualities, significant phytochemicals such as phenolic compounds, potential antioxidant activity, the absence of pathogenic microbes, and a longer shelf life.

No. of Pages : 11 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441055895 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD FOR MINIMIZING WIRELENGTH IN VLSI LAYOUTS THROUGH EMBEDDING ?(K_P-C_P)?^N INTO GRID-BASED HOST NETWORKS

(51) International classification	:G06F0030392000, G06F0030394000, G06F0007580000, G06F0111060000, G06F0030396000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Hindustan Institute of Technology and Science
Address of Applicant :Dr. SudalaiMuthu T Hindustan Institute of Technology and Science, P.O. No.1, Rajiv Gandhi Salai (OMR), Padur, Kelambakkam, Chennai, Tamilnadu, 603 103. E-mail: ipcell@hindustanuniv.ac.in Mobile: +91 9786143504 Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Rini Dominic
Address of Applicant :Hindustan Institute of Technology and Science, P.O. No.1, Rajiv Gandhi Salai (OMR), Padur, Kelambakkam, Chennai, Tamilnadu, 603 103. Chennai ---------- ----------
2)R Sundara Rajan
Address of Applicant :Hindustan Institute of Technology and Science, P.O. No.1, Rajiv Gandhi Salai (OMR), Padur, Kelambakkam, Chennai, Tamilnadu, 603 103. E-mail: ipcell@hindustanuniv.ac.in Mobile: +91 9786143504 Chennai ---------- ----------

(57) Abstract :
The present invention introduces a novel method aimed at minimizing wirelength in VLSI layouts by embedding the structured graph ?(K_p-C_p)?^n into grid-based host networks. In the field of VLSI design, efficient utilization of space and optimization of interconnect paths are paramount to enhancing critical performance metrics such as signal propagation speed, power consumption, and overall circuit reliability. The method leverages the recursive nature of the graph ?(K_p-C_p)?^n, where (K_p-C_p) represents a complete graph with a cycle C_p removed and ?(K_p-C_p)?^n is a n-dimensional cartesian product of (K_p-C_p). For n=1, this structure lays a foundation for minimizing adjacency and wirelength. For n=2, the graph is constructed recursively, with vertex sets partitioned into subsets that induce subgraphs isomorphic to ?(K_p-C_p)?^(n-1). These subsets are efficiently mapped onto the vertices of a grid-based host graph BBB, which aligns well with the physical layout of VLSI circuits that inherently form a grid structure. The key to minimizing wirelength lies in selecting optimal paths within the grid that correspond to the shortest paths in ?(K_p-C_p)?^n, thereby reducing the physical distance and complexity of interconnections. This method ensures that wirelength is minimized by taking advantage of the grid's inherent properties and the recursive structure of ?(K_p-C_p)?^n, which distributes connections evenly and efficiently across the layout. The approach is scalable, adaptable to various grid configurations, and accommodates different layout complexities and design requirements, ensuring optimal wirelength reduction and enhanced circuit performance. By systematically embedding ?(K_p-C_p)?^n into grid-based host networks, this innovation offers a significant advancement in VLSI technology, providing substantial improvements in efficiency, reliability, and cost-effectiveness, thereby pushing the boundaries of what is achievable in modern circuit design.

No. of Pages : 8 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :23/07/2024

(21) Application No.202441055896 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : CYBER RISK MANAGEMENT IN THE INDIAN BANKING INDUSTRY

(51) International classification	:G06F0021550000, G06Q0040020000, G06N0020000000, G06F0021560000, G06F0021570000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr. V. Sivakamy

Address of Applicant :Assistant Professor, Department of MBA, SRM Institute of Science and Technology, Ramapuram, Chennai, Tamil Nadu-600089, India. Chennai ---------- ----------

2)Mrs. P.C.Saranya

3)Mrs. P.C.Abirami

4)Dr. K. Balanaga Gurunathan

5)Dr.Anand Patil

6)Dr. K Vidhya

7)Dr. Rajib Bhattacharya

8)Kothai Reshikesh

9)Shanker Prabu. M

10)Dr. Jenesiszodykha V

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. V. Sivakamy

Address of Applicant :Assistant Professor, Department of MBA, SRM Institute of Science and Technology, Ramapuram, Chennai, Tamil Nadu-600089, India. Chennai ---------- ----------

2)Mrs. P.C.Saranya

Address of Applicant :Assistant Professor, Department of MBA, Vels Institute of Science Technology and Advanced Studies, Pallavarm, Chennai, Tamil Nadu-600012, India. Chennai ---------- ----------

3)Mrs. P.C.Abirami

Address of Applicant :Assistant Professor, School of Law, VIT, Kelambakkam, Tamil Nadu-600012, India. Chennai ---------- ----------

4)Dr. K. Balanaga Gurunathan

Address of Applicant :Professor, School of Commerce and Management, Jain (Deemed-to-be) University 44/4, District Fund Rd, Jayanagara 9th Block, Jayanagar, Bengaluru, Karnataka-560069, India. Bengaluru ---------- ----------

5)Dr.Anand Patil

Address of Applicant :Associate Professor, School of Business and Management, Christ University, Bangalore-560076, India. Bangalore ---------- ----------

6)Dr. K Vidhya

Address of Applicant :Assistant Professor School of Commerce, Jain University, Knowledge Campus, 9th block Jayanagar, Bangalore-560041, India. Bangalore ---------- ----------

7)Dr. Rajib Bhattacharya

Address of Applicant :Associate Professor, Department of Business Management, NSHM Knowledge Campus, 60 B L Saha Road, Kolkata, West Bengal-700053, India. Kolkata ---------- ----------

8)Kothai Reshikesh

Address of Applicant :Assistant Professor, Department of BBA, Hindusthan College of Arts and Science, Hindusthan Gardens Nava India, Coimbatore, Tamilnadu-641028, India. Coimbatore ---------- ----------

9)Shanker Prabu. M

Address of Applicant :Assistant Professor, Department of Commerce with Banking, Nehru Arts and Science College, Thirumalayampalayam Nehru Gardens, Coimbatore, Tamil Nadu-641105, India. Coimbatore ---------- ----------

10)Dr. Jenesiszodykha V

Address of Applicant :Assistant Professor, Department of Commerce, SRM Institute of Science and Technology, Kattankulathur, Tamilnadu-603203, India. Chennai ---------- ----------

(57) Abstract :

Cyber Risk Management in the Indian Banking Industry ABSTRACT The Indian banking sector, which is a vital part of the country's financial system, is seeing an increase in cyber threats despite its cautious adoption of digital transformation. In order to strengthen Indian banks' defenses against sophisticated cyberattacks, this essay aims to explore the intricate world of cyber risk management within these institutions. This study looks into the current status of cyber security in the banking sector, identifying common threats including ransomware, phishing, and insider attacks, and assessing how effective the existing risk management frameworks are. Furthermore, it looks into the regulatory actions taken by Indian authorities, like the Reserve Bank of India (RBI), and how these actions affect their capacity to fortify themselves against cyberattacks. The research reveals flaws in cyber risk management procedures and offers tactical solutions that may be put into place by looking at case studies of significant cyber incidents. Among the most important suggestions are the implementation of thorough security measures, frequent staff training, and the encouragement of a cyberaware culture. Adopting contemporary technologies for danger identification, such as machine learning and artificial intelligence, is another suggestion. The article concludes that a proactive and all-encompassing approach to managing cyber risk is necessary to safeguard the viability and integrity of the Indian banking sector against new cyberthreats.

No. of Pages : 10 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441055901 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTOMATIC INDUSTRIAL MOSQUITO REPELLING LIQUID FOGGING ROBOT WITH NON -CONTACT SELF-POWER CHARGING

(51) International classification	:H02J0007000000, H02J0007020000, H02J0050100000, A62C0027000000, H02J0007040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)CHENNAI INSTITUTE OF TECHNOLOGY
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI-600069. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P. SRIRAM
Address of Applicant :Chairman, CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI-600069. ---------- ----------
2)Dr. P. JAYAKUMAR
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI-600069. ---------- ----------

(57) Abstract :
The titled invention “Automatic industrial mosquito repelling robot is disclosed for maintaining a mosquito-free atmosphere in industrial settings. The robot (1) comprises a robot body housing all necessary components, including traction wheels (2) powered by DC motors for navigation along a pre-programmed path. A pesticide holding tank (3) and a diluter solution holding tank (4) store the required liquids, which are delivered to a pressure fogging pump (5) through suction hoses (6). The pump (5) pressurizes and atomizes the liquids before they are sprayed through a dual delivery nozzle (7) mounted on a swing arm (8). The swing arm (8) allows the nozzle (7) to oscillate horizontally within a 90-degree angle for wide-area coverage. An infra-red proximity sensor (9) fixed underneath the robot chassis detects painted line markings on the floor for accurate navigation. A control interface (10) manages the robot's operations, initiating the navigation and fog spraying process after industrial working hours. The robot (1) automatically recharges its battery at a charging station (11) equipped with a non-contact charging terminal (12) and a charger power supply (13), ensuring contactless and efficient battery recharging through the robot charging face (14). The invention provides an efficient and autonomous solution for maintaining a mosquito-free environment while minimizing operational costs and labor requirements.

No. of Pages : 13 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441055902 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : COLD INSULATION MILK CONTAINER WITH INTEGRATED REFRIGERATING CHILLER AND DELIVERY PUMP

(51) International classification	:A47J0031440000, A47J0031600000, B65D0081180000, F25D0003080000, A01J0011060000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)CHENNAI INSTITUTE OF TECHNOLOGY
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI-600069. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P. SRIRAM
Address of Applicant :Chairman, CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI-600069. ---------- ----------
2)Dr. P. JAYAKUMAR
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI-600069. ---------- ----------

(57) Abstract :
The titled invention “Cold insulated milk container with integrated refrigerating chiller and delivery pump" discloses the design of milk container with integrated refrigerating chiller to cool the milk poured into the container and maintain at the desired low temperature to prevent growth of bacteria before transporting it to the milk processing plant. SS milk container (4) is a double walled stainless steel container mounted on a refrigerator device (1). Milk is poured into the SS milk container (4) through the milk pour inlet (8) and closed with the lid (7). Cooling coil (5) present between the walls of the SS milk container (4) cools the milk present inside the container. Gel pad insulation (6) prevents absorption of heat from the surrounding thereby maintaining the temperature of the milk inside the SS milk container (4). Temperature display (9) is provided to monitor the temperature of milk present inside the SS milk container (4). Milk delivery pump (11) sucks milk from the bottom of the SS milk container (4) and deliver through the milk suction pipe (10). Wheels (2) are provided at the bottom of the refrigerator device (1) to move the milk container. Handles (3) are provided on the sides of the container for easy handling.

No. of Pages : 13 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441055903 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DUAL DECKED CUSTOMIZED WATER HOLDING TANK WITH UNIFORM WEIGHT DISTRIBUTION TO AVAIL COMPACT SPACE

(51) International classification	:C02F0001320000, E03D0001330000, A47L0011340000, E03D0001000000, A01K0007020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)CHENNAI INSTITUTE OF TECHNOLOGY
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMIL NADU, INDIA, PIN CODE-600069. ipr@citchennai.net, MOB: 8220844786. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P.SRIRAM
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMIL NADU, INDIA, PIN CODE-600069. ---------- ----------
2)Dr. P. JAYAKUMAR
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMIL NADU, INDIA, PIN CODE-600069. ---------- ----------

(57) Abstract :
ABSTRACT Title: DUAL DECKED CUSTOMIZED WATER HOLDING TANK WITH UNIFORM WEIGHT DISTRIBUTION TO AVAIL COMPACT SPACE
The titled invention “Dual decked customized water holding tank with uniform weight distribution to avail compact space” discloses the design of integrating two water tanks one above the other to satisfy the increased water requirement in a compact space. io Heavy base support (1) with foot rest (2) is provided to support the entire weight of the water tank. The lower deck water tank is mounted on the heavy base support (1). The upper deck water tank is mounted on the rigid base support for upper deck (6). Rigid base support for upper deck (6) has internal thread hub (7) that enable the upper deck tank to be mounted on the lower deck water tank with external thread on the neck (8). Rigid quadra vertical supports (3) provide support and stability to the lower deck water tank. Screw rod (5) is fitted into the threaded hub (4) present above the rigid quadra vertical support (3) to provide support for the upper deck water tank. Locking clamp (9) secures the screw rod (5) in place. Water enters the upper deck tank through the main tank water inlet (12) at the top. Water leaves the upper deck tank through the water passing hole (11) at the bottom of the upper deck tank. Water enters the lower deck tank through the water inlet (10) in the neck of the lower deck tank. Water is supplied to the building through the delivery outlet (13) at the bottom of the lower deck tank.

No. of Pages : 14 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024

(21) Application No.202441055914 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : COMPUTER-IMPLEMENTED SYSTEM AND METHOD TO GRADE SEVERITY OF OBSTRUCTIVE SLEEP APNOEA (OSA)

(51) International classification	:A61B0005000000, A61B0005024000, A61B0005080000, A61B0005020500, G16H0050200000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)NITTE (Deemed to be University)
Address of Applicant :University enclave, medical complex building , University Road, Mangalore Mangalore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Rashmi Soori
Address of Applicant :B-104, Kshema staff quarters Dearalakatte Mangalore-575018 Mangalore ---------- ----------
2)Giridhar B H
Address of Applicant :B-104, Kshema staff quarters Dearalakatte Mangalore-575018 Mangalore ---------- ----------
3)Navneet Bhushan
Address of Applicant :1B-401, Akme Harmony, Bellandur Post, Outer Ring Road, Bengaluru 560103, Karnataka Bengaluru ---------- ----------
4)B S Nagabhushana
Address of Applicant :58, Pearl Gardens, Vajarahalli, Thalaghattapura Post, Bengaluru 560109 Bengaluru ---------- ----------

(57) Abstract :
Disclosed are a system (101) and method for grading the severity of obstructive sleep apnoea (OSA) in patients. Sleep study data is received from a polysomnography machine (107), and event data, including apnoea and hypopnea events, is identified. The duration of these events, their effect on post-event heart rate change, and desaturation level are captured and analyzed. Arousal events are examined for association with specific events. Sleep efficiency data is correlated with the total duration of events per night. Weightage factors are assigned to events and event types, and a computational algorithm computes their values. The algorithm is applied to the correlated data to grade the severity of OSA. This method provides a comprehensive approach to assessing OSA severity, facilitating targeted treatment strategies.

No. of Pages : 49 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441055916 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A DEVICE FOR REGULATING UNIFORM FILAMENT DIAMETER DURING FILAMENT EXTRUSION

(51) International classification	:B33Y0010000000, B33Y0070000000, B33Y0030000000, B29C0064118000, B60C0009000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Chennai Institute of Technology
Address of Applicant :Sarathy Nagar, Kundrathur, Chennai-600069, Tamil Nadu, India. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)V. Murugan
Address of Applicant :Chennai Institute of Technology, Sarathy Nagar, Kundrathur, Chennai-600069 Chennai ---------- ----------
2)Dr.V. Dhinakaran
Address of Applicant :Chennai Institute of Technology, Sarathy Nagar, Kundrathur, Chennai-600069 Chennai ---------- ----------
3)P. Pradeep Castro
Address of Applicant :Chennai Institute of Technology, Sarathy Nagar, Kundrathur, Chennai-600069 Chennai ---------- ----------
4)PECHIMUTHU A
Address of Applicant :Chennai Institute of Technology, Sarathy Nagar, Kundrathur, Chennai-600069 Chennai ---------- ----------

(57) Abstract :
ABSTRACT A device for regulating uniform filament diameter during filament extrusion A novel device (201) for regulating uniform filament diameter during the extrusion of thermoplastic filaments presents a significant advancement in additive manufacturing technology. By precisely controlling the filament diameter, this device effectively prevents the formation of voids and minimizes the risk of contamination. Additionally, it enhances the reliability, efficiency, and versatility of the filament production process, thereby contributing to the consistent generation of high-quality thermoplastic filaments suitable for various 3D printing applications. FIG 3

No. of Pages : 14 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441055925 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A METHOD FOR WIRE-ARC ADDITIVE MANUFACURING OVERHANGING STAINLESS STEEL STRUCTURES WITH MILD STEEL SUPPORTS

(51) International classification :B33Y0010000000, B23K0009040000, B29C0064400000, B33Y0030000000, B22F0010200000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DEVIPRASAD SHETTY
Address of Applicant :DEPT. MECHANICAL ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
2)DR VIJEESH V
Address of Applicant :DEPT. MECHANICAL ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
3)POOJA MANGALADEVI
Address of Applicant :DIRECTOR, METASPOT PVT LTD., 308- AGRAJA APARTMENTS, UDAYNAGAR SRINIVASNAGAR, SURATHKAL MANGALURU, DAKSHINA KANNADA, KARNATAKA-575025 Udupi ---------- ----------

(57) Abstract :
Disclosed herein is a method (100) for fabricating overhanging stainless steel structures with mild steel support structure and selective dissolution of support materials. The method (100) include depositing a stainless steel wire and a mild steel wire simultaneously to create a fabricated component with overhanging features. The method (100) also includes using wire arc additive manufacturing (WAAM) mechanism with the subsequent selective chemical dissolution of the support structures (106). The method (100) also includes immersing the fabricated component in a chemical solution (110). The method (100) also includes cleaning the fabricated component to remove residual chemicals.

No. of Pages : 26 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024

(21) Application No.202441055927 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : WIRELESS POWER TRANSFER USING EV-IOT

(51) International classification :H02J50/10, B60L53/12, B60L53/66, H02J50/80, G16Y10/35, G16Y10/40, H02J7/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Karpagam Academy of Higher Education
Address of Applicant :Pollachi Main Road, Eachaneri Post, Coimbatore 641 021 Coimbatore ---------- ----------
2)Karpagam Institute of Technology
3)Dr.A.Amudha
4)R.Santhana Kumar
5)S.Niyas Ahamed
6)S.Kavi Arasan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.A.Amudha
Address of Applicant :Assistant Professor, Department of EEE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore 641021 Coimbatore ---------- ----------
2)R.Santhana Kumar
Address of Applicant :Student, Department of EEE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore 641021 Coimbatore ---------- ----------
3)S.Niyas Ahamed
Address of Applicant :Student, Department of EEE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore 641021 Coimbatore ---------- ----------
4)S.Kavi Arasan
Address of Applicant :Student, Department of EEE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore 641021 Coimbatore ---------- ----------

(57) Abstract :
Wireless power transfer is becoming a main concern to everyone staring from technical producer to the user. It becomes essential to create elective techniques to produce vitality. Wireless Power Transfer can be utilized to charge electronic versatile gadgets and Electrical Vehicle also In this project, the methods of Wireless Power Transfer is talked about and how its identified with the Wireless Power Transfer for electric vehicle is introduced. The global shift towards sustainable transportation solutions has led to the increasing adoption of electric vehicles (EVs). To meet the growing demand for convenient and efficient EV charging, this research presents a Wireless Power Transmission (WPT) system integrated with the Internet of Things (IoT) technology. The proposed system aims to enhance the user experience by providing seamless and automated wireless charging for EVs while optimizing energy usage and reducing environmental impact.

No. of Pages : 9 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441055928 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DESIGN OF EV BATTERY CHARGER USING SEPIC CONVERTER WITH ACTIVE PFC

(51) International classification :H02M3/155, H02M3/158, H02M1/42, B60L53/00, H02J7/00, G06F30/367, G05F1/70
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Karpagam Academy of Higher Education
Address of Applicant :Pollachi Main Road, Eachaneri Post, Coimbatore 641 021 Coimbatore ---------- ----------
2)Karpagam Institute of Technology
3)Dr. K. Balachander
4)Abishake.S
5)Pragadeesh.M
6)Sanjay.R
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. K. Balachander
Address of Applicant :Assistant Professor, Department of EEE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore 641021 Coimbatore ---------- ----------
2)Abishake.S
Address of Applicant :Student, Department of EEE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore 641021 Coimbatore ---------- ----------
3)Pragadeesh.M
Address of Applicant :Student, Department of EEE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore 641021 Coimbatore ---------- ----------
4)Sanjay.R
Address of Applicant :Student, Department of EEE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore 641021 Coimbatore ---------- ----------

(57) Abstract :
The switches in the converters need to operate at a very high frequency, it is forced to inject harmonics to the system which leads to reduction in the efficiency of the converter and increase in the power intake which leads to stress in the switches and reduction in the life of the operation of the switches, hence improvement of power factor is very vital to increase the power transfer capability of the power converter. Several converters are available for the Power factor control methods like boost converter, buck boost converter, CUK Converter and SEPIC Converter. The main motivation is to develop a simple DC-DC Converter topology with low switch count, low cost, high gain and efficiency with power factor correction.

No. of Pages : 10 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441055929 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : FUSED SILICA ZIRCON FLOUR FOR INVESTMENT CASTING FOUNDRIES

(51) International classification :C04B0035480000, B22C0001180000, B22C0009040000, C03C0008200000, B22C0001000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)LGC ENGINEERING LIMITED
Address of Applicant :No.1264, 1st main, 1st stage, Hebbal Layout, Mysore, Mysore, Karnataka-570016, India Mysore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)KUMAR , Kiran
Address of Applicant :45/A, KIADB INDUSTRIAL AREA, TUBINAKERE, Mandya, Mandya, Karnataka-571402, India Mandya ---------- ----------
2)Arjun ks
Address of Applicant :45/A, KIADB INDUSTRIAL AREA, TUBINAKERE, Mandya, Mandya, Karnataka-571402, India Mandya ---------- ----------
3)Abhishek GN
Address of Applicant :45/A, KIADB INDUSTRIAL AREA, TUBINAKERE, Mandya, Mandya, Karnataka-571402, India Mandya ---------- ----------
4)Vishnu S
Address of Applicant :45/A, KIADB INDUSTRIAL AREA, TUBINAKERE, Mandya, Mandya, Karnataka-571402, India Mandya ---------- ----------

(57) Abstract :
The present invention discloses about a preparation method of fused silica zircon flour for Investment casting foundries, comprising milling zircon sand to obtain zirconium silicate (ZrSiO4) in one or more state and mixing the zirconium silicate (ZrSiO4) with fused silica in one or more ratio. Further, the zircon sand is milled in a ball mill. Further, the one or more state including but not limited to dry state, powder form and slurry. Further, the one or more ratio include but not limited to 70 parts of the zirconium silicate (ZrSiO4) and 30 parts of the fused silica.

No. of Pages : 11 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441055943 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : PREDICTIVE ANALYSIS SYSTEM FOR IOT-DRIVEN PRECISION RAINFALL ESTIMATION AND IRRIGATION CONTROL

(51) International classification :H04W0084180000, G01W0001100000, G01N0033000000, G06Q0010040000, G08B0021180000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)ARAVINDA C.V
Address of Applicant :DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
2)MENG LIN
Address of Applicant :RITSUMEIKAN UNIVERSITY, DEPARTMENT OF ELECTRONICS AND COMPUTER ENGINEERING (THE GRADUATE SCHOOL OF SCIENCE AND ENGINEERING) RITSUMEIKAN UNIVERSITY 1-1-1 NOJI-HIGASHI, KUSATSU SHIGA 525-8577 JAPAN ---------- ----------
3)SUDEEPA K B
Address of Applicant :DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING NMAM INSTITUTE OF TECHNOLOGY NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110,KARNATAKA, INDIA Udupi ---------- ----------
4)MINU P ABRAHAM.
Address of Applicant :DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING NMAM INSTITUTE OF TECHNOLOGY NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
5)GURU PRASAD
Address of Applicant :DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING NMAM INSTITUTE OF TECHNOLOGY NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110,KARNATAKA, INDIA Udupi ---------- ----------

(57) Abstract :
Disclosed herein is a predictive analysis system (100) for the collection of real-time data (102), which is then analyzed to predict rainfall. the system (100) comprising sensors (104). The sensors (104) further comprising a temperature and humidity sensor (106) configured to measure climate data (102) predicting the likelihood of rainfall, an air pressure sensor (108) configured to measure weather forecasting models, a rainfall sensor (110) configured to measure the amount of rainfall aiding in the validation and calibration of predictive models. the system (100) also comprising a microcontroller (112) serves as the central processing unit for the weather station, collecting data (102) from the sensors (104). the system (100) also comprising a WIFI module (114) enables wireless communication, allowing the microcontroller (112) to send the data (102) to an IoT platform (116).

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441055949 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN INTERFACE FOR PROVIDING FINANCIAL RISK MANAGEMENT CONTROL SYSTEM USING BLOCKCHAIN TECHNOLOGY

(51) International classification :G06Q0040020000, G06Q0020400000, H04L0009080000, H04L0009060000, G06Q0040040000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Mr. J. Manoj Prabhakar
Address of Applicant :Assistant Professor, Department of Computer Science & Engineering, Dhaanish Ahmed Institute of Technology, Coimbatore ---
2)Mr. A. Mohamed Noordeen
3)Mr. J. Tharikraja
4)Mrs. V.J. Amrutha
5)Mrs. A. Manisha
6)Dr. B. Nathan
7)Mrs. A.P. Subapriya
8)Mrs. K. Thenmozhi
9)Mrs. M. Rohini
10)Dr. R. Vadivelu
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr. J. Manoj Prabhakar
Address of Applicant :Assistant Professor, Department of Computer Science & Engineering, Dhaanish Ahmed Institute of Technology, Coimbatore ---
2)Mr. A. Mohamed Noordeen
Address of Applicant :Assistant Professor, Department of Artificial Intelligence & Data Science, Dhaanish Ahmed Institute of Technology, Coimbatore ---
3)Mr. J. Tharikraja
Address of Applicant :Assistant Professor, Department of Artificial Intelligence & Data Science, Dhaanish Ahmed Institute of Technology, Coimbatore ---
4)Mrs. V.J. Amrutha
Address of Applicant :Assistant Professor, Department of Computer Science & Engineering CMS College of Engineering & Technology, Coimbatore ---
5)Mrs. A. Manisha
Address of Applicant :Assistant Professor, Department of Computer Science & Engineering Dhaanish Ahmed Institute of Technology, Coimbatore ---
6)Dr. B. Nathan
Address of Applicant :Associate Professor, Department of Computer Science & Engineering, Dhaanish Ahmed Institute of Technology, Coimbatore ---
7)Mrs. A.P. Subapriya
Address of Applicant :Assistant Professor, Department of Computer and Communication Engineering, Kathir College of Engineering, Coimbatore ---
8)Mrs. K. Thenmozhi
Address of Applicant :Assistant Professor, Department of Computer Science & Engineering, Coimbatore Institute of Engineering and Technology, Tamilnadu ---
9)Mrs. M. Rohini
Address of Applicant :Assistant Professor, Department of Computer Science & Engineering, Coimbatore Institute of Engineering and Technology, Tamilnadu ---
10)Dr. R. Vadivelu
Address of Applicant :Professor, Department of Electronics & Communication Engineering, Erode Sengunthar Engineering College, Perundurai, Tamilnadu ---

(57) Abstract :
By reducing operational risks, lowering counterparty risks, and improving overall security, blockchain has the potential to completely change the capital markets. This revolutionary effect tackles operational weaknesses associated with fraud, mistakes made by humans, and regulatory issues in the financial sector. Cryptography is another tool used by the blockchain to guarantee that transactions may only be accessed and validated by authorized parties. This technology might completely change the banking industry by improving security, boosting productivity, and possibly even cutting expenses. This system would enable very reliable and secure cash transfers inside the finance sector. It also facilitates quicker and more effective financial transactions while lowering the risk of fraud and enhancing security.

No. of Pages : 10 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :23/07/2024

(21) Application No.202441055976 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : MACHINE LEARNING ALGORITHMS FOR IOT SERVICES IN BIG DATA AND CLOUD COMPUTING

(51) International classification	:G06N0020000000, H04L0067120000, G06N0005040000, G06N0003040000, H04W0004380000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr.S.Thilagavathi

Address of Applicant :Assistant Professor, Department of Computer Science, NIFT-TEA College of Knitwear Fashion, Tirupur, Tamilnadu-641665, India. Tirupur ---------- ----------

2)Dr. Jain Mayank Narendra Kumar

3)P.Saranya

4)Devendra Ganeshrao Ingale

5)Dr.T.R.Ramesh

6)Ms.M.Evelin Jessy

7)Prof. Amit Kumar Patil

8)R.Thayammal

9)Jayakeerthi. M

10)Vijetha Bhat

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr.S.Thilagavathi

Address of Applicant :Assistant Professor, Department of Computer Science, NIFT-TEA College of Knitwear Fashion, Tirupur, Tamilnadu-641665, India. Tirupur ---------- ----------

2)Dr. Jain Mayank Narendra Kumar

Address of Applicant :Assistant Professor, Department of Master of Computer Application, Sarvajanik College of Engineering and Technology, Dr. R.K. Desai Marg, Opp. Mission Hospital, Athwalines, Surat, Gujarat-395001, India Surat ---------- ----------

3)P.Saranya

Address of Applicant :Lecturer, Department of Computer Science, Seethalakshmi Ramaswami College, Trichy-2, Tamilnadu-620002, India. Trichy ---------- ----------

4)Devendra Ganeshrao Ingale

Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Dr. Rajendra Gode Institute of Technology and Research, Amravati, Maharashtra-444602, India. Amravati ---------- ----------

5)Dr.T.R.Ramesh

Address of Applicant :Associate Professor, School of Science and Computer Studies, CMR University, Bengaluru, Karnataka-560043, India. Bengaluru ---------- ----------

6)Ms.M.Evelin Jessy

Address of Applicant :Assistant professor, Department of Artificial Intelligence and Data Science, St.Joseph College of Engineering, Sriperumbudur, Tamilnadu-600095, India. Chennai ---------- ----------

7)Prof. Amit Kumar Patil

Address of Applicant :Assistant Professor, Department of ECE, MIT Art, Design & Technology University, Pune, Maharashtra-412201, India. Pune ---------- ----------

8)R.Thayammal

Address of Applicant :Assistant Professor, Department of Bachelor of Computer Applications, St Joseph's College(Arts & Science), Kovur, Chennai, Tamilnadu-600128, India. Chennai ---------- ----------

9)Jayakeerthi. M

Address of Applicant :Assistant Professor, Department of Computer Science, Nehru Arts and Science College, Thirumalayampalayam Nehru Gardens, Coimbatore, Tamil Nadu-641105, India. Coimbatore ---------- ----------

10)Vijetha Bhat

Address of Applicant :Assistant Professor, Department of MCA, Canara College, Kodailbail MGRoad Mangalore, Karnataka-575003, India. Mangalore ---------- ----------

(57) Abstract :

Machine Learning Algorithms for IOT Services in Big Data and Cloud Computing ABSTRACT The combination of Big Data, Cloud Computing, and Internet of Things (IoT) services has transformed several industries. Real-time data collection, analysis, and interpretation are now feasible because to this connection. This study looks into how machine learning (ML) techniques can be used to enhance Internet of Things (IoT) services in the context of cloud computing and big data. Because machine learning algorithms leverage the massive processing and storage capacities of cloud platforms, they can efficiently analyse and analyse the massive volumes of data generated by Internet of Things devices. This synergy facilitates the extraction of significant insights, predictive analytics, and decision-making process automation. The application of supervised and unsupervised learning techniques for anomaly detection, predictive maintenance, and intelligent resource management are some of the major research fields. The paper discusses a variety of challenges, such as data security and privacy and the need for scalable machine learning models that can handle the dynamic nature of Internet of Things data streams. The potential of edge computing to reduce latency and bandwidth utilisation and hence enhance cloud-based machine learning systems is also explored. This study demonstrates the revolutionary impact of combining machine learning algorithms with Internet of Things services in Big Data and Cloud Computing contexts, highlighting the future possibilities and continuing research in this rapidly expanding field. Case studies and in-depth analysis are used to achieve this.

No. of Pages : 11 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441055978 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN APPARATUS FOR ACCURATE DETERMINATION OF THE MELTING POINT OF HIGH-TEMPERATURE SALT FLUXES

(51) International classification	:G01N0025160000, G01N0021640000, B01L0003000000, G01B0011160000, G01N0021880000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR VIJEESH V
Address of Applicant :DEPT. MECHANICAL ENGINEERING , NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
2)POOJA M
Address of Applicant :DIRECTOR, OCTASWIFT TECHNOLOGIES (OPC) PVT LTD. MANGALADEVI MANGALORE, KARNATAKA, INDIA MANGALORE ---------- ----------

(57) Abstract :
Disclosed herein is an apparatus (100) for accurate determination of the melting point of high-temperature salt fluxes, the apparatus (100) comprising a flux sample (102), a sample tube (104) configured to store the flux sample (102) for melting, a dilatometer (106) configured to accurately measure dimensional changes in the flux sample (102) during the melting process in the sample tube (104). The dilatometer (106) embedded at one end of a sample tube (104) configured to accurately measure the dimensional changes in the flux sample (102) during heating in the sample tube (104), the dilatometer (106) configured to measure the dimensional change up to a threshold limit set by a user.

No. of Pages : 28 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :23/07/2024

(21) Application No.202441055982 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : ARTIFICIAL INTELLIGENCE BASED REAL TIME QUICK WITTED ORAL HEALTH ANALYSER

(51) International classification :A61B0005000000, A61Q0011000000, G16H0050300000, A61B0005020500, A61B0005080000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)N. Gomathi
Address of Applicant :Assistant Professor Department of Computer Science and Engineering, Hindusthan College of Engineering and Technology, Coimbatore - 641 032 ---------- ----------
2)S. Ramaraj
3)J. Santhosh
4)N. Tamilarasi
5)K. Gayathree
6)N. Arun Prasath
7)Dr. D. Nageswari
8)Dr. P. Jeyanthi
9)S. Dinesh Kumar
10)N. Mathivanan
Name of Applicant : NA
Address of Applicant : NA

(72)**Name of Inventor :**
1)N. Gomathi
Address of Applicant :Assistant Professor Department of Computer Science and Engineering, Hindusthan College of Engineering and Technology, Coimbatore - 641 032 ---------- ----------
2)S. Ramaraj
Address of Applicant :Assistant Professor Department of Computer Science and Engineering, Karpagam College of Engineering, Othakkalmandapam, Coimbatore – 641032 ---------- ----------
3)J. Santhosh
Address of Applicant :Assistant Professor Department of Information Technology, Karpagam Institute of Technology, Salem - Kochi Hwy, Seerapalayam, Coimbatore – 641021 ---------- ----------
4)N. Tamilarasi
Address of Applicant :Assistant Professor Department of Information Technology, Nehru Institute of Technology, Kaliyapuram, Coimbatore – 641105 ---------- ----------
5)K. Gayathree
Address of Applicant :Assistant Professor Department of Electronics and Communication Engineering, Sree Sakthi Engineering College, Karamadai, Coimbatore -641104 ---------- ----------
6)N. Arun Prasath
Address of Applicant :Senior Assistant Professor Department of Electronics and Communication Engineering, EASA College of Engineering and Technology, Coimbatore 641105 ---------- ----------
7)Dr. D. Nageswari
Address of Applicant :Assistant Professor Department of Electronics and Communication Engineering, Nehru Institute of Engineering and Technology, Thirumalayampalayam, Coimbatore- 641105 ---------- ----------
8)Dr. P. Jeyanthi
Address of Applicant :Assistant Professor Department of Information Technology, Sri Ramakrishna College of Arts and Science, Coimbatore 641006 ---------- ----------
9)S. Dinesh Kumar
Address of Applicant :Assistant Professor Department of Electronics and Communication Engineering, Government College of Technology, Coimbatore. 641013 ---------- ----------
10)N. Mathivanan
Address of Applicant :Assistant professor Department of Artificial Intelligence and Data Science Karpagam Academy of Higher Education, Pollachi main road, Coimbatore 641 021. ---------- ----------

(57) Abstract :
Oral health is multi-faceted and includes the ability to speak, smile, smell, taste, touch, chew, swallow and convey a range of emotions through facial expressions with confidence and without pain, discomfort and disease of the craniofacial complex (head, face, and oral cavity). Oral health means the health of the mouth. No matter what your age, oral health is vital to general health and well-being. Health is wealth, and nowadays technology plays a significant role in monitoring and maintaining the health condition of human. Thus, oral health plays a crucial role in a common people and it is highly interconnected with the general health. Poor oral hygiene has been linked to various health issues, including heart disease, diabetics and respiratory infections. Preventing dental issues such as cavities, gum diseases and tooth loss by regular monitoring of oral health is our primary objective. The Sensor Module includes various sensors such as gas sensor (to detect volatile compounds associated with bad breath), temperature sensor (to measure mouth temperature), and humidity sensors (to measure mouth humidity). These sensors collect data related to oral conditions. The Signal Processing bock collect the sensor data which is processed using a microcontroller (e.g., Arduino). An ADC is used to convert analog sensor readings into digital data for further processing. Data Processing & Analysis block, analyze the sensor data. This can include comparing gas sensor readings to predefined thresholds for bad breath detection. More advanced systems might use pattern recognition algorithms to identify specific breath patterns associated with bad breath. The results of the analysis are displayed to the user. This could be done using LED indicators, a buzzer for audible alerts, an LCD screen for more detailed information, or even wireless communication modules like Bluetooth or Wi-Fi to send data to a smartphone app for real-time monitoring.

No. of Pages : 12 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441055987 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN UNDERWATER CAPSULE VEHICLE

(51) International classification	:H04N0007180000, A61B0017000000, A61B0010000000, A61B0005150000, G01N0001100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)INDIAN INSTITUTE OF TECHNOLOGY MADRAS (IIT MADRAS)
Address of Applicant :The Dean, Industrial Consultancy & Sponsored Research (IC&SR), Indian Institute of Technology Madras, Sardar Patel Road, IIT Post Chennai 600 036, Tamil Nadu, India Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Sadham Usean Ramasamy
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Madras, Chennai 600036, India Chennai ---------- ----------
2)Prabhu Rajagopal
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Madras, Chennai 600036, India Chennai ---------- ----------

(57) Abstract :
ABSTRACT AN UNDERWATER CAPSULE VEHICLE The present disclosure relates to an underwater capsule vehicle (200). The vehicle comprises an enclosure (201) for at least one human operator and a propulsion mechanism (202) for manoeuvring within a waterbody. A sampling unit (100) is 5 configured within the enclosure (201), to collect samples from the bed of waterbody. The sampling unit (100) comprises a conical head (110) with plurality of pockets (10). Each pocket houses peripheral channels (20) for collecting a first sample type. Agitators (30) in each pocket stir the bed surface. A central aperture (40) intakes a second sample type via a central channel (42). Intermediate channels (50) between the pockets and the central 10 aperture collect a third sample type. Storage units (120) around the conical head (110) have input conduits (121) and compartments (122) for sample collection, connected to suction devices (124). A connector head (130) links channels to storage units, with a flange (140). 15 Fig. 4

No. of Pages : 29 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056000 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR PROVIDING REAL-TIME VEHICLE EXPOSITION

(51) International classification :G06Q30/015, G07C5/08, G06N3/09
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Enginecal Technology Pvt Ltd
Address of Applicant :No 1252/A/29/1, 3rd Floor, 32nd G Cross, East End Main Road, 4th T Block, Jayanagar, Bangalore -560041. Bangalore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Anubhav Amarnath
Address of Applicant :No 1252/A/29/1, 3rd Floor, 32nd G Cross, East End Main Road, 4th T Block, Jayanagar, Bangalore -560041. Bangalore ---------- ----------
2)Praveen Rao
Address of Applicant :No 1252/A/29/1, 3rd Floor, 32nd G Cross, East End Main Road, 4th T Block, Jayanagar, Bangalore -560041. Bangalore ---------- ----------
3)Sarvesh Adyanthaya
Address of Applicant :No 1252/A/29/1, 3rd Floor, 32nd G Cross, East End Main Road, 4th T Block, Jayanagar, Bangalore -560041. Bangalore ---------- ----------
4)Preetham Acharya
Address of Applicant :No 1252/A/29/1, 3rd Floor, 32nd G Cross, East End Main Road, 4th T Block, Jayanagar, Bangalore -560041. Bangalore ---------- ----------

(57) Abstract :
A system (100) for providing a real-time vehicle exposition technology includes a vehicle (102), a vehicle interface module (104), and a smart device (112). The vehicle interface module (104) is configured to extract vehicular raw data. The smart device (112) includes a vehicle event algorithms (VEA) calibration data module (114), a vehicle catalog and voice messages module (116), a vehicle event algorithms module (118), a Bluetooth Low Energy (BLE) communication interface module (120), and an operating system module (122). The vehicle event algorithms (VEA) calibration data module (114) is configured to calibrate the vehicle event algorithms (VEA) based on the extracted vehicle raw data. The vehicle catalog and voice messages module (116) are configured with a trained pre-recorded vehicle catalog and voice messages, The Bluetooth Low Energy (BLE)/Wifi communication interface module (120) is configured to interface the smart device (114) with the vehicle interface module (104).

No. of Pages : 31 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056029 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN INNOVATIVE CLUSTERING-BASED FEATURE SELECTION ALGORITHM FOR HIGH-DIMENSIONAL HYPER SPECTRAL IMAGE ANALYSIS

(51) International classification	:G06K0009620000, G16B0025000000, G16C0020700000, G01V0099000000, G06F0011100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Thatavarti Satish
Address of Applicant :Department of Computer Science and Engineering, Koneru Lakshmaiah Education Foundation,Green Fields, Vaddeswaram ---------- ----------
2)KONERU LAKSHMAIAH EDUCATION FOUNDATION
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Sampurnima Pattem
Address of Applicant :Research Scholar, Department of Computer Science and Engineering, Koneru Lakshmaiah Education Foundation Green Fields, Vaddeswaram Guntur Andhra Pradesh India 522302 Vaddeswaram ---------- ----------
2)Thatavarti Satish
Address of Applicant :Associate Professor,Department of Computer Science and Engineering, Koneru Lakshmaiah Education Foundation Green Fields, Vaddeswaram Guntur, Andhra Pradesh, India, 522302. Vaddeswaram ---------- --------

(57) Abstract :
The present invention introduces a novel Clustering-based Feature Selection Algorithm (C-FSA) meticulously crafted to address the computational challenges posed by hyperspectral images. Hyper-spectral data, characterized by hundreds or thousands of features, presents a significant computational burden during the classification process due to irrelevant features. This innovative C-FSA aims to reduce high-dimensional data and alleviate computational load through a two-phase process. Initially, the algorithm eliminates redundant information, followed by selecting a representative feature for each cluster of similar attributes. Traditional feature selection methods, such as backward and forward selection, have been extensively studied; however, this method employs k-means clustering to enhance classification accuracy by selecting optimal features. The assumption is that similar features will cluster together while non-essential ones are excluded. The innovation utilizes datasets from Botswana, the Kennedy Space Center, and the District of Columbia, all of which include class labels assigned to each data point. These novel high-dimensional datasets derived from hyperspectral images serve as the foundation for this research. Experimental results demonstrate that the k-means clustering-based feature selection significantly improves classification accuracy, achieving results exceeding 80%. Through its innovative design, this Clustering-based Feature Selection Algorithm (C-FSA) promises enhanced computational efficiency and more accurate classification outcomes in the processing of hyper-spectral data.

No. of Pages : 22 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :23/07/2024

(21) Application No.202441056031 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : ROLE OF IOT AND E - MARKETING FOR COST OPTIMIZATION IN ONLINE SHOPPING

(51) International classification	:G06Q0030020000, G06Q0030060000, G06Q0010080000, G06Q0010060000, G06Q0010040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr. P. G. Thirumagal

Address of Applicant :Associate Professor, Department of MBA, VISTAS, Pallavaram, Chennai – 600117, Tamil Nadu, India. Chennai ---------- ----------

2)Dr. R. A. Ayyapparajan

3)Mr. S. Vasanth Kumar

4)Mrs. K M Padmapriya

5)Kavitha M. M

6)Dr. Rajib Bhattacharya

7)Dr. J. Anitha

8)Mrs. Sheeba K

9)Mrs. Gayathri L

10)Dr. Hoori Nadir

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. P. G. Thirumagal

Address of Applicant :Associate Professor, Department of MBA, VISTAS, Pallavaram, Chennai – 600117, Tamil Nadu, India. Chennai ---------- ----------

2)Dr. R. A. Ayyapparajan

Address of Applicant :Associate Professor, Department of MBA, Nehru Institute of Information Technology and Management, Nehru Gardens, Thirumalayampalayam, Coimbatore - 641105, Tamil Nadu, India. Coimbatore ---------- ----------

3)Mr. S. Vasanth Kumar

Address of Applicant :Assistant Professor, Department of Computer Science, Hindusthan College of Science and Commerce, Erode-638052, Tamil Nadu, India. Erode ---------- ----------

4)Mrs. K M Padmapriya

Address of Applicant :Assistant Professor, Department of Computer Science, Hindusthan College of Science and Commerce, Ingur, Perundurai, Erode-638052, Tamil Nadu, India. Erode ---------- ----------

5)Kavitha M. M

Address of Applicant :Assistant Professor, Department of Computer Applications, Kongu Arts and Science College (Autonomous), Erode-638316, Tamil Nadu, India. Erode ---------- ----------

6)Dr. Rajib Bhattacharya

Address of Applicant :Associate Professor, Department of Business Management, NSHM Knowledge Campus, 60 B L Saha Road, Kolkata-700053, West Bengal, India. Kolkata ---------- ----------

7)Dr. J. Anitha

Address of Applicant :Assistant Professor, Department of B.Com CS & AF, Hindusthan College of Arts and Science, Coimbatore-741028, Tamil Nadu, India. Coimbatore ---------- ----------

8)Mrs. Sheeba K

Address of Applicant :Assistant Professor, Department of BBA, Hindusthan College of Arts and Science, City Campus, Nava India, Avinashi Road, Coimbatore-641028, Tamil Nadu, India. Coimbatore ---------- ----------

9)Mrs. Gayathri L

Address of Applicant :Assistant Professor, Department of Commerce with CA, Hindusthan College of Arts and Science, City Campus, Nava India, Avinashi Road, Coimbatore-641028, Tamil Nadu, India. Coimbatore ---------- ----------

10)Dr. Hoori Nadir

Address of Applicant :Assistant Professor, School of Management, BBD University 111, Faizabad Rd, Atif Vihar, Uattardhona, Lucknow-226028, Uttar Pradesh, India. Lucknow ---------- ----------

(57) Abstract :

ROLE OF IOT AND E- MARKETING FOR COST OPTIMIZATION IN ONLINE SHOPPING ABSTRACT Online shopping has seen a dramatic shift in the last several years due to the convergence of the Internet of Things (IoT) and E-marketing. The vital function of these technologies in maximising savings for merchants and consumers is explored in this abstract. By facilitating real-time tracking, predictive maintenance, and inventory management, the Internet of Things (IoT) enhances supply chain efficiency, leading to reduced operational costs. At the same time, E-marketing makes use of big data analytics to develop targeted marketing strategies, enhance consumer engagement, and personalise online interactions. Online stores can improve pricing strategies, reduce advertising expenses, and increase conversion rates by combining the data collected by the Internet of Things (IoT) with the comprehensive analytics offered by e-marketing. Significant cost savings are made possible with the integration of these technologies, which also allow for automated customer help, easy payment processes, and dynamic pricing. In order to optimise costs and create more efficient and effective online purchasing experiences, this abstract highlights the convergence of the Internet of Things (IoT) with E-marketing.

No. of Pages : 14 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :23/07/2024

(21) Application No.202441056039 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : MACHINE LEARNING AND AI IN MARKETING–CONNECTING COMPUTING POWER TO HUMAN INSIGHTS

(51) International classification	:G06Q0030020000, G06N0020000000, H04L0051020000, G06K0009620000, G06N0005040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr. Sudha K. S.

Address of Applicant :Assistant Professor, PG and Research Department of Commerce CA, Nandha Arts and Science College, Erode, Tamilnadu-638052, India. Erode ---------- ----------

2)Dr. Suresh .K

3)Dr. A.Suhashini

4)Mr. Sayan Mandal

5)Mr. Sabir Nasir Mujawar

6)R.Vincysahana

7)Dr. M. Murali Krishnan

8)Dr.R.Rajasekaran

9)Dr. Mehulkumar Surendrabhai Patel

10)Dr. Priyanka Rawal

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. Sudha K. S.

Address of Applicant :Assistant Professor, PG and Research Department of Commerce CA, Nandha Arts and Science College, Erode, Tamilnadu-638052, India. Erode ---------- ----------

2)Dr. Suresh .K

Address of Applicant :Associate Professor, School of Management, Presidency University, Itgalpura, Yelahanka, Bengaluru -64, Karnataka-560064, India. Bengaluru ---------- ----------

3)Dr. A.Suhashini

Address of Applicant :Assistant professor, Department of Commerce and Economics, Presidency University, Tamilnadu-643211, India. Nilgiris ---------- ----------

4)Mr. Sayan Mandal

Address of Applicant :Assistant Professor, Department of Management and IT, Rai University, Ahmedabad, Gujarat-382260, India. Ahmedabad ---------- ----------

5)Mr. Sabir Nasir Mujawar

Address of Applicant :Assistant Professor, Department of Master of Management Studies, Martha Mandir's Babasaheb Gawde Institute of Management Studies, Maratha Mandir Annexe, Babasaheb Gawde Chowk, Dr Anandrao Nair Marg, Mumbai Central, Mumbai, Maharashtra-400008, India. Mumbai ---------- ----------

6)R.Vincysahana

Address of Applicant :Assistant Professor, Department of AI & DS, St.Joseph College of Engineering, Tamilnadu-602117, India. Chennai ---------- ----------

7)Dr. M. Murali Krishnan

Address of Applicant :Assistant Professor, Department of Management Studies, Dr. N. G. P. Institute of Technology, Coimbatore, Tamilnadu-641048, India. Coimbatore ---------- ----------

8)Dr.R.Rajasekaran

Address of Applicant :Assistant Professor, Department of Commerce, NIFT - Tea College of Knitwear Fashion, East of TEKIC ,Mudalipalayam, Tiruppur, Tamilnadu-641604, India. Tiruppur ---------- ----------

9)Dr. Mehulkumar Surendrabhai Patel

Address of Applicant :Assistant Professor, Department of BCA, SEMCOM and Near Sardar Patel University Vallabh Vidyanagar Anand Gujarat-388120, India. Anand ---------- ----------

10)Dr. Priyanka Rawal

Address of Applicant :Associate Professor, Faculty of Management, Jagran Lakecity University, Near Kaliasoth Barrage, Chandanpura, Bhopal , Madhya Pradesh-462007, India. Bhopal ---------- ----------

(57) Abstract :

Machine Learning and AI in Marketing–Connecting Computing Power to Human Insights ABSTRACT The emergence of Artificial Intelligence (AI) and Machine Learning (ML) has revolutionised the marketing landscape by bridging the gap between computing power and human understanding. This study aims to explore the manner in which artificial intelligence and machine learning technologies are transforming marketing strategies. Thanks to these technologies, businesses can now leverage vast volumes of data to improve their marketing campaigns, tailor customer experiences, and gain a deeper understanding of consumer behaviour. Thanks to the use of complex algorithms and data analytics procedures, businesses can now predict trends, identify patterns, and make decisions based on data with an accuracy that has never been witnessed before. Customer engagement and pleasure are further enhanced by integrating artificial intelligence-powered solutions like chatbots, recommendation engines, and sentiment analysis engines. This study looks into the main applications of artificial intelligence and machine learning in marketing. These uses include automated content creation, predictive analytics, and customer segmentation. It also covers the ethical issues and problems associated with using AI in marketing, like data privacy and algorithmic prejudice. Using case studies and real-world examples, the essay examines the revolutionary impact that artificial intelligence and machine learning have had on marketing. It also emphasises how new technologies have the power to spur creativity, improve productivity, and create deeper bonds between companies and customers.

No. of Pages : 11 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056057 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : INTEGRATED AI BASED SMART ASSISTIVE DEVICE FORVISUALLY AND HEARING-IMPAIRED PEOPLE

(51) International classification :G06N0003080000, A61H0003060000, A61F0009080000, G06N0003040000, G01S0013931000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)MANIVANNAN K
Address of Applicant :VSB ENGINEERING COLLEGE ---------- ----------
2)A Ananya
3)G Praveena
4)K Sarathy
5)K Sabarish
6)R Sanjay
7)M Venkadesh
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MANIVANNAN K
Address of Applicant :VSB ENGINEERING COLLEGE ---------- ----------
2)A Ananya
Address of Applicant :M.Kumarasamy College of Engineering, Karur Karur ---------- ----------
3)G Praveena
Address of Applicant :V.S.B. Engineering College, Karur Karur ---------- ----------
4)K Sarathy
Address of Applicant :V.S.B. Engineering College, Karur Karur ---------- ----------
5)K Sabarish
Address of Applicant :V.S.B. Engineering College, Karur Karur ---------- ----------
6)R Sanjay
Address of Applicant :V.S.B. Engineering College, Karur Karur ---------- ----------
7)M Venkadesh
Address of Applicant :V.S.B. Engineering College, Karur Karur ---------- ----------

(57) Abstract :
Although having good vision is a priceless gift, vision loss is sadly becoming more and more common these days. The visible world must be transformed into an aural one that can give blind people information about objects and their spatial locations in order to help them. Names and audio descriptions are given to identified objects from the scenario. Everyone, but notably those with disabilities, has the right to live freely. The goal of technology in the last few decades has been to give people with disabilities as much autonomy as possible. An assistive technology to help the blind understand their surroundings is suggested by this study. It accomplishes this by fusing YOLO, a quick and precise object detection technique based on deep neural networks in images, with OpenCV, a Python program. The findings demonstrated that the recommended strategy was effective in allowing blind users to navigate an unfamiliar indoor and outdoor space with the assistance of a user. In this research, artificial intelligence was utilized to recognize, assess, and communicate information through speech. In the proposed work, we address the current system problem by utilizing dark net YOLO techniques, which are intended to minimize the recognition time of many objects in less time with optimal time complexity.

No. of Pages : 7 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056066 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN ASTM CASTING SYSTEM USING UNIFIED MOLD WITH ANTI-GRAVITY FILLING FEATURE AND METHOD THEREOF

(51) International classification	:B22C0009080000, B29C0049420000, G16H0020400000, G01N0003040000, B29C0039100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR VIJEESH V
Address of Applicant :DEPT. MECHANICAL ENGINEERING , NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
2)MRS. POOJA M
Address of Applicant :DIRECTOR, OCTASWIFT TECHNOLOGIES (OPC) PVT LTD. MANGALADEVI MANGALORE, KARNATAKA, INDIA MANGALORE ---------- ----------
3)DR. ARUN AUGUSTIN
Address of Applicant :DEPARTMENT OF MECHANICAL ENGINEERING, CHRIST COLLEGE OF ENGINEERING IRINJALAKUDA THRISSUR - 680125, KERALA , INDIA THRISSUR ---------- ----------

(57) Abstract :
Disclosed herein is an american society for testing and materials (ASTM) specified sample casting system (100) using unified mold with anti-gravity filling feature for tensile, fatigue, impact, and wear tests of non-ferrous alloys. The system (100) comprising a melting furnace (102). The system (100) comprising a mold (104) further having a base (106) including a mold lower half (108) and a mold upper half (110). The mold (104) including a means for alignment (112) configured to align the mold lower half (108) and the mold upper half (110) such that the cavities align to form a complete product/sample. The system (100) comprising a preheat oven (114) configured to preheat the mold (104) to a pre-determined temperature. The system (100) comprising a thermocouple with temperature controller (116) configured to regulate the temperature. The system (100) comprising a thermal insulation (118) configured to maintain the temperature of the molten metal.

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056088 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR HEAD INJURY PREVENTION AND DETECTION USING A HELMET

(51) International classification :A42B0003040000, A61B0005110000, A42B0003120000, A61B0005000000, G01L0005000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VELLORE INSTITUTE OF TECHNOLOGY, CHENNAI
Address of Applicant :Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MANIGANDAN M
Address of Applicant :Assistant Professor, School of Electronics Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
2)SUCHETHA MANIKANDAN
Address of Applicant :Professor, Director, Center for Healthcare Advancement, Innovation and Research, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
3)P MANIMARAN
Address of Applicant :Assistant Professor, School of Electronics Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
4)G ROHITH
Address of Applicant :Assistant Professor, School of Electronics Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
5)ENIYAN K M
Address of Applicant :UG Student, School of Electronics Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
6)MOHAMMED SINAN CK
Address of Applicant :UG Student, School of Electronics Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
7)RIZWAN MUHAMMAD
Address of Applicant :UG Student, School of Electronics Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------

(57) Abstract :
Present disclosure discloses a system (100) and a method (400) for head injury prevention and detection using a helmet (102) to significantly enhance child safety during various activities by integrating innovative technologies. The helmet (102) is equipped with a set of Force-sensitive Resistor (FSR) sensors (104) and an Inertial Motion Unit (IMU) sensor (106), to measure ground reaction force during falls and detects fall direction respectively. A signal conditioning circuit (108) amplifies the ground reaction force data, and a processor (110) analyzes the amplified ground reaction force data, using machine learning algorithms for precise head injury severity predictions. The helmet's two-way interoperability, through Wi-Fi and a GSM unit (116), ensures reliable communication with a computing device 118, transmitting the wearer's location upon detecting a head injury.

No. of Pages : 29 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024

(21) Application No.202441056089 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : APPARATUS, SYSTEM, AND METHOD TO OBTAIN DIALYSIS PARAMETERS OF A USER FOR A DIALYSIS PROCESS

(51) International classification	:A61M0001160000, A61M0001280000, A61B0005318000, A61M0001360000, G01G0019414000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Manipal Academy of Higher Education
Address of Applicant :Madhav Nagar, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)NAIK, Bharathi
Address of Applicant :Assistant Professor, Renal Replacement Therapy and Dialysis Technology, Manipal College of Health Professions, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
2)NAYAK, Ajith M
Address of Applicant :Assistant Professor, Renal Replacement Therapy and Dialysis Technology, Manipal College of Health Professions, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
3)BHAT, Devadas
Address of Applicant :Assistant Professor, Department of Biomedical Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
4)BHUSHAN, Shivanand
Address of Applicant :Associate Professor, RSO Diagnostic Nuclear Medicine, Department of Nuclear Medicine, Manipal College of Health Professions, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------

(57) Abstract :
The invention discloses an apparatus (100), a system (200) and a method (300) for obtaining dialysis parameters for a user. The apparatus (100) integrates with a dialysis machine (600) and comprises a weighing instrument (102) to measure user's weight and sensors (103) to sense various user parameters. A control unit (104) receives the user parameters and weight data and compares it with pre-determined parameters stored in a memory (101). The pre-determined parameters can be retrieved from a data record associated with the user's last dialysis session completed using the dialysis machine (600). By comparing current data with pre-determined data, the control unit (104) can potentially personalize dialysis parameters for the user. A display panel (106) can present user parameters and obtained dialysis parameters. The dialysis parameters may send to the user through one or more connecting channels (107) and adjust the dialysis parameters of the dialysis machine (600) accordingly.

No. of Pages : 28 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056090 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SMART TIFFIN BOX ENABLING AUTOMATED FOOD DETECTION

(51) International classification :G16H0020600000, G06N0003040000, G06K0009620000, G09B0019000000, G06N0003080000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VELLORE INSTITUTE OF TECHNOLOGY, CHENNAI
Address of Applicant :Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)PANKAJ SHUKLA
Address of Applicant :Associate Professor, School of Advanced Sciences, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
2)REENA ROY
Address of Applicant :Assistant Professor Senior, School of Computer Science and Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
3)UTKARSH KEDIA
Address of Applicant :UG Student, School of Computer Science and Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
4)SOHIL AGARWAL
Address of Applicant :UG Student, School of Mechanical Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
5)YASHASHVI RAI
Address of Applicant :UG Student, School of Electronics Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------

(57) Abstract :
The present disclosure discloses a smart tiffin box (102) equipped with advanced technological components for automated food management. Positioned within the lid (202), an image capturing unit (106) automatically captures images of food items upon lid (202) closure following a pre-determined delay period. The images undergo processing utilizing deep learning techniques for accurate identification and classification of various food types. Concurrently, an in-built weigh scale (108) within the base (204) ensures precise measurement of food item weights, facilitating portion control and nutritional analysis. A user interface (110) provides access to nutritional information and customizable heating options, enhancing user interaction and meal planning efficiency. The smart tiffin box (102) aims to optimize dietary management, promote healthier eating habits, and cater to diverse culinary preferences through an integration of image recognition techniques, weigh scale (108) measurement, and user interface (110) functionalities.

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056091 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM ARCHITECTURE FOR PROTECTION AGAINST RANSOMWARE

(51) International classification :G06F0021560000, G06F0021550000, H04L0041063100, H04L0041042000, H04W0012088000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VIT-AP University
Address of Applicant :Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DIVYANSHU VASHISHT
Address of Applicant :B. Tech, School of Computer Science and Engineering, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
2)MOHAMMAD ABRAAR
Address of Applicant :B. Tech, School of Computer Science and Engineering, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
3)SAMRUDDHI D KHAIRNAR
Address of Applicant :B. Tech, School of Computer Science and Engineering, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
4)KUMAR DEBASIS
Address of Applicant :Assistant Professor Senior Grade 2, School of Computer Science and Engineering, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------

(57) Abstract :
A system architecture 100 to avert spread of ransomware in an internal network 200-A of an organisation can include a plurality of networks 200; a firewall 250; and a server 400 to perform operations to receive dangerous ransomware from an attacker to fall as victim; trap the ransomware into a masqueraded domain controller; transmit a pseudo signals to command and control server 500 of the attacker to mimic the behaviour of actual compromised system to avoid detection and manipulation by the attacker; and generate continuous analysis and protection capabilities by using the firewall 250 for robust incident response to the attacker. The system 100 serves as a honeypot and an incident response analysis surface, and with CiscoASA firewall. The system 100 operates in a plurality of phases, and in plurality of networks of campus network 200-A, a data centre network 200-B, internet service provider 200-C, de-militarized zone 200-D network, and a plurality of kill-switch network 200-E.

No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056092 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR ENHANCING MENTAL WELL-BEING OF A USER

(51) International classification :A61B0005000000, G16H0040670000, G16H0050300000, G16H0010200000, G16H0050200000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VELLORE INSTITUTE OF TECHNOLOGY, CHENNAI
Address of Applicant :Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)UMAMAHESWARI E
Address of Applicant :Professor, Grade-1, Centre for Cyber Physical Systems, School of Computer Science and Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
2)KANCHANA DEVI V
Address of Applicant :Associate Professor Senior, School of Computing Sciences and Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
3)G S SHYAM SUNDER
Address of Applicant :PG Student, School of Computing Sciences and Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
4)MOHAMMAD SAZEED
Address of Applicant :PG Student, School of Computing Sciences and Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
5)MALAM GAGAN REDDY
Address of Applicant :PG Student, School of Computing Sciences and Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------

(57) Abstract :
The present disclosure relates to a system (100) for enhancing mental well-being of a user, the system includes a plurality of physiological health indicators (104) configured to measure biological signals. A plurality of contextual indicators (106) configured to gather situational data. A plurality of self-monitored indicators (108) configured to measure user-reported data points. A health feedback device (102) configured to collect data from corresponding indicators, integrate the collected data from the corresponding indicators, provide feedback to the user, transmit data to analyze the collected data to generate health insights and provide actionable feedback to both the user and healthcare professionals.

No. of Pages : 20 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056094 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM FOR DETERMINING HOLDING POSITION OF HANDLE TO OPERATE HAND-HELD DEVICE, AND METHOD THEREOF

(51) International classification :A61B0090000000, G06F0003041000, G01J0003020000, G06F0001323400, H04L0043160000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VELLORE INSTITUTE OF TECHNOLOGY, CHENNAI
Address of Applicant :Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)S.JEYANTHI
Address of Applicant :Professor, School of Mechanical Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
2)SIMIYON PETER Y.
Address of Applicant :Lab Assistant, School of Mechanical Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
3)OJAS DHAR
Address of Applicant :UG Student, School of Mechanical Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
4)PARAM PATEL
Address of Applicant :UG Student, School of Mechanical Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------

(57) Abstract :
Present disclosure relates to relates to a system (100) to determine a holding position of a handle to operate a hand-held device, the system (100) can measure operational parameters of the hand-held device (102) through force-sensitive sensors (104), where the operational parameters include ripping force threshold values, finger pressure threshold values, and holding force threshold values. The system (100) can detect holding positions of the handle (202) based on the operational parameters, where the holding positions include a hand grip, a loss in hand grip, and a change in grip force of the handle. The system (102) can determine whether at least one holding position from the holding positions is within safe operational parameters. The system (102) can activate a motor (106) to operate the hand-held device (102) based on at least one of the holding position is within the safe operational parameters and secure an operator from hazardous motions.

No. of Pages : 24 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056095 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ALUMINUM-COPPER REINFORCED WITH NANOGRAPHENE OXIDE METAL MATRIX COMPOSITES ARE TESTED FOR PITTING CORROSION

(51) International classification	:B82Y0030000000, G01N0025480000, C08K0003040000, C08K0005000000, C08K0003220000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Andhra University
Address of Applicant :Andhra University, Visakhapatnam, Andhra Pradesh-530003, India ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Romola rajesh
Address of Applicant :Andhra University, Visakhapatnam, Andhra Pradesh-530003, India ---------- ----------
2)Prof v.v.s Prasad
Address of Applicant :Andhra University, Visakhapatnam, Andhra Pradesh-530003, India ---------- ----------
3)Dr surya nagendra
Address of Applicant :Andhra University, Visakhapatnam, Andhra Pradesh-530003, India ---------- ----------
4)Maduthuri venkatesh
Address of Applicant :Andhra University, Visakhapatnam, Andhra Pradesh-530003, India ---------- ----------

(57) Abstract :
6. ABSTRACT This work aims to investigate the alterations in mechanical and thermodynamic characteristics that occur when multiwall nanographene is added as a filler to an aluminium (Al) matrix. The nanocomposites were characterised using scanning electron microscopy (SEM) and energy dispersive X-ray spectroscopy (EDAX). The compositions and morphologies of the nanocomposites ranged from S1 (AL 100% + 0% Cu + 0% Nano Graphene) to S4 (AL 73% + 21% Cu + 6% Nano Graphene). The thermal stability of the composites was subsequently assessed using differential thermal analysis (DTA) and thermogravimetric analysis (TGA). The impact of nanographene on the physical and chemical characteristics of Al-copper-nanographene composites was assessed. Specifically, the findings demonstrated that nanographene enhanced the thermal properties of the composites by increasing their thermal resistance, surpassing that of pure aluminium. The electrical conductivity was measured using a CDE ResMap 178 4-Point Probe. The final electrical conductivity value was determined by averaging five distinct readings. The potential applications of composites in the aerospace, transportation, and maritime industries are demonstrated through mechanical tests such as tensile, hardness, wear, and flexural tests..

No. of Pages : 25 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :23/07/2024

(21) Application No.202441056096 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : DEEP LEARNING-DRIVEN VIRTUAL TUTOR AND ASSISTANCE SYSTEM FOR REAL-TIME STUDENT SUPPORT USING CHATGPT TECHNOLOGY

(51) International classification	:G06N0020000000, G06Q0050200000, G06N0003080000, G09B0007000000, G06F0040279000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr Reshma S

Address of Applicant :Associate Professor, Department of Artificial Intelligence and Machine Learning, Dayananda Sagar College of Engineering/ Visvesvaraya Technological University Shavige Malleshwara Hills, 91st Main Rd, 1st Stage, Kumaraswamy Layout, Bengaluru, Karnataka 560078 India ---------- ----------

2)Tanneru Venkata Lavanya

3)Dr. Neena Nanda

4)Dr. G. Suganya

5)Dr. Sanjay Kumar

6)Kataru Venkaa Naga Siva

7)Dr. F. Sangeetha Francelin Vinnarasi

8)Sundhareshwaran R

9)Mr.Anvesh Perada

10)Subhra Chakraborty

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr Reshma S

Address of Applicant :Associate Professor, Department of Artificial Intelligence and Machine Learning, Dayananda Sagar College of Engineering/ Visvesvaraya Technological University Shavige Malleshwara Hills, 91st Main Rd, 1st Stage, Kumaraswamy Layout, Bengaluru, Karnataka 560078 India ---------- ----------

2)Tanneru Venkata Lavanya

Address of Applicant :Ph. D Scholar, Department of CSE, Bharath Institute of Higher Education and Research, 173, Agaram Main Rd., Selaiyur, Chennai, Tamil Nadu 600073 India ---------- ----------

3)Dr. Neena Nanda

Address of Applicant :Associate Professor, Department of Business Analytics, Vivekanand Education Society's Institute of Management Studies & Research, 495-497, Collectors Colony, Chembur , Mumbai - 400074 Maharashtra ---------- ----------

4)Dr. G. Suganya

Address of Applicant :Assistant Professor Department of Computer Science, Dr. SNS Rajalakshmi College of Arts and Science, Coimbatore Tamilnadu India ---------- ----------

5)Dr. Sanjay Kumar

Address of Applicant :Professor Department of Computer Science and Engineering, SGT University, Budhera, Gurugram-Badli Road, Gurugram Haryana India ---------- ----------

6)Kataru Venkaa Naga Siva

Address of Applicant :Assistant Professor, Mallareddya Institute of Technology and Science MRITS Main block, Maisamma guda,Dhulapally, Secunderabad,500100 Hyderabad Telangana India ---------- ----------

7)Dr. F. Sangeetha Francelin Vinnarasi

Address of Applicant :Professor, Department of Information Technology, St.Joseph's Institute of Technology OMR, Chennai ,600119 Tamilnadu India ---------- ----------

8)Sundhareshwaran R

Address of Applicant :Student Department of CSE SNS College of Engineering, SNS Kalvi Nagar, Sathy Main Road, Nh 209, Vazhiyampalayam, Saravanampatti, Coimbatore, 641107 Tamil Nadu India ---------- ----------

9)Mr.Anvesh Perada

Address of Applicant :Student (MS in Computer Engineering), Drexel University, Department of Electrical and Computer Engineering, 3141 Chestnut Street, Philadelphia, PA 19104 Pennsylvania United States ---------- ----------

10)Subhra Chakraborty

Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, NITTE Meenakshi Institute of Technology 6429, NITTE Meenakshi College Rd, BSF Campus, Yelahanka, Bengaluru, Govindapura, Karnataka, Pin- 560064, India ---------- ----------

(57) Abstract :

Deep Learning-Driven Virtual Tutor and Assistance System for Real-Time Student Support Using ChatGPT Technology ABSTRACT: ChatGPT, which was created by OpenAI and is predicated on artificial intelligence (AI), has recently garnered widespread acceptance in a variety of fields, including education. Students are able to generate content while simultaneously acquiring knowledge about concepts and theories through the use of this technology. ChatGPT is built on the State of the Art (SOA). This encompasses Deep Learning (DL), Natural Language Processing (NLP), and Machine Learning (ML), which is an extension of a category of ML-NLP models commonly referred to as Large Language Models (LLMs). The potential exists to automate the grading of tests and assignments, thereby allowing teachers to concentrate on instructing. An additional approach to problem-solving is provided to students through the demonstration of ChatGPT's ability to simulate real-world scenarios. In the context of their studies, students are able to implement the strategies and concepts they have learned through the ChatGPT simulation. Children can engage in critical thinking and concentrate more intensely on the material by having their education tailored to their individual requirements with the assistance of this technology. ChatGPT is an advantageous choice for language instruction due to its capacity to translate text from one language to another

No. of Pages : 13 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056097 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A MULTI-AGENT AI SYSTEM FOR COLLABORATIVE MUSIC COMPOSITION AND PERFORMANCE

(51) International classification	:G10H0001000000, G06N0020000000, G10G0001000000, G10H0001380000, G10H0001400000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Shanmugavel G
Address of Applicant :Associate professor, Geetanjali Institute of science and technology, Nellore, Andhra Pradesh, India. ---------- ----------
2)Dr. M. Tamilselvi
3)Dr. Hemakumar V. S
4)N. Kishore Chandra dev
5)Mr. G D Vignesh
6)Dr. R. V. S. Lalitha
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Shanmugavel G
Address of Applicant :Associate professor, Geetanjali Institute of science and technology, Nellore, Andhra Pradesh, India. ---------- ----------
2)Dr. M. Tamilselvi
Address of Applicant :Associate Professor, Computer Science and Engineering, Roever Engineering College Perambalur Tamil Nadu, India. ---------- ----------
3)Dr. Hemakumar V. S
Address of Applicant :Professor, Department of ECE, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Avadi, Chennai. ---------- ----------
4)N. Kishore Chandra dev
Address of Applicant :Assistant Professor, Department of ECE S.R.K.R. Engineering College, Bhimavaram, A.P, India. ---------- ----------
5)Mr. G D Vignesh
Address of Applicant :Assistant professor, St. Joseph's College of Engineering, Chennai, Tamil Nadu, India. ---------- ----------
6)Dr. R. V. S. Lalitha
Address of Applicant :Professor, Department of C. S. E, Aditya College of Engineering &Technology, Surampalem, India. Andhra Pradesh. ---------- ----------

(57) Abstract :
A Multi-Agent AI System for Collaborative Music Composition and Performance Abstract: The present invention relates to a multi-agent AI system designed for collaborative music composition and performance. This innovative system integrates advanced machine learning algorithms, natural language processing, and real-time interaction capabilities to facilitate dynamic and seamless collaboration between human musicians and AI agents. The system comprises multiple specialized AI agents, each responsible for different aspects of music creation such as melody, harmony, rhythm, and instrumentation. These agents communicate and cooperate to generate cohesive musical pieces that can be customized and refined by human users through a user-friendly interface. Key features include real-time performance analysis, adaptive musical contributions, and intuitive natural language processing for user input and feedback. The system is also capable of functioning autonomously, generating and performing original compositions without human intervention. Additionally, it offers versatile tools for live performance, sound design, and music production, making it a valuable resource for composers, musicians, and producers. The multi-agent AI system aims to revolutionize the music industry by enhancing the creative process, expanding artistic possibilities, and providing new methods for live performance and music production. This invention bridges the gap between human creativity and AI technology, fostering innovative and expressive musical collaborations.

No. of Pages : 15 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056098 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A HYBRID REASONING FRAMEWORK FOR EXPLAINABLE AI WITH COMMON SENSE KNOWLEDGE

(51) International classification :G06N0005040000, G06N0020000000, G06N0003040000, G06N0003080000, G06K0009620000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SAVEETHA ENGINEERING COLLEGE
Address of Applicant :Saveetha Nagar, Thandalam, Chennai, India 602105 ---------- ----------
2)P. SANKAR
3)DHANALAKSHMI MANICKARAJ
4)RAJAKRISHNAMMAL A
5)K. VISHNUPRIYA
6)AROKIA NERLING RASONI G
7)SWEDHA V
8)G. KARTHIKA PRIYA DHARSHINI
9)PRIYANGA G
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P. SANKAR
Address of Applicant :Dept. of CSE, Saveetha Engineering College, Saveetha Nagar, Thandalam, Chennai, India 602105 ---------- ----------
2)DHANALAKSHMI MANICKARAJ
Address of Applicant :Dept. of Information Technology, Saveetha Engineering College, Saveetha Nagar, Thandalam, Chennai, India 602105 ---------- ----------
3)RAJAKRISHNAMMAL A
Address of Applicant :Dept. of AI&DS, Saveetha Engineering College, Saveetha Nagar, Thandalam, Chennai, India 602105 ---------- ----------
4)K. VISHNUPRIYA
Address of Applicant :Dept. of AIML, Saveetha Engineering College, Saveetha Nagar, Thandalam, Chennai, India 602105 ---------- ----------
5)AROKIA NERLING RASONI G
Address of Applicant :Dept. of ECE, Saveetha Engineering College, Saveetha Nagar, Thandalam, Chennai, India 602105 ---------- ----------
6)SWEDHA V
Address of Applicant :Dept. of Information Technology, Saveetha Engineering College, Saveetha Nagar, Thandalam, Chennai, India 602105 ---------- ----------
7)G. KARTHIKA PRIYA DHARSHINI
Address of Applicant :Dept. of AIML, Saveetha Engineering College, Saveetha Nagar, Thandalam, Chennai, India 602105 ---------- ----------
8)PRIYANGA G
Address of Applicant :Dept. of CSE, Saveetha Engineering College, Saveetha Nagar, Thandalam, Chennai, India 602105 ---------- ----------

(57) Abstract :
A Hybrid Reasoning Framework for Explainable AI with Common Sense Knowledge Abstract: The present invention discloses a hybrid reasoning framework for explainable artificial intelligence (AI) systems that integrates machine learning models with common sense knowledge to generate human-understandable explanations for AI-based predictions and decisions. The framework comprises three key components: a machine learning model trained on domain-specific data, a common sense knowledge graph encoding general-purpose knowledge, and a reasoning engine that integrates the model's outputs with relevant common sense knowledge using logical inference and causal reasoning techniques to generate explanations. The invention also presents a method for generating explanations using the hybrid framework, involving the steps of inputting data into the machine learning model, passing the model's outputs to the reasoning engine, querying the common sense knowledge graph to retrieve relevant knowledge, integrating the retrieved knowledge with the model's outputs using inference and reasoning techniques, and generating human-understandable explanations that provide insights into the factors and reasoning steps influencing the model's predictions or decisions. By combining machine learning, common sense knowledge, and reasoning capabilities, the hybrid framework enables AI systems to provide transparent, interpretable, and trustworthy explanations for their outputs, enhancing user understanding and acceptance of AI-based decisions across various domains, such as healthcare, finance, and legal services, ultimately advancing the field of explainable AI.

No. of Pages : 14 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056105 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SMART BUILDING STRUCTURAL HEALTH MONITORING AS A SERVICE (SHAAS) PLATFORM USING IOT AND MACHINE LEARNING

(51) International classification :G06N0003040000, G06N0003080000, G06K0009620000, G06N0020000000, H04L0067120000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Ms B. Rupa Devi
Address of Applicant :Associate Professor, Dept of CSE, Annamacharya Institute of Technology and Sciences, Tirupati - 517520. Tirupati ---------- ----------
2)Dr.T. Suguna
3)Ms.Saritha Dasari
4)Dr.L.JAYASREE
5)Dr. RANJITH KUMAR PAINAM
6)Mr N Narendra Reddy
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Ms B. Rupa Devi
Address of Applicant :Associate Professor, Dept of CSE, Annamacharya Institute of Technology and Sciences, Tirupati - 517520. Tirupati ---------- ----------
2)Dr.T. Suguna
Address of Applicant :Assistant Professor, Department of ECE, Panimalar Engineering College, Chennai -95 Chennai ---------- ----------
3)Ms.Saritha Dasari
Address of Applicant :Assistant Professor, Dept of CSE(Data Science), G. Narayanamma Institute of Technology and Science, Hyderabad -500104 Hyderabad ---------- ----------
4)Dr.L.JAYASREE
Address of Applicant :Assistant Professor, Dept of (CSE), Sri Padmavati Mahila Visva Vidyalayam, Tirupati - 517 502, AP Tirupati ---------- ----------
5)Dr. RANJITH KUMAR PAINAM
Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, Kallam Haranadhareddy Institute of Technology (Autonomous), NH-16, Chowdavaram, Guntur, Andhra Pradesh, India, PIN:52201 Guntur ---------- ----------
6)Mr N Narendra Reddy
Address of Applicant :Assistant Professor, Department of CSE, Sri Venkateswara College of Engineering, Tirupati, Andhra Pradesh Tirupati ---------- ----------

(57) Abstract :
The Smart Building Structural Health Monitoring as a Service (SHaaS) platform uses IoT sensors and machine learning algorithms to provide real-time monitoring and predictive maintenance recommendations for building structures. The platform collects data from a network of sensors, processes it to detect anomalies and predict future issues, and presents actionable insights through a user-friendly interface. Computer vision has evolved significantly, enabling autonomous building damage assessment. This work seeks to create a self-sufficient deep learning system to detect concrete fire damage. We present a new deep learning network that combines a CNN and LSTM network. LSTM damage detection and classification follows CNN feature extraction. We then simulate fire in three types of self-compacting concrete (SCC) specimens and assess structural damage to test the hybrid network. The network's design and hyper-parameters are optimized through extensive testing. The hybrid method outperforms the original, according to study. The suggested approach outperforms current deep learning algorithms while remaining robust. After fires, the suggested architecture would enable widespread deployment of automated damage detection systems.

No. of Pages : 10 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056111 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DATA PROCESSING SYSTEM WITH INTER-PROCESSOR COMMUNICATION FOR SENSOR NETWORKS

(51) International classification	:G06F0013420000, G06F0003060000, H04W0088080000, H04L0009320000, H04L0001000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)BERT LABS PRIVATE LIMITED
Address of Applicant :C1-906, L&T South City, Bannerghatta Road, Banglore-560076, Karnataka, INDIA Bangalore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Kiran Kumar N
Address of Applicant :#39 Shri Nivas Nilaya, 15thcross, RT Nagar, Bengaluru, Karnataka, India - 560032 Bangalore ---------- ----------
2)Aunullah Qaiser
Address of Applicant :Mahatma Street, Nalaroad, Rourkela, Odisha-769001 Rourkela ---------- ----------
3)Arun Kumar Shrivastava
Address of Applicant :Yadav Mohalla, Jhansi road, Shivpuri (M.P.) 473551 Shivpuri ---------- ----------
4)Bibek Mondal
Address of Applicant :Rajganj, Jalpaiguri West Bengal, 735135 Jalpaiguri ---------- ----------

(57) Abstract :
The present invention relates to a high-speed data processing system (100) designed for efficient real-time processing and transmission of data. The system incorporates a microcontroller (102) with a first preprocessing unit (104a) featuring a Cortex-A7 processor (106a) and a second preprocessing unit (104b) with a Cortex-M4 processor (106b). The sensors (108) send analog data to an AD74413R ADC processor (110) and digital data to a MAX14906 DSP processor (112). Processed data is transferred via AXIM and MLAHB buses to DDR3 memory (114), enabling dynamic data prioritization. The flash memory (116) stores processed data and command instructions, facilitating decision-making for data transmission via an I2C protocol interface (118) to a base station (120). This system ensures synchronized inter-processor communication, efficient memory management, and robust handling of external commands, making it ideal for applications in industrial automation, environmental monitoring, healthcare, smart cities, automotive, and aerospace.

No. of Pages : 30 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056118 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A METHOD FOR EXTRACTING AND INVESTIGATING ANTIBACTERIAL PROPERTIES OF SULFORAPHANE FROM BROCCOLI

(51) International classification	:A61K0031260000, A61P0031040000, A61K0009140000, A61K0045060000, C12Q0001180000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Andhra University
Address of Applicant :Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Vidadala Siri Hanuma
Address of Applicant :B. Tech Biotechnology, Department of Chemical Engineering, Andhra University College of Engineering, Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------
2)Manikanta Sodasani
Address of Applicant :Biophysics Programme Manager, Department of Intra-mural Research Core, TCABS-E, Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------
3)Dr. Ravikiran S Yedidi
Address of Applicant :Founder of TCABS-E, Department of Intra-mural Research Core, TCABS-E, Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------

(57) Abstract :
ABSTRACT: Title: A Method for Extracting and Investigating Antibacterial Properties of Sulforaphane from Broccoli The present disclosure proposes a method that extracts sulforaphane from broccoli to determine whether the sulforaphane has antibiotic properties against bacterial cultures at different concentrations. The method utilizes less dosage of sulforaphane at some concentration of Escherichia coli (E. coli) bacteria to exhibit higher inhibition of bacterial growth. The method compares the effectiveness of sulforaphane with established synthetic antibiotics adequately. The method that develops a natural alternative to synthetic antibiotics to reduce dependency on chemically synthesized drugs. The method prepares the sulforaphane antibiotic medication to enhance the body's natural immune deficiency, thereby providing an additional layer of protection against infections. The method incorporates the sulforaphane antibiotic medication into various formulations, including capsules, tablets, powders, and topical applications, thereby improving patient convenience and adherence.

No. of Pages : 18 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056119 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A METHOD FOR DETERMINING CALIFORNIA BEARING RATIO OF LOW COMPRESSIBLE CLAY

(51) International classification	:G01N0033240000, E02D0001020000, A01G0022000000, G01N0033420000, E02D0001040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Andhra University
Address of Applicant :Andhra University, Waltair, Visakhapatnam- 530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. C.N.V. Satyanarayana Reddy
Address of Applicant :Professor, Department of Civil Engineering, Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------
2)P. Lavanya Rekha
Address of Applicant :Research Scholar, Department of Civil Engineering, Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------

(57) Abstract :
ABSTRACT: Title: A Method for Determining California Bearing Ratio of Low Compressible Clay The present disclosure proposes a method for determining California Bearing Ratio (CBR) of low-compressible clays from Dynamic Cone Penetration Index (DCPI) measured in the field, thereby providing a rapid and economical alternative to traditional, time-consuming laboratory CBR test for pavement design applications. The proposed method reduces time-consuming and expensive laboratory CBR tests with the quicker and more economical DCPT, which takes only 15 minutes to execute the test. The proposed method reduces the time and cost associated with pavement design for projects involving low compressible clays. The proposed method develops correlation for low compressible clay, thereby enhancing its reliability for pavement construction. The proposed method collects soil samples from various depths and re-moulds them in the laboratory to match field density and natural moisture content.

No. of Pages : 25 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056120 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A METHOD FOR DETERMINING CALIFORNIA BEARING RATIO (CBR) OF SILTY SAND AND CLAYEY SILTY SAND SUBGRADES

(51) International classification	:G01N0033240000, E02D0001020000, C04B0111200000, E21B0043040000, E02D0001000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Andhra University
Address of Applicant :Andhra University, Waltair, Visakhapatnam- 530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. C.N.V. Satyanarayana Reddy
Address of Applicant :Professor, Department of Civil Engineering, Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------
2)P. Lavanya Rekha
Address of Applicant :Research Scholar, Department of Civil Engineering, Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------

(57) Abstract :
ABSTRACT: Title: A Method for Determining California Bearing Ratio (CBR) of Silty Sand and Clayey Silty Sand Subgrades The present disclosure proposes a method for determining California bearing ratio (CBR) of pavement subgrades using dynamic cone penetration index (DCPI) for silty sand and clayey silty sand. The proposed method establishes soil-specific correlations between CBR values obtained in the laboratory and DCPT measurements from field tests for silty sand (SM) and clayey silty sand (SC-SM) improves the accuracy and applicability of soil strength evaluations. The proposed method performs DCP tests in the field during varying seasons, and conducting CBR tests in the laboratory under different moisture conditions. Various soil properties, including specific gravity, grain size distribution, atterberg limits, field moisture content, and density are determined. The proposed method utilizes data collected from different depths in the field to ensure that the correlations developed are robust and applicable across varying soil conditions and depths.

No. of Pages : 26 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056121 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A TEMPLATE-FREE METHOD FOR SYNTHESIZING BIOCOMPATIBLE NANOPOROUS MICROSTRUCTURES

(51) International classification :A23F5/02, C08G69/08, C07K14/615
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)National Institute of Technology Calicut
Address of Applicant :NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Harsha Haridas Ellathveettil Swaminathan
Address of Applicant :PhD Scholar, Department of Physics, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
2)Megha Radhakrishnan
Address of Applicant :MSc Student, Department of Physics, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
3)K. Venkat Bharath
Address of Applicant :B-Tech Student, Department of Mechanical Engineering, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
4)Dr. Goutam Kumar Chandra
Address of Applicant :Assistant Professor, Department of Physics, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
5)Dr. Ravi Varma Mundakkara Kovilakam
Address of Applicant :Professor, Department of Physics, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------

(57) Abstract :
ABSTRACT: Title: A Template-Free Method for Synthesizing Biocompatible Nanoporous Microstructures The present disclosure proposes a template-free method for synthesizing biocompatible nanoporous microstructures via amino acid induced self-polymerization. The biocompatible nanoporous microstructures are synthesized without the need for toxic chemicals or high energy consumption associated with traditional methods. The proposed method uses green coffee leaf extract in conjunction with amino acids and vanillin to form nanoporous microstructures through a controlled polymerization process. The proposed method involves simple procedures and uses agricultural waste (coffee leaves), thereby reducing production costs significantly. The proposed method for synthesis of biocompatible nanoporous microstructures that exhibit potent antibacterial, antioxidant, and non-cytotoxic properties, making them suitable for biomedical applications such as drug delivery systems, bio-sensing, and bio-imaging.

No. of Pages : 20 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056130 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A GUIDE VANE-LESS BULB TURBINE SYSTEM FOR MICRO/ MINI HYDROPOWER GENERATION

(51) International classification :F03B0003120000, F03B0013100000, F03B0017060000, F03B0011040000, F03B0011000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Indian Institute of Technology Madras (IIT Madras)
Address of Applicant :The Dean, Industrial Consultancy & Sponsored Research [IC&SR], Indian Institute of Technology Madras, Sardar Patel Road, IIT P.O, Chennai, Tamil Nadu, India, 600 036 Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Dhiman Chatterjee
Address of Applicant :Department of Mechanical Engineering , Indian Institute of Technology Madras, Chennai 600036 Chennai ---------- ----------
2)Dr. Shyama Prasad Das
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Madras, Chennai 600036 Chennai ---------- ----------
3)Sonal Shandilya
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Madras, Chennai 600036 Chennai ---------- ----------

(57) Abstract :
The present invention discloses a guide vane-less bulb turbine system for micro/ mini hydropower generation. The absence of a movable guide vane reduces fabrication and maintenance costs while ensuring a near-flat efficiency curve regardless of the operational conditions. The present invention features bulb geometry (10) accommodating a generator for efficient power generation, supported by a robust rib-like structure (26) ensuring structural integrity and secure attachment to a strut (12) hydrofoil. These struts serve both as support and to facilitate smooth water flow. Runner blades (14) are specifically angled to compensate for the absence of inlet guide vanes, enabling efficient turbine operation under various flow conditions. A conical draft tube (20) is strategically positioned downstream of the turbine runner section (18) to improve pressure recovery and overall system performance. [Figure to be published along with abstract: Figure 1]

No. of Pages : 25 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056142 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : THERMAL AND MECHANICAL CHARACTERISATION OF PHENOLIC BASED COMPOSITES FOR AEROSPACE APPLICATIONS

(51) International classification	:C08L0063000000, C08K0003040000, C08J0005240000, B64G0001580000, B64C0001000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. C. Hari Venkateswara Rao
Address of Applicant :MSQAA, Min. of Defence, Hydreaabad-58 Hyderabad ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. C. Hari Venkateswara Rao
Address of Applicant :MSQAA, Min. of Defence, Hydreaabad-58 Hyderabad ---------- ----------

(57) Abstract :
Composite materials are gaining popularity in today's world because of their exceptional properties like less weight, more elastic strain, and strength-to-weight ratio. Due to the above reasons, there is vast research going on these composite materials. Composite materials are the most suitable materials for the design of aerospace structures like missile airframes, re-entry vehicle structures, and aircraft outer envelopes. In aerospace applications, the re-entry vehicle structures are generally made of a structural member and thermal protection member made by the combination of Carbon/ Epoxy (CE) and over above Carbon/Phenolic (CP). Phenolic-based composites are attractive materials for various engineering applications, particularly for high-temperature applications such as heat shields. In this study, PAN-based reinforced fabric phenolic resin composites laminates filled with different fillers such as Zirconium, Silicon, and Nanocarbon were prepared using the traditional hand layup technique. Three different fillers were filled with phenolic resin in 5%, 10%, 15% and 20% filler weight concentrations. Mechanical characterizations such as flexural strength, tensile strength, and ILSS were carried out to quantify the effect of fillers on the mechanical properties of the filled composites. Dry Sliding Wear Behavior of PAN fabric phenolic matrix composite laminate level study was done and discussed in detail. Thermal characterization such as DSC, TGA and TMA were carried out to quantify the effect of filler on the thermal properties of the filled composites. Ablation behaviors of the filled composites were investigated by oxyacetylene ablation test in terms of the linear ablation rate, mass ablation rate, and back face temperature.

No. of Pages : 17 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056154 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : STRENGTHENED SUSTAINABLE SANDWICH COMPOSITE STRUCTURES

(51) International classification	:C08J0005040000, B33Y0070000000, B32B0027040000, C08J0005240000, B32B0003120000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Chennai Institute of Technology
Address of Applicant :Sarathy Nagar, Kundrathur, Chennai-600069, Tamil Nadu, India. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. N. Ramasamy
Address of Applicant :Chennai Institute of Technology, Sarathy Nagar, Kundrathur, Chennai-600069 Chennai ---------- ----------
2)Dr. T. Arunkumar
Address of Applicant :Chennai Institute of Technology, Sarathy Nagar, Kundrathur, Chennai-600069 Chennai ---------- ----------

(57) Abstract :
ABSTRACT Strengthened Sustainable Sandwich Composite Structures The present invention relates to sustainable sandwich composite structures utilizing natural fibers reinforced with polylactic acid (PLA) through 3D printing technology. The sandwich structures feature various core configurations, such as truss, honeycomb, and prismatic, to enhance mechanical performance. Natural fibers like hemp and abaca undergo alkaline surface treatment for improved interfacial bonding. The resulting PLA-hybrid fiber composites exhibit superior mechanical properties, particularly in truss core configurations. These eco-friendly, lightweight sandwich structures are suitable for applications in aerospace, automotive, marine, and construction industries, contributing to reduced environmental impact and enhanced structural performance. Fig.1

No. of Pages : 14 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056155 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SELF-ENERGIZED SMART CROWD MONITORING SYSTEM

(51) International classification	:H02N0002180000, F21V0023040000, H04W0004029000, H04W0004380000, A61B0005080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Chennai Institute of Technology
Address of Applicant :Sarathy Nagar, Kundrathur, Chennai-600069, Tamil Nadu, India. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)D.Prakash
Address of Applicant :Centre for Nonlinear Systems, Chennai Institute of Technology, Kundrathur, Chennai-600069, Tamilnadu, India Chennai ---------- ----------
2)R.Karthikeyan
Address of Applicant :Centre for Nonlinear Systems, Chennai Institute of Technology, Kundrathur, Chennai-600069, Tamilnadu, India Chennai ---------- ----------

(57) Abstract :
ABSTRACT Self-Energized Smart Crowd Monitoring System A self-energized smart crowd monitoring system comprises pedestrian tiles (100) embedded with piezoelectric elements (2) for converting mechanical energy from footsteps into electrical energy. Integrated sensors within the tiles (100) detect crowd parameters and wirelessly transmit data to a central monitoring station. Energy storage units within the tiles store the generated electrical energy, ensuring continuous power for sensors and communication modules. The system provides real-time actionable insights on crowd dynamics, enhancing public safety and infrastructure efficiency. The pedestrian tiles (100) include a rubber floor mat (3) for improved mechanical energy transfer and durability, making the system modular, scalable, and suitable for various urban environments. Fig.2

No. of Pages : 21 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056164 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ADAPTIVE CHESS LEARNING PLATFORM WITH AI INTEGRATION

(51) International classification	:G09B0005020000, G16H0010600000, G06Q0050200000, G06Q0010060000, G06N0020000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)S.A.SuryaKumar
Address of Applicant :31/13,Second Street, Srinivasa Nagar, Co-operative Colony Road, MC Road,Thanjavur-613007, Tamil nadu Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)S.A.SuryaKumar
Address of Applicant :31/13,Second Street, Srinivasa Nagar, Co-operative Colony Road, MC Road,Thanjavur-613007, Tamil nadu Chennai ---------- ----------

(57) Abstract :
ABSTRACT Adaptive Chess Learning Platform with AI Integration The present invention is related to the field of artificial intelligence in sports. More particularly the invention is related to chess learning platform. This patent introduces a revolutionary chess learning platform designed to overcome traditional limitations. Unlike rigid one-size-fits-all approaches in chess education, our platform integrates adaptive learning paths, real-time AI and ML assistance, and interactive modules. Structured into three modules—Introduction, Guided Practice, and Assignments—the platform employs adaptive algorithms, seamlessly integrating theoretical concepts into AI-guided practice for a dynamic, personalized experience. Unique features include dynamic adaptability, AI-driven support, and community engagement. Emphasizing ML application, the custom-designed algorithm, especially for regional language implementation, sets our platform as a pioneering solution. This patent application positions our invention to redefine global chess education by transcending existing limitations. The protection extends to the innovative combination of adaptive learning paths, real- time AI and ML assistance, and the custom-designed algorithm, ensuring a comprehensive and pioneering solution for chess learners worldwide.

No. of Pages : 10 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056172 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A PHOTOCATALYST FOR REDUCING TOXIC CR (VI) USING C3N4 EMBEDDED BI2WO6 HETEROSTRUCTURES

(51) International classification :B01J0035000000, B01J0027240000, C02F0001300000, B01J0023310000, C01B0021060000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Karpaga Vinayaga College of Engineering and Technology
Address of Applicant :GST Road, Chinnakolambakkam, Padalam, Chengalpattu - 603308, Tamil Nadu, India. Chengalpattu ---------- ----------
2)Dr. Meenakshi Annamalai
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. K. S. Balamurugan
Address of Applicant :Professor, Department of Electronics and Communication Engineering, Karpaga Vinayaga College of Engineering and Technology, GST Road, Chinnakolambakkam, Padalam, Chengalpattu - 603308, Tamil Nadu, India. Chengalpattu ---------- ----------
2)Dr. A. Manimaran
Address of Applicant :Professor, Department of Electronics and Communication Engineering, Karpaga Vinayaga College of Engineering and Technology, GST Road, Chinnakolambakkam, Padalam, Chengalpattu - 603308, Tamil Nadu, India. Chengalpattu ---------- ----------
3)N. Punithavalli
Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Karpaga Vinayaga College of Engineering and Technology, GST Road, Chinnakolambakkam, Padalam, Chengalpattu - 603308, Tamil Nadu, India. Chengalpattu ---------- ----------
4)S. Sripreethi
Address of Applicant :UG Student, Department of Electronics and Communication Engineering, Karpaga Vinayaga College of Engineering and Technology, GST Road, Chinnakolambakkam, Padalam, Chengalpattu - 603308, Tamil Nadu, India. Chengalpattu ---------- ----------

(57) Abstract :
Disclosed is a photocatalyst by embedding graphitic carbon nitride (C3N4) into bismuth tungstate (Bi2WO6) to form a hierarchical microsphere heterostructure using a simple hydrothermal approach. This C3N4/ Bi2WO6 heterostructure exhibits significantly enhanced photocatalytic activity for the reduction of toxic hexavalent chromium (Cr(VI)) under UV–vis illumination. Characterization of the synthesized materials was performed using advanced techniques, confirming the formation and properties of the heterostructure. The superior performance of this photocatalyst is attributed to the effective electronic interaction between C3N4 and Bi2WO6, which enhances charge transfer and increases the number of active sites on the surface. The present invention also discloses a method (200) for reducing Cr (VI) in an aqueous solution. Refer Figure 1.

No. of Pages : 22 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056175 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM FOR PERSONALISED WORKOUT ASSISTANCE AND ITS METHOD THEREOF

(51) International classification :A63B0024000000, A61B0005000000, G16H0020300000, A63B0071060000, G06F0003048200
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Karpaga Vinayaga College of Engineering and Technology
Address of Applicant :GST Road, Chinnakolambakkam, Padalam, Chengalpattu – 603308, Tamil Nadu, India. Chengalpattu ---------- ----------
2)Dr. Meenakshi Annamalai
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. K. S. Balamurugan
Address of Applicant :Professor, Department of Electronics and Communication Engineering, Karpaga Vinayaga College of Engineering and Technology, GST Road, Chinnakolambakkam, Padalam, Chengalpattu - 603308, Tamil Nadu, India. Chengalpattu ---------- ----------
2)Selciya Selvan
Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Karpaga Vinayaga College of Engineering and Technology, GST Road, Chinna kolambakkam, Padalam, Chengalpattu – 603308, Tamil Nadu, India. Chengalpattu ---------- ----------
3)P. Rajendran
Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Karpaga Vinayaga College of Engineering and Technology, GST Road, Chinna kolambakkam, Padalam, Chengalpattu - 603308, Tamil Nadu, India. Chengalpattu ---------- ----------
4)S. Pavithrashree
Address of Applicant :UG Student, Department of Electronics and Communication Engineering, Karpaga Vinayaga College of Engineering and Technology, GST Road, Chinna kolambakkam, Padalam, Chengalpattu – 603308, Tamil Nadu, India. Chengalpattu ---------- ----------

(57) Abstract :
A personalized workout assistance system (100) comprises a frame (102) with integrated mass measurement and image capturing modules (104, 106) to assess user parameters such as height and BMI. The system includes components like a seat (110), foldable frames (112) for forelimbs workout, a plate (114) for abdomen workout, and panels (116) for hind limbs workout. Controlled by a microcontroller (108), the system offers tailored workout options displayed on a user device (118). The method (200) involves measuring user mass and capturing images to calculate BMI, providing workout facilities, displaying measurements, and receiving user inputs for customized workouts.

No. of Pages : 16 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056176 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A BATTERY POWERED AUXILIARY DEVICE FOR MANUAL WHEELCHAIR AND ITS METHOD THEREOF

(51) International classification :A61G0005100000, A61G0005020000, A61G0005120000, H01M0050200000, A63B0071000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Karpaga Vinayaga College of Engineering and Technology
Address of Applicant :GST Road, Chinnakolambakkam, Padalam, Chengalpattu – 603308, Tamil Nadu, India. Chengalpattu ---------- ----------
2)Dr. Meenakshmi Annamalai
3)Dr. Annamalai Regupathi
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Annamalai Regupathi
Address of Applicant :Managing Director, Karpaga Vinayaga Educational Group, GST Road, Chinnakolambakkam, Padalam, Chengalpattu – 603308, Tamil Nadu, India. Chengalpattu ---------- ----------
2)Dr. S. Dinesh Kumar
Address of Applicant :Professor, Department of Mechanical Engineering, Karpaga Vinayaga College of Engineering and Technology, GST Road, Chinnakolambakkam, Padalam, Chengalpattu - 603308, Tamil Nadu, India. Chengalpattu ---------- ----------
3)Ekanthamoorthy
Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Karpaga Vinayaga College of Engineering and Technology, GST Road, Chinnakolambakkam, Padalam, Chengalpattu - 603308, Tamil Nadu, India. Chengalpattu ---------- ----------
4)P. Surya
Address of Applicant :UG Scholar, Department of Mechanical Engineering, Karpaga Vinayaga College of Engineering and Technology, GST Road, Chinnakolambakkam, Padalam, Chengalpattu – 603308, Tamil Nadu, India. Chengalpattu ---------- ----------
5)V. Karthik
Address of Applicant :UG Scholar, Department of Mechanical Engineering, Karpaga Vinayaga College of Engineering and Technology, GST Road, Chinnakolambakkam, Padalam, Chengalpattu - 603308, Tamil Nadu, India. Chengalpattu ---------- ----------

(57) Abstract :
Disclosed is a battery powered auxiliary device (100) is disclosed for enhancing the functionality and convenience of manual wheelchairs. The device comprises a modular support structure (104) affixed to a frame (102), including a front forked assembly (106) and a crane span structure (108) facilitating secure attachment to the wheelchair. A wheel assembly (110) enables "to and fro" motion, driven by an electric motor (112) powered by a coupled power source (114). A user device (116) regulates velocity, while holders (118) atop the crane span structure accommodate oxygen cylinders and a side-mounted stand (120) supports I.V. fluid containers. The device includes a brake (122) for halting forward or backward motion and an emergency stop (124) accessible to the wheelchair user. A method (200) for utilizing the device encompasses attachment, joining, tethering, movement, acceleration, power supply, velocity regulation, accessory mounting, and stopping procedures, enhancing mobility and safety for wheelchair users. Figure 1 will be the reference

No. of Pages : 21 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024
(21) Application No.202441056178 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : COMBUSTOR FOR PROPUSION SYSTEM

(51) International classification :F23R0003280000, F23R0003160000, F02B0033220000, F02B0075020000, F02C0007220000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)INDIAN INSTITUTE OF TECHNOLOGY MADRAS (IIT Madras)
Address of Applicant :The Dean, Industrial Consultancy & Sponsored Research [IC&SR], Indian Institute of Technology Madras, Sardar Patel Road, IIT P.O, Chennai 600 036, Tamil Nadu, India Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Anbazhagan, Arun Govind Neelan
Address of Applicant :Weavers Street, Amsi, Thengapattanam, Kanyakumari, Tamil Nadu, 629173 Kanyakumari ---------- ----------
2)Paramanandham, Vinoth
Address of Applicant :D001 Manasarovar Apts, 50 feet road, Voltas colony extension, Nanganallur, Chennai 600061 Nanganallur ---------- ----------
3)Srinivasan, Balaji
Address of Applicant :Heat Transfer and Thermal Power Lab, Mechanical Engineering, IIT-Madras Chennai ---------- ----------

(57) Abstract :
Disclosed herein is a combustor (100) for a propulsion system. The combustor includes an inlet (102) for intake of compressed air, a combustion chamber (104) present downstream of the inlet (102) to receive the compressed air, a fuel injection mechanism for injecting a fuel into the combustion chamber (104), and an outlet (106) with an exhaust nozzle for expanding combustion products for generating thrust for the propulsion system. The combustion chamber (104) is configured to mix and ignite the compressed air and the fuel. The combustion chamber (104) includes a first portion (104-1) of constant cross-section area present downstream of the inlet (102) for maintaining the compressed air at a steady pressure and velocity, a second portion (104-2) having a diverging top boundary extending downstream of the first portion (104-1), and a plurality of spikes (108) positioned within the first portion (104-1) and the second portion (104-2). FIG. 1

No. of Pages : 19 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024

(21) Application No.202441056189 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : CHARGE GUARD: EARLY DETECTION OF DDOS ATTACKS AT EV CHARGING STATIONS USING LIGHTWEIGHT MICRO NEURAL NETWORK

(51) International classification	:G06N0003040000, G06N0003080000, H04L0045000000, G06N0003020000, G05B0013020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Manjula L
Address of Applicant :Dept. of CSE, Ramaiah Institute of Technology, MSR Nagar, Bangalore- 560054 ---------- ----------
2)Dr. G T Raju
3)Chethana H R
4)Dr. Rajan M A
5)Dr. Shashidhar H R
6)Soumya C S
7)Akshatha S Bayyar
8)Heth Joshi Rutul
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Manjula L
Address of Applicant :Dept. of CSE, Ramaiah Institute of Technology, MSR Nagar, Bangalore- 560054 ---------- ----------
2)Dr. G T Raju
Address of Applicant :Principal, SJC Institute of Technology, Chickaballapur ---------- ----------
3)Chethana H R
Address of Applicant :Dept. of CSE, RNS Institute of Technology ---------- ----------
4)Dr. Rajan M A
Address of Applicant :Research Scientist, TCS ---------- ----------
5)Dr. Shashidhar H R
Address of Applicant :Prof. and Head, Dept. of ISE, SJBIT, Bangalore ---------- ----------
6)Soumya C S
Address of Applicant :Dept. of CSE, Ramaiah Institute of Technology, MSR Nagar, Bangalore- 560054 ---------- ----------
7)Akshatha S Bayyar
Address of Applicant :Dept. of CSE, Ramaiah Institute of Technology, MSR Nagar, Bangalore- 560054 ---------- ----------
8)Heth Joshi Rutul
Address of Applicant :Dept. of CSE, Ramaiah Institute of Technology, MSR Nagar, Bangalore- 560054 ---------- ----------

(57) Abstract :
The present invention, titled "Charge Guard: Early Detection of DDoS Attacks at EV Charging Stations using Lightweight Micro Neural Network," provides a novel and efficient system for enhancing the security and reliability of electric vehicle (EV) charging stations. The system utilizes a lightweight micro neural network designed to operate with minimal computational resources, making it suitable for the limited hardware typically found in EV charging stations. It includes modules for data collection, preprocessing, detection, and alerting, enabling real-time identification and mitigation of Distributed Denial of Service (DDoS) attacks. This early detection system ensures continuous availability of charging services, increases user trust, and improves the overall security of the EV charging infrastructure. The invention offers significant advantages over existing technologies, including lower deployment and operational costs, enhanced real-time detection and response, improved scalability, and high detection accuracy, all while being energy-efficient and easy to integrate into existing systems. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 23 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/07/2024
(21) Application No.202441056203 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DESIGNING A CONCRETE KERNEL COMPUTATION MODEL FOR CHRONIC KIDNEY DISEASE USING LEARNING APPROACH

(51) International classification :A61P0013120000, G16H0050700000, G16H0010600000, G06K0009620000, C07K0016180000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Karpagam Academy of Higher Education
Address of Applicant :Pollachi Main Road, Eachaneri Post, Coimbatore 641 021 Coimbatore ---------- ----------
2)Karpagam Insitute of Technology
3)Mahalakshmi S
4)Surendar Kumar S
5)Karthik B
6)Suraj J
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mahalakshmi S
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore 641021 Coimbatore ---------- ----------
2)Surendar Kumar S
Address of Applicant :Final Year student, Department of Computer Science and Engineering, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore 641021 Coimbatore ---------- ----------
3)Karthik B
Address of Applicant :Final Year student, Department of Computer Science and Engineering, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore 641021 Coimbatore ---------- ----------
4)Suraj J
Address of Applicant :Final Year student, Department of Computer Science and Engineering, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore 641021 Coimbatore ---------- ----------

(57) Abstract :
Out of all non-communicable diseases, chronic kidney disease (CKD) accounts for 20% of all cases of morbidity and death worldwide. When the phases of the illness are identified accurately and promptly, the effects of chronic kidney disease (CKD) are thought to be mitigated. Hypertension, anemia, anomalies in the acid-base balance, poor nutritional status, difficulties of the metabolism of minerals and bone, and neurological problems are some of these impacts. Appropriate medication can be used to treat these conditions promptly. Machine learning approaches have been used in a number of studies on the early diagnosis of chronic kidney disease (CKD). It was not their primary goal to forecast the exact phases. For stage prediction, this study has used both binary and multiclassification. The kernel-based computation is employed as the prediction model. For prediction, feature removal by cross-validation and analysis of variance has been used. The CV was used to assess the model. The experiment's outcomes showed that the anticipated model outperforms SVM and DT and is based on cross-validation.

No. of Pages : 9 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/07/2024

(21) Application No.202441056204 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AGV FOR SMALL SCALE INDUSTRIES

(51) International classification :B66F0009075000, E02F0003400000, H04W0004020000, G06Q0050080000, B25J0009100000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Karpagam Academy of Higher Education
Address of Applicant :Pollachi Main Road, Eachaneri Post, Coimbatore 641 021 Coimbatore ---------- ----------
2)Karpagam Institute of Technology
3)Dr.G.Emayavaramban
4)Hari Krishna
5)Karthick.N
6)Sathishkumar. S
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.G.Emayavaramban
Address of Applicant :Assistant Professor, Department of EEE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore 641021 Coimbatore ---------- ----------
2)Hari Krishna
Address of Applicant :Student, Department of EEE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore 641021 Coimbatore ---------- ----------
3)Karthick.N
Address of Applicant :Student, Department of EEE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore 641021 Coimbatore ---------- ----------
4)Sathishkumar. S
Address of Applicant :Student, Department of EEE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore 641021 Coimbatore ---------- ----------

(57) Abstract :
Material handling is main operation in industry. Material handling involves transfer of jobs from one machine station to another storage and packaging. Automatically operated material handling device has large load carrying capacity, less or no maintenance. This project is basically RFID tag operated material handling device. In this project we fabricate the automatic material handling, material loading and unloading system for different sections. We use material handler to move material for loading or unloading from one place to another based on industrial layout.

No. of Pages : 10 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/07/2024
(21) Application No.202441056207 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DEVELOPMENT AND EVALUATION OF VIRIDIAN BLOOM EXFOLIATING FACE SCRUB

(51) International classification :A61Q0019000000, A61K0036736000, A61K0008920000, A23L0033105000, A61Q0019100000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)M. VASANTH KUMAR
Address of Applicant :Associate professor, Faculty of Pharmacy, Bharath Institute of Higher Education and Research, Selaiyur, Chennai-600073, INDIA Chennai ---------- ----------
2)Dr. R. SRINIVASAN
3)JAYASHREE. D
4)NADHIYA. J
5)RAJESHWARI. V
6)SNEGA. K
7)SOWMIYA. G
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)M. VASANTH KUMAR
Address of Applicant :Associate professor, Faculty of Pharmacy, Bharath Institute of Higher Education and Research, Selaiyur, Chennai-600073, INDIA Chennai ---------- ---------- ----------
2)Dr. R. SRINIVASAN
Address of Applicant :Professor & Dean , Faculty of Pharmacy Bharath Institute of Higher Education and Research Selaiyur, Chennai-600073 Chennai ---------- ---------- ----------
3)JAYASHREE. D
Address of Applicant :Faculty of Pharmacy Bharath Institute of Higher Education and Research Selaiyur, Chennai-600073 Chennai ---------- ----------
4)NADHIYA. J
Address of Applicant :Faculty of Pharmacy Bharath Institute of Higher Education and Research Selaiyur, Chennai-600073 Chennai ---------- ----------
5)RAJESHWARI. V
Address of Applicant :Faculty of Pharmacy Bharath Institute of Higher Education and Research Selaiyur, Chennai-600073 Chennai ---------- ----------
6)SNEGA. K
Address of Applicant :Faculty of Pharmacy Bharath Institute of Higher Education and Research Selaiyur, Chennai-600073 Chennai ---------- ----------
7)SOWMIYA. G
Address of Applicant :Faculty of Pharmacy Bharath Institute of Higher Education and Research Selaiyur, Chennai-600073 Chennai ---------- ----------

(57) Abstract :
A topical cosmetic product is formulated by incorporating extracts or bioactive components derived from two or more plants to achieve synergistic effects of various phytochemicals with better cosmetic benefits. A topical facial scrub was formulated by incorporating extracts or bioactive components derived from two or more plants. Particularly, the herbal scrub consists of Black grapes extract as an antioxidant, Passion fruit extract as an antioxidant, Walnut Powder as an Exfoliating agent, Cherry seed oil as moisturizing agent, Cetyl alcohol as thickening agent, Stearic acid as surfactant, Glycerine as humectant, Triethanolamine as Neutralizer to balance the pH, Verstatil as a preservative, Borax as a Preservative, and lavender Oil as Fragrance and deionized water. Upon evaluation of the prepared herbal scrub formulation, it was found to have a semisolid and homogenous consistency with neutral PH, good spreadability, Non-irritated nature and easy washability. Further, the formulation was found to possess good antimicrobial activity when tested against Escherichia coli and Staphylococcus aureus.

No. of Pages : 19 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/07/2024

(21) Application No.202441056208 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AI-DRIVEN SEA VOLTAIC SUPER BOAT FOR SUSTAINABLE FISH FARMING

(51) International classification :A01K0061600000, G06N0020000000, G01N0033180000, A23K0020147000, A01K0061000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr.G.Rajeswarappa
Address of Applicant :Associate Professor Computer science and Engineering G Pulla Reddy Engineering college G Pulla Reddy Engineering college(Autonomous),Kurnool,518007,Andhra pradesh,India. Kurnool ---------- ----------
2)Dr.Shaziya Islam
3)Mrs.Londhe Dhanashri Rohidas
4)Dr. Anil Kumar
5)Mr. Thushar S Shetty
6)Mrs. A Sruthi
7)Abhijith RP
8)Dr.R.Karthick
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.G.Rajeswarappa
Address of Applicant :Associate Professor Computer science and Engineering G Pulla Reddy Engineering college G Pulla Reddy Engineering college(Autonomous),Kurnool,518007,Andhra pradesh,India. Kurnool ---------- ----------
2)Dr.Shaziya Islam
Address of Applicant :Associate Professor CSE Rungta college of Engineering amd Technology Bhilai State:Chattisgarh Durg ---------- ----------
3)Mrs.Londhe Dhanashri Rohidas
Address of Applicant :Assistant Professor Computer Engineering Shree Ramchandra College of Engineering, Haveli, Gat no 351 &333/1 at post Lonikand, tal, dist, pune, maharashtra 412216. Pune ---------- ----------
4)Dr. Anil Kumar
Address of Applicant :HOD P.G.Dept.of Chemistry Sahibganj College Sahibganj 816109 Jharkhand, INDIA Sahebganj ---------- ----------
5)Mr. Thushar S Shetty
Address of Applicant :Department of Civil Engineering, NMAM Institute of Technology, Nitte, Nitte (Deemed to be University), Karnataka, India Udupi ---------- ----------
6)Mrs. A Sruthi
Address of Applicant :Assistant Professor, Department of CSE, Koneru lakshmaih education foundation , Vaddeswaram, Guntur (Dt) A.P-522302 Guntur ---------- ----------
7)Abhijith RP
Address of Applicant :Assistant Professor Department of Civil Engineering Marian Engineering College, Trivandrum, Kerala Thiruvananthapuram ---------- ----------
8)Dr.R.Karthick
Address of Applicant :Associate Professor, Department of Computer Science Engineering, K.L.N. College of Engineering, Pottapalayam, Sivagangai-630 612. Sivaganga ---------- ----------

(57) Abstract :
AI-Driven Sea Voltaic Super Boat for Sustainable Fish Farming The advent of the AI-driven Sea Voltaic Super Boat heralds a transformative era in sustainable fish farming, integrating advanced artificial intelligence with renewable energy sources to enhance aquaculture practices. This innovative vessel leverages photovoltaic technology to harness solar energy, ensuring a constant and eco-friendly power supply for its operations. Equipped with state-of-the-art AI systems, the Super Boat can autonomously navigate and manage fish farming activities, optimizing feeding schedules, monitoring water quality, and detecting fish health anomalies in real time. The integration of machine learning algorithms enables the vessel to adapt to changing environmental conditions, improving the resilience and efficiency of fish farming processes. Additionally, the boat's design incorporates eco-friendly materials and energy-efficient systems to minimize environmental impact. By reducing reliance on traditional energy sources and enhancing operational efficiency, the AI-driven Sea Voltaic Super Boat represents a significant advancement in sustainable aquaculture. It not only supports the growing demand for fish protein but also addresses critical environmental concerns associated with conventional fish farming methods. This pioneering approach has the potential to revolutionize the aquaculture industry, promoting sustainable practices that ensure the health of marine ecosystems while meeting global food security needs.

No. of Pages : 20 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/07/2024
(21) Application No.202441056209 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : HERBAL SUNSCREEN FORMULATION

(51) International classification :A61K0008920000, A61Q0017040000, A61Q0019000000, A61K0036610000, G01J0001420000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. W. Helen
Address of Applicant :Assistant Professor Faculty of Pharmacy Bharath Institute of Higher Education and Research , Selaiyur, Chennai-600073 Chennai ---------- ----------
2)T. Aswini
3)K. Dhanusha
4)K. Priya
5)R. Shalini
6)S. Sumithra
7)Dr. K .Rajaganapathy
8)Dr.R.Srinivasan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. W. Helen
Address of Applicant :Assistant Professor Faculty of Pharmacy Bharath Institute of Higher Education and Research , Selaiyur, Chennai-600073 Chennai ---------- ----------
2)T. Aswini
Address of Applicant :Faculty of Pharmacy Bharath Institute of Higher Education and Research, Selaiyur, Chennai-600073 Chennai ---------- ----------
3)K. Dhanusha
Address of Applicant :Faculty of Pharmacy Bharath Institute of Higher Education and Research, Selaiyur, Chennai-600073 Chennai ---------- ----------
4)K. Priya
Address of Applicant :Faculty of Pharmacy Bharath Institute of Higher Education and Research Selaiyur, Chennai-600073 Chennai ---------- ----------
5)R. Shalini
Address of Applicant :Faculty of Pharmacy Bharath Institute of Higher Education and Research Selaiyur, Chennai-600073 Chennai ---------- ----------
6)S. Sumithra
Address of Applicant :Assistant Professor Faculty of Pharmacy Bharath Institute of Higher Education and Research Selaiyur, Chennai-600073 Chennai ---------- ----------
7)Dr. K .Rajaganapathy
Address of Applicant :Professor Faculty of Pharmacy Bharath Institute of Higher Education and Research Selaiyur, Chennai-600073 Chennai ---------- ----------
8)Dr.R.Srinivasan
Address of Applicant :Professor and Dean Faculty of Pharmacy Bharath Institute of Higher Education and Research Selaiyur, Chennai-600073 Chennai ---------- ----------

(57) Abstract :
Life and energy have come from the sun from the beginning of human history. However, current research acknowledges that sun radiation such as UVA, UVB, and UVC is the primary cause of harmful consequences, including both acute (such as sunburn and drug-induced phototoxicity) and chronic (such as sunburn, fracture, melanoma, and pigmentation, cancer, and immunological suppression) concerns associated with repeated sun exposure. A comparative study was conducted by using the herbal oils into three formulations which has sun block effect. Each herbal oil has been formulated, evaluated, and compared to predict its SPF effect. In our study, all three formulations yielded good outcomes, with SPF values above 15. Among these formulations, Formulation 3 comprising Coconut Oil, Grape Seed Oil, Orange Oil, Rosehip Seed Oil, Raspberry Seed Oil, Olive Oil, Almond Oil, Tea Tree Oil, Shea Butter, Beeswax, Rose Water and Gelatin - stood out as it demonstrated superior results. The significance of these findings lies in the effectiveness of Formulation 3, which displayed the highest SPF value of 25 among all tested formulations. This indicates that Formulation 3 provides better protection against harmful UV rays compared to the other formulations.

No. of Pages : 30 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :24/07/2024

(21) Application No.202441056217 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : HEPATOPROTECTIVE ACTIVITY OF GUETTARDA SPECIOSA L. AGAINST CARBON TETRA CHLORIDE (CCL4)-INDUCED HEPATOTOXICITY IN WISTAR ALBINO RATS

(51) International classification	:A61K0009000000, C08L0083060000, A01N0065200000, A61P0039060000, G01N0033720000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr.A.Saravanakumar

Address of Applicant :Professor, Department of Pharmacology, GRT Institute of Pharmaceutical Education and Research, Thiruttani, Chennai, Tamil Nadu-631209, India Chennai ---------- ----------

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr.A.Saravanakumar

Address of Applicant :Professor, Department of Pharmacology, GRT Institute of Pharmaceutical Education and Research, Thiruttani, Chennai, Tamil Nadu-631209, India Chennai ---------- ----------

2)Dr. S.A. Mohamed Shiek Arabath

Address of Applicant :Professor, Department of Pharmacognosy, Arulmigu Kalasalingam College of Pharmacy, Krishnan koil, Virudhunagar District-626126, Tamil Nadu, India Virudhunagar ---------- ----------

3)Dr. A. Julliyan Dilleban

Address of Applicant :Assistant Professor, Department of Pharmacy practice, Arulmigu Kalasalingam College of Pharmacy, Krishnan koil, Virudhunagar District- 626126, Tamilnadu, India Virudhunagar ---------- ----------

4)D. Bharathi

Address of Applicant :Professor, Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Balaji Medical College and Hospital campus, Chromepet, Chennai- 600044, Tamil Nadu, India Chennai ---------- ----------

5)Dr. L. Karpagavalli

Address of Applicant :Professor, Department of Pharmaceutics, Saveetha College of Pharmacy, Saveetha Institute of Medical and Technical Sciences (SIMATS), Thandalam -602105, Chennai, Tamil Nadu, India Chennai ---------- ----------

6)Dr. Devi Thamizhanban

Address of Applicant :Professor, Department of Pharmaceutical Chemistry, Chettinad School of Pharmaceutical Sciences, Chettinad Hospital and Research Institute, Chettinad Academy of Research and Education(CARE), Kelambakkam -603103, Tamil Nadu, India Chennai ---------- ----------

7)Dr. J. Bhavani

Address of Applicant :Professor & HOD, Department of Pharmaceutics, St.Mary's Institute of Pharmacy, (A unit of St.Mary's College of Medical Sciences), Chintamani, Puliangudi, Kadayanallur (Taluk), Tenkasi-627855, Tamil Nadu, India Tenkasi ---------- ----------

8)Dr. S. Ravichandran

Address of Applicant :Principal, St.Mary's Institute of Pharmacy, (A unit of St.Mary's College of Medical Sciences), Chintamani, Puliangudi, Kadayanallur (Taluk), Tenkasi-627855, Tamil Nadu, India Tenkasi ---------- ----------

9)Dr.R.Gandhimathi

Address of Applicant :Professor, Department of Pharmaceutical Chemistry and Analysis, School of Pharmaceutical Sciences, Vels Institute of Science, Technology & Advanced Studies (VISTAS), Pallavaram, Chennai, Tamil Nadu-600117, India Chennai ---------- ----------

10)Dr. R. Meenakshi Sundaram

Address of Applicant :Professor & Principal, Department of Pharmacognosy, GRT Institute of Pharmaceutical Education and Research, Thiruttani-631209, Tamil Nadu, India Chennai ---------- ----------

(57) Abstract :

The present invention provides an extract of inner bark of Guettarda speciosa with hepatoprotective activity in rats against carbon tetrachloride induced hepatotoxicity. The extract of inner bark of Guettarda speciosa, wherein the untreated group of rats receiving only CCl4 1ml/kg, p.o; treatment group receiving dose of 200mg/kg and 400mg/kg, p.o. of methanolic extract of Guettarda speciosa dissolved in distilled water. The extract of Guettarda speciosa, wherein the 200 and 400mg/kg of extract is administered orally to rats three times at 12h intervals. The extract of Guettarda speciosa, wherein the carbon tetrachloride is diluted with liquid paraffin 1:1 is administered in dose of 1ml/kg, p.o, daily once for 2 days, to all the animal groups except normal control. The extract of Guettarda speciosa, wherein after 36hrs of CCl4 treatment, blood is collected from all groups of rats by puncturing the heart and serum is separated by centrifugation at 2500rpm at 37ºC for 15min and analyzed for various biochemical parameters. The methanolic extract of the inner bark of Guettarda speciosa, show presence of alkaloids, carbohydrates, triterpenoids, flavonoids, and tannins. The extract of Guettarda speciosa, wherein the hepatic enzymes SGOT, SGPT, ALP, ?-GT and total bilirubin are decreased and total serum proteins are increased as compared to animals treated only with CCl4 group. The extract of Guettarda speciosa, wherein the animals pretreated with methanolic extract of the inner bark of Guettarda speciosa L. show a protection against the injurious effects of CCl4.

No. of Pages : 12 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/07/2024

(21) Application No.202441056228 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ENHANCING SOLAR MODULE EFFICIENCY WITH GRAPHENE AND TITANIUM DIOXIDE

(51) International classification	:H01L0051000000, H01L0031049000, H01L0051500000, H01L0031020000, H01L0031048000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)SABINA PARVEEN
Address of Applicant :V.S.B college of engineering technical campus Ealur Pirivu, Solavampalayam Kinathukadavu Coimbatore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SABINA PARVEEN
Address of Applicant :V.S.B college of engineering technical campus Ealur Pirivu, Solavampalayam Kinathukadavu Coimbatore ---------- ----------
2)Mr.Ravi Raj
Address of Applicant :SENMAC SOLAR INDIA PVT LTD, 1ST STREET, KOVALAN NAGAR, T V S NAGAR, PALANGANATHAM, MADURAI, 625003 TAMIL NADU. Palanganatham ---------- ----------
3)Mr.C.Madhankumar
Address of Applicant :SENMAC SOLAR INDIA PVT LTD, 1ST STREET, KOVALAN NAGAR, T V S NAGAR, PALANGANATHAM, MADURAI, 625003 TAMIL NADU. Pollachi ---------- ----------

(57) Abstract :
Abstract: We propose the design of a compact solar module incorporating doped silicon with titanium dioxide (TiO2) and graphene. In this innovative configuration, graphene acts as a negative electrode, efficiently conducting excited electrons from the photovoltaic cells, effectively functioning as a superconductor. The below silicon layer, Polyethylene Dioxythiophene (PEDOT)serves as an anode, facilitating the conduction of holes within the module. These layers are sandwiched and encapsulated within glass, optimizing light transmission while ensuring durability. The inclusion of TiO2 enhances solar module efficiency by facilitating electron transport and UV radiation absorption, thereby enhancing the photovoltaic effects. This integrated approach aims to significantly improve the performance and sustainability of solar energy technologies, paving the way for advanced applications in both urban and remote environments

No. of Pages : 13 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/07/2024
(21) Application No.202441056239 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN ANIMAL HEALTH MONITORING SYSTEM AND METHOD THEREOF

(51) International classification :A61B0005000000, G16H0040670000, A61B0005020500, A61B0005024000, A01K0029000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Karpaga Vinayaga College of Engineering and Technology
Address of Applicant :GST Road, Chinnakolambakkam, Padalam, Chengalpattu – 603308, Tamil Nadu, India. Chengalpattu ---------- ----------
2)Dr. Meenakshi Annamalai
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. K. S. Balamurugan
Address of Applicant :Professor, Department of Electronics and Communication Engineering, Karpaga Vinayaga College of Engineering and Technology, GST Road, Chinnakolambakkam, Padalam, Chengalpattu - 603308, Tamil Nadu, India. Chengalpattu ---------- ----------
2)P. Geetha
Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Karpaga Vinayaga College of Engineering and Technology, GST Road, Chinna kolambakkam, Padalam, Chengalpattu – 603308, Tamil Nadu, India. Chengalpattu ---------- ----------
3)Dr. T. Sangeetha
Address of Applicant :Assistant Professor, Department of Biomedical Engineering, Karpaga Vinayaga College of Engineering and Technology, GST Road, Chinnakolambakkam, Padalam, Chengalpattu – 603308, Tamil Nadu , India. Chengalpattu ---------- ----------
4)S. Jayasri
Address of Applicant :UG Student, Department of Electronics and Communication Engineering, Karpaga Vinayaga College of Engineering and Technology, GST Road, Chinnakolambakkam, Padalam, Chengalpattu - 603308, Tamil Nadu, India. Chengalpattu ---------- ----------

(57) Abstract :
Disclosed is an Animal Health Monitoring System (AHMS) (100). The system (100) comprises a plurality of wearable sensor modules (104) attached to animals, each sensor modules (104) is equipped with sensors for monitoring vital parameters like temperature and movement. These modules (104) communicate with a server (108) through a communication unit (102), where an AI module (110) processes the collected data to identify potential health anomalies. Upon detection, alerts are generated and transmitted to user devices via the communication interface (102). The present invention also discloses a method (200) for monitoring the health of an animal.
Refer Figure 2

No. of Pages : 19 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/07/2024
(21) Application No.202441056242 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN INNOVATIVE HYBRID APPROACH TO STOCK SELECTION AND PORTFOLIO MANAGEMENT

(51) International classification	:G06Q0040060000, G06Q0040040000, G06Q0040080000, G06Q0040000000, G06Q0010060000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr.R.S.Balasenthil
Address of Applicant :Associate Professor, K.L.N.College of Engineering, Sivagangai District, Tamilnadu - 630612 Sivaganga ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.R.S.Balasenthil
Address of Applicant :Associate Professor, K.L.N.College of Engineering, Sivagangai District, Tamilnadu - 630612 Sivaganga ---------- ----------

(57) Abstract :
An Innovative Hybrid Approach to Stock Selection and Portfolio Management An innovative hybrid approach to stock selection and portfolio management that integrates quantitative analysis, machine learning algorithms, and fundamental analysis to enhance investment decision-making and optimize portfolio performance. The approach begins with a rigorous quantitative analysis that employs statistical models and financial metrics to identify potential investment opportunities. This is followed by the application of advanced machine learning algorithms, including neural networks and ensemble methods, to predict stock price movements and market trends based on historical data and real-time inputs. The hybrid model also incorporates fundamental analysis, which evaluates a company's intrinsic value by examining financial statements, management quality, and industry position. By combining these methodologies, the approach aims to leverage the strengths of each while mitigating their individual limitations. The paper demonstrates how this integration can lead to more accurate stock selection, improved risk management, and better portfolio diversification. Through empirical testing and simulation, the hybrid model is shown to outperform traditional investment strategies in terms of return on investment, risk-adjusted returns, and overall portfolio stability.

No. of Pages : 12 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :24/07/2024

(21) Application No.202441056279 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : THE INFLUENCE OF PLASTIC STRIPS ON CLAY SOIL STABILIZATION

(51) International classification :C04B0028040000, C04B0111000000, B29B0017000000, E02D0003000000, E02D0001020000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)S BANU
Address of Applicant :Professor, Department of Electrical and Electronics Engineering, VSB COLLEGE OF ENGINEERING TECHNICAL CAMPUS, ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)S BANU
Address of Applicant :Professor, Department of Electrical and Electronics Engineering, VSB COLLEGE OF ENGINEERING TECHNICAL CAMPUS, ---------- ----------
2)S Vadivelan
Address of Applicant :Assistant Professor Department of Civil Engineering VSB College of Engineering Technical Campus, Ealur Pirirvu, Solavampalayam Kinathukadavu Coimbatore-642109 Tamilnadu Coimbatore ---------- ----------
3)R. Gomekha
Address of Applicant :Assistant Professor Department of Civil Engineering VSB College of Engineering Technical Campus, Ealur Pirirvu, Solavampalayam Kinathukadavu Coimbatore-642109 Tamilnadu Coimbatore ---------- ----------
4)Dr.N.Muthukumaran
Address of Applicant :Associate Professor Department of Civil Engineering VSB College of Engineering Technical Campus, Ealur Pirirvu, Solavampalayam Kinathukadavu Coimbatore-642109 Tamilnadu Coimbatore ---------- ----------
5)R. Devaki
Address of Applicant :Assistant Professor Department of Civil Engineering VSB College of Engineering Technical Campus, Ealur Pirirvu, Solavampalayam Kinathukadavu Coimbatore-642109 Tamilnadu Coimbatore ---------- ----------
6)M.Muthiselvan
Address of Applicant :Assistant Professor Department of Civil Engineering VSB College of Engineering Technical Campus, Ealur Pirirvu, Solavampalayam Kinathukadavu Coimbatore-642109 Tamilnadu Coimbatore ---------- ----------
7)G.Kumareshan
Address of Applicant :Assistant Professor Department of Civil Engineering VSB College of Engineering Technical Campus, Ealur Pirirvu, Solavampalayam Kinathukadavu Coimbatore-642109 Tamilnadu Coimbatore ---------- ----------
8)R.Gowrishankar
Address of Applicant :Associate Professor Department of Civil Engineering VSB College of Engineering Technical Campus, Ealur Pirirvu, Solavampalayam Kinathukadavu Coimbatore-642109 Tamilnadu Coimbatore ---------- ----------
9)Dr.A.Vijayakumar
Address of Applicant :Assistant Professor Department of Civil Engineering VSB College of Engineering Technical Campus, Ealur Pirirvu, Solavampalayam Kinathukadavu Coimbatore-642109 Tamilnadu Coimbatore ---------- ----------
10)Dr.G.Gnanapragasam
Address of Applicant :Assistant Professor Department of Civil Engineering VSB College of Engineering Technical Campus, Ealur Pirirvu, Solavampalayam Kinathukadavu Coimbatore-642109 Tamilnadu Coimbatore ---------- ----------

(57) Abstract :
The best method for improving the physical properties of soil like; increasing strength such as shear strength, bearing capacity, etc. is the process of Soil Stabilization. This procedure includes addition of the admixtures into the soil in order to increase the properties of the soil. The admixtures such as; Portland cement, lime and waste materials like fly-ash, phosphor gypsum, etc. are very expensive materials. The cost of these kind of admixtures is increasing day by day as the technology is improving around the every corner of the society. In recent technology and research, utilization of waste materials likes plastic, bamboo etc. The widely used thing in today's society is the plastic. The disposal of these plastic wastes causes the ecological hazards, a big threat to our surroundings but we have a solution, we have found in this research work that the waste plastic is a useful thing in stabilization. In the modern world, there is a scarcity of a good soil. Since the low availability of un-stabilized soils makes it difficult for the construction. To avoid problems like these, we will have to overcome them, for this we will have to add suitable admixtures to the soil. This research work includes the addition of the suitable admixtures such as plastic waste like bottles. These plastic waste materials like plastic bottles are used in this project. For this to happen the plastic bottles are cut down into small strip like pieces. The addition of these small strips in the soil by different percentage and conduct tests such as liquid limit, plastic limit, compaction test, CBR test etc. Then soil becomes stabilized i.e. increasing the load bearing capacity of the soil and also strength properties such as shear strength with a controlled compaction. Soil stabilization by using waste plastic bottles which significantly enhance the strength properties of the soil. Key words: Soil Stabilization, Lime, Portland cement, Raw Plastic, Plastic Bottles

No. of Pages : 15 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/07/2024
(21) Application No.202441056283 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : IDENTIFICATION OF MEDICINAL HERBS USING MACHINE LEARNING

(51) International classification :G06N0003040000, G06N0003080000, G06K0009620000, G06N0020000000, G16H0050300000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Ms.P.SASIKALA
Address of Applicant :Sri Shakthi Institute o f Engineering & Technology,Coimbatore, 641062 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr.MANI KANDAN D
Address of Applicant :Sri Shakthi Institute o f Engineering & Technology,Coimbatore, 641062 ---------- ----------
2)Mr.HARSHA VARDAN M
Address of Applicant :Sri Shakthi Institute o f Engineering & Technology, Coimbatore, 64106 ---------- ----------
3)Mr.NANDHA GOPAL E
Address of Applicant :Sri Shakthi Institute o f Engineering & Technology, Coimbatore, 64106 ---------- ----------
4)Mr.KARTHIK K B
Address of Applicant :Sri Shakthi Institute o f Engineering & Technology, Coimbatore, 64106 ---------- ----------
5)Ms.P.SASIKALA
Address of Applicant :Sri Shakthi Institute o f Engineering & Technology, Coimbatore, 64106 ---------- ----------

(57) Abstract :
TITLE 24-Jul-2024/96684/202441056283/Form 2(Title Page) IDENTIFICATION OF MEDICINAL HERBS USING MACHINE LEARNING ABSTRACT The Project pertains to a novel system and method for the identification of medicinal herbs using machine learning techniques. The system leverages a comprehensive dataset comprising images and metadata of various medicinal herbs. Through the application of advanced deep learning algorithm particularly Convolutional Neural Networks (CNNs); the system achieves high accuracy in identifying and classifying medicinal herbs. The CNNs have demonstrated superior performance in recognizing intricate patterns and features inherent in herb images, thereby significantly enhancing identification accuracy over traditional methods. This innovation presents a scalable and reliable solution for the accurate identification of medicinal herbs, which can be integrated into mobile applications and digital platforms. The practical applications of this system extend to healthcare professionals, researchers, and enthusiasts, facilitating improved access to medicinal herb identification and supporting advancements in healthcare and pharmaceutical development. Future enhancements will focus on expanding the dataset, refining the models, and implementing real-time identification capabilities to further augment the utility and efficiency of the system.

No. of Pages : 9 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :24/07/2024

(21) Application No.202441056291 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : SMART CITY WASTE MANAGEMENT SYSTEM USING IOT, MACHINE LEARNING AND WSN FOR SOLID WASTE

(51) International classification :G06Q0010000000, G06Q0010060000, B65F0001140000, G06Q0010080000, G06Q0050260000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. S. Santiago
Address of Applicant :Assistant Professor, Department of Computer Science. St. Joseph`s College, Trichy, Tamilnadu ---------- ----------
2)Rajkumar Ramasamy
3)Senthil Kumar D
4)Ambati Nagaraju
5)Jibu J V
6)Abhijeet Das
7)Dr. S.Sathya
8)M.Vara Lakshmi
9)Dr. C. Rameshkumar
10)Iyappan G
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. S. Santiago
Address of Applicant :Assistant Professor, Department of Computer Science. St. Joseph`s College, Trichy, Tamilnadu ---------- ----------
2)Rajkumar Ramasamy
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Rajarajeswari College of Engineering, Ramohalli Cross, Kumbalgodu, Bengaluru, Karnataka -560074 ---------- ----------
3)Senthil Kumar D
Address of Applicant :Assistant Professor, Department of Artificial Intelligence and Data Science, St.Jospeh's College of Engineering, Chennai, Tamilnadu ---------- ----------
4)Ambati Nagaraju
Address of Applicant :Assistant Professor, Department of CSE, NBKR Institute of Science & Technology, Vidyanagar, Tirupati (District), Andhra Pradesh ---------- ----------
5)Jibu J V
Address of Applicant :Assistant Professor, Department of Electronics And Communication Engineering, College of Engineering, Karunagappalli, Thodiyoor, Kerala -690523 ---------- ----------
6)Abhijeet Das
Address of Applicant :Research Scholar, Department of Civil Engineering, C.V. Raman Global University (CGU), Bhubaneswar, Odisha ---------- ----------
7)Dr. S.Sathya
Address of Applicant :Associate Professor, Department of ECE, S.A. Engineering College, Avadi, Chennai, Tamilnadu ---------- ----------
8)M.Vara Lakshmi
Address of Applicant :Assistant Professor, Department of CSE, Aditya Institute of Technology and Management, Tekkali, Srikakulam Dist, Andhra Pradesh -532201 ---------- ----------
9)Dr. C. Rameshkumar
Address of Applicant :Associate Professor, Department of Physics, Sathyabama Institute of Science and Technology, Jeppiaar Nagar, Rajiv Gandhi Salai (OMR), Chennai, Tamilnadu ---------- ----------
10)Iyappan G
Address of Applicant :Assistant Professor, Department of Civil Engineering Arasu Engineering College, Kumbakonam, Tamilnadu -612501 ---------- ----------

(57) Abstract :
The proposed invention is a Smart City Waste Management system integrating IoT, Machine Learning, and Wireless Sensor Networks to enhance solid waste management efficiency and sustainability. IoT sensors monitor waste levels and environmental conditions in real-time, transmitting data to central servers via Wireless Sensor Networks. Machine Learning algorithms analyze this data to optimize waste collection schedules and routes, predict waste generation patterns, and perform predictive maintenance on equipment. This system reduces operational costs, minimizes the carbon footprint, and prevents waste bin overflows, thereby improving public health and safety. The data-driven approach also supports effective recycling and waste diversion programs, contributing to the overall sustainability of urban environments. Through its innovative use of technology, the system addresses traditional waste management inefficiencies and aligns with smart city initiatives.

No. of Pages : 29 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/07/2024
(21) Application No.202441056319 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DEEP LEARNING-INTEGRATED POWER MANAGEMENT SYSTEM FOR ELECTRIC VEHICLES IN DIVERSE APPLICATIONS

(51) International classification :B60L58/10, G05B23/02, G06N20/00, G06N3/00, G06Q50/06
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Ms. Sandiri Swetha
Address of Applicant :Assistant Professor, Department of ECE, St. Peter's Engineering College, Hyderabad, Telangana, India, Pincode: 500043 ---------- ----------
2)Mr. Sunil Kumar Suvvari
3)Mr. P. Sai Sampath Kumar
4)Dr. G. Venkateswarlu
5)Ms. Mallela Leela Mounika
6)Mr. Potnuru Narayanarao
7)Mrs. Nellore Yamini
8)Dr. Nellore Manoj Kumar
9)Mr. B. Siva Sankar
10)Dr. Peddireddi Sivakrishna
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Ms. Sandiri Swetha
Address of Applicant :Assistant Professor, Department of ECE, St. Peter's Engineering College, Hyderabad, Telangana, India, Pincode: 500043 ---------- ----------
2)Mr. Sunil Kumar Suvvari
Address of Applicant :Senior Consultant, 11211 lost maples Trail, Frisco State, USA, Pin - 75035 ---------- ----------
3)Mr. P. Sai Sampath Kumar
Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, Rajeev Gandhi Memorial College of Engineering and Technology, Nandyal, Andhra Pradesh, India. Pincode:518501 ---------- ----------
4)Dr. G. Venkateswarlu
Address of Applicant :HoD & Professor, Department of Electrical and Electronics Engineering, Narayana Engineering College, Nellore, SPSR Nellore (Dt), Andhra Pradesh, India, Pincode: 524 004 ---------- ----------
5)Ms. Mallela Leela Mounika
Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, Narayana Engineering College, Nellore, SPSR Nellore (Dt), Andhra Pradesh, India, Pincode: 524 004 ---------- ----------
6)Mr. Potnuru Narayanarao
Address of Applicant :Assistant Professor, Department of ECE, Aditya Institute of Technology and Management, Tekkali, Andhra Pradesh, India ---------- ----------
7)Mrs. Nellore Yamini
Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, Narayana Engineering College, Nellore, SPSR Nellore (Dt), Andhra Pradesh, India, Pincode: 524 004 ---------- ----------
8)Dr. Nellore Manoj Kumar
Address of Applicant :Independent Researcher, Founder & CEO, Infinite-Research Organization, B.O, 15-225, Gollapalem, Venkatagiri, Tirupati District, Andhra Pradesh, India, Pincode: 524132 ---------- ----------
9)Mr. B. Siva Sankar
Address of Applicant :Assistant Professor, Department of IT, Institute of Aeronautical Engineering, Dundigal, Hyderabad, Telangana, India, Pincode: 500043 ---------- ----------
10)Dr. Peddireddi Sivakrishna
Address of Applicant :Professor, Department of CSE, Sree Rama Engineering College, Tirupati, Andhra Pradesh, India, Pincode: 517507 ---------- ----------

(57) Abstract :
The proposed invention is a Deep Learning-Integrated Power Management System for Electric Vehicles designed to optimize energy usage, improve efficiency, and enhance reliability. Utilizing advanced deep learning algorithms, the system processes real-time data from vehicle sensors, user inputs, and environmental factors to make dynamic adjustments in power distribution. It predicts energy consumption patterns, enabling proactive power management and predictive maintenance. The system adapts to different driving conditions and vehicle types, offering personalized and responsive operation. Integration with external data sources, such as traffic and weather updates, further refines energy management. This innovative approach enhances the overall performance of electric vehicles, supports sustainability, and contributes to the broader adoption of electric mobility.

No. of Pages : 24 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :24/07/2024

(21) Application No.202441056320 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : SEMI-AUTONOMOUS ENERGY OPTIMIZATION IN ELECTRIC VEHICLES THROUGH MACHINE LEARNING AND DEEP LEARNING

(51) International classification	:G06N0003040000, G06N0003080000, G01R0031392000, H04W0004460000, G06N0020000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Venkatesh Yepuri
Address of Applicant :Associate Professor, Department of EEE, Swarandhra College of Engineering & Technology, Seetharamapuram, West Godavari, Andhra Pradesh, India, Pincode: 534280 ---------- ----------
2)Dr. P. Suresh
3)Mr. D Venkatabrahmanaidu
4)Dr. Akhib Khan Bahamani
5)Dr. Prabhuraj S
6)Dr. G. Srinivasulu Reddy
7)Mr. B. Siva Sankar
8)Dr. Nellore Manoj Kumar
9)Dr. Peddireddi Sivakrishna
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Venkatesh Yepuri
Address of Applicant :Associate Professor, Department of EEE, Swarandhra College of Engineering & Technology, Seetharamapuram, West Godavari, Andhra Pradesh, India, Pincode: 534280 ---------- ----------
2)Dr. P. Suresh
Address of Applicant :Assistant Professor, Department of EEE, SRM Institute of Science and Technology, Kattankulathur, Chennai, Tamilnadu, India, Pincode: 603203 ---------- ----------
3)Mr. D Venkatabrahmanaidu
Address of Applicant :Assistant Professor (C), Department of Electrical and Electronics Engineering, S.V.U College of Engineering, Sri Venkateswara University, Tirupati, Andhra Pradesh, India, Pincode: 517502 ---------- ----------
4)Dr. Akhib Khan Bahamani
Address of Applicant :Professor, Department of Electrical and Electronics Engineering, Narayana Engineering College, Nellore, SPSR Nellore (Dt), Andhra Pradesh, India, Pincode: 524004 ---------- ----------
5)Dr. Prabhuraj S
Address of Applicant :Professor, Department of Electrical and Electronics Engineering, Narayana Engineering College, Nellore, SPSR Nellore (Dt), Andhra Pradesh, India, Pincode: 524004 ---------- ----------
6)Dr. G. Srinivasulu Reddy
Address of Applicant :Principal, Narayana Engineering College, Nellore, SPSR Nellore (Dt), Andhra Pradesh, India, Pincode: 524004 ---------- ----------
7)Mr. B. Siva Sankar
Address of Applicant :Assistant Professor, Department of IT, Institute of Aeronautical Engineering, Dundigal, Hyderabad, Telangana, India, Pincode: 500043 ---------- ----------
8)Dr. Nellore Manoj Kumar
Address of Applicant :Independent Researcher, Founder & CEO, Infinite-Research Organization, B.O, 15-225, Gollapalem, Venkatagiri, Tirupati District, Andhra Pradesh, India, Pincode: 524132 ---------- ----------
9)Dr. Peddireddi Sivakrishna
Address of Applicant :Professor, Department of CSE, Sree Rama Engineering College, Tirupati, Andhra Pradesh, India, Pincode: 517507 ---------- ----------

(57) Abstract :
The proposed invention, Semi-Autonomous Energy Optimization in Electric Vehicles through Machine Learning and Deep Learning, enhances energy efficiency and performance by leveraging advanced computational techniques. It integrates machine learning (ML) and deep learning (DL) algorithms to dynamically adapt to real-time data, predicting and adjusting energy usage based on driving patterns, terrain, and battery health. The system includes convolutional neural networks (CNNs) for spatial data processing and recurrent neural networks (RNNs) for temporal sequence analysis. Vehicle-to-infrastructure (V2I) and vehicle-to-vehicle (V2V) communication, along with reinforcement learning (RL), facilitate continuous improvement in energy management. A user-friendly interface provides real-time insights and personalized recommendations. Predictive maintenance capabilities ensure battery longevity and safety. This innovation aims to optimize energy usage, extend driving range, and support the broader goals of smart cities and sustainable transportation networks.

No. of Pages : 29 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/07/2024
(21) Application No.202441056350 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : GENERATIVE ADVERSARIAL NETWORK (GAN)-BASED SYNTHETIC DATA GENERATION FOR PRIVACY PRESERVING MACHINE LEARNING

(51) International classification :G06F0021620000, G06N0003080000, G06N0003040000, G06N0020000000, G06F0021600000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SAVEETHA ENGINEERING COLLEGE
Address of Applicant :Saveetha Nagar, Thandalam, Chennai, India 602105 ---------- ----------
2)E. POOVANNAN
3)P.SANKAR
4)R. AUGUSTIAN ISAAC
5)C. RAJARAJACHOZHAN
6)R. VINOTH RAJ
7)P. SUNDARAVADIVEL
8)P. MUTHUVEL
9)K. PREMNATH
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)E. POOVANNAN
Address of Applicant :Dept. of ECE, Saveetha Engineering College, Saveetha Nagar, Thandalam, Chennai, India 602105 ---------- ----------
2)P.SANKAR
Address of Applicant :Dept. of CSE, Saveetha Engineering College, Saveetha Nagar, Thandalam, Chennai, India 602105 ---------- ----------
3)R. AUGUSTIAN ISAAC
Address of Applicant :Dept. of AIML, Saveetha Engineering College, Saveetha Nagar, Thandalam, Chennai, India 602105 ---------- ----------
4)C. RAJARAJACHOZHAN
Address of Applicant :Dept. of ECE, Saveetha Engineering College, Saveetha Nagar, Thandalam, Chennai, India 602105 ---------- ----------
5)R. VINOTH RAJ
Address of Applicant :Dept. of ECE, Saveetha Engineering College, Saveetha Nagar, Thandalam, Chennai, India 602105 ---------- ----------
6)P. SUNDARAVADIVEL
Address of Applicant :Dept. of AIML, Saveetha Engineering College, Saveetha Nagar, Thandalam, Chennai, India 602105 ---------- ----------
7)P. MUTHUVEL
Address of Applicant :Dept. of ECE, Saveetha Engineering College, Saveetha Nagar, Thandalam, Chennai, India 602105 ---------- ----------
8)K. PREMNATH
Address of Applicant :Dept. of CSE, Saveetha Engineering College, Saveetha Nagar, Thandalam, Chennai, India 602105 ---------- ----------

(57) Abstract :
Generative Adversarial Network (GAN)-Based Synthetic Data Generation for Privacy-Preserving Machine Learning Abstract: A system and method for generating privacy-preserving synthetic data using Generative Adversarial Networks (GANs) is disclosed. The invention comprises a data preprocessing module, a GAN module with generator and discriminator networks, a privacy enhancement module implementing differential privacy and k-anonymity, a quality assurance module, and a synthetic data output module. The system trains the GAN while applying privacy-preserving techniques, iteratively refining the process based on quality and privacy evaluations. The resulting synthetic data maintains statistical properties of the original dataset while ensuring strong privacy guarantees. The invention addresses the critical need for high-quality, privacy-compliant data in machine learning applications across various domains, enabling organizations to leverage data insights while protecting individual privacy and complying with data protection regulations.

No. of Pages : 17 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/07/2024
(21) Application No.202441056367 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN IOT BASED SMART EXOSKELETON SUIT

(51) International classification :A61B0005000000, A61B0005024000, A61B0005145500, A61B0005020500, A61H0003000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)FLIPKART INTERNET PRIVATE LIMITED
Address of Applicant :Buildings Alyssa, Begonia & Clover, Embassy Tech Village, Outer Ring Road, Devarabeesanahalli Village, Bengaluru - 560103, Karnataka, India Bengaluru ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)ARORA, Sachin
Address of Applicant :C/o Flipkart Internet Private Limited, Buildings Alyssa, Begonia & Clover, Embassy Tech Village, Outer Ring Road, Devarabeesanahalli Village, Bengaluru – 560103, Karnataka, India Bengaluru ---------- ----------
2)JAIN, Vidyesh
Address of Applicant :C/o Flipkart Internet Private Limited, Buildings Alyssa, Begonia & Clover, Embassy Tech Village, Outer Ring Road, Devarabeesanahalli Village, Bengaluru – 560103, Karnataka, India Bengaluru ---------- ----------
3)VARTAK, Nikhil
Address of Applicant :C/o Flipkart Internet Private Limited, Buildings Alyssa, Begonia & Clover, Embassy Tech Village, Outer Ring Road, Devarabeesanahalli Village, Bengaluru – 560103, Karnataka, India Bengaluru ---------- ----------

(57) Abstract :
ABSTRACT AN IOT BASED SMART EXOSKELETON SUIT The present invention relates to an IOT based smart exoskeleton suit (100). The exoskeleton suit (100) comprises of a first set of sensors (114) and a second set of sensors (126) for measuring the pre-defined parameters such as weight of load lifted, heart rate, pulse rate, oxygen saturation level (SPO2), number of lift of load, time duration of use of exoskeleton suit (100), calorie consumed, step count, gripping strength, and body temperature. The exoskeleton suit (100) further comprises of a microcontroller (116) configured to provide fitness rating based on the pre-defined parameters. The rating is categorized into three ranges: first range indicates fit for work, second range indicates moderate level of fitness, and third range indicates unfit for work. Therefore, the exoskeleton suit (100) measure physiological body parameters to decide fitness for lifting task and keep track of work performed by the user, thereby enabling equitable distribution of work. Figure 1

No. of Pages : 21 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/07/2024

(21) Application No.202441056394 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN AUTONOMOUS AND REMOTELY OPERATED ARMAMENT NEUTRALIZATION SYSTEM, AND METHOD THEREOF

(51) International classification	:B25J0009160000, G05D0001000000, A61B0034350000, A61B0017160000, A61B0034370000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)VELLORE INSTITUTE OF TECHNOLOGY, CHENNAI
Address of Applicant :Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)BARNEEL RAY
Address of Applicant :UG Student - B. Tech. CSE with Specialization in AI and Robotics, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
2)KUSH KUMAR KUSHWAHA
Address of Applicant :UG Student - B. Tech. CSE with Specialization in AI and Robotics, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
3)DEB DEEP BOSE
Address of Applicant :UG Student - B. Tech. ECE, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
4)DHRUV HATKAR
Address of Applicant :UG Student - B. Tech. CSE with Specialization in Artificial Intelligence and Machine Learning, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
5)KUSHAL SULTANIA
Address of Applicant :UG Student - B. Tech. CSE, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
6)G. LAKSHMI PRIYA
Address of Applicant :Assistant Professor Senior - Centre for Advanced Materials and Innovative Technologies (CAMIT), School of Electronics Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
7)SAKTHIVEL V
Address of Applicant :Assistant Professor Senior - School of Computer Science Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------

(57) Abstract :
Present invention discloses an autonomous and remotely operated armament neutralization system (100), and method thereof. System (100) includes a robot (102) configured to work in congested areas and work over long ranges for disposal and neutralization of an armament by employing the one or more components. A rover chassis (104) is configured to provide movement to the robot. One or more manipulator arms (108) are configured to allow deflection of wiring in the armament and the neutralization of the armament by cutting one or more wires controlled by one or more control units (116-1 and 116-2). A user interface (122) is configured to enable at least one user (124) to perform the neutralization process of the armament effectively and securely by observing the at least one video stream feed captured by at least one image capturing unit (110) processed by a server (120).

No. of Pages : 29 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/07/2024
(21) Application No.202441056396 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : NEBULIZER FOR ADMINISTERING AEROSOLIZED MEDICATIONS

(51) International classification :A61M0015000000, A61M0011000000, A61M0011060000, A61M0016000000, A61K0045060000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VELLORE INSTITUTE OF TECHNOLOGY, CHENNAI
Address of Applicant :Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)VINOTH.N
Address of Applicant :Research Scholar, School of Mechanical Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
2)BHASKARA RAO LOKAVARAPU
Address of Applicant :Professor, School of Mechanical Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------

(57) Abstract :
A nebulizer (100) for administering aerosolized medications is provided. The nebulizer (100) involves a nozzle (112) with adjustable diameter, which allows for personalized treatment by addressing unique requirements of various medications. Optimization of the nozzle diameter increases delivery efficiency, ensuring that a higher proportion of the medication reaches targeted lung areas, thus improving therapeutic outcomes. The nebulizer (100) also focuses on reducing drug wastage by investigating and optimizing aerosol particle size. Additionally, the nebulizer (100) is versatile, capable of accommodating a wide range of medications, making it suitable for treating diverse respiratory conditions such as asthma and COPD. The nebulizer's (100) adaptability and efficiency make the nebulizer (100) a valuable tool in clinical settings, enhancing patient care by providing effective and personalized respiratory treatments.

No. of Pages : 23 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/07/2024
(21) Application No.202441056403 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A COMPOSITE SCAFFOLD INTEGRATED WITH HALLOYSITE NANOTUBES FOR BONE REGENERATION AND REPAIR

(51) International classification	:A61L0027560000, A61L0027540000, A61P0019100000, A61L0027440000, A61Q0019000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)INDIAN INSTITUTE OF TECHNOLOGY MADRAS (IIT Madras)
Address of Applicant :The Dean, Industrial Consultancy & Sponsored Research [IC&SR], Indian Institute of Technology Madras, Sardar Patel Road, IIT P.O, Chennai, Tamil Nadu, 600036, India Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)VIMALRAJ SELVARAJ
Address of Applicant :No 5C, Bharath Street, Balaiah Garden, Madipakkam, Chennai-600091, India. Chennai ---------- ----------
2)SWATHI SUDHAKAR
Address of Applicant :Department of Applied Mechanics and Biomedical Engineering, Indian Institute of Technology Madras, Chennai-600036, Tamil Nadu, India Chennai ---------- ----------
3)SWAMINATHAN RAMAKRISHNAN
Address of Applicant :Department of Applied Mechanics and Biomedical Engineering, Indian Institute of Technology Madras, Chennai-600036, Tamil Nadu, India Chennai ---------- ----------

(57) Abstract :
The present invention provides a composite, multifunctional scaffold that supports bone growth, regeneration and repair as well as releases of osteogenic agents in a controlled manner, ensuring a sustained and effective bone regeneration process. The present invention provides a chitosan alginate matrix integrated with halloysite nanotubes (HNTs). The halloysite nanotubes (HNTs) comprised in the composite scaffold are loaded with osteogenesis promoting agents to enhance bone regeneration and repair. The composite scaffold for bone regeneration and repair described in the present invention is biocompatible, biodegradable and provides for controlled release of osteogenesis promoting agents.

No. of Pages : 29 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :24/07/2024

(21) Application No.202441056409 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : EARTHQUAKE-RESISTANT BUIDING TECHNOLOGIES

(51) International classification	:E04H0009020000, E04B0001980000, C22F0001000000, A61B0008120000, F16F0015040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Er. BASAVA VAMSI KRISHNA

Address of Applicant :Associate Professor Department of Civil Engineering MALLA REDDY ENGINEERING COLLEGE (Autonomous) Secunderabad-500100 Secunderabad ---------- ----------

2)Dr.Kurakula Vimala Kumar

3)Shrujal Jayesh Kumar Barvaliya

4)Dr. P. Rajasekhar

5)Dr. T. SRINIVAS

6)Dr Sumanth Kumar Bandaru

7)Dr.Raja Reddy Duvvuru

8)Dr.R.K.Madhumathi

9)Mrs.M.Ashni

10)A.BHASKAR

11)MALLA REDDY ENGINEERING COLLEGE (Autonomous)

12)Gokaraju Rangaraju Institute of Engineering and Technology

13)Kakatiya Institute of Technology and science, Warangal

14)Stella Mary's College of engineering

15)Matrusri Engineering college

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Er. BASAVA VAMSI KRISHNA

Address of Applicant :Associate Professor Department of Civil Engineering MALLA REDDY ENGINEERING COLLEGE (Autonomous) Secunderabad-500100 Secunderabad ---------- ----------

2)Dr.Kurakula Vimala Kumar

Address of Applicant :Assistant Professor, Dept.of.E.E.E, JNTUK University College of Engineering Narasaraopet, Narasaraopet Palnadu Dist Andhra Pradesh India 522601 Guntur ---------- ----------

3)Shrujal Jayesh Kumar Barvaliya

Address of Applicant :Project Engineer/Associate KC Engineering and Land Surveying PC 7 Penn Plaza, New York,NY 10001 ---------- ----------

4)Dr. P. Rajasekhar

Address of Applicant :Associate Professor Department of Civil Engineering MATRUSRI ENGINEERING COLLEGE (Autonomous) Hyderabad,-500059 Hyderabad ---------- ----------

5)Dr. T. SRINIVAS

Address of Applicant :Professor, Department of Civil Engineering, Gokaraju Rangaraju Institute of Engineering and Technology, Bachupally, Hyderabad-500090 Hyderabad ---------- ----------

6)Dr Sumanth Kumar Bandaru

Address of Applicant :Associate Professor Department of Civil Engineering Kakatiya InstituteofTechnologyandScience (Autonomous) Warangal 506015 Warangal ---------- ----------

7)Dr.Raja Reddy Duvvuru

Address of Applicant :Associate Professor EEE Department, MallaReddy Engineering College (Autonomous), Hyderabad Hyderabad ---------- ----------

8)Dr.R.K.Madhumathi

Address of Applicant :Associate Professor & Head, Department of civil engineering, Stella Mary's College of engineering, Aruthenganvillai, Kalluketti Junction, Azhikkal Rd, Tamil Nadu 629202 ---------- ----------

9)Mrs.M.Ashni

Address of Applicant :Assistant Professor, Department of civil engineering, Stella Mary's College of engineering, Aruthenganvillai, Kalluketti Junction, Azhikkal Rd, Tamil Nadu 629202 ---------- ----------

10)A.BHASKAR

Address of Applicant :Assistant Professor, Department of Civil Engineering, Kakatiya Institute of Technology and Science (Autonomous), Warangal 506015 Warangal ---------- ----------

(57) Abstract :

7. ABSTRACT The present invention introduces earthquake-resistant building (100) technologies that integrate advanced damping systems (104), innovative structural designs, and advanced materials to enhance the seismic resilience of buildings. The invention aims to reduce the risk of structural failure and improve safety during earthquakes by incorporating a range of elements, including viscoelastic dampers, tuned mass dampers (TMDs) (104), base isolation systems (106), reinforced core structures (108), X-bracing (110), shear walls (110), high-performance concrete (112), shape memory alloys (SMAs) (114), and fiber-reinforced polymers (FRPs) (116). Advanced materials such as high-performance concrete (112), SMAs (114), and FRPs (116) are used to enhance the building's strength, flexibility, and durability. The invention offers a comprehensive solution for enhancing the seismic resilience of buildings, reducing the risk of damage and ensuring the safety of occupants during earthquakes. The figure associated with abstract is Fig. 1

No. of Pages : 24 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/07/2024
(21) Application No.202441056413 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN ELECTRIC BICYCLE WITH ADVANCED SUSPENSION SYSTEM

(51) International classification	:G06N0005040000, B62M0006600000, B62J0045200000, A61G0005060000, G01C0021340000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)TEAMPOWER INFRASTRUCTURE INDIA PRIVATE LIMITED
Address of Applicant :PLOT NO: 2-100/1/1, NEAR SATHIVANIPALEM, KOTA NARAVA,REVENUE WARD 57, VISAKHAPATNAM,530053 (AP) Visakhapatnam ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Yegi Sreedhar Kumar
Address of Applicant :PLOT NO: 2-100/1/1, NEAR SATHIVANIPALEM, KOTA NARAVA,REVENUE WARD 57, VISAKHAPATNAM,530053 (AP) Visakhapatnam ---------- ----------

(57) Abstract :
ABSTRACT The present invention related to an electric bicycle designed for superior performance across various terrains, including uneven surfaces, off-road trails, and regular roads. This electric bicycle features an advanced 125mm stroke suspension system that ensures consistent comfort and stability for riders of all ages and sizes and equipped with equal front and rear suspension capabilities to enhance control and comfort, heavy-duty 9-gauge spokes, and an aluminum alloy rim for increased durability and strength. It is equipped with uniquely sturdy stand for support even when the rider is seated and includes red lights that activate when brakes are applied, increasing rider visibility and provide safety to the rider. The bicycle is powered by a 48-volt, 36 Ah battery and a 48-volt, 500-watt motor, managed by a 50-amp controller. This invention aims to redefine mobility solutions through advanced technology, robust construction, ergonomic design, and enhanced safety features, promoting sustainable transportation choices. Figure associated with Abstract is Fig. 1

No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :24/07/2024

(21) Application No.202441056437 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : EXPERIMENTAL AND ANALYTICAL INVESTIGATION ON FRICTION WELDING DISSIMILAR JOINTS FOR AEROSPACE APPLICATIONS

(51) International classification	:B23K0020120000, G06F0030230000, B23K0103180000, B23K0103100000, B23K0011110000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)G ASHWIN PRABHU

Address of Applicant :No. 11, Thirumagal Nagar, II Street, Karthick Avenue, Flat No. F1, First Floor, "Sai Guru Appartments", Chitlapakkam ---------- ----------

2)Dr. K P VASANTHA KUMAR

3)Dr. P SATHISH KUMAR

4)Dr. H B MICHAEL RAJAN

5)P UMAMAHESWARRAO

6)Dr. MOHAMMED SADHIKH

7)IRAYYA SHIKKERIMATH

8)J VIJAYANAND

9)A S JAGADHEESWARI

10)Dr. R SURESH

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. K P VASANTHA KUMAR

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, University College of Engineering, Ramanathapuram campus, Ramanathapuram - Manamelkudi Rd, Pullangudi, Tamil Nadu 623513 ---------- ----------

2)Dr. P SATHISH KUMAR

Address of Applicant :Associate Professor, Department of Robotics & Automation, United Institute of Technology, Gudalur Koundampalayam, Periyanaickenpalayam Post, Coimbatore, Tamil Nadu 641020 ---------- ----------

3)Dr. H B MICHAEL RAJAN

Address of Applicant :Professor, Department of Mechanical Engineering, Kings College of Engineering, Punalkulam, Near Thanjavur, Gandarvakottai Taluk, Pudukkottai District – 613303, Tamil Nadu, India. ---------- ----------

4)P UMAMAHESWARRAO

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Bapatla Engineering College, Mahatmajipuram, Bapatla, Guntur District, Andhra Pradesh 522102 ---------- ----------

5)Dr. MOHAMMED SADHIKH

Address of Applicant :Professor, Department of Mechanical Engineering, TKM College of Engineering, Kollam - Thirumangalam Rd, Karicode, Peroor, Kerala 691005 ---------- ----------

6)IRAYYA SHIKKERIMATH

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Ballari Institute of Technology and Management, Hospet Rd, near Allipura, Ballari 583104, Karnataka ---------- ----------

7)J VIJAYANAND

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, St. Joseph's College of Engineering, Old Mahabalipuram Road, Chennai 600119, Tamil Nadu, India ---------- ----------

8)A S JAGADHEESWARI

Address of Applicant :Assistant Professor, Department of Civil Engineering, Akshaya College of Engineering and Technology, Bhagavathipalayam, Kinathukadavu, Coimbatore, Tamil Nadu 642109 ---------- ----------

9)Dr. R SURESH

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Christian College of Engineering and Technology, Oddanchatram, Dindigul, Tamil Nadu 624619 ---------- ----------

10)G ASHWIN PRABHU

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, St. Joseph's College of Engineering, Old Mahabalipuram Road, Chennai 600119, Tamil Nadu, India ---------- ----------

(57) Abstract :

Friction welding is a solid-state joining technique that effectively bonds dissimilar materials by applying continuous forging pressure combined with rotational motion. This process is characterized by low heat input and high contact bonding. The present study investigates the microhardness and structural properties of friction-welded joints for aerospace applications. The experimental analysis focuses on the effects of key process parameters, including friction pressure, forging pressure, friction time, rotation speed, and upset time, on the properties and temperature distribution of the joints. The results from ANOVA and finite element analysis (FEA) using ANSYS R16.2 show good agreement, indicating the reliability of the numerical models. Optimal process parameters were determined to be a friction time of 5 seconds, a rotation speed of 2100 rpm, a friction pressure of 80 MPa, and a forging pressure of 84.5 MPa, resulting in sound joints. The study highlights the challenges of welding dissimilar metals, such as Ti-6Al-4V and SS304L, due to their different chemical and physical properties. Structural analysis revealed significant microstructural changes and intermetallic compound formation at the weld interface, influencing the mechanical properties of the joints. Experimental trials with and without aluminum interlayers were conducted to assess the impact on joint quality. The aluminum interlayer technique demonstrated superior tensile strength and reduced corrosion. The FE analysis provided insights into temperature distribution, equivalent stress, and deformation behavior, supporting the experimental findings. The research confirms that friction welding, optimized through precise control of process parameters, can produce robust dissimilar metal joints with enhanced performance for aerospace applications. This study contributes to a deeper understanding of the friction welding process for dissimilar materials, offering valuable data for optimizing welding parameters and improving joint quality. The correlation between experimental and FEA results establishes a scientific foundation for further advancements in friction welding technology.

No. of Pages : 15 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/07/2024
(21) Application No.202441056451 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A METHOD FOR FLUORESCENT DETECTION OF HEAVY METALS USING PAPER-BASED NANOCLUSTER BIOSENSORS

(51) International classification :G01N0021640000, G01F0023040000, A61P0031000000, C12Q0001020000, A61K0038480000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. AKSHATH U. S
Address of Applicant :DEPARTMENT OF BIO & NANO TECHNOLOGY, NITTE UNIVERSITY CENTRE FOR SCIENCE EDUCATION AND RESEARCH-NUCSER, NITTE DEEMED TO BE UNIVERSITY, 6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 MANGALURU ---------- ----------
2)RAJITHA G. V
Address of Applicant :DEPARTMENT OF BIO & NANO TECHNOLOGY, NITTE UNIVERSITY CENTRE FOR SCIENCE EDUCATION AND RESEARCH-NUCSER, NITTE DEEMED TO BE UNIVERSITY, 6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 MANGALURU ---------- ----------
3)NIDHI S SHETTY
Address of Applicant :DEPARTMENT OF BIO & NANO TECHNOLOGY, NITTE UNIVERSITY CENTRE FOR SCIENCE EDUCATION AND RESEARCH-NUCSER, NITTE DEEMED TO BE UNIVERSITY, 6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 MANGALURU ---------- ----------

(57) Abstract :
Disclosed herein is a method (100) for fluorescent detection of heavy metals using paper-based nanocluster biosensors which initiates with synthesizing FGNCs by reacting, characterizing and storing them in the synthesis of protein-protected nanoclusters (102) step. Then selecting and immobilizing FGNCs onto paper/dipstick platforms, enhancing shelf life with polymers or glutaraldehyde, and evaluating stability in the immobilization of nanoclusters onto paper/dipstick (104) step. Then assembling UV lamps and components for effective FGNC excitation and testing in the design and preparation of in-house UV chamber (106) step. Then detecting heavy metals in water and serum samples by immobilizing FGNCs, adding water or serum, incubating, and observing fluorescence for the detection of heavy metals. Then validating the biosensor by comparing fluorescence responses with classical methods during the validation of developed biosensor (110) step and then, performing long-term stability testing and monitoring fluorescence intensity in the stability evaluation (112) step.

No. of Pages : 28 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :24/07/2024

(21) Application No.202441056452 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : TRACK VISION – REAL TIME OBSTRUCTION TRACKING AND PEDESTRIAN ALERT SYSTEM

(51) International classification :G06N0003080000, G06N0003040000, G06Q0010060000, G06K0009620000, B61L0023040000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Srinivas Institute of Technology, Valachil, Mangaluru
Address of Applicant :Srinivas Institute of Technology Valachil, Mangaluru – 574143 Karnataka, India Mangaluru ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr. Sudarshan K
Address of Applicant :Associate Professor, Department of Information Science & Engineering Srinivas Institute of Technology, Valachil, Mangaluru. 574 143, Karnataka, India Mangaluru ---------- ----------
2)Mr. Athmaranjan K
Address of Applicant :Associate Professor, Department of Information Science & Engineering Srinivas Institute of Technology, Valachil, Mangaluru. 574 143, Karnataka, India Mangaluru ---------- ----------
3)Mrs. Sowmya
Address of Applicant :Assistant Professor, Department of Information Science & Engineering Srinivas Institute of Technology, Valachil, Mangaluru. 574 143, Karnataka, India Mangaluru ---------- ----------
4)Mrs. Shreekshitha
Address of Applicant :Assistant Professor, Department of Information Science & Engineering Srinivas Institute of Technology, Valachil, Mangaluru. 574 143, Karnataka, India Mangaluru ---------- ----------
5)Mr. Kiran
Address of Applicant :Assistant Professor, Department of Artificial Intelligence & Data Science. Srinivas Institute of Technology, Valachil, Mangaluru. 574 143, Karnataka, India Mangaluru ---------- ----------
6)Ms. Aparna
Address of Applicant :Teaching Assistant, Department of Artificial Intelligence & Data Science. Srinivas Institute of Technology, Valachil, Mangaluru. 574 143, Karnataka, India Mangaluru ---------- ----------
7)Mr. Yajnesh J Kulal
Address of Applicant :UG Student Information Science & Eng, Department of Information Science & Engineering, Srinivas Institute of Technology, Valachil, Mangaluru. 574 143, Karnataka, India Mangaluru ---------- ----------
8)Mr. Deepak Kumar A
Address of Applicant :UG Student Information Science & Eng, Department of Information Science & Engineering, Srinivas Institute of Technology, Valachil, Mangaluru. 574 143, Karnataka, India Mangaluru ---------- ----------
9)Mr. Dhanush
Address of Applicant :UG Student Information Science & Eng, Department of Information Science & Engineering, Srinivas Institute of Technology, Valachil, Mangaluru. 574 143, Karnataka, India Mangaluru ---------- ----------
10)Mr. T. Vaishnav
Address of Applicant :UG Student Information Science & Eng, Department of Information Science & Engineering, Srinivas Institute of Technology, Valachil, Mangaluru. 574 143, Karnataka, India Mangaluru ---------- ----------

(57) Abstract :
Computer vision and deep learning technologies has ushered a new era of innovation by entering the railway industry. Traditional train control systems rely on fixed infrastructure and human operators, which can be inflexible and prone to errors. A new age technological solution for problems faced in efficient railway transportation is in need that also safeguards the passenger's life. One such approach is this project that helps AI assisted driving of passenger trains using computer vision along with deep-learning for efficient decision makings and prevent negligence of loco-pilot resulting in life risks. This project contains the design, implementation, and testing of a robust system that can detect obstacles on the track, pedestrians crossing the track and effective decision-making system that can decide any collision or pedestrian accidents enabling loco pilots to make informed decisions about when and where to apply emergency breaks etc. The integration of computer vision technology enables real-time data acquisition, and deep learning algorithms empower trains to adapt to dynamic and complex environments. Improved safety, reduced human error, increased operational efficiency, and enhanced scheduling flexibility are some of the key advantages. While exploring the applications of AI in the field of railways this approach can subsequently help the railway authorities to enable the existing safety system "Kavach" and implement it to safeguard citizens at risk.

No. of Pages : 6 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/07/2024
(21) Application No.202441056460 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DEVICE AND METHOD FOR PREDICTING AQUACULTURE POND CONDITIONS

(51) International classification :A01K0063040000, H04W0004020000, H04L0041089300, H04N0019440000, H04W0048180000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Coastal Aquaculture Research Institute P. Ltd.
Address of Applicant :Type II/17, Rajiv Gandhi Salai, Dr. V S I Estate, Thiruvanmiyur, Chennai, Tamil Nadu 600041, India. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Murugan Chidhambaram
Address of Applicant :Coastal Aquaculture Research Institute P. Ltd., Type II/17, Rajiv Gandhi Salai, Dr. V S I Estate, Thiruvanmiyur, Chennai, Tamil Nadu 600041, India. Chennai ---------- ----------

(57) Abstract :
Disclosed is a device (100) for predicting aquaculture pond conditions. The device (100) includes a processing circuitry (102) that is configured to acquire data from satellites (124) representing one or more parameters associated with the aquaculture pond. By comparing this data with prestored information in a storage unit (104), deficiencies in the pond are identified. Real-time alerts are then generated for shops, notifying them of these deficiencies. Moreover, the device (100) evaluates the availability of suitable supplements in nearby shops or suppliers to address the identified deficiencies, thereby enhancing overall pond conditions. Additionally, the processing circuitry suggests specific supplements based on their availability in stock within the geographic location. The present disclosure also relates to a method (200) for predicting aquaculture pond conditions by way of the device (100). Refer Figure 1

No. of Pages : 32 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024

(21) Application No.202441056462 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTOMATIC PNEUMATIC BUMPER FOR FOURWHEELER

(51) International classification	:G01S0015931000, B60R0019480000, F16K0031060000, G01S0007521000, G06F0021560000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)S BANU
Address of Applicant :Professor, Department of Electrical and Electronics Engineering, VSB COLLEGE OF ENGINEERING TECHNICAL CAMPUS, ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)S BANU
Address of Applicant :Professor, Department of Electrical and Electronics Engineering, VSB COLLEGE OF ENGINEERING TECHNICAL CAMPUS, ---------- ----------
2)P.Srinivasan
Address of Applicant :Assistant Professor Department of Mechanical Engineering VSB College of Engineering Technical Campus, Ealur Pirivu, Solavampalayam Kinathukadavu Coimbatore- 642109 Tamilnadu Coimbatore ---------- ----------
3)N.Parthiban
Address of Applicant :Assistant Professor Department of Mechanical Engineering VSB College of Engineering Technical Campus, Ealur Pirivu, Solavampalayam Kinathukadavu Coimbatore- 642109 Tamilnadu Coimbatore ---------- ----------
4)M.R.Raveendran
Address of Applicant :Assistant Professor Department of Mechanical Engineering VSB College of Engineering Technical Campus, Ealur Pirivu, Solavampalayam Kinathukadavu Coimbatore- 642109 Tamilnadu Coimbatore ---------- ----------
5)V.Ashok Pandi
Address of Applicant :Assistant Professor Department of Mechanical Engineering VSB College of Engineering Technical Campus, Ealur Pirivu, Solavampalayam Kinathukadavu Coimbatore- 642109 Tamilnadu Coimbatore ---------- ----------
6)P.Karthikraja
Address of Applicant :Department of Mechanical Engineering VSB College of Engineering Technical Campus, Ealur Pirivu, Solavampalayam Kinathukadavu Coimbatore- 642109 Tamilnadu Coimbatore ---------- ----------
7)S.Thamilselvan
Address of Applicant :Department of Mechanical Engineering VSB College of Engineering Technical Campus, Ealur Pirivu, Solavampalayam Kinathukadavu Coimbatore- 642109 Tamilnadu Coimbatore ---------- ----------
8)N.Chandru
Address of Applicant :Department of Mechanical Engineering VSB College of Engineering Technical Campus, Ealur Pirivu, Solavampalayam Kinathukadavu Coimbatore- 642109 Tamilnadu Coimbatore ---------- ----------
9)S.Kishore Khan
Address of Applicant :Department of Mechanical Engineering VSB College of Engineering Technical Campus, Ealur Pirivu, Solavampalayam Kinathukadavu Coimbatore- 642109 Tamilnadu Coimbatore ---------- ----------

(57) Abstract :
ABSTRACT This proposed system introduces an automatic pneumatic bumper system designed for four wheelers, employing components such as a NodeMCU microcontroller, a 20*125 mm pneumatic cylinder, a 5/2 solenoid valve, and an ultrasonic sensor. Unlike traditional iimplementations, this system operates independently of IoT (Internet of Things) connectivity, focusing solely on local sensor-based collision detection and response. The primary objective of this system is to enhance vehicle safety by providing an automated collision avoidance mechanism, particularly in scenarios where low visibility or unexpected obstacles pose risks to vehicle occupants and pedestrians. Key components include the NodeMCU microcontroller, which serves as the central control unit, coordinating the actions of the pneumatic cylinder, solenoid valve, and ultrasonic sensor. The pneumatic cylinder, with its dimensions of 20*125 mm, acts as the actuator for deploying and retracting the bumper system. An ultrasonic sensor is employed to detect obstacles within the vehicle's path, transmitting real-time distance measurements to the NodeMCU. Upon detecting an obstacle within a predefined range, the NodeMCU triggers the activation of the pneumatic cylinder through the solenoid valve, deploying the bumper system automatically.

No. of Pages : 12 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024

(21) Application No.202441056469 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : BLOCKCHAIN TECHNOLOGY FOR SECURE CLOUD DATA STORAGE AND SHARING

(51) International classification	:H04L0009320000, H04L0009080000, G06F0021620000, H04L0009060000, G06F0021640000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Madhavi Katamaneni
Address of Applicant :Assistant Professor, Department of Information Technology, Vrsiddhartha Engineering College, Vijayawada, Andhra Pradesh, India. Vijayawada ---------- ----------
2)Ms. Madhavi Kishor Chaudhari
3)Chandra Prakash Katare Omprakash
4)DN Murali Krishna Rao
5)Bhavani Viyyapu
6)Pankaj Kunekar
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Madhavi Katamaneni
Address of Applicant :Assistant Professor, Department of Information Technology, Vrsiddhartha Engineering College, Vijayawada, Andhra Pradesh, India. Vijayawada ---------- ----------
2)Ms. Madhavi Kishor Chaudhari
Address of Applicant :Assistant professor, Department of MCA, Dr. D. Y. Patil Institute of Management and research Pimpri, Pune University, Pune, Maharashtra, India. Pune ---------- ----------
3)Chandra Prakash Katare Omprakash
Address of Applicant :Research Scholar, Osmania University, Hyderabad, Telangana, India. Hyderabad ---------- ----------
4)DN Murali Krishna Rao
Address of Applicant :Research Scholar, Jawaharlal Nehru Technological University, Hyderabad, Telangana, India. Hyderabad ---------- ----------
5)Bhavani Viyyapu
Address of Applicant :Research Scholar, Jawaharlal Nehru Technological University, Kakinada, Andhra Pradesh, India. Kakinada ---------- ----------
6)Pankaj Kunekar
Address of Applicant :Assistant Professor, Department of Information Technology, Vishwakarma Institute of Technology, Pune, Maharashtra, India. Pune ---------- ----------

(57) Abstract :
BLOCKCHAIN TECHNOLOGY FOR SECURE CLOUD DATA STORAGE AND SHARING ABSTRACT Blockchain technology provides a secure and decentralised platform for cloud data storage and exchange. Blockchain ensures data integrity, immutability, and transparency through the use of cryptographic concepts and distributed ledger technology. Data recorded on the blockchain is safeguarded from unauthorised access and alteration via consensus procedures and encryption. Smart contracts offer automated, trustless data sharing and administration, hence increasing efficiency and security. This strategy reduces the risks associated with centralised cloud storage, such as single points of failure and data breaches, by providing a strong framework for safe data storage and sharing in the cloud.

No. of Pages : 11 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024

(21) Application No.202441056471 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A RAPID PROTOCOL FOR QUANTITATIVE ANALYSIS OF POTENT ANTI-CANCER DRUG BY SPECTROFLOURIMETRY

(51) International classification	:G01N0021640000, A61K0031198000, C07D0403120000, G06F0016680000, A61K0009107000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)CVR COLLEGE OF ENGINEERING
Address of Applicant :CVR COLLEGE OF ENGINEERING, Vastunagar, Mangalpalli (V), Ibrahimpatnam (M), Rangareddy (Dist), Telangana 501510, India. Hyderabad ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. S. Naga Gayatri
Address of Applicant :Chemistry Division, Department of H&S, CVR COLLEGE OF ENGINEERING, Vastunagar, Mangalpalli (V), Ibrahimpatnam (M), Rangareddy (Dist), Telangana 501510, India. Hyderabad ---------- ----------
2)Dr. Kishor Palle
Address of Applicant :Chemistry Division, Department of H&S, CVR COLLEGE OF ENGINEERING, Vastunagar, Mangalpalli (V), Ibrahimpatnam (M), Rangareddy (Dist), Telangana 501510, India. Hyderabad ---------- ----------
3)Dr. Ramakanth Pagadala
Address of Applicant :Chemistry Division, Department of H&S, CVR COLLEGE OF ENGINEERING, Vastunagar, Mangalpalli (V), Ibrahimpatnam (M), Rangareddy (Dist), Telangana 501510, India. Hyderabad ---------- ----------
4)Dr. T. Jagadish
Address of Applicant :Chemistry Division, Department of H&S, CVR COLLEGE OF ENGINEERING, Vastunagar, Mangalpalli (V), Ibrahimpatnam (M), Rangareddy (Dist), Telangana 501510, India. Hyderabad ---------- ----------
5)Dr. Kadeer. Md
Address of Applicant :Chemistry Division, Department of H&S, CVR COLLEGE OF ENGINEERING, Vastunagar, Mangalpalli (V), Ibrahimpatnam (M), Rangareddy (Dist), Telangana 501510, India. Hyderabad ---------- ----------
6)Dr. A. Venugopal
Address of Applicant :Chemistry Division, Department of H&S, CVR COLLEGE OF ENGINEERING, Vastunagar, Mangalpalli (V), Ibrahimpatnam (M), Rangareddy (Dist), Telangana 501510, India. Hyderabad ---------- ----------

(57) Abstract :
An effective, speedy, and economical spectrofluorimetric procedure has been developed for Melphalan quantification in pharmaceutical formulations and spiked human plasma. This method focuses on exploring Melphalan's fluorescence attributes within a Tween-80 micellar environment. Melphalan exhibits strong inherent fluorescence with an emission wavelength (?em) of 365 nm when excited at 265 nm (?ex) in the presence of Tween-80. Extensive validation of the method has been conducted, and it has been successfully employed for content uniformity evaluation across multiple Melphalan brands.

No. of Pages : 16 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024
(21) Application No.202441056478 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : IOT BASED SOLAR POWERED AUTOMATIC SEED DISPENSER

(51) International classification	:H04L0067120000, H04W0004380000, G06Q0010060000, G06Q0050020000, A61B0005000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)CVR COLLEGE OF ENGINEERING
Address of Applicant :CVR COLLEGE OF ENGINEERING, Vastunagar, Mangalpalli (V), Ibrahimpatnam (M), Ranga Reddy (Dist), Telangana 501510, India. Hyderabad ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.S.Harivardhagini
Address of Applicant :CVR COLLEGE OF ENGINEERING, Vastunagar, Mangalpalli (V), Ibrahimpatnam (M), Ranga Reddy (Dist), Telangana 501510, India. Hyderabad ---------- ----------
2)V. Sreelatha Reddy
Address of Applicant :CVR COLLEGE OF ENGINEERING, Vastunagar, Mangalpalli (V), Ibrahimpatnam (M), Ranga Reddy (Dist), Telangana 501510, India. Hyderabad ---------- ----------

(57) Abstract :
Abstract. The IoT Based Solar-Powered Automatic Seed Dispenser project offers an inventive approach to improving agricultural practices by integrating renewable energy and Internet of Things (IoT) technologies. At its core, the system features a solar-powered seed sprayer that utilizes solar panels to harness energy, ensuring sustainability and minimizing environmental impact. This capability allows the device to operate independently, reducing reliance on traditional power sources and cutting operational costs for farmers. Additionally, the system incorporates IoT-based soil monitoring sensors to gather and analyze vital data on soil health. These sensors measure parameters such as humidity, pH, temperature, and nutrient levels, providing farmers with real-time insights into conditions that affect seed germination and plant growth. With its blend of sustainability and advanced technology, this innovative system aims to offer efficient solutions for modern agriculture.

No. of Pages : 18 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :25/07/2024

(21) Application No.202441056479 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : AI AND IOT-ENHANCED ANIMAL REPELLENT SYSTEM FOR AGRICULTURAL APPLICATIONS

(51) International classification :G06N0003040000, G06Q0050020000, A01M0029100000, G06N0003080000, A01M0029160000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr K S Balamurugan
Address of Applicant :Professor, Department of ECE, Karpaga Vinayaga College of Engineering and Technology, Chengalpattu, Tamil Nadu, India. profksbala@gmail.com ---------- ----------
2)G Kalayani
3)Dr D Kumutha
4)R.M. Gomathi
5)A. Venkatesan
6)L. Saranya
7)Dr. S.R.Suram Samuel
8)T. Karthika
9)Geetha P
10)R. Rajalakshmi
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr K S Balamurugan
Address of Applicant :Professor, Department of ECE, Karpaga Vinayaga College of Engineering and Technology, Chengalpattu, Tamil Nadu, India. profksbala@gmail.com ---------- ----------
2)G Kalayani
Address of Applicant :Research Associate, RuralCare Innovators LLP, Madurai, Tamil Nadu, India. ruralcareinnovators@gmail.com ---------- ----------
3)Dr D Kumutha
Address of Applicant :Professor, Department of ECE, Jeppiaar Institute of Technology, Sriperumbudur, Kanchipuram, Tamil Nadu, India, skvijaykumu@gmail.com ---------- ----------
4)R.M. Gomathi
Address of Applicant :Associate Professor, School of Computing, Sathyabama Institute of Science and Technology, Chennai, India. gomathi.it@sathyabama.ac.in ---------- ----------
5)A. Venkatesan
Address of Applicant :Assistant Professor, Department of ECE, Kingston Engineering College, Vellore, Tamil Nadu, India Venkataaru2018@gmail.com ---------- ----------
6)L. Saranya
Address of Applicant :Assistant professor, Department of ECE, karpagam college of engineering, coimbatore-32, Tamil Nadu, India, saranyalece@kce.ac.in ---------- ----------
7)Dr. S.R.Suram Samuel
Address of Applicant :Assistant Professor, ECE, Kingston Engineering College, Vellore, Tamil Nadu, India. suremsam81@gmail.com ---------- ----------
8)T. Karthika
Address of Applicant :Assistant Professor, Department of ECE, Jeppiaar Institute of Technology, Sriperumbudur, Kanchipuram, Tamil Nadu, India, karthi.m.e.20@gmail.com ---------- ----------
9)Geetha P
Address of Applicant :Assistant Professor, Department of ECE, Karpaga Vinayaga College of Engineering and Technology, Chengalpattu, Tamil Nadu, India, kgeetha300392@gmail.com ---------- ----------
10)R. Rajalakshmi
Address of Applicant :Assistant Professor, Department of ECE, Pandian Saraswathi Yadav Engineering College, Sivaganga, Tamil Nadu, India kbraji1985@gmail.com ---------- ----------

(57) Abstract :
The proposed method is designed to keep wild animals out of human settlements and agriculture. This automatic technology recognises the presence of wild creatures and repels them without injury. Our invention is an ultrasonic smart repellent gadget that deters wild animals from entering land for agriculture. We record the image with the help of cameras and sensors, followed by use contemporary technologies such as AI and IoT to recognise the animal type and emit the specific ultrasonic frequency that disrupts them. In addition, a warning signal is sent to appropriate authorities to notify them of the finding. As a result, minimizing the harmful implications of the dispute might be deemed a breakthrough in smart agriculture applications. Solar panels and cells are utilised to provide the energy required enabling the system to function. Farmers go through significant losses as a result of the regular crop destruction caused by local animals like buffaloes, cows, goats, elephants, and others. To protect their fields, farmers have been using animal traps or electric fences. Both animals and humans perish as a result of these countless deaths. Many individuals are giving up farming because of the serious harm that animals inflict on crops. The systems now in use make it challenging to identify the animal species. Consequently, animal detection is made simple and effective by employing the Artificial Intelligence based Convolution Neural Network method. The concept of playing animal-specific sounds is by far the most accurate execution. Rotating cameras are put to good use. The percentage of animals detected by this technique has grown from 90% to 97%.

No. of Pages : 12 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024
(21) Application No.202441056480 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ASSESSING DROUGHT CONDITIONS IN GUNTUR WITH MODIS AND GOOGLE EARTH ENGINE

(51) International classification	:G06F0016290000, G16Z0099000000, G06F0030200000, G06F0017000000, G01W0001000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)POKKUNURI PARDHA SARADHI
Address of Applicant :Department of ECE, Koneru Lakshmaiah Education Foundation, Vaddeswaram, AP, India ---------- ----------
2)Koneru Lakshmaiah Education Foundation
3)P. SivaNagendram
4)P.Satyanarayana
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P. SivaNagendram
Address of Applicant :Koneru Lakshmaiah Education Foundation Vaddeswaram, Guntur District, Andhra Pradesh, AP, India, 522 302 Guntur ---------- ----------
2)P.Satyanarayana
Address of Applicant :Koneru Lakshmaiah Education Foundation, Vaddeswaram, AP, India Guntur ---------- ----------
3)P. Pardhasaradhi
Address of Applicant :Dept of ECE, Koneru Lakshmaiah Education Foundation, Vaddeswaram, AP, India Guntur ---------- ----------

(57) Abstract :
This evaluation explores the utility of specific methodologies, particularly Geographic Information System (GIS) and Remote Sensing (RS), in the near real-time assessment of drought conditions across regions. The investigation focuses on comparing Remote Sensing Derived Drought Indices (RSDIs) with the Standardized Precipitation Evapotranspiration Index (SPEI) for the period 2001–2023. The RSDIs, including Vegetation Condition Index (VCI), Temperature Condition Index (TCI), and Vegetation Health Index (VHI), are computed utilized MODIS data through Google Earth Engine (GEE) platform. To assess the efficacy of these indices, correlation analyses are conducted between VCI, TCI, VHI, and the Standardized Precipitation Index (SPI). Pearson correlation coefficients (CC) are employed to quantify the agreement between SPEI and RSDIs. Results indicate varying levels of agreement, with higher correlation observed between VCI and SPEI across different time scales (12, 9, 6, 3, and 1 month). Conversely, TCI demonstrates comparatively lower agreement with SPEI. Moderate correlation is noted between VCI and SPEI across different time scales. These findings suggest that VHI and SPEI exhibit stronger correlation, making them preferable for drought monitoring in regions with limited meteorological data. Furthermore, the study reveals a persistent presence of drought across the study area throughout the analysed period. This research contributes to enhancing our comprehension of the interrelationships among Weather and remote sensing based drought indices.

No. of Pages : 10 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024
(21) Application No.202441056482 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR INTEGRATING HYPERMEDIA RECORDS WITH SPATIOTEMPORAL METADATA

(51) International classification	:G06F0016740000, G06F0016957000, G06F0016400000, G06F0016930000, G06F0016480000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)CVR COLLEGE OF ENGINEERING
Address of Applicant :CVR COLLEGE OF ENGINEERING, Vastunagar, Mangalpalli (V), Ibrahimpatnam (M), Rangareddy (Dist), Telangana 501510, India Hyderabad ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SRIKANTH LAKUMARAPU
Address of Applicant :Department of Computer Science & Engineering, CVR COLLEGE OF ENGINEERING, Vastunagar, Mangalpalli (V), Ibrahimpatnam (M), Rangareddy (Dist), Telangana 501510, India Hyderabad ---------- ----------
2)BANOTH SAMYA
Address of Applicant :Department of Computer Science & Engineering, CVR COLLEGE OF ENGINEERING, Vastunagar, Mangalpalli (V), Ibrahimpatnam (M), Rangareddy (Dist), Telangana 501510, India Hyderabad ---------- ----------

(57) Abstract :
This patent presents a novel system and method for integrating hypermedia records with spatiotemporal metadata to enhance the organization, retrieval, and analysis of multimedia archives. The system comprises a Data Ingestion Module for acquiring hypermedia content and extracting inherent metadata, a Metadata Enrichment Module for augmenting the content with spatiotemporal annotations, a Data Storage and Management Module featuring a unified database and advanced indexing mechanisms, a User Interface Module for interactive visualization and sophisticated search functionalities, and an Analytics and Reporting Module for pattern recognition and detailed reporting. The method involves the systematic acquisition of hypermedia content, extraction and annotation of spatiotemporal metadata, efficient storage and indexing of the enriched data, and provision of powerful search and retrieval capabilities. This innovative integration framework significantly improves the accessibility, searchability, and contextual relevance of multimedia archives, providing users with an enhanced tool for managing and utilizing rich hypermedia content.

No. of Pages : 11 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024

(21) Application No.202441056493 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : INTELLIGENT BLOOD BANK MANAGEMENT THROUGH IOT, ML, AND DL INTEGRATION

(51) International classification	:G06N0003080000, G06N0020000000, G06Q0010080000, G06N0003040000, G06Q0020400000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. MANJULA GURURAJ RAO
Address of Applicant :Dr. MANJULA GURURAJ RAO ASSOCIATE PROFESSOR, Dept of ISE NMAMIT NITTE(Deemed to be University) Karkala, Udupi-574110 9900377663 dr.manjulagururajh@gmail.com ---------- ----------
2)Dr. Priyanka H
3)Dr. Vatsala GA
4)Dr. Bhagyashri R Hanji
5)Pradyumna S A
6)CHAITRA M
7)Dr. Hemanth Kumar Reddy
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. MANJULA GURURAJ RAO
Address of Applicant :Dr. MANJULA GURURAJ RAO ASSOCIATE PROFESSOR, Dept of ISE NMAMIT NITTE(Deemed to be University) Karkala, Udupi-574110 9900377663 dr.manjulagururajh@gmail.com ---------- ----------
2)Dr. Priyanka H
Address of Applicant :Dr. Priyanka H Associate Professor PES University RR CAMPUS RING ROAD BSK 3rd Stage Bangalore 8553007131 drpriyakahsachin@gmail.com ---------- ----------
3)Dr. Vatsala GA
Address of Applicant :Dr. Vatsala GA Associate Professor Department of Mathematics Dayanada Sagar Academy of Technology and Management Bengaluru 560082 dr.vatsala.ga@gmail.com 9972287654 ---------- ----------
4)Dr. Bhagyashri R Hanji
Address of Applicant :Dr. Bhagyashri R Hanji Professor Information Science and Engineering Global Academy of Technology Bangalore babyakod@gmail.com 9986254968 ---------- ----------
5)Pradyumna S A
Address of Applicant :Pradyumna S A Student RV College of Engineering #136 Paarijaatha The Valley by Essem18, Rachanamadu Bengaluru Karnataka 5600109 pradyumna.pri.24@gmail.com 9972287654 ---------- ----------
6)CHAITRA M
Address of Applicant :CHAITRA M Address: ASSISTANT PROFESSOR, BGS COLLEGE OF ENGINEERING AND TECHNOLOGY, MAHALAKSHMIPURAM, BANGALORE 560086 Email: chaitramg16@gmail.com 9972287654 ---------- ----------
7)Dr. Hemanth Kumar Reddy
Address of Applicant :Dr. Hemanth Kumar Reddy Professor Grade-I School of Computer Science and Engineering VIT-AP University Amravathi, Vijayawada, Andra Pradesh-522508 +91-8895008219 khemant.reddy@gmail.com ---------- ----------

(57) Abstract :
ABSTRACT OF THE INVENTION: Title: Intelligent Blood Bank Management through IoT, ML, and DL Integration The invention relates to: An intelligent system for managing blood banks through the integration of Internet of Things (IoT), Machine Learning (ML), and Deep Learning (DL) technologies. The system comprises: IoT devices for realtime tracking, sensors for monitoring storage conditions, ML algorithms for donor matching, and DL models for predictive analytics. The present invention ensures: Enhanced efficiency, accuracy, and reliability in blood bank operations, including inventory management, donor matching, and predictive analytics.

No. of Pages : 13 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024

(21) Application No.202441056494 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD OF TESTING FOR MYCOBACTERIUM TUBERCULOSIS USING QUICK EXTRACTION REAGENT

(51) International classification :C12N0015100000, G01N0033569000, C12Q0001040000, C12Q0001700000, C12Q0001680600
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)HUWEL LIFESCIENCES PRIVATE LTD
Address of Applicant :M14, M15, M16, Exit 04 Sultanpur, IDA, Hyderabad, Sangareddy, Telangana, 502319 Hyderabad ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Rachana Tripathi
Address of Applicant :Huwel Lifesciences Private Ltd. M14, M15, M16, Exit 04 Sultanpur, IDA, Hyderabad, Sangareddy, Telangana, 502319 Hyderabad ---------- ----------
2)Shesheer Munpally
Address of Applicant :Huwel Lifesciences Private Ltd. M14, M15, M16, Exit 04 Sultanpur, IDA, Hyderabad, Sangareddy, Telangana, 502319 Hyderabad ---------- ----------
3)Sreeman Kumar Mamidyala
Address of Applicant :Huwel Lifesciences Private Ltd. M14, M15, M16, Exit 04 Sultanpur, IDA, Hyderabad, Sangareddy, Telangana, 502319 Hyderabad ---------- ----------
4)Prabhakar Mujagond
Address of Applicant :Huwel Lifesciences Private Ltd. M14, M15, M16, Exit 04 Sultanpur, IDA, Hyderabad, Sangareddy, Telangana, 502319 Hyderabad ---------- ----------
5)Sireesha Divyakolu
Address of Applicant :Huwel Lifesciences Private Ltd. M14, M15, M16, Exit 04 Sultanpur, IDA, Hyderabad, Sangareddy, Telangana, 502319 Hyderabad ---------- ----------
6)Ravi Bogisetti
Address of Applicant :Huwel Lifesciences Private Ltd. M14, M15, M16, Exit 04 Sultanpur, IDA, Hyderabad, Sangareddy, Telangana, 502319 Hyderabad ---------- ----------
7)Pranay Katkar
Address of Applicant :Huwel Lifesciences Private Ltd. M14, M15, M16, Exit 04 Sultanpur, IDA, Hyderabad, Sangareddy, Telangana, 502319 Hyderabad ---------- ----------

(57) Abstract :
Abstract Method of testing for Mycobacterium tuberculosis using quick extraction reagent The present invention relates to the detection of infectious diseases, in particular mycobacterium tuberculosis including MTB using quick extraction reagent. The method includes collecting a sterile swab and carefully rotate by dipping into the sample collected (Sputum/BAL fluid/Pus/Ascitic fluid) in the container for 10-15 sec. Inserting the collected swab into the vial containing reagent (0.6 mL) and placing the buffer vial containing the premixture in a dry bath, which is preheated to 75°C and incubate for 10 minutes. Giving a short spin to the lysate at 5000 rpm for 30 sec. Further, using 5µL of the supernatant as a template and proceed with RT-PCR assay. In this procedure, DNA containing SWAB without any DNA extraction procedures leading to the detection of Mycobacterium tuberculosis with 100% sensitivity and specificity; and can process a relatively larger number of samples in a short time. Figure. 2

No. of Pages : 64 No. of Claims : 21

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :25/07/2024

(21) Application No.202441056515 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : SINTERING TECHNIQUE IN THE FORMULATION DEVELOPMENT OF FLOATING TABLETS OF DASATINIB

(51) International classification	:A61K0009200000, A61K0009000000, A61K0009280000, A61K0031506000, A61K0047260000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Chandan Mohnaty

Address of Applicant :Flat No. 419 Ishta city Apartment Attapur ---------- ----------

2)Mr. Cherukupally Ratnakar

3)Mr. Tapan Kumar Jena

4)Mrs. Soumya Stuti Patnaik

5)Dr. Shaik Harun Rasheed

6)Dr. Sandip Sen

7)Dr. Vakkalagadda Ravi Kumar

8)Mrs. Muthadi Radhika Reddy

9)Ms. Kothamasi Priyarini

10)Ms. Vallavoju Sai Meghana

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. Chandan Mohnaty

Address of Applicant :Associate Professor, School of pharmacy, Guru Nanak Institutions Technical Campus, Khanapur, Ibrahimpatnam, Hyderabad, Ranga Reddy (Dist), Telangana-501506, India Hyderabad ---------- ----------

2)Mr. Tapan Kumar Jena

Address of Applicant :Assistant Manager, Dr Reddy's Lab, Bachupally, Hyderabad, Telangana-500090, India Hyderabad ---------- ----------

3)Mrs. Soumya Stuti Patnaik

Address of Applicant :Assistant Professor, School of pharmacy, Guru Nanak Institutions Technical Campus, Khanapur, Ibrahimpatnam, Hyderabad, Ranga Reddy (Dist), Telangana-501506, India Hyderabad ---------- ----------

4)Dr. Shaik Harun Rasheed

Address of Applicant :Professor, School of pharmacy, Guru Nanak Institutions Technical Campus, Khanapur, Ibrahimpatnam, Hyderabad, Ranga Reddy (Dist), Telangana-501506, India Hyderabad ---------- ----------

5)Dr. Sandip Sen

Address of Applicant :Professor, School of pharmacy, Guru Nanak Institutions Technical Campus, Khanapur, Ibrahimpatnam, Hyderabad, Ranga Reddy (Dist), Telangana-501506, India Hyderabad ---------- ----------

6)Dr. Vakkalagadda Ravi Kumar

Address of Applicant :Professor, School of pharmacy, Guru Nanak Institutions Technical Campus, Khanapur, Ibrahimpatnam, Hyderabad, Ranga Reddy (Dist), Telangana-501506, India Hyderabad ---------- ----------

7)Mrs. Muthadi Radhika Reddy

Address of Applicant :Associate Professor, School of pharmacy, Guru Nanak Institutions Technical Campus, Khanapur, Ibrahimpatnam, Hyderabad, Ranga Reddy (Dist), Telangana-501506, India Hyderabad ---------- ----------

8)Ms. Kothamasi Priyarini

Address of Applicant :Assistant Professor, School of pharmacy, Guru Nanak Institutions Technical Campus, Khanapur, Ibrahimpatnam, Hyderabad, Ranga Reddy (Dist), Telangana-501506, India Hyderabad ---------- ----------

9)Ms. Vallavoju Sai Meghana

Address of Applicant :Assistant Professor, School of pharmacy, Guru Nanak Institutions Technical Campus, Khanapur, Ibrahimpatnam, Hyderabad, Ranga Reddy (Dist), Telangana-501506, India Hyderabad ---------- ----------

10)Mr. Cherukupally Ratnakar

Address of Applicant :Associate Professor, School of pharmacy, Guru Nanak Institutions Technical Campus, Khanapur, Ibrahimpatnam, Hyderabad, Ranga Reddy (Dist), Telangana-501506, India Hyderabad ---------- ----------

(57) Abstract :

ABSTRACT The current study aimed to investigate the utilization of the sintering technique, in the development of gastro-retentive floating tablets for Dasatinib. The tablets were prepared by the direct compression method, with EC N100 and HPMC K100 as the matrix-forming polymer and sodium bicarbonate as the gas-generating agent. In a hot air oven, the prepared tablets were sintered at two different temperatures for two different time periods. The effects of sintering conditions were investigated in terms of in-vitro dissolution, hardness, friability, floating lag time, and total floating time. Formulation F2 sintered at 700c for 3 hr was selected as optimised formulation, for which maximum percentage release and time to attain maximum release was found to be 96.3% and 13 hr respectively. Stability studies as per ICH guidelines revealed that optimized formulation was stable on storage conditions. The developed sintered floating tablets shown good controlled release characteristics which extended the release rate of the drug and delivered steady state drug release over a prolonged period. This innovative approach offers improved therapeutic efficacy, reduced dosing frequency and enhanced patient compliance.

No. of Pages : 24 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024
(21) Application No.202441056518 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTOMATIC IV TRIP MONITORING AND CONTROL USING EMBEDDED SYSTEM

(51) International classification :A61M0005168000, A61M0005140000, F28F0013060000, A61M0005360000, A61B0005153000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. G.SUNDAR
Address of Applicant :DEPT.OF ELECTRICAL AND ELECTRONICS ENGINEERING,SRI SHAKTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY,SRI SHAKTHI NAGAR,L&T BYPASS,CHINNIYAMPALAYAM POST,COIMBATORE,TAMILNADU,INDIA. PIN:641062 9842781393 sundargeee@siet.ac.in ---------- ----------
2)Dr. B. THARANI
3)Ms.ICANUPRIYA
4)Ms.T.BALASUBBULAKSMI
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. G.SUNDAR
Address of Applicant :Electrical and Electronics Engineering Sri Shakthi Institute of Engineering and TechnologySri Shakthi Nagar, L&T BY-PASS, Chinniyampalayam Post, Coimbatore,Tamil Nadu India 9842781393 641 062 ---------- ----------
2)Dr. B. THARANI
Address of Applicant :Electrical and Electronics Engineering Sri Shakthi Institute of Engineering and Technology Sri Shakthi Nagar, L&T BY-PASS, Chinniyampalayam Post, Coimbatore ,Tamil Nadu India 9842781393 641 062 ---------- ----------
3)Ms.ICANUPRIYA
Address of Applicant :Electrical and Electronics Engineering Sri Shakthi Institute of Engineering and TechnologySri Shakthi Nagar, L&T BY-PASS, Chinniyampalayam Post, Coimbatore,Tamil Nadu India 9842781393 641 062 ---------- ----------
4)Ms.T.BALASUBBULAKSMI
Address of Applicant :Electrical and Electronics Engineering Sri Shakthi Institute of Engineering and TechnologySri Shakthi Nagar, L&T BY-PASS, Chinniyampalayam Post, Coimbatore,Tamil Nadu India 9842781393 641 062 ---------- ----------

(57) Abstract :
In hospitals, ensuring the patients safety is the most important thing Monitoring the intravenous fluid level manually is not a simple job if it is not done with more care may affect the health of the patient severely. This may cause blood loss or backflow of blood to IV tube from their veins. If the bottle gets fully drained, then air bubbles may enter the tube and in turn into the vein, which may cause disastrous to the patient, o automating this system might prove really helpful. A system is designed such that if the Intravenous fluid reaches a critical level, it is sensed by ultrasonic sensor and notification is send to nurse mobile using Blynk app. When notification is send the nurse can easily identify the room and go there directly to change the bottle rather than keep checking every room to notice if the fluid has reached the critical level.

No. of Pages : 9 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024
(21) Application No.202441056531 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : PAPER BASED ELECTROCHEMICAL NUTMEG REDOX ACTIVITY BASED ELECTRODES FOR DETERMINATION OF CANCER PROGE

(51) International classification	:A61P0035000000, A61P0017000000, A61K0036185000, A61P0021000000, C12Q0001000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)CHRIST UNIVERSITY
Address of Applicant :DEPARTMENT OF CHEMISTRY, CHRIST (DEEMED TO BE UNIVERSITY), HOSUR ROAD, BENGALURU, KARNATAKA, INDIA-560029. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MANSI GANDHI
Address of Applicant :DEPARTMENT OF CHEMISTRY, CHRIST (DEEMED TO BE UNIVERSITY), HOSUR ROAD, BENGALURU, KARNATAKA, INDIA-560029. ---------- ----------
2)KHAIRUNNISA AMREEN
Address of Applicant :DEPARTMENT OF CHEMISTRY, CHRIST (DEEMED TO BE UNIVERSITY), HOSUR ROAD, BENGALURU, KARNATAKA, INDIA-560029. ---------- ----------
3)ANITHA VARGHESE
Address of Applicant :DEPARTMENT OF CHEMISTRY, CHRIST (DEEMED TO BE UNIVERSITY), HOSUR ROAD, BENGALURU, KARNATAKA, INDIA-560029. ---------- ----------

(57) Abstract :
Nulnicg or Jaiphnl is one of the versatile and highly valued Indian household spices, i.e.'. a ground spice derived from the seeds' numerous usage and properties. They are extended lor multiple uses in the flavoring. aroma, food, and beverage industries, h has significant medicinal benefits, especially for antioxidant ehaijietcrislics, digestive disorders, and skin problems. Extending the potential of jaiphal for an electrochemical-based sensor prototype for screening cancer progression is quite a novel concept. No such report for^in electroehcmical-based Nutmeg electrochemical transducer has been reported yet. NADH or fi-nicoiinamide adenine dimicleotide is involved in ealaholie reactions. It is quite an.iniporlani analyicsysiem lor \ arious disorder screening such as cancer. Alzheimer's, diabetes and Parkinson's and sarcopenia. We in this patent have reported the NADH screening using a paper based electrode (SPCE/M\Y.CNT@JP) in biological'pH media.

No. of Pages : 10 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024
(21) Application No.202441056537 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : FUZZY-BASED ENCRYPTION MECHANISM FOR PRIVACY PRESERVATION AND EVALUATION OF QUERY RESPONSE TIME IN CLOUD

(51) International classification :G06F0021620000, H04L0009320000, H04L0009140000, H04W0012020000, G06F0021550000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Karpagam Academy of Higher Education
Address of Applicant :Pollachi Main Road, Eachaneri Post, Coimbatore 641 021 Coimbatore ---------- ----------
2)Karpagam Institute of Technology
3)Dr.L.Selvam
4)Vishnupriya.R
5)Manikodi.K
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.L.Selvam
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore 641021 Coimbatore ---------- ----------
2)Vishnupriya.R
Address of Applicant :Final Year Student, Department of Computer Science and Engineering, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore 641021 Coimbatore ---------- ----------
3)Manikodi.K
Address of Applicant :Final Year Student, Department of Computer Science and Engineering, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore 641021 Coimbatore ---------- ----------

(57) Abstract :
Data is considered a resource where security is a critical factor in the prospective growth of data mining. The protection offered by public infrastructure is insufficient to guarantee the privacy of personal data disclosure. Edge devices are used by analysts to obtain data. Data accessible by unauthorized parties and privacy leaks at the edge layer are prevalent issues found in earlier study. To tackle the problem, this study introduces fuzzy mechanism which provides differential privacy with Laplace mechanism. This is where operations like as query processing and data processing are completed. The data owner encrypts the dataset using encryption and adds noise after sending it to the data provider and then moves it to the cloud. Based on the uploaded dataset, the data owner employs the encryption technique to generate index from the recovered key properties. Conversely, the data supplier authenticates the requests and queries made by the data analyst. After that, the edge server's hash tree looks for the matching data, retrieves it from the cloud, and sends it in an encrypted format to the data analyst. A decryption key is given to each verified data analyst so they can access the query result. MATLAB 2020a is used to do this, and the outcomes demonstrate improved throughput, response time, encryption time are evaluated.

No. of Pages : 9 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024
(21) Application No.202441056538 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : HUMAN EMOTIONS IDENTIFIER USING MACHINE LEARNING

(51) International classification :G06N0003040000, G06N0020000000, G06F0040300000, G06K0009620000, G10L0025630000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Karpagam Academy of Higher Education
Address of Applicant :Pollachi Main Road, Eachaneri Post, Coimbatore 641 021 Coimbatore ---------- ----------
2)Karpagam College of Engineering
3)P.Sasikala
4)Ragunath.R
5)Ramana.V
6)Kunguma Ajith.S
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P.Sasikala
Address of Applicant :Assistant Professor, Department of ECE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore 641021 Coimbatore ---------- ----------
2)Ragunath.R
Address of Applicant :Department of ECE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore 641021 Coimbatore ---------- ----------
3)Ramana.V
Address of Applicant :Department of ECE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore 641021 Coimbatore ---------- ----------
4)Kunguma Ajith.S
Address of Applicant :Department of ECE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore 641021 Coimbatore ---------- ----------

(57) Abstract :
Emotion recognition has emerged as a pivotal research area in the domain of artificial intelligence and human-computer interaction. Understanding human emotions expressed through text is crucial for various applications, ranging from customer sentiment analysis to mental health diagnostics. This study presents an in-depth exploration of human emotion identification using machine learning techniques applied to textual data. This research delves into the complexities of emotion recognition, focusing on the textual modality. A comprehensive review of existing literature is conducted, highlighting the challenges posed by linguistic nuances, cultural variations, and evolving language patterns. The study emphasizes the significance of emotion recognition across diverse fields, underscoring its pivotal role in enhancing user experience, social robotics, and mental health support systems. The core of this research lies in the development of robust machine learning models tailored for emotion identification. A systematic approach to data collection, preprocessing, and feature extraction is employed, ensuring the effective transformation of textual data into numerical features. Various machine learning algorithms, including Support Vector Machines (SVM), recurrent neural networks (RNN), and transformer-based models, are investigated and compared for their efficacy in accurately classifying human emotions. Furthermore, this study explores the ethical dimensions associated with emotion recognition, addressing concerns related to user privacy, data security, and algorithmic bias. Ethical considerations are integrated into the methodology, ensuring the responsible development and deployment of emotion recognition systems. The proposed models are rigorously evaluated using benchmark datasets, and their performance is analyzed based on metrics such as accuracy, precision, recall, and F1-score. Comparative analyses are conducted to discern the strengths and limitations of different machine learning algorithms in real-world emotion recognition scenarios. The findings of this research contribute valuable insights to the fields of natural language processing and affective computing. The developed models demonstrate promising results, signifying their potential for practical applications. Additionally, the study sheds light on future directions, including the integration of multimodal inputs and the incorporation of explainable AI techniques for enhanced interpretability.

No. of Pages : 13 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024
(21) Application No.202441056550 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A METHOD FOR FABRICATING FUNCTIONALLY GRADED MATERIAL USING TWIN WIRE ARC ADDITIVE MANUFACTURING

(51) International classification	:B33Y0010000000, B23K0009040000, B33Y0030000000, B23K0009320000, B23K0009167000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)VIJEESH V
Address of Applicant :DEPT. MECHANICAL ENGINEERING , NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA UDUPI ---------- ----------
2)RAGHAVENDRA PAI K
Address of Applicant :DEPT. MECHANICAL ENGINEERING , NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA UDUPI ---------- ----------
3)PRAVINAV S PRAVEEN
Address of Applicant :DEPT. MECHANICAL ENGINEERING , NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA UDUPI ---------- ----------
4)RISHI VIJITH
Address of Applicant :DEPT. MECHANICAL ENGINEERING , NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA UDUPI ---------- ----------
5)ANUJITH P V
Address of Applicant :DEPT. MECHANICAL ENGINEERING , NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA UDUPI ---------- ----------
6)POOJA MANGALADEVI
Address of Applicant :DIRECTOR, METASPOT PVT LTD., 308- AGRAJA APARTMENTS, UDAYNAGAR SRINIVASNAGAR, SURATHKAL MANGALURU, DAKSHINA KANNADA, KARNATAKA-575025 MANGALURU ---------- ----------

(57) Abstract :
Disclosed herein is a method for fabricating functionally graded material using twin wire arc additive manufacturing (100) that using a four-axis wire arc additive manufacturing machine (102) equipped with a specially designed torch holder (104) to hold two welding torches (110). The method (100) includes adjusting the pitch distance between the two welding torches (110). The method (100) also includes depositing welding wires of two different materials in a layer-by-layer manner to achieve desired chemical composition. The method (100) also includes optimizing the mechanical and material properties of the fabricated functionally graded material (114) by systematically varying the pitch distance while maintaining consistent deposition rates. The method (100) also includes integrating a controller (106) to interface with the wire arc additive manufacturing machine (102) and welding machines to regulate the deposition process (112). The method (100) also includes utilizing software or human-machine interface (HMI) (108) for precise layer-by-layer deposition.

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :25/07/2024

(21) Application No.202441056565 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : DESIGN, DEVELOPMENT, AND CLINICAL APPLICATIONS OF PHARMACEUTICAL NANOCARRIERS

(51) International classification	:A61K0009510000, A61K0009500000, A61K0009127000, B82Y0005000000, A61K0031337000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr. Vakkalagadda Ravi Kumar

Address of Applicant :Professor, School of Pharmacy, Guru Nanak Institutions Technical Campus, Khanapur, Rangareddy, Hyderabad, Telangana, Pin code: 501506 ---------- ----------

2)Miss. S. Sreelakshmi

3)Mr. Amaresh

4)Mr. Kachare Namdev Eknath

5)Miss. Pratibha Gautam

6)Mr. Ashish Anand

7)Mr. Kunal

8)Dr. Jeevanandham Somasundaram

9)Dr. Basu Venkateswara Reddy

10)Mr. Ankur Agrawal

11)Dr. Shivani Singh

12)Mr. Ankit Anchliya

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. Vakkalagadda Ravi Kumar

Address of Applicant :Professor, School of Pharmacy, Guru Nanak Institutions Technical Campus, Khanapur, Rangareddy, Hyderabad, Telangana, Pin code: 501506 ---------- ----------

2)Miss. S. Sreelakshmi

Address of Applicant :Assistant Professor, Swami Vivekananda Institute of Pharmacy, Swami Vivekananda Campus, Narayanpura Highway, Towards Kessarhatti Road, Lingasugur, Raichur, Karnataka, Pin Code: 584122 ---------- ----------

3)Mr. Amaresh

Address of Applicant :Assistant Professor, Swami Vivekananda Institute of Pharmacy, Swami Vivekananda Campus, Narayanpura Highway, Towards Kessarhatti Road, Lingasugur, Raichur, Karnataka, Pin Code: 584122 ---------- ----------

4)Mr. Kachare Namdev Eknath

Address of Applicant :Associate professor, Shri Sai Janvikas Pratisthans, Shri Sai College of pharmacy, Khandala, Vaijapur, Chhatrapati Sambhajinagar, Maharashtra, Pin Code: 431003. ---------- ----------

5)Miss. Pratibha Gautam

Address of Applicant :Assistant Professor, Seth Vishambhar Nath Institute of Pharmaceutical Sciences, Khajur Gao, Deva Road, Barabanki, Uttar Pradesh. Pin code: 225003 ---------- ----------

6)Mr. Ashish Anand

Address of Applicant :Associate Professor, Krishak College of Pharmacy, Rajgarh, Mirzapur, Uttar Pradesh, Pin Code:231210 ---------- ----------

7)Mr. Kunal

Address of Applicant :Student, R.P. Educational Trust Group of Institutions (Bastara), Karnal, Haryana, Pincode: 132114 ---------- ----------

8)Dr. Jeevanandham Somasundaram

Address of Applicant :Principal and Professor Sree Abirami College of Pharmacy, (affiliated with The Tamil Nadu Dr.M.G.R. Medical University, Chennai), Seerapalayam, Eachanari, Coimbatore, Tamil Nadu, Pin Code: 641 021 ---------- ----------

9)Dr. Basu Venkateswara Reddy

Address of Applicant :Professor and Head, Department of Pharmaceutics, Sri K. V. College of Pharmacy, M.G. Road, Chikkaballapura, Karnataka, Pin Code:562101. ---------- ----------

10)Mr. Ankur Agrawal

Address of Applicant :Associate Professor, Jai Institute of Pharmaceutical Sciences and Research, Gwalior, Madhya Pradesh, Pincode: 474001 ---------- ----------

11)Dr. Shivani Singh

Address of Applicant :Director, Dev Kumari Raja Ram (DKRR) Institute of Pharmacy, Sitapur , Uttar Pradesh, Pin code: 261303 ---------- ----------

12)Mr. Ankit Anchliya

Address of Applicant :Associate Professor, Department of Pharmacy, Quantum University, Rorkee, Uttarakhand, Pin Code: 825301 ---------- ----------

(57) Abstract :

The present invention relates to the design, development, and clinical applications of advanced pharmaceutical nanocarriers aimed at enhancing drug delivery. These nanocarriers, including liposomes, polymeric nanoparticles, dendrimers, and inorganic nanoparticles, are engineered to improve drug solubility, provide controlled release, and achieve targeted delivery to specific tissues or cells, thereby minimizing side effects and enhancing therapeutic efficacy. The surface of these nanocarriers is modified with ligands for precise targeting. Applications span oncology, infectious diseases, chronic conditions, and gene therapy, promising to transform modern medicine by improving patient outcomes and reducing adverse effects. This innovative approach addresses the limitations of conventional drug formulations, offering a versatile and effective solution for a wide range of therapeutic needs.

No. of Pages : 13 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024
(21) Application No.202441056567 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : COMPREHENSIVE SYSTEM AND METHOD FOR ASSESSING AND INFLUENCING CONSUMER ATTITUDES TOWARDS ELECTRONIC WASTE MANAGEMENT IN INDIA

(51) International classification :C22B0007000000, C22B0003020000, G06Q0030020000, G06N0020000000, G06Q0010060000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. A Sivagami
Address of Applicant :Associate Professor, Department of Social Work, Bharathidasan University, Khajamalai Campus, Tiruchirappalli, Pin : 620 023 ---------- ----------
2)Dr. G Arun Senthil Ram
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. A Sivagami
Address of Applicant :Associate Professor, Department of Social Work, Bharathidasan University, Khajamalai Campus, Tiruchirappalli, Pin : 620 023 ---------- ----------
2)Dr. G Arun Senthil Ram
Address of Applicant :Environment and Rights Activist, No.12 Amman Nagar, Near Kailash Nagar, Tiruchirappalli, Pin : 620 019 ---------- ----------

(57) Abstract :
The study investigates e-waste recycling behaviors in India using regression analysis, aiming to understand and influence the actions of consumers, recyclers, and policymakers toward more sustainable e-waste management. It reviews existing literature on recycling behaviors, regulatory frameworks, and stakeholder roles to develop effective strategies for e-waste management. By applying the Theory of Planned Behavior and the Waste Management Hierarchy, the study explores motivations and obstacles associated with e-waste recycling. Utilizing a mixed-methods approach that includes structured questionnaires and semi-structured interviews, the research evaluates how knowledge and awareness, environmental concern, government policies, recycling challenges, collection preferences, disposal practices, and technological changes impact recycling behaviors. The findings identify key predictors of recycling behavior, supporting the idea that increased knowledge, environmental concern, policy awareness, and technological advancements positively affect e-waste recycling. The study also highlights challenges and preferences that need to be addressed to enhance recycling rates. In conclusion, the study offers recommendations to improve e-waste management practices in India, emphasizing the importance of raising awareness, strengthening policies, fostering technological innovation, and overcoming recycling challenges to achieve better environmental outcomes and sustainable e-waste management. Accompanied Drawing [FIG. 1] [FIG. 2] [FIG. 3]

No. of Pages : 23 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024

(21) Application No.202441056572 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SMART VEHICLE MONITORING SYSTEM

(51) International classification	:B60Q0001140000, G08G0001160000, G16H0050200000, G16H0040670000, A61B0005000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Isaac Kathir
Address of Applicant :Professor, EEE department, V.S.B. Engineering College ---------- ----------
2)Dr. P. Venkatesan
3)D. Pushpalatha
4)Dr.Alagarasan
5)P.Parathraju
6)Dr.B.Senthil kumar
7)R.VAIBHAVI
8)G.VARSHINI
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Isaac Kathir
Address of Applicant :Professor, EEE department, V.S.B. Engineering College ---------- ----------
2)Dr. P. Venkatesan
Address of Applicant :Associate Professor, Department of Electrical and Electronics Engineering, Mahendra Institute of Technology Salem Salem ---------- ----------
3)D. Pushpalatha
Address of Applicant :Assistant professor, Department of Electrical and Electronics Engineering, M. kumarasamy college of Engineering, Karur Karur ---------- ----------
4)Dr.Alagarasan
Address of Applicant :Associate professor Department of Electrical and Electronics Engineering Annapoorana Engineering College Salem Salem ---------- ----------
5)P.Parathraju
Address of Applicant :Assistant Professor Department of Electrical and Electronics Engineering Mahendra Engineering College(Autonomous) Salem Salem ---------- ----------
6)Dr.B.Senthil kumar
Address of Applicant :EEE department, V.S.B. Engineering College, Karur-639111 Karur ---------- ----------
7)R.VAIBHAVI
Address of Applicant :EEE department, V.S.B. Engineering College, Karur-639111 Karur ---------- ----------
8)G.VARSHINI
Address of Applicant :EEE department, V.S.B. Engineering College, Karur-639111 Karur ---------- ----------

(57) Abstract :
Now-a-days, the advancement of technology has led to the integration of smart systems into various aspects of our daily lives, including transportation. In this paper, we propose a Smart Vehicle Monitoring System (SVMS) designed to enhance driving safety and comfort through the implementation of automatic headlight dim and bright control. The SVMS utilizes a combination of sensors, including ambient light sensors, proximity sensors, and image sensors, to continuously monitor the surrounding environment and detect various factors such as oncoming vehicles, ambient lighting conditions, and road obstacles. This real-time data is processed using artificial intelligence algorithms to make informed decisions regarding headlight brightness levels. One of the key features of the SVMS is its ability to automatically adjust the brightness of the vehicle's headlights based on the detected conditions. When the system identifies oncoming vehicles or detects well-lit environments, it dims the headlights to prevent glare and reduce driver distraction.Conversely, in low-light conditions or when no other vehicles are present, the system brightens the headlights to improve visibility and ensure safety.

No. of Pages : 10 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024

(21) Application No.202441056573 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTOMATED STAND EXTENSION MECHANISM

(51) International classification	:B62H0001020000, A63B0022060000, F16M0011420000, A01K0097100000, A01M0031020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)PRASAD V. POTLURI SIDDHARTHA INSTITUTE OF TECHNOLOGY
Address of Applicant :KANURU, VIJAYAWADA, KRISHNA DISTRICT, ANDHRA PRADESH, INDIA-520007 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. K. SRIVIDYA
Address of Applicant :Department of Mechanical Engineering, PVP Siddhartha Institute of Technology, Kanuru,ANDHRA PRADESH, INDIA-520007 ---------- ----------
2)Dr. B. RAGHU KUMAR
Address of Applicant :Department of Mechanical Engineering, PVP Siddhartha Institute of Technology, Kanuru,ANDHRA PRADESH, INDIA-520007 ---------- ----------
3)GORTHI PRUDHVI
Address of Applicant :Department of Mechanical Engineering, PVP Siddhartha Institute of Technology, Kanuru,ANDHRA PRADESH, INDIA-520007 ---------- ----------
4)S. MANI PRADEEP KUMAR
Address of Applicant :Department of Mechanical Engineering, PVP Siddhartha Institute of Technology, Kanuru,ANDHRA PRADESH, INDIA-520007 ---------- ----------
5)K. BHASKAR RAO
Address of Applicant :Department of Mechanical Engineering, PVP Siddhartha Institute of Technology, Kanuru,ANDHRA PRADESH, INDIA-520007 ---------- ----------
6)T. KANAKA DURGA PAVAN
Address of Applicant :Department of Mechanical Engineering, PVP Siddhartha Institute of Technology, Kanuru,ANDHRA PRADESH, INDIA-520007 ---------- ----------

(57) Abstract :
ABSTRACT Two wheelers are most prone to accidents due to their fragile nature or more imbalance able one. One of the issues of motorbike accidents is that people forget to slide their side stands back in place on starting the bike. So here we .propose,an automated side stand'slider system that will automatically slide the side stand back in position when user starts his/her bike. In this system e make a demonstration model with a demo starter for bike and a frame, used to hold starter, demo bike and side stand in position. The frame is used to mount bile upright using frame. The starter consists of a microcontroller circuit used to monitor the starter and then operate the stand sliding mechanism. The stand consists of a motorized system used to operate the stand. The circuit monitors the starter, on starting the bike the side stand is operated by the motor using a shaft to slide from a vertical position to a horizontal position. On turning off the key in other direction to lock bike the. system moves the motorized stand shaft in opposite direction so as to move the stand in a direction perpendicular to the bottom frame rod which rests the motor bike on side stand. Thus, we have a fully automated side stand system for motor bikes.

No. of Pages : 10 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :25/07/2024

(21) Application No.202441056583 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : WIRELESS CHARGERS FOR AUTOMOBILES WHILE DRIVING

(51) International classification :B60L53/51, B60L53/53, B60L50/60, B60L53/12, H02J50/10, H02J7/35, H01M10/46

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Sai Vidya Institute of Technology
Address of Applicant :Sai Vidya Institute of Technolgy, Rajanukunte, Bengaluru – 64 Bengaluru ----------
2)Dr. A M Padma Reddy
3)Dr. M S Ganesha Prasad
4)Dr. Vani B P
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Vani B P
Address of Applicant :Department of ECE, Sai Vidya Institute of Technology, Rajanukunte, Benagaluru-560064 Bengaluru ---------- ----------
2)Dr. Y Jayasimha
Address of Applicant :Department of ECE, Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064 Bengaluru ---------- ----------
3)Dr. Venkatesha M
Address of Applicant :Department of ECE, Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064 Bengaluru ---------- ----------
4)Dr. Chaya B M
Address of Applicant :Department of ECE, Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064 Bengaluru ---------- ----------
5)Dr. Pavithra G S
Address of Applicant :Department of ECE, Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064 Bengaluru ---------- ----------
6)Dr. Suryanarayana N K
Address of Applicant :Department of ECE, Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064 Bengaluru ---------- ----------
7)Prof. Nayana K
Address of Applicant :Department of ECE, Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064 Bengaluru ---------- ----------
8)Prof. Darshan R V
Address of Applicant :Department of ECE, Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064 Bengaluru ---------- ----------
9)Prof. Prabha K
Address of Applicant :Department of ECE, Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064 Bengaluru ---------- ----------
10)Prof. Akshith Monnappa K
Address of Applicant :Department of ECE, Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064 Bengaluru ---------- ----------
11)Prof. Advaith P R
Address of Applicant :Department of ECE, Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064 Bengaluru ---------- ----------
12)Prof. Nagayya S Hiremath
Address of Applicant :Department of ECE, Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064 Bengaluru ---------- ----------
13)Prof. Divya T M
Address of Applicant :Department of ECE, Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064 Bengaluru ---------- ----------
14)Prof. Tejashree S
Address of Applicant :Department of ECE, Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064 Bengaluru ---------- ----------
15)Prof. N Ajay Kumar
Address of Applicant :Department of ECE, Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064 Bengaluru ---------- ----------
16)Prof. Manjuvani K M
Address of Applicant :Department of ECE, Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064 Bengaluru ---------- ----------
17)Prof. Shashank S Bhagwat
Address of Applicant :Department of ECE, Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064 Bengaluru ---------- ----------
18)Prof. Shruthi N
Address of Applicant :Department of ECE, Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064 Bengaluru ---------- ----------
19)Prof. Nisha S K
Address of Applicant :Department of ECE, Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064 Bengaluru ---------- ----------
20)Prof. Kalyani K
Address of Applicant :Department of ECE, Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064 Bengaluru ---------- ----------
21)Prof. Amulya H G
Address of Applicant :Department of ECE, Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064 Bengaluru ---------- ----------
22)Prof. Soumya L N
Address of Applicant :Department of ECE, Sai Vidya Institute of Technology, Rajanukunte, Bengaluru-560064 Bengaluru ---------- ----------

(57) Abstract :
The number of electric cars on the road today is steadily increasing. Electric cars have shown to be effective in reducing transportation expenses by switching out expensive gasoline with much more economical electricity, in addition to being better for the environment. The proposed study outlines the design of a solar-powered mechanism for recharging electric vehicles, which addresses the major problems of fuel and pollution. An infrastructure for recharging electric cars is developed so as to find a practical answer to the charging issue. The suggested EV charging system operates entirely on solar power, thus there is no need of an external power source and there is no need to stop the car while it is charging. The components that utilized are solar panel, battery, transformer, regulator circuits, copper coils, and an AC to DC converter. in the system's development. The method shows how electric cars may be charged while driving, doing away with the requirement to pull over for recharging. As a result, the technology shows how an electric car wireless charging system powered by solar energy may be incorporated into the road.

No. of Pages : 10 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024

(21) Application No.202441056586 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : RETRIEVAL OF CLAY FROM WASTE FOUNDRY SAND FOR PRODUCTION OF GEOPOLYMER MORTAR

(51) International classification :C04B0028000000, C04B0033132000, C04B0038000000, C04B0111000000, C08G0008040000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)PSG Institute of Technology and Applied Research
Address of Applicant :The Principal, PSG Institute of Technology and Applied Research Avinashi Road, Neelambur, Coimbatore, Tamilnadu, India, Pin code-641062. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr. Kannadasan Kavikumaran
Address of Applicant :304, PSG staff quarters, Neelambur, Coimbatore, Tamilnadu, India, Pin code-641 062. ---------- ----------
2)Ms. Srinivasan Deepasree
Address of Applicant :14/8, Lakshmi Nagar, Cheran maa Nagar, Coimbatore, Tamilnadu, India, Pin code-641 048. ---------- ----------
3)Dr. Murugesan Arun
Address of Applicant :2/8, Mandapam Street, Alavaipatty & Post, Rasipuram, Namakkal, Tamilnadu, India, Pin code-637 505. ---------- ----------
4)Dr, Jaisankar Karthick
Address of Applicant :61, Vinayakar kovil, Velayuthapuram, Aruppukottai, Tamilnadu, India, Pin code-626101. ---------- ----------
5)Dr. Mohamed Ismail Abdul Aleem
Address of Applicant :2/130, Udhaya Nagar, Ganapathy, Coimbatore, Tamilnadu, India, Pin code-641006. ---------- ----------
6)Dr. MuthukaruppanAlagar
Address of Applicant :Plot 66, 5th Main road, Swaminathanagar, Kottivakkam, Chennai, Tamilnadu, India, Pin code- 600041. ---------- ----------

(57) Abstract :
6. Abstract of the invention: Title: Retrieval of clay from waste foundry sand for production of geopolymer mortar The present invention relates to assess the suitability of retrieved clay from waste foundry sand for the development of geopolymer mortar. The retrieved clay from waste foundry sand with yield of-3wt% was used for the development and the properties obtained were compared with those of sourced virgin bentonite clay. Four different clay (virgin bentonite and retrieved) products were formulated by unactivated and activated, viz., BCUA, BC-A, RC-UA and RC-A and their properties were assessed and compared. The residual mass of the retrieved clay was higher than that of virgin bentonite clay when calcined atl200°C was found to be 95.21%. The density of the developed geopolymer mortar RC-UA possesses the lightweight with the compressive strength and flexural strength of 39.60MPa and 4.52MPa respectively. RC-UA possesses the highest formation of ordered crystallinity of 34.40%. The mortar developed using retrieved clay (RC-UA) exhibits better properties with higher cross-link density than those of virgin bentonite clay based geopolymer mortar. The present invention is considered as cutting-edge concept in the field of industrial waste utilization and effective method of solid waste management.

No. of Pages : 14 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024

(21) Application No.202441056602 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : APPARATUS AND METHOD FOR MEASURING HUMAN ANTHROPOMETRIC PARAMETERS

(51) International classification	:A61B0005000000, A61B0005010000, A61B0005107000, B60N0002020000, A47C0031120000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)PSG COLLEGE OF TECHNOLOGY
Address of Applicant :THE PRINCIPAL, PSG COLLEGE OF TECHNOLOGY, AVINASHI ROAD, PEELAMEDU, COIMBATORE-641004, TAMIL NADU, INDIA. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)G. Madhan Mohan
Address of Applicant :Professor, Department of Production Street Engineering, PSG College of Technology, Coimbatore-641004,Tamil Nadu, India ---------- ---------- ----------
2)C. Vigneswaran
Address of Applicant :Assistant Professor, Department of Production Street Engineering, PSG College of Technology, Coimbatore-641004,Tamil Nadu, India ---------- ----------
3)Mohanraj Ramasamy
Address of Applicant :Assistant Professor, Department of Production Street Engineering, PSG College of Technology, Coimbatore-641004,Tamil Nadu, India ---------- ----------
4)Arjun N
Address of Applicant :No 232, 23"' cross street, Nagathamman Nagar, City Pothur, Chennai-600052,Tamil Nadu, India ---------- ----------
5)Kishore N
Address of Applicant :13 7 A, Kuttikat Apartments, Harmony Lane, Vylopilly Lane,Kaloor, Kochi-682017. ---------- ----------
6)Prasannaa Ezhilan V G
Address of Applicant :Mariamankovi I street,papanapattu,Villupuram taluk, Villupuram-605601,Tamil Nadu, India. ---------- ----------
7)Vigneshwaran M
Address of Applicant :10/21,Sengodagoundanpudur,Arasur Post, Sulur via, Coimbatore- 641407,Tamil Nadu, India. ---------- ----------

(57) Abstract :
Ergonomists and anthropometrists use different manual anthropometric tools 10 to measure, collect and record anthropometric data. This is the traditional approach where the ergonomists will use different anthropometers to collect the required data from the human. This traditional approach is time consuming as the trained professional has to use multiple anthropometers and due to the human intervention, the subject might be uncomfortable due to privacy of sharing his/her body 15 information and also the human body is sensitive to touch. The traditional approach is not suggestable for collecting anthropometric data from a large population. The fatigue experienced by the trained professionals due to the collection of data from multiple subjects might lead to human error while performing the data collection process, the proposed apparatus and method for measuring human anthropometric 20 parameters plays a major role in collecting the anthropometric data and recording the data in a short time and without human intervention or supervision of trained professionals. The subject just needs to stand on the apparatus then with the foot gesture from the subject, the apparatus will automatically start the collection of anthropometric data one after the other. The proposed apparatus and method for 25 measuring the human anthropometric parameters/data will record the collected data, these data are calculated by different sensors and onboard microprocessors. The proposed apparatus streamlines the process of the collection of anthropometric parameters.

No. of Pages : 16 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024
(21) Application No.202441056639 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A METHOD FOR FORMULATING A LEAST-COST FEED RATION FOR A PREGNANT DAIRY COW

(51) International classification :G06N0003120000, A23K0050100000, G06Q0010060000, A23K0010300000, H04L0045120000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Nitte Meenakshi Institute of Technology
Address of Applicant :P.B.No.6429. Yelahanka-Bangalore 560064. Karnataka, India. Bengaluru Urban ---------- ----------
2)Dr. Ravinder Singh Kuntal
3)Dr Pramod Kumar Naik
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Ravinder Singh Kuntal
Address of Applicant :Associate Professor Mathematics Department Nitte Meenakshi Institute of Technology Bengaluru Urban ---------- ----------
2)Dr Pramod Kumar Naik
Address of Applicant :Associate Professor Dayananda Sagar University-Bangalore Bangalore Urban ---------- ----------

(57) Abstract :
The present invention relates to a method for formulating least-cost feed rations for pregnant dairy cows using a real-coded genetic algorithm (RGA). The approach determines nutrient requirements based on the cow's characteristics and pregnancy stage, selects regional feedstuffs, and defines nutritional constraints. A linear programming model minimizes feed costs while meeting these constraints. The RGA, utilizing real-number encoding and genetic operators, solves this model to generate optimal feed rations. The method also incorporates goal programming to address linear programming limitations, employing a hybrid RGA function to refine the feed mix further. Results demonstrate the RGA's effectiveness in creating cost-efficient, nutritionally balanced rations for different pregnancy stages. The study emphasizes the importance of considering implementation constraints when developing practical feed formulation software. This approach offers farmers a valuable tool for optimizing dairy cow nutrition while managing costs efficiently.

No. of Pages : 28 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024
(21) Application No.202441056649 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A METHOD FOR THE SYNTHESIS OF CARBON QUANTUM DOTS AND USE THEREOF

(51) International classification :B82Y0040000000, B82Y0030000000, C09K0011650000, B82Y0020000000, C02F0001300000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Manipal Academy of Higher Education
Address of Applicant :Madhav Nagar, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)COLIN VARGHESE
Address of Applicant :M.Sc (Molecular Biology and Human Genetics), Department of Plant Sciences, Manipal School of Life Sciences, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
2)REVATHI T
Address of Applicant :Dr TMA Pai PhD Scholar, Department of Plant Sciences, Manipal School of Life Sciences, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
3)VIDHU SANKAR BABU
Address of Applicant :Additional Professor, Department of Plant Sciences, Manipal School of Life Sciences, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------

(57) Abstract :
The present invention relates to the field of nanomaterials. Particularly, the present invention relates to a method for the synthesis of carbon quantum dots (CQDs) from citric acid and urea. Also, the method for the synthesis of carbon quantum dots (CQDs) has eco-friendly, cost-effective chemicals, minimizing toxicity and waste generation, while maintaining functional efficacy of CQDs. The synthesized carbon quantum dots (CQDs) have application in the field of plant bio imaging and genetic studies.

No. of Pages : 26 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024
(21) Application No.202441056650 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM TO HAVE ADAPTIVE CRUISE CONTROL FOR VEHICLES

(51) International classification :B60W0030160000, B60W0030140000, B60W0050000000, H04W0072080000, F02B0003060000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VIT-AP University
Address of Applicant :Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)UPPARA NITHIN
Address of Applicant :Student, School of Computer Science and Engineering, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
2)I. RAKSHITHA
Address of Applicant :Student, School of Computer Science and Engineering, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
3)BANDA SAATHVIK
Address of Applicant :Student, School of Computer Science and Engineering, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
4)S P SIDDIQUE IBRAHIM
Address of Applicant :Assistant Professor, School of Computer Science and Engineering, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
5)S. SELVA KUMAR
Address of Applicant :Assistant Professor Sr. Grade-1, School of Computer Science and Engineering, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
6)GOKULNATH BV
Address of Applicant :Assistant Professor Sr. Grade-1, School of Computer Science and Engineering, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------

(57) Abstract :
A system 100 and method for an adaptive cruise control for a vehicle can include a plurality of sensors 150 configured with the vehicle in a network 120; and a on board controller 102 operatively coupled to a plurality of actuators 104 of the vehicle. The on board controller 102 receives a plurality of signals from one or more modules, and in case predefined parameters deviates, generates control commands to actuates at least one actuator 104 to alter the concerned parameter of the vehicle to continue with the adaptive cruise control. The plurality of sensors 150 comprises one or more camera sensors 150-A, radar 150-B, a plurality of speed sensors 150-C. The on board controller 102 receives current metrological data 110, historical data 112, GPS 106, and GSM 108 to receive data and communicate with a smartphone 114 to transmit command for actuators for the adaptive cruise control for the vehicle.

No. of Pages : 17 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024
(21) Application No.202441056652 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR ENHANCING SECURITY OF DIGITAL DOCUMENT EXCHANGE

(51) International classification	:G06F0021640000, H04L0009320000, H04L0009080000, G06F0021570000, H04N0001320000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)VELLORE INSTITUTE OF TECHNOLOGY, CHENNAI
Address of Applicant :Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)PRIYANKA MISHRA
Address of Applicant :Research Scholar, School of Computer Science and Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
2)GANESAN R
Address of Applicant :Professor, School of Computer Science and Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------

(57) Abstract :
A system (102) and method (600) for enhancing security of digital document exchange is provided. The system (102) integrates blockchain technology to prevent shadow attacks in digital document exchange between government agencies. The system (102) enhances security by recording the original structure of PDF documents on a blockchain network (108), ensuring their integrity throughout the exchange process. By leveraging blockchain, the system (102) detects and prevents shadow attacks, where malicious content is hidden within PDF objects and revealed after the document is signed. The system (102) enhances the security and integrity of e-governance document exchanges, promoting transparency, reducing vulnerabilities, and ensuring compliance with regulatory requirements.

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024
(21) Application No.202441056681 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A FOLDED BROADBAND OPTICAL RESONATOR SPECTROMETER FOR TRACE GAS DETECTION WITH HIGH SENSITIVITY AND METHOD THEREOF

(51) International classification :G01N21/17, G01N33/00, G01J3/02, G01J3/28
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)National Institute of Technology Calicut
Address of Applicant :NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. M. K. Ravi Varma
Address of Applicant :Professor, Department of Physics, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
2)Salma Jose
Address of Applicant :Ph.D. Scholar, Department of Physics, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
3)Keerthana V. A
Address of Applicant :M.Sc. Student, Department of Physics, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
4)Adithya Danaj
Address of Applicant :B.Tech Student, Department of Physics, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------

(57) Abstract :
ABSTRACT: Title: A Folded Broadband Optical Resonator Spectrometer for Trace Gas Detection with High Sensitivity and Method Thereof The present disclosure proposes a folded broadband optical resonator spectrometer (100) for high-sensitivity detection and quantification of trace gases and aerosols in atmospheric monitoring applications. The folded broadband optical resonator spectrometer (100) comprises a light source (102), a resonator system (108), a sampling chamber (112), a band-pass filter (114), an optical fiber holder (116), and a CCD array detector (CCDAD) (120). The folded broadband optical resonator spectrometer (100) utilizes high-reflectivity mirrors to reduce light absorption and scattering, thereby allowing for more light-sample interactions and improved detection of trace gases. The folded broadband optical resonator spectrometer (100) is compact and portable compared to traditional CEAS systems, thereby facilitating field-deployable measurements and real-time monitoring of air quality in various environments.

No. of Pages : 22 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024
(21) Application No.202441056682 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : LED-BASED SPHERICAL INTEGRATING NEPHELOMETER WITH MINIMIZED TRUNCATION ERROR FOR AEROSOL LIGHT SCATTERING MEASUREMENTS AND METHOD THEREOF

(51) International classification :G01N21/47, G01J1/16, G01N21/01
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number:NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)National Institute of Technology Calicut
Address of Applicant :NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. M. K. Ravi Varma
Address of Applicant :Professor, Department of Physics, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
2)Salma Jose
Address of Applicant :Ph.D. Scholar, Department of Physics, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
3)Sarath C J
Address of Applicant :M.Sc. Physics Student, Department of Physics, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
4)Abijith K Reju
Address of Applicant :B-Tech Engineering Physics Student, Department of Physics, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------

(57) Abstract :
ABSTRACT: Title: LED-Based Spherical Integrating Nephelometer with Minimized Truncation Error for Aerosol Light Scattering Measurements and Method Thereof The present disclosure proposes an LED-based spherical integrating nephelometer that determines aerosol light scattering coefficients across a wide spectrum covering, but not limited to, 380 nm – 700 nm while minimizing truncation errors. The LED-based spherical integrating nephelometer (100) comprises a pair of inlets (106A, 106B), an outlet (108), plurality of illuminating units (110) and an optical fiber (112). The proposed LED-based spherical integrating nephelometer (100) measures scattering coefficients accurately within an angular range of 0.65 to 179.61 degrees. The proposed LED-based spherical integrating nephelometer (100) having a spherical structure 104 is coated with a high reflecting member i.e., a high-reflectance barium sulfate polyvinyl alcohol coating for enhancing light intensity in sample volume, thereby improving measurement sensitivity.

No. of Pages : 24 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024
(21) Application No.202441056683 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : FABRICATION OF PIEZORESISTIVE SENSORS USING PYROLYZED COCONUT FIBER AND METHOD THEREOF

(51) International classification	:G01L0001180000, A61B0005000000, C08K0003040000, B82Y0030000000, G01N0033000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)National Institute of Technology Calicut
Address of Applicant :NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Calicut ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. C. N. Shyam Kumar
Address of Applicant :Associate Professor, Department of Materials Science and Engineering, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode 673601, India. Calicut ---------- ----------
2)Mohammed Mudassir
Address of Applicant :2-137, Mubarak Manzil, Belma Renjady, Derlakatte, Mangalore- 575018, Karnataka, India. Mangalore ---------- ----------
3)Bushair Ali. K
Address of Applicant :Kudumbikkal(HO), Morayur(PO), Malappuram-673642, Kerala, India. Malappuram ---------- ----------

(57) Abstract :
ABSTRACT: Title: Fabrication of Piezoresistive Sensors Using Pyrolyzed Coconut Fiber and Method Thereof The present disclosure proposes a method for fabricating a piezoresistive sensor (100) using pyrolysis coconut fiber that leverages the tunable piezoresistive properties achieved by varying pyrolysis temperatures, thereby providing an environmentally friendly alternative by utilizing renewable materials. The method provides a cost-effective alternative to conventional sensor materials by utilizing low-cost coconut fiber and implementing a streamlined pyrolysis process for carbon fiber production. The method produces piezoresistive sensors with enhanced mechanical strength, electrical conductivity, and durability, suitable for diverse applications ranging from wearable technology to structural health monitoring. The method enables the integration of carbonized coconut fiber sensors into flexible substrates and diverse sensor designs, facilitating applications in flexible electronics, automotive sensors, biomedical devices, and environmental monitoring systems.

No. of Pages : 24 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :25/07/2024

(21) Application No.202441056714 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : A FLOATING TABLET COMPOSITION OF LAFUTIDINE FOR PROLONGED GASTRIC RETENTION AND CONTROLLED DRUG RELEASE

(51) International classification	:A61K0009000000, A61K0009200000, A61K0047320000, A61K0009280000, A61K0047380000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr. Allagadda Rekha Devi

Address of Applicant :Associate Professor, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati – 517561, Andhra Pradesh, India. Tirupati ---------- ----------

2)Bandi Ajay Kumar

3)Mallikarjuna Gandla

4)Dr. Mudduluru Niranjan Babu

5)Vadamala Prudhvi Raj

6)Dr. Hari Veluru

7)Gandupally Naveen Kumar

8)Dr. Dommaraju R. Aruna Kumari

9)Vuppalapati Aswini

10)Matam Thanusree

11)Ponna M Ramyasri

12)Kuruba Jagadish

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. Allagadda Rekha Devi

Address of Applicant :Associate Professor, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati – 517561, Andhra Pradesh, India. Tirupati ---------- ----------

2)Bandi Ajay Kumar

Address of Applicant :Student, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------

3)Mallikarjuna Gandla

Address of Applicant :Associate Professor, Department of Pharmacology, Seven Hills College of Pharmacy, Tirupati – 517561, Andhra Pradesh. Tirupati ---------- ----------

4)Dr. Mudduluru Niranjan Babu

Address of Applicant :Principal and Professor, Department of Pharmacognosy, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------

5)Vadamala Prudhvi Raj

Address of Applicant :Associate Professor, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati – 517561, Andhra Pradesh, India. Tirupati ---------- ----------

6)Dr. Hari Veluru

Address of Applicant :Associate Professor, Department of Pharmacology, MBU School of Pharmaceutical Sciences, A. Rangampeta, Tirupati - 517102, Chandragiri Mandal, Andhra Pradesh, India. Tirupati ---------- ----------

7)Gandupally Naveen Kumar

Address of Applicant :Assistant Professor, Department of Pharmacology, Sri Venkateswara College of Pharmacy (Autonomous), RVS Nagar, Tirupati Road, Chittoor - 517127, Andhra Pradesh, India. Chittoor ---------- ----------

8)Dr. Dommaraju R. Aruna Kumari

Address of Applicant :Associate Professor, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------

9)Vuppalapati Aswini

Address of Applicant :Associate Professor, Department of Pharmaceutical Chemistry, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------

10)Matam Thanusree

Address of Applicant :Student, Department of Pharmaceutical Chemistry, Seven Hills College of Pharmacy, Tirupati – 517561, Andhra Pradesh, India. Tirupati ---------- ----------

11)Ponna M Ramyasri

Address of Applicant :Student, Department of Pharmaceutics, Seven Hills College of Pharmacy, Tirupati - 517561, Andhra Pradesh, India. Tirupati ---------- ----------

12)Kuruba Jagadish

Address of Applicant :Student, Mysore University, Mysore - 570001, Karnataka, India. Mysore ---------- ----------

(57) Abstract :

The present invention relates to a gastro-retentive floating tablet (102) composition of Lafutidine (104) designed to enhance gastric retention time and provide controlled drug release. The formulation comprises Lafutidine (104) as the active pharmaceutical ingredient, combined with excipients such as Carbopol 934 (106), Locust bean gum, Hydroxypropyl methylcellulose (HPMC) (108) K-100M, Polyvinylpyrrolidone (PVP) (110) K30, Sodium bicarbonate, Citric acid (112), Magnesium stearate, and Talc. The composition is prepared using a direct compression method. The inclusion of effervescent agents like Sodium bicarbonate and Citric acid (112) enables the tablet to float on the gastric fluid, thereby prolonging gastric retention. The tablet exhibits a floating lag time of less than 40 seconds and demonstrates a controlled release profile, adhering to both Zero-order kinetics and Higuchi release mechanism. Stability studies indicate that the tablet maintains its physical properties, drug content, floating capabilities, and dissolution profile under accelerated storage conditions. This gastro-retentive floating tablet (102) formulation of Lafutidine (104) offers a promising approach to improve the therapeutic efficacy and patient compliance in the treatment of gastric-related disorders.

No. of Pages : 21 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024
(21) Application No.202441056763 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DESIGN ADAPTIVE DEEP BELIEF NEURAL NETWORK FOR INTRUSION DETECTION IN FOG COMPUTING

(51) International classification	:G06N0003080000, G06N0003040000, G06N0020000000, H04L0067100000, G06F0021550000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Koneru Lakshmaiah Education Foundation
Address of Applicant :Koneru Lakshmaiah Education Foundation,Vaddeswaram, Guntur (DT) Pincode-522302. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr Ramaiah Challa
Address of Applicant :Koneru Lakshmaiah Education Foundation,Vaddeswaram, Guntur (DT) Pincode-522302. ---------- ----------
2)Dr Kiran Kumar Kothamasu
Address of Applicant :Koneru Lakshmaiah Education Foundation,Vaddeswaram, Guntur (DT) Pincode-522302. ---------- ----------

(57) Abstract :
DESIGN ADAPTIVE DEEP BELIEF NEURAL NETWORK FOR INTRUSION DETECTION IN FOG COMPUTING Fog computing, as an extension of cloud computing, brings data and computing resources closer to the edge of the network, enabling real-time processing and reducing latency. However, the decentralized nature of fog computing introduces significant security challenges, particularly intrusion detection. This paper proposes an adaptive deep belief neural network (DBNN) architecture tailored for intrusion detection in fog computing environments. The proposed system leverages the hierarchical learning capabilities of DBNNs to model complex data patterns and detect anomalous behaviors effectively. By incorporating adaptive learning mechanisms, the system can dynamically adjust its parameters in response to evolving network threats, ensuring robust performance over time. The architecture consists of multiple stacked restricted Boltzmann machines (RBMs), which are pre-trained layer by layer and fine-tuned using backpropagation. This deep learning approach enables the extraction of high-level features from raw network data, enhancing the detection accuracy of various intrusion types. Experimental results demonstrate that the adaptive DBNN outperforms traditional machine learning models and static deep learning approaches in terms of detection rate and false alarm rate.

No. of Pages : 17 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024
(21) Application No.202441056766 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : REAL-TIME NETWORK ANOMALY DETECTION SYSTEM USING DEEP LEARNING TECHNIQUES

(51) International classification	:G06N0003040000, G06N0003080000, G06K0009620000, G06N0005040000, H04L0043040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)NMAM Institute of Technology (NITTE Deemed to be University)
Address of Applicant :NMAM Institute of Technology (NITTE Deemed to be University), Nitte, Karkala, Udupi District, Karnataka 574110, India ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Manjula Gururaj Rao
Address of Applicant :Associate Professor, Department of Information Science and Engineering, NMAM Institute of Technology (NITTE Deemed to be University), Nitte, Karkala, Udupi District, Karnataka 574110, India ---------- ----------

(57) Abstract :
The invention introduces a real-time network anomaly detection system that leverages deep learning techniques to enhance network security and performance. The system captures and preprocesses network traffic data, then applies advanced deep learning models—such as Convolutional Neural Networks (CNNs), Recurrent Neural Networks (RNNs), or Long Short-Term Memory (LSTM) networks—to identify deviations from normal network behavior. The system's anomaly detection engine generates alerts and actionable insights based on the detected anomalies, enabling rapid response to potential security threats or performance issues. By utilizing these deep learning techniques, the system provides a dynamic and adaptive approach to monitoring network traffic and safeguarding against evolving threats.
Accompanied Drawing [FIGS. 1-2]

No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024

(21) Application No.202441056768 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM AND METHOD FOR AI-BASED FRAUD DETECTION IN FINANCIAL TRANSACTIONS USING A DONGLE

(51) International classification	:G06Q0020400000, G06Q0020100000, G06Q0040000000, G06Q0040020000, G06Q0020380000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr.K.Natarajan
Address of Applicant :Assistant Professor, Dept. of Commerce, Vel Tech Ranga Sanku Arts College Avadi, No: 60, Alamathi Road, Avadi, Chennai 600062, Tamilnadu, India. ---------- ----------
2)Dr. K. Arumugam
3)Dr.Sivakumar. T
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.K.Natarajan
Address of Applicant :Assistant Professor, Dept. of Commerce, Vel Tech Ranga Sanku Arts College Avadi, No: 60, Alamathi Road, Avadi, Chennai 600062, Tamilnadu, India. ---------- ----------
2)Dr. K. Arumugam
Address of Applicant :Assistant Professor and HOD, Dept. of Commerce, Karnataka College of Management & Science, 33/2 Hegde Nagar, Thirumenahalli, Yelahanka Hobli, Karnataka, Bangalore 560064. ---------- ----------
3)Dr.Sivakumar. T
Address of Applicant :IQAC Director and HOD, Dept. of Computer Science, Karnataka College of Management & Science, 33/2 Hegde Nagar Thirumenahalli, Yelahanka Hobli, Karnataka, Bangalore 560064. ---------- ----------

(57) Abstract :
The invention presents a novel system and method for detecting fraud in financial transactions through an AI-enabled dongle. The system includes a dongle that connects to a computing device and contains embedded artificial intelligence algorithms for real-time analysis of financial transactions. Upon detection of anomalies or patterns indicative of fraudulent activities, the dongle generates alerts to notify users and/or financial institutions. This approach enhances transaction security by leveraging AI-driven insights for immediate fraud detection and response, offering a decentralized and user-friendly solution for safeguarding financial transactions against fraudulent activities. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 20 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/07/2024
(21) Application No.202441056770 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR EFFECTIVE ENERGY CONSERVATION IN THE RECYCLING PROCESS OF BY-PRODUCTS CONTAINING ZN AND FE

(51) International classification	:G06Q0010060000, G06Q0050060000, B01D0021000000, H04W0052020000, C22B0007000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)S.A.Engineering College
Address of Applicant :Poonamallee, Avadi Road, Veeraraghavapuram, Chennai, Tamil Nadu 600077 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.L.Umasankar
Address of Applicant :Associate Professor, Electrical and Electronics Engineering, S.A.Engineering College, Poonamalle, Avadi Road, Veeraraghavapuram, Thiruverkadu, Tamil Nadu, Chennai-600077 ---------- ----------
2)Dr.S.Bhuvaneswari
Address of Applicant :Associate Professor, Electrical and Electronics Engineering, S.A.Engineering College, Poonamalle, Avadi Road, Veeraraghavapuram, Thiruverkadu, Tamil Nadu, Chennai-600077 ---------- ----------

(57) Abstract :
The present invention discloses a system and method designed for efficient energy conservation during the recycling process of by-products containing zinc (Zn) and iron (Fe). Traditional recycling methods often entail high energy consumption, leading to increased operational costs and environmental impact. To address these challenges, our system integrates advanced technologies including multi-stage separation, energy-efficient smelting techniques, and real-time monitoring and control systems. The multi-stage separation unit employs mechanical, chemical, and thermal processes to separate Zn and Fe from other components, optimizing resource recovery. The energy-efficient smelting unit utilizes induction heating and a heat recovery system to minimize energy consumption during metal extraction. A real-time monitoring and control system continuously adjusts process parameters based on sensor data, ensuring optimal energy usage and operational efficiency. This innovation aims to significantly reduce energy costs and environmental footprint while enhancing the sustainability of recycling practices for by-products containing Zn and Fe.
Accompanied Drawing [FIGS. 1-2]

No. of Pages : 20 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024

(21) Application No.202441056771 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : HYBRID NANOCOMPOSITE SOLID POLYMER ELECTROLYTE FOR SOLID-STATE SODIUM-ION BATTERY

(51) International classification	:H01M0010054000, H01M0010056500, H01M0010052000, H01M0004020000, H01M0004620000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)ANJI REDDY POLU
Address of Applicant :BVRIT HYDERABAD College of Engineering for Women ---------- ----------
2)BVRIT HYDERABAD College of Engineering for Women
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Anji Reddy Polu
Address of Applicant :Materials for Energy Devices Lab, Department of Physics, BVRIT HYDERABAD College of Engineering for Women, Hyderabad-500090, Telangana, India Hyderabad ---------- ----------
2)Venkanna Mekala
Address of Applicant :Department of Physics, BVRIT HYDERABAD College of Engineering for Women, Hyderabad-500090, Telangana, India Hyderabad ---------- ----------
3)Shufeng Song
Address of Applicant :College of Aerospace Engineering, Chongqing University, Chongqing, 400044, China ---------- ----------
4)Aseel A. Kareem
Address of Applicant :Department of physics, College of Science, University of Baghdad, Baghdad, Iraq ---------- ----------
5)Pramod K. Singh
Address of Applicant :Center for Solar Cells and Renewable Energy, Sharda University, School of Basic Sciences and Research, Greater Noida, Uttar Pradesh 201306, India Greater Noida ---------- ----------
6)Serguei V. Savilov
Address of Applicant :Department of Chemistry, Lomonosov Moscow State University, 1–3 Leninskiye Gory, Moscow, 119991, Russia ---------- ----------
7)Hussein Kh. Rasheed
Address of Applicant :Department of physics, College of Science, University of Baghdad, Baghdad, Iraq ---------- ----------
8)Chava Sunil Kumar
Address of Applicant :Department of EEE, BVRIT HYDERABAD College of Engineering for Women, Hyderabad-500090, Telangana, India Hyderabad ---------- ----------

(57) Abstract :
This research explores the use of hybrid nanoparticles, specifically POSS-PEG13.3, to enhance the performance of 70PEO-30NaClO4 solid polymer electrolyte for sodium-ion batteries. The study found that incorporating POSS-PEG13.3 successfully disrupts the formation of crystals within the electrolyte, leading to significantly improved ionic conductivity. This improvement stems from the unique ability of POSS-PEG13.3 to increase the flexibility and mobility of the polymer chains, facilitating better ion transport. Furthermore, the addition of POSS-PEG13.3 strengthens the electrolyte, making it more durable and less prone to damage. These findings, supported by electrochemical tests, highlight the potential of POSS-PEG13.3 as a valuable additive for developing high-performance, stable, and robust solid polymer electrolytes for next-generation sodium-ion batteries.

No. of Pages : 12 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024

(21) Application No.202441056773 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : HIGH-PRECISION MULTI-SENSOR INSTRUMENT FOR ENVIRONMENTAL MONITORING

(51) International classification	:H02J0007000000, C25D0005560000, C25D0017080000, C25D0017000000, C02F0103160000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. T. Prem kumar
Address of Applicant :(Former Scientist, RISE, GIST, South Korea), S.N.College, Ganapathy Nagar, Madurai – 625022, Tamil Nadu, India Madurai ---------- ----------
2)Dr. V. Muhtupriyal
3)Jae-Hyung Jang
4)SJ Park
5)Kwang-hee Lee
6)Lee
7)Dr. Yonkil Jeong
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. T. Prem kumar
Address of Applicant :(Former Scientist, RISE, GIST, South Korea), S.N.College, Ganapathy Nagar, Madurai – 625022, Tamil Nadu, India Madurai ---------- ----------
2)Dr. V. Muhtupriyal
Address of Applicant :Scientist, Indian Institute Of Astrophysics, 100 Feet Rd, Santhosapuram, 2nd Block, Koramangala, Bengaluru - 560034, Karnataka, India Bengaluru ---------- ----------
3)Jae-Hyung Jang
Address of Applicant :Professor, KENTECH (Korea Institute of Energy Technology), 21 Kentech-gil, Naju-si, Jeollanam-do, 58330, Republic of Korea ---------- ----------
4)SJ Park
Address of Applicant :Professor, GIST, Gwangju Institute of Science and Technology, 123 Cheomdangwagi-ro, Buk-gu, Gwangju, South Korea ---------- ----------
5)Kwang-hee Lee
Address of Applicant :Professor, Heeger Center for Advanced Materials, RISE, GIST, South Korea ---------- ----------
6)Lee
Address of Applicant :Professor, ERTL Center for Electrochemistry, RISE, GIST, South Korea ---------- ----------
7)Dr. Yonkil Jeong
Address of Applicant :RISE, GIST, 123 Cheomdan-gwagiro (Oryong-dong), Buk-gu., Gwangju, South Korea ---------- ----------

(57) Abstract :
This novel method applicable for (a) Timing circuit based electro-magnet induced electroplating; (b) Multivibrator circuits based electro-magnet induced electroplating, (c) Wave generators based electro-magnet induced electroplating, (d) Thin film patterning, (e) Solar power based photon control oriented electro-magnet induced electroplating, (f) capacitor charging and discharging based electro-magnet induced electroplating.

No. of Pages : 11 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056774 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ENGINE OPERATED WALK-BEHIND VERTICAL ROTARY SINGLE ROW WEEDING EQUIPMENT FOR WET LAND PADDY CROP

(51) International classification	:A01B0039180000, A01G0022220000, A01B0039190000, A01G0022000000, A01C0021000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)SAVEETHA ENGINEERING COLLEGE
Address of Applicant :Thandalam, Chennai – 602105, Tamil Nadu, India Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. A. Tajuddin
Address of Applicant :Professor and Head, Department of Agricultural Engineering, Saveetha Engineering College, Thandalam, Chennai – 602105, Tamil Nadu, India Chennai ---------- ----------

(57) Abstract :
Rice is a staple food crop in India, typically cultivated two to three times annually. Due to water scarcity, rice is now often grown as a single crop. The rice crop requires three weedings per season, and mechanical weeding offers significant cost savings compared to manual weeding, potentially saving up to Rs.10,000 crore annually. Engine-operated single row and three row vertical rotary weeders were designed for wetland rice cultivation. CAD drawings were prepared, and the machines were priced at Rs.41,000 for the single row and Rs.59,000 for the three-row weeder. The effective field capacities were estimated at 0.016 ha/h and 0.048 ha/h, respectively. Operational costs were Rs.12,000/h for the single row and Rs.4100/h for the three-row weeder. Power requirements were 0.75 kW for the single row and 2.2 kW for the three-row weeder. The three row weeder can reduce weeding costs by up to 48.30% compared to manual methods.

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056775 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : COLORSORT MEDMANAGER

(51) International classification	:A61K0035583000, B07C0005342000, B07C0005360000, B07C0005020000, G06K0009620000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Address of Applicant :CEO Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 6238099690 ---------- ----------

(57) Abstract :
ABSTRACT In sectors like medicine, fruit and candy sorting, Color-Based Object Sorting technology is essential. It uses image processing to identify and group objects according to color. This technique is demonstrated by the system that is being given here, which uses three bins for sorting, an electrical circuit, and a camera. The Raspberry Pi, which powers the device, is linked to a controller circuit that controls the sorting procedure. This circuit includes a camera that records the color of things that are positioned in front of it. An automated feeder transports items into the camera's field of vision. Upon identifying the color, the sorting mechanism receives a signal from the system that positions a sorting tube in line with the corresponding bin. The object is then pushed into the appropriate bin by a feeder, enabling smooth processing of the following object. The system's connection with the IOTGecko platform, which monitors sorting operations in real-time, improves its usefulness. This link makes it possible to keep track of how many items are sorted into each bin, giving information that may be utilized to streamline and increase productivity. The Raspberry Pi, controller circuit, camera, motorized feeder, and sorting mechanism are the main parts of this setup. Every component serves a specific purpose: the camera takes high-quality images for accurate color detection; the Raspberry Pi processes images and manages operations; the controller circuit manages electrical signals and motor functions; and the motorized feeder and sorting mechanism ensures smooth movement and precise object sorting. Comparing this automatic sorting technique to manual ones, there are a lot of benefits. In contrast to automated sorting, which operates continually without tiredness and offers great accuracy, speed, and efficiency, manual sorting is labor-intensive, sluggish, and prone to errors. This improves performance and lowers operating expenses. In addition to color sorting, the system may be tailored to sort according to other parameters like size or form, which makes it adaptable for a range of uses like industrial quality control or recycling. To ensure dependable functioning, engineers and developers must collaborate on the design and integration of the components. This include calibrating the motors and feeds for exact movement and fine-tuning the camera's color detecting algorithms and resolution. Building a strong communication network is necessary for integrating with the IoT server in order to guarantee precise and timely data delivery. Real-time monitoring and optimization are made possible by the infrastructure for data management and analytics provided by the IOT Gecko platform. Color-Based Object Sorting systems will become much more capable as technology develops, with machine learning and artificial intelligence boosting image processing to achieve even more precise sorting. IoT platform integration will expand, offering real-time capabilities and sophisticated analytics. Color-Based Object Sorting technology stands as a transformative solution with far-reaching applications, particularly in the fruit and candy sorting industries. By harnessing the power of image processing, electronic circuitry, and IoT integration, this system provides a robust, efficient, and scalable method for automated sorting tasks. The use of platforms like IOT Gecko for real-time data tracking and analytics enhances the system's functionality, enabling continuous monitoring and optimization. This advancement not only improves sorting accuracy and speed but also cuts down operational costs and labor intensity, offering a competitive edge in industrial processes. Moreover, the system's adaptability to various sorting criteria beyond color, such as size and shape, opens up a wide range of applications across different industries, including recycling and manufacturing. As technology progresses, incorporating advanced artificial intelligence and machine learning algorithms will further refine sorting accuracy and efficiency, making these systems even more valuable. Ultimately, Color-Based Object Sorting represents a significant leap forward in automation technology. It highlights the potential of combining innovative technologies to create solutions that address complex industrial challenges, paving the way for future advancements and broader applications. This technology not only streamlines operations but also sets the stage for ongoing improvements and innovations in automated sorting systems.

No. of Pages : 8 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056776 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SMART UMBRELLA AUTOSHIELD

(51) International classification	:A45F0003040000, B60S0001080000, A45B0011020000, H04N0007180000, A45F0003140000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Address of Applicant :CEO Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------

(57) Abstract :
ABSTRACT In the realm of rainy-day necessities, the umbrella stands as a ubiquitous item. However, the traditional umbrella comes with its own set of inconveniences, such as the need to carry it separately, which can occupy a hand and add to the load of items to manage. Additionally, the risk of forgetting or losing umbrellas is common when they are stored separately. To address these challenges, we propose a smart solution—a backpack with an integrated umbrella that features auto rain sensing. This innovative device offers a hands-free experience, allowing users to keep both hands free even when the umbrella is open. The umbrella opens automatically with the press of a button, and its rain sensing feature ensures that it opens automatically when rain is detected. This modern umbrella provides not only protection from rain but also from sunlight when needed. The smart umbrella backpack offers several advantages over traditional umbrellas. Firstly, it eliminates the need to carry an umbrella separately, making it more convenient to use. Users can keep both hands free for other activities while still being protected from the rain. Additionally, the umbrella is always accessible, reducing the risk of forgetting or losing it. The automatic opening and closing feature adds to the convenience, allowing users to open the umbrella with just the press of a button. The rain sensing feature further enhances the usability of the umbrella, ensuring that it opens automatically when needed. The design of the smart umbrella backpack includes a DC motorized system with a transparent plastic cover, a rain sensor, and an Arduino controller integrated into the backpack. The rain sensor detects rainfall and sends a trigger to the Arduino controller, which then operates the motors to open the umbrella shed. Users can also manually trigger the opening and closing of the umbrella with a button press. This design ensures that the umbrella is easy to use and provides instant protection from the rain. The smart umbrella backpack has practical applications in various settings, including commuting, outdoor activities, and travel. It provides a convenient and efficient way to stay dry and protected from the rain while keeping both hands free. The automatic operation and rain sensing feature make it easy to use in unpredictable weather conditions. Overall, the smart umbrella backpack is a modern and innovative solution to the challenges associated with traditional umbrellas. It offers convenience, efficiency, and protection, making it a valuable addition to any rainy-day arsenal.

No. of Pages : 8 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056777 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : INSECT TERMINATOR PRO SYSTEM

(51) International classification	:A01M0001020000, A01M0001220000, A01M0001040000, A01M0001060000, A01M0001100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr Gireeshan MG
Address of Applicant :Director Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Gireeshan MG
Address of Applicant :Director Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Address of Applicant :CEO Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam ---------- ----------

(57) Abstract :
ABSTRACT Mosquitoes are notorious vectors for diseases, transmitting viruses, bacteria, and parasites from one host to another through their bites. These diseases, including dengue, Zika, chikungunya, and yellow fever, affect millions of people worldwide each year, with malaria alone claiming over a million lives annually according to the World Health Organization (WHO). While traditional mosquito control methods have been somewhat effective, they often fall short due to drawbacks like environmental impact and limited efficacy.In response to these challenges, there's a growing interest in developing innovative and efficient mosquito control solutions. One promising approach is the development of a smart mosquito killer machine that targets mosquitoes based on their sensory capabilities. Mosquitoes rely on various senses to locate their hosts, including carbon dioxide (CO2) detection, body odor, body heat, and moisture. Contrary to popular belief, mosquitoes are not attracted to light and are more active during low-light periods. The proposed smart mosquito killer machine aims to manipulate these sensory cues to effectively lure, trap, and eliminate mosquitoes. It features three heating rods maintained at human body temperature (around 34 degrees Celsius) to attract mosquitoes, a mini humidifier to generate mist simulating body sweat, and a low-intensity blue light to attract mosquitoes without driving them away. Additionally, the machine is equipped with high-torque fans to suck in mosquitoes and electric zapper meshes to kill them using an electric current. The machine's design targets mosquitoes' sensory cues, providing a more efficient and environmentally friendly alternative to traditional mosquito control methods. It can be used in various settings, including homes, offices, gardens, parks, railway stations, open-air restaurants, schools, and colleges. By effectively targeting mosquitoes based on their sensory cues, this innovative solution has the potential to significantly reduce mosquito populations and mitigate the spread of mosquito-borne diseases.

No. of Pages : 7 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056778 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : HOME SAFE LIFT FROM FLOOD

(51) International classification	:E02B0003100000, E04H0009140000, E06B0009000000, H04L0045000000, E06B0009020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Address of Applicant :CEO, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 6238099690 ---------- ----------

(57) Abstract :
ABSTRACT Flooding is a pervasive and devastating natural phenomenon that disrupts human life across the globe with alarming frequency and severity. It is estimated that approximately 2.2% of the world's population, nearly 2.9%, resides in areas where there is a 10% chance of flooding occurring every 50 years. Moreover, the looming specter of global warming threatens to exacerbate these risks, potentially amplifying the frequency and intensity of floods in the near future. While the loss of human lives due to flooding is tragic, the toll on property is equally significant, if not more so, as unlike human beings who can relocate to higher ground, property, being immovable, remains vulnerable to irreparable damage when inundated by floodwaters. To address this pressing issue, there has been a concerted effort to develop innovative mechanisms aimed at safeguarding homes and properties from the ravages of flooding. One such pioneering solution involves the implementation of a hydraulic lift system designed to elevate homes above flood levels, thereby mitigating the risk of damage and destruction. This futuristic concept represents a paradigm shift in flood resilience strategies, requiring meticulous planning, engineering precision, and a comprehensive understanding of the challenges posed by flooding. At the heart of this innovative system lies the integration of advanced hydraulic technology with robust structural design. The system is engineered to lift entire structures above flood levels in a timely and efficient manner, thereby averting potential damage and minimizing the impact of flooding on homeowners and their properties. The hydraulic mechanism comprises pumps, cylinders, and hydraulic fluid, which collectively serve as the backbone of the system, providing the necessary lift to elevate homes clear of harm's way when floodwaters threaten to engulf them. Strategically positioned flood sensors play a crucial role in detecting impending inundation, triggering the automatic activation of the hydraulic lift system to elevate homes in time. This proactive approach to flood resilience ensures that homeowners are afforded ample time to take preventative measures and safeguard their properties from potential damage. Furthermore, the system is designed with durability in mind, utilizing materials such as steel to ensure structural integrity and resilience against the forces of nature. Waterproofing measures are also implemented to protect vital components of the hydraulic lift system from corrosion, thereby ensuring reliable operation even when submerged. Remote control functionality provides homeowners with convenient access to lift activation, while manual override features offer contingency options in emergencies or power outages. Collaboration with professionals well-versed in hydraulic engineering and flood protection is essential to ensure compliance with local regulations and codes, as well as adherence to industry best practices. Regular maintenance and inspections are integral to sustaining the performance and longevity of the hydraulic lift system, reinforcing its role as a dependable defence mechanism against the perils of flooding. By investing in flood-resistant housing solutions such as the hydraulic lift system, homeowners in flood-prone regions can enhance their resilience in the face of environmental adversity, safeguarding their investments and ensuring peace of mind for themselves and their families. the development of a hydraulic lift system for flood protection represents a significant leap forward in flood resilience technology. By leveraging advanced hydraulic technology and robust structural design, this innovative system offers homeowners in flood-prone regions a reliable and effective means of safeguarding their properties from the devastating effects of flooding. Through proactive measures such as strategic flood sensor placement and remote-control functionality, homeowners can take pre-emptive action to mitigate the risks posed by flooding and ensure the safety and security of their homes and families.

No. of Pages : 8 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056779 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AQUASERVE ADVANCED DISPENSER

(51) International classification :B67D0001000000, F25D0023120000, B67D0003000000, B67D0001120000, A47J0031540000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr Reshmi Ramakrishnan
Address of Applicant :CEO Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ceo@genefithub.com 6238099690 ---------- ----------
2)Dr Gireeshan MG
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Reshmi Ramakrishnan
Address of Applicant :CEO Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ceo@genefithub.com 6238099690 ---------- ----------
2)Dr Gireeshan MG
Address of Applicant :Director Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 mggireeshan@gmail.com 9495308311 ---------- ----------

(57) Abstract :
ABSTRACT Automation is becoming more and more important in many areas of today's fast-paced society, including routine chores like distributing water or drinks. We suggest a completely automated coin-operated water dispenser system that makes use of sensors and microcontrollers to meet the demand for an effective and user-friendly solution. This system's intelligent features avoid water waste while guaranteeing user convenience by automating the dispensing of water or cola. This invention's key component is its clever application of motors and sensors, which cooperate to offer a smooth and effective user experience. This paper presents a fully automated coin-based water dispenser system utilizing a microcontroller and various sensors to efficiently dispense water or cola. Designed to enhance user convenience and environmental sustainability, the system prevents water wastage. An Infrared (IR) sensor detects the presence of a glass at the dispensing counter, signaling the microcontroller to initiate the dispensing process. A coin detector verifies the validity of inserted coins, ensuring access is granted only to authorized users. Upon receiving confirmations from both the IR sensor and the coin detector, the microcontroller activates a motor to dispense water. Dispensing continues as long as the glass is detected and halts immediately if the glass is removed, conserving water.The system adapts to different coin types, making it suitable for various public and private settings. Its modular design facilitates easy maintenance and upgrades, providing a versatile and efficient solution for automated beverage dispensing. Meticulously designed to prevent water wastage, the system ensures water is dispensed only when a glass is detected. The process begins with the IR sensor confirming the presence of a glass and relaying this information to the microcontroller. The actual dispensing remains on hold until a valid coin is identified by the coin detector, which recognizes specific coins based on physical characteristics such as size, weight, and metal composition. Upon coin insertion, the detector analyzes it and signals the microcontroller if valid, ensuring only authorized users access the dispenser.Once the microcontroller receives confirmations from both the IR sensor and the coin detector, it activates the motor to dispense water. The motor, under microcontroller control, opens a valve to allow water flow into the glass. Dispensing continues as long as the IR sensor detects the glass's presence. If the glass is removed, the IR sensor promptly signals the microcontroller to stop the motor and halt water flow, preventing spillage and conserving resources. This makes the system both convenient and environmentally friendly.The fully automated coin-based water dispenser system represents a significant advancement in beverage dispensing technology. By integrating microcontrollers with IR sensors and coin detectors, the system ensures efficient and secure dispensing while preventing water wastage. The IR sensor's ability to detect a glass and the coin detector's verification process add layers of functionality and security, making the dispenser suitable for various settings. The system's modular design and adaptability to different coin types further enhance its versatility and ease of maintenance. This innovative solution not only provides convenience and control but also contributes to environmental sustainability by minimizing resource wastage. The automated coin-based water dispenser system exemplifies the potential of modern technology to improve everyday tasks, offering a practical and eco-friendly alternative for water and beverage dispensing.

No. of Pages : 9 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056780 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : COVGUARD ELECTRONIC SYSTEM

(51) International classification	:G16H0050800000, G01J0005000000, A61B0005000000, G16H0050200000, G16H0050300000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr Reshmi Ramakrishnan
Address of Applicant :CEO Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Gireeshan MG
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Reshmi Ramakrishnan
Address of Applicant :CEO Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Gireeshan MG
Address of Applicant :Director , Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 9495308311 ---------- ----------

(57) Abstract :
ABSTRACT The COVID-19 pandemic has highlighted the critical need for effective health and safety measures in public and private spaces. Among the various strategies to mitigate the spread of the virus, one essential aspect is the screening of individuals for symptoms and compliance with preventive measures such as mask-wearing. Traditional manual temperature screening methods, which involve handheld thermometers and human operators, have several significant drawbacks. These include the potential for human error, inconsistency in enforcement, inefficiency in handling large crowds, and the risk of close-contact transmission between the screener and the individual being screened. The creation and use of an electronic Systems offer a ground-breaking method for overcoming these obstacles and improving the security and effectiveness of entry point checks. To address these challenges the proposed system integrates contactless temperature measurement and mask detection, utilizing advanced technology to ensure accurate, reliable, and hygienic screening processes. The primary components of the system include an infrared temperature scanner, a mask detection camera, a central processing unit (such as a Raspberry Pi), an automated barrier mechanism, and IoT connectivity for real-time data transmission. Each component plays a crucial role in the overall functionality of the system, contributing to its ability to provide comprehensive and effective screening. The contactless temperature scanner employs infrared sensors to measure an individual's forehead temperature without physical contact. This technology not only ensures precise readings but also maintains hygiene by eliminating the need for direct interaction. The mask detection camera, equipped with artificial intelligence (AI) algorithms, captures visual data to determine whether individuals are wearing masks properly. The integration of AI enhances the accuracy and speed of detection, significantly reducing the possibility of false negatives or false positives. The COVID-19 pandemic has catalyzed a surge in technological innovations aimed at preventing the spread of the virus and safeguarding public health. Among these groundbreaking developments, the COVID prevention electronic system stands as a beacon of hope in the global fight against the pandemic. This multifaceted system leverages an array of cutting-edge technologies to create a comprehensive and robust approach to COVID-19 prevention. At its core, the system incorporates contactless temperature scanning technology, utilizing infrared sensors to accurately measure individuals' body temperatures without the need for physical contact. This non-invasive method not only reduces the risk of virus transmission but also enables rapid and efficient screening of large groups of people. Moreover, the system integrates advanced facial recognition and mask detection capabilities, allowing it to identify individuals who may pose a risk of spreading the virus due to improper mask usage. By combining these features with automated entry control mechanisms, such as motorized gates or barriers, the COVID prevention electronic system effectively screens individuals before they enter public spaces, ensuring that only those who meet specific health criteria are granted access. Additionally, the system's integration with Internet of Things (IoT) technology enables real-time data monitoring and analysis, providing authorities with valuable insights into potential COVID-19 hotspots and facilitating swift intervention measures. With its ability to streamline and enhance COVID-19 prevention efforts, the COVID prevention electronic system represents a critical step forward in safeguarding public health and mitigating the impact of the pandemic on communities worldwide.

No. of Pages : 8 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056781 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : BICYCLE GESTURE GUIDE

(51) International classification	:B60Q0001440000, G06F0003010000, A61B0005000000, B62J0006050000, A42B0003040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr Reshmi Ramakrishnan
Address of Applicant :CEO Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 6238099690 ---------- ----------
2)Dr Gireeshan MG
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Reshmi Ramakrishnan
Address of Applicant :CEO Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 6238099690 ---------- ----------
2)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------

(57) Abstract :
ABSTRACT Bicycles remain a popular, economical, and healthy mode of transportation, especially with the increased health and environmental consciousness following the COVID-19 pandemic. However, this rise in bicycle usage has also led to an increase in bicycle accidents. One of the major reasons behind these accidents is the lack of visibility and signaling on bicycles, such as missing back lights, brake lights, and indicator lights. To address these safety concerns, we propose an advanced system that utilizes sensors, microcontrollers, and wireless communication to prevent bicycle accidents. The system offers several advantages, including back lights for visibility in the dark, automatic brake lights when the bicycle applies brakes, and gesture-based gloves for button-less operation. Additionally, the system includes a 2x brake lights attachment for the bicycle, wireless communication between the gloves and lights, and a battery-powered lightweight design for convenience. The system consists of two main components: the gesture control glove worn by the user and an indicator unit mounted below the seat of the bicycle. These two units communicate wirelessly to provide the desired functionality. The glove unit includes a gyro sensor, RF transmitter, and Arduino Pro Mini controller, all powered by a battery. The glove controller receives tilt commands from the gyro sensor when the user tilts their hand in a direction or applies brakes. These commands are then transmitted wirelessly to the indicator unit. The indicator unit is also battery-powered and integrates an ATmega controller and RF receiver. When the receiver receives a command, it is processed by the controller to determine if it is a braking command or a direction indication. If it is a direction indication, the respective light on the indicator unit is illuminated. If it is a braking command, both back lights are illuminated simultaneously, alerting others of the bicycle's deceleration. In conclusion, the proposed system provides a safe and comfortable bicycle indicator system, addressing the visibility and signaling issues that contribute to bicycle accidents. By enhancing the visibility and signaling capabilities of bicycles, this system aims to improve safety for cyclists and reduce the risk of accidents, especially in low light conditions.

No. of Pages : 8 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056782 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : WASTESENSE MONITOR SMART SYSTEM

(51) International classification	:B65F0001140000, G06Q0010060000, B65F0001000000, G06Q0050260000, G06Q0010080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Address of Applicant :CEO Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 6238099690 ---------- ----------

(57) Abstract :
ABSTRACT Maintaining a clean urban environment is a challenging task that demands continuous effort, particularly from sanitation workers who empty garbage bins. The frequency at which these bins require attention is often unpredictable—some bins fill up quickly, while others take longer. The IoT Garbage Monitoring with Weight Sensing project aims to streamline this process, making waste management more efficient and less labor-intensive through the use of advanced technology. The IoT Garbage Monitoring system is designed to monitor the fill levels of garbage bins and provide real-time updates via an online platform. The system employs ultrasonic sensors placed above the bins to measure the level of waste by calculating the distance between the sensor and the garbage. Additionally, weight sensors are installed at the base of the bins to measure the weight of the collected waste. This combination of sensors provides a comprehensive understanding of each bin's status. Data regarding both the fill level and the weight of the garbage bins is transmitted over the internet. This dual-sensing method ensures a more accurate assessment of each bin's status. Even if a bin isn't visually full, the weight sensor can alert authorities when it has reached the maximum weight capacity that collection vehicles can handle. This allows for timely collection, preventing overflow and ensuring efficient waste management. The IoT Garbage Monitoring system offers several key benefits. Real-time data on bin status allows for optimized routing of garbage collection vehicles. Bins are emptied only when necessary, reducing unnecessary trips and saving resources. Weight sensors ensure that bins are emptied before they become too heavy, preventing overloading of collection vehicles. Prompt emptying of bins helps maintain city cleanliness, reducing the risk of overflow and associated health hazards. The graphical web interface facilitates easy monitoring and analysis, helping authorities make informed decisions about waste management. In urban areas, particularly busy city centers, this system can significantly enhance waste management by alerting authorities as soon as a bin reaches a critical level. In residential neighborhoods, the weight sensors can help manage bins that may not fill up quickly but accumulate heavy waste, such as yard debris or large household items. This technology can also be adapted for industrial settings where efficient waste management is crucial, such as factories or large commercial facilities. The IoT Garbage Monitoring with Weight Sensing project represents a significant advancement in waste management technology. By combining ultrasonic and weight sensors with real-time data transmission and a user-friendly web interface, this system offers a comprehensive solution for monitoring and managing garbage bins. This innovative approach not only improves the efficiency of waste collection but also contributes to the overall cleanliness and sustainability of urban environments. As cities continue to grow and the demand for efficient waste management increases, systems like this will become essential tools for maintaining public health and cleanliness. The system’s capability to provide a detailed, real-time overview of garbage bin statuses is a game-changer for urban cleanliness. By integrating both ultrasonic and weight sensors, the system ensures that waste collection is not only timely but also optimized for efficiency. The use of the AVR family microcontroller ensures that all operations are managed seamlessly, from processing sensor data to communicating with the web interface. This ensures that city officials and sanitation workers have access to accurate and up-to-date information at all times.One of the most significant advantages of this system is its ability to reduce the workload of sanitation workers. By providing real-time data on the status of garbage bins, the system allows workers to focus their efforts on bins that actually need attention. This reduces the number of unnecessary trips and ensures that resources are used more efficiently. Additionally, the weight sensors prevent bins from becoming too heavy, which can lead to overloading of collection vehicles and potential damage. By ensuring that bins are emptied before they reach their maximum weight capacity, the system helps to maintain the integrity of the collection vehicles and prevent costly repairs.The system’s ability to provide timely alerts is also crucial for maintaining city cleanliness. The buzzer sounds an alert when the garbage level exceeds a preset threshold, ensuring that bins are emptied before they overflow. This helps to prevent the spread of waste and associated health hazards, contributing to a cleaner and healthier urban environment. The graphical web interface further enhances the system’s functionality by providing a visual representation of the status of each bin. This makes it easy for city officials to monitor and manage the waste collection process, ensuring that all bins are emptied in a timely manner.

No. of Pages : 9 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056783 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : REVOLUTION MASSAGETECH

(51) International classification	:A61H0015000000, A61H0007000000, A61H0023020000, A61K0039120000, G06F0016220000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 mggireeshan@gmail.com 9495308311 ---------- ----------
2)Dr Reshmi Ramakrishnan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 mggireeshan@gmail.com 9495308311 ---------- ----------
2)Dr Reshmi Ramakrishnan
Address of Applicant :CEO Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------

(57) Abstract :
ABSTRACT Back massages are universally cherished for their ability to provide relaxation and rejuvenation. However, the manual administration of these massages can be physically demanding for the masseuse and often leaves recipients wanting more. Additionally, the cost of regular massages can be prohibitive due to the high human effort involved. To address these challenges, we propose a semi-automated full back massager that utilizes a motorized mechanism to deliver a human-like back massage from the shoulders to the lower back. This system offers several key advantages: -Human-Like Massage: The massager is designed to replicate the feel of a human touch, providing a massage experience with adjustable pressure that can be tailored to the user's preference. -Adaptive Massage Roller: Using a spring arrangement, the massage roller adjusts to the contours of the user's body, ensuring a comfortable and effective massage. -Continuous Operation: Unlike traditional massages, which are limited by the stamina of the masseuse, the semi-automated massager can operate continuously for hours, allowing for longer and more satisfying massage sessions. -Effortless Operation: Once started, the massager requires no further human intervention, providing a seamless and relaxing experience for the user. -Cost-Effective: By consuming low power and eliminating the need for a human masseuse, the massager offers massages at a fraction of the cost of traditional methods. The core of the massager's design is a linear actuator that provides linear movement across the back, moving the massage rollers connected through spring dampers. This mechanism is mounted on two cylindrical rods, allowing for horizontal movement to adjust the massage path. Belts connect these rods to the user, enabling pressure adjustment and ensuring that the entire back can be covered for a comprehensive massage experience. This innovative semi-automated system has the potential to revolutionize the way back massages are delivered, offering a cost-effective, efficient, and satisfying massage experience for users

No. of Pages : 6 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056784 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : CARGUARD BLACKBOX

(51) International classification :G07C0005080000, G07C0005000000, B60K0028060000, G08G0001010000, G08G0001160000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Address of Applicant :CEO Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------

(57) Abstract :
ABSTRACT The alarming statistics surrounding road traffic crashes underscore the urgent need for effective measures to prevent accidents and mitigate their consequences. Every year, approximately 1.3 million lives are tragically lost due to road traffic crashes, with an additional 20 to 50 million individuals sustaining non-fatal injuries, many of which result in long-term disabilities. These accidents not only result in immense human suffering but also impose significant economic costs on individuals, families, and entire nations. The direct costs of medical treatment for injuries sustained in road traffic crashes are substantial, often placing a heavy financial burden on affected individuals and their families. Additionally, the indirect costs, such as lost productivity due to injuries or fatalities, can have far-reaching implications for economies, with some countries experiencing losses equivalent to 3% of their Gross Domestic Product (GDP). In response to this pressing issue, innovative solutions are needed to address the root causes of road traffic crashes and improve overall road safety. To address these challenges, we have developed an advanced electronic system designed to enhance road safety and provide timely assistance in the event of accidents or emergencies. This system utilizes a combination of cutting-edge sensors, including temperature, vibration, alcohol, and gyroscopic sensors, to monitor various aspects of the vehicle's environment and driver behaviour. The rapid advancements in automotive technology have led to the development of various safety features aimed at reducing road traffic accidents and mitigating their consequences. One such innovation is the Smart Car Black Box System, which provides comprehensive monitoring and recording capabilities, much like an airplane's black box. This system enhances road safety by capturing crucial data before, during, and after an accident, providing invaluable insights for accident analysis, prevention strategies, and legal investigations. The temperature sensor is capable of detecting signs of fires or overheating within the vehicle, while the vibration sensor can detect sudden impacts or collisions. Additionally, the alcohol sensor is able to detect the presence of alcohol in the vicinity of the driver, alerting authorities to instances of drunk driving. Furthermore, the gyroscopic sensor can detect changes in the vehicle's orientation, such as rollovers or sudden swerves. In the event of an abnormality detected by any of the sensors, the system instantly triggers an alert mechanism, sending SMS notifications to pre-registered contacts. These alerts provide real-time information about the nature of the emergency and the vehicle's precise location, allowing for prompt response and assistance. Moreover, the system is equipped with a GPS module, enabling accurate tracking of the vehicle's movements and facilitating rapid intervention by emergency services. In addition to its alert capabilities, the system also features a data logging function, storing all relevant sensor data leading up to and during the accident in a secure black box. This data can be retrieved and analyzed by investigators to determine the root causes of the accident and identify potential areas for improvement in road safety measures. By providing comprehensive data on the circumstances surrounding accidents, this feature enables authorities to take targeted action to prevent similar incidents in the future.

No. of Pages : 9 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056785 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SMART SAFE SYRINGE FOR HOSPITAL

(51) International classification	:G16H0010600000, G16H0040200000, G16H0020170000, G16H0040670000, G16H0015000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Address of Applicant :CEO Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 6238099690 ---------- ----------

(57) Abstract :
ABSTRACT In the ever-evolving healthcare landscape, the convergence of technology and innovation is constantly transforming the way medical professionals provide care. At the forefront of this development is the smart injector, a cutting-edge tool designed to revolutionize drug delivery in hospital environments. This introduction marks the arrival of a transformative paradigm in which precision, safety and efficiency will reconnect the standards of patient care. The story unfolds as we explore the many functions and features of this smart injector. This demonstrates its potential not only to simplify drug administration processes, but also to protect against errors, optimize treatment results and maintain the highest patient safety standards. As we embark on this journey, the impact of this disruptive technology will reverberate beyond the confines of the hospital corridor, ushering in a new era of healthcare, characterized by ingenuity, efficiency and an unwavering commitment to patient well-being. The concept of a smart syringe for hospital use represents a transformative innovation in medical technology that aims to improve the accuracy, safety and efficiency of drug administration. Unlike traditional injectors, smart injectors integrate advanced technologies such as precise dosing mechanisms, wireless connectivity and data analysis. These features allow healthcare professionals to deliver medications with exceptional precision, greatly reducing the risk of dosing errors. The wireless connection enables seamless integration with the hospital's electronic medical records (EMR), facilitating real-time monitoring and documentation of medication administration. This connectivity also supports remote administration capabilities, allowing clinicians to adjust dosage and monitor patient responses from any location, improving patient needs. Safety features are paramount, and smart injectors are often equipped with automatic error detection to prevent incorrect doses and mechanisms that prevent needle stick injuries, improving both patient and staff safety. Incorporating data mining and analysis provides valuable information about treatment efficacy and patient responses, contributing to the continuous improvement of clinical practices. In addition, smart injectors are designed to be user-friendly, with intuitive user interfaces that make them easy to use and ensure that healthcare professionals can manage drug delivery quickly and efficiently. Overall, the adoption of smart syringes in hospitals is a significant advance in health care, optimizing the administrative process, improving patient outcomes and ensuring higher levels of care. The introduction of smart syringes into the hospital environment is a major step forward in medical technology that is poised to revolutionize drug delivery. Integrating advanced features such as precision dosing, wireless connectivity, remote control capabilities and comprehensive data acquisition, these devices offer unparalleled precision and safety in drug delivery. The ability to monitor and adjust doses in real time, combined with robust error detection and prevention mechanisms, ensures that patient and staff safety is paramount. In addition, the user-friendly design and intuitive user interfaces of smart injectors make them an easy-to-use and effective tool for healthcare professionals. As healthcare systems continue to embrace digital innovation, smart injectors stand out as critical advances that will improve overall quality of care, improve patient outcomes and set a new standard for hospital care..

No. of Pages : 8 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056786 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : TROLLEYASSIST PRO SYSTEM

(51) International classification :G06Q0030020000, G06Q0030060000, B62B0003140000, E04H0003020000, B25J0005000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Address of Applicant :CEO Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 6238099690 ---------- ----------

(57) Abstract :
ABSTRACT Malls are a bustling center of activity that attracts crowds every day for shopping, entertainment and leisure. However, the growth of online shopping has presented significant challenges to brick-and-mortar stores, forcing them to innovate and improve the shopping experience in order to retain and attract customers. One such innovative solution that has emerged is the smart people-tracking shopping cart, designed to transform the way people shop by offering unparalleled convenience and efficiency. Intelligent, human-tracking shopping carts are equipped with advanced technology that allows them to independently track customers around the world. save, in which case a handshake is not necessary. These carts are equipped with an array of sensors and cameras that detect and track customer movements, ensuring that the carts stay close as they move through the aisles. This hands-free approach allows customers to focus entirely on the product range, enhancing their overall shopping experience. One of the most important advantages of these smart carts is the level of customization of the shopping experience. Shoppers no longer have to face the difficulty of manoeuvring a large cart through crowded aisles or worry about losing their cart in the middle of a sea of shoppers. Instead, they can enjoy a seamless shopping journey, focusing on the products they want to buy, while the trolley dutifully follows. This not only makes shopping more enjoyable, but allows customers to spend more time browsing and discovering new products. In addition, smart people-tracking carts are especially useful for customers with mobility or disabilities. For these people, the physical effort required to push a traditional shopping cart can be a significant barrier to an enjoyable shopping experience. A smart cart that automatically follows the customer removes this barrier and makes shopping accessible and enjoyable for everyone, regardless of physical limitations. This engagement can enhance the image of shopping centres as inviting and comfortable spaces. In addition to providing convenience and accessibility, smart carts make the shopping process more efficient. Shoppers can quickly find and retrieve the items they need without having to constantly check their cart. This streamlined approach saves time and reduces the stress often associated with navigating large stores, especially at peak times. This allows customers to complete their purchase faster, which can increase their overall satisfaction and likelihood of returning. For malls, the integration of smart people-tracking carts is a strategic advantage in the competitive retail landscape. By offering a high level of personalized shopping experience, malls can differentiate themselves from their competitors and attract a larger customer base. The novelty and convenience of smart carts can act as a unique selling point that attracts curious shoppers who want to try the latest technology in retail. Over time, this can foster customer loyalty and increase foot traffic, which ultimately increases sales and profitability. Technologically intelligent human tracking of a shopping cart is an impressive feat of engineering. The system uses a combination of infrared (IR) sensors, ultrasonic sensors, motor drivers and DC motors, all controlled by a microcontroller. The body of the cart has a web-based basket, similar to traditional shopping carts, mounted on a robotic platform. The integration of four DC motors into the wheels enables smooth four-wheel drive, which is essential for navigating the shop environment. The controller plays a vital role as it interfaces with the motor controllers to power the motors and facilitate movement. Two IR sensors mounted on the bottom of the cart enable a line-tracking mechanism that allows the robot to navigate the store along predetermined paths. In addition, an ultrasonic sensor mounted on the front of the robot detects the distance between the customer and the cart, thus ensuring a safe and uniform tracking distance is maintained. This combination of sensors and microcontroller technology allows the cart to operate independently and reliably, providing a seamless user experience. As customers move along the shopping streets, the smart cart follows diligently, ready to transport the goods of their choice. This system not only improves the shopping experience, but also introduces the possibilities of robotics and automation in everyday life. By adopting such advanced technology, shopping centers can position themselves at the forefront of retail innovation, attract tech-savvy consumers and set new standards for customer service. In short, it can be stated that intelligent human-following shopping carts are a promising solution for shopping centers whose goal is to offer a more personal and efficient shopping experience. These carts offer unprecedented convenience by following customers independently, allowing them to shop hands-free and focus on their purchases. They provide significant benefits for people with reduced mobility, ensuring that shopping is accessible and enjoyable for all. By simplifying the shopping process, smart carts save time and reduce stress, which increases overall customer satisfaction.

No. of Pages : 10 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056787 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SMART SYSTEM FOR SAFETY ALERT

(51) International classification	:G08B0025010000, G07C0005080000, G08B0025000000, G06Q0040080000, G07C0005000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Address of Applicant :CEO Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 6238099690 ---------- ----------

(57) Abstract :
ABSTRACT In the realm of automotive safety, the Airbag-Notification Vehicle Safety System represents a significant technological innovation aimed at enhancing emergency response and improving post-accident outcomes. This system integrates various components and functionalities to promptly notify relevant parties following airbag deployment, thereby facilitating swift assistance and efficient incident management. The core components of the system include an airbag deployment sensor, control unit, GPS module, communication module, power supply, and user interface. These components work synergistically to detect airbag deployment events, process critical data such as vehicle location through GPS technology, and initiate notifications to predefined contacts or emergency services. The system's design emphasizes real-time communication capabilities, ensuring that pertinent information—such as the exact location of the vehicle, time of the incident, and vehicle identification details—is swiftly relayed to facilitate timely assistance. By leveraging advanced sensor technology and communication protocols, the system aims to reduce emergency response times and mitigate the severity of injuries sustained in accidents. It serves both personal and commercial vehicle sectors, offering benefits such as improved safety for occupants, streamlined accident documentation processes for insurance claims, and enhanced fleet management capabilities for commercial operators. Future enhancements of the Airbag-Notification Vehicle Safety System may include integration with artificial intelligence (AI) for advanced accident detection and analysis, as well as leveraging emerging communication technologies such as 5G for faster and more reliable data transmission. These developments promise to further enhance the system's effectiveness in safeguarding vehicle occupants and optimizing emergency response procedures in diverse driving environments. The Airbag-Notification Vehicle Safety System represents a pivotal advancement in automotive safety technology, promising to redefine the standards of emergency response and accident management. By integrating state-of-the-art components and functionalities, this system embodies a proactive approach to enhancing vehicle safety and improving outcomes in critical situations. As technological advancements continue to evolve, the system's capabilities are poised to expand, contributing to safer roads and more efficient emergency services globally. Additionally, this system can potentially integrate with smart city infrastructure, allowing for a more coordinated response from traffic management systems and emergency services. The system can also provide valuable data for traffic safety studies, helping to identify high-risk areas and improve overall road safety strategies. With the potential to include voice recognition and interactive features, future iterations of the system could allow for direct communication between the vehicle occupants and emergency responders, providing real-time updates on the occupants' condition and the nature of the accident. This integration could significantly enhance the quality of care provided at the scene. Furthermore, the system's ability to log detailed incident data can aid in the continuous improvement of vehicle design and safety features, as manufacturers can analyze real-world accident data to identify areas for enhancement. The potential to integrate with wearable technology and health monitoring systems could further elevate the system’s capability, allowing it to provide medical data about the occupants to emergency responders, thereby improving the efficiency of the medical response. As the automotive industry continues to advance towards fully autonomous driving, the Airbag-Notification Vehicle Safety System could play a crucial role in ensuring safety in self-driving cars, acting as a failsafe to immediately notify authorities in the rare event of a malfunction or collision. This proactive approach not only aims to safeguard the lives of vehicle occupants but also contributes to the broader objective of reducing road fatalities and serious injuries on a global scale. The development of such a comprehensive safety system underscores the commitment of the automotive industry to innovate and implement technologies that prioritize human life and safety above all else.

No. of Pages : 8 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056788 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SELF-GOVERNING DELIVERY ROBOTS

(51) International classification	:G06Q0010080000, G05D0001000000, G06Q0010040000, G06Q0010060000, G06N0020000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Address of Applicant :CEO Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 6238099690 ---------- ----------

(57) Abstract :
ABSTRACT Self-governing delivery robots represent a cutting-edge solution poised to transform the landscape of logistics and urban transportation. These autonomous robots, equipped with advanced technologies such as artificial intelligence (AI), machine learning, sensors, and sophisticated navigation systems, are designed to navigate city streets, campuses, and other environments independently while transporting goods. Their development and deployment promise to revolutionize various industries, offering efficiencies in last-mile delivery, cost savings, environmental sustainability, and improved safety. Despite their potential, the integration of self-governing delivery robots faces challenges including regulatory frameworks, technical complexities, public acceptance, and security concerns. This introduction sets the stage to explore the capabilities, applications, benefits, challenges, and future prospects of self-governing delivery robots, highlighting their role in shaping the future of transportation logistics. Advanced navigation systems, artificial intelligence, machine learning, and sensors are being used by self-driving delivery robots to transform logistics through autonomous transportation. Precise navigation, avoiding obstacles, and effective delivery are made possible by this technology. In order to track position and optimize routes, key components include GPS, LIDAR, infrared, ultrasonic, and high-definition cameras. Their ongoing functioning is ensured by effective power management and battery technology, while cloud service connections, IoT, and V2X communication facilitate their operation. Applications include campus logistics, food and grocery delivery, and e-commerce. These provide advantages including safer, more affordable, quicker, and more dependable deliveries, as well as reduced emissions. Concerns about security, technological constraints, public acceptability, and regulatory obstacles are among the obstacles that still need to be overcome. Expected technical advancements, changing regulatory environments, growing markets, and more collaboration make the future seem bright. Businesses that are setting the standard by showcasing the potential of these robots in diverse delivery scenarios. The benefits of autonomous delivery robots are numerous. They offer cost efficiency by reducing labor and operational costs and requiring less maintenance than traditional vehicles. Their ability to operate continuously ensures faster and more reliable deliveries. Environmentally, they reduce emissions and encourage the use of green technologies. Safety is another advantage, as they can help reduce traffic accidents, provide contactless delivery options, and incorporate predictive maintenance to ensure safe operation. In the end, self-driving delivery robots will revolutionize transportation and logistics, offering substantial advantages and resolving current issues via constant innovation and cooperation. With important benefits in terms of cost effectiveness, speed, dependability, safety, and environmental effect, autonomous delivery robots are poised to revolutionize logistics and transportation. This technology has a bright future ahead of it, despite obstacles like security, public acceptability, technological constraints, and regulatory issues that need to be resolved. The distribution of products across sectors will be revolutionized, and the overall efficiency of logistics operations will be improved, as a result of ongoing innovations, rules that change, market expansion, and cooperative efforts.

No. of Pages : 9 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056789 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ECOWASH HAND HYGIENE

(51) International classification	:G08B0021240000, A61Q0017000000, A47K0005120000, E03C0001050000, E03C0001046000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 9495308311 ---------- ----------
2)Dr Reshmi Ramakrishnan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 9495308311 ---------- ----------
2)Dr Reshmi Ramakrishnan
Address of Applicant :CEO Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 6238099690 ---------- ----------

(57) Abstract :
Abstract In response to the increased emphasis on hand hygiene during the COVID-19 pandemic, there is a growing concern about water wastage. Traditional handwashing methods can be water-intensive, leading to environmental challenges and exacerbating water scarcity issues in many regions. To address these challenges, we have developed a water-efficient handwashing system that consumes over 95% less water than conventional methods while ensuring effective disinfection.The key to effective hand disinfection is to ensure that water and soap or disinfectant reach every part of the hand, eliminating germs and pathogens. However, many people tend to overuse water when washing their hands, with only a small percentage actually coming into contact with the skin. This inefficiency not only wastes water but also contributes to environmental degradation. Our system aims to rethink handwashing practices by utilizing a fog-based approach. The system includes a water tank filled with water and, if needed, a safe herbal disinfectant. When a user applies soap to their hands and inserts them into the system, a water fogging system is triggered. This system converts water from the tank into fog, which is then directed into the handwash chamber.The use of fog has several advantages. First, as it is in a gaseous state (water vapor), fog has the ability to reach all corners of the hand in less than 5 seconds. This ensures thorough coverage and effective disinfection. Second, after 5-15 seconds of exposure to the fog, the soap on the user's hands is washed away, requiring significantly less water than traditional tap-based handwashing methods. The handwashing system is driven by an Atmega-based controller system, which allows for manual settings. Users can adjust the duration for which the fog is driven into the handwash chamber, ensuring optimal disinfection while minimizing water usage. The system also includes a fan to drive air, which is necessary to propel the fog into the handwash chamber. In conclusion, the water-efficient handwashing system represents a significant advancement in hand hygiene technology. By utilizing a fog-based approach, the system reduces water consumption while ensuring effective disinfection. This innovation not only addresses the challenges posed by the COVID-19 pandemic but also contributes to sustainable water management practices. As the world continues to prioritize hygiene and environmental sustainability, technologies like the fog-based handwashing system will play a crucial role in promoting health and well-being.

No. of Pages : 9 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056790 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : WEEDBOT REMOTE SPRAYER

(51) International classification	:A01M0007000000, G06Q0050020000, A01B0079000000, A01M0021040000, B25J0009160000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Address of Applicant :CEO Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 6238099690 ---------- ----------

(57) Abstract :
ABSTRACT In contemporary agriculture, optimizing crop yields while minimizing environmental impact presents significant challenges due to the inefficiencies of traditional pesticide application and manual weed removal methods. These conventional practices often lead to involve indiscriminate pesticide spraying, leading to overuse and the emergence of pesticide-resistant pests. Moreover, manual weed removal is time-consuming and labour-intensive, requiring substantial resources. Addressing these issues, this paper proposes an innovative autonomous pesticide sprayer robot with remote control operation and integrated weed-cutting capabilities. The precision required for targeted application is sometimes lacking in the present generation of pesticide sprayers, resulting in uneven dispersion and detrimental impacts on the environment. Considering the increasing need for sustainable farming methods, a more deliberate and efficient approach is evidently needed. The system uses sophisticated robots, cameras, sensors, and algorithms to control weeds effectively and apply pesticides precisely. The main problem with the pesticide sprayer systems in use today is that they are not adaptable enough to keep up with the constantly shifting agricultural terrain. Accurate targeting can be difficult for farmers at times, which can lead to resource waste and even harm to untargeted areas. In addition, the presence of unwanted weeds complicates things and calls for the application of various intervention strategies. The recommended method aims to ensure accurate application and focused weed eradication by combining a robotic system with a remote-control mechanism that allows users to move the robot within a 5-meter radius. Enhancing safety and accuracy, remote control feature enables real-time supervision and operation within a 5-meter range. Farmers may minimize waste and environmental impact by supervising the robot's activities and ensuring focused pesticide application. Apart from that, the robot has a system for remotely cutting weeds, which simplifies the weed control procedure by removing the need for separate physical interventions. The robot's tiny built-in tank guarantees a regulated pesticide discharge, enabling it to cover huge regions before needing to be refilled. This function lowers downtime and improves operational efficiency. The suggested method solves the problem of weed management on a single, effective platform while also optimizing pesticide consumption by fusing remote control operation with precision agricultural approaches. Through focused pesticide application and weed eradication, this dual feature significantly enhances crop management's overall performance and provides a comprehensive solution to modern agricultural challenges. Integrating these state-of-the-art features into a single robotic system has the potential to revolutionize agricultural practices, promote sustainable farming, and ensure effective crop output. The design, use, and possible effects of this self-governing robotic system on precision agriculture are covered in this research.

No. of Pages : 8 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056791 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SOLOCOOK INDUCTION PRO

(51) International classification	:F24C0007080000, A47J0027000000, A47J0037060000, A47J0036320000, H05B0006120000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Address of Applicant :CEO Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 6238099690 ---------- ----------

(57) Abstract :
ABSTRACT Induction cooking represents a modern advancement in culinary technology, operating exclusively on electricity and thus eliminating the need for gas. Traditional gas burner systems are fraught with several issues, including the risk of gas explosions due to reliance on gas fuel, potential accidents from open flames, the likelihood of food being overcooked if not constantly monitored, the necessity of manually adjusting gas valves to gauge cooking temperatures, and the inability to multitask as each burner requires continuous supervision. This innovative induction cooktop addresses these problems and offers numerous advantages: it eliminates the need for gas pipelines or cylinders, negates the threat of gas explosions, facilitates faster cooking through induction heating, includes an auto shutoff feature after a specified time duration, and has an automatic buzzer to alert users when cooking is complete. Additionally, the cost of cooking is reduced as electricity is generally cheaper than gas. Designed for a faster and safer cooking experience, this induction cooktop is portable, allowing it to be easily moved from the kitchen to other rooms or even outdoors for flexible cooking or food heating needs. The system employs microcontroller-based circuitry, featuring a control panel with an LCD display for users to set cooking time and temperature. Once the settings are entered, an induction copper coil is energized to provide precise heating as per the user's instructions. When the set heating time concludes, the coil turns off and the system sounds a buzzer to notify the user that the cooking process is complete. This ensures that food is never overcooked or undercooked, making the cooking process more convenient and stress-free. The portability is further enhanced with two handles for easy carrying and a 4-meter long wire. Thus, this induction cooktop system revolutionizes the cooking experience by combining safety, efficiency, and convenience, addressing the shortcomings of traditional gas cooking methods, and meeting the demands of modern culinary practices. The circuitry of the system is built on microcontrollers, which it uses to do this work. The user may adjust the cooking temperature and time with its compact control panel featuring an LCD display. The user may choose the cooking temperature as well as the cooking time. The device activates an induction copper coil to produce the necessary heating as soon as these parameters are input. In accordance with the user's instructions, the induction coil is turned on to only heat the required temperature. The user's heating coil shuts off as soon as the allotted time has passed. In addition, a buzzer is activated by the system to inform the user that the cooking process is finished. With automated warnings and no need to worry about food being overdone or underdone, this simplifies the cook's job. With two handles to make carrying the system easier and a four-meter-long cable for mobility, the system is further made portable.

No. of Pages : 8 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056792 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DOG FEEDING ELECTRONICS SYSTEM

(51) International classification	:A01K0015020000, A01K0005020000, A01K0029000000, A01K0005010000, A01K0001035000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Address of Applicant :CEO Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------

(57) Abstract :
ABSTRACT People adore their pets, and pets reciprocate that affection. However, there are times when pet owners must leave their pets alone at home for extended periods, which can be challenging. To address this issue, we propose the development of a doggy daycare robot that not only monitors pets but also feeds them on schedule. This robot is an IoT-based device designed to care for your pets while you're away. Equipped with a camera, it provides live streaming over an IoT platform, enabling you to view real-time footage of your home. Unlike a standard security camera, this robot allows for remote control over the internet, so you can navigate it around your house at any time. This feature ensures you can interact with your pets no matter where you are. In addition to the camera, the robot is fitted with a speaker that lets you communicate with your pets. You can use it to correct their behavior or call them when it's time to eat. An LCD display is also included to show messages as needed. The robot can dispense the correct amount of food and water into a feeding tray as instructed by the user online. It then opens the tray and calls out to your pet by name to announce feeding time. After the pet has finished eating, the tray is closed. Pet owners can monitor this entire process online. All functionalities of the robot are controlled by a Raspberry Pi controller, ensuring efficient and reliable operation. The IoT-based pet care robot offers numerous advantages, making it a valuable addition to any pet owner's home. First and foremost, it provides peace of mind. Knowing that you can check on your pet anytime and ensure they are well-fed and comfortable reduces the anxiety that comes with leaving pets alone. This is particularly beneficial for pet owners who work long hours or travel frequently. The live streaming feature is a significant benefit. It allows you to observe your pet's behavior and activities in real time. You can see if they are resting, playing, or getting into mischief. This real-time monitoring helps in understanding your pet's daily routine and can alert you to any unusual behavior that might indicate health issues or distress. The ability to control the robot remotely adds an interactive element to pet care. You can move the robot to different rooms, ensuring comprehensive surveillance of your home. This mobility is especially useful in larger homes where pets may roam freely. The robot can be directed to specific areas where pets tend to spend their time, providing targeted monitoring. Communication is another critical feature. The integrated speaker allows you to talk to your pet, offering reassurance and commands even when you're not physically present. This can help in maintaining your pet's discipline and comfort. For instance, you can use the speaker to deter destructive behavior or simply to soothe your pet with the sound of your voice. The feeding mechanism is designed to be both practical and efficient. You can program feeding times and portions, ensuring your pet receives the right amount of food and water even in your absence. This feature is particularly beneficial for pets with specific dietary needs or those on a strict feeding schedule. The robot's ability to call your pet by name to the feeding tray adds a personal touch, making the feeding process more engaging for your pet.The inclusion of an LCD display for messages enhances the robot's functionality. This display can show various messages, such as feeding instructions, reminders, or even personalized notes from the owner. This feature adds an extra layer of interaction, making the robot a more integral part of the pet's daily routine. The use of a Raspberry Pi controller is a strategic choice for this robot. Raspberry Pi is known for its versatility and reliability, making it ideal for managing the robot's various functions. It ensures that all operations, from live streaming to food dispensing, are performed smoothly and efficiently. Moreover, the Raspberry Pi platform is well-supported, with a wealth of resources available for troubleshooting and upgrades. In conclusion, the IoT-based doggy daycare robot is a comprehensive solution for pet owners who need to leave their pets alone for extended periods. It offers real-time monitoring, remote control, communication, and automated feeding, all managed by a reliable Raspberry Pi controller. This innovative device not only ensures the well-being of pets but also provides peace of mind for their owners, making it an invaluable tool for modern pet care.

No. of Pages : 9 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056793 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : LIFI DATAXFER

(51) International classification	:H04B0010116000, H04B0010114000, G06K0019070000, H04B0010400000, H04B0010110000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Address of Applicant :CEO Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------

(57) Abstract :
ABSTRACT The LiFi Data Transfer System represents a groundbreaking advancement in wireless communication technology, harnessing the unique properties of LED lights for high-speed data transmission through visible light communication (VLC). Unlike conventional radio frequency methods, LiFi encodes data by modulating the intensity of LED light, imperceptible to the human eye, thereby offering potential advantages such as enhanced security, reduced electromagnetic interference, and potentially higher data transfer rates. Central to its operation are key components like the LDR sensor module, which detects and converts modulated light signals into electrical signals, and the Atmega microcontroller, which processes these signals to decode data packets and ensure reliable transmission. Complementing these components is an LCD display that provides real-time feedback and facilitates user interaction, crucial for system monitoring and debugging during deployment and maintenance.The system's operational flow begins with the LiFi transmitter Android application, empowering users to input text messages directly through their smartphones' flashlights. This application converts text into sequences of rapid light pulses, each representing binary data for transmission. On the receiving end, the LDR sensor module captures these light pulses, translating them back into electrical signals. The Atmega microcontroller then undertakes the task of decoding these signals, executing predefined algorithms to reconstruct the original data and displaying it in readable format on the connected LCD screen. This process ensures accurate data transmission and retrieval, demonstrating the system's robustness and reliability in practical applications. LiFi's applications span various sectors, from indoor networking environments seeking higher data rates and reduced interference, to smart lighting systems that integrate illumination with data transmission capabilities, enhancing energy efficiency and operational flexibility in smart buildings. Healthcare facilities benefit from LiFi's secure and interference-free communication capabilities between medical devices, addressing critical concerns about electromagnetic interference. Furthermore, LiFi holds promise in revolutionizing transportation networks by offering high-speed internet access on moving vehicles, thereby improving passenger connectivity and operational efficiencies for transportation providers.Looking forward, ongoing research aims to enhance LiFi's capabilities further, exploring areas such as increased data transfer rates, expanded coverage, and improved robustness against environmental conditions. The technology's potential to contribute to global connectivity efforts, bridge digital divides, and support sustainable development aligns with broader societal goals of enhancing efficiency and connectivity in the digital age. As LiFi continues to evolve and gain adoption, it stands poised to redefine wireless communication standards, offering unprecedented opportunities for connectivity, efficiency, and sustainability across diverse industries and global environments.

No. of Pages : 8 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056794 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AQUATRASH COLLECTOR

(51) International classification :C02F0103000000, E02B0015040000, B63B0035320000, C02F0001660000, E02B0015100000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Gireeshan MG
Address of Applicant :Director, Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 ---------- ----------
2)Dr Reshmi Ramakrishnan
Address of Applicant :CEO Genefithub 2nd floor, Abhayam Building SN Junction Tripunithura Ernakulam 682301 6238099690 ---------- ----------

(57) Abstract :
ABSTRACT Water pollution is a pressing environmental issue that poses significant threats to ecosystems and human health. The accumulation of waste in lakes and rivers not only degrades water quality but also harms aquatic life and disrupts ecosystems. Traditional methods of cleaning polluted water bodies often involve manual labor, which can be inefficient, time-consuming, and costly. To address these challenges, we propose an innovative floating waste collector project designed to automate the process of cleaning waste from the surface of water bodies. This project aims to increase efficiency, reduce costs, and minimize the environmental impact of waste accumulation in water bodies. The floating waste collector is a remote-operated system controlled by an RC remote, allowing for precise maneuvering to collect waste effectively. Directional control is achieved using DC pumps, while a servo motor arrangement controls the steering, ensuring smooth navigation across the water surface. This remote operation eliminates the need for manual labor, making the cleaning process more efficient and cost-effective.One of the key features of the system is its self-sustainability. Two solar panels are integrated into the design to charge the battery, ensuring continuous operation without the need for external power sources. This self-sustainability not only reduces operational costs but also minimizes the environmental impact of the system.The waste collection mechanism of the system utilizes a wire gauge net, which is effective in trapping and collecting floating waste. The collected waste is then disposed of properly, preventing it from re-entering the water body and causing further pollution. By automating the process of waste collection, our system offers a more efficient and environmentally friendly solution to water pollution. It reduces the need for manual labor, which can be labor-intensive and expensive. Additionally, its self-sustainability ensures that the system can operate continuously, providing ongoing support for cleaning water bodies.In conclusion, our floating waste collector project offers a practical and innovative approach to tackling water pollution. By combining automation, self-sustainability, and cost-effectiveness, our system provides a viable solution for cleaning up polluted water bodies and preserving the health of our ecosystems.

No. of Pages : 8 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056799 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : OCCUPANCY-BASED APPLIANCE AUTOMATION SYSTEM

(51) International classification	:A61B0005000000, G06F0003010000, B60R0021015000, H04N0005232000, A61B0001050000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SHUBHA B.
Address of Applicant :DEPARTMENT OF E AND CE, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
2)VEENA DEVI SHASTRIMATH V
Address of Applicant :DEPARTMENT OF E AND CE, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------

(57) Abstract :
Disclosed herein is an occupant detection system (100) for automating home appliances, the system (100) comprising an input unit (102) configured to capture a real-time video of a plurality of subjects (104), the input unit (102) further comprises a plurality of thermal sensors (106) configured to detect a thermal impression of the plurality of subjects (104) captured by the input unit (102), a microcontroller (108) connected with the input unit (102) configured to process the real-time video captured by the input unit (102).

No. of Pages : 25 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024

(21) Application No.202441056804 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN ECO-FRIENDLY COOLING SYSTEM

(51) International classification :H02J0007350000, F25B0025000000, H01F0027290000, B64C0027570000, H01F0017040000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR.BHOJARAJA B E
Address of Applicant :CIVIL ENGINEERING DEPARTMENT, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110,KARNATAKA, INDIA UDUPI ---------- ----------
2)DARSHA S SHETTY
Address of Applicant :CIVIL ENGINEERING DEPARTMENT, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110,KARNATAKA, INDIA UDUPI ---------- ----------
3)K SUBHASH NAIK
Address of Applicant :CIVIL ENGINEERING DEPARTMENT, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110,KARNATAKA, INDIA UDUPI ---------- ----------
4)KARTHIK R ACHARYA
Address of Applicant :CIVIL ENGINEERING DEPARTMENT, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110,KARNATAKA, INDIA UDUPI ---------- ----------
5)DEEPAK U ACHARYA
Address of Applicant :CIVIL ENGINEERING DEPARTMENT, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110,KARNATAKA, INDIA UDUPI ---------- ----------

(57) Abstract :
Disclosed herein is an eco-friendly cooling system(100) that comprises a body(102) made up of clay cups (104), a cooling window and a solar panel attached with the system(100). The solar panel(106) further comprises of mounting rails(120) and module clamps(122) to keep the solar panel intact at position. The system(100) includes a fan(108) having a set of blades (110). The system (102) also includes a motor pump(112), pipe(114) and a switch(116) fixed with the body (110). The system further comprises an air module(120) and converter(118) attached to the air module(120).

No. of Pages : 25 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024

(21) Application No.202441056814 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DEVELOPMENT OF AN AI-POWERED VIRTUAL MOUSE USING COMPUTER VISION AND HAND GESTURE RECOGNITION

(51) International classification	:G06F0003035400, G06F0003010000, G06F0003038000, G06F0003030000, G06F0001160000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Boggarapu Srinivasulu
Address of Applicant :Hyderabad ---------- ----------
2)St.Peter's Engineering college
3)Dr. Mikkili Dileep Kumar
4)Dr. Anilkumar P
5)Mr. Kale Naga Venkata Srinivas
6)Dr. Srinivasa Rao Dhanikonda
7)Mr. B Prabhanjan Yadav
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Mikkili Dileep Kumar
Address of Applicant :Professor & HOD, Department of Computer Science & Engineering, St.Peter's Engineering college, Hyderabad, Telangana, India. ---------- ----------
2)Dr. Anilkumar P
Address of Applicant :Associate professor, Department of Computer Science and Engineering, Mother Theresa Institute of Engineering and Technology, Palamaner, Andhra Pradesh, India. ---------- ----------
3)Mr. Kale Naga Venkata Srinivas
Address of Applicant :Assistant Professor, Department of CSE,Aditya College of Engineering and Technology,Surampalem,Andhra Pradesh, India. ---------- ----------
4)Dr. Srinivasa Rao Dhanikonda
Address of Applicant :Assistant Professor, Department of Data Science and Artificial Intelligence, Faculty of Science and Technology (IcfaiTech), ICFAI Foundation for Higher Education (Deemed to Be University), Hyderabad, Telangana, India. ---------- ----------
5)Mr. B Prabhanjan Yadav
Address of Applicant :Department of Computer Science, Sumathi Reddy Institute of Technology for Women, Warangal, India ---------- ----------

(57) Abstract :
The mouse is one of the wonders of Human-Computer Interaction (HCI) technology. Since a battery is required for current and a dongle is required to attach the mouse to the computer, a wireless mouse or a trace ballmouse currently even use gadgets and is not whollydevice-free. This restriction can be removed from the suggested artificial intelligence virtualized mouse device by using a webcam or a built-in camera to record paw motions and detect fingertips using computer vision. Real-time hand gesture detection has many uses in the outside world because it can be applied practically anywhere that we interact with computers. Without using a real mouse, the computer could be basically controlled using palmmotions to accomplish left, right-click, scrolling, and computer mouse tasks.The only input device needed for the suggested system is a webcam. OpenCV, Python and NumPy will be needed to implement the suggested system. On the system's screen, the camera's output will be shown so that the user may adjust it further.

No. of Pages : 9 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024

(21) Application No.202441056815 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : HYBRID POWER GENERATION SYSTEM USING SOLAR AND WIND

(51) International classification :H02S10/12, H02J3/38, F03D9/25, H02J7/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Karpagam Academy of Higher Education
Address of Applicant :Pollachi Main Road, Eachaneri Post, Coimbatore 641 021 Coimbatore ---------- ----------
2)Karpagam Institute of Technology
3)K.Elavarasi
4)Gokul Nithish K S
5)Sivarshan P G
6)Shivaram K
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)K.Elavarasi
Address of Applicant :Assistant Professor, Department of EEE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore Coimbatore ---------- ----------
2)Gokul Nithish K S
Address of Applicant :Department of EEE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore Coimbatore ---------- ----------
3)Sivarshan P G
Address of Applicant :Department of EEE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore Coimbatore ---------- ----------
4)Shivaram K
Address of Applicant :Department of EEE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore Coimbatore ---------- ----------

(57) Abstract :
This project proposes a hybrid power generation system using Solar and Wind energy. It is fact that energy is an important resource for any country in the world to develop economically strong in all aspects. Without energy one cannot sustain the life such as transportation from one place to another, home needs, industrial purposes etc., More than 80% world energy consumption is produced by using fossil fuels it is estimated that the fossil fuel reserves will end by 2250.However this technology is already existed in two different forms, but we are giving the two technologies in one place. Most probably concentrating on the wind turbine blade design by using readily available PVC (Poly Vinyl Chloride) pipes. It is easy to get them into required size and shape by following design considerations. It is household usage purpose project which is available at low cost compared to individuals available. The reason behind combining both of them is to improve the pole efficiency for the same using in conventional methods.

No. of Pages : 9 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056816 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : THE IMPACT TRAFFIC NOISE POLLUTION ON THE HIGHLY POPULATED AREAS

(51) International classification :E01F0008000000, G06Q0030020000, G01H0017000000, G16H0010200000, E01C0001000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Karpagam Academy of Higher Education
Address of Applicant :Pollachi Main Road, Eachaneri Post, Coimbatore 641 021 Coimbatore ---------- ----------
2)Karpagam College of Engineering
3)Dr.N.Balasundaram
4)Chandru.SR
5)Devasudhan .P
6)Rahulkanna .R
7)Sarannikash .R
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.N.Balasundaram
Address of Applicant :Assistant Professor, Department of Civil Engineering, Karpagam Academy of Higher Education Pollachi Main Road, Eachanari Post, Coimbatore Coimbatore ---------- ----------
2)Chandru.SR
Address of Applicant :Department of Civil Engineering, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore Coimbatore ---------- ----------
3)Devasudhan .P
Address of Applicant :Department of Civil Engineering, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore Coimbatore ---------- ----------
4)Rahulkanna .R
Address of Applicant :Department of Civil Engineering, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore Coimbatore ---------- ----------
5)Sarannikash .R
Address of Applicant :Department of Civil Engineering, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore Coimbatore ---------- ----------

(57) Abstract :
Due to heavy urbanization, industrialization, population, explosion, thereby deforestation, ambient noise has increased to intolerable level in most of the Places in Coimbatore. This research investigates is about the traffic noise and the impact it has on the population of Coimbatore to Pollachi Main Road, Eachanari. The selected study area was delimited by drawing a circle with a radius of four kilometers around the middle point, it being at the intersection of L & T road and Coimbatore to Pollachi main road. A calibrated sound level meter was used to measure the traffic noise at 18 different measuring points within the study area at a distance of 30m, 60m and 90m. Measurements were taken during the day (6am to 10pm) and at night (10pm-6am) in order to establish the noise impact caused by the peak flow and non-peak flow of traffic in the L and T. A 30-item noise -health-related questionnaire was used to establish the impact of traffic noise on the respondents. A hundred randomly -chosen participants within the study area were interviewed on a door-to-door basis. On completion of this research, it was established that the people interviewed were generally annoyed by the traffic noise in Coimbatore to Pollachi main road, Eachanari. The adverse effects associated with road traffic noise and irritability, general annoyance, interruptions in daytime relaxation hours, and sometimes disturbance of sleep during the night.

No. of Pages : 14 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024

(21) Application No.202441056823 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AL-ENABLED REMOTE PATIENT MONITORING AND HOSPITAL RESOURCE ALLOCATION

(51) International classification :A61B0005000000, G16H0040200000, A61B0005145500, G16H0080000000, G16H0050200000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VEL TECH MULTI TECH Dr.RANGARAJAN Dr. SAKUNTHALA ENGINEERING COLLEGE
Address of Applicant :#42, AVADI-VEL TECH ROAD, POONAMALLEE-AVADI HIGH RD, VEL NAGAR, CHENNAI, TAMIL NADU, INDIA-600062. ---------- ----------
2)S. DANIEL JOSEPH
3)Dr. N. BHARATHIRAJA
4)R. K. NEHAA
5)R. KISHORE
6)G. KALYANI
7)M. S. R. KARNIKA
8)V. ABARNA LAKSHMI
9)S. SWATHI
10)K. TAMILARASI
11)P. VAIRAVA SUNDARAM
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)S. DANIEL JOSEPH
Address of Applicant :#42, AVADI-VEL TECH ROAD, POONAMALLEE-AVADI HIGH RD, VEL NAGAR, CHENNAI, TAMIL NADU, INDIA-600062. ---------- ----------
2)Dr. N. BHARATHIRAJA
Address of Applicant :#42, AVADI-VEL TECH ROAD, POONAMALLEE-AVADI HIGH RD, VEL NAGAR, CHENNAI, TAMIL NADU, INDIA-600062. ---------- ----------
3)R. K. NEHAA
Address of Applicant :#42, AVADI-VEL TECH ROAD, POONAMALLEE-AVADI HIGH RD, VEL NAGAR, CHENNAI, TAMIL NADU, INDIA-600062. ---------- ----------
4)R. KISHORE
Address of Applicant :#42, AVADI-VEL TECH ROAD, POONAMALLEE-AVADI HIGH RD, VEL NAGAR, CHENNAI, TAMIL NADU, INDIA-600062. ---------- ----------
5)G. KALYANI
Address of Applicant :#42, AVADI-VEL TECH ROAD, POONAMALLEE-AVADI HIGH RD, VEL NAGAR, CHENNAI, TAMIL NADU, INDIA-600062. ---------- ----------
6)M. S. R. KARNIKA
Address of Applicant :#42, AVADI-VEL TECH ROAD, POONAMALLEE-AVADI HIGH RD, VEL NAGAR, CHENNAI, TAMIL NADU, INDIA-600062. ---------- ----------
7)V. ABARNA LAKSHMI
Address of Applicant :#42, AVADI-VEL TECH ROAD, POONAMALLEE-AVADI HIGH RD, VEL NAGAR, CHENNAI, TAMIL NADU, INDIA-600062. ---------- ----------
8)S. SWATHI
Address of Applicant :#42, AVADI-VEL TECH ROAD, POONAMALLEE-AVADI HIGH RD, VEL NAGAR, CHENNAI, TAMIL NADU, INDIA-600062. ---------- ----------
9)K. TAMILARASI
Address of Applicant :#42, AVADI-VEL TECH ROAD, POONAMALLEE-AVADI HIGH RD, VEL NAGAR, CHENNAI, TAMIL NADU, INDIA-600062. ---------- ----------
10)P. VAIRAVA SUNDARAM
Address of Applicant :#42, AVADI-VEL TECH ROAD, POONAMALLEE-AVADI HIGH RD, VEL NAGAR, CHENNAI, TAMIL NADU, INDIA-600062. ---------- ----------

(57) Abstract :
Patients in unstable conditions were watched from home during the second wave of the COVID-19 pandemic in India, as nearly all towns and cities had hospital beds filled and the health department as a whole had collapsed with several problems. It was hard for the doctor to keep an eye on them all the time. Allocating ICUs to serious circumstances was challenging. The idea here is to introduce an Artificial Intelligence board that will continuously monitor the patient's vital signs, such as Spo2, HB, respiratory, and body temperature. It will process these data using an algorithm to determine which patient categories the patient falls into, based on the hospital's lot-enabled networked medical system availability, and determine which patient needs oxygen bed support, ventilator support, or MICU support based on the inputs received from the patient. The A1 board will keep track of the patients' demographic and medical data, as well as look for local specialized hospitals and ambulance availability. Additionally, it will forward this information to a nearby Hospital Telegram Community channel, enabling family members to promptly inquire further. By prohibiting the availability of medical systems for the highest-paid individual, which would deny treatment to the impoverished, and by exposing the corruption of ambulance drivers who divert- patients to the hospital in exchange for bribes, this Telegram Channel post will help mitigate hospital corruption.

No. of Pages : 16 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :26/07/2024

(21) Application No.202441056824 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : SPATIALLY VARIANT BASED ON PATCH DIVISION FOR DIGITAL PILL ANALYSIS

(51) International classification :G16H0010600000, G16H0050200000, G16H0040630000, A61B0005000000, G16H0050300000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VEL TECH MULTI TECH Dr.RANGARAJAN Dr. SAKUNTHALA ENGINEERING COLLEGE
Address of Applicant :#42, AVADI-VEL TECH ROAD, POONAMALLEE-AVADI HIGH RD, VEL NAGAR, CHENNAI, TAMIL NADU, INDIA-600062. ---------- ----------
2)R. K. NEHAA
3)Dr. N. BHARATHIRAJA
4)S. DANIEL JOSEPH
5)L. P. BABIN
6)B. SHREENIDHI
7)S. DIVYA
8)S.N. DHIVYA SHRI
9)G. RENGA SRI
10)K.S.A. TEJASWINI
11)S. MOHAN DHANUSH
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)R. K. NEHAA
Address of Applicant :#42, AVADI-VEL TECH ROAD, POONAMALLEE-AVADI HIGH RD, VEL NAGAR, CHENNAI, TAMIL NADU, INDIA-600062. ---------- ----------
2)Dr. N. BHARATHIRAJA
Address of Applicant :#42, AVADI-VEL TECH ROAD, POONAMALLEE-AVADI HIGH RD, VEL NAGAR, CHENNAI, TAMIL NADU, INDIA-600062. ---------- ----------
3)S. DANIEL JOSEPH
Address of Applicant :#42, AVADI-VEL TECH ROAD, POONAMALLEE-AVADI HIGH RD, VEL NAGAR, CHENNAI, TAMIL NADU, INDIA-600062. ---------- ----------
4)L. P. BABIN
Address of Applicant :#42, AVADI-VEL TECH ROAD, POONAMALLEE-AVADI HIGH RD, VEL NAGAR, CHENNAI, TAMIL NADU, INDIA-600062. ---------- ----------
5)B. SHREENIDHI
Address of Applicant :#42, AVADI-VEL TECH ROAD, POONAMALLEE-AVADI HIGH RD, VEL NAGAR, CHENNAI, TAMIL NADU, INDIA-600062. ---------- ----------
6)S. DIVYA
Address of Applicant :#42, AVADI-VEL TECH ROAD, POONAMALLEE-AVADI HIGH RD, VEL NAGAR, CHENNAI, TAMIL NADU, INDIA-600062. ---------- ----------
7)S.N. DHIVYA SHRI
Address of Applicant :#42, AVADI-VEL TECH ROAD, POONAMALLEE-AVADI HIGH RD, VEL NAGAR, CHENNAI, TAMIL NADU, INDIA-600062. ---------- ----------
8)G. RENGA SRI
Address of Applicant :#42, AVADI-VEL TECH ROAD, POONAMALLEE-AVADI HIGH RD, VEL NAGAR, CHENNAI, TAMIL NADU, INDIA-600062. ---------- ----------
9)K.S.A. TEJASWINI
Address of Applicant :#42, AVADI-VEL TECH ROAD, POONAMALLEE-AVADI HIGH RD, VEL NAGAR, CHENNAI, TAMIL NADU, INDIA-600062. ---------- ----------
10)S. MOHAN DHANUSH
Address of Applicant :#42, AVADI-VEL TECH ROAD, POONAMALLEE-AVADI HIGH RD, VEL NAGAR, CHENNAI, TAMIL NADU, INDIA-600062. ---------- ----------

(57) Abstract :
A digital pill is essentially a multichannel sensor that uses micro technology to provide remote biological measurements. Smart pill prototype integrates advanced sensor technology and wireless communication capabilities to revolutionize healthcare monitoring. By encapsulating essential medical sensors within a pill-sized device, our innovation enables seamless ingestion and real-time tracking of vital health metrics. The valproate sensor is. fabricated using chemical reaction changes pattern integration andwas controlled by an application specific integrated circuit (ASIC). Through 10T application, patients and healthcare providers can access comprehensive data insights, facilitating proactive intervention and personalized treatment plans. Digital pills are ingestible, tiny, electromechanical devices that constitute a point of confluence for the pharmaceutical, medical, and biomedical industries. It includes both the data supplied by the pill's sensor and the technology that goes into making the pill. The sensor's "compliance" function is to ascertain if the user is taking their prescription or not. This breakthrough in medical technology holds immense promise for enhancing patient outcomes, optimizing medication management, and streamlining healthcare delivery.

No. of Pages : 13 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056827 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTOMATIC PILL DISPENSER

(51) International classification :A61J0007040000, A61J0007000000, G16H0020130000, G16H0040670000, G08B0021040000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)RNS Institute of Technology
Address of Applicant :Dr. Vishnuvardhana Road Post, RNS Farms Rd, Channasandra, Rajarajeshwari Nagar, Bengaluru, Karnataka 560098 Bangalore ---------- ----------
2)Department of E&E
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Syed Luqman Ashrafi
Address of Applicant :Student Department of E&E RNS Institute of Technology Bengaluru, Karnataka 560098 Bangalore ---------- ----------
2)Kirthana P
Address of Applicant :Student Department of E&E RNS Institute of Technology Bengaluru, Karnataka 560098 Bangalore ---------- ----------
3)Umabai
Address of Applicant :Student , Department of E&E , RNS Institute of Technology Bengaluru, Karnataka 560098 Bangalore ---------- ----------
4)Rakesh M N
Address of Applicant :RNS Institute of Technology Dr. Vishnuvardhana Road Post, RNS Farms Rd, Channasandra, Rajarajeshwari Nagar, Bengaluru, Karnataka 560098 Bengaluru ---------- ----------

(57) Abstract :
Abstract The issue of medication misuse among the elderly has emerged as a significant concern within the healthcare industry, particularly for individuals managing multiple medications concurrently over extended periods. These patients often encounter challenges in adhering to their medication regimens, frequently forgetting doses or unintentionally taking incorrect medications simultaneously. To address this critical issue, we propose the implementation of a automatic pill dispenser equipped with an alarm system and messaging functionality aimed at facilitating the accurate administration of medications at the prescribed times. This innovative solution integrates advanced technologies, including Arduino, PIR sensor, RTC module and a GSM module, to effectively regulate medication dosage. The alarm system is seamlessly integrated through popup notifications on the user's smartphone, providing timely reminders for medication intake. By combining these cutting-edge components, we aim to ease the burdens faced by elderly individuals in managing complex medication routines, enhancing convenience and reliability. Moreover, this solution empowers healthcare providers and caregivers to remotely monitor medication adherence, enabling timely interventions when necessary. Implementing such technologically advanced solutions like this pill dispenser become increasingly imperative. Future advancements and refinements hold the potential to further optimize this pill dispenser, fostering improved medication adherence and promoting the overall well-being of elderly individuals within the healthcare landscape. This project is aimed at developing low-cost, portable and easy-to-use pill dispenser that addresses the infrastructural and economic challenges. We present the initial crude implementation of our design, and a propose plans for refinement to enhance its efficacy and impact

No. of Pages : 11 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056837 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN ATTENTION-ENHANCED ALERT SYSTEM FOR FOREST SMOKE DETECTION USING NEURAL NETWORKS

(51) International classification :G06Q0050200000, C11D0001290000, C11D0003200000, C11D0003380000, E05B0015160000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr Karthi S
Address of Applicant :V.S.B. Engineering College, Karur ---------- ----------
2)RAAJYA VARDHINI A
3)ANANYA A
4)MYTHILI M
5)SENTHIL KUMAR M
6)PRABAKARAN S
7)ANBUMANI P
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)RAAJYA VARDHINI A
Address of Applicant :V.S.B. ENGINEERING COLLEGE, KARUR ---------- ----------
2)ANANYA A
Address of Applicant :M.Kumarasamy College of Engineering, Karur ---------- ----------
3)MYTHILI M
Address of Applicant :M.Kumarasamy College of Engineering, Karur ---------- ----------
4)SENTHIL KUMAR M
Address of Applicant :Sengunthar Engineering College ---------- ----------
5)PRABAKARAN S
Address of Applicant :V.S.B. Engineering College, Karur ---------- ----------
6)ANBUMANI P
Address of Applicant :V.S.B. ENGINEERING COLLEGE, KARUR ---------- ----------
7)Dr.KARTHI S
Address of Applicant :V.S.B. ENGINEERING COLLEGE, KARUR Karur ---------- ----------

(57) Abstract :
The proposed framework is intended to break down the outcome and sort out the pass and bomb level of every organization. The essential thought is the plan of the examination of understudies result with clear measurement utilizing encryption method manages gathering the signs of every understudy and putting away them in the data set lastly contrasting every one of the outcomes and discover the best school which has scored the most noteworthy rate. The current framework for social event the characteristics of understudies from different universities is done physically by individuals. For contrasting the outcomes this product is utilized. Gathering the signs of understudy of one school for a specific subject code and afterward measure the pass rate, bomb rate report. At last contrast the outcome and any remaining school in the college that can be utilized like are regularly used to portray an informational index since the student?s report are put away as records in distributed storage. To defeat the issues in information security, a novel methodology has been characterized that the documents are encoded utilizing AES procedure to forestall the information spillage in cloud move. With the end goal of safety and security of information AES calculation was planned.

No. of Pages : 7 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056838 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN INTEGRATED MULTI-FUNCTION COCONUT SCRAPPING AND VEGETABLE CUTTING APPARATUS

(51) International classification	:B26D0001000000, B26D0007060000, B26D0007320000, B26D0005080000, G06Q0010100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MR. RAKSHITH KUMAR SHETTY
Address of Applicant :DEPARTMENT OF MECHANICAL ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY (NMAMIT), NITTE (DEEMED TO BE UNIVERSITY) , NITTE, KARNATAKA, 574110, INDIA UDUPI ---------- ----------
2)DR. AJIT M. HEBBALE
Address of Applicant :DEPARTMENT OF MECHANICAL ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY (NMAMIT), NITTE (DEEMED TO BE UNIVERSITY) , NITTE, KARNATAKA, 574110, INDIA UDUPI ---------- ----------

(57) Abstract :
Disclosed herein is an integrated multi-function coconut scraper and vegetable cutter apparatus (100) comprises a motor (102) configured to operate at 1440 rpm. The apparatus includes a power transmission unit (104) including belts and pulleys for driving the apparatus components. The apparatus also includes a frame constructed from mild steel (106) for supporting the apparatus. The apparatus also includes multiple tools for coconut scraping and vegetable processing (108). The apparatus also includes shafts and bearings (110) facilitating the movement and operation of the tools. The apparatus also includes scraping tools (112) for efficiently removing coconut meat from the shell. The apparatus also includes slicing tools (114) for processing vegetables into various cuts. The apparatus also includes sheet metal components (116) for structural support and safety.

No. of Pages : 26 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :26/07/2024

(21) Application No.202441056844 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : A SMART HELMET SYSTEM FOR ENHANCED RIDING SAFETY

(51) International classification	:A42B0003040000, G02B0027010000, A42B0003300000, H04W0004800000, E01F0015040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Mr. M. Raju

Address of Applicant :Assistant Professor,Department of Mechanical Engineering, Easwari Engineering College, Bharathi Salai, Ramapuram, Tiruvallur – 600089, Chennai, Tamil Nadu, India. Chennai ---------- ----------

2)Dr. S. Sathiyamurthy

3)Dr. R. Ramadoss

4)Dr. M. Vetrivel Sezhian

5)Dr. V. Elango

6)Dr. K. G Ashok

7)N. Subramani

8)M. Shyam Richard

9)S. Madhushree

10)R. Kirubakaran

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Mr. M. Raju

Address of Applicant :Assistant Professor,Department of Mechanical Engineering, Easwari Engineering College, Bharathi Salai, Ramapuram, Tiruvallur – 600089, Chennai, Tamil Nadu, India. Chennai ---------- ----------

2)Dr. S. Sathiyamurthy

Address of Applicant :Professor and Head, Department of Mechanical Engineering, Easwari Engineering College, Bharathi Salai, Ramapuram, Tiruvallur – 600089, Chennai, Tamil Nadu, India. Chennai ---------- ----------

3)Dr. R. Ramadoss

Address of Applicant :Professor, Department of Mechanical Engineering, Easwari Engineering College, Bharathi Salai, Ramapuram, Tiruvallur – 600089, Chennai, Tamil Nadu, India. Chennai ---------- ----------

4)Dr. M. Vetrivel Sezhian

Address of Applicant :Professor, Department of Mechanical Engineering, Easwari Engineering College, Bharathi Salai, Ramapuram, Tiruvallur – 600089, Chennai, Tamil Nadu, India. Chennai ---------- ----------

5)Dr. V. Elango

Address of Applicant :Professor, Department of Robotics and Automation, Easwari Engineering College, Bharathi Salai, Ramapuram, Tiruvallur – 600089, Chennai, Tamil Nadu, India. Chennai ---------- ----------

6)Dr. K. G Ashok

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Easwari Engineering College, Bharathi Salai, Ramapuram, Tiruvallur – 600089, Chennai, Tamil Nadu, India. Chennai ---------- ----------

7)N. Subramani

Address of Applicant :Assistant Professor, Department of Mechanical Engineering Easwari Engineering College, Bharathi Salai, Ramapuram, Tiruvallur – 600089, Chennai, Tamil Nadu, India. Chennai ---------- ----------

8)M. Shyam Richard

Address of Applicant :Student, Department of Mechanical Engineering, Easwari Engineering College, Bharathi Salai, Ramapuram, Tiruvallur – 600089, Chennai, Tamil Nadu, India. Chennai ---------- ----------

9)S. Madhushree

Address of Applicant :Student, Department of Mechanical Engineering, Easwari Engineering College, Bharathi Salai, Ramapuram, Tiruvallur – 600089, Chennai, Tamil Nadu, India. Chennai ---------- ----------

10)R. Kirubakaran

Address of Applicant :Student, Department of Mechanical Engineering, Easwari Engineering College, Bharathi Salai, Ramapuram, Tiruvallur – 600089, Chennai, Tamil Nadu, India. Chennai ---------- ----------

(57) Abstract :

This invention relates to a Smart Helmet designed to significantly enhance road safety through the integration of advanced technologies. The Smart Helmet includes a limit switch connected to a relay linked to the vehicle's ignition system, ensuring the vehicle cannot be started unless the helmet is worn by the rider. An alcohol sensor is integrated to prevent the vehicle from starting if the rider has consumed alcohol, thus mitigating the risk of accidents due to impaired driving. The helmet features an inbuilt Heads-Up Display (HUD) that shows time and notifications from the rider's mobile phone to reduce distractions. Bluetooth headphones enable hands-free navigation using Google Maps. In the event of an accident, a pressure switch detects impact and activates a GPS system to share the rider's location and contact information with nearby hospitals for prompt medical assistance. A micro camera records live footage to verify accident details and provide valuable evidence. A dedicated website is developed to store and organize recorded footage, accident reports, and other relevant information for overall safety analysis. This Smart Helmet aims to enhance rider safety through technological innovation and connectivity.

No. of Pages : 22 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056849 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MULTIPORT ELECTRIC VEHICLE CHARGING STATION AND A METHOD OF CONTROLLING THE SAME

(51) International classification :B60L53/00, H02M1/42, H02J7/02, H02M3/335, B60L53/16, H02M1/00
(86) International Application No:NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Indian Institute of Science
Address of Applicant :C V Raman Road, Bangalore -560012, Karnataka, India Bangalore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Vishnu Mahadeva Iyer
Address of Applicant :Department of Electrical Engineering, Indian Institute of Science, C V Raman Road, Bangalore -560012, Karnataka, India Bangalore ---------- ----------
2)Himanshu Bhusan Sandhibigraha
Address of Applicant :Department of Electrical Engineering, Indian Institute of Science, C V Raman Road, Bangalore -560012, Karnataka, India Bangalore ---------- ----------
3)Gurunath Gurrala
Address of Applicant :Department of Electrical Engineering, Indian Institute of Science, C V Raman Road, Bangalore -560012, Karnataka, India Bangalore ---------- ----------

(57) Abstract :
MULTIPORT ELECTRIC VEHICLE CHARGING STATION AND METHOD OF CONTROLLING THE SAME The present disclosure relates to a reconfigurable multi-port charging unit 100 for charging of electric vehicles. The charging unit 100 comprises a plurality of switching modules 106 with one or more charging ports 108. Further, charging unit 100 comprises a three-phase input power supply, an Alternating Current-to-Direct Current (AC-DC) Power Factor Correction (PFC) converter 102, a Direct Current-to-Direct Current (DC-DC) converter 104, a first set of relays 110 and second set of relays 112. In an embodiment, the multi-port charging unit 100 may be configured with at least three switching modules 106 to interface the charging unit 100 with a three-phase input power supply. The relays (110, 112) are configurable to operate in a first position to facilitate charging of multiple low-power, low voltage electric vehicles or operate in a second position to facilitate charging of a at most three mid-power, high-voltage or a single high-power, high-voltage electric vehicle. FIG. 4a

No. of Pages : 24 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056856 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DUAL-MODE BASED COLLEGE BUS ATTENDANCE AND PAYMENT SYSTEM

(51) International classification :G06Q0050200000, G06Q0020400000, G06Q0020320000, G06F0021320000, G06Q0020100000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)KRISHNARAJ RAO N S
Address of Applicant :DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA udupi ---------- ----------
2)ASHWIN SHENOY M
Address of Applicant :DEPARTMENT OF COMPUTER SCIENCE ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA udupi ---------- ----------
3)DR. CHITHRA
Address of Applicant :DEPARTMENT OF DATA SCIENCE AND COMPUTER APPLICATION, MIT MAHE, MANIPAL, INDIA udupi ---------- ----------
4)SHRAVYA SHETTY
Address of Applicant :DEPARTMENT OF AIML, NEW HORIZON COLLEGE OF ENGINEERING, BANGALORE INDIA udupi ---------- ----------

(57) Abstract :
Disclosed herein is a dual-mode based college bus attendance and payment system (100) for, secure college bus attendance and payment management system (100) comprising a facial recognition module (102) configured to capture images of students as they board and disembark the bus, a RFID authentication module (104) configured to collect punched student card data and provide secondary verification, a secure payment module (106) configured to facilitate online payment of bus fares, a data centre (108) comprising a database (110), wherein the database (110) is configured to store the predefined data, a micro-processing unit (112) connected to facial recognition module (102), RFID authentication module (104), secure payment module (106), data centre (108), wherein the micro-processing unit (112) is configured to receive the images of the student captured using the facial recognition module (102) and the punched student card data from the RFID authentication module (104), to process the captured images received from the facial recognition module (102), to compare the processed images and the punched student card data with the student data stored in the database (110), to log attendance as well as deduct bus fare as soon as the processed images and the punched student card data matches with the stored student data.

No. of Pages : 26 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056926 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYNTHESIS, IN-SILICO AND IN-VITRO ANTITUBERCULAR ACTIVITY SCREENING OF NOVEL PYRROLYL THIAZOLIDINONE DERIVATIVES

(51) International classification	:A61P0031060000, C07D0277140000, A61P0011000000, G16B0005000000, C12Q0001689000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Ms. Shivani G. Shah
Address of Applicant :Department of Pharmaceutical Chemistry, KLE College of Pharmacy, Vidyanagar, Hubballi, Karnataka, Pin Code: 580031 ---------- ----------
2)Dr. Pradeep Kumar M.R
3)Shrikant Sambhajirao Kadam
4)Dr. Vinod Shivajirao Pawar
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Ms. Shivani G. Shah
Address of Applicant :Department of Pharmaceutical Chemistry, KLE College of Pharmacy, Vidyanagar, Hubballi, Karnataka, Pin Code: 580031 ---------- ----------
2)Dr. Pradeep Kumar M.R
Address of Applicant :Assistant Professor, Department of Pharmaceutical Chemistry, KLE College of Pharmacy, Vidyanagar, Hubballi, Karnataka, Pin Code: 580031 ---------- ----------
3)Shrikant Sambhajirao Kadam
Address of Applicant :Assistant professor, Department of Pharmaceutical Chemistry, SVPMs College of Pharmacy. Malegaon (Bk), Baramati, Pune, Maharashtra, Pin Code: 413115 ---------- ----------
4)Dr. Vinod Shivajirao Pawar
Address of Applicant :Associate Professor, Department of Pharmacology, SVPM's College of Pharmacy, Malegaon (Bk), Baramati, Pune, Maharashtra, Pin Code: 413115 ---------- ----------

(57) Abstract :
The present invention relates to field of medicinal chemistry, specifically focusing on the synthesis and evaluation of novel pyrrolyl thiazolidinone derivatives for their potential antitubercular activity. A series of novel pyrrolyl thiazolidinone derivatives (4a-c) were synthesized through the reaction of pyrrolyl hydrazide with substituted aldehyde in ethanol to form pyrrolyl Schiff bases, which were then refluxed with thioglycolic acid and benzene. The synthesized compounds were confirmed using FT-IR, 1H NMR, 13C NMR, and mass spectroscopy. Their in-vitro antitubercular activity was evaluated against Mycobacterium tuberculosis H37Rv strain using the Microplate Alamar Blue Assay (MABA) method, with isoniazid and rifampicin as reference standards. Among the synthesized compounds, 4b showed the most significant activity. In-silico molecular docking studies using PyRx and Discovery Studio software revealed crucial interactions and binding affinities, highlighting the potential of these derivatives as antitubercular agents.

No. of Pages : 16 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056931 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : CONTINUOUS PERFORMANCE MANAGEMENT COACHING VIRTUAL ASSISTANT TOUCH

(51) International classification	:G06Q0010060000, A61B0005000000, G09B0019000000, G06N0020000000, A61B0005080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Saveetha Engineering College
Address of Applicant :Saveetha Engineering College, Saveetha Nagar, Sriperumbadur Taluk, Kanchipuram - Chennai Rd, Chennai, Tamil Nadu 602105 jyothip@saveetha.ac.in ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.P. Jyothi
Address of Applicant :Associate Professor, Department Management Studies, l,2Saveetha Engineering College, Saveetha Nagar, Sriperumbadur Taluk, Kanchipuram - Chennai Rd, Chennai, Tamil Nadu 602105 ---------- ----------
2)Dr.L.Anitha
Address of Applicant :Assistant Professor, Department Management Studies ,l,2Saveetha Engineering College, Saveetha Nagar, Sriperumbadur Taluk, Kanchipuram - Chennai Rd, Chennai, Tamil Nadu 602105 ---------- ----------

(57) Abstract :
A continuous performance management (CPM) coaching virtual assistant (VA) system, designed to enhance employee development through ongoing feedback, guidance, and support. The system comprises a touchscreen interface for user interaction, a modem enabling connectivity to a dedicated server for data processing and storage. Leveraging artificial intelligence (Al) and natural language processing (NLP) capabilities, the VA provides personalized coaching, goal setting, progress tracking, and real-time feedback. By facilitating continuous communication and interaction between employees and managers, the system aims to foster a culture of continuous improvement, enhance performance, and drive organizational success.

No. of Pages : 6 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056933 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DESIGN AND DEVELOPMENT OF COPY ROTOR RMP 550/SPM

(51) International classification	:B23C0005100000, B29C0041040000, H01L0021768000, G06F0111040000, B62D0025040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)ADITYA JAYAKRISHNAN
Address of Applicant :14 SAROJINI STREET, RAM NAGAR, COIMBATORE, TAMIL NADU, INDIA-641009 8056999687 adithya.jayakrishnan@hotmail.com ---------- ----------
2)S. BHUVANESH
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)ADITYA JAYAKRISHNAN
Address of Applicant :14 SAROJINI STREET, RAM NAGAR, COIMBATORE, TAMIL NADU, INDIA-641009 8056999687 adithya.jayakrishnan@hotmail.com ---------- ----------
2)S. BHUVANESH
Address of Applicant :3 Street Main Road-1, City Mamsapuram Sri villiputhur Taluk, State Tamilnadu Pincode 626110 ---------- ----------

(57) Abstract :
The Copy Rotor designed invented is a a specialized solution tailored to the unique demands of roto molding processes. This innovative machine, equipped with a Bosch GO FI30 router and an 8mm end mill cutter, serves the critical function of removing excess material formed during roto moulding. Central to its design is a three- table system, featuring a central pillar structure housing the router and template mechanism, flanked by two additional tables for jig and fixture placement.Fabrication of the Copy rotor adheres to rigorous standards, employing high-quality materials and advanced manufacturing techniques lu guaiamee durability, reliability, and performance. Quality assurance measures are implemented throughout the fabrication process, culminating in comprehensive testing to validate accuracy, functionality, and safety compliance. Its precision, efficiency, and adaptability make it a valuable asset in streamlining production processes and driving continuous improvement in product manufacturing.

No. of Pages : 21 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056936 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MILLET-BASED DESIGNER NEURO-NUTRITION FOR HEALTHY AGING

(51) International classification :G16H0020700000, A23L0033100000, A61P0025280000, A61P0025000000, G16H0010200000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Jagannatha Rao K S
Address of Applicant :Prochancellor, KL Deemed to be University, Vaddeswaram, Vijayawada, Andhra Pradesh 522302 ---------- ----------
2)Lakshmi Sowmya Emani
3)Dr. Jayanth K Rao
4)Dr. Vasuja Devi Midasala
5)Dr.A.Pavani
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Jagannatha Rao K S
Address of Applicant :Prochancellor, KL Deemed to be University, Vaddeswaram, Vijayawada, Andhra Pradesh 522302 ---------- ----------
2)Lakshmi Sowmya Emani
Address of Applicant :Ph.D Scholar, Department of Biotechnology, KL Deemed to be University, Green fields, Vaddeswaram 522302, Guntur district Andhra Pradesh ---------- ----------
3)Dr. Jayanth K Rao
Address of Applicant :Medical Doctor, University college of Dublin, Dublin. ---------- ----------
4)Dr. Vasuja Devi Midasala
Address of Applicant :Associate Professor, Department of Computer Science Engineering MANGALAYATAN University Jabalpur, Madhyapradesh, India Pincode - 481662 ---------- ----------
5)Dr.A.Pavani
Address of Applicant :Assistant Professor, Department of Health Humanities, English KL University, Vaddeswaram, Vijayawada, Andhra Pradesh Pincode-522302 ---------- ----------

(57) Abstract :
Millet-Based Designer Neuro-nutrition for Healthy Aging ABSTRACT: Brain health is a key player in healthy living with good mental health. According to a recent survey by the National Institute of Mental Health and Neurosciences (NIMHANS), a staggering 150 million Indians require mental health care services. Good Cognition leads to Mental Health. Neuro-nutrition is the nutrition needed to achieve healthy brain and neurocognitive function. Nutrition components like Omega-3 fatty acids, Vitamin B12, proteins and polysaccharides. Millet-based designer brain foods and provides neuro-nutrition components unique and never be in the market and have the highest potential to reach all targeted populations. We are going to build brain foods from the millets which improves brain health through Omics mechanism

No. of Pages : 10 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056937 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : IMPACT OF USING CARBON NANOMATERIALS SUCH AS CARBON NANOHORNS (CNHS) AND CARBON NANOFIBERS IN INDUSTRIAL APPLICATIONS LIKE GAS STORAGE, ENERGY STORAGE, DRUG DELIVERY, AND PHOTOTHERAPY

(51) International classification :B82Y0030000000, G16H0010600000, G16H0070400000, C01B0032180000, G16H0015000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. P. Vivek
Address of Applicant :Department of Physics, Saveetha school of engineering, Saveetha Institute of Medical and technical sciences, Chennai, 602105, Tamil Nadu,India ---------- ----------
2)Dr. Riya Sebastian
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. P. Vivek
Address of Applicant :Department of Physics, Saveetha school of engineering, Saveetha Institute of Medical and technical sciences, Chennai, 602105, Tamil Nadu,India ---------- ----------
2)Dr. Riya Sebastian
Address of Applicant :Assistant Professor Department of Physics SRM Easwari Engineering College (Autonomous) Ramapuram, Chennai 600089, Tamil Nadu, India ---------- ----------

(57) Abstract :
Impact of using carbon nanomaterials such as carbon nanohorns (CNHs) and carbon nanofibers in industrial Applications like gas storage, energy storage, drug delivery, and phototherapy ABSTRACT: It is common knowledge that the number of studies pertaining to electrochemical sensors has substantially expanded as a result of the promising qualities that these devices have. These characteristics include the ability of getting information, with minimal manipulation of the system that is being researched, in real time, and with a low influence on the environment. The carbon nanomaterials are discussed in this article, which also includes a presentation of significant features such as the primary properties, production methods, and the application of these materials in the construction of electrochemical sensors for the detection of pharmaceuticals and substances of clinical importance. In this context, drug analysis is of utmost importance for quality control, as it guarantees that the medication performs its function in an efficient manner, without any potential consequences that could jeopardize the patient's health and quality of life.

No. of Pages : 9 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :26/07/2024

(21) Application No.202441056938 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : AI VIRTUAL ASSISTANT FOR LINUX OPERATING SYSTEM

(51) International classification :G10L0015220000, G06F0021620000, G10L0015260000, H04L0012400000, G06F0008610000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Saroja Kumar Rout
Address of Applicant :Associate Professor, Department of Information Technology, Vardhaman College of Engineering (Autonomous), Nagarguda -Shamshabad Road, Kacharam, Hyderabad, Pin: 501218, Telangana, India. ---------- ----------
2)Mr. Abhishek Majhi
3)Mr. Bijaya Kumar Sethi
4)Dr. Suryanarayan
5)Dr. Prakash Kumar Sarangi
6)Mr. G Stalin Babu
7)Mr. E Ravi Kumar
8)Dr. Nilamadhab Mishra
9)Mr. S. Eswar Reddy
10)Mr. S. Ranjith Reddy
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Saroja Kumar Rout
Address of Applicant :Associate Professor, Department of Information Technology, Vardhaman College of Engineering (Autonomous), Nagarguda -Shamshabad Road, Kacharam, Hyderabad, Pin: 501218, Telangana, India. ---------- ----------
2)Mr. Abhishek Majhi
Address of Applicant :Software Engineer, Coforge LTD, Pin: 110019 New Delhi, India. ---------- ----------
3)Mr. Bijaya Kumar Sethi
Address of Applicant :Assistant Professor, Department of CSD, Vardhaman College of Engineering (Autonomous), Nagarguda -Shamshabad Road, Kacharam, Hyderabad, Pin: 501218, Telangana, India. ---------- ----------
4)Dr. Suryanarayan
Address of Applicant :Associate Professor, Department of Information Technology, Vardhaman College of Engineering (Autonomous), Nagarguda -Shamshabad Road, Kacharam, Hyderabad, Pin: 501218, Telangana, India. ---------- ----------
5)Dr. Prakash Kumar Sarangi
Address of Applicant :Associate Professor, Department of CSM, Vardhaman College of Engineering (Autonomous), Nagarguda -Shamshabad Road, Kacharam, Hyderabad, Pin: 501218, Telangana, India. ---------- ----------
6)Mr. G Stalin Babu
Address of Applicant :Assistant Professor, GMR Institute of Technology, GMR Nagar, Razam, Pin: 532127, Andhra Pradesh, India. ---------- ----------
7)Mr. E Ravi Kumar
Address of Applicant :Assistant Professor Department of Information Technology, Vardhaman College of Engineering (Autonomous), Nagarguda -Shamshabad Road, Kacharam, Hyderabad, Pin: 501218, Telangana, India. ---------- ----------
8)Dr. Nilamadhab Mishra
Address of Applicant :Associate Professor, School of Computing Science and Engineering, VIT Bhopal University, Sehore, Pin: 466114, Madhya Pradesh, India. ---------- ----------
9)Mr. S. Eswar Reddy
Address of Applicant :Assistant Professor, Department of Computer Science, United School of Business Management (USBM), Bhubaneswar, Pin: 751024, Odisha, India. ---------- ----------
10)Mr. S. Ranjith Reddy
Address of Applicant :Assistant Professor, Department of Information Technology, Vardhaman College of Engineering (Autonomous), Nagarguda -Shamshabad Road, Kacharam, Hyderabad, Pin: 501218, Telangana, India. ---------- ----------

(57) Abstract :
AI VIRTUAL ASSISTANT FOR LINUX OPERATING SYSTEM Abstract: This virtual assistant makes a daily Linux user life easier by doing all the basic and advance task with just voice and simple text commands. User can perform all the day to day tasks including emails check, file operation, software installation, media paying, browsing web, system label tasks like update, upgrade of system, shutdown, reboot sleep etc. This model will work with both voice commands and simple text. It makes Linux experience of a normal user easier and better who recently switched from other OS like Windows. This is a lightweight application which able to understand all type of command and perform them as instructed. As most Linux users are more security oriented so, there may be a doubt about system security or admin stuff. So, to make sure that only the system admin (main user) can able to access this assistant, we introduced a voice recognition system which will recognize admin voice. So, the app will start to work if get command from admin so others can't use it. This work still in development phase and have immense future with future development of AI.

No. of Pages : 15 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :26/07/2024

(21) Application No.202441056939 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : APPLICATIONS OF GRAPH THEORY IN A CRYPTOGRAPHIC KEY EXCHANGE PROTOCOL

(51) International classification	:H04L0009080000, H04L0009300000, B65C0009180000, G06F0016901000, G99Z0099000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr. P. Shyamala Anto Mary

Address of Applicant :Assistant Professor, Department of Mathematics, SRM TRP Engineering College, Irungalur, Tiruchirappalli, Pin: 621 105, Tamilnadu, India. ---------- ----------

2)Dr. K. Deiwakumari

3)Dr. G. Kavitha

4)Dr. S. Dineshkumar

5)Ms. R. Deepa

6)Mrs. C. Ruby Sharmila

7)Dr. M. Elakkiya

8)Dr. D. Kumar

9)Dr. J. Sebastian lawrence

10)Dr. M. Bhuvaneshwari

11)Mr. Nareshkumar R

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. P. Shyamala Anto Mary

Address of Applicant :Assistant Professor, Department of Mathematics, SRM TRP Engineering College, Irungalur, Tiruchirappalli, Pin: 621 105, Tamilnadu, India. ---------- ----------

2)Dr. K. Deiwakumari

Address of Applicant :Assistant Professor, Sona College of Technology(Autonomous), Junction main road, Suramangalam, Salem Pin: 636005 Tamilnadu, India. ---------- ----------

3)Dr. G. Kavitha

Address of Applicant :Associate Professor, Selvamm Arts and Science College, Namakkal, Pin:637003, Tamilnadu, India. ---------- ----------

4)Dr. S. Dineshkumar

Address of Applicant :Associate Professor, Roever Engineering College, Elambalur, Perambalur, Pin: 621220, Tamilnadu, India. ---------- ----------

5)Ms. R. Deepa

Address of Applicant :Assistant Professor, Excel Engineering College, Komarapalayam, Namakkal, Pin:637303, Tamilnadu, India. ---------- ----------

6)Mrs. C. Ruby Sharmila

Address of Applicant :Assistant Professor, Tamilnadu College of Engineering, Karumathampatti, Coimbatore, Pin: 641659, Tamilnadu, India. ---------- ----------

7)Dr. M. Elakkiya

Address of Applicant :Assistant Professor, SRM TRP Engineering College, Irungalur, Tiruchirappalli, Pin: 621 105, Tamilnadu, India. ---------- ----------

8)Dr. D. Kumar

Address of Applicant :Assistant Professor, SRM TRP Engineering College, NH 45, Mannachanallur Taluk, Irungalur, Tiruchirappalli, Pin: 621105, Tamil Nadu, India. ---------- ----------

9)Dr. J. Sebastian lawrence

Address of Applicant :Assistant Professor, SRM TRP Engineering College, Irungalur, Tiruchirappalli, Pin: 621105, Tamil Nadu, India. ---------- ----------

10)Dr. M. Bhuvaneshwari

Address of Applicant :Assistant Professor, SRM TRP Engineering College, Irungalur, Tiruchirappalli, Pin: 621105, Tamil Nadu, India. ---------- ----------

11)Mr. Nareshkumar R

Address of Applicant :Research Scholar, SRM Institute of Science and Technology, Kattankulathur, Pin: 603203, Tamil Nadu India ---------- ----------

(57) Abstract :

Applications of Graph Theory in a Cryptographic Key Exchange Protocol Abstract The assignment of integers to a graph's vertices under certain prime number constraints is known as prime labelling, and it is a fascinating and important topic in graph theory. A graph G=(V,E) is said to have a prime labelling if there exists a bijective function f:V?{1,2,…,|V|} such that for each edge (u,v)?E(u,v)the greatest common divisor (GCD) of f(u) and f(v)is 1.In other words, labels for neighboring vertices must be relatively prime. The fundamental ideas of prime labeling, as well as its mathematical characteristics and the several kinds of graphs that allow for it, are examined in this abstract. Additionally, this study provides an introduction of the cryptographic key exchange protocol with an emphasis on prime labeling in Goldner Harary graphs. Key words: Goldner Harary graphs, graph labeling, prime labeling, duplication, switching and Cryptography

No. of Pages : 15 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056956 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DESIGN, DEVELOPMENT AND FIELD TESTING OF A POWER-OPERATED CONO-WEEDER FOR SYSTEM OF RICE INTENSIFIC

(51) International classification	:A01B0039180000, A01B0001160000, A01B0039190000, A01M0021020000, A01D0034820000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)SAVEETHA ENGINEERING COLLEGE
Address of Applicant :SAVEETHA ENGINEERING COLLEGE, SAVEETHA NAGAR, THANDALAM,CHENNAI, TAMIL NADU-602105. 9787982231 ganapathid@saveetha.ac.in ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Ganapathi.D
Address of Applicant :Department of Agriculture Engineering, Saveetha Engineering College, Saveetha Nagar, Thandalam, Chennai 602105, Tamilnadu, India. ---------- ----------

(57) Abstract :
The current invention reveals a weeder powered by an engine, specifically designed for the System of Rice Intensification (SRI). It utilises a 1 horsepower (hp) petrol engine to operate a carefully constructed gearbox that is attached to a rotary drum. The drum drives two cutter wheels, each fitted with sharp blades specifically intended to penetrate the soil effectively and remove weeds as the weeder moves along the rows of rice plants. The design includes a float mechanism that allows for precise height adjustment, protecting rice plants from harm while maximising the efficiency of weed removal. This revolutionary weeder effectively minimises the manual labour often involved with SRI weeding methods, resulting in reduced operation time and physical effort. The idea provides a more efficient and productive solution compared to traditional ways, making it easier to use SRI techniques in agriculture. It also promotes ergonomics and sustainability.

No. of Pages : 9 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056961 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : INTELLIGENT TELEOPERATION FRAMEWORK FOR VIRTUATED RENEWABLE ENERGY LABORATORIES WITH ADAPTIVE ANALYTICS

(51) International classification	:G16H0010600000, G06Q0010100000, A63B0069340000, G06N0020000000, G16B0050000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Karthikeyan Janakiraman
Address of Applicant :No.12/77A, Venkatesa Nagar, 1st Cross Street, Virugambakkam, Chennai, Tamil Nadu-600092, India Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Karthikeyan Janakiraman
Address of Applicant :No.12/77A, Venkatesa Nagar, 1st Cross Street, Virugambakkam, Chennai, Tamil Nadu-600092, India Chennai ---------- ----------

(57) Abstract :
The present system and method provide secure remote access, control, monitoring, and data analysis of renewable energy experiments and their research and development, tackling limited access to expensive traditional labs, inefficient manual processes, collaboration barriers due to geographical dispersion, and on-site safety risks by conducting these experiments in specialized laboratory environments. It offers a secure web-based interface for researchers worldwide to remotely design and conduct experiments on various renewable energy technologies, including fuel cells, hydrogen storage, solar power, and wind energy. The real-time monitoring is enabled through live video feeds and sensor data, while advanced data analytics leveraging AI and machine learning facilitate comprehensive data analysis, anomaly detection, and performance optimization; collaboration tools allow for data sharing, co-authoring of reports, and joint analysis, enhancing teamwork and knowledge dissemination and safety is prioritized by minimizing the need for on-site presence and implementing automated safety protocols.

No. of Pages : 24 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056970 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYMBIOTIC NEXUS OF ROBOTICS AND ADDITIVE MANUFACTURING FOR ACCELERATED EVOLUTION OF SUSTAINABLE ENERGY TRANSDUCERS

(51) International classification	:G06N0020000000, B25J0009160000, C12M0001000000, B25J0009080000, H01L0031180000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Karthikeyan Janakiraman
Address of Applicant :No.12/77A, Venkatesa Nagar, 1st Cross Street, Virugambakkam, Chennai, Tamil Nadu-600092, India Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Karthikeyan Janakiraman
Address of Applicant :No.12/77A, Venkatesa Nagar, 1st Cross Street, Virugambakkam, Chennai, Tamil Nadu-600092, India Chennai ---------- ----------

(57) Abstract :
The present invention is a system of automated fuel cell stack assembly, leveraging advanced robotics, 3D printing, AI-powered optimization, and a comprehensive system architecture. It addresses challenges of labor-intensive manual processes, error-prone procedures, limited scalability, and restricted customization options. Modular robotic arms and interchangeable end-effectors automate repetitive tasks, reducing human labor, increasing throughput, and ensuring consistent quality. 3D printing facilitates, on-demand fabrication of custom components for rapid prototyping and tailored designs, while AI algorithms optimize assembly in real-time, maximizing efficiency and minimizing waste. High-resolution quality control sensors verify component alignment, and machine learning supports predictive maintenance to prevent unplanned downtime. The system's architecture includes a cloud-based control system, a Machine Learning & Simulation Unit, and a Digital Twin Simulation Engine. The invention incorporates sensors, data analytics, machine vision, and closed-loop feedback. The modular and scalable system of the invention enhances efficiency, cost-effectiveness, and environmental sustainability in fuel cell manufacturing.

No. of Pages : 29 No. of Claims : 19

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056971 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : INVESTIGATION ON FUZZY SUBLATTICES USING INTUITIONISTIC FUZZY SETTING

(51) International classification	:G06Q0010060000, G05B0013020000, G06N0007020000, G06N0007040000, B60G0017018000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Koneru Lakshmaiah Education Foundation
Address of Applicant :Green Fields, Vaddeswaram, Guntur District, A.P., INDIA. Pincode : 522 502. Vaddeswaram ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Raghupatruni Sunil Kumar
Address of Applicant :Koneru Lakshmaiah Education Foundation, Greenfields, Vaddeswaram, Guntur-522502 Vaddeswaram ---------- ----------
2)V. B. V. N. Prasad
Address of Applicant :Koneru Lakshmaiah Education Foundation, Greenfields, Vaddeswaram, Guntur-522502 Vaddeswaram ---------- ----------

(57) Abstract :
The present invention investigates fuzzy sublattices using an intuitionistic fuzzy setting. It explores the properties of intuitionistic fuzzy ideals, (?, ??q)-intuitionistic fuzzy sublattices, and their correspondence with lattice homomorphisms and epimorphisms. The study includes a detailed examination of inclusion principles and provides a rigorous mathematical framework for understanding these structures.

No. of Pages : 11 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056972 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : FAST REINJECTION OF LOST PACKET FOR MPTCP INTERMITTENT CONNECTIONS

(51) International classification :H04W0084120000, H04W0088060000, H04L0069140000, H04W0084100000, H04W0004029000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Koneru Lakshmaiah Education Foundation
Address of Applicant :Green Fields, Vaddeswaram, Guntur District, A.P., INDIA. Pin code : 522 302. Vaddeswaram ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)K RAGHAVENDRA RAO
Address of Applicant :Koneru Lakshmaiah Education Foundation, Greenfields, Vaddeswaram, Guntur-522502 Vaddeswaram ---------- ----------
2)Dr. Ruth Ramya Kalangi
Address of Applicant :Koneru Lakshmaiah Education Foundation, Greenfields, Vaddeswaram, Guntur-522502 Vaddeswaram ---------- ----------

(57) Abstract :
Mobile devices equipped with multiple network interfaces can maintain continuous data transmission even with intermittent connections. The MPTCP protocol enables concurrent use of these interfaces, such as cellular and Wi-Fi. Packet loss due to network changes or congestion necessitates a method to detect lost connections and reinject missing packets. This invention proposes using the EMA algorithm to achieve a 90% reduction in application-level delays, enhancing overall connectivity and performance.

No. of Pages : 13 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024

(21) Application No.202441056973 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DETECTION OF DIABETIC RETINOPATHY USING TRANSFER LEARNING AND ENSEMBLE LEARNING

(51) International classification	:G06N0003040000, G06N0003080000, G06K0009620000, G06T0007000000, G06N0020000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Koneru Lakshmaiah Education Foundation
Address of Applicant :Green Fields, Vaddeswaram, Guntur District, A.P., INDIA. Pin code : 522 502. Vaddeswaram ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Vinodkumar Bhutnal
Address of Applicant :Dept. of computer science and engineering Koneru Lakshmaiah Education Foundation, Greenfields, Vaddeswaram, Guntur-522502 Vaddeswaram ---------- ----------
2)Nageswara Rao Moparthi
Address of Applicant :Dept. of computer science and engineering Koneru Lakshmaiah Education Foundation, Greenfields, Vaddeswaram, Guntur-522502 Vaddeswaram ---------- ----------
3)Dubba Naga Malleswari
Address of Applicant :Dept. of computer science and engineering Koneru Lakshmaiah Education Foundation, Greenfields, Vaddeswaram, Guntur-522502 Vaddeswaram ---------- ----------

(57) Abstract :
This invention relates to a system for detecting diabetic retinopathy (DR) using advanced deep learning techniques, specifically transfer learning and ensemble learning. The system processes retinal images to prepare them for analysis by three pre-trained models: DenseNet, Inception V3, and NasNet. These models are fine-tuned to identify DR signs, leveraging pre-trained weights from large datasets. Ensemble learning combines the predictions from these models to enhance accuracy and reliability. The system offers a highly accurate, efficient, and automated solution for early DR detection, including a user-friendly interface and integration with medical workflows.

No. of Pages : 19 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441056979 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : UNDERGROUND VISUALIZATION SYSTEM AND METHOD THEREOF

(51) International classification	:G06T0019000000, G06F0016290000, G01C0021360000, G06F0030130000, H04L0009320000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL
Address of Applicant :National Institute of Technology Warangal, Warangal, Telangana – 506004, India. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Aneetha Vilventhan
Address of Applicant :National Institute of Technology Warangal, Warangal, Telangana – 506004, India ---------- ----------
2)R. Rajadurai
Address of Applicant :National Institute of Technology Warangal, Warangal, Telangana – 506004, India ---------- ----------

(57) Abstract :
Disclosed is an underground visualization system (100) comprising a user device (102), comprising an input unit (108), that is adapted to capture one or more image of a scene, a processing unit (116), that is communicatively coupled with the input unit (108); and is configured to receive one or more images from the user device, compare the received one or more images with one or more prestored data that comprises of geometric data of 3D utility models and non-geometric, geospatial data, identify one or more markers in the received one or more images, map the one or more prestored data onto the identified targets and overlay the stored environment data onto the user device to depict it onto a real-world environment. Figure 1 will be the reference.

No. of Pages : 21 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441057001 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTOMATED EXCESS FOOD MANAGEMENT SYSTEM FOR SERVICE ENVIRONMENTS AND THE METHOD THEREOF

(51) International classification :G06Q0020400000, G06Q0030040000, A61B0005110000, G16H0040200000, G06Q0010080000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VELLORE INSTITUTE OF TECHNOLOGY, CHENNAI
Address of Applicant :Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)UMAMAHESWARI E
Address of Applicant :Professor Grade-1, Centre for Cyber Physical Systems, School of Computer Science and Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
2)KANCHANA DEVI V
Address of Applicant :Associate Professor Senior, School of Computing Sciences and Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
3)MANIVANNAN A
Address of Applicant :Assistant Professor Senior Grade 2, School of Advanced Sciences, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
4)KAVIN BHARATHI
Address of Applicant :UG Student, School of Computing Sciences and Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
5)SAKKTHI GURRU
Address of Applicant :UG Student, School of Computing Sciences and Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------

(57) Abstract :
The present disclosure relates to an automated excess food management system for service environments, The system (102) includes processors (112); memory (204) coupled to processors (112), memory (204) stores instructions which when executed by processors (112) cause system (102) to monitor a surplus food stored in storage area (120) using sensors (114) and detect sensor data, where sensor data pertains to volume, and weight. The system (102) processes sensor data to determine availability of quantities of surplus food. The system transfers, alerts to computing device (108) associated with user (106) to notify availability of quantities of the surplus food in service environment for donation, where service environment includes cafeteria, hospital, and large-scale event.

No. of Pages : 28 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441057003 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A HYBRID MODEL FOR DETECTION AND CLASSIFICATION OF IMAGING RELATED DISEASES FOR A SUBJECT

(51) International classification	:G06N0020000000, G06K0009620000, G06N0003080000, G06N0003040000, G06N0020100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)VIT-AP University
Address of Applicant :Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)KUMAR, B. Anil
Address of Applicant :Research Scholar, School of Electronics Engineering (SENSE), VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
2)MISRA, Neeraj Kumar
Address of Applicant :Associate Professor (Sr. Grade-II), School of Electronics Engineering (SENSE), VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------

(57) Abstract :
A system 100 and method using a hybrid model 118 to detect and classify imaging related diseases for a subject including steps for receiving, from a subject, one or more images 102; extracting one or more features from the input image 102; pre-processing 106 to train data using machine learning algorithms including deep learning algorithm; developing the model 118 by combining the two machine learning algorithms used to train data; testing 120 the trained data using the developed model 118 for obtaining classified results 122. The model 118 comprises a pre-trained Convolutional Architecture for Fast Feature Embedding 114 and a modified MobileNetV2 112, and a new Numerical Python having twenty models of Python coding algorithms is used to speed up image processing. A transfer learning process is adopted to leverage pre-trained data to enhance diagnostic accuracy. The model 118 achieves an accuracy, error rate, f1 score, recall and precision with less parameters and computational time.

No. of Pages : 24 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441057054 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM AND METHOD FOR DETECTING UNDER-UTILIZED FEATURES AND PROVIDING TRAINING, INSTRUCTION, OR TECHNICAL SUPPORT IN A CLOUD-BASED OBSERVATION PLATFORM

(51) International classification	:G06Q0010060000, H04L0067500000, G06Q0030020000, G09B0019000000, G06Q0010100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)R.M.K. Engineering College
Address of Applicant :R.S.M. Nagar, Kavaraipettai, Gummidipoondi Taluk, Tiruvallur District, Pin Code: 601206, Tamil Nadu ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. T. Ramesh
Address of Applicant :Associate Professor, Department of Computer Science and Engineering, R.M.K. Engineering College, R.S.M. Nagar, Kavaraipettai, Gummidipoondi Taluk, Tiruvallur District, Pin Code: 601206 ---------- ----------

(57) Abstract :
The present invention relates to a system and method for detecting under-utilized features within a cloud-based observation platform and providing targeted training, instruction, or technical support to enhance user engagement and optimize platform utilization. The system comprises a Usage Monitoring Module to track user interactions, an Analytics Engine to analyze usage data and identify under-utilized features, a Training Module to deliver personalized training materials, and a Support Module to provide technical assistance. By integrating real-time monitoring with advanced analytics, the invention ensures that users are better informed and supported in utilizing the full range of platform features. This proactive approach improves user productivity, maximizes the return on investment for organizations, and enhances overall platform performance. Accompanied Drawing [FIGS. 1-3]

No. of Pages : 23 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :26/07/2024

(21) Application No.202441057056 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : A PROPOSAL FOR USING NEURAL NETWORKS IN THE CREATION OF DIDACTIC SEQUENCES BASED ON THE SCORM STANDARD

(51) International classification	:G06Q0050200000, G06N0003040000, G09B0005000000, G09B0007000000, G06N0003080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr. N. Rajkumar

Address of Applicant :Professor, Department of CSE, Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology, Chennai, Tamil Nadu, India – 600062 ---------- ----------

2)Dr. V. Anitha

3)Ms. Bhagyalakshmi T

4)Dr. M.Geethalakshmi

5)Dr. Anuradha. T

6)Dr. M.A.Mukunthan

7)Ms. Monisha T.

8)Dr. Ruchi Sharma

9)Ms. S.Shanthini Devi

10)Ms. Indra Devi C.

11)Dr. Jose Anand

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. N. Rajkumar

Address of Applicant :Professor, Department of CSE, Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology, Chennai, Tamil Nadu, India – 600062 ---------- ----------

2)Dr. V. Anitha

Address of Applicant :Vice Principal & Professor, Department of Electronics and Communication Engineering, Sri Muthukumuran Institute of Technology, Chikkarayapuram, Near Mangadu, Chennai, Tamil Nadu, India – 600069 ---------- ----------

3)Ms. Bhagyalakshmi T

Address of Applicant :Assistant Professor, Information Technology, Jeppiaar Engineering College, Semmancheri, Tamilnadu – 600119 ---------- ----------

4)Dr. M.Geethalakshmi

Address of Applicant :Associate Professor, Department of Mathematics, KCG College of Technology, Karapakkam, Chennai – 600097 ---------- ----------

5)Dr. Anuradha. T

Address of Applicant :Professor, Department of Electrical and Electronics Engineering, KCG College of Technology, Chennai, Tamil Nadu, India – 600097 ---------- ----------

6)Dr. M.A.Mukunthan

Address of Applicant :Professor, School of Computing, Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology, Vel Nagar, Avadi, Chennai, Tamil Nadu 600062 ---------- ----------

7)Ms. Monisha T.

Address of Applicant :Assistance Professor, Computer Science and Engineering, Jeppiaar Engineering College, Semmancheri, Tamilnadu – 600119 ---------- ----------

8)Dr. Ruchi Sharma

Address of Applicant :Professor, Department of AI&DS, Jaipur Engineering College & Research Centre, Jaipur, Rajasthan – 302022 ---------- ----------

9)Ms. S.Shanthini Devi

Address of Applicant :Assistant Professor, Department of CSE, Mohamed Sathak Engineering College, Kilakarai, Ramanathapuram, Tamilnadu – 623806 ---------- ----------

10)Ms. Indra Devi C.

Address of Applicant :Assistant Professor, Department of CSBS, Mohamed Sathak Engineering College, Kilakarai, Ramanathapuram, Tamilnadu – 623806 ---------- ----------

11)Dr. Jose Anand

Address of Applicant :Professor, Department of ECE, KCG College of Technology, Karapakkam, Chennai, Tamil Nadu – 600097 ---------- ----------

(57) Abstract :

[06] Technology has enabled great advances in the area of education, and with this arose the need to adapt physical materials to the digital environment. Among the methodologies that can be applied for this purpose are didactic sequences, which indicate the order in which students should study the content during the learning process and which can be created to meet the needs of each student. Considering the challenge of creating didactic sequences with such characteristics and that can be inserted into different learning management systems, the present work presents the development of a module capable of generating didactic sequences using Neural Networks and following the SCORM standard model, within the context of the data structure matter. Accompanied Drawing [FIG. 1] [FIG. 2] [FIG. 3] [FIG. 4] [FIG. 5] [FIG. 6] [FIG. 7] [FIG. 8]

No. of Pages : 21 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441057078 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A NEW THROTTLED ADAPTED LOAD BALANCING (TALB) STRATEGY FOR DYNAMIC VM ALLOCATIONS IN CLOUD DATACENTERS

(51) International classification :G06F0009500000, H04L0067100100, H04L0067100800, G06F0003060000, H04L0041089600
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)S. Shanmuga Priya
Address of Applicant :Assistant Professor, PG Department of Information Technology and BCA, Dwaraka Doss Goverdhan Doss Vaishnav College, Arumbakkam, Chennai-106. ---------- ----------
2)Dr.N.Priya
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)S. Shanmuga Priya
Address of Applicant :Assistant Professor, PG Department of Information Technology and BCA, Dwaraka Doss Goverdhan Doss Vaishnav College, Arumbakkam, Chennai-106. ---------- ----------
2)Dr.N.Priya
Address of Applicant :Associate Professor, Research Department of Computer Science, Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women, Chrompet, Chennai-600044 ---------- ----------

(57) Abstract :
The proposed Throttled Adapted Load Balancing (TALB) strategy enhances VM allocation in cloud datacenters by leveraging a TreeMap data structure for efficient sorting and retrieval of VM details. This approach partitions VMs into available and busy lists, enabling quick identification and allocation of tasks based on VM capacity and current load. TALB reduces searching and response times, optimizes resource utilization, and prevents server overloading. Simulations using the CloudAnalyst tool demonstrate TALB's superior performance, scalability, and cost-efficiency compared to traditional algorithms like Round Robin, ESCE, and TLB. The innovation ensures high performance and reliability, making it suitable for dynamic and heterogeneous cloud environments, and paving the way for future advancements in cloud computing.

No. of Pages : 28 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441057085 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : LYAPUNOV LEARNED RBFNN-BASED HEART DISEASE CLASSIFICATION USING PCG SIGNALS

(51) International classification	:A61B0007040000, G06K0009620000, G06N0003080000, G06N0003040000, G16H0050200000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Koneru Lakshmaiah Education Foundation
Address of Applicant :Green Fields, Vaddeswaram, Guntur District, A.P., INDIA. Pin code : 522 502. Vaddeswaram ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P Jyothi
Address of Applicant :Koneru Lakshmaiah Education Foundation, Greenfields, Vaddeswaram, Guntur-522502 Vaddeswaram ---------- ----------
2)G. Pradeepini
Address of Applicant :Koneru Lakshmaiah Education Foundation, Greenfields, Vaddeswaram, Guntur-522502 Vaddeswaram ---------- ----------

(57) Abstract :
A Lyapunov-learned Radial Basis Function Neural Network (RBFNN) method for early detection and classification of cardiovascular disease (CVD) using Phonocardiogram (PCG) signals is presented. The method includes splitting the PCG signal into intervals, re-sampling, de-noising, normalization, energy envelope computation, systolic and diastolic extraction using Bayes Fuzzy-C-Means (Bayes FCM), time-frequency conversion using Kendall's Ranking Correlation based Hilbert Huang Transform (KRC-HHT), feature extraction, feature selection using Premature Convergence Strategy based COOT (PCS-COOT), and classification via Lyapunov-learned RBFNN. The proposed system enhances classification accuracy, sensitivity, and specificity in CVD detection

No. of Pages : 16 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441057096 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM AND METHOD FOR EARLY DETECTION AND PREDICTION OF CROP DISEASES USING SMART AGRICULTURAL TECHNOLOGIES

(51) International classification :G06N0020000000, G06Q0010060000, G06Q0010040000, G06N0005040000, G06Q0050020000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Mamatha G
Address of Applicant :Assistant Professor, Department of Information Science and Engineering, East Point College of Engineering and Technology, Bengaluru 560049, Karnataka, India. ---------- ----------
2)Dr. G. T. Raju
3)Dr. Shanthi M
4)Jayashri M
5)Shilpa Prabhu Patil
6)Rashmi T. V.
7)Dhanushree A. N.
8)Tejaswini B
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mamatha G
Address of Applicant :Assistant Professor, Department of Information Science and Engineering, East Point College of Engineering and Technology, Bengaluru 560049, Karnataka, India. ---------- ----------
2)Dr. G. T. Raju
Address of Applicant :Principal, S. J. C. Institute of Technology, Chikkaballapur 562101, Karnataka, India. ---------- ----------
3)Dr. Shanthi M
Address of Applicant :Professor, Department of Information Science and Engineering, East Point College of Engineering & Technology, Bengaluru 560049, Karnataka, India. ---------- ----------
4)Jayashri M
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, SEA College of Engineering, Bengaluru 560049, Karnataka, India. ---------- ----------
5)Shilpa Prabhu Patil
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, East Point College of Engineering & Technology, Bengaluru 560049, Karnataka, India. ---------- ----------
6)Rashmi T. V.
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, East Point College of Engineering & Technology, Bengaluru 560049, Karnataka, India. ---------- ----------
7)Dhanushree A. N.
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, S. J. C. Institute of Technology, Chikkaballapur 562101, Karnataka, India. ---------- ----------
8)Tejaswini B
Address of Applicant :Assistant Professor, Department of Information Science and Engineering, East Point College of Engineering and Technology, Bangalore-560049, Karnataka, India. ---------- ----------

(57) Abstract :
The present invention provides a novel system and method for the early detection and prediction of crop diseases using advanced smart agricultural technologies. The system integrates a network of sensors deployed across agricultural fields to continuously monitor environmental conditions, soil properties, and crop health indicators. The collected data is transmitted to a central processing unit, where it is preprocessed and analyzed using machine learning algorithms. These algorithms identify patterns and correlations indicative of potential crop diseases and generate predictive insights. The results are presented through an intuitive user interface, offering real-time alerts and actionable recommendations to farmers. The system enhances disease management by enabling timely intervention, ultimately improving crop yield and quality while promoting sustainable agricultural practices. The invention also includes a feedback mechanism to continuously refine predictive models based on new data, ensuring ongoing accuracy and relevance. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024

(21) Application No.202441057097 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : IOT-ENABLED WASTE MANAGEMENT SYSTEM WITH MACHINE LEARNING FOR PREDICTIVE ANALYTICS

(51) International classification	:G06Q0010060000, G06N0020000000, G06Q0030060000, B65F0001140000, G06Q0010080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Rakesh Roshan
Address of Applicant :Assistant Professor, Department of Data Science, Anurag University, Hyderabad ---------- ----------
2)Rajendra Kumar
3)Arshid Ahmad Khan
4)Venkata Siva Rama Krishna
5)Dr. C. Antony
6)Prashant Agarwal
7)Dr. Kumar Neeraj
8)Dr. Ravi Aavula
9)Shashi Bhushan Singh
10)Dr. V Biksham
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Rakesh Roshan
Address of Applicant :Assistant Professor, Department of Data Science, Anurag University, Hyderabad ---------- ----------
2)Rajendra Kumar
Address of Applicant :Assistant Professor, Gurunanak Institutions Technical Campus Ibrahimpatnam, Rangareddy ---------- ----------
3)Arshid Ahmad Khan
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, AKAL University, Punjab ---------- ----------
4)Venkata Siva Rama Krishna
Address of Applicant :Assistant Professor, Gurunanak Institutions Technical Campus Ibrahimpatnam, Rangareddy ---------- ----------
5)Dr. C. Antony
Address of Applicant :Associate Professor, Gurunanak Institutions Technical Campus Ibrahimpatnam, Rangareddy ---------- ----------
6)Prashant Agarwal
Address of Applicant :Solution Architect, Gurugram ---------- ----------
7)Dr. Kumar Neeraj
Address of Applicant :Assistant Professor, Electronics and Communication Engineering, Anurag University, Hyderabad ---------- ----------
8)Dr. Ravi Aavula
Address of Applicant :Associate Professor, Department of CSE -DS, Anurag University, Hyderabad ---------- ----------
9)Shashi Bhushan Singh
Address of Applicant :Assistant Professor, Arka Jain University, Jharkhand (Gamharia) ---------- ----------
10)Dr. V Biksham
Address of Applicant :Asst. Professor, Dept. of Data Science, Anurag University, Hyderabad ---------- ----------

(57) Abstract :
The invention provides an IoT-enabled waste management system that integrates machine learning for predictive analytics to enhance the efficiency of waste collection and disposal. The system features smart waste bins equipped with sensors to monitor fill levels, temperature, and location. Data from these sensors is transmitted to a central processing unit, which utilizes machine learning algorithms to analyze and predict optimal collection schedules and routes. The system includes a cloud-based platform for data storage and a mobile application for real-time updates to waste collection personnel. This approach minimizes operational costs, reduces environmental impact, and ensures efficient waste management by optimizing collection processes based on predictive analytics. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 22 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024
(21) Application No.202441057098 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : IMPLEMENTATION OF A FACIAL RECOGNITION BASED ENHANCED SECURITY SYSTEM

(51) International classification	:G06F0021550000, A61B0005000000, G08B0013196000, H04N0007180000, H04L0051080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. T Murari
Address of Applicant :Professor, Department of English, Sri Venkateswara College of Engineering (Autonomous), Karakambadi Road, Tirupati, Tirupati District, Andhra Pradesh, India Tirupati ---------- ----------
2)T Yugandhar
3)Dr. P. Sreenivasulu
4)K. R. Surendra
5)K. B. Vamsi
6)Dr. P. Maninaga Kumar
7)Dr. K. Lokesh Krishna
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. T Murari
Address of Applicant :Professor, Department of English, Sri Venkateswara College of Engineering (Autonomous), Karakambadi Road, Tirupati, Tirupati District, Andhra Pradesh, India Tirupati ---------- ----------
2)T Yugandhar
Address of Applicant :Senior Assistant Professor, Department of English, Sri Venkateswara College of Engineering (Autonomous), Karakambadi Road, Tirupati, Tirupati District, Andhra Pradesh, India Tirupati ---------- ----------
3)Dr. P. Sreenivasulu
Address of Applicant :Professor, Department of Maths, Sri Venkateswara College of Engineering (Autonomous), Karakambadi Road, Tirupati, Tirupati District, Andhra Pradesh, India Tirupati ---------- ----------
4)K. R. Surendra
Address of Applicant :Senior Assistant Professor, Department of Electronics and Communication Engineering, Sri Venkateswara College of Engineering (Autonomous), Karakambadi Road, Tirupati, Tirupati District, Andhra Pradesh, India Tirupati ---------- ----------
5)K. B. Vamsi
Address of Applicant :Assistant Professor, Department of English, Sri Venkateswara College of Engineering (Autonomous), Karakambadi Road, Tirupati, Tirupati District, Andhra Pradesh, India Tirupati ---------- ----------
6)Dr. P. Maninaga Kumar
Address of Applicant :Professor, Department of Maths, Sri Venkateswara College of Engineering (Autonomous), Karakambadi Road, Tirupati, Tirupati District, Andhra Pradesh, India Tirupati ---------- ----------
7)Dr. K. Lokesh Krishna
Address of Applicant :Professor, Department of Electronics and Communication Engineering, Sri Venkateswara College of Engineering (Autonomous), Karakambadi Road, Tirupati, Tirupati District, Andhra Pradesh, India Tirupati ---------- ----------

(57) Abstract :
Disclosed herein is the Implementation of a Facial Recognition based Enhanced Security System. In general, perfect security system is needed as the current world is not safe as it is in the old days, and it has gained particular attention in the current scenario day-to-day activities. So, we need a enhanced and advanced security system. In this invention, Roboflow software module for face recognition and face detection is used, which are used to provide accurate and precise recognition even in difficult situations and with varying demographics. It includes the main processor as Raspberry Pi as a central computing system which reduces the implementation costs. The project is to provide a complete and dependable defensive system that protects people, property, and institutions from security threats by integrating Roboflow into the security infrastructure. Our Simulation results reveal that the invention is more efficient than the previous works in literature i.e. Accuracy as 95.7%, mean average precision as 99.7% and recall as 100%.

No. of Pages : 22 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024

(21) Application No.202441057099 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A COMPENSATED TWO-STAGE OPERATIONAL AMPLIFIER

(51) International classification :G06F0030367000, H03F0001080000, H04L0027260000, H03F0003450000, H03M0001000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. K. Lokesh Krishna
Address of Applicant :Professor, Department of Electronics and Communication Engineering, Sri Venkateswara College of Engineering (Autonomous), Karakambadi Road, Tirupati, Tirupati District, Andhra Pradesh, India Tirupati ---------- ----------
2)Dr. D. Srinivasulu Reddy
3)Allabaksh Shaik
4)V. Nagendra Kumar
5)Dr. G. Sujatha
6)T. Swarna Latha
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. K. Lokesh Krishna
Address of Applicant :Professor, Department of Electronics and Communication Engineering, Sri Venkateswara College of Engineering (Autonomous), Karakambadi Road, Tirupati, Tirupati District, Andhra Pradesh, India Tirupati ---------- ----------
2)Dr. D. Srinivasulu Reddy
Address of Applicant :Professor, Department of Electronics and Communication Engineering, Sri Venkateswara College of Engineering (Autonomous), Karakambadi Road, Tirupati, Tirupati District, Andhra Pradesh, India Tirupati ---------- ----------
3)Allabaksh Shaik
Address of Applicant :Senior Assistant Professor, Department of Electronics and Communication Engineering, Sri Venkateswara College of Engineering (Autonomous), Karakambadi Road, Tirupati, Tirupati District, Andhra Pradesh, India Tirupati ---------- ----------
4)V. Nagendra Kumar
Address of Applicant :Senior Assistant Professor, Department of Electronics and Communication Engineering, Sri Venkateswara College of Engineering (Autonomous), Karakambadi Road, Tirupati, Tirupati District, Andhra Pradesh, India Tirupati ---------- ----------
5)Dr. G. Sujatha
Address of Applicant :Professor, Department of Electronics and Communication Engineering, Sri Venkateswara College of Engineering (Autonomous), Karakambadi Road, Tirupati, Tirupati District, Andhra Pradesh, India Tirupati ---------- ----------
6)T. Swarna Latha
Address of Applicant :Senior Assistant Professor, Department of Electronics and Communication Engineering, Sri Venkateswara College of Engineering (Autonomous), Karakambadi Road, Tirupati, Tirupati District, Andhra Pradesh, India Tirupati ---------- ----------

(57) Abstract :
Disclosed herein are the design, simulation and implementation results of a compensated two-stage complementary metal oxide semiconductor operational amplifier architecture for a high speed analog to digital converter or digital to analog converter in 0.09 micrometer CMOS process technology. Improvements and modifications in integrated circuit fabrication technologies along with state of the art novel circuit design methodologies have made the high speed low power linear circuits to offer better performance in terms of operating speed, noise free, power dissipation, signal to noise distortion, voltage gain and oscillation free. The work in this invention reports a low power CMOS two-stage operational amplifier with proper designed miller compensation technique. The technique uses a nulling resistor method and achieves temperature insensitive tracking method. Circuit simulation is carried out at CMOS 90nm in analog design environment of cadence tools software. The circuit simulation demonstrates a gain of 78dB, unity gain bandwidth of 194MHz, phase margin of 72 degrees, slew rate of 62.6V/μS, a power consumption of 106.3 microwatts and all the results confirm an improved performance when compared to the previous works in the literature.

No. of Pages : 18 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2024
(21) Application No.202441057100 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR OPTIMIZING ACTIONABLE PARAMETERS OF PYRO PROCESSING IN CEMENT MANUFACTURING

(51) International classification	:G06N0003080000, G06N0003000000, G06N0020000000, G05B0019418000, G10L0015180000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)BERT LABS PRIVATE LIMITED
Address of Applicant :C1-906, L&T South City, Bannerghatta Road, Banglore-560076, Karnataka, INDIA Bangalore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Rohit Kochar
Address of Applicant :C1-906, L&T South City, Bannerghatta Road, Bengaluru, Karnataka, India – 560076 Bangalore ---------- ----------
2)Jai Prakash
Address of Applicant :# 125, BTM Lane Bhiwani, Haryana, India – 127021 Bhiwani ---------- ----------
3)Ramesh Potnuri
Address of Applicant :44-11-26, Near Ramalayam Temple, Rajahmundry, East Godavari District, AP 533103 Rajahmundry ---------- ----------

(57) Abstract :
A system (100) for optimizing actionable parameters of pyro processing in cement manufacturing is disclosed. The system includes a digital twin (112) and a reinforcement learning (RL) agent (202). The digital twin (112) is configured to simulate pyro processing system (114) associated with cement manufacturing process. The pyro processing system (114) is simulated based on collected operational data and design data. The RL agent (202) receives training and learning for optimizing the actionable parameters of the pyro processing through interaction with the digital twin (112) or the one or more environment models (112a). The RL agent (202) outputs at least one control strategy including the optimized actionable parameters, which when implemented or actuated simultaneously, minimizes power consumption, maximizes clinker product, and reduces fuel consumption.

No. of Pages : 53 No. of Claims : 17

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2024
(21) Application No.202441057102 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MICRO FLOW REACTOR SYSTEM FOR CATALYTIC ACTIVATION

(51) International classification :B01J0019000000, G06N0020000000, B01J0035000000, H01M0004900000, G06K0009620000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VELLORE INSTITUTE OF TECHNOLOGY
Address of Applicant :Vellore Institute of Technology, Near Katpadi Road, Vellore, Tamil Nadu, India – 632014 Vellore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Ponnusamy Palanisamy
Address of Applicant :Department of Thermal and Energy Engineering, School of Mechanical Engineering, Vellore Institute of Technology, Near Katpadi Rd, Katpadi, Tamil Nadu 632014, India Vellore ---------- ----------
2)Dr. Lokeshkumar Ramasamy
Address of Applicant :Department of Analytics, School of Computer Science and Engineering, Vellore Institute of Technology, Near Katpadi Rd, Katpadi, Tamil Nadu 632014, India Vellore ---------- ----------
3)Dr. Senthil Kumaran Selvaraj
Address of Applicant :Department of Manufacturing Engineering, School of Mechanical Engineering, Vellore Institute of Technology, Near Katpadi Rd, Katpadi, Tamil Nadu 632014, India Vellore ---------- ----------

(57) Abstract :
Micro flow reactor system for catalytic activation. The system (100) comprising of catalytic materials (110, 120 and 130) consisting of copper, nickel and chromium respectively wherein the catalytic materials (110, 120 and 130) are coated on the surface of the reactor to ensure uniform coverage and adhesion [FIG. 1]. A temperature regulation module (140) for maintaining optimal catalytic performance. Optimized mixing and flow control systems (150) within the reactor for promoting thorough mixing of fuel and air streams and ensure uniform distribution. A machine learning module (160) for collecting and analysing data from the reactor system and identify optimal operating conditions for catalytic activity. [FIG. 1]

No. of Pages : 20 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2024
(21) Application No.202441057103 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR CONTROLLING AND OPERATING LIGHTS IN A COMMERCIAL SHOP ENVIRONMENT

(51) International classification :H05B47/10, H05B47/115, H05B47/125, H05B47/155, G05B19/02, H04W4/80, H05B47/19
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VELLORE INSTITUTE OF TECHNOLOGY
Address of Applicant :Vellore Institute of Technology, Near Katpadi Road, Vellore, Tamil Nadu, India – 632014 Vellore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Santanu Kumar Dash
Address of Applicant :TIFAC-CORE, 7th Floor Technology Tower, Vellore Institute of Technology, Near Katpadi Rd, Katpadi, Tamil Nadu 632014, India Vellore ---------- ----------
2)Harin M. Mohan
Address of Applicant :SELECT, 7th Floor TIFAC CORE Technology Tower, Vellore Institute of Technology, Near Katpadi Rd, Katpadi, Tamil Nadu 632014, India Vellore ---------- ----------

(57) Abstract :
System and method for controlling and operating lights in a commercial shop environment. The system comprising of a self-scanner unit (110) equipped with advanced power management tackling energy consumption issues in retail stores wherein the self-scanner unit (110) utilizes a power management system that dynamically adjusts its own consumption based on usage wherein the self-scanner unit (110) is integrated with the building management system to control lighting and air conditioning based on real-time customer traffic data wherein the self-scanner unit (110) guides customers through the store, highlighting item locations and estimated costs. An in-built navigation system powered by RFID, Wi-Fi and indoor mapping, directs them right to the products they need. Even perishables are accounted for, as the scanner's camera can be used to assess the freshness of fruits and vegetables [FIG. 1 and FIG. 2].

No. of Pages : 15 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2024
(21) Application No.202441057108 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : VIBRATION ENABLED SMART HAND STICK FOR VISUALLY CHALLENGED AND HEARING IMPAIRMENTS

(51) International classification	:A61H0003060000, G09B0021000000, G08B0006000000, A61F0009080000, G01S0015870000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)N S GOWRI GANESH
Address of Applicant :PLOT NO 56 SECOND CROSS STREET KAMAKOTI NAGAR PALLIKARANAI CHENNAI TAMIL NADU INDIA 600100 ---------- ----------
2)SAVEETHA ENGINEERING COLLEGE
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr.VASANTHKUMAR.CHODA
Address of Applicant :HOUSE NO 8-35 MAIN ROAD INKOLLU ANDHRA PRADESH INDIA 523167 INKOLLU ---------- ----------
2)N S GOWRI GANESH
Address of Applicant :PLOT NO 56 SECOND CROSS STREET KAMAKOTI NAGAR PALLIKARANAI CHENNAI TAMIL NADU INDIA 600100 Chennai ---------- ----------

(57) Abstract :
ABSTRACT OF THE INVENTION The present invention is a sophisticated navigational aid specifically designed for visually impaired individuals to enhance their mobility and independence. This smart stick incorporates an Arduino UNO microcontroller, ultrasonic sensors, and a coin vibration motor, creating a comprehensive system for obstacle detection and user notification. The ultrasonic sensors, strategically positioned on the cane, can detect obstacles up to 100 cm away. When an obstacle is detected, the sensor sends the distance information to the Arduino UNO, which processes this data and triggers the coin vibration motor. The vibration motor, mounted on a hand band, provides tactile feedback to the user, alerting them to the presence and proximity of obstacles. This method of feedback is discreet yet effective, ensuring that the user is constantly aware of their surroundings without the need for auditory signals, which might be intrusive or missed in noisy environments. The smart stick's design is compact and user-friendly, incorporating a lightweight and ergonomic cane, making it comfortable for daily use. The use of modern electronic components and sensors ensures reliability and durability. This invention represents a significant improvement over traditional aids like white canes and guide dogs, offering a high-tech solution that addresses the limitations of existing devices and supports visually impaired individuals in navigating their environments safely and independently.

No. of Pages : 12 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :27/07/2024

(21) Application No.202441057109 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : PREDICTIVE ANALYTICS: TRANSFORMING CUSTOMER PROFILING, SEGMENTATION AND SALES PREDICTION IN DIRECT MARKETING USING MACHINE LEARNING

(51) International classification	:G06Q0030020000, G06K0009620000, G06N0005040000, G06F0011360000, G06Q0050060000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr Somasekhar Donthu

Address of Applicant :Assistant Professor, School Of Business, Gitam University, Bangalore 561203, Bangalore Rural, Karnataka, India. ---------- ----------

2)Dr.Yogesh wasudeo Bhowte

3)Dr. Riyaz Ahmed Qureshi

4)Dr. Priya Sethuraman

5)Dr. Rambhai Jakhara Bharada

6)Sudeshna Pahari

7)Br. Bandaru Srinivasa Rao

8)Chaduvula Ramya

9)Dr.M.Vetrivel

10)N.Manicka Senthamarai

11)Anthony Savio Herminio da Piedade Fernandes

12)Dr.K.Mahendran

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr Somasekhar Donthu

Address of Applicant :Assistant Professor, School Of Business, Gitam University, Bangalore 561203, Bangalore Rural, Karnataka, India. ---------- ----------

2)Dr.Yogesh wasudeo Bhowte

Address of Applicant :Professor, MBA, Singhad Institute of Management and Computer Applications Pune 411041, Maharashtra, India. ---------- ----------

3)Dr. Riyaz Ahmed Qureshi

Address of Applicant :Assistant Professor Marketing, Institute of Management & Research, MGM University, Aurangabad, Maharashtra, India. ---------- ----------

4)Dr. Priya Sethuraman

Address of Applicant :Professor/ Department of Management Studies, St. Joseph's Institute of Technology, Chennai, 600119, Chengalpattu, Tamil Nadu, India. ---------- ----------

5)Dr. Rambhai Jakhara Bharada

Address of Applicant :Assistant Professor at Darshan Institute of Management, Darshan University, Rajkot, 363650, Gujarat, India. ---------- ----------

6)Sudeshna Pahari

Address of Applicant :Assistant Professor, Amity Business School, Amity University Kolkata, 700135, West Bengal, India. ---------- ----------

7)Br. Bandaru Srinivasa Rao

Address of Applicant :Department of Management Studies, VFSTR Deemed to be University, Vadlamudi (Village), Guntur, Andhra Pradesh, India. ---------- ----------

8)Chaduvula Ramya

Address of Applicant :Assistant Professor, Department of Chemical Engineering GMR Institute of Technology, Rajam, 532127, Vizianagaram, Andhra Pradesh, India. ---------- ----------

9)Dr.M.Vetrivel

Address of Applicant :Associate Professor, Department of Commerce, VELS University VISTAS, Chennai - 600117, Tamil Nadu, India. ---------- ----------

10)N.Manicka Senthamarai

Address of Applicant :Assistant Professor, Computer science and engineering, Erode - 638012, Tamil Nadu, India. ---------- ----------

11)Anthony Savio Herminio da Piedade Fernandes

Address of Applicant :Founder Owner, Trading Equations, 54/C, Xell, Bastora, Bardez, Goa (403507), North Goa, India. ---------- ----------

12)Dr.K.Mahendran

Address of Applicant :Associate Professor /ECE, Jansons Institute of Technology, Coimbatore 641659, Tamil Nadu, India. ---------- ----------

(57) Abstract :

PREDICTIVE ANALYTICS: TRANSFORMING CUSTOMER PROFILING, SEGMENTATION AND SALES PREDICTION IN DIRECT MARKETING USING MACHINE LEARNING The method for the development of digital startups that want to satisfy their customers and expand sustainably must base their strategic decision-making on effective client profiling. Utilizing validation measures to determine the best clusters, this study explores the clustering of consumers based on regency, frequency, and monetary (RFM) analysis. Identification of discrete consumer segments is facilitated by the combination of the Elbow technique, Silhouette coefficient, and Gap Statistics approach with the K-means clustering algorithm. A boosting tree for prediction is employed, along with the RFM analysis approach for assessing client capital. This study gave an organized examination of how AI may accurately identify the target consumers despite their disparate actions, with a focus on the marketing environment. The uses of AI in customer targeting and the expected efficacy across the many phases of customer lifecycle were also covered. Through the historical analysis, behavioral insights of individual customers may be obtained in a more reliable and efficient method. FIG.1

No. of Pages : 16 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2024
(21) Application No.202441057115 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : IOT BASED CLINICAL FLOW CYTOMETER

(51) International classification :G01N0015140000, H04L0067120000, G16H0010600000, G06N0005040000, E21B0044000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr.R.Rajalakshmi
Address of Applicant :Associate Professor, CSE, Sathyabama Institute Of Science and Technology, Chennai, Tamilnadu, India ---------- ----------
2)Dr.Viji Amutha Mary.A
3)Dr.Joshila Grace L K
4)Dr. S.Jancy
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.R.Rajalakshmi
Address of Applicant :Associate Professor, CSE, Sathyabama Institute Of Science and Technology, Chennai, Tamilnadu, India ---------- ----------
2)Dr.Viji Amutha Mary.A
Address of Applicant :Professor, CSE, Sathyabama Institute Of Science and Technolgy, Chennai, Tamilnadu, India ---------- ----------
3)Dr.Joshila Grace L K
Address of Applicant :Professor, CSE, Sathyabama Institute Of Science and Technology, Chennai, Tamilnadu, India ---------- ----------
4)Dr. S.Jancy
Address of Applicant :Associate Professor, CSE, Sathyabama Institute Of Science and Technology, Chennai, Tamilnadu, India ---------- ----------

(57) Abstract :
The present invention relates to an IOT based clinical flow cytometer (100). The IOT based clinical flow cytometer (100) comprises a plurality of IoT sensors, a data collection module, a connectivity module, a cloud-based platform, an automation and remote control module. The system integrates a plurality of IoT sensors to monitor critical parameters such as temperature, pressure, flow rates, and fluid levels within the cytometer. The system includes a data collection module that gathers real-time data from these sensors and transmits it to a centralized system. The connectivity module ensures secure internet connectivity for transmitting the data to a cloud-based platform or local server. The cloud-based platform is responsible for storing, processing, and analyzing the transmitted data, facilitating real-time monitoring and remote access. Additionally, the system incorporates an automation and remote control module that allows users to start, stop, and monitor cytometric processes from a remote location.

No. of Pages : 12 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2024
(21) Application No.202441057116 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN AUTOMATIC MACHINE FOR POINT GRINDING OF SURGICAL NEEDLES AND A METHOD OF GRINDING THEREOF

(51) International classification	:A61B0017060000, B24B0041000000, B24B0041060000, B24D0005020000, B24B0047220000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Stitchwell
Address of Applicant :D.No 1/39 -H, Keeranatham, Saravanampatti, Coimbatore, Tamilnadu, India- 631035 Coimbatore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)A. Senthil Kumar
Address of Applicant :D.No 1/39 -H, Keeranatham, Saravanampatti, Coimbatore, Tamilnadu, India- 631035 Coimbatore ---------- ----------

(57) Abstract :
Title of the Invention: An automatic machine for point grinding of surgical needles and a method of grinding thereof An automatic machine for point grinding of surgical needles and a method thereof are disclosed. The machine comprises a storage hopper (1), an autofeed sprocket (2) which feeds needles to the rubberized flywheel (3) and transports them to the tapered polishing wheel (5) for precise grinding. The machine utilizes a motor (7), a gear assembly (15) and a combination of flywheels and shaft arrangements including shafts (16, 16a, 19, 19a), flywheels (20,22) and sprockets C and C1 (17, 18) and sprockets D and D1 (24, 25) to ensure synchronized operation. Technical advancements include an automatic feeding system, enhanced friction and grip for accurate needle transportation, and a tapered polishing wheel for precise grinding. The primary use of this machine is in the production of surgical needles of varying lengths and diameters, enhancing the quality and precision of medical instruments.

No. of Pages : 37 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2024
(21) Application No.202441057120 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ENHANCED PROCESS FOR BORING THROUGH-HOLES IN COMPOSITE LAMINATES

(51) International classification	:B23H0007100000, B32B0027080000, B23H0007020000, B23H0007060000, B23H0007040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Chennai Institute of Technology
Address of Applicant :Sarathy Nagar, Kundrathur, Chennai-600069, Tamil Nadu, India. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Hrishikesh Dutta
Address of Applicant :Chennai Institute of Technology, Sarathy Nagar, Kundrathur, Chennai-600069 Chennai ---------- ----------
2)Dr. T. Arunkumar
Address of Applicant :Chennai Institute of Technology, Sarathy Nagar, Kundrathur, Chennai-600069 Chennai ---------- ----------

(57) Abstract :
ABSTRACT Enhanced Process for Boring Through-Holes in Composite Laminates The invention discloses an improved method for boring through-holes in carbon fiber-kevlar fiber reinforced polymer (CKRP) laminates using a modified wire electric discharge machining (WEDM) process. The method involves placing the CKRP laminate, with a pre-drilled hole, between two conductive sheets, each with pre-drilled holes, and positioning this assembly in a WEDM machine. A wire electrode is threaded through the holes and moved in a specific path to enlarge the hole. This process optimizes input parameters to achieve enhanced surface finish and precision, effectively removing material through controlled sparking and heat generation. Fig.1

No. of Pages : 13 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2024
(21) Application No.202441057121 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ANTI THEFT AND TRACKING SYSTEM

(51) International classification	:H02J0007000000, G06Q0030020000, A61B0090000000, H04M0003420000, G08B0025100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Chennai Institute of Technology
Address of Applicant :Sarathy Nagar, Kundrathur, Chennai-600069, Tamil Nadu, India. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. G. Maheswaran
Address of Applicant :Chennai Institute of Technology, Sarathy Nagar, Kundrathur, Chennai-600069 Chennai ---------- ----------
2)T. Vinoth
Address of Applicant :Chennai Institute of Technology, Sarathy Nagar, Kundrathur, Chennai-600069 Chennai ---------- ----------
3)Dr. Anushrsj. B
Address of Applicant :Chennai Institute of Technology, Sarathy Nagar, Kundrathur, Chennai-600069 Chennai ---------- ----------
4)E. Sampathkumar
Address of Applicant :Chennai Institute of Technology, Sarathy Nagar, Kundrathur, Chennai-600069 Chennai ---------- ----------

(57) Abstract :
ABSTRACT ANTI THEFT AND TRACKING SYSTEM The present invention discusses an anti-theft tracking system or device comprising a GPS module to identify location, a chip-based quad-band GSM/GPRS+GPS module for internet access equipped with a GPS location module to identify location; a GSM module to connect to the electronic device to receive and send call and messages; a controller to control the said modules and transfer the current location to sim module; a server connected to website to provide information of the location; a battery with charging circuit to provide energy to run the system along with a switch to ON and OFF the said system, wherein the said system is microcontroller assisted. The said switch can also be put ON by way of connecting the system to vehicle battery.

No. of Pages : 14 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2024

(21) Application No.202441057122 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : EXTRUDER AIR QUALITY MONITORING SYSTEM

(51) International classification	:G01N0033000000, F24F0110700000, G01N0001220000, G01N0015000000, G01N0015060000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Chennai Institute of Technology
Address of Applicant :Sarathy Nagar, Kundrathur, Chennai-600069, Tamil Nadu, India. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P. Pradeep Castro
Address of Applicant :Chennai Institute of Technology, Sarathy Nagar, Kundrathur, Chennai-600069 Chennai ---------- ----------
2)Dr.V. Dhinakaran
Address of Applicant :Chennai Institute of Technology, Sarathy Nagar, Kundrathur, Chennai-600069 Chennai ---------- ----------
3)V. Murugan
Address of Applicant :Chennai Institute of Technology, Sarathy Nagar, Kundrathur, Chennai-600069 Chennai ---------- ----------
4)Dhushyanth PS
Address of Applicant :Chennai Institute of Technology, Sarathy Nagar, Kundrathur, Chennai-600069 Chennai ---------- ----------

(57) Abstract :
ABSTRACT Extruder Air Quality Monitoring System The present invention discloses an advanced air quality monitoring and alarm system specifically designed for filament extrusion processes in industrial settings. The system includes multiple sensors to detect air quality parameters such as particulate matter, volatile organic compounds (VOCs), temperature, and humidity. Data collected is analyzed in real-time by a central processing unit using advanced techniques to identify trends and predict potential hazards. Upon detecting unsafe air quality levels, the system triggers an alarm mechanism (3, 4, 5), ensuring immediate action. The system aims to enhance operational safety, ensure regulatory compliance, and promote environmental sustainability. Fig.3

No. of Pages : 20 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :27/07/2024

(21) Application No.202441057124 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : FAKE DETECT: A DEEP LEARNING ENSEMBLE MODEL FOR FAKE NEWS DETECTION

(51) International classification	:G06N0003040000, G06K0009620000, G06N0020000000, G06N0007000000, A61K0036280000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr. Raghunadh Pasunuri

Address of Applicant :Associate Professor Computer Science and Engineering(AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State:Telangana Email ID & Contact Number: drraghunadhcse@mrec.ac.in & 9063447284 Secunderabad ---------- ----------

2)Malla Reddy Engineering Colleg

3)Dr.J.Rajaram

4)Dr. Masrath Parveen

5)Dr. UDDANTI MOHAN SRINIVAS

6)CH V S SURYA NARAYANA

7)SAISUMAN SINGAMSETTY

8)Dr SAHITHI URITI

9)K.Sateesh

10)P.Dhana Laxmi

11)Dhondi Pandu Ranga

12)M.Sailu

13)Dinesh Magapu

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. Raghunadh Pasunuri

Address of Applicant :Associate Professor Computer Science and Engineering(AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State:Telangana Email ID & Contact Number: drraghunadhcse@mrec.ac.in & 9063447284 Secunderabad ---------- ----------

2)Malla Reddy Engineering Colleg

Address of Applicant :Malla Reddy Engineering College Dhulapally post via Kompally Maisammaguda Secunderabad -500100 Secunderabad ---------- ----------

3)Dr.J.Rajaram

Address of Applicant :Professor Computer Science and Engineering(AIML) Dept., Malla Reddy Engineering College for Women, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State:Telangana Email ID & Contact Number: drjrajaram81@gmail.com & 9866587739 Secunderabad ---------- ----------

4)Dr. Masrath Parveen

Address of Applicant :Assistant Professor IT Dept., Vidya Jyothi Institute of Technology, Aziznagar, (Moinabad-500075). State:Telangana Email ID & Contact Number: masrath19@gmail.com & 9849611556 Hyderabad ---------- ----------

5)Dr. UDDANTI MOHAN SRINIVAS

Address of Applicant :Professor Computer Science and Engineering(AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State:Telangana Email ID & Contact Number:umohansrinivas@gmail.com & 9052760536 Secunderabad ---------- ----------

6)CH V S SURYA NARAYANA

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: surya930@gmail.com & 9247722083 Secunderabad ---------- ----------

7)SAISUMAN SINGAMSETTY

Address of Applicant :Data Management Specialist Algo professor Software solutions,Bachupalli,Hyderabad-500090 Telangana. Email ID & Contact Number: saisuman.singamsetty@gmail.com & 6303432833 Hyderabad ---------- ----------

8)Dr SAHITHI URITI

Address of Applicant :Assistant Professor . Dept of Computer Applications Gayatri Vidya Parishad College of Degree and PG Courses(A) Rushikonda, Visakhapatnam -530045 State: Andhra Pradesh. Email ID & Contact Number: sahitiuriti@gmail.com & 9849339874 Visakhapatnam ---------- ----------

9)K.Sateesh

Address of Applicant :Assistant Professor Computer Science and Engineering(AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State:Telangana Email ID & Contact Number: ksateesh18@gmail.com & 8019873736 Secunderabad ---------- ----------

10)P.Dhana Laxmi

Address of Applicant :Assistant Professor Computer Science and Engineering(AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State:Telangana Email ID & Contact Number: dhana3054@gmail.com & 9912726385 Secunderabad ---------- ----------

11)Dhondi Pandu Ranga

Address of Applicant :Assistant Professor Computer Science and Engineering(AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State:Telangana Email ID & Contact Number: dhondi.pandu2gmail.com & 9494925776 Secunderabad ---------- ----------

12)M.Sailu

Address of Applicant :Assistant Professor Computer Science and Engineering(AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State:Telangana Email ID & Contact Number: mavuram.sailu@gmail.com & 8142941219 Secunderabad ---------- ----------

13)Dinesh Magapu

Address of Applicant :Student, 4th B.Tech Sem-1, Electrical and Electronics Engineering Dept., Srinivasa Institute of Engineering and Technology(A) Cheyyeru, Amalapuram-533216 Andhra Pradesh Email ID & Contact Number magapudinesh@gmail.com &9666921939 Amalapuram ---------- ----------

(57) Abstract :

The growing exposure of untrue reports in today's digital age makes it tricky to separate honest and deceitful information. This piece suggests a template for recognizing fabricated news by employing machine learning and profound learning methodologies. Different formulas such as SVM, CNN, LSTM, KNN, and Naive Bayes are applied for trait extraction and authenticity scoring from textual information. LSTM stands out as the most productive formula, attaining a noteworthy accuracy of 97%. An ensemble learning tactic through the smooth voting technique is used to join the advantages of individual categorizers, further increasing accuracy. Precision evaluation measures like sensitivity, recall, and F1-Grade are used to analyze the efficiency of the template. By concentrating on profound learning formulas like CNN and LSTM, the strategy outshines old-school machine learning methods, promising enhanced accuracy and credibility in spotting bogus news. The template is tested on an assorted data collection procured from different news platforms and scrutinized against a scope of news articles. Continuous enhancement and adaptation grounded on new information and evolving trends are highlighted to ensure the template's toughness over time. In closure, this inquiry gives a potential progression in contesting false reports, delivering an advanced resolution that possesses the potential to elevate the trustworthiness of news utilization in the digital era.

No. of Pages : 8 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2024

(21) Application No.202441057127 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ARTIFICIAL INTELLIGENCE BASED DISPLAY AND INTERACTIVE KIOSK FORBANKING SECTOR

(51) International classification	:G06Q0030020000, G06N0020000000, H04L0051020000, G06Q0030000000, A61B0005110000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Mr Jaswanth Singh Gokul
Address of Applicant :Insurance (InsureTech),Banking & Pensions Domain Consultant and Faculty Innovator ---------- ----------
2)Dr Vijaya Bhaskar. Kolur
3)Dr Madhumita Chatterji
4)Dr Subhash Ramchandra Kulkarni
5)Dr Kshitiz Sharma
6)Dr Naresh Babu
7)Dr Purushotham
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr Jaswanth Singh Gokul
Address of Applicant :Insurance (InsureTech),Banking & Pensions Domain Consultant and Faculty Innovator ---------- ----------
2)Dr Vijaya Bhaskar. Kolur
Address of Applicant :Professor and Program Coordinator Banking, Financial Services, and Insurance (BFSI) Program Acharya Bangalore B-School School of Management (ABBSSM) ---------- ----------
3)Dr Madhumita Chatterji
Address of Applicant :Director & Domain expertise: Strategic Management Acharya Bangalore B-School School of Management (ABBSSM) ---------- ----------
4)Dr Subhash Ramchandra Kulkarni
Address of Applicant :Sr. Faculty Analytics Acharya Bangalore BSchool School of Management (ABBSSM) ---------- ----------
5)Dr Kshitiz Sharma
Address of Applicant :Professor Acharya Bangalore B-School School of Management (ABBSSM) ---------- ----------
6)Dr Naresh Babu
Address of Applicant :Professor Acharya Bangalore B-School School of Management (ABBSSM) ---------- ----------
7)Dr Purushotham
Address of Applicant :Professor Acharya Bangalore B-School School of Management (ABBSSM) ---------- ----------

(57) Abstract :
The present invention relates to an artificial intelligence based display and interactive kiosk for banking sector. The artificial intelligence based display and interactive kiosk for banking sector comprises a user interface, a identity verification, a natural language processing (NLP) driven chatbot, a machine learning algorithms, an accessibility features and a security measures. The user interface for facilitating customer interaction. The identity verification means for secure user authentication, including at least one of the following: mobile retina scan, facial recognition, and gait analysis. The natural language processing (NLP) driven chatbot for real-time customer support and transaction guidance. The machine learning algorithms for personalizing customer service and promotional offers. The accessibility features designed to accommodate users with disabilities. The security measures including data encryption and a system for conducting regular security audits.

No. of Pages : 18 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2024

(21) Application No.202441057129 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : PHENYL ALANINE-DEXIBUPROFEN PRODRUG FOR TREATMENT OF ALZHEIMER'S DISEASE

(51) International classification :A61P0025280000, A61K0031192000, A61P0025000000, A61P0025080000, A61K0045060000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Al Shifa College of Pharmacy
Address of Applicant :Al Shifa College of Pharmacy, Poonthavanam Post, Kizhattur, Peinthalmanna, Malappuram District, Kerala, India 679325 Malappuram ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Arun Rasheed
Address of Applicant :Department of Pharmaceutical Chemistry, Al Shifa College of Pharmacy, Poonthavanam Post, Kizhattur, Peinthalmanna, Malappuram District, Kerala, India 679325 Malappuram ---------- ----------
2)Athulya K A
Address of Applicant :Department of Pharmaceutical Chemistry, Al Shifa College of Pharmacy, Poonthavanam Post, Kizhattur, Peinthalmanna, Malappuram District, Kerala, India 679325 Malappuram ---------- ----------
3)Sanal Dev K T
Address of Applicant :Department of Pharmaceutical Chemistry, Al Shifa College of Pharmacy, Poonthavanam Post, Kizhattur, Peinthalmanna, Malappuram District, Kerala, India 679325 Malappuram ---------- ----------
4)Suhail P T
Address of Applicant :Department of Pharmacology, Al Shifa College of Pharmacy, Poonthavanam Post, Kizhattur, Peinthalmanna, Malappuram District, Kerala, India 679325 Malappuram ---------- ----------
5)Deepika Dinesh A
Address of Applicant :Department of Pharmaceutical Chemistry, Al Shifa College of Pharmacy, Poonthavanam Post, Kizhattur, Peinthalmanna, Malappuram District, Kerala, India 679325 Malappuram ---------- ----------

(57) Abstract :
Abstract The present invention describes design and method of synthesis of Phenyl alanine-Dexibuprofen prodrug with superior lipophilic properties and the prodrug transport dexibuprofen to the brain by crossing blood brain barrier. The prodrug exerts neuroprotective properties and potentially can be use in prevention and treatment of Alzheimer's disease.

No. of Pages : 28 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2024
(21) Application No.202441057132 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DESIGN AND DEVELOPMENT OF PORTABLE AND PROGRAMMABLE HIGH FREQUENCY SOUNDER FOR BOTTOMSIDE AND TOPSIDE SOUNDING OF THE EARTH & PLANETARY IONOSPHERES

(51) International classification :H04B0001690000, H01Q0009280000, G06N0020000000, G06K0009000000, H04K0003000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Indian Space Research Organisation
Address of Applicant :ISRO Headquarters, Department of Space, Antariksh Bhavan, New BEL Road, Bangalore – 560094, India Bangalore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. M. Durga Rao
Address of Applicant :National Atmospheric Research Laboratory (NARL), department of space, Gadanki – 517112 Gadanki ---------- ----------
2)Dr. N. Venkateswara Rao
Address of Applicant :National Atmospheric Research Laboratory (NARL), department of space, Gadanki – 517112 Gadanki ---------- ----------
3)Mr. KMV Prasad
Address of Applicant :National Atmospheric Research Laboratory (NARL), department of space, Gadanki – 517112 Gadanki ---------- ----------
4)Mr. K Jayaraj
Address of Applicant :National Atmospheric Research Laboratory (NARL), department of space, Gadanki – 517112 Gadanki ---------- ----------
5)Mr. J. Raghavendra
Address of Applicant :National Atmospheric Research Laboratory (NARL), department of space, Gadanki – 517112 Gadanki ---------- ----------

(57) Abstract :
ABSTRACT Aspect of the present invention relates to a portable and programmable high frequency sounder system comprising of key components DAC based Radio Frequency synthesizer, Solid state Transmitter (SST), Radio Frequency (RF) Receiver, Signal Processing System (SPS), Power supply unit and Antenna system. The DAC (Digital-to-Analog Converters) based Radio Frequency synthesizer generates low power radio frequency (RF) signals depending on the modes of operation having both sweep mode and chirp mode. The power supply is DC/DC converter with output short circuit protection which connects to all units via twisted shielded copper cables. The antenna is a fan dipole antenna which is RF transformer and lumped components to cover the entire frequency band from 1-25 MHz. Artificial Intelligence (AI) based data processing algorithm to identify the data points where signals are present have considerably higher statistical variance of RTI across time than those with only noise.

No. of Pages : 60 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2024
(21) Application No.202441057133 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MINIATURISED PASSIVE LOAD CAPSULE

(51) International classification :F03G0007060000, A61B0017880000, F16F0007120000, E04H0009020000, G01B0007240000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Indian Space Research Organisation
Address of Applicant :ISRO Headquarters, Department of Space, Antariksh Bhavan, New BEL Road, Bangalore 560094, India Bangalore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Johns Paul
Address of Applicant :C/o VSSC, ISRO Government of India, Department of Space, Thiruvananthapuram, Kerala- 695022, India Thiruvananthapuram ---------- ----------
2)Aromal Loujan
Address of Applicant :C/o VSSC, ISRO Government of India, Department of Space, Thiruvananthapuram, Kerala- 695022, India Thiruvananthapuram ---------- ----------
3)Santhosh Joseph Nalluveettil
Address of Applicant :C/o VSSC, ISRO Government of India, Department of Space, Thiruvananthapuram, Kerala- 695022, India Thiruvananthapuram ---------- ----------

(57) Abstract :
ABSTRACT MINIATURISED PASSIVE LOAD CAPSULE Load capsule is a passive device designed and developed to be used in compact spaces and can measure the peak tensile load acting on the system. It contains a shape memory alloy which undergoes plastic deformation when the load capsule is under tensile load. The peak tensile load can be estimated from the deformation of the SMA collar. The device can be designed to measure any arbitrary load range with an accuracy of ±5%.

No. of Pages : 20 No. of Claims : 17

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2024
(21) Application No.202441057134 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DIFFUSION BONDING OF NI BASED SUPER ALLOY WITH MONEL ALLOY

(51) International classification :G01N0003080000, B64G0001640000, B64G0001000000, B23K0020020000, A61L0027300000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Indian Space Research Organisation
Address of Applicant :ISRO Headquarters, Department of Space, Antariksh Bhavan, New Bel Road, Bangalore – 560094, India Bangalore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Steaphen Sigatapu
Address of Applicant :SMF/MMG/MME/VSSC, INSTEF Area, Thumba, Thiruvananthapuram, Kerala-695022 Thiruvananthapuram ---------- ----------
2)Omendra Mishra
Address of Applicant :SMF/MMG/MME/VSSC, INSTEF Area, Thumba, Thiruvananthapuram, Kerala-695022 Thiruvananthapuram ---------- ----------
3)Anoop Kumar Shukla
Address of Applicant :SMF/MMG/MME/VSSC, INSTEF Area, Thumba, Thiruvananthapuram, Kerala-695022 Thiruvananthapuram ---------- ----------
4)Govind
Address of Applicant :MMG/MME/VSSC, INSTEF Area, Thumba, Thiruvananthapuram, Kerala-695022 Thiruvananthapuram ---------- ----------

(57) Abstract :
Inconel and Monel alloy samples are joined together through diffusion bonding and the process parameters are optimized. No interlayer/coating/surface preparation is used for joining of the samples. The diffusion bonded samples are subjected to tensile testing and obtained a strength of 500 MPa (min.). This technology can be used for processing Bi-Metallic Adaptors (BMA) for launch vehicle and satellite applications.

No. of Pages : 12 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :27/07/2024

(21) Application No.202441057137 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : FEASIBILITY AND DEVELOPMENT OF INDIAN REGIONAL SATELLITE-BASED QUANTUM POSITIONING SYSTEM- A TESTBED APPROACH (DIAMOND)

(51) International classification :H04B0007185000, G01W0001000000, G01W0001080000, H04B0010700000, H04L0009080000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Venkata Ratnam D
Address of Applicant :Flat No 202, Sree Rama Sneha Apartment, Opp Pathuru X Road, Kunchanapalle, Tadepalle(Mandal), Guntur GUNTUR, ANDHRA PRADESH 522501 India ---------- ----------
2)Koneru Lakshmaiah Education Foundation
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. D. Venkata Ratnam
Address of Applicant :Koneru Lakshmaiah Education Foundation Vaddeswaram ---------- ----------
2)Dr. Ketavath Kumar Naik
Address of Applicant :Koneru Lakshmaiah Education Foundation Vaddeswaram ---------- ----------
3)Dr. PVV Kishore
Address of Applicant :Koneru Lakshmaiah Education Foundation Vaddeswaram ---------- ----------
4)Dr. M Sridhar
Address of Applicant :Koneru Lakshmaiah Education Foundation Vaddeswaram ---------- ----------
5)Dr. M. Suman
Address of Applicant :Koneru Lakshmaiah Education Foundation Vaddeswaram ---------- ----------
6)Ms. E. Suneetha
Address of Applicant :Koneru Lakshmaiah Education Foundation Vaddeswaram ---------- ----------
7)Dr. D. Bhavana
Address of Applicant :Koneru Lakshmaiah Education Foundation Vaddeswaram ---------- ----------
8)Dr. Nishant Kumar
Address of Applicant :Koneru Lakshmaiah Education Foundation Vaddeswaram ---------- ----------
9)Dr. Vyoma Singh
Address of Applicant :Koneru Lakshmaiah Education Foundation Vaddeswaram ---------- ----------
10)Dr. M. Rajani Devi
Address of Applicant :Koneru Lakshmaiah Education Foundation Vaddeswaram ---------- ----------
11)Dr. TV Rao
Address of Applicant :TIFR - balloon facility Hyderabad ---------- ----------
12)Dr. K. Padma Raju
Address of Applicant :JNTU Kakinada Kakinada ---------- ----------
13)Dr. TSN Murthy
Address of Applicant :JNTU Vizianagaram Vizianagaram ---------- ----------

(57) Abstract :
A Quantum signal propagating through the atmosphere experiences absorption and scattering propagation, affecting atmospheric turbulence results. The Atmospheric Refractive Index parameter Cn2 profile is crucial to monitor the atmospheric variability for QKD-based satellite-to-ground communication links. Atmospheric turbulence is a function of location, time of day, wind speed, and other climate conditions and vegetation. The Cn2 atmospheric profile up 20 km is major atmospheric turbulence losses that are significant quantum QKD signals traversing the troposphere. The Cn2 profiles will be derived, and atmospheric scintillations over the Indian region will be characterized using Radiosonde observations. It is a known fact that cloud coverage is the most dominant feature that causes the blocking of satellite communication links. Generally, the satellites of low-earth orbits are affected by space weather conditions due to the dynamic change of atmospheric conditions and cloud cover, which in turn degrades the quality of data received by the ground stations. Various optimal ground station diversity techniques are employed to mitigate the effects of cloud coverage. It is to be noted that, although cloud-free line-of-sight conditions exist, the optical satellite communication links are being affected by atmospheric turbulence, absorption, and scattering mechanisms. In the proposed work, the estimation of cloud-free line-of-sight (CFLOS) probability for the optical ground stations of a satellite communication network will be performed. The major problem in free-space optical networks is due to cloud blockage, which partially or entirely affects space-to-ground communication links, and these ground stations fail to receive data continuously from the satellites. Given this, site diversity plays a vital role in the continuous operability of the satellite network. Increasing the available number of optical links with the selection choice of multiple ground stations is termed site diversity. Prediction of the channel conditions in the future in accordance with past fluctuations leads to optimal and appropriate ground station selection. Using Reinforcement Learning Algorithms, the proposed model determines the ground station's optimal location to realize an efficient satellite communication system. The specifications for Satellite payload transmitter optical beam waist and transmitter diameters for a WCP source and a FWHM of half the transmitter diameter for an entangled photon source. The quantum sensors, satellite subsystems, ground stations, and communication protocols will be identified. MATLAB/SIMULINK/Python tools will be utilized to model the behavior of the Quantum Navigation System under various conditions. Simulations of quantum entanglement-based communication and navigation scenarios will be analyzed to evaluate system performance. The outcome of this proposal would be beneficial for high-precision PNT applications, especially for autonomous vehicles and aviation transportation sectors.

No. of Pages : 18 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :27/07/2024

(21) Application No.202441057139 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : MACHINE LEARNING ANALYSIS OF THE IMPACT OF TECHNOSTRESS ON STUDENT LEARNING AND ACADEMIC PERFORMANCE

(51) International classification	:G06Q0050200000, G06N0020000000, G09B0007000000, G09B0005000000, G09B0019220000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr. R Venkat

Address of Applicant :Associate Professor, Department of (CSE-AIML), St Peter's Engineering College, Hyderabad, Pin: 500100, Medchal, Telangana, India. ---------- ----------

2)Dr Dasari Ratna Kishore

3)Dr. Devara Pavan Nagendra

4)Prof. Gauri Gaurav Kulkarni

5)Sharmila EMN

6)N.Mohananthini

7)Thiyagarajan T

8)Dr Ram Kumar Garg

9)Dr.Dhanusha.C

10)Mrs.S.Kayathri

11)Dr. M. Shabeena Begam

12)Dr. G. Aparna

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. R Venkat

Address of Applicant :Associate Professor, Department of (CSE-AIML), St Peter's Engineering College, Hyderabad, Pin: 500100, Medchal, Telangana, India. ---------- ----------

2)Dr Dasari Ratna Kishore

Address of Applicant :Professor, Department of Information Technology, Lakireddy Bali Reddy College of Engineering, Mylavram, 521230, Krishna, Vijayawada, Andhra Pradesh, India. ---------- ----------

3)Dr. Devara Pavan Nagendra

Address of Applicant :Assistant Professor, Career Development Cell/Basic Science and Humanities, GMR Institute of Technology, Rajam, 532127, Vizianagaram, Andhra Pradesh, India. ---------- ----------

4)Prof. Gauri Gaurav Kulkarni

Address of Applicant :Assistant Professor, Department of Commerce and Management, Vishwakarma University, Kondhwa, Pune 411048, Maharashtra, India. ---------- ----------

5)Sharmila EMN

Address of Applicant :Alagappa University School of Education, Alagappa University, Karaikudi, Sivaganga, Tamil Nadu, India. ---------- ----------

6)N.Mohananthini

Address of Applicant :Associate Professor, Department of EEE, Muthayammal Engineering College, Rasipuram - 637408, Namakkal, Tamil Nadu, India. ---------- ----------

7)Thiyagarajan T

Address of Applicant :Assistant Professor, Department of MCA, Nehru Institute of Information Technology and Management, Coimbatore- 641105, Tamil Nadu, India. ---------- ----------

8)Dr Ram Kumar Garg

Address of Applicant :Professor, Department of Community Health Nursing, Teerthanker Mahaveer University, College of Nursing Moradabad, Uttar Pradesh, India. ---------- ----------

9)Dr.Dhanusha.C

Address of Applicant :Assistant Professor, Department of Software Systems and Computer Science [PG], KG College of Arts and Science, Saravanampatti, Coimbatore, 641035, Tamil Nadu, India. ---------- ----------

10)Mrs.S.Kayathri

Address of Applicant :Assistant Professor, Department of MCA, M.Kumarasamy College of Engineering, Karur, 639113, Tamil Nadu, India. ---------- ----------

11)Dr. M. Shabeena Begam

Address of Applicant :Assistant professor/MBA, SNS Institutions, Coimbatore, 641035, Tamil Nadu, India. ---------- ----------

12)Dr. G. Aparna

Address of Applicant :Associate Professor, Department of Data Science, Hyderabad Institute of Technology and Management Hyderabad, Medchal malkajgiri, Telangana, India. ---------- ----------

(57) Abstract :

MACHINE LEARNING ANALYSIS OF THE IMPACT OF TECHNOSTRESS ON STUDENT LEARNING AND ACADEMIC PERFORMANCE The method for the development of an online survey was used to gather information from 371 students at Koforidua Technical University (KTU), in Ghana, representing a variety of faculties and academic levels. The study evaluated the validity and reliability of the suggested research model using the partial least squares structural equation model (PLS-SEM) approach. Learning burnout among students, their perceived academic achievement, and individual technostress producers were all examined using machine learning algorithms. The literature has several reports of working professionals experiencing technostress, or stress brought on by technology. Research on the frequency of technostress and its effects among students is scarce, despite the fact that digital gadgets have become more common in academic settings. This study looks at the prevalence of technostress in the 18–28 age range, which is considered to be the younger demographic. The study examines the moderating effects of instructor and university support on technostress and the quality of online learning relationships among university students, using the Community of Inquiry (CoI) paradigm. FIG.1

No. of Pages : 14 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2024
(21) Application No.202441057141 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN AUTONOMOUS SMART NAVIGATIONAL MEDICAL ROBOTIC ECOSYSTEM AND METHOD THEREOF

(51) International classification :A61B0034300000, A61B0090000000, A61B0034000000, A61B0005000000, G16H0040670000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Zaid Aboobacker
Address of Applicant :Sabira Kottej, Iritty PO, Kannur Rural, Kerala, India ---------- ----------
2)Fadel Kandapath
3)Ali Hamza Shariq
4)Adnan Sabeer
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Zaid Aboobacker
Address of Applicant :Sabira Kottej, Iritty PO, Kannur Rural, Kerala, India ---------- ----------
2)Fadel Kandapath
Address of Applicant :Kandapath House, Kattuppara, Chelakkad PO, Malapurram, Kerala, India ---------- ----------
3)Ali Hamza Shariq
Address of Applicant :A 10, Star Colony, Behind MS Petrol Pump, Maheshpur Koil, Aligarh, Uttar Pradesh, India ---------- ----------
4)Adnan Sabeer
Address of Applicant :Karuppamveettil House, Koorkenchery (P.O), Thrissur, Kerala, India ---------- ----------

(57) Abstract :
AN AUTONOMOUS SMART NAVIGATIONAL MEDICAL ROBOTIC ECOSYSTEM AND METHOD THEREOF The present invention provides an autonomous smart navigational medical robotic ecosystem capable of medical diagnosis, assessment, health monitoring, and telemedicine, in rural areas where medical infrastructure is under-developed or is hard to reach. The autonomous smart navigational medical robotic ecosystem disclosed herein comprises a plurality of robots to collect patient vitals and biological samples from patients, a charging station, a centre, at least one drone for transportation of the biological samples and carry medicine and pharmaceuticals; and, an electronic device that stores the data received from the various components of the autonomous smart navigational medical robotic ecosystem. A method of providing medical assistance to a target area using the autonomous smart navigational medical robotic ecosystem is also disclosed.

No. of Pages : 41 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2024
(21) Application No.202441057143 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : FOOTBALL OR SOCCER OR CRICKET MATCH WITH MIXED TEAM OF BOTH FEMALE AND MELA TEAM MEMBERS

(51) International classification	:A63B0102200000, C07D0405120000, H04B0007260000, A63B0059550000, A61P0003020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Venkatasubramanian Balasubramanian
Address of Applicant :Plot no 12, east main road, near 2nd cross street, padmavathy nagar, madambakkam, chennai 600126 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Venkatasubramanian Balasubramanian
Address of Applicant :Plot no 12, east main road, near 2nd cross street, padmavathy nagar, madambakkam, chennai 600126 ---------- ----------

(57) Abstract :
Teams playing cricket or soccer (football) may comprise of team size of 11 but comprising of both men and women to bring in a new format of the games. example: a cricket or football team my comprise of 6 men and 6 women to have a new format of game play. gives the viewers in various digital formats and tv a refreshing way for the game with new strategies. this strategy of men's and women's team in a single game format has never existed.

No. of Pages : 5 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :27/07/2024

(21) Application No.202441057151 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : INTEGRATING MACHINE LEARNING FOR REVENUE ENHANCEMENT AND FRAUD PREVENTION IN E-COMMERCE

(51) International classification :G06N0020000000, G06Q0030060000, G06N0003040000, G06Q0010060000, G06Q0030000000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**

1)Kohila P.
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, VSB College of Engineering Technical Campus, Coimbatore, Tamilnadu, India 642109 ---------- ----------

2)Farzana S.

3)Dr. Jaya Kaithwas

4)Dr. Arti Padiyar

5)Dr. Vijay Kumar Tiwari

6)Dr. Santosh Kumar Ray

7)Dr.Amarnath Tiwari

8)Jeethu Philip

9)R.Vasanthi

10)Dr.S.Kalpana

11)Subha S

12)Akarsha D P

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Kohila P.
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, VSB College of Engineering Technical Campus, Coimbatore, Tamilnadu, India 642109 ---------- ----------

2)Farzana S.
Address of Applicant :Assistant Professor (Sr. Gr.), Department of Commerce, B. S. Abdur Rahman Crescent Institute of Science and Technology, Vandalur, Chennai, Tamilnadu, India - 600048 ---------- ----------

3)Dr. Jaya Kaithwas
Address of Applicant :Assistant Professor, Commerce, Govt. Kusum P. G. College Seoni Malwa, Narmadapuram, Madhya Pradesh, India - 461223 ---------- ----------

4)Dr. Arti Padiyar
Address of Applicant :Assistant Professor, Commerce, Govt. Kusum P.G. College Seoni Malwa, Narmadapuram, Madhya Pradesh, India - 461223 ---------- ----------

5)Dr. Vijay Kumar Tiwari
Address of Applicant :Assistant Professor, Department of Commerce, Government Degree College Sukrauli, Kushinagar U P, India - 274207 ---------- ----------

6)Dr. Santosh Kumar Ray
Address of Applicant :Assistant Professor, Department of Commerce, Mahant Avaidyanath Government Degree College, Jungle Kaudia, Gorakhpur, Uttar Pradesh, India - 273007 ---------- ----------

7)Dr.Amarnath Tiwari
Address of Applicant :Assistant Professor, Mahanth Avedyanath Government Degree College, Jungle Kaudiya, Gorakhpur U P, India ---------- ----------

8)Jeethu Philip
Address of Applicant :Assistant Professor, Dept. of Information Technology, MLR Institute of Technology, Hyderabad, Medchal, Telangana PIN-500043, India ---------- ----------

9)R.Vasanthi
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, St.Joseph's Institute of Technology, Chennai, kanchipuram, Tamilnadu, India - 600119 ---------- ----------

10)Dr.S.Kalpana
Address of Applicant :Associate Professor and Head of the Department, Department of Commerce with Retail Marketing, PSG College of Arts and Science, Coimbatore, Tamilnadu, India ---------- ----------

11)Subha S
Address of Applicant :Student, Department of Management Studies, SNS College of Technology, Coimbatore, Tamilnadu, India - 35 ---------- ----------

12)Akarsha D P
Address of Applicant :Assistant Professor, Department of ISE, Nitte Meenakshi Institute of Technology, Bengaluru Urban, Karnataka, India - 64 ---------- ----------

(57) Abstract :
The invention relates to a system and method for integrating machine learning into e-commerce platforms to enhance revenue and prevent fraud. The system comprises a data collection module that gathers transaction data, user behavior data, and external data sources. A preprocessing module cleans, normalizes, and transforms the collected data, while a feature engineering module extracts relevant features. At the core of the system, a machine learning engine employs fraud detection models and revenue enhancement models to analyze the data. The integration module interfaces with the e-commerce platform, enabling real-time implementation of machine learning predictions. A monitoring and feedback module continuously tracks system performance and updates the models to maintain high accuracy and effectiveness. This invention offers a dynamic and adaptive solution for improving operational efficiency, security, and profitability in e-commerce by leveraging advanced machine learning techniques and comprehensive data analysis.

No. of Pages : 19 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :27/07/2024

(21) Application No.202441057152 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : BLOCKCHAIN AND AI-BASED SECURE ONLINE EXAMINATION SYSTEM FOR PREVENTING CHEATING AND ENSURING ACADEMIC INTEGRITY

(51) International classification	:G06Q0050200000, G09B0007000000, G09B0007020000, G06Q0020360000, G09B0005000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Kunduru Gayathri

Address of Applicant :Assistant Professor Department of Computer science and Engineering G Pulla Reddy Engineering college (Autonomous), Kurnool,518007, Andhra pradesh, India. ---------- ----------

2)Dr.J.Jean Justus

3)Y Laxmana Rao

4)Dr.M.Newlin Rajkumar

5)Dr.J. Alfred Daniel

6)Mrs. Jaya shree S

7)Anshul Arora

8)Arun Kumar M

9)Mr Sujoy Kumar Basu

10)Ms. Saranya. D

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Kunduru Gayathri

Address of Applicant :Assistant Professor Department of Computer science and Engineering G Pulla Reddy Engineering college (Autonomous), Kurnool,518007, Andhra pradesh, India. ---------- ----------

2)Dr.J.Jean Justus

Address of Applicant :Associate Professor Department of Computer Science and Engineering SRM Institute of Science and Technology Ramapuram Chennai, TamilNadu, India. ---------- ----------

3)Y Laxmana Rao

Address of Applicant :Assistant professor Department of IT Vignan's Institute of Engineering for Women near STBL II, Kapujaggaraju Peta Visakhapatnam Andhra Pradesh India ---------- ----------

4)Dr.M.Newlin Rajkumar

Address of Applicant :Assistant Professor Department of EEE Anna University Regional Campus Coimbatore Maruthamalai Main Road, Navavoor, Coimbatore - 641046 Tamilnadu India ---------- ----------

5)Dr.J. Alfred Daniel

Address of Applicant :Assistant Professor Department of Computer Science and Engineering Karpagam Academy of Higher Education, Pollachi Main Road, L & T By Pass Road Junction Eachanari Post, Eachanari, Coimbatore, Tamil Nadu 641021 India ---------- ----------

6)Mrs. Jaya shree S

Address of Applicant :Assistant Professor Department of CSE KGISL Institute of Technology, KGISL Campus, Thudiyalur Road, Saravanampatti, Coimbatore - 641035 Tamilnadu India ---------- ----------

7)Anshul Arora

Address of Applicant :Head of Department Department of Management Global Institute of Technology and Management Gurgaon, Pin-122001 Haryana India ---------- ----------

8)Arun Kumar M

Address of Applicant :Teaching Fellow Department of Rubber and Plastics Technology Anna University, MIT Campus Chrompet, Chennai-44 Chengalpattu Tamilnadu India ---------- ----------

9)Mr Sujoy Kumar Basu

Address of Applicant :Assistant Professor Department of Computer Application, Asansol Engineering College Asansol West Bengal Pin Code: 713305 India ---------- ----------

10)Ms. Saranya. D

Address of Applicant :Assistant Professor Department of CSE St.Josephs College Of Engineering OMR, Semmenchery Chennai Tamil Nadu India ---------- ----------

(57) Abstract :

Blockchain and AI-Based Secure Online Examination System for Preventing Cheating and Ensuring Academic Integrity ABSTRACT: Academic integrity has always been a very important topic in education. It is even more critical for online education. As students cannot be physically monitored in online mode, they can easily engage in academic misconduct without being detected by the academic staff. Existing research shows that students' grades are higher in online exams compared to face-to-face exams and cheating in online exams might be a possible reason for this gap in grades. This paper proposes a novel Learning Management System (LMS) built on the Ethereum blockchain to address these concerns. The system leverages MetaMask wallets for secure student authentication and utilizes smart contracts to automate grading and plagiarism detection, providing immediate feedback and enhancing learning efficiency. Robustsecurity protocols ensure data integrity and prevent exam malpractices. This innovative approach fosters academic fairness, reduces instructor workload, and facilitates comprehensive student performance analysis, paving the way for a secure and efficient future of online education.

No. of Pages : 10 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2024
(21) Application No.202441057153 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : INTEGRATED CUSTOMER RELATIONSHIP MANAGEMENT AND DATA ANALYTICS PLATFORM FOR ENHANCED BUSINESS INSIGHTS

(51) International classification	:G06Q0030020000, G06N0020000000, G06Q0030000000, G06F0016250000, G06N0005040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Thangjam Ravichandra
Address of Applicant :Associate Professor, Alliance School of Business, Alliance University, Bengaluru, Pin:562106, Karnataka, India ---------- ----------
2)Dr. Chintureena Thingom
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Thangjam Ravichandra
Address of Applicant :Associate Professor, Alliance School of Business, Alliance University, Bengaluru, Pin:562106, Karnataka, India ---------- ----------
2)Dr. Chintureena Thingom
Address of Applicant :Assistant Professor, Department of Computer Science & Engineering, Alliance School of Advanced Computing, Alliance University, Bengaluru, Pin: 562106, Karnataka, India ---------- ----------

(57) Abstract :
The invention provides an integrated platform that combines Customer Relationship Management (CRM) functionalities with advanced data analytics to enhance business insights. The platform features a Customer Data Management Module for aggregating and organizing customer interaction data from multiple sources. It includes a Data Integration Engine that consolidates this data into a unified profile, and an Analytics Engine that applies sophisticated data analytics techniques, such as machine learning and predictive modeling. The Insight Generation Module then translates these analyses into actionable insights and recommendations. The User Interface presents these insights through customizable dashboards and interactive reports. Additionally, Integration APIs facilitate seamless connectivity with existing business systems. This platform enables real-time data processing and advanced personalization, improving customer engagement and decision-making while optimizing operational efficiency.

No. of Pages : 18 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2024
(21) Application No.202441057154 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AI-DRIVEN DYNAMIC PRICING AND INVENTORY MANAGEMENT SYSTEM FOR RETAIL BUSINESSES

(51) International classification	:G06Q0030020000, G06Q0010080000, G06Q0030060000, G06Q0010060000, G06Q0010040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Thangjam Ravichandra
Address of Applicant :Associate Professor, Alliance School of Business, Alliance University, Bengaluru, Pin:562106, Karnataka, India ---------- ----------
2)Dr. Chintureena Thingom
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Thangjam Ravichandra
Address of Applicant :Associate Professor, Alliance School of Business, Alliance University, Bengaluru, Pin:562106, Karnataka, India ---------- ----------
2)Dr. Chintureena Thingom
Address of Applicant :Assistant Professor, Department of Computer Science & Engineering, Alliance School of Advanced Computing, Alliance University, Bengaluru, Pin: 562106, Karnataka, India ---------- ----------

(57) Abstract :
The invention provides an AI-driven system designed to optimize dynamic pricing and inventory management for retail businesses. The system integrates a Data Collection Module that gathers real-time data from sales, inventory, market trends, and competitor pricing. This data is processed by an AI Analytics Engine, which uses machine learning algorithms to forecast demand and recommend pricing adjustments. The Dynamic Pricing Module implements real-time price changes based on these recommendations, while the Inventory Management Module ensures optimal stock levels and efficient replenishment. The system features a User Interface that offers a comprehensive dashboard for monitoring and managing pricing and inventory decisions. This integrated approach enhances profitability, reduces inventory costs, and improves customer satisfaction by adapting to dynamic market conditions.

No. of Pages : 18 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :27/07/2024

(21) Application No.202441057171 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : ACCURATE DETECTION AND PREDICTIVE MODELLING OF CARDIOVASCULAR DISEASES USING MACHINE LEARNING MODELLING TECHNIQUES

(51) International classification	:G06N0020000000, A61P0009000000, G06K0009620000, H04L0041160000, G01N0015140000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Prasanth SP

Address of Applicant :Assistant Professor, Department of CSE, V.S.B.Engineering College, Karur, 639111 Karur ---------- ----------

2)Dr. Anitha S

3)Dr. Rashmi Mohapatra

4)Rumana Anjum

5)Dr Rashmi A Taley

6)Dr.Mrunal Rajendrasingh Pardeshi

7)Logeshwari D

8)R Sambasivam

9)Dr G. Aparna

10)Dr.S.Nagendra Prabhu

11)Dr. T. Arunkumar

12)Dr. Partha Ghosh

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Prasanth SP

Address of Applicant :Assistant Professor, Department of CSE, V.S.B.Engineering College, Karur, 639111 Karur ---------- ----------

2)Dr. Anitha S

Address of Applicant :Prof. & Head, Department of CSE-Cyber Security, ACS College of Engineering, Bengaluru-560074 Bengaluru ---------- ----------

3)Dr. Rashmi Mohapatra

Address of Applicant :Associate Professor & Dean, Kalinga Institute of Social Sciences (Kiss) Deemed To Be University Bhubaneswar ---------- ----------

4)Rumana Anjum

Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Vidya Vikas Institute of Engineering and Technology, Mysore, 570028 Mysore ---------- ----------

5)Dr Rashmi A Taley

Address of Applicant :Asst Professor, Department of Computer Science and Engineering, College of Engineering and Technology, Akola Akola ---------- ----------

6)Dr.Mrunal Rajendrasingh Pardeshi

Address of Applicant :PG- I , Department of Cardiovascular Respiratory, DVVPF'S College of Physiotherapy,Vilad ghat, PO MIDC, Nagapur Ahmednagar-414111 Ahmednagar ---------- ----------

7)Logeshwari D

Address of Applicant :Professor, Department of Information Technology, St.Joseph's Institute of Technology, Chennai, 600119 Chennai ---------- ----------

8)R Sambasivam

Address of Applicant :Assistant Professor, Department of Mechatronics Engineering, SNS College of Technology, Coimbatore - 641035 Coimbatore ---------- ----------

9)Dr G. Aparna

Address of Applicant :Assoc. Professor, Department of Data Science, HITAM, Hyderabad Hyderabad ---------- ----------

10)Dr.S.Nagendra Prabhu

Address of Applicant :Assistant Professor, Department of Computational Intelligence, School of Computing, SRM Institute of Science & Technology Kattankulathur, Chennai 603203 Chennai ---------- ----------

11)Dr. T. Arunkumar

Address of Applicant :Assistant Professor, Department of Chemistry, SNS College of Technology, Coimbatore - 641 035 Coimbatore ---------- ----------

12)Dr. Partha Ghosh

Address of Applicant :SKHS, Gadra, Jalpaiguri,West Bengal Siliguri ---------- ----------

(57) Abstract :

Accurate detection and predictive modelling of cardiovascular diseases using machine learning modelling techniques is the proposed invention. The proposed invention focuses on understanding the functions of Cardiovascular Disease. The invention focuses on analyzing the parameters of detection and predictive modelling of cardiovascular disease using algorithms of machine learning.

No. of Pages : 14 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :27/07/2024

(21) Application No.202441057172 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : TRANSFORMING PERSONALISED LEARNING IN HIGHER EDUCATION TO PREDICT STUDENT SUCCESS USING MACHINE LEARNING APPROACH

(51) International classification	:G06N0020000000, G06Q0050200000, G06N0003080000, G06K0009620000, G01N0015140000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr. D. Jayasutha

Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Hindusthan Institute of Technology, Coimbatore, 641 032 Coimbatore ---------- ----------

2)Dr. C. Premila Rosy

3)Prof N L Mishra

4)Neha Patnaik

5)P Mohan

6)Dr.Manasi Vyankatesh Ghamande

7)Dr.Pradeep Devendra Gaikwad

8)Dr.C.John Paul

9)Dr. T. Prabakaran

10)Ms.Soni Gupta

11)Thulasimani T

12)Dr E D Francis

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. D. Jayasutha

Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Hindusthan Institute of Technology, Coimbatore, 641 032 Coimbatore ---------- ----------

2)Dr. C. Premila Rosy

Address of Applicant :HoD, Department of Computer Science, Idhaya College for Women, Kumbakonam, 612001. Kumbakonam ---------- ----------

3)Prof N L Mishra

Address of Applicant :Prof &Dean, Faculty of Arts, M G Gramodaya University Chitrakoot, Satna M P 485334 Chitrakoot ---------- ----------

4)Neha Patnaik

Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Chouksey Engineering College Bilaspur, Chhattisgarh 495004 Bilaspur ---------- ----------

5)P Mohan

Address of Applicant :AP, Department of English, K S R College of Engineering Tiruchengode ---------- ----------

6)Dr.Manasi Vyankatesh Ghamande

Address of Applicant :Assistant Professor, Department of E and AS, Vishwakarma Institute of Information Technology Pune ---------- ----------

7)Dr.Pradeep Devendra Gaikwad

Address of Applicant :Associate Professor, Department of Physics, R.B. Attal Art's Science and Commerce College Georai Georai ---------- ----------

8)Dr.C.John Paul

Address of Applicant :Head, Department of Computer Applications, Alpha Arts and Science College, Porur, Chennai -600 048 Chennai ---------- ----------

9)Dr. T. Prabakaran

Address of Applicant :Professor, Department of Computer Science and Engineering, Joginpally B.R. Engineering College Hyderabad ---------- ----------

10)Ms.Soni Gupta

Address of Applicant :Faculty, Amity Institute of Aerospace Engineering, Amity University Uttar Pradesh. Noida ---------- ----------

11)Thulasimani T

Address of Applicant :Associate Professor, Department of Mathematics, Bannari Amman Institute of Technology, Sathy - 638401 Sathy ---------- ----------

12)Dr E D Francis

Address of Applicant :Professor in Mechanical Engineering, Wellfare Institute of Science Technology and Management, Visakhapatnam Visakhapatanam ---------- ----------

(57) Abstract :

Transforming Personalised Learning in Higher Education to predict Student Success using Machine Learning Approach is the proposed invention. The proposed invention focuses on understanding the functions of transformation and personalised learning in Higher Education. The invention focuses on analyzing the parameters of student's success in higher education using algorithms of Machine Learning.

No. of Pages : 14 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2024

(21) Application No.202441057175 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : CESIUM TIN BROMIDE PEROVSKITE BASED SENSITIZER FOR DYE SENSITIZED SOLAR CELL

(51) International classification :H01G0009200000, H01L0051000000, B82Y0030000000, C07F0015000000, B82Y0040000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VELLORE INSTITUTE OF TECHNOLOGY
Address of Applicant :Vellore Institute of Technology, Near Katpadi Road, Vellore, Tamil Nadu, India – 632014 Vellore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Andrews Nirmala Grace
Address of Applicant :Centre for Nanotechnology Research (CNR), Room No. 102, Vellore Institute of Technology, Vellore-632014, Tamil Nadu, India Vellore ---------- ----------
2)Suruthi Priya Nagalingam
Address of Applicant :Centre for Nanotechnology Research (CNR), Room No. 027, Vellore Institute of Technology, Vellore-632014, Tamil Nadu, India Vellore ---------- ----------
3)Sathish Marimuthu
Address of Applicant :Centre for Nanotechnology Research (CNR), Room No. 027, Vellore Institute of Technology, Vellore-632014, Tamil Nadu, India Vellore ---------- ----------
4)Bharath Gunaseelan
Address of Applicant :Centre for Nanotechnology Research (CNR), Room No. 027, Vellore Institute of Technology, Vellore-632014, Tamil Nadu, India Vellore ---------- ----------
5)G. Tamil Selvi
Address of Applicant :Centre for Nanotechnology Research (CNR), Room No. 027, Vellore Institute of Technology, Vellore-632014, Tamil Nadu, India Vellore ---------- ----------
6)S. Shriswaroop
Address of Applicant :Centre for Nanotechnology Research (CNR), Room No. 102, Vellore Institute of Technology, Vellore-632014, Tamil Nadu, India Vellore ---------- ----------
7)Jaimson T. James
Address of Applicant :Centre for Nanotechnology Research (CNR), Room No. 102, Vellore Institute of Technology, Vellore-632014, Tamil Nadu, India Vellore ---------- ----------

(57) Abstract :
Cesium Tin Bromide Perovskite based sensitizer for dye sensitized solar cell. Cs2SnBr6 was synthesized by precipitation method using acidic solution of cesium salt with alcoholic solution of tin bromide at room temperature wherein the Cs2SnBr6 is air stable and sensitizer for dye sensitized solar cell (DSSC). [FIG. 1]

No. of Pages : 17 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :27/07/2024

(21) Application No.202441057183 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : INTERNET-CONNECTED HOME MICRO-AGRICULTURE SYSTEM

(51) International classification :G06N0020000000, G06N0005040000, H04L0067120000, G01W0001000000, G06Q0010060000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. B. Stalin Baskaran
Address of Applicant :Principal/Professor, Department of EEE, Dr. MGR Polytechnic College, Irumbedu, Arni 632317 ---------- ----------
2)Dr. D Buvana
3)Dr.S.Sivakumar
4)M. Dinesh
5)A.Nandhakumar
6)Gayathri G
7)Prabhu K
8)Senthil Prabhu S
9)Vignesh M
10)Dr.K.Kannan
11)R.Gurulakshmi
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. B. Stalin Baskaran
Address of Applicant :Principal/Professor, Department of EEE, Dr. MGR Polytechnic College, Irumbedu, Arni 632317 ---------- ----------
2)Dr. D Buvana
Address of Applicant :Associate Professor, Department of EEE, Sri Balaji Chockalingam Engineering College, Arni 632317 ---------- ----------
3)Dr.S.Sivakumar
Address of Applicant :Associate Professor/ Ph.D., PG & Research Department of Physics, Government Arts College (Autonomous), Salem 636 007, Tamilnadu, India ---------- ----------
4)M. Dinesh
Address of Applicant :Assistant Professor, Department of EEE, Mahendra Engineering College, Namakkal ---------- ----------
5)A.Nandhakumar
Address of Applicant :Assistant Professor, Department of Biomedical Engineering, Dhaanish Ahmed Institute of Technology, Dhaanish Avenue, Verappanur, Kandhe Gounden Chavadi, Tamil Nadu 641105 ---------- ----------
6)Gayathri G
Address of Applicant :Assistant Professor, Dr.Mahalingam College of Engineering and Technology, Pollachi, Tamil Nadu 642003 ---------- ----------
7)Prabhu K
Address of Applicant :Assistant Professor (SS), Dr.Mahalingam College of Engineering and Technology, Pollachi, Tamil Nadu 642003 ---------- ----------
8)Senthil Prabhu S
Address of Applicant :Assistant Professor (SS), Dr.Mahalingam College of Engineering and Technology, Pollachi, Tamil Nadu 642003 ---------- ----------
9)Vignesh M
Address of Applicant :Assistant Professor, Karpagam Institute of Technology, Seerapalayam, Tamil Nadu 641021 ---------- ----------
10)Dr.K.Kannan
Address of Applicant :Associate Professor, Annapoorna Engineering College, Chinna Seeragapadi, Salem, Tamil Nadu 636308 ---------- ----------
11)R.Gurulakshmi
Address of Applicant :PG Scholar, Electronics and Communication Engineering Department, Erode Sengunthar Engineering College, Perundhurai, Tamil Nadu - 638057 ---------- ----------

(57) Abstract :
[06] This invention describes an integrated IoT (Internet of Things) system that combines hardware, software with artificial intelligence, and wireless sensing capabilities to monitor real-time data from agriculture, greenhouse, garden, and lawn environments. The system collects crop climate, weather data, and field images using kite, satellite, or UAV (unmanned aerial vehicle), making this information accessible remotely on computers, laptops, tablets, or smartphones. The system employs predictive analytics with artificial intelligence to model real-time streaming data, enabling proactive and preventive actions in the field. These actions aim to increase yield, achieve energy and cost savings, reduce water consumption, and minimize food waste. Additionally, the system includes communication infrastructure and a social media networking platform to connect users to local and overseas markets. It optimizes logistics for food storage, tracking, distribution, and delivery to enhance efficiency and consumer satisfaction. Furthermore, the system extends its applications to air quality measurement, hazardous waste detection, and environmental monitoring such as oceanography and atmospheric conditions. It integrates disaster prediction capabilities for earthquakes and tsunamis, providing predictive analytics for structural integrity and sending alerts to mobile devices to mitigate risks. The system is versatile, also supporting monitoring and management of geotechnical surveys, hydrocarbon detection, semiconductor and chemical plants, and critical infrastructure like bridges, electric grids, dams, roads, tunnels, and airports. It offers remote monitoring, actionable data insights, and predictive maintenance capabilities to ensure optimal performance and safety across various domains. Accompanied Drawing [FIG. 1] [FIG. 2] [FIG. 3] [FIG. 4]

No. of Pages : 21 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2024
(21) Application No.202441057188 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A NECROBOTIC SYSTEM FOR VASCULAR SURGERIES

(51) International classification :B01L0003000000, A61B0005000000, C07K0014435000, C12N0005073500, A61B0034200000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Woxsen University
Address of Applicant :Kamkole Village, Sadasivpet, Sangareddy District, Hyderabad, Telangana, India – 502345 Hyderabad ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Daya Shakar
Address of Applicant :Dean, School of Sciences, Woxsen University, Kamkole Village, Sadasivpet, Sangareddy District, Hyderabad, Telangana, India – 502345 Hyderabad ---------- ----------
2)Dr. Beauty Pandey
Address of Applicant :Associate Professor, School of Sciences, Woxsen University, Kamkole Village, Sadasivpet, Sangareddy District, Hyderabad, Telangana, India – 502345 Hyderabad ---------- ----------
3)Dr. Raul V. Rodriguez
Address of Applicant :Vice President, Woxsen University, Kamkole Village, Sadasivpet, Sangareddy District, Hyderabad, Telangana, India – 502345 Hyderabad ---------- ----------
4)Dr. Thota Srikar
Address of Applicant :Assistant Professor, School of Sciences, Woxsen University, Kamkole Village, Sadasivpet, Sangareddy District, Hyderabad, Telangana, India – 502345 Hyderabad ---------- ----------

(57) Abstract :
The present invention discusses necrobotic system and method to perform vascular surgeries wherein the systemis characterized with necrobotic surgical device (3) and optimized by artificial intelligence (AI) to enhance the safety, efficacy, and affordability of vascular surgeries. Wherein the said system utilizes utilizing the unique properties of spider silk and other biocompatible materials to develop micro-actuators (5) for precise surgical manipulation. The microfluidic channels (6), sensory arrays (7) along with AI control unit and electrochemical actuation assist in the vascular surgeries. Figure 1.

No. of Pages : 37 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/07/2024
(21) Application No.202441057191 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AI BASED REAL-TIME DATA PROVENANCE SYSTEM IN DISTRIBUTED BIG DATA SYSTEMS

(51) International classification	:H04L0009320000, G06F0009500000, H04L0009060000, G06F0021550000, G06F0021640000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Swathi Chundru
Address of Applicant :Flat no 301, Plot no 810 & 831, Venkata ramana colony, Gokul plots, Hyderabad, Telangana PIN : 500085 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Swathi Chundru
Address of Applicant :Flat no 301, Plot no 810 & 831, Venkata ramana colony, Gokul plots, Hyderabad, Telangana PIN : 500085 ---------- ----------

(57) Abstract :
AI based Real-Time Data Provenance System in Distributed Big Data System In the era of big data, ensuring data integrity, security, and traceability has become a critical challenge, especially in distributed systems where data is constantly generated, transferred, and transformed across multiple nodes. This system presents an AI-based Real-Time Data Provenance System designed to address these challenges within distributed big data environments. Leveraging advanced machine learning algorithms and blockchain technology, our system provides a robust framework for tracking the lineage of data from its origin to its current state, ensuring authenticity and reliability. The proposed system utilizes decentralized ledgers to create immutable records of data transactions, enhancing transparency and security. AI algorithms are employed to analyze data flow patterns, detect anomalies, and predict potential security breaches in real time. This combination of blockchain and AI technologies ensures that any unauthorized access or manipulation of data can be quickly identified and mitigated. The system's architecture is designed to be scalable, accommodating the vast and dynamic nature of big data environments. This research contributes to the field by providing a scalable, secure, and efficient solution for real-time data provenance in distributed big data systems, paving the way for more reliable and trustworthy data management practices Diagram: Description: Data Sources: These are various types of data inputs coming from different origins. Data Provenance Framework: Responsible for capturing metadata and providing an immutable history of data transactions. AI Algorithms: Monitor data flow patterns, detect anomalies, and predict potential security threats in real-time. Blockchain Ledger: Ensures data provenance information is stored in a decentralized, tamper-proof ledger. Scalable Architecture: Handles large volumes of data efficiently with load balancing and supports horizontal scaling. User Interface: Provides a user interface for interacting with the system and tracking user interactions, modifications, and access attempts.

No. of Pages : 15 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/07/2024
(21) Application No.202441057193 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ML BASED PREDICTIVE MAINTENANCE FOR REAL-TIME ANOMALY DETECTION IN HVAC SYSTEM

(51) International classification	:G06N0020000000, G05B0023020000, F24F0011300000, G06N0007000000, G06N0005040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Subash Banala
Address of Applicant :Flat no 301, Plot no 810 & 831, Venkata ramana colony, Gokul plots, Hyderabad, Telangana-500085. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Subash Banala
Address of Applicant :Flat no 301, Plot no 810 & 831, Venkata ramana colony, Gokul plots, Hyderabad, Telangana-500085. ---------- ----------

(57) Abstract :
ML based Predictive Maintenance for Real-Time Anomaly Detection in HVAC System The invention relates to a machine learning-based predictive maintenance system designed for real-time anomaly detection in Heating, Ventilation, and Air Conditioning (HVAC) systems. This system leverages advanced machine learning algorithms to analyze extensive operational data collected from various HVAC components, such as compressors, condensers, evaporators, fans, and ducts. By continuously monitoring real-time data from sensors that capture critical parameters like temperature, pressure, airflow rates, and energy consumption, the system identifies patterns indicative of normal and abnormal operating conditions. The system includes an anomaly detection module that detects deviations from normal operations and predicts potential failures before they occur. This proactive approach allows maintenance teams to perform targeted interventions, thereby reducing unexpected breakdowns, minimizing downtime, and lowering maintenance costs. Additionally, the system improves energy efficiency by ensuring optimal HVAC operation, contributing to reduced operational costs and environmental impact. The invention is scalable and adaptable, making it suitable for various HVAC applications in residential, commercial, and industrial settings.

No. of Pages : 10 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/07/2024
(21) Application No.202441057194 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MACHINE LEARNING-BASED METHODOLOGY FOR DATABASE MIGRATION IN CLOUD COMPUTING ENVIRONMENT

(51) International classification	:G06N0003080000, G06F0016210000, G06N0003040000, G06F0009500000, G06N0020000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Swati Tyagi
Address of Applicant :PhD Candidate, Institute of Financial Services Analytics University Of Delaware, Newark, DE, USA. ---------- ----------
2)Anuj Tyagi
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Swati Tyagi
Address of Applicant :PhD Candidate, Institute of Financial Services Analytics University Of Delaware, Newark, DE, USA. ---------- ----------
2)Anuj Tyagi
Address of Applicant :College of Engineering, Northeastern Univesity, Boston, USA. ---------- ----------

(57) Abstract :
Machine Learning-Based Methodology for Database Migration in Cloud Computing Environment ABSTRACT Computing in the cloud is a new paradigm that provides services that are dynamic, trustworthy, and elastic. The acceleration of the Internet, which led to the development of Web 2.0, was the causal factor that brought about this paradigm. The effective scheduling of resources or the right allocation of requests is one of the most critical concerns in the field of cloud computing, which is one of the most notable challenges in the industry. When the ever-increasing complexity of cloud computing is taken into consideration, it is anticipated that future cloud systems will need resource management strategies that are more effective. Some complex conditions make it impossible to directly evaluate the efficiency of scheduling solutions. Traditional algorithms, such as heuristics and meta-heuristics, will not be able to provide an efficient scheme when they are confronted with these constraints. Deep reinforcement learning, or DRL for short, is a novel approach that has made significant strides in the field of scheduling problem resolution. During recent inventions, deep reinforcement learning (DRL) has achieved a substantial degree of performance. This is a direct result of the combination of deep learning and reinforcement learning (RL). To focus on this particular topic and study the potential uses of DRL in cloud scheduling, we give a comprehensive review of DRL-based methods that are used in resource scheduling for cloud computing. We explore the advantages of DRL-based approaches within the context of cloud scheduling using the theoretical formulation of scheduling and the invention of RL frameworks. This is done to fulfil the needs of cloud scheduling. Furthermore, we cover the numerous challenges that are now being encountered in DRL-based cloud scheduling, as well as the future directions that are going to be presented shortly.

No. of Pages : 11 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/07/2024
(21) Application No.202441057195 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ARTIFICIAL INTELLIGENCE BASED APPROACH ALONG WITH BIG DATA ANALYTICS AND PREDICTIVE MODELING FOR AUTOMATING THE STOCK TRADING WITH MINIMIZED RISK OF MARKET EXPOSURE

(51) International classification	:G06Q0040040000, G06Q0040060000, G06N0020000000, G06Q0010060000, G06Q0040080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Swati Tyagi
Address of Applicant :PhD Candidate Institute of Financial Services Analytics University Of Delaware, Newark, DE, USA. ---------- ----------
2)Anuj Tyagi
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Swati Tyagi
Address of Applicant :PhD Candidate Institute of Financial Services Analytics University Of Delaware, Newark, DE, USA. ---------- ----------
2)Anuj Tyagi
Address of Applicant :College of Engineering, Northeastern Univesity, Boston, USA. ---------- ----------

(57) Abstract :
ARTIFICIAL INTELLIGENCE BASED APPROACH ALONG WITH BIG DATA ANALYTICS AND PREDICTIVE MODELING FOR AUTOMATING THE STOCK TRADING WITH MINIMIZED RISK OF MARKET EXPOSURE ABSTRACT Predictive modeling, Big Data analytics, and artificial intelligence (AI) have revolutionized the stock trading sector. Due to this connectivity, trading procedures can now be automated in a way that was previously unattainable, lowering exposure to market risk. This method uses sophisticated artificial intelligence algorithms to analyze enormous volumes of historical and current market data in order to find patterns and trends that may be used as trading instructions. Big data analytics improves this process by offering the processing power and computing capacity needed to manage massive datasets effectively. One approach for refining trading tactics is predictive modeling. Based on historical market performance and patterns, it forecasts future market moves. Combining these technologies makes it possible to create automated trading systems that can swiftly and accurately execute trades, which lowers the risk of human error and emotional bias. Trading systems driven by artificial intelligence have the potential to reduce exposure to volatile markets, improve portfolio performance, and optimize trade execution. This is accomplished by continual learning and adapting to changing market circumstances. In addition to discussing the advantages of predictive modeling for risk management and the role big data analytics plays in improving prediction accuracy, this study investigates the methodology and analytical frameworks that underpin AI-based trading systems. We demonstrate the efficacy of this comprehensive technique in producing dependable, effective, and low-risk stock trading automation using empirical data and case studies.

No. of Pages : 10 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/07/2024
(21) Application No.202441057199 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A MOSQUITO NET FOR THE AIR VENT OF SEPTIC TANKS

(51) International classification	:C02F0011040000, E03F0011000000, A45F0003520000, B60H0001340000, A01N0065000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)S N SHEIK UMAR SAHITH
Address of Applicant :Department of Zoology, Jamal Mohamed College, ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)S N SHEIK UMAR SAHITH
Address of Applicant :Department of Zoology, Jamal Mohamed College, ---------- ----------

(57) Abstract :
ABSTRACT “A mosquito net for the air vent of septic tanks.” Mosquitoes are small insect acts as an ectoparasite and bite human and other organisms for sucking blood. The species of mosquitoes belonging to Aedes, Anopheles, Armigeres, and Culex genera are common. They reproduce by laying eggs in freshwater and followed by a short larval life. These mosquitoes also prefer exposed sewage waters and sewage waters of septic tanks. The control of mosquito population in non natural environment is essential. The present invention discloses an apparatus used to prevent the entry of mosquito through air vent of septic tanks. This set up is having a cylindrical net base to be attached with the vent pipe of septic tank. The other structure includes cylindrical and conical nets to cover the entire air vent structure of septic tank.

No. of Pages : 13 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :28/07/2024

(21) Application No.202441057203 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : ADVANCED SYNTHESIS AND APPLICATIONS OF SILVER-ENHANCED BISMUTH FERRITE (BIFEO3) NANOPARTICLES

(51) International classification :B01J0023843000, C01G0049000000, G06K0009620000, C04B0035260000, C12N0015100000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr P Piramanayagam
Address of Applicant :Assistant Professor, Department of Chemistry, SRM Madurai College for Engineering and Technology, Pottapalayam, Sivagangai District.630612. Madurai ---------- ----------
2)Dr.K.Kalaimathi
3)Dr.Rashmi Mohapatra
4)Dr K N Singh
5)Dr.Manasi Vyankatesh Ghamande
6)Dr. Amit Chauhan
7)Dr.A.Sindhya
8)Ms. S. Sindhuja
9)Dr.Abhilash D P
10)Ruthra R
11)Dr. Manoj Kumar Banjare
12)Dr Manikandan K
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr P Piramanayagam
Address of Applicant :Assistant Professor, Department of Chemistry, SRM Madurai College for Engineering and Technology, Pottapalayam, Sivagangai District.630612. Madurai ---------- ----------
2)Dr.K.Kalaimathi
Address of Applicant :Assistant Professor, Department of Chemistry, Government College of Engineering, Sengipatti, Thanjavur.613402. Thanjavur ---------- ----------
3)Dr.Rashmi Mohapatra
Address of Applicant :Associate Professor and Dean, School of Comparative Indic Studies and Tribal Sciences, Kalinga Institute of Social Sciences (KISS), Deemed to be University Bhubaneswar ---------- ----------
4)Dr K N Singh
Address of Applicant :Professor, Department of Pure and Applied Physics, Guru Ghasidas Vishwavidyalaya Koni Bilaspur chhattisgarh Bilaspur ---------- ----------
5)Dr.Manasi Vyankatesh Ghamande
Address of Applicant :Assistant Professor, Department of E and AS, Vishwakarma Institute of Information Technology Pune ---------- ----------
6)Dr. Amit Chauhan
Address of Applicant :Department of Life Sciences, CHRIST University, Bengaluru, Karnataka, India 560029 Bengaluru ---------- ----------
7)Dr.A.Sindhya
Address of Applicant :Assistant Professor of Physics, Department of Science and Humanities, I.F.E.T. College of Engineering, Villupuram, Pin - 605 108 Villupuram ---------- ----------
8)Ms. S. Sindhuja
Address of Applicant :Assistant Professor, Department of Mathematics, SNS College of Technology, Coimbatore - 35 Coimbatore ---------- ----------
9)Dr.Abhilash D P
Address of Applicant :Associate Professor, Department of Chemistry, Bethlahem Institute of Engineering, Karungal, 629157 Karungal ---------- ----------
10)Ruthra R
Address of Applicant :Assistant Professor, Department of Civil Engineering, St.Joseph's College of Engineering, OMR, Chennai-119 Chennai ---------- ----------
11)Dr. Manoj Kumar Banjare
Address of Applicant :Scientists, Department of Chemistry, Dev Vihar colony, Bhatagaon, Raipur, Chhattisgarh 492009, India Raipur ---------- ----------
12)Dr Manikandan K
Address of Applicant :Professor, No 32/40 M P Sarathy Nagar, Kagithapattarai, Vellore 632012. Vellore ---------- ----------

(57) Abstract :
Advanced Synthesis and Applications of Silver-Enhanced Bismuth Ferrite (BiFeO3) Nanoparticles is the proposed invention. The proposed invention focuses on understanding the functions of advanced synthesis and applications of silver enhanced bismuth ferrite nanoparticles. The invention focuses on analyzing the parameters of silver-enhanced bismuth ferrite nanoparticles.

No. of Pages : 12 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2024
(21) Application No.202441057206 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : BIODEGRADABLE PAPER AND PROCESS OF PREPARATION THEREOF

(51) International classification :C05F0003000000, A23K0010370000, B27N0003040000, A01G0022000000, C01B0003560000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Manipal Academy of Higher Education
Address of Applicant :Madhav Nagar, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)VIDYA S.RAO
Address of Applicant :Department of Instrumentation and Control Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, 576104, Karnataka, India. Manipal ---------- ----------
2)KAVYASHREE
Address of Applicant :Department of Civil Engineering, Dr. T.M.A Pai Polytechnic, Manipal, Karnataka, 576104, India. Manipal ---------- ----------

(57) Abstract :
A biodegradable paper and process of preparation thereof is provided. The biodegradable paper involves fibres extracted from dry agricultural waste including dry coconut leaves and their central stems. Utilizing dry coconut leaves, an abundant agricultural waste, the invention addresses environmental concerns such as deforestation, landfill waste, and pollution from burning residues. The process provided by the present invention offers significant advantages, including resource efficiency, reduced greenhouse gas emissions, and economic benefits for coconut-growing communities through sustainable farming practices and new income opportunities. The resultant biodegradable paper serves as an eco-friendly alternative to traditional wood pulp paper, aligning with global sustainability goals and promoting environmental conservation. The invention supports a circular economy and contributes to a greener, more sustainable future by transforming agricultural waste into a valuable product.

No. of Pages : 20 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :28/07/2024

(21) Application No.202441057207 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD TO DETECT IMPACTED MANDIBULAR SECOND PREMOLAR TEETH USING FEED FORWARD NEURAL NETWORKS

(51) International classification	:G06N0003080000, G06N0003040000, G06K0009620000, G06T0007000000, G06N0003020000
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)S.Balamurugan
Address of Applicant :No.21, Kalloori Nagar, Peelamedu, Coimbatore-641004, Tamilnadu, India ---------- ----------
2)Dr. Sudhanshu Agrawal
3)Dr. Garima Singh
4)Dr. Dipti Singh
5)Dr. P. L. Ravi Shankar
6)Dr. Bennete Aloysius Fernandes
7)Dr. Tulika Rani Roy
8)Dr. Neelam Das
9)Dr. Manjiri Bharat Saoji
10)Dr. Sameer Gupta
11)Dr. Barun Kumar
12)Dr. Anant Raghav Sharma
13)Dr. Neetha Bhargava
14)Dr. Prashansa Sharma
15)Dr. Amita Olivia Coutinho
16)Dr. Sonal Singh
17)Dr. Arun Sharma
18)Dr. Jasmine Marwaha
19)Rakesh Kumar
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Sudhanshu Agrawal
Address of Applicant :Professor, Department of Periodontics and Implantology, Chandra Dental College & Hospital, Safedabad, Barabanki, Uttar Pradesh - 225003, India ---------- ----------
2)Dr. Garima Singh
Address of Applicant :Senior Lecturer, Chandra Dental College & Hospital, Safedabad, Barabanki, Uttar Pradesh - 225003, India ---------- ----------
3)Dr. Dipti Singh
Address of Applicant :Professor & Head, Department of Oral Medicine & Radiology, Chandra Dental College & Hospital, Safedabad, Barabanki, Uttar Pradesh - 225003, India ---------- ----------
4)Dr. P. L. Ravi Shankar
Address of Applicant :Professor & HOD, Dept of Periodontics, SRM Kattankulathur Dental College and Hospital, Kattankulathur, Tamil Nadu - 603203, India ---------- ----------
5)Dr. Bennete Aloysius Fernandes
Address of Applicant :Faculty of Dentistry, SEGi University, Selangor - 47810, Malaysia ---------- ----------
6)Dr. Tulika Rani Roy
Address of Applicant :Assistant Professor, Department of Periodontology & Implantology, Inderprastha Dental College & Hospital, Sahibabad, Ghaziabad, Uttar Pradesh - 201010, India ---------- ----------
7)Dr. Neelam Das
Address of Applicant :Associate Professor, Department of Periodontology, Rama Dental College Hospital and Research Centre, Mandhana, Kanpur, Uttar Pradesh - 209217, India ---------- ----------
8)Dr. Manjiri Bharat Saoji
Address of Applicant :Assistant Professor, Department of Periodontics and Implantology, Government Dental College & Hospital, Aurangabad, Maharashtra - 431001, India ---------- ----------
9)Dr. Sameer Gupta
Address of Applicant :Associate Professor, Department of Oral & Maxillofacial Surgery, Inderprastha Dental College and Hospital, Sahibabad , Ghaziabad, Uttar Pradesh - 201010, India ---------- ----------
10)Dr. Barun Kumar
Address of Applicant :Associate Professor, Department of Oral and Maxillofacial Surgery, Bharati Vidyapeeth Dental College and Hospital, Navi Mumbai (Deemed to be University), Maharashtra - 400614, India ---------- ----------
11)Dr. Anant Raghav Sharma
Address of Applicant :Professor, Department of Periodontology & Implantology, Pacific Dental College, Debari, Udaipur, Rajasthan - 313024, India ---------- ----------
12)Dr. Neetha Bhargava
Address of Applicant :Professor and Head, Department of Periodontology, NIMS Dental College and Hospital, NIMS University, Jaipur, Rajasthan - 302131, India ---------- ----------
13)Dr. Prashansa Sharma
Address of Applicant :College, Murad Nagar, Ghaziabad, Uttar Pradesh - 201206, India ---------- ----------
14)Dr. Amita Olivia Coutinho
Address of Applicant :Reader, Department of Periodontics and Implantology, The Oxford Dental College, Bommanahalli, Bangalore, Karnataka – 560068, India ---------- ----------
15)Dr. Sonal Singh
Address of Applicant :Senior Lecturer, Department of Periodontology and Implantology, Mahatma Gandhi Dental College and Hospital, Jaipur, Rajasthan - 302022, India ---------- ----------
16)Dr. Arun Sharma
Address of Applicant :Professor and Head, Department of Pediatric and Preventive Dentistry, Rama Dental College Hospital & Research Centre, Mandhana, Kanpur, Uttar Pradesh - 209217, India ---------- ----------
17)Dr. Jasmine Marwaha
Address of Applicant :Assistant Professor, Department of Conservative Dentistry & Endodontics, Maharishi Markandeshwar College of Dental Sciences and Research, Mullana, Ambala, Haryana - 133203, India ---------- ----------
18)Rakesh Kumar
Address of Applicant :Founder & CEO, Global Outreach Research College & Hospital, Karah Dih, Silao, Nalanda, Bihar - 803117, India ---------- ----------
19)Dr.S.Balamurugan
Address of Applicant :No.21, Kalloori Nagar, Peelamedu, Coimbatore-641004, Tamilnadu, India ---------- ----------

(57) Abstract :
A method for detecting impacted mandibular second premolar teeth using feed forward neural networks is disclosed. This innovative approach utilizes a trained neural network model to analyze dental radio graphs, identifying the presence and position of impacted teeth with high accuracy. The method involves pre-processing the images to enhance relevant features, followed by feeding the processed data into a multi-layer feed forward neural network. The network, after being trained on a diverse datasets of labeled dental images, can effectively classify and pinpoint impacted mandibular second premolars. This automated detection system offers a reliable and efficient alternative to traditional diagnostic methods, reducing the need for manual interpretation and improving diagnostic speed and precision in dental practices.

No. of Pages : 16 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/07/2024
(21) Application No.202441057208 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A HERBAL-BASED NUTRACEUTICAL FORMULATION AND ITS PROCESS THEREOF

(51) International classification :A61K0031122000, A23L0033105000, A61P0003020000, A61K0031050000, A61P0031100000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Karpagam College of Pharmacy
Address of Applicant :Karpagam College of Pharmacy Pollachi Road, Othakkalmandapam Coimbatore - 641032 Tamil Nadu India Coimbatore ---------- ----------
2)Dr.M.Karpakavalli
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.M.Karpakavalli
Address of Applicant :Dept. of Pharmaceutical Chemistry, Karpagam College of Pharmacy, Pollachi Road, Othakkalmandapam, Coimbatore- 32 Tamil Nadu, India Coimbatore ---------- ----------
2)Dr. S. Mohan
Address of Applicant :Karpagam College of Pharmacy Pollachi Road, Othakkalmandapam Coimbatore - 641032 Tamil Nadu India Coimbatore ---------- ----------
3)Dr. S. Muthumareeswari
Address of Applicant :Thassim Beevi Abdul Kadar college for women, Kilakarai, Ramanathapuram, Tamil Nadu 623517 Kilakarai ---------- ----------
4)Dr. S. Sumaya
Address of Applicant :Thassim Beevi Abdul Kadar college for women, Kilakarai, Ramanathapuram, Tamil Nadu 623517 Kilakarai ---------- ----------
5)Dr. A. Sangilimuthu
Address of Applicant :Karpagam College of Pharmacy Pollachi Road, Othakkalmandapam Coimbatore - 641032 Tamil Nadu India Coimbatore ---------- ----------
6)Mrs. K.M. Buvaneshwari
Address of Applicant :Thassim Beevi Abdul Kadar college for women, Kilakarai, Ramanathapuram, Tamil Nadu 623517 Kilakarai ---------- ----------
7)Mrs. R. Lakshmi Shree
Address of Applicant :Thassim Beevi Abdul Kadar college for women, Kilakarai, Ramanathapuram, Tamil Nadu 623517 Kilakarai ---------- ----------

(57) Abstract :
A Herbal-based Nutraceutical formulation and its process thereof Abstract The present invention focuses on developing herbal-based nutraceuticals, leveraging the growing popularity of complementary and alternative medicines (CAMs) in developed countries. Despite the benefits of herbal therapies, issues like lack of quality control and inadequate labeling persist. This invention formulates a nutraceutical from selected spices and herbs, testing them for phytochemicals, stability, and bioactivity. Analysis includes moisture, lipid, protein, and carbohydrate content, as well as antioxidant and antimicrobial activities. The formulations demonstrated notable secondary metabolites, stability under various conditions, and mild antioxidant and significant antibacterial and antifungal activities, suggesting their potential as safe, effective nutraceutical products. The formulation provides a natural, effective, and safe alternative to synthetic supplements, promoting overall health and well-being. The standardized process ensures high quality and consistent efficacy, addressing the need for reliable and scientifically validated nutraceutical products in the market.

No. of Pages : 28 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :28/07/2024

(21) Application No.202441057212 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : ADVANCED IOT SOLUTIONS SYSTEM FOR EFFICIENT NETWORK RESOURCE DISTRIBUTION AND OPTIMIZATION

(51) International classification	:G06N0020000000, G06F0009500000, H04W0072040000, H04L0047700000, H04W0004700000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Mrs.T.Vamshi Mohana

Address of Applicant :Associate Professor, Head Department of Computer Science, R.B.V.R.R Women's College, Narayanaguda, Hyderabad, Telangana, India. Pin Code:500027 ---------- ----------

2)Mr.Panduri Bujjibabu

3)Dr.M.Vijaya Laxmi

4)Dr.S.Narasimha Rao

5)Dr.Jacob Vincent

6)Dr. M. Kanagaraj Madasamy

7)Mr.Pradeep Kandimalla

8)Ms.Salma Begum

9)Ms.P.Sampurna

10)Dr.Dasari Vijaya Kumar

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Mrs.T.Vamshi Mohana

Address of Applicant :Associate Professor, Head Department of Computer Science, R.B.V.R.R Women's College, Narayanaguda, Hyderabad, Telangana, India. Pin Code:500027 ---------- ----------

2)Mr.Panduri Bujjibabu

Address of Applicant :Assistant Professor, Department of CAI, Chalapathi Institute of Engineering and Technology, Guntur, Guntur District, Andhra Pradesh, India. Pin Code:522002 ---------- ----------

3)Dr.M.Vijaya Laxmi

Address of Applicant :Professor, Department of Electronics and Communication Engineering, Chadalawada Ramanamma Engineering College, Tirupati, Tirupati District, Andhra Pradesh, India. Pin Code: 517501 ---------- ----------

4)Dr.S.Narasimha Rao

Address of Applicant :Associate Professor, Department of Electrical and Electronics Engineering, Siddharth Institute of Engineering and Technology, Puttur, Tirupati District, Andhra Pradesh, India. Pin Code: 517583 ---------- ----------

5)Dr.Jacob Vincent

Address of Applicant :Associate Professor, Department of Chemistry, Jayaraj Annapackiam C.S.I. College of Engineering, Margoschis Nagar, Nazareth, Thoothukudi District, Tamil Nadu, India. Pin Code:628617 ---------- ----------

6)Dr. M. Kanagaraj Madasamy

Address of Applicant :Assistant Professor, Department of Chemistry, Sri S. Ramasamy Naidu Memorial College, Sattur, Virudhynagar District, Tamil Nadu, India. Pin Code: 626203 ---------- ----------

7)Mr.Pradeep Kandimalla

Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Vignan Lara Institute of Technology and Science, Vadlamudi, Guntur District, Andhra Pradesh, India. Pin Code:522213 ---------- ----------

8)Ms.Salma Begum

Address of Applicant :Assistant Professor, Department of Computer Science, Department of Computer Science, RBVRR Women's College (Autonomous), Narayanguda, Hyderabad, Telangana, India. Pin Code:500027 ---------- ----------

9)Ms.P.Sampurna

Address of Applicant :Assistant Professor, Department of Computer Science, RBVRR Women's College (Autonomous), Narayanguda, Hyderabad, Telangana, India. Pin Code:500027 ---------- ----------

10)Dr.Dasari Vijaya Kumar

Address of Applicant :Adjunct Professor, Department of Environmental Sciences, Andhra University, Visakhapatnam, Andhra Pradesh, India. Pin Code:530003 ---------- ----------

(57) Abstract :

The present invention relates to an advanced IoT solutions system for efficient network resource distribution and optimization. The system employs a combination of edge nodes, cloud servers, and a resource management module to dynamically monitor and manage network resources. By leveraging machine learning algorithms for predictive analytics, the system anticipates future resource demands and adjusts resource allocation in real-time. This approach enhances network performance by reducing latency, preventing congestion, and ensuring optimal utilization of resources across diverse IoT devices and applications. The invention addresses key challenges in current network management systems, offering a scalable and efficient solution for the growing complexity of IoT environments. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 23 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/07/2024

(21) Application No.202441057214 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR NEURAL NETWORK-BASED BIDIRECTIONAL SPEECH TO SIGN LANGUAGE TRANSLATION

(51) International classification	:G06N0003040000, G09B0021000000, G06N0003080000, H04N0007150000, G06F0040400000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Parkavi.A
Address of Applicant :Department of CSE, M S Ramaiah Institute of Technology, Bangalore ---------- ----------
2)Pushpalatha M N
3)Nandini S B
4)Brunda G
5)Uzma Sulthana
6)Pallavi T P
7)Evangeline D
8)Subramanya S G
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Parkavi.A
Address of Applicant :Department of CSE, M S Ramaiah Institute of Technology, Bangalore ---------- ----------
2)Pushpalatha M N
Address of Applicant :Department of ISE, M S Ramaiah Institute of Technology, Bangalore ---------- ----------
3)Nandini S B
Address of Applicant :Department of CSE, M S Ramaiah Institute of Technology, Bangalore ---------- ----------
4)Brunda G
Address of Applicant :Department of CSE, M S Ramaiah Institute of Technology, Bangalore ---------- ----------
5)Uzma Sulthana
Address of Applicant :Department of CSE, M S Ramaiah Institute of Technology, Bangalore ---------- ----------
6)Pallavi T P
Address of Applicant :Department of CSE, M S Ramaiah Institute of Technology, Bangalore ---------- ----------
7)Evangeline D
Address of Applicant :Department of ISE, M S Ramaiah Institute of Technology, Bangalore ---------- ----------
8)Subramanya S G
Address of Applicant :Department of CSE, Nitte Meenakshi Institute of Technology, Bangalore ---------- ----------

(57) Abstract :
The present invention relates to a system and method for bidirectional translation between spoken language and sign language, leveraging advanced neural networks, natural language processing, and 3D avatar representations. This system addresses the communication barriers between spoken language users and the deaf community by providing a real-time translation solution. The system captures sign language gestures through a trained neural network, which are then rendered using a 3D avatar. Text inputs are processed using a Natural Language Toolkit (NLTK) for keyword extraction, and corresponding sign files are matched from a comprehensive sign language database. The invention supports seamless bidirectional communication by converting spoken language to sign language and sign language to spoken language, facilitating effective interaction between hearing-impaired individuals and the general public. The novel features of this invention include the use of 3D avatar representations, an Indian Sign Language dataset, NLTK integration, and bidirectional communication capabilities. Potential applications include communication aids for the deaf, educational tools, customer service interfaces, and integration into video conferencing tools. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :28/07/2024

(21) Application No.202441057216 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : TITANIUM OXIDE NANOPARTICLES: A NEW FRONTIER IN ANTIBACTERIAL SOLUTIONS

(51) International classification	:B01J0035000000, C08L0071020000, C02F0001000000, A01N0059000000, C07K0014195000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr. Bhargavi K. S

Address of Applicant :Assistant Professor, Department of Physics, East West College of Engineering, Yalahanka, Bangalore, Karnataka, India, Pincode: 500064 ---------- ----------

2)Dr. B. Kishore Babu

3)Dr. G. Ramanathan

4)Dr. S. Mohamed Rabeek

5)Dr. Y. Anantha Lakshmi

6)Mr. Baddepudi Kamalababu

7)Dr. M. Esakkiammal

8)Dr. B. Radhakrishna

9)Dr. Pramod A G

10)Dr. Mohamed Zikriya

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. Bhargavi K. S

Address of Applicant :Assistant Professor, Department of Physics, East West College of Engineering, Yalahanka, Bangalore, Karnataka, India, Pincode: 500064 ---------- ----------

2)Dr. B. Kishore Babu

Address of Applicant :Associate Professor, Department of Engineering Chemistry, AUCE (A), Andhra University, Visakhapatnam, Andhra Pradesh, India, Pincode: 530003 ---------- ----------

3)Dr. G. Ramanathan

Address of Applicant :Professor, Department of Physics, Sri Sairam Engineering College, Chennai, Tamilnadu, India, Pincode: 602109 ---------- ----------

4)Dr. S. Mohamed Rabeek

Address of Applicant :Assistant Professor of Chemistry, PG and Research Department of Chemistry, Jamal Mohamed College (Autonomous), Affiliated to Bharathidasan University, Tiruchirappalli, Tamilnadu, India, Pincode: 620020 ---------- ----------

5)Dr. Y. Anantha Lakshmi

Address of Applicant :Assistant Professor, Department of H & S, MLR Institute of Technology, Dundigal, Telangana, India, Pincode: 500043 ---------- ----------

6)Mr. Baddepudi Kamalababu

Address of Applicant :Lecturer in Chemistry, TRR Govt Degree College, Kandukur, Andhra Pradesh, India, Pincode: 523105 ---------- ----------

7)Dr. M. Esakkiammal

Address of Applicant :Assistant Professor, Department of Chemistry, National College (Autonomous), Tiruchirappalli, Tamilnadu, India, Pincode: 620001 ---------- ----------

8)Dr. B. Radhakrishna

Address of Applicant :Associate Professor, Department of S & H (Physics), N.B.K.R. Institute of Science & Technology, Vidyanagar, Andhra Pradesh, India, Pincode: 524413 ---------- ----------

9)Dr. Pramod A G

Address of Applicant :Guest Faculty, Department of Physics, Jnanabharathi Campus, Banglore University, Bengaluru, Karnataka, India, Pincode: 560056 ---------- ----------

10)Dr. Mohamed Zikriya

Address of Applicant :Guest Faculty, Department of Physics, Jnanabharathi Campus, Banglore University, Bengaluru, Karnataka, India, Pincode: 560056 ---------- ----------

(57) Abstract :

The invention pertains to titanium oxide nanoparticles (TiO2 NPs) with enhanced antibacterial properties for use in medical, environmental, and consumer applications. Synthesized via a sol-gel process and doped with nitrogen, these nanoparticles extend their photocatalytic activity into the visible light spectrum. Functionalized with silver nanoparticles, they offer broad-spectrum efficacy against various bacteria, including resistant strains. Applications include coatings for medical devices, wound dressings, water purification systems, and air purification devices. TiO2 NPs provide continuous antibacterial protection by generating reactive oxygen species under light, ensuring safety and efficacy in diverse environments. This invention addresses the global challenge of antibiotic resistance, offering a versatile and sustainable alternative to traditional antibacterial agents.

No. of Pages : 29 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :28/07/2024

(21) Application No.202441057218 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : THE ROLE OF PLATINUM NANOPARTICLES IN COMBATTING BACTERIAL INFECTIONS

(51) International classification :A61P0031040000, A61K0033380000, A61F0013000000, A61P0031000000, A61L0002180000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**

1)Dr. A. Parveen

Address of Applicant :Assistant Professor, PG & Research Department of Physics, AVS College of arts & Science (Autonomous), Salem, Tamilnadu, India, Pincode: 636106 ---------- ----------

2)Dr. B. Kishore Babu

3)Smt. Ramya Mandala

4)Mr. V. Sanjeeva Kumar

5)Dr. K. Suganandam

6)Mr. Baddepudi Kamalababu

7)Dr. P. Vimala

8)Dr. B. Radhakrishna

9)Dr. V. Prathipa

10)Mrs. Pushukuri Yamuna

11)Mr. V. Rambabu

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. A. Parveen

Address of Applicant :Assistant Professor, PG & Research Department of Physics, AVS College of arts & Science (Autonomous), Salem, Tamilnadu, India, Pincode: 636106 ---------- ----------

2)Dr. B. Kishore Babu

Address of Applicant :Associate Professor, Department of Engineering Chemistry, AUCE (A), Andhra University, Visakhapatnam, Andhra Pradesh, India, Pincode: 530003 ---------- ----------

3)Smt. Ramya Mandala

Address of Applicant :Lecturer in Physics, Department of Physics, Dr. V. S. Krishna Govt. Degree College (A), Visakhapatnam, Andhra Pradesh, India, Pincode: 530022 ---------- ----------

4)Mr. V. Sanjeeva Kumar

Address of Applicant :Lecturer in Chemistry, Department of Chemistry, Pithapur Rajah's Government College (A), Kakinada, Andhra Pradesh, India, Pincode: 533001 ---------- ----------

5)Dr. K. Suganandam

Address of Applicant :Assistant Professor, Department of Chemistry, Velammal College of Engineering and Technology, Madurai, Tamilnadu, India, Pincode: 625009 ---------- ----------

6)Mr. Baddepudi Kamalababu

Address of Applicant :Lecturer in Chemistry, TRR Govt Degree College, Kandukur, Andhra Pradesh, India, Pincode: 523105 ---------- ----------

7)Dr. P. Vimala

Address of Applicant :Associate Professor, Department of Chemistry, Muthurangam Govt Arts College, Vellore, Tamilnadu, India, Pincode: 632002 ---------- ----------

8)Dr. B. Radhakrishna

Address of Applicant :Associate Professor, Department of S & H (Physics), N.B.K.R. Institute of Science & Technology, Vidyanagar, Andhra Pradesh, India, Pincode: 524413 ---------- ----------

9)Dr. V. Prathipa

Address of Applicant :Associate Professor, Department of Chemistry, PSNA College of Engineering and Technology (Autonomous), Dindigul, Tamilnadu, India, Pincode: 624622 ---------- ----------

10)Mrs. Pushukuri Yamuna

Address of Applicant :Assistant Professor, Department of Physics, Mallareddy Engineering College (A), Kompelly, Telangana, India, Pincode: 500015 ---------- ----------

11)Mr. V. Rambabu

Address of Applicant :Lecturer in Chemistry, Department of Chemistry, Pithapur Rajah's Government College (A), Kakinada, Andhra Pradesh, India, Pincode: 533001 ---------- ----------

(57) Abstract :

The invention relates to the application of platinum nanoparticles (PtNPs) for combatting bacterial infections. PtNPs are synthesized through the reduction of a platinum salt solution and stabilized with a capping agent, resulting in nanoparticles with high antimicrobial efficacy. These nanoparticles can be incorporated into various medical applications, including wound dressings, medical device coatings, and pharmaceutical formulations, providing continuous and targeted antibacterial activity. The high surface area and catalytic properties of PtNPs enable the generation of reactive oxygen species, enhancing their ability to eradicate bacteria and prevent infection. This versatile approach addresses the critical challenge of antibiotic resistance, offering a potent and sustainable solution for infection control and improved patient outcomes in healthcare settings.

No. of Pages : 29 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057219 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN INTEGRATED VEHICLE MANAGEMENT AND FINANCIAL COMPLIANCE SYSTEM

(51) International classification	:G06Q0040020000, G06Q0040080000, G06Q0040000000, H04L0067120000, G01S0019470000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)MR LALITH SAI
Address of Applicant :No. 51, SAI NILAYA, MUTHANALLUR VILLAGE, SARJAPURA HOBLI, ANEKAL TALUK, BANGALORE – 560099, INDIA. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MR LALITH SAI
Address of Applicant :No. 51, SAI NILAYA, MUTHANALLUR VILLAGE, SARJAPURA HOBLI, ANEKAL TALUK, BANGALORE – 560099, INDIA. ---------- ----------

(57) Abstract :
ABSTRACT AN INTEGRATED VEHICLE MANAGEMENT AND FINANCIAL COMPLIANCE SYSTEM The present invention discloses an integrated vehicle management and financial compliance system includes a microcontroller unit (MCU) programmed to process data related to payments such as EMIs, insurance premiums, and road tax. A relay, controlled by the MCU, enables or disables vehicle ignition based on payment status. The system features a communication module supporting GSM and Wi-Fi for data transmission, a power management unit for stable power supply, and a server system for data exchange, monitoring, and updates. Additionally, a web and mobile administration interface allows for system management, status viewing, and manual overrides. Advanced features include user feedback analysis, secure data storage with encryption, and real-time notifications. The system also interfaces with global databases for payment validation and compliance, ensuring robust and efficient vehicle management.

No. of Pages : 17 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :29/07/2024

(21) Application No.202441057220 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : ENHANCED RFID-BASED SUPERMARKET ASSISTANCE SYSTEM FOR THE VISUALLY IMPAIRED PEOPLE

(51) International classification :G09B0021000000, G06Q0030060000, A61H0003060000, G06K0007100000, G10L0013033000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. G. Ignisha Rajathi
Address of Applicant :Assistant Professor – Senior Scale, Department of Information Technology, Manipal Institute of Technology Bengaluru, Manipal Academy of Higher Education, Manipal, India. (Institution of Eminence, Deemed to be University) ---------- ----------
2)Dr. F. Margret Sharmila
3)Dhanush Murugesan
4)Devin James R
5)Deepesh Pranav V
6)Dhanush Ram R A
7)Gowtham E
8)Kavin M
9)Rajabalaji N
10)Siddharth S V
11)Varnesh R
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. G. Ignisha Rajathi
Address of Applicant :Assistant Professor – Senior Scale, Department of Information Technology, Manipal Institute of Technology Bengaluru, Manipal Academy of Higher Education, Manipal, India. (Institution of Eminence, Deemed to be University) ---------- ----------
2)Dr. F. Margret Sharmila
Address of Applicant :Assistant Professor, Department of Computer Science and Business Systems, Sri Krishna College of Engineering and Technology, Coimbatore. ---------- ----------
3)Dhanush Murugesan
Address of Applicant :UG Scholar, Department of Computer Science and Business Systems, Sri Krishna College of Engineering and Technology, Coimbatore. ---------- ----------
4)Devin James R
Address of Applicant :UG Scholar, Department of Computer Science and Business Systems, Sri Krishna College of Engineering and Technology, Coimbatore. ---------- ----------
5)Deepesh Pranav V
Address of Applicant :UG Scholar, Department of Computer Science and Business Systems, Sri Krishna College of Engineering and Technology, Coimbatore. ---------- ----------
6)Dhanush Ram R A
Address of Applicant :UG Scholar, Department of Computer Science and Business Systems, Sri Krishna College of Engineering and Technology, Coimbatore. ---------- ----------
7)Gowtham E
Address of Applicant :UG Scholar, Department of Computer Science and Business Systems, Sri Krishna College of Engineering and Technology, Coimbatore. ---------- ----------
8)Kavin M
Address of Applicant :UG Scholar, Department of Computer Science and Business Systems, Sri Krishna College of Engineering and Technology, Coimbatore. ---------- ----------
9)Rajabalaji N
Address of Applicant :UG Scholar, Department of Computer Science and Business Systems, Sri Krishna College of Engineering and Technology, Coimbatore. ---------- ----------
10)Siddharth S V
Address of Applicant :UG Scholar, Department of Computer Science and Business Systems, Sri Krishna College of Engineering and Technology, Coimbatore. ---------- ----------
11)Varnesh R
Address of Applicant :UG Scholar, Department of Computer Science and Business Systems, Sri Krishna College of Engineering and Technology, Coimbatore. ---------- ----------

(57) Abstract :
The experiences of buying things separately are very daunting for the visually impaired clients since they encounter problems in: a) moving around aisles to find preferred products, b) identifying particular products and c) figuring out some of the product attributes such as names, descriptions, prices and availability of stock. Such challenges entail dependency on the sighted help resulting to an unfavorable shopping experience impacted on independence. Some existing approaches include using tactile labels on products and help from personal assistants, but these solutions prove to be inadequate and still make the shopping experience more tedious for the target population. The Enhanced RFID-based Supermarket Assistance System incorporates the requirements by relying on the strengths of RFID technology, microcontrollers, TTS conversion to overcome these challenges. In this case, the integration of specific passive UHF RFID tags on the supermarket products enables handheld RFID readers, namely the MFRC522, to obtain the saved product details. This information is processed by microcontrollers, so that they correlate this data with a local SQLite database that contains detailed information about the products. In this work, the information sought through the queries is converted into clear and intelligible speech by using Google Cloud Text-to-Speech. This real time vocal feedback is given via the linked headphones or loudspeakers and gives the blind buyer an instant and tangible information on the item. The microcontrollers of the system utilize serial interfaces optimally and allow the integration of incoming data, and transformation at real-time. In the same manner, the database is optimized in such a way that it embodies fast searching algorithms so as not to compromise the time of searching and therefore the time of purchasing. Additionally, the incorporation of the TTS engine, provided by Google Cloud Text-to-Speech, improves the quality of the voices and makes it convenient for users in communicating with the system. The system also fulfills the requirements needed to convey information in various supermarket environments based on the infrastructure setting of the supermarket and the amount of product variety. This versatility is also apparent in the audio output devices that have been calibrated to give accurate and clear voice outputs. The Enhanced RFID-based Supermarket Assistance System is a much more sophisticated and comprehensive solution than existing ones and it thus enhanced the shopping experience of the visually impaired and helped them to gain increased independence in society. This is a great innovation since it marks improvement in the use of assistive technologies and creates a society where everyone can move and shop freely.

No. of Pages : 22 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024

(21) Application No.202441057254 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SELF DRIVING CAR

(51) International classification	:G05D0001020000, B60W0060000000, G05D0001000000, A61K0036730000, F03G0007100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Department of E&E
Address of Applicant :RNS Institute of Technology Dr. Vishnuvardhana Road Post, RNS Farms Rd, Channasandra, Rajarajeshwari Nagar, Bengaluru, Karnataka 560098 Bangalore ---------- ----------
2)RNS Institute of Technology
3)PRASANNA KUMAR MALLAPPA
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Syed Luqman Ashrafi
Address of Applicant :Student ,Department of EEE, RNS Institute of technology, Bengalore Bangalore ---------- ----------
2).Kirthana P
Address of Applicant :Student ,Department of EEE, RNS Institute of technology, Bengalore Bangalore ---------- ----------
3)Umabai
Address of Applicant :Student ,Department of EEE, RNS Institute of technology, Bengalore Bangalore ---------- ----------
4)Rakesh M N
Address of Applicant :Assistant Professor, Department of EEE, RNS Institute of technology, Bengalore Bangalore ---------- ----------

(57) Abstract :
Abstract Technology has advanced tremendously, in recent years. One among them is artificial intelligence. Artificial intelligence plays a major role in self-driving cars. Artificial intelligence is something that was once imagined, and now it's been developed and innovated in a non-fictional world, one such innovation and development is self-driving cars or Autonomous vehicles. Self-driving cars are next-generation road transport. which can travel from source to destination without human intervention. self-driving car technology stands out as a creative innovation with significant implications for the way people will commute in the future. This project aims for the creation of a miniature self-driving car model by involving the integration of Raspberry Pi, Raspberry Pi Camera, DC motors, car chassis, ultrasonic sensors, IR sensors and employing established algorithms like Lane Detection and Following, Obstacle Detection and Avoidance, Traffic Signal Detection, Traffic Sign board Detection, Pothole Detection, and Animal Detection. Together, these integrations form a robust framework for autonomous driving. Results reveal a functional prototype model, with a compact design and integration of core technologies, providing a strong foundation for autonomous system exploration. This project highlights the fundamentals of self-driving technology, emphasizing its potential and serving as an inspiration for continued research and exploration in this transformative field.

No. of Pages : 13 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057257 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : BLOCKCHAIN TECHNOLOGY IN MARKETING: OPPORTUNITIES AND CHALLENGES

(51) International classification	:G06Q0030020000, H04L0009320000, H04L0009060000, G06F0021640000, G06Q0020380000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. M.Ramesh
Address of Applicant :Assistant professor, Department of Information Technology, VR Siddhartha Engineering College, Vijayawada, Andhra Pradesh, India. Vijayawada ---------- ----------
2)Dr. Monika Sharma
3)Sudarshana Anandkumar Abbad
4)Dr.SDN Hayath Ali
5)Dr. Ashok Kumar Sahoo
6)Lokesh Sheshrao Khedekar
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. M.Ramesh
Address of Applicant :Assistant professor, Department of Information Technology, VR Siddhartha Engineering College, Vijayawada, Andhra Pradesh, India. Vijayawada ---------- ----------
2)Dr. Monika Sharma
Address of Applicant :Assistant professor, Department of Management, GLA University, Mathura, India. Mathura ---------- ----------
3)Sudarshana Anandkumar Abbad
Address of Applicant :Assistant Professor, Computer Science & Engineering, Bharati Vidyapeeth (deemed to be university) College of Engineering, Pune, India. Pune ---------- ----------
4)Dr.SDN Hayath Ali
Address of Applicant :Associate Professor, Department of MCA, Ballari Institute of Technology and Management, Ballari, Karnataka, India. Ballari ---------- ----------
5)Dr. Ashok Kumar Sahoo
Address of Applicant :Assistant Professor, Department of Commerce, Kalasalingam Academy of Research and Education (A Deemed University), Tamilnadu – 626126, India. Virudhunagar ---------- ----------
6)Lokesh Sheshrao Khedekar
Address of Applicant :Assistant Professor, Artificial Intelligence and Data Science, Vishwakarma Institute of Technology, Pune, India. Pune ---------- ----------

(57) Abstract :
Blockchain Technology in Marketing: Opportunities and Challenges ABSTRACT The marketing industry has a lot to gain from the introduction of blockchain technology, which has the potential to greatly enhance several aspects of the operation, including the administration of data and transactions and the process's efficiency, security, and transparency. This invention paper's goal is to examine the opportunities that blockchain technology offers the marketing industry through the use of immutable ledgers. Among the available options are the elimination of ad fraud, the use of smart contracts to automate processes, and the empowering of consumers to control their data, thereby guaranteeing privacy and facilitating targeted advertising. These represent only a small selection of the possible choices. Furthermore, because blockchain technology makes it possible to create interoperable systems that increase user involvement and ensure their satisfaction, it has the potential to completely transform customer loyalty programs. This implies that customer loyalty programs could transform thanks to blockchain technology. Still, before blockchain technology is fully applied to marketing, several significant challenges must be solved. The main barriers to large-scale deployment include issues with scalability and excessive energy consumption, particularly with Proof of Work consensus approaches. There are numerous obstacles standing in the way of large-scale deployment. The existence of regulatory uncertainty and the initial costs of adoption make integration significantly more challenging to execute. This is especially true for companies that fit into the smaller or medium-sized category. Marketing professionals must participate in comprehensive training and development programs to stay up to date with the complex nature of blockchain technology. This essay aims to present a thorough analysis of the benefits and drawbacks associated with blockchain technology. It also provides insights into how the marketing company might be able to get over these challenges and fully realize the potential of blockchain technology. This is an extra advantage that it provides.

No. of Pages : 10 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057273 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR AUTOMATIC LOAD BALANCING FOR BANK OF CLOUD SERVERS

(51) International classification :G06F9/50, H04L67/1001, H04L67/1004, G06N20/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Kakumani K C Deepthi
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, SRM University, Neerukonda - 522240, Andhra Pradesh, India Neerukonda ---------- ----------
2)Ms. Yarra Khyathisree
3)Dr. Prasanthi Boyapati
4)Mr. B Mohan
5)Mr. Nampally Vijay Kumar
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Kakumani K C Deepthi
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, SRM University, Neerukonda - 522240, Andhra Pradesh, India Neerukonda ---------- ----------
2)Ms. Yarra Khyathisree
Address of Applicant :Bachelor of Technology, Computer Science and Engineering, Undergraduate Student, SRM University, Neerukonda - 522240, Andhra Pradesh, India Neerukonda ---------- ----------
3)Dr. Prasanthi Boyapati
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, SRM University, Neerukonda - 522240, Andhra Pradesh, India Neerukonda ---------- ----------
4)Mr. B Mohan
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering (AI & ML), Institute of Aeronautical Engineering, Dundigal, Hyderabad - 500043, Telangana, India Hyderabad ---------- ----------
5)Mr. Nampally Vijay Kumar
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, B V Raju Institute of Technology, Narsapur, Medak - 502313, Hyderabad, Telangana, India Hyderabad ---------- ----------

(57) Abstract :
Load balancing is crucial for the efficient operation of distributed environments, especially with the rapid growth of cloud computing and increasing customer demands for more services and positive outcomes. Cloud load balancing involves transparently sharing data and delivering services through a scalable network of nodes. Due to the open and distributed nature of cloud computing, the amount of data storage grows rapidly, making load balancing a critical issue. Managing load information in such a vast system is costly. A major challenge in cloud computing is distributing dynamic workloads across multiple nodes to prevent any single node from becoming overwhelmed. Numerous algorithms have been proposed to effectively allocate customer requests to available cloud nodes. These methods aim to enhance the overall performance of the cloud and provide users with more satisfying and efficient services. This article reviews various notification algorithms to address cloud computing load balancing and job scheduling issues, comparing the latest methods in the field.

No. of Pages : 15 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057277 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DEEP LEARNING - BASED SIGN LANGUAGE RECOGNITION AND TRANSLATION SYSTEM

(51) International classification :G06F0003010000, G06K0009620000, G01R0033563000, G06F0003030000, G10L0015260000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SAVITHA SHETTY
Address of Applicant :DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
2)SARITHA SHETTY
Address of Applicant :DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
3)DR. SAVITHA G.
Address of Applicant :DEPARTMENT OF DATA SCIENCE AND COMPUTER APPLICATIONS, MANIPAL INSTITUTE OF TECHNOLOGY, MANIPAL ACADEMY OF HIGHER EDUCATION, MANIPAL - 576104, KARNATAKA , INDIA Udupi ---------- ----------
4)SAMIPTHI DINESH NAYAK
Address of Applicant :COMPUTER SCIENCE AND ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
5)SHARANYA SHETTY
Address of Applicant :COMPUTER SCIENCE AND ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------

(57) Abstract :
Disclosed herein is a sign language system (100) to convert gestures into text, comprising a camera configured to capture images (103) of ASL gestures, a processing (104) unit being configured to recognize the ASL gestures, a mediapipe (105) to extract hand landmarks from the captured images, a random forest (106) model for training system to recognize ASL gestures based on the hand landmark data, a opencv (107) for real-time gesture detection and translation, a user-friendly interface (108) developed with tkinter (109) to display the translated text. The system (100) wherein the processing unit (104) is configured to create a custom ASL image dataset for training the ASL gesture recognition system, the random forest (106) model is trained to achieve high accuracy in recognizing ASL gestures. The hand landmarks are extracted from the captured images using mediapipe (105) to enhance the accuracy of gesture recognition, user-friendly interface developed with Tkinter displays the translated text in real time.

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057285 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : LEAF SHAPED TRIBOELECTRIC NANOGENERATOR DEVICE FOR COLLECTING WATER FROM FOG AND HARVESTING ENERGY FROM RAIN

(51) International classification :H02N0001040000, H02N0002180000, G03G0009097000, H01G0009055000, E03B0003280000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VELLORE INSTITUTE OF TECHNOLOGY
Address of Applicant :VELLORE INSTITUTE OF TECHNOLOGY KATPADI VELLORE Tamil Nadu India 632014 VELLORE ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Arunkumar Chandrasekhar
Address of Applicant :School of Electronics Engineering Vellore Institute of Technology, Vellore campus VELLORE Tamil Nadu India 632014 VELLORE ---------- ----------
2)Shaik Ruksana Begum
Address of Applicant :School of Electronics Engineering Vellore Institute of Technology, Vellore campus VELLORE Tamil Nadu India 632014 VELLORE ---------- ----------

(57) Abstract :
An embodiment herein provides a leaf shaped triboelectric nanogenerator device 100 for collecting water from fog and harvesting energy from rain. The leaf shaped triboelectric nanogenerator device 100 includes a hydrophobic leaf shaped surface/film 102, a fog collector 106 and a triboelectric nanogenerator 108. The hydrophobic leaf shaped surface/film 102 includes one or more hydrophobic leaf micro and nanostructures 104 in a banana leaf pattern. The fog collector 106 is integrated with the hydrophobic leaf shaped surface 102 and collects water from the fog through the one or more hydrophobic leaf micro and nanostructures 104. The triboelectric nanogenerator 108 is integrated with the hydrophobic leaf shaped surface102 and includes a top aluminium electrode, a bottom aluminium electrode and the hydrophobic leaf surface 102 placed in between the top aluminium electrode and the bottom aluminium electrode on a material. When in operation, the triboelectric nanogenerator 108 generates electricity by transforming the mechanical energy from rainfall into the electrical energy and provides the electrical energy to power the fog collector 106 to collect the water from the fog, thereby eliminating the need for external power to power the leaf shaped triboelectric nanogenerator device 100.
FIG. 1

No. of Pages : 31 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024

(21) Application No.202441057298 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : TRANSFORMING PUBLIC SERVICES: A MACHINE LEARNING APPROACH TO CITIZEN ENGAGEMENT IN E-GOVERNANCE

(51) International classification	:G06N0003040000, G06N0003080000, G06Q0050260000, G06N0020000000, G06Q0010060000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. P G Thirumagal
Address of Applicant :Associate Professor, Department of Management Studies, Vels Institute of Science, Technology and Advanced Studies (VISTAS), Pallavaram, Chennai - 600117, Tamil Nadu, India. Chennai ---------- ----------
2)Dr. D. Anitha Kumari
3)Dr. G Madhumita
4)Dr. M. Komala
5)Gowtham M
6)Subalakshmi R
7)Swati V
8)Malini Y
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. P G Thirumagal
Address of Applicant :Associate Professor, Department of Management Studies, Vels Institute of Science, Technology and Advanced Studies (VISTAS), Pallavaram, Chennai - 600117, Tamil Nadu, India. Chennai ---------- ----------
2)Dr. D. Anitha Kumari
Address of Applicant :Associate Professor, Department of Management Studies, Vels Institute of Science, Technology and Advanced Studies (VISTAS), Pallavaram, Chennai - 600117, Tamil Nadu, India Chennai ---------- ----------
3)Dr. G Madhumita
Address of Applicant :Associate Professor, Vels Institute of Science, Technology and Advanced Studies (VISTAS), Pallavaram, Chennai - 600117, Tamil Nadu, India. Chennai ---------- ----------
4)Dr. M. Komala
Address of Applicant :Professor, School of Pharmaceutical Sciences, Vels Institute of Science, Technology and Advanced Studies (VISTAS), Pallavaram, Chennai - 600117, Tamil Nadu, India. Chennai ---------- ----------
5)Gowtham M
Address of Applicant :Assistant Professor, School of Law, Vels Institute of Science, Technology and Advanced Studies (VISTAS), Pallavaram, Chennai - 600117, Tamil Nadu, India. Chennai ---------- ----------
6)Subalakshmi R
Address of Applicant :Assistant Professor, School of Law, Vels Institute of Science, Technology and Advanced Studies (VISTAS), Pallavaram, Chennai - 600117, Tamil Nadu, India. Chennai ---------- ----------
7)Swati V
Address of Applicant :Assistant Professor, School of Law, Vels Institute of Science, Technology and Advanced Studies (VISTAS), Pallavaram, Chennai - 600117, Tamil Nadu, India. Chennai ---------- ----------
8)Malini Y
Address of Applicant :Assistant Professor, School of Law, Vels Institute of Science, Technology and Advanced Studies (VISTAS), Pallavaram, Chennai - 600117, Tamil Nadu, India. Chennai ---------- ----------

(57) Abstract :
This invention presents a transformative approach to public services by leveraging a Machine Learning-based Region-based Convolutional Neural Network (RCNN) to enhance citizen engagement in e-governance. The proposed model aims to provide personalized, efficient, and secure public services, thereby fostering a more interactive and participatory relationship between citizens and government entities.

No. of Pages : 9 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024

(21) Application No.202441057305 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : IOT BASED SMART WIRELESS POWER LINE DETECTOR

(51) International classification	:G01R0022060000, G01R0011240000, G01R0015180000, H04W0004140000, G06T0003000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)VIVEKANANDHAN MUTHULINGAM
Address of Applicant :2/1, KARTHIKA ILLAM, SF NO 173/1A1B, WARD 16, WEST ZONE, YOGALAKSHMI NAGAR, SARAVANA NAGAR, COIMBATORE, TAMIL NADU-641025. ---------- ----------
2)VIJAY SANKARI PERIASAMY
3)Dr.S.P. VIMAL
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)VIVEKANANDHAN MUTHULINGAM
Address of Applicant :2/1, KARTHIKA ILLAM, SF NO 173/1A1B, WARD 16, WEST ZONE, YOGALAKSHMI NAGAR, SARAVANA NAGAR, COIMBATORE, TAMIL NADU-641025. ---------- ----------
2)VIJAY SANKARI PERIASAMY
Address of Applicant :2/1, KARTHIKA ILLAM, SF NO 173/1A1B, WARD 16, WEST ZONE, YOGALAKSHMI NAGAR, SARAVANA NAGAR, COIMBATORE, TAMIL NADU-641025. ---------- ----------
3)Dr.S.P. VIMAL
Address of Applicant :2/1, KARTHIKA ILLAM, SF NO 173/1A1B, WARD 16, WEST ZONE, YOGALAKSHMI NAGAR, SARAVANA NAGAR, COIMBATORE, TAMIL NADU-641025. ---------- ----------

(57) Abstract :
In electrical, the leakage may be considered as a major loss of energy. In home or industry an electrical theft may takes place .Those issues can be identified using our invention setup. The area that is applied for our invention process is Internet of Things i.e lOT Based Smart Wireless Power line Detector .The outcome of the process is to detect and monitor the presence of electricity using a wireless manner .This can be done in a personal computer , mobile device and using a stand-alone application .The major components used in the prototype of the work is transformer , Voltage and current sensor ,Arduino Kit , GSM Kit , Wifi module and power supply unit .Then the software coding is done using Arduino • IDE platform which is integrated with Hardware part to detect the power .(AC or DC) lines in the invention . Finally the changes in AC and DC lines values are viewed in Mobile SMS via GSM module and in Personal computer using Think speak application .Our invention method has an advantage of low cost, fast operating device and reliable in all conditions. The prototype is designed, in-order to resolve the following objectives > To detect the leakage of electricity . > To monitor the electrical power theft > To detect the overflow of electric power under real time conditions > To detect the current and voltage from low to high level applications. > To monitor industry as well in home power consumption so that accidents can be prevented and huge economic losses can be avoided.

No. of Pages : 12 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024

(21) Application No.202441057306 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MONITORING OF CRITICAL PATIENTS AND ALERTING THE OBSERVER USING ENBEDDED SYSTEM

(51) International classification	:A61B0005000000, A61B0005110000, A61B0005024000, A61B0005080000, A61B0005020500
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)E. NANDAKUMAR
Address of Applicant :Professor & Head Department of Electrical and Electronics Engineering Sri Shakth i Institute of Engineering and Techno logy Sri Shakthi Nagar, L & T By- Pass, Chinniyampalayam Post, Coimbatore, Tamil Nadu, India, Pin code: 641 062 ---------- ----------
2)T.BALASUBBULAKSHMI
3)K.ANUPRIYA
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)E. NANDAKUMAR
Address of Applicant :Professor & Head Department of Electrical and Electronics Engineering Sri Shakth i Institute of Engineering and Techno logy Sri Shakthi Nagar, L & T By- Pass, Chinniyampalayam Post, Coimbatore, Tamil Nadu, India, Pin code: 641 062 ---------- ----------
2)T.BALASUBBULAKSHMI
Address of Applicant :Student,Department of Em bedded System Tech no log Sri Shakthi Institute of Engineering and Technology Sri Shakthi Nagar, L & T By-Pass, Chinniyampalayam Post, Coimbatore, Tamil Nadu, India, Pin code: 641062 ---------- ----------
3)K.ANUPRIYA
Address of Applicant :Student,Department of Em bedded System Tech no log Sri Shakthi Institute of Engineering and Technology Sri Shakthi Nagar, L & T By-Pass, Chinniyampalayam Post, Coimbatore, Tamil Nadu, India, Pin code: 641062 ---------- ----------

(57) Abstract :
Detection of changes due to movement in a real-time video is a very important tool. Patient movement & monitoring system is a system that is used to detect movement changes in the patient. Those changes may be either abnormal behaviour or unusual changes made by the patient in the absence of a doctor. This paper presents the method of patient movement monitoring systemlbr the patients who are critically illand who are taking medical treatment in both local and tbreign hospitals with the help of frames comparison approach. As there are many health monitoring systems fbr monitoring the vital functions of the patients. There, are no particular devices to monitor the physical signs or movements of the patients. This system will be usefulfor monitoring both the vital and physical signs of the patients who arc to be continuously monitored for long term. The patients who are critically ill such as coma, major accidents, Organ l~1ilures etc., are admitted in IC unit lbr monitoring until they move to critical to normal stage. This project will monitor the patients vitaland physical signs for 24x7 . When the movement and the vital signs above the threshold level is detected the alert will send to the concerned person. The alert is send through the GSM module by call as well as me~:.iage. In addition to this, LCD is used to visualize the current status of the patient. The LCD display'displny's the body parameter like heart beat with the help of heart beat sensor which is an IR sensor. In this project, FLUX sensors are !~xed in two hands of the patient when there is any movement in hands the sensor sends information to the doctors by wireless communication. GLASS SETUP with EYEBALL sensor is Iixed in the patient's eyewhen any motions in the eye the sensor sense the value and send information to the doctor.

No. of Pages : 9 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057308 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A METHOD OF PRODUCING SUSTAINABLE ASPHALT FROM BIO REFINERY DERIVATIVE

(51) International classification :C08L0095000000, C08J0003240000, C08L0097020000, C08K0005000000, C10L0005440000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MRS. VIBHA
Address of Applicant :DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
2)DR. SANDESH K
Address of Applicant :DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
3)DR. UJWAL P
Address of Applicant :DEPARTMENT OF DATA SCIENCE AND COMPUTER APPLICATIONS, MANIPAL INSTITUTE OF TECHNOLOGY, MANIPAL ACADEMY OF HIGHER EDUCATION, MANIPAL - 576104, KARNATAKA , INDIA Udupi ---------- ----------

(57) Abstract :
Disclosed herein is a method of producing sustainable asphalt from bio refinery derivative (100) comprises cocoa pod shells (102) as a biomass feedstock. The method includes chemical additives (104), a hot air oven (106) for biomass drying and preparation. The method also includes a blender (108) for mixing biomass with additives and other asphalt components. The method also includes a lab-scale extruder (110) for producing bio-refined asphalt mixtures. The method also includes lignin (112) a natural polymer derived from cocoa pod shells, serves as a replacement for bitumen, enhancing the mechanical strength of the asphalt through cross-linking of polyphenols. Adhesive aids (114) incorporated to improve the binding properties of the asphalt during blending. The method also includes baby jelly stones (116) used as aggregates to provide structural stability and durability. The method also includes limestone (118) acts as a filler material to mitigate moisture damage in the produced asphalt.

No. of Pages : 23 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057317 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SOLAR ASSISTED EGG INCUBATOR

(51) International classification :A61G0011000000, C12M0001000000, F03G0006000000, F24S0010400000, F24S0010700000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)PSG Institute of Technology and Applied Research
Address of Applicant :The Principal, PSG Institute of Technology and Applied Research, Avinashi Road, Neelambur, Coimbatore, Tamilnadu, India 641 062 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Prem kumar Thiyagarajan
Address of Applicant :385 Pankaja Mills road, Ramanathapuram, Coimbatore, Tamilnadu, India 641045 ---------- ----------
2)Mr. Gokulnath Panneerselvam
Address of Applicant :48/52 Therkkukadu, Attur, Salem, Tamilnadu, India 636102 ---------- ----------
3)Mr. Logeswaran Selvaraj
Address of Applicant :28/48 Sowdamman kovil street, Moolathurai, Sirumugai Coimbatore Tamilnadu India 641 302 ---------- ----------
4)Mr. Bagavathi Palanisamy
Address of Applicant :8/34A vinayagar kovil street, No:4 veerapandi, Naikanoor. Coimbatore Tamilnadu India 641019 ---------- ----------
5)Mr. Rithick Ramasamy
Address of Applicant :1/93 A, Vadllgapalayarn Naranapuram,S.S kulam Coimbatore Tamilnadu India 641107 ---------- ----------

(57) Abstract :
Title: Solar assisted egg incubator Abstract: The present invention relates to the field of solar thermal energy based direct hot and humid air generation for artificial egg incubator applications using the invented solar 10 assisted egg incubator. The solar assisted egg incubator contains three parts mainly solar air heater (9), humidifier (17) and incubator (26). The solar air heater (9) comprises o f wooden frame (1), mica (6) and aluminium sheet box (7), plurality of lens (5) and transparent acrylic sheet (4). Humidifier (17) setup comprises o f water storage tank (11), water tube frame (13) and water branch tube with multiple nozzles 15 (14). Incubator setup (26) comprises o f the incubator acrylic cap (18), plurality o f thermostatic sensors (20 & 21) for solar heater fan (8) control and incubator bulb (22) control, hygrometer (19) to indicate the relative humidity which enables to manually operate the control valve (15) in humidifier (17) and conventional bulb (22) to provide heat during o ff sunshine hours.

No. of Pages : 12 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057328 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A ROBOT FOR MATERIAL COLLECTION

(51) International classification :B63G8/00, B63C11/52, B25J18/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)INDIAN INSTITUTE OF TECHNOLOGY MADRAS (IIT MADRAS)
Address of Applicant :The Dean, Industrial Consultancy & Sponsored Research (IC&SR), Indian Institute of Technology Madras, Sardar Patel Road, IIT Post Chennai 600 036, Tamil Nadu, India Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Sadham Usean Ramasamy
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Madras, Chennai 600036, India Chennai ---------- ----------
2)Prabhu Rajagopal
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Madras, Chennai 600036, India Chennai ---------- ----------

(57) Abstract :
ABSTRACT A ROBOT FOR MATERIAL COLLECTION The present disclosure relates to a robot for material collection (200) to operate underwater, comprising a main housing (201) capable of submersion. It includes a propulsion mechanism (202) for navigation and multiple legs (203) with multi-joint 5 configurations, to move over the waterbody bed. The robot's material collection device (100) is mounted beneath the main housing, to sort and store materials based on size. This device includes multiple robotic arms (10) with articulated fingers (13) for grasping materials, a feed unit (20) for transferring materials, and a multistage collection unit (30) with primary (32), secondary (33), and tertiary (34) columns. Each column has filters of 10 varying mesh sizes, enabling systematic sorting. Actuators (23, 24) in the collection unit push materials through these filters, ensuring thorough sorting and collection. This constructional and functional aspect of the robot to efficiently gather and categorize underwater materials. Fig. 2

No. of Pages : 33 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057329 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD FOR OBTAINING COPPER BASED FLEXIBLE ELECTRODES USING PVC INK

(51) International classification	:H05K0003020000, H01L0021020000, H05K0001030000, B41M0001120000, H05K0003060000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)VELLORE INSTITUTE OF TECHNOLOGY
Address of Applicant :Vellore Institute of Technology, Near Katpadi Road, Vellore, Tamil Nadu, India – 632014 Vellore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Harish Gnanasambanthan. G
Address of Applicant :Research Scholar, Department of Sensors and Biomedical Technology, School of Electronics Engineering, Vellore Institute of Technology, Katpadi Road, Vellore, Tamil Nadu 632014, India Vellore ---------- ----------
2)Debashis Maji
Address of Applicant :Department of Sensors and Biomedical Technology, School of Electronics Engineering, Vellore Institute of Technology, Katpadi Road, Vellore, Tamil Nadu 632014, India Vellore ---------- ----------

(57) Abstract :
Method for obtaining copper based flexible electrodes using PVC ink. The fabrication of the electrode was performed over a flexible copper-clad polyimide film (Cu-PI) having 12µm copper thickness using screen printed masking technique involving screen printing of a masking layer of PVC (polyvinyl chloride) over the copper layer followed by selective etching of the exposed (un-masked) copper to obtain the desired pattern similar to that of epoxy-based masking for PCB printing wherein the film was cleaned with IPA (isopropyl alcohol) and pasted over the cleaned glass slide using scotch tape to provide a flat surface for the subsequent patterning step [as shown in step (1) of FIG. 1] wherein the screen-printing technique was used for printing a mask using an aluminum frame having 77 threads per inch which was firmly attached to the frame wherein a capillary film light–reactive emulsion of 17 µm thickness was coated over the mesh. [FIG. 1]

No. of Pages : 19 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057344 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD FOR SYNTHESIZING FLUORINE-FREE SUPERHYDROPHOBIC AND ICEPHOBIC COATING

(51) International classification	:A61K0008190000, B05D0005080000, B82Y0040000000, C09D0005000000, C09D0005080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Indian Institute of Science
Address of Applicant :Sir C V Raman Road Bengaluru, Bangalore, 560012, Karnataka, India Bangalore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Sampath Parasuram
Address of Applicant :Indian Institute of Science, Sir C V Raman Road Bengaluru, Bangalore, 560012, Karnataka, India Bangalore ---------- ----------
2)Krishna Shankar
Address of Applicant :Indian Institute of Science, Sir C V Raman Road Bengaluru, Bangalore, 560012, Karnataka, India Bangalore ---------- ----------
3)Sufiyan Siddiqui
Address of Applicant :Indian Institute of Science, Sir C V Raman Road Bengaluru, Bangalore, 560012, Karnataka, India Bangalore ---------- ----------
4)Rishi Raj
Address of Applicant :Indian Institute of Science, Sir C V Raman Road Bengaluru, Bangalore, 560012, Karnataka, India Bangalore ---------- ----------
5)Sankeerthana Avasarala
Address of Applicant :Indian Institute of Science, Sir C V Raman Road Bengaluru, Bangalore, 560012, Karnataka, India Bangalore ---------- ----------
6)Prof. S. Kumar
Address of Applicant :Indian Institute of Science, Sir C V Raman Road Bengaluru, Bangalore, 560012, Karnataka, India Bangalore ---------- ----------
7)Prof. Suryasarathi Bose
Address of Applicant :Indian Institute of Science, Sir C V Raman Road Bengaluru, Bangalore, 560012, Karnataka, India Bangalore ---------- ----------

(57) Abstract :
METHOD FOR SYNTHESIZING FLUORINE-FREE SUPERHYDROPHOBIC AND ICEPHOBIC COATING ABSTRACT A method (100) for synthesizing a fluorine-free superhydrophobic and icephobic coating is disclosed. The method (100) involves forming transition metal dichalcogenide nanoflowers by reacting a transition metal salt with an organic sulphur reagent. These nanoflowers are alkalized with ammonia. Separately, metal sulphide nanoparticles are produced by reacting a metallic sulphide salt with a metallic chloride salt. The alkalized nanoflowers and metal sulphide nanoparticles are combined to form hybrid nanoparticles (402). A polymeric resin coating is applied to a substrate and partially cured. The hybrid nanoparticles (402) are dispersed in a solvent and applied to the partially cured polymeric resin coating. Finally, the coating with dispersed hybrid nanoparticles (402) is fully cured to obtain the fluorine-free superhydrophobic and icephobic coating. FIG. 1

No. of Pages : 46 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057346 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A NOVEL TREATMENT OF RENAL CANCER USING LISINOPRIL, TORSEMIDE AND RITUXIMAB DRUGS

(51) International classification :A61P0035000000, A61K0045060000, A61K0039000000, A61P0043000000, A61K0031440000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr.R.Saravanan
Address of Applicant :Professor and Head,Department of Pharmaceutics, Faculty of Pharmacy,Bharath Institute of Higher Education and Research, Selaiyur, Chennai-600073. ---------- ----------
2)Dr. V. Rakshana
3)Dr Ranganathan Srinivasan
4)Amos,Anjldoss
5)Sam David Emmanuvel
6)Triveen Kumar Sathiyaseelan
7)Vijay Aadhi Raj Krishnan
8)Kesavan Kannan
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.R.Saravanan
Address of Applicant :Professor and Head,Department of Pharmaceutics, Faculty of Pharmacy,Bharath Institute of Higher Education and Research, Selaiyur, Chennai-600073. ---------- ----------
2)Dr. V. Rakshana
Address of Applicant :Assistant Professor,Department of Pharmaceutics, Faculty of Pharmacy,Bharath Institute of Higher Education and Research, Selaiyur, Chennai-600073. ---------- ----------
3)Dr Ranganathan Srinivasan
Address of Applicant :Dean & Professor,Department of Pharmaceutics, Faculty of Pharmacy,Bharath Institute of Higher Education and Research, Selaiyur, Chennai-600073. ---------- ----------
4)Amos,Anjldoss
Address of Applicant :Department of Pharmaceutics, Faculty of Pharmacy, Bharath Institute of Higher Education and Research, Selaiyur, Chennai-600073. ---------- ----------
5)Sam David Emmanuvel
Address of Applicant :Department of Pharmaceutics, Faculty of Pharmacy, Bharath Institute of Higher Education and Research, Selaiyur, Chennai-600073. ---------- ----------
6)Triveen Kumar Sathiyaseelan
Address of Applicant :Department of Pharmaceutics, Faculty of Pharmacy, Bharath Institute of Higher Education and Research, Selaiyur, Chennai-600073. ---------- ----------
7)Vijay Aadhi Raj Krishnan
Address of Applicant :Department of Pharmaceutics, Faculty of Pharmacy, Bharath Institute of Higher Education and Research, Selaiyur, Chennai-600073. ---------- ----------
8)Kesavan Kannan
Address of Applicant :Department of Pharmaceutics Faculty of Pharmacy, Bharath Institute of Higher Education and Research, Selaiyur, Chennai-600073. ---------- ----------

(57) Abstract :
ABSTRACT A Novel Treatment of Renal Cancer Using Lisinopril,Torsemide and RituximabDrugs The present invention proposes a combination therapy involving Lisinopril, Torsemide, and Rituximab for the treatment of renal cancer. The combination is hypothesized to provide a multi-faceted attack on renal cancer cells by:Lisinopril: Reducing angiogenesis and tumor growth by inhibiting ACE, which plays a role in tumor blood vessel formation.Torsemide: Providing diuretic effects that may help reduce edema and improve the delivery and effectiveness of chemotherapeutic agents.Rituximab: Targeting cancer cells directly and stimulating an immune response against them The proposed combination therapy utilizing Lisinopril, Torsemide, and Rituximab presents a novel approach to treating renal cancer by targeting tumor growth, enhancing drug delivery, and stimulating immune responses. Careful dosing, monitoring, and management of potential side effects are critical to the successful implementation of this treatment regimen.This invention offers a promising new approach to the treatment of renal cancer through the synergistic use of Lisinopril, Torsemide, and Rituximab. This combination therapy has the potential to enhance treatment outcomes, reduce adverse effects, and improve the quality of life for patients suffering from renal cancer.

No. of Pages : 10 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057377 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A METHOD FOR THE ENTITY EXTRACTION FROM THE CLINICAL DOCUMENTS

(51) International classification :G16H0010600000, G16H0050200000, G06F0016330000, G06N0020000000, G06N0003040000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SAVITHA SHETTY
Address of Applicant :DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
2)DR. SARIKA HEGDE
Address of Applicant :DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
3)SARITHA SHETTY
Address of Applicant :DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------

(57) Abstract :
Disclosed herein is a method of novel approach for the entity extraction from the clinical documents (100) comprises receiving unstructured patient data (102) from clinical documents. The method includes performing data extraction on the unstructured patient data (104) using natural language processing (NLP) techniques to identify and extract text elements. The method also includes applying pattern matching module (106) to the extracted text elements to detect and prioritize specific medical symptoms. The method also includes normalizing the text elements (108) to standardize the identified medical symptoms. The method also includes using machine learning module (110) to analyze the normalized text elements, identify relevant patterns, and extract meaningful information related to the medical symptoms. The method also includes prioritizing the extracted medical symptoms (112) based on their clinical significance.

No. of Pages : 28 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057422 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : CYTOTOXICITY AND ANTI MICROBIAL ACTIVITY ,GCMS PROFILE OF COLLETOTRICHUM COBBITTIENSE

(51) International classification	:A61P0031040000, A01N0063300000, A61P0025000000, A61L0027180000, A61P0031180000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr.Puchakayala Indhu Keerthana
Address of Applicant :D/o P.V.Prasada Rao, Flat no.508,Ashritha Heights, Ramachandrapuram, Dr.B.R. Ambedkar Konaseema Dist, Andhra Pradesh.533255 ---------- ----------
2)Dr.Peethala Kaiding Ratna Kumar
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.Puchakayala Indhu Keerthana
Address of Applicant :D/o P.V.Prasada Rao, Flat no.508,Ashritha Heights, Ramachandrapuram, Dr.B.R. Ambedkar Konaseema Dist, Andhra Pradesh.533255 ---------- ----------
2)Dr.Peethala Kaiding Ratna Kumar
Address of Applicant :Professor, Department of Botany, Andhra University, Visakhapatnam, Andhra Pradesh.530003 ---------- ----------

(57) Abstract :
ABSTRACT This study investigates the bioactive properties of four solvent extracts of the fungal pathogen Colletotrichum cobbittiense, namely Methanol extract (COL-1), Ethyl acetate extract (COL-2), Chloroform extract (COL-3), and Hexane extract (COL-4). The antibacterial activity analysis revealed that the Chloroform extract (COL-3) exhibited high antibacterial activity. In antifungal screening, COL-3 also demonstrated significant fungicidal activity. These results indicate that Colletotrichum cobbittiense possesses antibacterial and antifungal properties. Moreover, the methanol extract (COL-1) was found to be more effective compared to COL-2 and COL-3, displaying lower cytotoxicity to the normal cell line (L929) and higher inhibitory action on the cervical cancer cell line (HeLa). GC-MS analysis of the three extracts (COL-1, COL-2, and COL-3) identified approximately 51 active compounds, including those with antiviral, antibacterial, and anti-inflammatory properties. Thus, Colletotrichum cobbittiense shows potential for therapeutic applications, particularly in the treatment of cervical cancer.

No. of Pages : 28 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024

(21) Application No.202441057428 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR HIGH FREQUENCY SIGNAL MANAGEMENT IN AN ENGINE

(51) International classification	:F02P0005150000, F02D0035020000, G01R0031120000, F02D0041260000, F02D0041000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Indian Institute of Technology Madras (IIT Madras)
Address of Applicant :The Dean, Industrial Consultancy & Sponsored Research (IC&SR), Indian Institute of Technology Madras, Sardar Patel Road, IIT Post, Chennai, Tamil Nadu, India 600036 Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mayank Mittal
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Madras, Sardar Patel Road, IIT Post, Chennai, Tamil Nadu, India, 600036 Chennai ---------- ----------
2)Penmatsa Sandeep Varma
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Madras, Sardar Patel Road, IIT Post, Chennai, Tamil Nadu, India, 600036 Chennai ---------- ----------

(57) Abstract :
The present invention discloses a system and method for high frequency signal management in an engine (102). The system comprises at least one rotating component (104) connected to the engine (102). Further, the system comprises at least one sensor unit (108) characterized by measuring and communicating at least one high frequency sensor signal related to the at least one rotating component (104). Furthermore, the system comprises a high frequency signal management unit (110) to receive the at least one high frequency sensor signal from the at least one sensor unit (108), determine one or more engine instructions and manage at least one engine event related to the engine (102), ensuring highly accurate control of engine events, and thereby providing precise control over fuel injection and ignition timing.

No. of Pages : 27 No. of Claims : 22

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057429 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM AND METHOD FOR AN ADJUSTMENT OF A VALVE TRAIN DRIVE FOR AN OPTICAL ENGINE

(51) International classification	:F01L0001047000, F01L0013000000, F01L0001053000, B22D0019000000, F16G0001280000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Indian Institute of Technology Madras (IIT Madras)
Address of Applicant :The Dean, Industrial Consultancy & Sponsored Research (IC&SR), Indian Institute of Technology Madras, Sardar Patel Road, IIT Post, Chennai, Tamil Nadu, India 600036 Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mayank Mittal
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Madras, Chennai, Tamil Nadu, India- 600036 Chennai ---------- ----------
2)Ravi Velugula
Address of Applicant :Department of Mechanical Engineering, Indian Institute of Technology Madras, Chennai, Tamil Nadu, India- 600036 Chennai ---------- ----------

(57) Abstract :
The present invention discloses a system and method for an adjustment of a valve train drive for an optical engine. The system (100) comprises a production cylinder head (104) disposed in the optical engine. Further, a production camshaft (102) is disposed in the production cylinder head (104). Furthermore, at least one elongated camshaft assembly is attached to the production camshaft (102). An elongated camshaft (210) is connected to the at least one elongated camshaft assembly and the production camshaft (102) to accommodate an extended center distance between a production camshaft axis and a crankshaft axis. A toothed belt (302) is connected between the production camshaft (102) and a crankshaft (304). Thereafter, a tensioning support unit (400) is connected to the toothed belt (302). Furthermore, at least one tension assembly is disposed in the tensioning support unit (400) and connected to an engine base plate.

No. of Pages : 27 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057435 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SUCTION CUP-BASED VERTICAL TRANSFER SYSTEM FOR TWO-LEVEL CROSS BELT SORTER AND METHOD FOR OPERATION THEREOF

(51) International classification	:B65G0049060000, B65G0067240000, F21Y0115100000, B65G0017340000, B65B0003020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)FLIPKART INTERNET PRIVATE LIMITED
Address of Applicant :Buildings Alyssa, Begonia & Clover, Embassy Tech Village, Outer Ring Road, Devarabeesanahalli Village, Bengaluru - 560103, Karnataka, India Bengaluru ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)VARTAK, Nikhil
Address of Applicant :C/o Flipkart Internet Private Limited, Buildings Alyssa, Begonia & Clover, Embassy Tech Village, Outer Ring Road, Devarabeesanahalli Village, Bengaluru – 560103, Karnataka, India Bengaluru ---------- ----------
2)SESHADRI, Arvind
Address of Applicant :C/o Flipkart Internet Private Limited, Buildings Alyssa, Begonia & Clover, Embassy Tech Village, Outer Ring Road, Devarabeesanahalli Village, Bengaluru – 560103, Karnataka, India Bengaluru ---------- ----------

(57) Abstract :
ABSTRACT SUCTION CUP-BASED VERTICAL TRANSFER SYSTEM FOR TWO-LEVEL CROSS BELT SORTER AND METHOD FOR OPERATION THEREOF The present invention relates to a suction cup-based vertical transfer system for two-level cross belt sorter, comprising a chain driven loop (102), having a first side and a second side, and the first side disposed with a conveyor drive system (104) to move the chain driven loop (102) between at least two point (106, 108). A plurality of modular slabs (110) mounted on the second side and moving along the chain driven loop (102). A tray (112), having a first surface and a second surface, and positioned on the plurality of modular slabs (110) for carrying a shipment between the at least two points (106, 108). A number of suction cups (114) installed on the second surface of the tray (112), and carrying the shipment between the at least two points. Figure 1

No. of Pages : 15 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057454 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ASSESSING DROUGHT CONDITIONS IN GUNTUR WITH MODIS AND GOOGLE EARTH ENGINE

(51) International classification	:H01L0029739000, H01L0029660000, H01L0029490000, H01L0029080000, H01L0021280000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)POKKUNURI PARDHA SARADHI
Address of Applicant :Department of ECE, Koneru Lakshmaiah Education Foundation, Vaddeswaram, AP, India ---------- ----------
2)B.Balaji
3)G.V.Ganesh
4)Koneru Lakshmaiah Education Foundation
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)B.Balaji
Address of Applicant :Koneru Lakshmaiah Education Foundation, Vaddeswaram, AP, India guntur ---------- ----------
2)P.Pardhasaradhi
Address of Applicant :Koneru Lakshmaiah Education Foundation, Vaddeswaram, AP, India Vijayawada ---------- ----------
3)G.V.Ganesh
Address of Applicant :Koneru Lakshmaiah Education Foundation, Vaddeswaram, AP, India Vijayawada ---------- ----------

(57) Abstract :
This evaluation explores the utility of temperature, metal gate, and drain current have a significant impact on the improved performance of nano-scale devices in submicron technology. The conventional TFET has a problem with temperature sensitivity in low-power applications. Therefore, the vertical tunneling-based dual metal gate TFET (V-DMGTFET) is introduced in this work. The proposed device focuses on the temperature sensitivity of tunnel field-effect transistors (TFET) and conducts an in-depth analysis of the temperature sensitivity across various digital, analog, and RF performance metrics for conventional TFET. The proposed device temperature sensitivity parameters are analyzed and compared with traditional TFET using Silvaco TCAD software. The comparative analysis reveals that the V-DMGTFET exhibits lower sensitivity compared to traditional-tunnel field-effect transistors. The electrical parameters results at the metal gate work function of 4.12 eV demonstrate the high On State current, low off state current, and Ion/Ioff ratio of 1.9×1011. Therefore the proposed V-DMGTFET is extensively suitable for low power switching operations. .

No. of Pages : 10 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057475 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : CONVERTIBLE WRITABLE DEVICE

(51) International classification	:G06F0003041000, H04M0001724120, F16M0011420000, H04M0001210000, G02B0021360000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)JAIN (Deemed-to-be University)
Address of Applicant :Jain Global Campus, Jakkasandra Post, Kanakapura Road, Kanakapura Taluk, Ramnagar District, Bangalore –562112, Karnataka, India. Bangalore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Praveen Gujjar J
Address of Applicant :Associate Professor, Department of Business Analytics, JAIN (Deemed-to-be University), Jain Global Campus, Jakkasandra Post, Kanakapura Road, Kanakapura Taluk, Ramnagar District, Bangalore –562112, Karnataka, India. Bangalore ---------- ----------

(57) Abstract :
A convertible writable device, comprising a platform 101 positioned over a ground surface by means of circular disc 102, an imaging unit 104 determines height of a user, a telescopic rod 105 positioning platform 101 at appropriate height, a display panel 106 receives input related to writing surface, a touch enabled screen 107 enables user to write over screen 107 via a stylus, a first and second rectangular housing 109, 110 attached via two motorized sliding units 111 to position multiple transparent glass panels 112 in front of screen 107, a motorized vertical conveyor 201 having multiple clamps 202, each gripping marker, a motorized drawer arrangement 124 to allow user to access chalks, a two-axis lead screw arrangement 114 rubs panels 112 via a detachable duster, a sun sensor monitors direction of light and a canopy arrangement 118 is deployed to prevent direct fall of light to increase readability.

No. of Pages : 30 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057484 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A CATHODE COMPRISING A CERAMIC LAYER AND ITS PREPARATION PROCESS

(51) International classification :H01M0004360000, H01M0004020000, H01M0004620000, B28B0001000000, H01M0004131000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)OLA ELECTRIC MOBILITY LIMITED
Address of Applicant :Regent Insignia, #414, 3rd Floor, 4th Block, 17th Main, 100 Feet Road, Koramangala, Bangalore, Karnataka 560034, India ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)KUMAR, Saurabh
Address of Applicant :Kharagpur Dist., Palamu, Jharkhand 822113, India ---------- ----------
2)H N, Sumedha
Address of Applicant :Harike, Tyavana post, Sringeri taluq, Chikmagalur district, Karnataka 577139, India ---------- ----------
3)LOBO, Laurel Simon
Address of Applicant :"Private Farm", Hirekolale Road, Uppalli, Indavara Post, Chikmagalur, Karnataka 577101, India ---------- ----------

(57) Abstract :
ABSTRACT A CATHODE COMPRISING A CERAMIC LAYER AND ITS PREPARATION PROCESS The present disclosure provides a cathode (100) comprising: (a) a ceramic layer (101) having a first inorganic material, a second inorganic material and at least two 5 water-soluble binders; (b) a current collector (102); and (c) an active material layer (103), wherein the first inorganic material has a particle size in a range of 1.5 to 2.0 µm, and the second inorganic material has a particle size in a range of 0.1 to 0.15 µm; wherein the first inorganic material and the second inorganic material are in a weight ratio range of 1:1.5 to 1:4, with respect to combined weight of the first and 10 the second inorganic materials. 34

No. of Pages : 41 No. of Claims : 18

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057495 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A COMPOSITION AND METHOD FOR PREPARING A GASTROPROTECTIVE NIOSOMAL SYRUP USING TRADESCANTIA PALLIDA EXTRACT

(51) International classification :A61P0001040000, A61K0036880000, C07D0277280000, A61K0009000000, A61K0009127000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Andhra University
Address of Applicant :Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Pashikanti Shailaja
Address of Applicant :Associate Professor, Department of Pharmaceutics, Andra University College of Pharmaceutical Sciences, Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------
2)Dr. Rama Devi Korni
Address of Applicant :Flat no: 203, Block A, MVV Apartments, KRM Colony, Visakhapatnam – 530013 Andhra Pradesh, India. Visakhapatnam ---------- ----------
3)Dr. Swathi Putta
Address of Applicant :4-43, Komati Veedhi, Lakkavarapu Kota, Vizianagaram – 535161, Andhra Pradesh, India. Vizianagaram ---------- ----------

(57) Abstract :
ABSTRACT: Title: A Composition and Method for Preparing a Gastroprotective Niosomal Syrup Using Tradescantia Pallida Extract The present disclosure proposes to a composition and method that prepares a gastroprotective niosomal syrup by using tradescantia pallida extract to enhance drug efficacy. The composition for preparing the gastroprotective niosomal syrup comprises 4 to 8 weight percentage of Nizatidine niosomes (10), 79 to 83 weight percentage of sucrose (12) and 10 to 14 weight percentage of purified water (14). In addition, the Nizatidine niosomes (10) comprises 1.7 to 1.9 weight percentage of Nizatidine (102), 2.6 to 2.8 weight percentage of a fortified product (104), 1.7 to 1.9 weight percentage of a cholesterol (106), 3.5 to 3.7 weight percentage of a Span 60 (108) and 89 to 91 weight percentage of a phosphate buffer solution (110). The Nizatidine niosomes (10) is mixed with sucrose (12) and purified water (14) for obtaining a gastroprotective niosomal syrup (100).

No. of Pages : 29 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024

(21) Application No.202441057496 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A METHOD FOR DEGRADATION OF DYE USING COPPER DOPED TITANIUM DIOXIDE NANOCOMPOSITE

(51) International classification	:B01J0035000000, C02F0001300000, C01G0041020000, C02F0101300000, C02F0001720000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Andhra University
Address of Applicant :Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. B. B. V. Sailaja
Address of Applicant :Professor, Department of Chemistry, Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------
2)Sandhya Rani Nayak
Address of Applicant :Research Scholar, Department of Chemistry, Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------
3)P. Manohar
Address of Applicant :Junior Project Fellow, CSBOB, Andhra University, Waltair, Visakhapatnam-530003, Andhra Pradesh, India. Visakhapatnam ---------- ----------

(57) Abstract :
ABSTRACT: Title: A Method for Degradation of Dye Using Copper Doped Titanium Dioxide Nanocomposite The present disclosure proposes a method for preparation, characterization, and application of a copper-doped titanium dioxide and tungsten trioxide (Cu-TiO2 and WO3) nanocomposite for the degradation of amaranth dye under visible light. The proposed method significantly improves photocatalytic activity under visible light, making it more effective than conventional photocatalysts. The proposed method is capable of completely degrading amaranth dye, a common pollutant in wastewater, within a short period, ensuring thorough purification. The proposed method varies soaking times, the tungsten trioxide to achieve maximum photocatalytic activity, thereby allowing for customization based on specific requirements. The proposed method provides an efficient solution for degrading harmful dyes in wastewater, contributing to environmental protection and sustainable water management.

No. of Pages : 30 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057501 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : HIGH ENTROPY ALLOY-REINFORCED SS410 COMPOSITION

(51) International classification	:B23K0020120000, C22C0030000000, B33Y0070000000, B22F0001000000, C08G0018420000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)AMRITA VISHWA VIDYAPEETHAM
Address of Applicant :Coimbatore Campus, Coimbatore- 641112, Tamil Nadu, India Coimbatore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)NACHIMUTHU, Radhika
Address of Applicant :No. 309, Raja Brindavan Nagar, Kurumbapalayam Road, Madukkarai, Coimbatore, Tamil Nadu 641105 Coimbatore ---------- ----------
2)SINGH, Aman
Address of Applicant :142, Shiv Shakti Nagar Colony, Padari Bazar, Gorakhpur, Uttar Pradesh 273014 Gorakhpur ---------- ----------
3)SANUBOINA NADAMUNI, Kishan
Address of Applicant :No. 10, 9th Avenue, A Sector, Siva Sakthi Nagar, Annanur PO, Chennai, Tamil Nadu 600062 Chennai ---------- ----------

(57) Abstract :
HIGH ENTROPY ALLOY-REINFORCED SS410 COMPOSITION ABSTRACT A high entropy alloy (HEA)-reinforced SS410 alloy composition exhibiting enhanced wear resistance and hardness is disclosed. The novel alloy comprises an SS 410 matrix containing 8-15% of AlSiBeTiV HEA by weight dispersed within the matrix. The AlSiBeTiV HEA includes equiatomic proportions of Al, Si, Be, Ti, and V, and exhibits face-centered cubic structure. A method of manufacturing the alloy using friction stir processing is also disclosed. The refined grain size is configured to give an increase in tensile strength of 45% or more, and wear resistance of 35% or more over the base SS410 alloy. FIG. 1

No. of Pages : 24 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024

(21) Application No.202441057502 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : GLYCINE-DEXIBUPROFEN PRODRUG FOR NEUROPROTECTIVE EFFECTS

(51) International classification :A61P0025280000, A61K0031192000, A61P0025000000, A61P0025080000, A61K0045060000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Al Shifa College of Pharmacy
Address of Applicant :Al Shifa College of Pharmacy, Department of Pharmaceutical Chemistry Poonthavanam Post, Kizhattur, Peinthalmanna, Malappuram District, Kerala, India 679325. Malappuram ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Arun Rasheed
Address of Applicant :Al Shifa College of Pharmacy, Department of Pharmaceutical Chemistry Poonthavanam Post, Kizhattur, Peinthalmanna, Malappuram District, Kerala, India 679325. Malappuram ---------- ----------
2)Nija B
Address of Applicant :Al Shifa College of Pharmacy, Department of Pharmaceutical Chemistry Poonthavanam Post, Kizhattur, Peinthalmanna, Malappuram District, Kerala, India 679325. Malappuram ---------- ----------
3)Shabina P Rasheed
Address of Applicant :Al Shifa College of Pharmacy, Department of Pharmaceutical Chemistry, Poonthavanam Post, Kizhattur, Peinthalmanna, Malappuram District, Kerala, India 679325 Malappuram ---------- ----------
4)Raihan A Abdu
Address of Applicant :Al Shifa College of Pharmacy, Department of Pharmaceutical Chemistry Poonthavanam Post, Kizhattur, Peinthalmanna, Malappuram District, Kerala, India 679325. Malappuram ---------- ----------
5)Neethu Varghese
Address of Applicant :Al Shifa College of Pharmacy, Department of Pharmaceutical Chemistry Poonthavanam Post, Kizhattur, Peinthalmanna, Malappuram District, Kerala, India 679325. Malappuram ---------- ----------
6)Prasanth S S
Address of Applicant :Al Shifa College of Pharmacy, Department of Pharmaceutical Analysis, Poonthavanam Post, Kizhattur, Peinthalmanna, Malappuram District, Kerala, India 679325 Malappuram ---------- ----------

(57) Abstract :
Abstract The present invention describes design and method of synthesis of Glycine-Dexibuprofen prodrug with superior lipophilic properties and the prodrug transport dexibuprofen to the brain by crossing blood brain barrier. The prodrug exerts neuroprotective properties and potentially can be use in prevention and treatment of Alzheimer's disease.

No. of Pages : 26 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057522 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DISTRIBUTED AI-ASSISTED HEALTHCARE DIAGNOSIS PLATFORM WITH BLOCKCHAIN AND IOT INTEGRATION

(51) International classification	:G16H0010600000, G16H0050200000, G06N0020000000, G06F0021600000, H04L0067120000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Guru Nanak Educational Society
Address of Applicant :Guru Nanak Salai, Velachery, Chennai, Tamil Nadu 600042 Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.G.Preetha
Address of Applicant :Assistant Professor, Dept of Computer Science, Guru Nanak College (Autonomous), Guru Nanak Salai, Velachery, Chennai, Tamil Nadu 600042 Chennai ---------- ----------
2)Dr.R.Akila
Address of Applicant :Assistant Professor, Dept of Computer Science, Guru Nanak College (Autonomous), Guru Nanak Salai, Velachery, Chennai, Tamil Nadu 600042 Chennai ---------- ----------
3)Ms. H.Sujatha
Address of Applicant :Assistant Professor, Dept of Computer Application, Guru Nanak College (Autonomous), Guru Nanak Salai, Velachery, Chennai, Tamil Nadu 600042 Chennai ---------- ----------

(57) Abstract :
A distributed artificial intelligence (AI)-assisted healthcare diagnosis platform that leverages blockchain and Internet of Things (IoT) technologies to provide secure, efficient, and accurate medical diagnoses. The platform enables secure data sharing and collaboration between patients, healthcare providers, and AI algorithms, improving diagnosis accuracy and speed. By utilizing blockchain technology, the platform ensures data integrity, privacy, and security, while IoT integration facilitates seamless data collection from various medical devices and sensors. The AI algorithms analyze patient data, provide diagnostic insights, and support personalized treatment plans, enhancing the overall healthcare diagnosis process.

No. of Pages : 8 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057523 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD OF ALGAL WATER MOVEMENT IN THE ALGAL CULTIVATION SYSTEMS THROUGH GRAVITY-FED GAPS TO GET MAXIMUM IMMERSED ARTIFICIAL LIGHT EXPOSURE AND TO ENHANCE PRODUCTIVITY

(51) International classification :C12M0001000000, C12N0001120000, A01G0033000000, C12M0001120000, C12M0001107000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)P. Sai Krishna
Address of Applicant :Scion Algae Industries Pvt. Ltd D-3 Adarsh Apartments No.8, Sarangapani Street T. Nagar, Chennai -600017 Tamilnadu India Chennai ---------- ----------
2)Y. Nishita Prasad
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P. Sai Krishna
Address of Applicant :Scion Algae Industries Pvt. Ltd D-3 Adarsh Apartments No.8, Sarangapani Street T. Nagar, Chennai -600017 Tamilnadu India Chennai ---------- ----------
2)Y. Nishita Prasad
Address of Applicant :No-4, 4th Lane , Nungambakkam High road, Nungambakkam , Chennai -600034, Tamilnadu India Chennai ---------- ----------

(57) Abstract :
Algae cultivation system is an increasingly important field due to their versatility and the high biomass yield produced. Efficient water movement and mixing is crucial in algae cultivation. The movement of water is crucial for algae to get exposed to light source which is the important ingredient in the photosynthesis. The continuous movement and Mixing of Algal Water will help Algal cell to get exposed to light source. Exposed to light source depends on the thickness of the algal culture. The thin layers of algal culture also facilitate efficient gas exchange, ensuring that carbon dioxide is readily available for photosynthesis and oxygen is effectively removed, preventing oxygen accumulation that could inhibit growth. Algae requires few seconds of light exposure to start its photosynthetic activity. The amount of light received by algae is very minimum in the old methods. Scale-up of cultivation systems requires external energy sources or complex mechanisms like paddle wheel, centrifugal pumps etc., which consumes high power and complex structures This has created huge difference between the laboratory and mass scale productivity. There is a need for a simple, energy-efficient system which makes algal cells to get maximum exposure to light.

No. of Pages : 19 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057526 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MAKING PRESSURE VESSEL AS ISOBARIC ‘USING PRESSURE MAINTENANCE MEANS’ USING ONE OR TWO WORKING FLUIDS

(51) International classification	:G01N0033680000, A61F0002958000, B29C0044340000, A61F0002070000, C02F0001240000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Vooradi Rajeshwara Prasad
Address of Applicant :V. RAJESHWARA PRASAD, House No: 2-4-118, Ramnagar street, Hanamkonda Town, Warangal (Urban) District, Telangana State, INDIA PIN Code: (506001) ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Vooradi Rajeshwara Prasad
Address of Applicant :V. RAJESHWARA PRASAD, House No: 2-4-118, Ramnagar street, Hanamkonda Town, Warangal (Urban) District, Telangana State, INDIA PIN Code: (506001) ---------- ----------

(57) Abstract :
The present invention named as “Making pressure vessel as isobaric ‘using pressure maintenance means’ using one or two working fluids” relates to a device for maintaining constant pressure of fluid in a container filled with fluid. The present invention relates to Physical Sciences. An isobaric pressure maintaining means is attached to a pressure vessel to maintain isobaric pressure in the pressure vessel during pumping of fluids into the pressure vessel, and also during taking out of the fluids from the pressure vessel. In this device downward pulling force is continually exerted by weight of objects hanged at lower end of a long vertical hand chain attached to “the driving or pulling part of a mechanical advantage device”. The magnified force is transmitted in the form of compressive force to the expanding and contracting vessel to maintain predefined isobaric pressure of fluid in the expanding and contracting vessel and also in the pressure vessel attached to it. This device is useful to maintain isobaric pressure in the pressure vessel during pumping of fluids into the pressure vessel, and also during taking out of the fluids from the pressure vessel. In the devices using corrosive chemicals in the pressure vessel, a flexible container is housed in the pressure vessel, and attached through a pipe to the said expanding and contracting vessel to avoid ‘the direct circulation of fluid in between pressure vessel and the expanding and contracting vessel’. Another non-corrosive or chemically inert fluid “filled in the expanding and contracting vessel and the said flexible container” circulates in between the said flexible container housed in the pressure vessel and the expanding and contracting vessel during pumping in and taking out of the fluid from the pressure vessel to maintain isobaric pressure in the pressure vessel and there by protects expanding and contracting vessel from corrosive effect of the fluids handled for physical or chemical processing in the pressure vessel attached to the expanding and contracting vessel.

No. of Pages : 84 No. of Claims : 27

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057539 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM FOR GREEN ENERGY STORAGE

(51) International classification :G06F113/04, H02J3/38, H02J3/00, G06Q50/06, G06N20/00, H02J7/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VIT-AP University
Address of Applicant :Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)IREDDI RAKSHITHA
Address of Applicant :Student, School of Computer Science and Engineering, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
2)S.P. SIDDIQUE IBRAHIM
Address of Applicant :Assistant Professor Sr. Grade-1, School of Computer Science and Engineering, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
3)S. SELVA KUMAR
Address of Applicant :Assistant Professor Sr. Grade-1, School of Computer Science and Engineering, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
4)GOKULNATH BV
Address of Applicant :Assistant Professor Sr. Grade-1, School of Computer Science and Engineering, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------

(57) Abstract :
A system 100 to store and manage renewable energy can include a plurality of renewable energy sources 150; a server 102 operatively coupled with the plurality of renewable energy sources 150 to perform operations to collect weather forecast to predict generation of renewable energy; forecast energy demand 206 and energy generation 208 for renewable energy at a point of time; apply adaptive control 210 to calculate balance of energy at the point of time; integrate generation of energy and demand received for dynamic storage optimisation 212 using machine learning algorithm; and perform integration of real-time data 214 to decide storage of energy and supply to grid 112 for proactive grid support 216 and grid stability 218 using user interface 220. The plurality of renewable energy sources 150 are solar panel 150-A, and wind turbine 150-B. The energy is stored using one or more lithium ion batteries, and a user is able to monitor energy by using a mobile application.

No. of Pages : 20 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057540 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A WIRELESS CORNEAL REHABILITATION DEVICE

(51) International classification :H02J0050120000, A61B0005000000, H02J0050800000, H02J0050100000, A61B0008120000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VELLORE INSTITUTE OF TECHNOLOGY, CHENNAI
Address of Applicant :Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)JOHN SAHAYA RANI ALEX
Address of Applicant :Professor, School of Electronics Engineering, Vellore Institute Of Technology, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
2)RADHIKA NATARAJAN
Address of Applicant :Sankara Nethralaya (JKCN), Medical Research Foundation, Sankara Nethralaya, No.21, Dr. S.S. Badrinath Road, Chennai - 600006, Tamil Nadu, India. Chennai ---------- ----------
3)AHMED ELSHEIKH
Address of Applicant :West Hey, West Road, Prenton CH43 9UJ, United Kingdom. Prenton ---------- ----------
4)YAOCHUN SHEN
Address of Applicant :85, St. Andrew Street, Liverpool, L3 5XY, United Kingdom. Liverpool ---------- ----------
5)PRAKASH VENUGOPAL
Address of Applicant :Associate Professor, School of Electronics Engineering, Vellore Institute Of Technology, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------

(57) Abstract :
A rehab device 100 to assist a user with corneal blindness can include a camera module 112; a display unit 152; and a control unit comprising a commercial-off-the shelf microcontroller 116 to be in communication using a Bluetooth module. A battery 114 powers a primary coil 118 of a wireless power transfer circuit of the transmitter module 110, and a secondary coil 154 of a receiver module 150 through a wireless power transfer circuit to power the rehab device 100. The rehab device 100 capture real-time images upon activation of a switch 120; process and encrypt them to transmit to the receiver module 150 via vitreous liquid. The receiver module 150 decrypt images in an appropriate display format to display on the display unit 152. The images are processed and compressed into a transmittable display format by a commercial-off-the shelf microcontroller consuming very low power, and the display unit 152 used is an organic light emitting diode display.

No. of Pages : 17 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057541 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM AND METHOD ENABLING IDENTIFICATION OF USER INFORMATION ASSOCIATED WITH USERS WEARING FACE MASK

(51) International classification :G06N0003080000, G06N0003040000, A61M0016060000, G06F0003048200, G10L0015160000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VIT-AP University
Address of Applicant :Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)KUMAR, B. Anil
Address of Applicant :Research Scholar, School of Electronics Engineering (SENSE), VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
2)MISRA, Neeraj Kumar
Address of Applicant :Associate Professor (Sr. Grade-II), School of Electronics Engineering (SENSE), VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------

(57) Abstract :
Present disclosure discloses a system (102) and a method enabling identification of user information associated with users wearing face mask. System (102) receives one or more datasets from one or more computing devices (108) associated with the user (106). System (102) extracts one or more features associated to the one or more datasets by a first modified deep neural network. System (102) creates a second modified deep neural network by combining at least one framework with the first modified deep neural network to enable classification. System (102) detects the user based on the classes, and the features extracted, to categorize the user as at least one of a user with mask and a user without mask by employing the second modified deep neural network refined by training. System (102) identifies and displays one or more details associated to the at least one user categorized.

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202441057542 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM FOR ADJUSTING HEIGHT OF FAN FOR PREVENTION OF SUICIDE

(51) International classification :H04L0012180000, F16H0061060000, F21Y0105100000, G06F0016951000, G08B0021020000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VIT-AP University
Address of Applicant :Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)S. KARTHIKEYAN
Address of Applicant :Associate Professor Grade-I, School of Computer Science and Engineering, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
2)MADHUKIRAN SG
Address of Applicant :Student, School of Electronics and Communications, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
3)SRICHARANI GARLAPATI
Address of Applicant :Student, School of Electronics and Communications, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
4)PRABHAT GAURAV
Address of Applicant :Student, School of Electronics and Communications, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
5)BOYAPALLY SAI SHARAJ
Address of Applicant :Student, School of Electronics and Communications, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------

(57) Abstract :
The present disclosure discloses a system (100) designed for the precise adjustment of a fan's height for preventing suicide. The system (100) incorporates a remote (102) transmitting signals at a specific frequency, paired with a fan assembly (104) featuring a sensing element (106) capable of receiving these signals. An integrated processor (108) and memory (110) work in tandem to analyze the received signals, identifying associated commands, and subsequently actuating a first engaging element (112) to move against a second engaging element (114). The present working of the first engaging element (112) and the second engaging element (114) facilitates the precise height adjustment of the fan assembly (104). This present system offers a convenient and efficient means of controlling fan height, enhancing user comfort and convenience while addressing the need for adaptable fan positioning in various environments.

No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :30/07/2024

(21) Application No.202441057549 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : AGRICULTURAL INNOVATION: IOT AND MACHINE LEARNING FOR CROP HEALTH MONITORING AND MANAGEMENT SYSTEM

(51) International classification	:G06K0009620000, G06N0020000000, A01G0025160000, G06N0020100000, G06Q0050020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**

1)Dr . K. Arungandhi

Address of Applicant :Professor, Department of Biotechnology, Dr.N.G.P Arts And Science College, Kalapatti Road Coimbatore-641048, Tamil Nadu, India. ---------- ----------

2)Dr. Pankaj Madhukarrao Kahate

3)Dr.Rashmi Mohapatra

4)Dr.S.Sundararajan

5)Dr V Balaraju

6)S.Manoharan

7)Dr Alok Kumar Srivastava

8)Nagendla Lavanya

9)Dr Suniti Kumar Kuriyal

10)T. Kalai Selvi

11)S.M.Keerthana

12)Dr. Bhaskar Roy

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr . K. Arungandhi

Address of Applicant :Professor, Department of Biotechnology, Dr.N.G.P Arts And Science College, Kalapatti Road Coimbatore-641048, Tamil Nadu, India. ---------- ----------

2)Dr. Pankaj Madhukarrao Kahate

Address of Applicant :Assistant Professor, Department of Botany, Phulsing Naik Mahavidyalaya, Pusad, Dist. Yavatmal 445216, Pusad, Maharashtra, India. ---------- ----------

3)Dr.Rashmi Mohapatra

Address of Applicant :Associate Professor And Dean, School Of Comparative Indic Studies And Tribal Science, Kalinga Institute Of Social Sciences (Kiss)Deemed To Be University, Pin:751024 , Khordha, Odisha, India. ---------- ----------

4)Dr.S.Sundararajan

Address of Applicant :Head of the department, Department of MCA, SNS College of technology, Coimbatore, Tamil Nadu, India. ---------- ----------

5)Dr V Balaraju

Address of Applicant :Teaching Associate, Dept. of Basic Engineering and Applied Science, Dr NTR College of Agricultural Engineering, Bapatla - 522101, Andhra Pradesh, India. ---------- ----------

6)S.Manoharan

Address of Applicant :Assistant Professor/ECE, Knowledge Institute of Technology, Salem -637504, Tamil Nadu, India. ---------- ----------

7)Dr Alok Kumar Srivastava

Address of Applicant :Assistant Professor Department of Zoology DBS College (CSJM University) Kanpur Nagar 20806, Kanpur, Uttar Pradesh, India. ---------- ----------

8)Nagendla Lavanya

Address of Applicant :Department of CSE, KSRM College of Engineering (A) Kadapa, Andhra Pradesh, India. ---------- ----------

9)Dr Suniti Kumar Kuriyal

Address of Applicant :Senior Assistant Professor, Department of Botany, Pt.L.M.S.Sridev Suman Uttarakhand University Campus, Rishikesh, Dehradun, Uttarakhand, India. ---------- ----------

10)T. Kalai Selvi

Address of Applicant :Assistant Professor (SLG-I)/ CSE, Erode Sengunthar Engineering College, Thudupathi, Perundurai, Erode-638057, Tamil Nadu, India. ---------- ----------

11)S.M.Keerthana

Address of Applicant :Assistant Professor/Department of Computer Science & Engineering, St.Joseph's Institute of Technology, Semmanchery, Chennai,600119, Chengalpattu, Tamil Nadu, India. ---------- ----------

12)Dr. Bhaskar Roy

Address of Applicant :Assistant Professor, Department of CSE (AIML), Asansol Engineering College, Asansol, Pin-713305, West Bengal, India. ---------- ----------

(57) Abstract :

AGRICULTURAL INNOVATION: IOT AND MACHINE LEARNING FOR CROP HEALTH MONITORING AND MANAGEMENT SYSTEM The method for the development of a range of sensors-equipped Internet of Things (IoT) devices are positioned throughout agricultural fields to gather data in real-time on various environmental parameters. These variables include the amount of nutrients present, temperature, humidity, and soil moisture. Since these sensors are networked together via wireless networks, data may be easily transferred to centralized cloud-based systems for statistical analysis. Machine learning algorithms are used to analyze the data and identify patterns, correlations, and anomalies in the obtained information. In this context, "crop monitoring system" refers to both crop disease detection and prediction. Utilizing available data, this work applies regression analysis, SVM, and decision trees to forecast agricultural diseases in a variety of crops, including such as rice, ragi, gram, potato, and onion. FIG.1

No. of Pages : 14 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057550 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DEVELOPMENT OF DIGITAL TWIN OF ROBOT ARM

(51) International classification :G06N0020000000, B25J0009160000, G06F0003010000, G06F0003048150, H02J0003000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Department of EEE
Address of Applicant :RNS Institute of Technology, Dr. Vishnuvardhana Road Post, RNS Farms Rd, Channasandra, Rajarajeshwari Nagar, Bengaluru, Karnataka 560098 Bangalore ---------- ----------
2)RNS Institute of Technology
3)PRASANNA KUMAR MALLAPPA
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Vignesh Raj N M
Address of Applicant :Student Department of EEE, RNS Institute of Technology Bangalore Bangalore ---------- ----------
2)Harsha M R
Address of Applicant :Student Department of EEE, RNS Institute of Technology Bangalore Bangalore ---------- ----------
3)Puneet H Shiroor
Address of Applicant :Student Department of EEE, RNS Institute of Technology Bangalore Bangalore ---------- ----------
4)Siddalingappa V Rajoor
Address of Applicant :Student Department of EEE, RNS Institute of Technology Bangalore Bangalore ---------- ----------
5)Dr.Roopa Nayak
Address of Applicant :Associate Professor and Head Department of EEE, RNS Institute of Technology Bangalore Bangalore ---------- ----------

(57) Abstract :
TITLE OF INVENTION: DEVELOPMENT OF DIGITAL TWIN OF ROBOT ARM FIELD OF INVENTION: ELECTRICAL & ELECTRONICS ENGINEERING Abstract In an era defined by rapid technological advancement, the integration of digital twinning with physical robotic systems stands as a testament to human ingenuity and progress. This project represents a meticulous exploration into the convergence of digital and physical realms, leveraging state-of-the-art technologies to enhance control, visualization, and understanding of robotic arm operations. At its heart lies the concept of digital twinning, a transformative approach that generates a virtual counterpart of the physical robotic arm in real-time. This digital twin serves not merely as a passive observer but as an active collaborator, synchronizing seamlessly with its physical counterpart to mirror movements, analyze performance, and optimize operations. By creating a dynamic and interactive digital replica, the system can provide detailed insights into the robotic arm's functionality, identify potential improvements, and preemptively address issues before they manifest in the physical world The integration of sensors, machine learning algorithms, and real-time data analytics forms the backbone of this sophisticated system, enabling precise and adaptive control of the robotic arm. Furthermore, the digital twin facilitates an immersive visualization experience, allowing operators to interact with and manipulate the robotic arm in a virtual environment, thus enhancing their understanding and control capabilities. This initiative not only exemplifies the integration of cutting-edge technology with practical applications but also underscores the role of innovation in shaping a future where technology serves as a catalyst for positive transformation and collective advancement. Through this exploration, we aim to contribute to a world where the synergy between digital and physical realms fosters unprecedented levels of efficiency, precision, and understanding in robotic operations

No. of Pages : 16 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057557 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : CONCRETE BLOCK WATER ABSORPTION TEST MODULE WITH PROGRAMMABLE MAGNETIC LIFTING HOIST

(51) International classification	:B41M0005000000, G01N0033380000, G01N0015080000, B66C0001440000, B28B0017000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)CHENNAI INSTITUTE OF TECHNOLOGY
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY ,SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMIL NADU, INDIA-600069. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P. SRIRAM
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY ,SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMIL NADU, INDIA-600069. ---------- ----------
2)Dr. P. JAYAKUMAR
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY ,SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMIL NADU, INDIA-600069. ---------- ----------

(57) Abstract :
ABSTRACT Title: CONCRETE BLOCK WATER ABSORPTION TEST MODULE WITH PROGRAMMABLE MAGNETIC LIFTING HOIST The titled invention discloses a Concrete block water absorption test module with a 5 programmable magnetic lifting hoist. The system automates the water absorption testing of concrete blocks by utilizing a base platform, vertical and cross support frames, a hoist rail, and a motor-powered hoist with a lifting plate with electromagnetic dots featuring electromagnetic dots. A control panel manages the hoist's linear and vertical movements, ensuring precise placement and retrieval of concrete blocks 10 within a water tank. Each block is fitted with a metal plate for electromagnetic lifting, and the control panel tracks batch codes, manufacturing dates, and other relevant data. This system enhances traceability, automates handling, and improves decisionmaking, thereby streamlining the quality control process in concrete block production.

No. of Pages : 15 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057566 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : PERISCOPIC POLE CAMERA VIEWER TO FIND OUT THE MISPLACED TOOLS IN THE OVERHEAD HOIST MOVING PATH

(51) International classification	:H04N0005225000, F16M0011180000, B64D0011000000, F16M0011040000, G02B0023080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)CHENNAI INSTITUTE OF TECHNOLOGY
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMIL NADU, INDIA. PIN-600069 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P. SRIRAM
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMIL NADU, INDIA. PIN-600069 ---------- ----------
2)P. JAYAKUMAR
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMIL NADU, INDIA. PIN-600069 ---------- ----------

(57) Abstract :
The titled invention discloses a periscopic pole camera viewer (1) designed for the inspection of overhead paths (2) in industrial settings, particularly for identifying misplaced tools or components that may pose safety risks. The device comprises a 10 movable ch~ssis (3) equipped with wheels (4) for easy maneuverability, a hydraulic power bank (5) for supplying power, and a dual-stage hydraulic cylinder (6) for vertical height adjustment of the camera. The cylinder (6) includes a first extension plunger (7) and a second extension plunger (8), which can be extended twice the length of the cylinder to reach the height of the overhead crane path (2). 15 A camera bed (9) fixed to the second extension plunger (8) securely mounts the camera (10), while a turn table (11) incorporated into the base of the hydraulic cylinder (6) allows for manual horizontal swiveling of the camera angle. The camera (10) is -Cll connected to an LCD monitor (12) through an interface for real-time viewing of the C) ~ overhead path (2). The LCD monitor (12) is fixed to the base unit of the device, Q) --1- N E.... 0 -LL. (0 (0 Lt) L""t"") 0 ..... -::1' -::1' ·N 0 ~..... CIO Lt) CIO ~ -::1' N 0 ~ 20 enabling operators to inspect the overhead area without the need to climb the rails. 25 The device further includes hydraulic control levers (13) for adjusting the position of the camera, providing precise control and optimal viewing of the overhead path (2). A handle fixed to the base unit allows operators to move the periscopic camera viewer . (1) smoothly across the floor while capturing images of the overhead path (2).

No. of Pages : 13 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057567 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : INTEGRATED AN EFFICIENT E-WASTE MANAGEMENT USING DEEP LEARNING AND WEB BASED PLATFORM

(51) International classification :G06Q0010060000, G06N0003080000, G06Q0010000000, G06K0009620000, C22B0007000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)CHENNAI INSTITUTE OF TECHNOLOGY
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMIL NADU, INDIA. PIN-600069. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)A. TAMIL SELVI
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMIL NADU, INDIA. PIN-600069 ---------- ----------
2)JANANI. J
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMIL NADU, INDIA. PIN-600069 ---------- ----------
3)KOWSHIKA. K
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMIL NADU, INDIA. PIN-600069 ---------- ----------
4)LOHITHA. S
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMIL NADU, INDIA. PIN-600069 ---------- ----------

(57) Abstract :
The titled invention "An integrated and efficient e-waste management using deep learning and web based platform" leveraging deep learning and a web-based platform provides a comprehensive solution to the growing e-waste problem. By combining advanced technologies with effective management strategies. it offers several key benefits such as accurate e-waste classification, real-time monitoring, optimized collection routes. transparent 10 waste management. data-driven decision making and compliance and reporting .. This invention typically includes an image capture device (2) ,a microcontroller board (3) ,a servo motor (4) • an LCD display (5) ,a buzzer (6) . a power supply unit (7) ,an ultrasonic sensor (8). This invention has a wide range of applications across various sectors such as environmental applications includes Pollution prevention, Resource recovery, Climate change mitigation and 15 economic applications covers circular economy, business opportunities and cost savings.

No. of Pages : 15 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057568 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SMART VISION SECURE AUTOMATED TELLER MACHINE

(51) International classification :G07F0019000000, G08B0013196000, H04N0007180000, G06Q0040020000, G06Q0020100000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)CHENNAI INSTITUTE OF TECHNOLOGY
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMIL NADU, INDIA. PIN-600069 8220844786 ipr@citchennai.net ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. R. M. BOM Ml
Address of Applicant :Assistant Professor, Electronics Engineering (VLSI D&T), CHENNAI INSTIT Sarathy Nagar, Kundrathur,Chennai Tamilnadu,India,600069 ---------- ----------
2)CHEZHIYAN. M
Address of Applicant :Electronics EngineeringfVLSI D&T), CHENNAI INSTITUTE OF TECHNOLOGY,Sarathy Nagar, Kundrathur,ChennaI,Tamilnadu,India,600069 ---------- ----------
3)A. ATHUL KRISHNA
Address of Applicant :Electronics EngineeringfVLSI D&T), CHENNAI INSTITUTE OF TECHNOLOGY,Sarathy Nagar, Kundrathur,ChennaI,Tamilnadu,India,600069 ---------- ----------
4)PRASANTH.Y
Address of Applicant :AIDS, B.Tech, CHENNAI INSTITUTE OF TECHNOLOGY. Sarathy Nagar, Kundrathur,Chennai,Tamilnadu,India 600069 ---------- ----------
5)GOWTHAM. M
Address of Applicant :ECE, CHENNAI INSTITUTE OF TECHNOLOGY,Sarathy Nagar, Kundrathur,ChennaI,Tamilnadu,India,600069 ---------- ----------

(57) Abstract :
The titled invention " Smart vision secure automated teller machine" leverage facial recognition and real-time threat detection to combat fraud and enhance customer safety, while also offering a user-friendly experience and improved operational efficiency. This invention typically includes a facial recognition camera (2), a fingerprint scanner (3), an iris scanner (4), an artificial intelligence-driven monitoring system (5), a high-definition surveillance system (6) , a tamper detection sensors (7), a mobile application interface (8), a real time monitoring (9) , a cordless transaction capability (10) ,an enhanced user accessibility , a tamper detection and response (12), a secure mobile application (13), a high-definition surveillance integration (14). This invention performs continuous monitoring by artificial intelligence-driven systems to ensure immediate detection and response to suspicious activities and physical tampering attempts. This invention offers a variety of applications in in the banking and financial institutions and government facilities.

No. of Pages : 14 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057569 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SECUREDRIVE: ENHANCING VEHICLE SAFETY WITH IOT SOLUTIONS FOR HIGHWAY-PARKED VEHICLES

(51) International classification :A61K0036730000, G08B0025100000, B60Q0005000000, B60Q0001520000, G08B0013196000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)CHENNAI INSTITUTE OF TECHNOLOGY
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMILNADU, INDIA-600069. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MOHAMED IMRAN. S
Address of Applicant :ECE, CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMILNADU, INDIA-600069. ---------- ----------
2)MUGUNDAN. G
Address of Applicant :ECE, CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMILNADU, INDIA-600069. ---------- ----------
3)PANDIMEENA. R
Address of Applicant :ASSISTANT PROFESSOR, ECE, CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMILNADU, INDIA-600069. ---------- ----------
4)SURESHKUMAR. P
Address of Applicant :PROFESSOR, ECE, CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMILNADU, INDIA-600069. ---------- ----------

(57) Abstract :
Title: SECUREDRIVE: ENHANCING VEHICLE SAFETY WITH IOT SOLUTIONS FOR HIGHWAY-PARKED VEHICLES The titled invention “a securedrive: enhancing vehicle safety with iot solutions for highway- parked vehicles" is an innovative system that harnesses the power of iot technology to significantly enhance the safety of vehicles parked on highways. By integrating a suite of cutting-edge components, including a Raspberry Pi Pico, colour identification sensors, image 10 processing capabilities, iot connectivity, a driver alert system, and a reliable power supply, securedrive provides a robust solution to protect vehicles from potential threats. This invention typically includes a raspberry pi pico board (2) ,a colour identification sensors (3) ,an image processing module (4) ,an iot connectivity module (5) ,a driver alert system (6) ,a power supply (7). This invention delivers a comprehensive approach to vehicle safety, offering real-time 15 monitoring, immediate threat detection, and timely alerts, ultimately providing peace of mind to vehicle owners.

No. of Pages : 14 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :30/07/2024

(21) Application No.202441057570 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : ONION HEAP DRYING BARREL WITH CONVECTION NOT AIR BLOWER

(51) International classification	:G06F0012020000, F26B0021000000, A21B0001260000, C03B0029080000, A61K0036896200
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)CHENNAI INSTITUTE OF TECHNOLOGY
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNI, TAMIL NADU, INDIA, PIN CODE-600069. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P. SRIRAM
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNI, TAMIL NADU, INDIA, PIN CODE-600069. ---------- ----------
2)Dr. P. JAYAKUMAR
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNI, TAMIL NADU, INDIA, PIN CODE-600069. ---------- ----------

(57) Abstract :

The titled invention discloses an onion heap drying barrel designed to efficiently dry onions using convection hot air. The device includes a stainless-steel outer barrel with perforations, a central screen hub frame, revolving curtain dish holders, an AC motor driving an impeller, a heater coil, and a two-layer revolving curtain with adjustable perforations. Stepper motors control the movement of the curtains along revolving rails, and a control interface manages the operation of the fan, heater coil, and curtain sliders. This system provides faster drying times, space efficiency, and weather independence, ensuring consistent and high-quality drying of onions.

No. of Pages : 15 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057572 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN POLYHERBAL FORMULATION FOR ANTI AGING ACTIVITY

(51) International classification	:A61K0036482000, A61Q0019080000, A61K0008978900, A61K0036470000, A61K0036484000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Mrs. Dr. SHALINI K
Address of Applicant :2D, Abirami Nagar, Seethalakshmipuram, Gobichettipalayam, Erode - 638476, Tamilnadu, India Gobichettipalayam ---------- ----------
2)Ms. RAMYA M
3)Mr. MURALIDHARAN S. P
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mrs. Dr. SHALINI K
Address of Applicant :2D, Abirami Nagar, Seethalakshmipuram, Gobichettipalayam, Erode - 638476, Tamilnadu, India Gobichettipalayam ---------- ----------
2)Ms. RAMYA M
Address of Applicant :27, Thirunali Madura Srinivaspuram, Oragadam Post, Thirukalkundram, Chengalpattu – 603109, Tamilnadu, India. Thirukalkundram ---------- ----------
3)Mr. MURALIDHARAN S. P
Address of Applicant :No 6/11, 2nd floor Sathya bhavanam flats, 14th cross street, New Colony, Chrompet, Chennai – 600044. Chrompet ---------- ----------

(57) Abstract :
The present disclosure relates to a pharmaceutical composition. More specifically, the present disclosure relates to a processed extracts of polyherbal composition for anti-aging activity comprising effective therapeutic amount of Glycyrrhiza glabra in the range of 0.1 to 25%, Emblica officinalis in the range of 0.1 to 20%, Senna auriculata in the range of 0.1 to 35% and Rosa Damascena in the range of 0.1 to 20% and pharmaceutically acceptable excipients, useful in the treatment of aging. Further, the present disclosure provides a safe composition, excellent in vitro collagenase inhibition activity.

No. of Pages : 14 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057573 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : EASY MOVING ATTACHMENT FOR ENGINE POWERED GRASS TRIMMING MACHINE WITH HEIGHT ADJUSTABLE CUTTER HEAD

(51) International classification	:A01D0034416000, E02F0009200000, E01C0019000000, A01D0034730000, A01D0034900000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)CHENNAI INSTITUTE OF TECHNOLOGY
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI-600069. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P. SRIRAM
Address of Applicant :Chairman, CHENNAI INSTITUTE OF TECHNOLOGY SARATHY NAGAR, KUNDRATHUR, CHENNAI-600069. ---------- ----------
2)Dr. P. JAYAKUMAR
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY SARATHY NAGAR, KUNDRATHUR, CHENNAI-600069. ---------- ----------

(57) Abstract :
The titled invention “Easy moving attachment for engine powered grass trimming machine with height adjustable cutter head” is designed to reduce the manual strain of the operator in carrying the grass trimming machine by introducing an easy moving attachment and height adjustable cutter head. The engine (1) supplies the power required for the operation of the machine. Rotary shaft (9) transmits power from the engine (1) to the blade hub (11). Gear box (10) transfers the rotational movement through an angle of 90 degrees. Blade hub (11) holds the trimmer blade (12) attached to the rotary axle (13). Trimmer blade (12) rotates and cut the grass that come in contact. Traction wheel (5) bears the weight of the machine and enables easy movement of the machine along the path. Telescopic column (6) enables the operator to fix the height of the trimmer blade (12). Height adjusting lock (7) secures the telescopic column (6) at the desired height. Guiding wheel (8) guides the direction in which the machine moves. Handle bar (3) ensures easy handling of the machine by the operator.

No. of Pages : 12 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057574 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : CONCRETE BLOCK WATER ABSORPTION TEST TRACKING AND IDENTIFICATION DEVICE USING NFC TAGS

(51) International classification	:G06K0007100000, G06F0011360000, H04B0005000000, H04W0004800000, H01R0013520000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)CHENNAI INSTITUTE OF TECHNOLOGY
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI-600069. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P. SRIRAM
Address of Applicant :Chairman, CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI-600069. ---------- ----------
2)Dr. P. JAYAKUMAR
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI-600069. ---------- ----------

(57) Abstract :
The titled invention discloses a tracking and identification device for concrete block water absorption testing, utilizing NFC (Near Field Communication) technology. The device comprises a metal-enclosed outer case (1) with an external right-handed thread, an NFC card slot (2) for securely holding an NFC card, a gasket (4) to create a watertight seal, and a hexagon slotted screw (5) with a left-handed thread for securing the NFC card and gasket (4) within the outer case (1). The device is designed to be embedded into a concrete block mold before curing, providing unique identification and traceability for each concrete block sample during and after water absorption testing The NFC card is pre-loaded with unique data including batch code manufacturing date, raw material composition, and test details, enabling efficient tracking and quality control. The durable and waterproof design ensures data integrity and easy retrieval using an NFC reader, solving the challenge of identifying samples from different batches in the testing process.

No. of Pages : 13 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057575 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : RED CHILLI DRYER WITH HOT AIR CONVECTION BLOWER SHROUD

(51) International classification	:A23B0007020000, F24C0015320000, B05D0003040000, F04D0029020000, F26B0021020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)CHENNAI INSTITUTE OF TECHNOLOGY
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI-600069. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P. SRIRAM
Address of Applicant :Chairman, CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI-600069. ---------- ----------
2)Dr. P. JAYAKUMAR
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI-600069. ---------- ----------

(57) Abstract :
The titled invention “Red chilli dryer with hot air convection blower shroud” is designed to dry red chilli using hot air convection blower shroud. Red chilli dryer has the chilly spread mat (1) with floor rest bush (2) at the bottom. Red chillies to be dried are loaded on the chilly spread mat (1). Fan impeller (3) powered by blower motor (4) generates air to be circulated. Heating coil (5) heats up the air generated by the fan impeller (3). Hot air is blown over the red chillies through the hot air blow passage (6) and the convection blow air vent (7). The hot air takes up moisture from the red chillies and exit to the atmosphere. This process is repeated till the red chillies are completely dried. Height adjuster (8) is positioned below the fan impeller (3) tn change the height of the fan impeller (3) according to the volume of red chillies placed on the chilli spread mat (1).

No. of Pages : 12 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057576 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : EASY GRASS TRIMMING MACHINE WITH FLEXIBLE WHEEL DRIVE TO REACH CORNERS OF THE LAWN

(51) International classification	:A01D0101000000, A01D0034416000, A01G0003060000, A01D0034000000, B25B0013480000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)CHENNAI INSTITUTE OF TECHNOLOGY
Address of Applicant :SARATHY NAGAR, KUNDRATHUR, CHENNAI-600069. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P. SRIRAM
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY,SARATHY NAGAR, KUNDRATHUR, CHENNAI-600069. ---------- ----------
2)P. JAYAKUMAR
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY,SARATHY NAGAR, KUNDRATHUR, CHENNAI-600069. ---------- ----------

(57) Abstract :
The titled invention discloses a grass trimming machine designed to effectively reach corners and edges of lawns The machine comprises a movable chassis (1) with a vertical frame (2) supporting a high-speed DC motor (4) and batteries. A flexible shaft (7), driven by the motor and protected by a flexible hose enclosure (8), transmits torque to a twin rotary blade (1 0) assembly. A handle (9) allows manual direction of the cutting assembly, enabling precise and thorough trimming of hard-to-reach areas. The machine offers improved maneuverability, time and effort savings, uniform cutting, and ease of use in lawn maintenance.

No. of Pages : 11 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202441057578 A

(19) INDIA

(22) Date of filing of Application :30/07/2024

(43) Publication Date : 02/08/2024

(54) Title of the invention : INDUSTRIAL SMOKE PASSING INTERNAL HORIZONTAL DUCT WET CLEANING DEVICE 6

(51) International classification	:A47L0011400000, B01D0047060000, A24D0003040000, G03G0021000000, H01L0021768000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)CHENNAI INSTITUTE OF TECHNOLOGY
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNI, TAMIL NADU, INDIA, PIN CODE-600069 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P.SRIRAM
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNI, TAMIL NADU, INDIA, PIN CODE-600069 ---------- ----------
2)Dr. P. JAVAKUMAR
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNI, TAMIL NADU, INDIA, PIN CODE-600069 ---------- ----------

(57) Abstract :

The titled invention provides a device for efficiently cleaning the inner portions of industrial smoke ducts. The device includes a main barrel housing a central water pipe line, rear and guiding wheels for smooth movement, an extension pipe, a waterproof sealed bearing, a PVC pipe hub with an angular nozzle, and a DC motor driving the rotation of the nozzle. The angular nozzle, positioned at a 45-degree angle, sprays water evenly across the duct's inner surface as the device moves through the duct. This invention improves cleaning efficiency, ensures thorough coverage, and minimizes worker exposure to harmful substances, offering a complete solution for maintaining industrial smoke ducts.

No. of Pages : 13 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057582 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DC POWERED HANDY TREE BRANCH SNAPPING MACHINE WITH DUAL STEP HEIGHT ADJUSTABLE CUTTER WHEEL

(51) International classification	:A01G0003080000, A01G0017100000, B02C0018180000, A01G0023060000, C03B0033100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)CHENNAI INSTITUTE OF TECHNOLOGY
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMIL NADU, INDIA, PIN CODE-600069. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P. SRIRAM
Address of Applicant :Chairman, CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMIL NADU, INDIA, PIN CODE-600069. ---------- ----------
2)Dr. P.JAYAKUMAR
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNI, TAMIL NADU, INDIA, PIN CODE-600069. ---------- ----------

(57) Abstract :
ABSTRACT Title: DC POWERED HANDY TREE BRANCH SNAPPING MACHINE WITH DUAL STEP HEIGHT ADJUSTABLE CUTTER WHEEL The titled invention “DC powered handy tree branch snapping machine with dual step height adjustable cutter wheel” is designed to cut high and hard to reach tree branches of the tall trees from the comfort of the ground. It has a long, fixed pole (4) fixed to the battery case and handle. Battery case (1) encloses the battery to supply power for the operation of the machine. Handle (2) provides grip and control over the machine from the ground. Carbide cutter wheel (9) is mounted on to the end of the fixed pole (4). High speed DC motor (8) rotates the carbide cutter wheel (9). Control switch (3) positioned on the top of the battery case (1) enables controlling the operation of the machine from the ground. Extended pole (5) is the additional attachment to increase the reach of the machine to snap very high tree branches. Power terminal(male) (6) and power transfer terminal(female) (7) transfers power from the battery to the high-speed de motor (8).

No. of Pages : 13 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057583 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : UNIVERSAL LAPTOP CHARGER AND BATTERY REPLACEMENT SYSTEM WITH AUTOMATIC POWER ADJUSTMENT

(51) International classification	:G01R0031392000, H02J0007000000, H01M0010052500, B60L0053800000, A61F0002300000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)CHENNAI INSTITUTE OF TECHNOLOGY
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMIL NADU, INDIA, PIN CODE-600069. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P. SRIRAM
Address of Applicant :Chairman, CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMIL NADU, INDIA, PIN CODE-600069. ---------- ----------
2)Dr. P.JAYAKUMAR
Address of Applicant :CHENNAI INSTITUTE OF TECHNOLOGY, SARATHY NAGAR, KUNDRATHUR, CHENNAI, TAMIL NADU, INDIA, PIN CODE-600069. ---------- ----------

(57) Abstract :
ABSTRACT Title: UNIVERSAL LAPTOP CHARGER AND BATTERY REPLACEMENT SYSTEM WITH AUTOMATIC POWER ADJUSTMENT 5 The invention is a universal laptop charger and battery replacement system with automatic power adjustment. It features an outer enclosure body (1) housing modular lithium-ion battery cells (2) that can be individually replaced. A control interface (3) within the enclosure regulates power output, adjusting voltage and current to match the laptop's requirements. Integrated sensors monitor battery health, providing real- 10 time notifications for cell replacement. The system includes a power input (4) for connection to an external source and an output adapter (5) for stable power delivery to the laptop. This design extends laptop lifespan and reduces electronic waste.

No. of Pages : 14 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057585 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : BLOCKCHAIN-INTEGRATED ANOMALY DETECTION FOR SECURE TRANSACTIONS

(51) International classification	:H04L0009320000, G06Q0020400000, G06N0020000000, G06Q0020380000, G06Q0020060000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. USHA DIVAKARLA
Address of Applicant :Dr. USHA DIVAKARLA ASSOCIATE PROFESSOR DEPT. Of ISE NMAM Institute of Technology NITTE(Deemed to be University) ushachavali@gmail.com M: 8722389298 ---------- ----------
2)Dr. K. Chandrasekaran
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. USHA DIVAKARLA
Address of Applicant :Dr. USHA DIVAKARLA ASSOCIATE PROFESSOR DEPT. Of ISE NMAM Institute of Technology NITTE(Deemed to be University) ushachavali@gmail.com M: 8722389298 ---------- ----------
2)Dr. K. Chandrasekaran
Address of Applicant :Dr. K. Chandrasekaran Professor CSE dept National Institute of Technology Karnataka, Surathkal kch@nitk.edu.in M:9448251453 ---------- ----------

(57) Abstract :
ABSTRACT OF THE INVENTION Title: Blockchain-Integrated Anomaly Detection for Secure Transactions The invention relates to a system for secure transactions that integrates blockchain technology with advanced anomaly detection techniques to enhance security, transparency, and efficiency in detecting and preventing fraudulent activities. The system comprises: • A blockchain ledger for recording transactions in a decentralized manner; • An anomaly detection module using machine learning algorithms to analyze transaction data and identify anomalies; • A transaction verification module using cryptographic techniques to verify the authenticity of transactions; • A user interface for interacting with the system, providing transaction statuses and alerts. The present invention ensures that transactions are securely recorded and verified in a decentralized, immutable manner while efficiently detecting and preventing fraudulent activities through advanced machine learning-based anomaly detection.

No. of Pages : 17 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057589 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : VOXROID-A VOICE CONTROLLED HUMANOID ROBOT WITH WIFI CONNECTIVITY

(51) International classification :G10L0015220000, A61B0001000000, H04B0005000000, G05B0019042000, A61G0005040000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)T. Sunitha
Address of Applicant :DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE, ARUNACHALA COLLEGE OF ENGINEERING FOR WOMEN, MANAVILAI, NAGERCOIL, TAMIL NADU-629203. ---------- ----------
2)P.S.ANU RAKHI
3)FAHMI HANAN K
4)JASHILA J C
5)CELITY DANI D
6)SAFRIN S
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)T. Sunitha
Address of Applicant :DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE, ARUNACHALA COLLEGE OF ENGINEERING FOR WOMEN, MANAVILAI, NAGERCOIL, TAMIL NADU-629203. ---------- ----------
2)P.S.ANU RAKHI
Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE, ARUNACHALA CO LEGE OF ENGINEERING, FOR WOMEN, MANA VILAI, VELICHANTHAI-629203 ---------- ----------
3)FAHMI HANAN K
Address of Applicant :UG STUDENT, DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE, ARUNACHALA COLLEGE OF ENGINEERING, FOR WOMEN, MANAVILAI, VELICHANTHAI- 629203. ---------- ----------
4)JASHILA J C
Address of Applicant :UG STUDENT, DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE, ARUNACHALA COLLEGE OF ENGINEERING, FOR WOMEN, MANAVILAI, VELICHANTHAI- 629203. ---------- ----------
5)CELITY DANI D
Address of Applicant :UG STUDENT, DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE, ARUNACHALA COLLEGE OF ENGINEERING, FOR WOMEN, MANANILAI, VELICHANTHAI- 629203. ---------- ----------
6)SAFRIN S
Address of Applicant :UG STUDENT, DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE, ARUNACHALA COLLEGE OF ENGINEERING, FOR WOMEN, MANAVILAI, VELICHANTHAI- 629203. ---------- ----------

(57) Abstract :
Voxroid-A voice controlled humanoid robot with WiFi connectivity is based on Arduino UNO and Ultrasonic sensors that performs two functions. First, it detects object or a person nearby and it is controlled wirelessly via voice commands directly from the user. The robot can move forward, backward, left, and right and can also be stopped. Second, the Ultrasonic sensor which can be operated through user voice input as it requires android app to communicate via Bluetooth HC-05 module and it can sense the things with the assistance of this module, And this WiFi Controlled Robot as a control unit. To control the pair of Motors, we used L298n Motor Driver IC Module. We can power on the circuit using any battery as the power requirement is more than SV. The Robot can be controlled using an Android App which is· designed using a Software.

No. of Pages : 4 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057590 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ADAPTIVE LEARNING SYSTEM AND METHOD FOR PERSONALIZED EDUCATION

(51) International classification :G06Q0050200000, G09B0007000000, G09B0007020000, G09B0005020000, G09B0005060000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)HINDUSTHAN COLLEGE OF ARTS & SCIENCE, COIMBATORE
Address of Applicant :Hindusthan College of Arts &Science, City Campus, Nava India, Avinashi Road, Coimbatore - 641028 Tamilnadu ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.A.Ponnusamy
Address of Applicant :Prinicipal, Hindusthan College of Arts &Science, City Campus, Nava India, Avinashi Road, Coimbatore - 641028 Tamilnadu ---------- ----------
2)Dr.P.Priya
Address of Applicant :Professor & Head, Hindusthan College of Arts &Science, City Campus, Nava India, Avinashi Road, Coimbatore - 641028 Tamilnadu ---------- ----------
3)Dr.C.Naveena Jasmine
Address of Applicant :Associate Professor, Hindusthan College of Arts &Science, City Campus, Nava India, Avinashi Road, Coimbatore - 641028 Tamilnadu ---------- ----------
4)P.Indumathy
Address of Applicant :Assistant Professor, Hindusthan College of Arts &Scicnce, City Campus, Nava India, Avinashi Road, Coimbatore - 641028 Tamilnadu ---------- ----------
5)Dr.M.Maheswari
Address of Applicant :Professor, Hindusthan College of Arts &Science, City Campus, Nava India, Avinashi Road, Coimbatore - 641028 Tamilnadu ---------- ----------
6)Dr.M.Uma
Address of Applicant :Assistant Professor, Hindusthan College of Arts &Science, City Campus, Nava India, Avinashi Road, Coimbatore - 641028 Tamilnadu ---------- ----------

(57) Abstract :
7. ABSTRACT OF THE INVENTION(to be given along with complete specification on separate page) Abstract: The Adaptive Learning System and Method for Personalized Education is a comprehensive educational technology designed to cater to individual student needs and enhance learning outcomes through adaptive methodologies. The system utilizes artificial intelligence (Al) algorithms to dynamically adjust educational content, pacing, and delivery based on realtime student performance and learning preferences. By analyzing student data and interactions within the learning environment, the system optimizes personalized learning paths, ensuring each student receives tailored instruction aligned with their unique strengths and areas for improvement. The method integrates interactive learning modules, assessments, and feedback mechanisms to foster engagement and efficacy in educational settings. This innovation represents a significant advancement in educational technology, promising to revolutionize traditional learning paradigms by providing adaptive, personalized learning experiences for students of all ages and educational backgrounds.

No. of Pages : 6 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057591 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN UNSTEADY THREE DIMENSIONAL MHD CARREAU FLUID ALONG THE STRETCHING SHEET WITH ARRHENIUS ACTIVATION

(51) International classification	:G06F0017130000, G06N0020000000, G06N0003040000, G01V0009000000, G06F0017110000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)HINDUSTHAN COLLEGE OF ARTS & SCIENCE
Address of Applicant :HINDUSTHAN COLLEGE OF ARTS & SCIENCE, CITY CAMPUS, NAVA INDIA, AVINASHI ROAD, COIMBATORE, TAMIL NADU, INDIA, PIN CODE-641028 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)S.Anuradha
Address of Applicant :Professor & Head, Department of Mathematics, Data Science and Analytics, Hindusthan College of Arts &Science, City Campus, Nava India, Avinashi Road, Coimbatore- 641028 Tamil nadu. ---------- ----------
2)S.Karunalakshmi
Address of Applicant :Assistant Professor, Department of Mathematics, Hindusthan College of Arts &Science, City Campus, Nava India, Avinashi Road, Coimbatore - 641028 Tamil nadu. ---------- ----------
3)P.Jagadeeshwari
Address of Applicant :Assistant Professor, Department of Mathematics, Hindusthan College of Arts &Science, City Campus, Nava ndia, Avinashi Road, Coimbatore- 641028 Tamil nadu. ---------- ----------
4)S.Devidhanshrii
Address of Applicant :!Assistants Professor, Department of Data ~cience and Analytics, Hindusthan College of Arts &Science, City Campus, INava India, Avinashi Road, Coimbatore-641028 Tamil Nadu ---------- ----------
5)V.Sangeetha
Address of Applicant :!Assistants Professor, Department of Data Science and Analytics, Hindusthan College of Arts &Science, City Campus, INava India, A vinashi Road, Coimbatore- 641028 Tamil Nadu. ---------- ----------

(57) Abstract :
An unsteady three-dimensional MHD Carreau fluid along a stretching sheet with Arrhenius activation energy and binary chemical reaction has been investigated in this invention. Mathematical modeling has developed to derive the momentum, energy and concentration equations. Similarity transformations are applied to transform the governing dimensional forms into non-dimensional forms. Transformed non-linear ordinary differential equations with associated boundary conditions have solved and elucidated numerically by R-K fourth-fifth order scheme. Resulting non-dimensional variables demonstrated through the graphs to study the physical significance of Carreau fluid flow. This invention quantifies and qualifies the phenomenon caused by Arrhenius activation energy and binary chemical reaction in MHO Carreau fluid along a stretching sheet. Machine learning algorithms are most useful in extracting the hidden pattern knowledge of any complex data. The approximate solutions achieved by the proposed technique are validated by comparing with the least square method (LSM), machine learning algorithms such as NARX-LM, and numerical solutions by the Runge-Kutta-Fehlberg ~ method (RKFM) to predict the thermal conductivity ratio of Carreau fluid.

No. of Pages : 7 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057602 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD FOR ENHANCING BIOAVAILABILITY OF ANTI-GLIOBLASTOMA DRUG USING NANO-FORMULATION

(51) International classification	:A61K0009510000, A61K0009160000, A61K0009000000, A61K0009127000, A61L0027560000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, DAKSHIN KANNADA, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. NIMMY VARGHESE
Address of Applicant :NGSMIPS, NITTE DEEMED TO BE UNIVERSITY, 6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 MANGALURU ---------- ----------
2)HARSHA ASHTEKAR
Address of Applicant :NGSMIPS, NITTE DEEMED TO BE UNIVERSITY, 6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 MANGALURU ---------- ----------
3)DR. PRERANA SHETTY
Address of Applicant :NGSMIPS, NITTE DEEMED TO BE UNIVERSITY, 6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 MANGALURU ---------- ----------
4)ANISHA R RODRIGUES
Address of Applicant :NGSMIPS, NITTE DEEMED TO BE UNIVERSITY, 6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 MANGALURU ---------- ----------
5)DR. ASHWINI PRABHU
Address of Applicant :YENOPOYA RESEARCH CENTRE, YENOPOYA (DEEMED TO BE UNIVERSITY), UNIVERSITY ROAD, DERALAKATTE, MANGALURU, KARNATAKA 575018 MANGALURU ---------- ----------

(57) Abstract :
Disclosed herein is a method for enhancing bioavailability of anti-glioblastoma drug using nano-formulation (100) that comprises preparing a nano-formulation (102) by encapsulating the anti-glioblastoma drug within biocompatible nanoparticles (104), wherein the biocompatible nanoparticles (104) are composed of a biodegradable polymer (106) selected from the group consisting of poly(lactic-co-glycolic acid) (PLGA) (108), chitosan (110), and polycaprolactone (PCL) (112). The method (100) includes optimizing the encapsulation efficiency (114) by adjusting parameters (116) including polymer concentration (118), drug concentration (120), and solvent composition (122). The method also (100) includes characterizing the nano-formulation (124) to determine particle size, zeta potential, and encapsulation efficiency (114).

No. of Pages : 26 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057607 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DYNAMIC RESOURCE ALLOCATION FOR MACHINE LEARNING WORKLOADS IN CLOUD ENVIRONMENTS

(51) International classification	:G06F0009500000, G06N0020000000, G06F0009480000, G06N0005040000, H04L0041147000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. Chintureena Thingom
Address of Applicant :Assistant Professor, Department of Computer Science & Engineering, Alliance School of Advanced Computing, Alliance University, Bengaluru, Pin: 562106, Karnataka, India ---------- ----------
2)Dr. Thangjam Ravichandra
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Chintureena Thingom
Address of Applicant :Assistant Professor, Department of Computer Science & Engineering, Alliance School of Advanced Computing, Alliance University, Bengaluru, Pin: 562106, Karnataka, India ---------- ----------
2)Dr. Thangjam Ravichandra
Address of Applicant :Associate Professor, Alliance School of Business, Alliance University, Bengaluru, Pin:562106, Karnataka, India ---------- ----------

(57) Abstract :
The present invention discloses a system and method for dynamic resource allocation in cloud environments, specifically optimized for machine learning (ML) workloads. The system comprises a monitoring module for tracking real-time resource utilization and workload performance, a predictive analytics module using machine learning algorithms to forecast future resource needs, and a resource management module for dynamically adjusting resource allocations based on these predictions. By using real-time data and predictive insights, the system ensures efficient resource utilization, enhancing performance and reducing operational costs. The invention addresses the inefficiencies of static resource provisioning and offers a scalable, automated solution for optimizing ML tasks in cloud environments.

No. of Pages : 16 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057630 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : IOT-ENHANCED MACHINE LEARNING FOR TRAFFIC MANAGEMENT SYSTEMS IN SMART CITIES

(51) International classification	:G06N0020000000, G06N0003080000, G06N0003000000, G06N0007000000, G06N0003040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Vijayalaxmi Gopu
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering (AI&ML), Vaagdevi College of Engineering, Bollikunta, Warangal – 506005, India. ---------- ----------
2)Amrita Tiwari
3)Mary Swarupa Dakori
4)R. Suganya
5)Dr.M.Archana
6)Dr.Sindhu.V
7)Dr P Rizwan Ahmed
8)V. Sandhya
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Vijayalaxmi Gopu
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering (AI&ML), Vaagdevi College of Engineering, Bollikunta, Warangal – 506005, India. ---------- ----------
2)Amrita Tiwari
Address of Applicant :Assistant Professor, Department of CSE, Ajay Kumar Garg Engineering College, 27th km stone, Delhi-Hapur bypass road, Ghaziabad – 201009, Uttar Pradesh, India. ---------- ----------
3)Mary Swarupa Dakori
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, KL University, Guntur, Andhra Pradesh-522302, India. ---------- ----------
4)R. Suganya
Address of Applicant :Assistant Professor, Department of Civil Engineering, Dhirajlal Gandhi College of Technology, Salem, Tamil Nadu, India. ---------- ----------
5)Dr.M.Archana
Address of Applicant :Assistant Professor, Department of Civil Engineering, Dhirajlal Gandhi College of Technology, Salem, Tamil Nadu, India. ---------- ----------
6)Dr.Sindhu.V
Address of Applicant :Assistant professor, Department of Computer Science, Christ University, Bangalore, Karnataka, India. ---------- ----------
7)Dr P Rizwan Ahmed
Address of Applicant :Assistant Professor and Head, Department of Computer Application, Data Science, and PG and Research, Department of Computer Science, Mazharul Uloom College, Ambur-635802, Tamil Nadu, India. ---------- ----------
8)V. Sandhya
Address of Applicant :Assistant Professor, Department of Mathematics, SNS College of Technology, Coimbatore, Tamil Nadu, India. ---------- ----------

(57) Abstract :
IOT-ENHANCED MACHINE LEARNING FOR TRAFFIC MANAGEMENT SYSTEMS IN SMART CITIES The method for the development of the issue of inadequate information sharing has arisen as a result of the traditional transportation system's inability to handle a variety of complicated scenarios brought on by the trend of ongoing metropolitan area growth and rising vehicle numbers. A CVIS is developed through the use of IoT technology. By building sophisticated IoT structures, this technology facilitates effective information flow between cars and infrastructure. Reinforcement learning models are then employed to optimize driving tactics and system reactions. From civil engineering to technology-driven solutions, smart cities have become a specialist field embracing a range of technologies. Solutions for smart cities have been made possible in large part by the rapid development of technologies like artificial intelligence, cognitive science, 5G, software-defined networks (SDN), Internet of Things (IoT), and analytics. In addition, it assesses the challenges and opportunities associated with the industry-wide adoption of IoT while offering outlooks on the evolution of connected urban transportation in the future. FIG.1

No. of Pages : 15 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057636 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM AND METHOD FOR CHARGING DRONE USING AUTONOMOUS MOBILE ROBOT

(51) International classification	:B64C0039020000, H02J0007000000, G05D0001020000, B25J0009160000, G05D0001100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)FLIPKART INTERNET PRIVATE LIMITED
Address of Applicant :Buildings Alyssa, Begonia & Clover, Embassy Tech Village, Outer Ring Road, Devarabeesanahalli Village, Bengaluru - 560103, Karnataka, India Bengaluru ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)VARTAK, Nikhil
Address of Applicant :C/o Flipkart Internet Private Limited, Buildings Alyssa, Begonia & Clover, Embassy Tech Village, Outer Ring Road, Devarabeesanahalli Village, Bengaluru – 560103, Karnataka, India Bengaluru ---------- ----------

(57) Abstract :
ABSTRACT A SYSTEM AND METHOD FOR CHARGING DRONE USING AUTONOMOUS MOBILE ROBOT The present invention relates to a system and method for charging drone using autonomous mobile robot. The system (100) comprises of a plurality of drones (102); and a plurality of autonomous mobile robot (AMR) (104) adapted to house the plurality of drones (102) for charging. The drone (102) is configured to land on a landing pad (126) of the AMR (104) for charging by a charging pad (128), upon detecting the charging value below a first pre-fed threshold value. The drone (102) is released from the AMR (104) on successful charging. Further, the AMR (104) is configured to move towards the charging station, upon detecting the battery below a second pre-fed threshold value. Therefore, the present invention provides on demand charging to the drones (102) through the AMR (104) and increase uptime of the drones (102) by eliminating the need to fly back to remotely located charging station for charging. Figure 1

No. of Pages : 24 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057680 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : BIOINSPIRED DORADO AIRFOIL DESIGN FOR ENHANCED AERODYNAMIC PERFORMANCE IN DARRIUS VERTICAL-AXIS WIND TURBINES

(51) International classification	:F03D0007020000, G06F0030200000, G06F0111100000, F03D0009250000, F03D0001060000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Jarupula Somlal
Address of Applicant :Department of EEE, Koneru Lakshmaiah Education Foundation, Green Fields, Vaddeswaram, Mangalagiri, Guntur ---------- ----------
2)Koneru Lakshmaiah Education Foundation
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Wallaaldin Abass Mohamed Eltayeb
Address of Applicant :Department of EEE, Koneru Lakshmaiah Education Foundation, Vaddeswaram, Mangalagiri, Guntur ---------- ----------
2)Jarupula Somlal
Address of Applicant :Department of EEE, Koneru Lakshmaiah Education Foundation, Vaddeswaram Mangalagiri, Guntur ---------- ----------

(57) Abstract :
This patent application introduces a novel approach to enhance the aerodynamic performance of H-Darrieus wind turbines through bioinspired airfoil optimization. Inspired by the Mahi-Mahi fish, the invention integrates the Dorado airfoil into the NACA2412 baseline, resulting in a remarkable 28% improvement in lift coefficient. Computational fluid dynamics simulations demonstrate the superior performance of the Dorado airfoil, achieving a peak coefficient of power (Cp) of 0.45 at a Tip Speed Ratio (TSR) of 3.5. This innovative design offers significant advancements in wind turbine technology, promising enhanced efficiency and performance in sustainable energy generation.

No. of Pages : 11 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057682 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ANALYSING THE ROLE OF INTEGRATED MARKETING COMMUNICATION: THE IMPORTANCE OF INCORPORATING WITH SOCIAL MEDIA

(51) International classification	:G06Q0030020000, G06Q0050000000, G16H0015000000, H04N0021250000, H04L0067100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. T. Vinila
Address of Applicant :Lecturer, Department of Commerce, Smt. N.P. Savithramma Govt. Degree College(W), Chittoor, Pin: 517002, Andhra Pradesh, India. ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. T. Vinila
Address of Applicant :Lecturer, Department of Commerce, Smt. N.P. Savithramma Govt. Degree College(W), Chittoor, Pin: 517002, Andhra Pradesh, India. ---------- ----------

(57) Abstract :
The present invention relates to a system and method for integrating marketing communication across multiple channels, with a focus on incorporating social media platforms. The system includes a central management interface for coordinating marketing campaigns across various channels such as social media, email, print, and digital advertising. An integration module connects to social media platforms and marketing tools, enabling real-time synchronization and data exchange. An advanced analytics engine aggregates and analyzes data from social media interactions and other marketing activities, providing actionable insights into consumer behavior and campaign performance. Additionally, an automated content management module facilitates the creation, scheduling, and distribution of marketing content, optimizing efficiency and effectiveness. The invention aims to streamline marketing operations, enhance campaign coordination, and improve overall marketing effectiveness by leveraging integrated data and advanced analytics.

No. of Pages : 16 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024

(21) Application No.202441057684 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AI-BASED VIRTUAL SHOPPING KIOSK WITH DYNAMIC PLANOGRAM FOR IMMERSIVE SHOPPING EXPERIENCE

(51) International classification :G06Q0030020000, G06Q0030060000, G06Q0010080000, G02B0027010000, G06N0020000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Sri Sivasubramaniya Nadar College Of Engineering
Address of Applicant :Sri Sivasubramaniya Nadar College Of Engineering, Old Mahabalipuram Road, Kalavakkam, Tamil Nadu – 603110. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. S. ANGEL DEBORAH
Address of Applicant :Sri Sivasubramaniya Nadar College Of Engineering, Old Mahabalipuram Road, Kalavakkam, Tamil Nadu – 603110. Chennai ---------- ----------
2)Dr. K. R. SARATH CHANDRAN
Address of Applicant :Sri Sivasubramaniya Nadar College Of Engineering, Old Mahabalipuram Road, Kalavakkam, Tamil Nadu – 603110. Chennai ---------- ----------
3)Dr. T. T. MIRNALINEE
Address of Applicant :Sri Sivasubramaniya Nadar College Of Engineering, Old Mahabalipuram Road, Kalavakkam, Tamil Nadu – 603110. Chennai ---------- ----------
4)K. RAGHUL YADHAV
Address of Applicant :Sri Sivasubramaniya Nadar College Of Engineering, Old Mahabalipuram Road, Kalavakkam, Tamil Nadu – 603110. Chennai ---------- ----------

(57) Abstract :
The present invention relates to a system and method for providing a real-time immersive shopping experience using a virtual reality (VR) headset. This system allows customers to navigate through virtual racks and view products in a highly interactive and engaging manner. By leveraging AI-driven dynamic planogramming, frequently purchased brands and products are strategically placed at the front of the virtual racks to increase sales volume and revenue. The system also provides real-time updates to the planogram, suggesting highly reviewed products to customers, thereby saving them the time required for review analysis. Additionally, the system optimizes product placement on virtual shelves based on sales history and seasonal trends, enhancing customer attraction and engagement. This innovative approach combines advanced VR technology with intelligent data analytics to revolutionize the shopping experience, offering a seamless blend of convenience, personalization, and efficiency.

No. of Pages : 13 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057686 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ROBUST ADAPTIVE ONLINE CONTROLLER FOR DIABETES MONITORING SYSTEM

(51) International classification	:A61P0003100000, A61M0005142000, G16H0020170000, G06N0020000000, G06N0003040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Sri Sivasubramaniya Nadar College Of Engineering
Address of Applicant :Sri Sivasubramaniya Nadar College Of Engineering, Old Mahabalipuram Road, Kalavakkam, Tamil Nadu – 603110. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)C.K.Subasri
Address of Applicant :Sri Sivasubramaniya Nadar College Of Engineering, Old Mahabalipuram Road, Kalavakkam, Tamil Nadu – 603110. Chennai ---------- ----------
2)Dr. Vijay Jeyakumar
Address of Applicant :Sri Sivasubramaniya Nadar College Of Engineering, Old Mahabalipuram Road, Kalavakkam, Tamil Nadu – 603110. Chennai ---------- ----------

(57) Abstract :
The aim is to create a patient model that considers the impact of stress, food consumption, exercise, and Insulin Sensitivity (IS). A online adaptive controller is developed to handle the complexity of diabetes treatment and is used in unpredictable environments where accurate blood glucose control is essential. In real-world applications, hardware experimentation makes a basic insulin pump to confirm its functionality. The results show how well the controller works to keep blood sugar levels safe and prevent episodes of hypo and hyperglycemia. The superiority of the Reinforcement Learning Human Feedback Controller is demonstrated by comparative comparisons with other control systems, such as Model Reference Adaptive Control (MRAC) and RECCo (Robust Evolving Cloud Based Controller). Additionally, the effectiveness of the created model is validated using the N-BEATS using data sets produced by the simulated model. The validation findings confirm the model's reliability with an exceptional precision level of over 97.4%.

No. of Pages : 20 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057705 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A PROCESS OF PREPARATION OF ANTIMICROBIAL HERBAL SOAP AND PRODUCT THEREOF

(51) International classification	:A61K0036210000, A61K0036906600, A61K0036610000, A61K0036530000, C11D0009380000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)SREE BALAJI MEDICAL COLLEGE AND HOSPITAL
Address of Applicant :NO 7, WORKS ROAD, CHROMEPET, CHENGALPATTU CHENNAI TAMIL NADU INDIA 600 044 Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DEEPALAKKSHMI BALAKRISHNAN
Address of Applicant :DEPARTMENT OF RESEARCH AND DEVELOPMENT, SREE BALAJI MEDICAL COLLEGE AND HOSPITAL, NO 7, WORKS ROAD, CHROMEPET, CHENGALPATTU CHENNAI TAMIL NADU INDIA 600044 Chennai ---------- ----------
2)ANGELIN DAVID SELVAM
Address of Applicant :DEPARTMENT OF RESEARCH AND DEVELOPMENT, SREE BALAJI MEDICAL COLLEGE AND HOSPITAL, NO 7, WORKS ROAD, CHROMEPET, CHENGALPATTU CHENNAI TAMIL NADU INDIA 600044 Chennai ---------- ----------
3)SHYAMALA SAMBASIVAM
Address of Applicant :DEPARTMENT OF RESEARCH AND DEVELOPMENT, SREE BALAJI MEDICAL COLLEGE AND HOSPITAL, NO 7, WORKS ROAD, CHROMEPET, CHENGALPATTU CHENNAI TAMIL NADU INDIA 600044 Chennai ---------- ----------
4)DR. SARAMMA MINI JACOB
Address of Applicant :DEPARTMENT OF RESEARCH AND DEVELOPMENT, SREE BALAJI MEDICAL COLLEGE AND HOSPITAL, NO 7, WORKS ROAD, CHROMEPET, CHENGALPATTU CHENNAI TAMIL NADU INDIA 600044 Chennai ---------- ----------
5)SATHIYAMOORTHY PANDURANGAN
Address of Applicant :DEPARTMENT OF ZOOLOGY, GOVERNMENT ARTS COLLEGE FOR MEN (AUTONOMOUS) NANDANAM CHENNAI CHENNAI TAMIL NADU INDIA 600035 Chennai ---------- ----------

(57) Abstract :
TITLE: A PROCESS OF PREPARATION OF ANTIMICROBIAL HERBAL SOAP AND PRODUCT THEREOF APPLICANT: SREE BALAJI MEDICAL COLLEGE AND HOSPITAL ABSTRACT The present invention discloses a process of preparation of antimicrobial soap enriched with herbal extracts for skin health enhancement, comprises of following steps; a. preparation of soap base emulsion; b. preparation of condensed, aqueous extract of Cassia fistula, Origanum vulgare, Achyranthes aspera, Syzygium aromaticum, Curcuma longa; c. preparation of uniform dispersion; d. preparation of soap mixture and e. preparation of antimicrobial soap enriched with herbal extracts for skin health enhancement. The present invention also discloses an antimicrobial soap enriched with herbal extracts for skin health enhancement prepared by the process as described above.

No. of Pages : 29 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024

(21) Application No.202441057713 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DESIGN AND DEVELOPMENT OF SMART PILL BOX

(51) International classification :A61J0007040000, B65D0083040000, G16H0020100000, A61J0007000000, A61J0001030000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. MGR Educational & Research Institute
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, India – 600095 Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)ZAHID AHMED.C
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, India – 600095 Chennai ---------- ----------
2)RAKESH.A
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, India – 600095 Chennai ---------- ----------
3)YOKESH.V
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, India – 600095 Chennai ---------- ----------
4)ROMIT DUTTA
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, India – 600095 Chennai ---------- ----------
5)SNEHA
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, India – 600095 Chennai ---------- ----------
6)Dr. L RAMESH
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, India – 600095 Chennai ---------- ----------
7)Dr. P SELVARAJ
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, India – 600095 Chennai ---------- ----------
8)Dr. K SARAVANAN
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, India – 600095 Chennai ---------- ----------

(57) Abstract :
The object of the present invention to provide a smart pill dispenser for medication management for chronic disease patients, particularly addressing the challenges faced by newly prescribed patients and elderly individuals. It is another object of the present invention to provide a smart pill dispenser for effectively preventing high and low dose errors, ensuring timely medication administration and help individuals manage their medication schedules more efficiently and effectively.

No. of Pages : 23 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057714 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MUSCLEFLEXPRO

(51) International classification :A61N0001360000, A61F0007000000, A61F0007020000, A61F0007100000, A61N0001040000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. MGR Educational and Research Institute
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 patent@drmgrdu.ac.in Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)ASHRIN. T
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
2)Dr. VEENAKIRTHIKA. S
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
3)R. SANKAR
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
4)Dr SENTHIL NATHAN C V
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------

(57) Abstract :
The present invention discloses a wearable pain relief device (100) to provide versatile and effective pain management. The device (100) comprises a compression wrap (102) with integrated chambers (104) for adjustable compression, along with heating (106) and cooling (108) elements for targeted thermal therapy. Additionally, a pulsating air pressure generator (110) offers massage-like relief, while electrodes (112) enable Transcutaneous Electrical Nerve Stimulation (TENS). A controller (114) governs therapy functions, including compression, thermal therapy, and TENS, with automatic shut-off timers (120) for safety. Removable ice pack compartments (116) enhance cold therapy, while a thermal storage material (122) ensures sustained thermal effects. Integrated with a power bank (124), the device offers portable pain relief suitable for various applications. Refer Figure 1

No. of Pages : 20 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057715 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM AND METHOD FOR ENHANCING ELEVATOR EFFICIENCY

(51) International classification :B66B0005000000, H04W0004800000, B66B0001340000, B66B0003000000, B66B0001460000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. MGR Educational and Research Institute
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)S PAULIN BINUSHA
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
2)PUSHPAVATHI.P
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
3)NIVETHA M
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
4)B ASHWINI
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
5)LM VISHNU
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
6)KAVIN K
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
7)Dr V RAMESH BABU
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
8)Dr DAHLIA SAM
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
9)Dr S ELAKKIYA
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------

(57) Abstract :
The present invention relates to the system and method which focusses on enhancing the efficiency of the elevators wherein the system comprises a piezoelectric sensor embedded in a mat which is put up in front of every floor of the elevator entrance, with sensor able to communicate with the elevator via wi-fi. The principle of working includes when the pressure is applied on the mat embedded with piezoelectric sensor , the sensor gets activated and passes the information to elevator system via Wi-Fiwired connection confirming the presence of the user , thereby the allowing the elevator to open the door , when the button is pressed and the user is not present on the mat , the piezoelectric sensor doesn't sense the user and thereby communicates to the elevator to avoid the door opening thereby saving time and energy consumption. Refer Fig 2

No. of Pages : 16 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057716 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SENSO FLIP FAN

(51) International classification :H02P25/03, F04D25/08, F24F11/88, F24F11/46, G05B19/02
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. MGR Educational and Research Institute
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)P S V N BHARATH
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
2)H. LAIBA
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
3)P. SATYANARAYANA
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
4)BHUVANESHWARAN
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
5)G Rajesh
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
6)B. Harish
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
7)SUMIT KUMAR MANDAL
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
8)Dr E KAVITHA
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
9)Dr D USHA
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
10)Dr S KRISHNAVENI
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
11)Dr. K. Rajan
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------

(57) Abstract :
ABSTRACT The present invention discloses a smart sensing flip fan, comprising a Brushless DC motor, servo motors linked with a gear mechanism to adjust the tilt angle of the fan blades to customizing airflow direction, a plurality of sensors vizultrasonic sensor for occupancy detection, a temperature sensor to sense temperature, and a motion detection sensor for detecting movement within certainvicinity. Sensors feed data to a microcontroller, which acts as the central control unit, processing this data to determine optimal fan operation parameters like speed, direction, tilt angle. The control signals are sent to the motor drivers and other components to adjust the fan's operation accordingly; the system is equipped with power distribution network and relay to control the fan motor and other high-power components, thus optimizing airflow, conserve energy, and improving user comfort. Refer Figure 1

No. of Pages : 17 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057717 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SMART ENVIRONMENTAL MONITORING SYSTEM WITH INTEGRATED RADIATION DETECTION

(51) International classification	:G06K0009620000, G06N0020000000, G01D0021020000, G06N0003000000, G01N0015060000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. MGR Educational and Research Institute
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)T. SOMASEKHAR REDDY
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
2)S. ARUN KUMAR
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
3)U. Venu
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
4)Dr G KAVITHA
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
5)Mr B RAMESH
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
6)Dr U JAYALATSUMI
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------

(57) Abstract :
The present invention discloses a smart environmental monitoring system, A smart environmental monitoring system is disclosed, comprising: a plurality of sensors (101), configured to detect and measure various environmental parameters including air quality indicators, temperature, humidity, pressure, and radiation levels; a microprocessor unit (102); an IoT display unit (103) with a WIFI module (104), the microprocessor, features specialized modules for data preprocessing, feature selection, and machine learning-based analysis, employing a hybrid algorithm of Random Forest and Linear Regression for precise predictions. A unique real-time prediction module, equipped with a proactive risk management feature, issues alerts and recommendations, enabling immediate user action to mitigate health and safety risks. The innovative system promises to revolutionize the way environmental conditions are monitored, analyzed, and responded to, providing actionable insights for users to effectively manage their exposure to environmental risks. Refer Figure 1

No. of Pages : 19 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057718 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : HEKEMORA : A NON INVASIVE SMART MOBILE APPLICATION FOR DEFICIENCY DETENTION FROM HUMAN FINGERNAIL PHOTOGRAPHY

(51) International classification :G06N0020000000, G16H0050300000, G01N0021880000, G06Q0030060000, H04N0001000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. MGR Educational and Research Institute
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)KEERTHANA PRIYADHARSHINI L
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
2)HEMALATHA S
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
3)PAVITHRA E
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
4)MOHANA SANDHIYA S
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
5)Dr K SUJATHA
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
6)Dr S KRISHNAVENI
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
7)Dr K SARAVANAN
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------

(57) Abstract :
The present disclosure discloses a device (100) and method (200) for detecting human deficiencies through fingernail photography. The device (100) comprises at least one camera (102) for capturing images of the user's fingernails, a user interface (104) for receiving user inputs, an image processing module (106) for preprocessing and extracting features from the captured images, and a machine learning model (108) integrated with a custom vision API for analyzing the features and identifying potential systemic deficiencies. Further, an output module (110) generates feedback and recommendations based on the analysis, while an educational resource module (112) provides information about nail health and systemic conditions. The method (200) involves capturing, preprocessing, feature extraction, analysis, feedback generation, and display within the user interface (104). This disclosure offers a user-friendly, non-invasive approach to deficiency detection, empowering individuals to monitor their health and seek timely intervention. Refer Figure 1

No. of Pages : 19 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057719 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : PROJECT GRAPHENE

(51) International classification	:B01D0053620000, C02F0001660000, B01J0023780000, C05D0001000000, B22F0003100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. MGR Educational and Research Institute
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MOHAMMED ASKAR. S
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
2)Dr LAKSHMAN RAJ RAJA
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
3)Dr V KALPANA DEVI
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------

(57) Abstract :
The present invention relates to process of preparation of graphene from carbon dioxide. The process involves reacting atmospheric carbon dioxide with potassium hydroxide to yield potassium carbonate. Decomposition of potassium carbonate to potassium oxide, further reaction of potassium oxide with carbon dioxide in presence of carbon ion, to yield carbon monoxide, which on heating yields carbon, in a copper surface with presence of hydrogen gas which is further heated to yield Graphene.
Fig 1

No. of Pages : 12 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057720 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AI ENHANCED ARDUINO BASED CUSTOMIZED SMART GLASSES FOR BLIND PEOPLE

(51) International classification :G06F0003010000, A61H0003060000, G09B0021000000, A61B0005000000, A61B0005110000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. MGR Educational and Research Institute
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Y. RAJESH
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
2)K. BHASKAR
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
3)K. AUDI DINAKAR
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
4)M PRIYANKA
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
5)Dr T KIRUBADEVI
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
6)Dr. S. GEETHA
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------

(57) Abstract :
The present invention discloses a smart wearable system (100) for visually impaired. The system (100) includes a microcontroller (102), a plurality of sensors (104) including an ultrasonic sensor (104-A), and one or more camera modules (104-C). The microcontroller (102) uses advanced algorithms in the software module (116) for analyzing the sensor data to identify obstacles, objects, and fire hazards. Based on analyzed sensor data, real-time feedback is delivered to the user through an audio output unit (106) and haptic feedback unit (108). The system further includes a Bluetooth communication module (112), a navigation assistance (114), and a user interaction module (118) for enhanced functionality. By collecting and processing data and providing tactile and auditory feedback, the system (100) aims to greatly improve the mobility and independence of visually impaired individuals. Refer Figure 1

No. of Pages : 20 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057721 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A RENEWABLE POWER GENERATION SYSTEM AND ITS METHOD FOR GENERATING RENEWABLE ELECTRICAL ENERGY

(51) International classification :H01L0041113000, H02K0053000000, F03B0013180000, F21Y0115100000, H01L0041193000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. MGR Educational and Research Institute
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)R.NAVANEEDHAN
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
2)E.DHILIP KUMAR
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
3)R.JAGAN
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
4)S.MOHAMMED HAKIM
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
5)Dr K R VIJAYAKUMAR
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------
6)Dr K RAJAN
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu 600095 Chennai ---------- ----------

(57) Abstract :
ABSTRACT The present disclosure discloses a renewable power generation system (100). The system (100) comprises a staircase platform (102) in high-traffic areas, employing compressible steps (104) to generate rotational motion via a mechanical energy conversion mechanism (106). This mechanism (106) includes a rack (114), pinion (116), driveshaft (118), and flywheel (120). One or more piezoelectric sensors (108) are positioned proximate to the mechanism (106) that generates electricity from the rotational motion, which is then stored in a storage unit (110). The stored electricity is converted from DC to AC by an output unit (112). The present disclosure also discloses a method (200) for generating renewable electrical energy. Refer Figure 1

No. of Pages : 22 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057728 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : FABRICATION AND MECHANICAL CHARACTERISATION OF AL6061 COMPOSITES REINFORCED WITH NANO-SIZED B4C AND GR.

(51) International classification	:C22C0021000000, C22F0001040000, F16D0069020000, B33Y0080000000, C22C0023060000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Andhra University
Address of Applicant :Department of Marine Engineering, Andhra University, Visakhapatnam, Andhra Pradesh.530003 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Teella Mahendra Rao
Address of Applicant :Department of Marine Engineering, Andhra University, Visakhapatnam, Andhra Pradesh.530003 ---------- ----------
2)Prof.V.V.S.PRASAD
Address of Applicant :Department of Marine Engineering, Andhra University, Visakhapatnam, Andhra Pradesh.530003 ---------- ----------

(57) Abstract :
6.ABSTRACT The selection of reinforcing material and its dispersion range are essential factors in customising the properties of metal matrix composites (MMC) by modifying their structural behavior. The project aims to experimentally examine the impact of reinforcing materials, such as graphite and boron carbides, on the mechanical properties of Aluminum 6061MMC (AMC). The materials are blended using ball milling, then AMCs are reinforced at varying weights ranging from 2 to 8% using the stir casting process with equal increments. The mechanical properties of the fabricated AMCS are evaluated in accordance with the ASTM standards. AMCs containing 6% reinforcement demonstrate the highest improvement in ultimate strength, compressive strength, impact strength, and hardness compared to the base material. The improvements are measured at 28.7%, 39.72%, 23.5%, and 211.8 MPa, 2959.05 MPa, 0.66 Kg-m, and 74.59 VHN, respectively. The SEM analysis demonstrated the effective distribution of reinforcing components within the interstitial layers, while the XRD analysis confirmed the occurrence of the Orowan mechanism resulting from grain refinement in the AMC. The correlations are established through quantitative examination of the tested mechanical properties of the B4C-Gr based AMCs.

No. of Pages : 26 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057735 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A REAL-TIME AUTOMATED MULTILINGUAL CONVERSATIONAL CHATBOT SYSTEM AND A METHOD THEREOF

(51) International classification	:H04L0051020000, G06F0040300000, G06T0013400000, G10L0015220000, G06N0020000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Woxsen University
Address of Applicant :Kamkole Village, Sadasivpet, Sangareddy District, Hyderabad, Telangana, India – 502345 Hyderabad ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Pankaj Kumar Singh
Address of Applicant :Senior AI Engineer, AI Research Centre, Woxsen University, Kamkole Village, Sadasivpet, Sangareddy District, Hyderabad, Telangana, India – 502345 Hyderabad ---------- ----------
2)Dr. Hemachandran K
Address of Applicant :Professor, AI Research Centre, School of Business, Woxsen University, Kamkole Village, Sadasivpet, Sangareddy District, Hyderabad, Telangana, India – 502345 Hyderabad ---------- ----------
3)Dr. Rajesh Kumar K V
Address of Applicant :Associate Professor, AI Research Centre, School of Busines, Woxsen University, Kamkole Village, Sadasivpet, Sangareddy District, Hyderabad, Telangana, India – 502345 Hyderabad ---------- ----------
4)M. Balamurugan
Address of Applicant :Jr. AR VR Engineer, AI Research Centre, Woxsen University, Kamkole Village, Sadasivpet, Sangareddy District, Hyderabad, Telangana, India – 502345 Hyderabad ---------- ----------

(57) Abstract :
The present invention relates to a multilingual conversational Chatbot system (100) for 3D characters, leveraging neural networks and tokenized intents data. It comprises a Multilingual Natural Language Processing Module (102), a Dialogue Management System (104), and a 3D Character Animation Module (106), all built on a scalable and customizable platform. The system processes user inputs in multiple languages, generates dynamic responses, and animates lifelike 3D characters in real-time. This results in highly engaging, natural, and adaptive conversations across various languages and contexts. The invention overcomes limitations of existing chatbots by providing accurate multilingual capabilities, lifelike interactions, and flexible responses. It simplifies development and deployment, making conversational AI more accessible to global audiences and diverse industries. Figure 1.

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057745 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AUTONOMOUS SAFETY SYSTEM AND METHOD FOR PERFORMING RESCUE OPERATIONS IN EMERGENCY EVENTS

(51) International classification :B66B0005020000, B25J0011000000, G06F0003042000, H04N0005232000, B60R0021015000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VELLORE INSTITUTE OF TECHNOLOGY, CHENNAI
Address of Applicant :Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)K. TAMILARASI
Address of Applicant :Assistant Professor Senior Grade-1, School of Computer Science and Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chenqnai, Tamil Nadu - 600127, India. Chennai ---------- ----------
2)PULAKUNTA RAJESH REDDY
Address of Applicant :UG Student, School of Computer Science and Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
3)HINDUJA KANAKALA
Address of Applicant :UG Student, School of Computer Science and Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
4)N. DIVYA CHARITHA
Address of Applicant :UG Student, School of Computer Science and Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------
5)NAHID SHAMMEM D
Address of Applicant :UG Student, School of Computer Science and Engineering, Vellore Institute of Technology, Chennai, Vandalur - Kelambakkam Road, Chennai, Tamil Nadu - 600127, India. Chennai ---------- ----------

(57) Abstract :
The present disclosure relates to an autonomous safety system for performing rescue operations in emergency events by monitoring real-time data. The system (102) includes sensors (114), and image capturing units (116) operatively coupled to processors (112) to monitor and detect environmental parameters of emergency event pertains to user (106), or object trapped in borehole. The system (102) analyses environmental parameters to determine real-time data include temperature readings, structural integrity data, ultrasonic and infrared data, vibration and seismic data, and real-time visual feedback data. The system (102) predicts potential safety threats using supervised and unsupervised learning techniques based on real-time data and historical data. The system (102) actuates oxygen generation unit (118), airbag (120), and robotic arm (122) to perform rescue operation for user trapped in borehole based on potential safety threats in real-time.

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057746 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SYSTEM, DEVICE AND METHOD FOR DETECTION AND CLASSIFICATION OF BRAIN TUMORS

(51) International classification	:G06N0003040000, G06K0009620000, G06N0003080000, G06T0007000000, G16H0030400000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)VIT-AP University
Address of Applicant :Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)RUQSAR ZAITOON
Address of Applicant :D.No:18-13-8/IHC/48, Islamia Hills Colony, Chandrayan Gutta, Millat Nagar, Bandlaguda, Hyderabad - 500005, Telangana, India. Hyderabad ---------- ----------
2)HUSSAIN SYED
Address of Applicant :Associate Professor, School of Computer Science and Engineering, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------

(57) Abstract :
A system (100) for detecting and classifying brain tumors using image processing comprises a device (102) with one or more processors (202) and a memory (204) containing executable instructions that enable the system (100) to receive an input image (108) from medical imaging scans. The input image (108) is segmented into multiple patches using a neural network (104) which analyses the patches to detect the boundaries of tumors by comparing each pixel to training images stored in a database (208). The system (100) captures spatial dependencies within the patches using a graph neural network (106) to generate predictions about the presence of tumors. The predictions and detected boundaries are used to classify abnormal conditions (114), which are displayed on a computing device (110) associated with a user (116). The method (500) for detection and classification involves steps of receiving, segmenting, capturing spatial dependencies, and classifying the input image (108).

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057756 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AI BASED CLOUD DATA ANALYSIS SYSTEM

(51) International classification :G06N0020000000, G06N0003080000, G06N0003040000, G06Q0050000000, G06N0007000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. E. Poongothai
Address of Applicant :Department of Computational Intelligence, SRM Institute of Science and Technology, Kattankuthur, Tamilnadu, India – 603203 Kattankuthur ---------- ----------
2)Dr. P. Nagendra Kumar
3)Ms. Mukku Hymavathi
4)Ms. Kethireddy Siva Tanaya
5)Ms. Vidisha Tiwari
6)Dr. Y. Jahnavi
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. E. Poongothai
Address of Applicant :Department of Computational Intelligence, SRM Institute of Science and Technology, Kattankuthur, Tamilnadu, India – 603203 Kattankuthur ---------- ----------
2)Dr. P. Nagendra Kumar
Address of Applicant :Department of Computer Science and Engineering, Geethanjali Institute of Science and Technology, Gangavaram(V), Kovur(Md), Nellore (Dt), Andhra Pradesh, India 524137 Gangavaram ---------- ----------
3)Ms. Mukku Hymavathi
Address of Applicant :Department of Computer Science and Engineering, N.B.K.R.I.S.T, Vidyanagar, Andhra Pradesh, India - 524413 Vidyanagar ---------- ----------
4)Ms. Kethireddy Siva Tanaya
Address of Applicant :Department of Computer Science and Engineering, Sree Venkateswara College of Engineering, Nellore, Andhra Pradesh, India- 524316 Nellore ---------- ----------
5)Ms. Vidisha Tiwari
Address of Applicant :Masters in Technology Management, University of Illinois Urbana, Champaign, USA 61820 ---------- ----------
6)Dr. Y. Jahnavi
Address of Applicant :Department of Computer Science, Government Degree College - Naidupet, Tirupathi (Dt), Andhra Pradesh, India. 524126 Naidupet ---------- ----------

(57) Abstract :
ABSTRACT Our Invention is “device to improve the AI Algorithm Performance “ is a current age of the Fourth Industrial Revolution (4IR or Industry 4.0), the digital world has a wealth of data, such as Internet of Things (IoT) data, cybersecurity data, mobile data, business data, social media data, health data, etc. To intelligently analyze these data and develop the corresponding smart and automated applications, the knowledge of artificial intelligence (AI), particularly, machine learning (ML) is the key. Various types of machine learning algorithms such as supervised, unsupervised, semi-supervised, and reinforcement learning exist in the area. Besides, the deep learning, which is part of a broader family of machine learning methods, can intelligently analyze the data on a large scale. In this invention, we present a comprehensive view on these machine learning algorithms that can be applied to enhance the intelligence and the capabilities of an application. Thus, this study’s key contribution is explaining the principles of different machine learning techniques and their applicability in various real-world application domains, such as cybersecurity systems, smart cities, healthcare, e-commerce, agriculture, and many more. We also highlight the challenges and potential research directions based on our study. Overall, this invention aims to serve as a reference point for both academia and industry professionals as well as for decision-makers in various real-world situations and application areas, particularly from the technical point of view.

No. of Pages : 9 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057757 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : QUAMIN AGRICARE 1.0: A PRECISION AGRICULTURE PLATFORM FOR OPTIMIZED CROP MANAGEMENT AND FOOD SAFETY

(51) International classification	:G06Q0050020000, G06Q0010060000, H04L0009060000, H04L0009320000, G06Q0010080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Manish Kumar
Address of Applicant :SC-304, Shriram Surabhi, OPP-KSSEM College, Off Kanakapura Road, Mallasandra,Bangalore-560109 Bangalore ---------- ----------
2)Prof. Dr. Reena Singh
3)Mr. Pawan Kumar Singh
4)Prof. Dr. B.K.Sarkar
5)Prof.(Dr.) Vandana Singh
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Manish Kumar
Address of Applicant :SC-304, Shriram Surabhi, OPP-KSSEM College, Off Kanakapura Road, Mallasandra,Bangalore-560109 Bangalore ---------- ----------
2)Prof. Dr. Reena Singh
Address of Applicant :Co- Founder, Research Unit -Geh Research Office T “A” 1104, Chembur -400071, M West, Mumbai, MH, India. Mumbai ---------- ----------
3)Mr. Pawan Kumar Singh
Address of Applicant :Co-Founder ,Geh Press Office, Rajeev Nagar, Lucknow UP, India-226002 Lucknow ---------- ----------
4)Prof. Dr. B.K.Sarkar
Address of Applicant :Patent Guru, Research Unit -Geh Research Office T “A” 1104, Chembur -400071, M West, Mumbai, MH, India. Mumbai ---------- ----------
5)Prof.(Dr.) Vandana Singh
Address of Applicant :Founder, Geh Press Office, Rajeev Nagar, Lucknow UP, India-226002 Lucknow ---------- ----------

(57) Abstract :
ABSTRACT Quamin AgriCare 1.0 is a comprehensive platform leveraging IoT, AI, and blockchain technologies to revolutionize agriculture and food safety. The platform integrates precision farming, predictive analytics, and supply chain management to enhance crop yields, reduce waste, and ensure transparency. Farmers, Local Agriculture Researchers (Scientists), suppliers, and consumers are connected through a decentralized network, enabling data-driven decision-making, traceability, and smart contracts. Quamin AgriCare 1.0 transforms the agriculture industry, promoting sustainability, efficiency, and trust

No. of Pages : 8 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057758 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AI BASED ENGLISH SPEAKING CORRECTION METHOD AND PROCESS

(51) International classification :G06F0040253000, G06F0040211000, G09B0019060000, G10L0015190000, G06F0040550000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr.D.J.B.Esther Rajathi
Address of Applicant :Assistant Professor , Sathyabama Institute of Science and Technology, Jeppiar Nagar, Rajiv Gandhi Salai, Chennai - 600119 Chennai ---------- ----------
2)Dr. Lizy V
3)Dr. N.Safrine
4)Ms. K. Swarnamughi
5)Ms. S. Aishwarya
6)Ms. S. Nithyasri
7)Ms. M. Kavipriya
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.D.J.B.Esther Rajathi
Address of Applicant :Assistant Professor , Sathyabama Institute of Science and Technology, Jeppiar Nagar, Rajiv Gandhi Salai, Chennai - 600119 Chennai ---------- ----------
2)Dr. Lizy V
Address of Applicant :Assistant Professor , Sathyabama Institute of Science and Technology, Jeppiar Nagar, Rajiv Gandhi Salai, Chennai - 600119 Chennai ---------- ----------
3)Dr. N.Safrine
Address of Applicant :Assistant Professor , Sathyabama Institute of Science and Technology, Jeppiar Nagar, Rajiv Gandhi Salai, Chennai - 600119 Chennai ---------- ----------
4)Ms. K. Swarnamughi
Address of Applicant :Assistant Professor , Sathyabama Institute of Science and Technology, Jeppiar Nagar, Rajiv Gandhi Salai, Chennai - 600119 Chennai ---------- ----------
5)Ms. S. Aishwarya
Address of Applicant :Assistant Professor , Sathyabama Institute of Science and Technology, Jeppiar Nagar, Rajiv Gandhi Salai, Chennai - 600119 Chennai ---------- ----------
6)Ms. S. Nithyasri
Address of Applicant :Assistant Professor , Sathyabama Institute of Science and Technology, Jeppiar Nagar, Rajiv Gandhi Salai, Chennai - 600119 Chennai ---------- ----------
7)Ms. M. Kavipriya
Address of Applicant :Assistant Professor , Sathyabama Institute of Science and Technology, Jeppiar Nagar, Rajiv Gandhi Salai, Chennai - 600119 Chennai ---------- ----------

(57) Abstract :
ABSTRACT Our Invention AI based English speaking correction method and process is a important publications like research, business pieces, and formal papers, grammar correction is vital. However, as English changes every century, several grammar correction rules have been added or modified. Online grammar checkers have been developed, which has aided most students in producing academic writing. While some systems run an algorithm based on the sort of document you are producing, others concentrate on editing the paper by adhering to certain standards. In this work. In order to assist this study in developing a solution for constructing a grammar correction tool, we analyzed publications released between 2017 and 2021 that dealt with grammar correction and grammatical mistake detection. These publications included several Natural Language Processing and models that had been offered by previous researchers.

No. of Pages : 7 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057780 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : BALANCE ASSESSOR

(51) International classification	:A61B0005110000, A61B0005000000, A63B0026000000, A61N0001365000, H04N0005225000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. MGR Educational and Research Institute
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu – 600095. Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)RAJALAXMI.V
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu – 600095. Chennai ---------- ----------
2)BHAVANI.V
Address of Applicant :Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, Tamil Nadu – 600095. Chennai ---------- ----------

(57) Abstract :
The objective of the present invention is to reduce the risk of fall and to determine the level of balance system, functional strength, and mental focus. Moreover, it helps us to diagnose the patient's posture using ampu6050 accelerometer sensor, audio-visual feedback is determined using the camera, power grip, strength will be measured using a pressure sensor, and weight balance will be measured by a load cell. This will assess and plan exercises for patients with risk of fall and balance impairment, improve functional strength, balance and coordination. Fall is considered very normal but if there is proper awareness the there is much chances for preventing fall.

No. of Pages : 15 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057784 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : VIDEO SENSOR PRE-FALL PREDICTION SYSTEM USING IOT AND DEEP LEARNING MODEL

(51) International classification :G08B0021040000, A61B0005000000, G16H0050200000, A61B0005110000, G16H0040670000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Justin Joy
Address of Applicant :31/206, Anugraham (H), Lane 6, Junior Janatha Road, Vytilla PO, Kochi ---------- ----------
2)Dr. Helen Josephine V L
3)Dr. Tripti Mahara
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Justin Joy
Address of Applicant :31/206, Anugraham (H), Lane 6, Junior Janatha Road, Vytilla PO, Kochi ---------- ----------
2)Dr. Helen Josephine V L
Address of Applicant :Associate Professor, Business Analytics Specialisation, School of Business and Management, Christ (Deemed to be University), Kengeri Campus, Kanminike, Kumbalagodu, Mysore Road, Bangalore Bangalore ---------- ----------
3)Dr. Tripti Mahara
Address of Applicant :Associate Professor, Prin.L.N.Welingkar Institute of Management Development and Research, 102/103, Electronic City Phase-1, Hosur Road, Bengaluru 560100, Karnataka Bangalore ---------- ----------

(57) Abstract :
7. ABSTRACT OF THE INVENTION The Video Sensor Pre-Fall Prediction System (VSPFPS) is an innovative technology tailored to anticipate pre-fall incidents among elderly individuals or individuals requiring assistance due to illness. It integrates a pre-fall detection deep learning unit with a sensor unit comprising both active and passive sensors. Active sensors, including accelerometers and gyroscopes, detect abrupt motion changes and shifts in body position, while passive sensors like pressure sensors monitor changes in posture and movement patterns discreetly. The system's pre-fall safety decision support system processes inputs from both units, activating alarms and deploying airbags when necessary. Notifications are sent to stakeholders' mobile devices and cloud services, ensuring timely assistance and support. By shifting focus from reactive to proactive fall prevention, VSPFPS aims to safeguard the well-being of elderly individuals by providing immediate aid and preventing severe injuries. Through its comprehensive monitoring and proactive intervention capabilities, the system addresses the urgent need for efficient pre-fall prediction to mitigate the rising incidents of fall-related injuries and fatalities among seniors living alone.

No. of Pages : 17 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057808 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ARTIFICIAL INTELLIGENCE FOR MITIGATING FUTURE PANDEMICS

(51) International classification	:A61K0039000000, G16H0010200000, G16H0050800000, G16H0050700000, G16H0015000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)RAJARAJESWARI COLLEGE OF ENGINEERING
Address of Applicant :Ramohalli Cross, Mysore Road, Kumbalagodu, Bangalore, Karnataka-560074 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Sivakumar Duraisamy
Address of Applicant :Professor, Department of Computer Science and Engineering, Rajarajeswari College of Engineering, Ramohalli Cross, Mysore Road, Kumbalagodu, Bangalore Kumbalagodu ---------- ----------
2)Dr. M. Selvi
Address of Applicant :Associate Professor, Department of Computer Science and Engineering, Rajarajeswari College of Engineering, Ramohalli Cross, Mysore Road, Kumbalagodu, Bangalore Kumbalagodu ---------- ----------
3)Mr. T. Auntin Jose
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Rajarajeswari College of Engineering, Ramohalli Cross, Mysore Road, Kumbalagodu, Bangalore Kumbalagodu ---------- ----------
4)Mr. A. Sunil
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Rajarajeswari College of Engineering, Ramohalli Cross, Mysore Road, Kumbalagodu, Bangalore Kumbalagodu ---------- ----------
5)Ms. B.R. Rashmi
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Rajarajeswari College of Engineering, Ramohalli Cross, Mysore Road, Kumbalagodu, Bangalore Kumbalagodu ---------- ----------

(57) Abstract :
Using vast amounts of clinical case data, AI could examine the epidemiological traits, clinical traits, and treatment outcomes of COVID-19. AI has also been utilized to help diagnosis through quantitative digital analysis of medical imagery. It made the expert's knowledge system more firmly embedded in the model. Robots can provide food and medication to patients, monitor for fevers, clean rooms, and even reduce the need for nurses to be there. AI, for example, can help ambulances move quickly through traffic while still providing medical attention. Future pandemics can be avoided by giving priority to the discovery and manufacturing of vaccinations against recognized high-risk diseases. Furthermore, it is imperative to guarantee universal access to vaccines in order to curb the spread of infectious illnesses.

No. of Pages : 10 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024

(21) Application No.202441057815 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : BIG DATA SOURCE TO DETECT THE DATA LEAKS USING SQL AND AI SYSTEM

(51) International classification	:G06N0005040000, G06F0021620000, G06N0020000000, G06F0016250000, H04L0067010000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr.A.Amudha
Address of Applicant :Assistant Professor / Computer Science Engineering, Bharath Niketan Engineering College, Aundipatty - 625536 ---------- ----------
2)T.Rambaskar
3)Dr.B. Srinivasa Rao
4)Dr. Anish Thomas
5)Dr.P.Nisha
6)Dr.A.Regita Thangam
7)Evance Leethial. R
8)M.Suresh
9)Dr.J.Senthil Murugan
10)Jibu J V
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr.A.Amudha
Address of Applicant :Assistant Professor / Computer Science Engineering, Bharath Niketan Engineering College, Aundipatty - 625536 ---------- ----------
2)T.Rambaskar
Address of Applicant :Assistant Professor / Computer Science, NMS S Vellaichamy Nadar College, Nagamalaipudukottai, Madurai – 625019 ---------- ----------
3)Dr.B. Srinivasa Rao
Address of Applicant :Professor, Department of Computer Science and Engineering, Gokaraju Rangaraju Institute of Engineering and Technology, Bachupally, Hyderabad-500090 ---------- ----------
4)Dr. Anish Thomas
Address of Applicant :Assistant Professor (Sr), Department of Electronics, Saintgits College of Engineering, Kottayam ---------- ----------
5)Dr.P.Nisha
Address of Applicant :Assistant professor / EEE, St.Joseph's Institute of Technology, OMR, Chennai -600119 ---------- ----------
6)Dr.A.Regita Thangam
Address of Applicant :Asst Professor / Computer Applications, St.Xavier's College, Palayamkottai, Tirunelveli District- 627002 ---------- ----------
7)Evance Leethial. R
Address of Applicant :Assistant Professor / Computer Science and Engineering, Nehru Institute of Technology, Jawahar Gardens, Kaliapuram, Thirumalayampalayam, Coimbatore-641105 ---------- ----------
8)M.Suresh
Address of Applicant :Assistant Professor / ECE, Rajarajeswari College of Engineering, Bengaluru-560074 ---------- ----------
9)Dr.J.Senthil Murugan
Address of Applicant :Professor /CSE, Vel Tech High Tech Dr. Rangarajan Dr.Sakunthala Engineering College, Avadi, Chennai ---------- ----------
10)Jibu J V
Address of Applicant :Assistant Professor, Electronics and Communication Engineering, College of Engineering, Karunagappalli, Thodiyoor-690523 ---------- ----------

(57) Abstract :
The proposed invention provides a sophisticated system for detecting data leaks in big data environments by leveraging SQL and artificial intelligence (AI) technologies. The system integrates advanced SQL querying capabilities with AI-driven machine learning algorithms to monitor and analyze data flows in real-time, identifying anomalies that may indicate data leaks. It features distributed processing for scalability, user-friendly interfaces for easy management, and comprehensive alerting and reporting functionalities to support prompt investigation and response. This invention is designed for seamless integration with existing infrastructures, catering to various industries by ensuring robust protection of sensitive data and compliance with regulatory standards. The system's adaptability, precision, and scalability make it an essential tool for maintaining data security in complex, high-volume data environments.

No. of Pages : 29 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024

(21) Application No.202441057816 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DETECT MALWARE IN CYBER SECURITY BY USING AI AND ML

(51) International classification	:G06N0020000000, G06N0003080000, G06F0021560000, G06N0007000000, G06N0003040000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Mrs. Meenakshi V
Address of Applicant :Selection Grade Lecturer / Computer Science and Engineering, JSS Polytechnic for Women, JSS Technical Institutions Campus, Mysore ---------- ----------
2)Dr. Rakesh S
3)Rajkumar Ramasamy
4)Dr.B. Srinivasa Rao
5)Ms.A.Kavitha
6)D. Maria Sahaya Diran
7)Dr. F. R. Shiny Malar
8)Dr.V.Kavitha
9)Dr.T.Sureshkumar
10)Suganthi K
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mrs. Meenakshi V
Address of Applicant :Selection Grade Lecturer / Computer Science and Engineering, JSS Polytechnic for Women, JSS Technical Institutions Campus, Mysore ---------- ----------
2)Dr. Rakesh S
Address of Applicant :Associate Professor / CSE, CMR Institute of Technology, Kandlakoya (V), Medchal Road, Hyderabad, 500014 ---------- ----------
3)Rajkumar Ramasamy
Address of Applicant :Assistant Professor, Computer Science and Engineering, Rajarajeswari College of Engineering, Ramohalli Cross, Kumbalgodu, Bengaluru-560074 ---------- ----------
4)Dr.B. Srinivasa Rao
Address of Applicant :Professor, Department of Computer Science and Engineering, Gokaraju Rangaraju Institute of Engineering and Technology, Bachupally, Hyderabad-500090 ---------- ----------
5)Ms.A.Kavitha
Address of Applicant :Assistant Professor/Information Technology, St.Joseph's college of Engineering, Old Mamallapuram Road, Semmencherry, Chennai ---------- ----------
6)D. Maria Sahaya Diran
Address of Applicant :Assistant Professor / Commerce, Kamaraj College, Tuticorin ---------- ----------
7)Dr. F. R. Shiny Malar
Address of Applicant :Professor & Head, Computer Science and Engineering, Stella Mary's College of Engineering, Aruthenganvilai, Azhikal Post -629202 ---------- ----------
8)Dr.V.Kavitha
Address of Applicant :Associate Professor / Computer Science and Engineering, Velalar College of Engineering and Technology & Thindal, Erode - 638012 ---------- ----------
9)Dr.T.Sureshkumar
Address of Applicant :Professor & Head, Information Technology, Nehru Institute of Technology, Coimbatore - 641105 ---------- ----------
10)Suganthi K
Address of Applicant :Assistant Professor / Civil Engineering, Arasu Engineering College, Kumbakonam -612501 ---------- ----------

(57) Abstract :
The proposed invention is a sophisticated malware detection system utilizing artificial intelligence (AI) and machine learning (ML) to enhance cybersecurity. The system aggregates data from various sources, preprocesses it for quality, and employs supervised, unsupervised, and reinforcement learning models to identify both known and unknown malware. It features automated response mechanisms to mitigate threats in real-time and includes robust privacy-preserving techniques to protect user data. The system generates detailed threat reports and alerts, providing comprehensive protection across diverse environments such as enterprise networks, cloud infrastructures, personal devices, and IoT ecosystems. This adaptive and dynamic approach ensures robust defense against evolving cyber threats, significantly enhancing overall cybersecurity.

No. of Pages : 25 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057830 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : FARMER BOT FOR YIELD PREDICTION AND FERTILIZER RECOMMENDATIONS

(51) International classification :G06N0020000000, H04L0051020000, G06N0003000000, G06N0005020000, G06N0005040000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)S SOUNDHAR
Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE V S B COLLEGE OF ENGINEERING TECHNICAL CAMPUS ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)S Soundhar
Address of Applicant :Assistant Professor AI&DS V S B College of Engineering Technical Campus Coimbatore Coimbatore ---------- ----------
2)M Abernakumari
Address of Applicant :Assistant Professor,AI&DS V S B College of Engineering Techmical Campus Coimbatore Coimbatore ---------- ----------
3)D Jeevitha
Address of Applicant :Assistant Professor,AI&DS V S B College of Engineering Techmical Campus Coimbatore Coimbatore ---------- ----------
4)D S Jaya Kumari
Address of Applicant :Assistant Professor AI&DS V S B College of Engineering Techmical Campus Coimbatore Coimbatore ---------- ----------
5)V MurugaLakshmi
Address of Applicant :Assistant Professor AI&DS V S B College of Engineering Techmical Campus Coimbatore Coimbatore ---------- ----------
6)F Theophilus
Address of Applicant :Assistant Professor AI&DS V S B College of Engineering Techmical Campus Coimbatore Coimbatore ---------- ----------
7)Dr R Murugadoss
Address of Applicant :Professor ,AI&DS,V S B College of Engineering Techmical Campus Coimbatore Coimbatore ---------- ----------
8)Dr P Venkadesh
Address of Applicant :Professor ,AI&DS, V S B College of Engineering Techmical Campus Coimbatore Coimbatore ---------- ----------

(57) Abstract :
This study develops a chat room and a Chat–Bot to discuss the prevailing issues related to farming with peers and expertise and support farmers to make timely decision on farming. A standard set of questions was identified through discussions and surveys with farmers, expertise and other stakeholders. Intents, which the users might want to know, and examples, which the users use to explain a specific intent and entities that are different objects referring to an intent were identified from the questions. Artificial Intelligence Markup Language (AIML) was used to train a model, which predicts an intent based on the given example. The Chat-Bot was implemented in a cloud platform and therefore, the client end does not require more computational resources. Farmers loose their yield because they lack knowledge of new technologies and different parameters that help them increase their yield. Our proposed system performs machine learning analysis on all the valuable parameters required for increasing the farmers yield .We analyse the weather , season, rainfall ,and type of soil of a region and based on historic data train the system to suggest which crops to grow , and which mix crops grown together increase their yield We also answer all these farmers questions using auto-chat bot .This chat bot is NLP trained hence it learns on its own and improvises its answers .This system helps farmers in remote places where no connectivity is present to better understand the crop to be grown based on atmospheric conditions and also answer their basic questions on farming

No. of Pages : 9 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :30/07/2024

(21) Application No.202441057831 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : INTEGRATING AERIAL INNOVATION DRONE-BASED SEED SPREADING AND LEAF DISEASE DETECTION IN AGRICULTURE

(51) International classification :G06Q0050020000, B64C0039020000, G06N0003080000, B64D0001180000, A01C0001060000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Mr.S.P.Ramesh, Galgotias University
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, School of Computing Science & Engineering, Galgotias University, Sector 17A, Yamuna Expy, Greater Noida, Uttar Pradesh-203201 Greater Noida ---------- ----------
2)Mr.P.Selvaraj, Galgotias University
3)Mr. A.Venkatesan, Galgotias University
4)Mr.P.RajaKumar, Galgotias University
5)Mr. R.RadhaKrishnan,Galgotias University
6)Mr.Sivakumar Madeshwaran, Galgotias University
7)Mr.Infant Leo S, Galgotias University
8)Ms.G.Abirami, AMET University
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr.S.P.Ramesh
Address of Applicant :Galgotias University, Assistant Professor, Department of Computer Science and Engineering, School of Computing Science & Engineering, Galgotias University, Sector 17A, Yamuna Expy, Greater Noida, Uttar Pradesh-203201 Greater Noida ---------- ----------
2)Mr.P.Selvaraj
Address of Applicant :Galgotias University, Assistant Professor, Department of Computer Science and Engineering, School of Computing Science & Engineering, Galgotias University, Sector 17A, Yamuna Expy, Greater Noida, Uttar Pradesh-203201 Greater Noida ---------- ----------
3)Mr. A.Venkatesan
Address of Applicant :Galgotias University, Assistant Professor, Department of Electrical, Electronics and Communication Engineering, School of Engineering, Galgotias University, Sector 17A, Yamuna Expy, Greater Noida, Uttar Pradesh-203201 Greater Noida ---------- ----------
4)Mr.P.RajaKumar
Address of Applicant :Galgotias University, Assistant Professor, Department of Computer Science and Engineering, School of Computing Science & Engineering, Galgotias University, Sector 17A, Yamuna Expy, Greater Noida, Uttar Pradesh-203201 Greater Noida ---------- ----------
5)Mr. R.RadhaKrishnan
Address of Applicant :Assistant Professor, Galgotias University, Department of Computer Science and Engineering, School of Computing Science & Engineering, Galgotias University, Sector 17A, Yamuna Expy, Greater Noida, Uttar Pradesh-203201 Greater Noida ---------- ----------
6)Mr.Sivakumar Madeshwaran
Address of Applicant :Galgotias University, Assistant Professor, Department of Computer Science and Engineering, School of Computing Science & Engineering, Galgotias University, Sector 17A, Yamuna Expy, Greater Noida, Uttar Pradesh-203201 Greater Noida ---------- ----------
7)Mr.Infant Leo S
Address of Applicant :Galgotias University, Assistant Professor, Department of Electrical, Electronics and Communication Engineering, School of Engineering, Galgotias University, Sector 17A, Yamuna Expy, Greater Noida, Uttar Pradesh-203201 Greater Noida ---------- ----------
8)Ms.G.Abirami
Address of Applicant :AMET University, Assistant Professor, Department of Computer Science and Engineering, AMET University, Kanathur, Chennai, Tamil Nadu, Pin: 603112 Chennai ---------- ----------

(57) Abstract :
The inefficiency and labor-intensiveness of conventional seed dispersal techniques, as well as the difficulty in identifying and managing plant diseases early on, are the two main issues facing the agricultural industry and are the source of the problem this invention attempts to solve. Uneven seed distribution from traditional seeding methods can result in less-than-ideal crop yields and more resource waste. In addition, the process of manually monitoring crop health to detect diseases is labor-intensive, time-consuming, and prone to human error. This can cause delays in intervention, which can result in considerable crop loss and lower yields. These difficulties have an impact on farming businesses' capacity to make a profit, but they also worsen environmental problems by causing excessive use of pesticides, fertilizers, and water. By combining drone technology for accurate and effective seed distribution with cutting-edge deep learning algorithms for precise and timely leaf disease diagnosis, the idea aims to solve these issues. By increasing output, decreasing labor costs, and boosting crop health and productivity, this integrated strategy seeks to transform agricultural practices and provide a long-term response to the urgent demands of the agriculture industry.

No. of Pages : 8 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057835 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : FORMULATION AND EVALUATION OF ANTIMICROBIAL HERBAL SOAP USING EXTRACT OF SPHAERANTHUS INDICUS AND OILS OF ACALYPHA INDICIA AND AZADIRACHTA INDICA

(51) International classification :A61K0036280000, A61K0036470000, A61P0031040000, A61P0031100000, A61Q0005000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. R. SRINIVASAN
Address of Applicant :Professor and Dean Faculty of Pharmacy Bharath Institute of Higher Education and Research Selaiyur, Chennai-600073 Chennai ---------- ----------
2)S. HEMNATH
3)E. KEERTHIVASAN
4)M. MIDHUN KARTHICK
5)V. VIKRAM
6)S. YUVAN SANKAR
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. R. SRINIVASAN
Address of Applicant :Professor and Dean Faculty of Pharmacy Bharath Institute of Higher Education and Research Selaiyur, Chennai-600073 Chennai ---------- ----------
2)S. HEMNATH
Address of Applicant :Faculty of Pharmacy Bharath Institute of Higher Education and Research Selaiyur, Chennai-600073 Chennai ---------- ----------
3)E. KEERTHIVASAN
Address of Applicant :Faculty of Pharmacy Bharath Institute of Higher Education and Research Selaiyur, Chennai-600073 Chennai ---------- ----------
4)M. MIDHUN KARTHICK
Address of Applicant :Faculty of Pharmacy Bharath Institute of Higher Education and Research Selaiyur, Chennai-600073 Chennai ---------- ----------
5)V. VIKRAM
Address of Applicant :Faculty of Pharmacy Bharath Institute of Higher Education and Research Selaiyur, Chennai-600073 Chennai ---------- ----------
6)S. YUVAN SANKAR
Address of Applicant :Faculty of Pharmacy Bharath Institute of Higher Education and Research Selaiyur, Chennai-600073 Chennai ---------- ----------

(57) Abstract :
Skin infections are commonly caused by improper hygiene, which caused by various microorganism such as bacteria and Fungal, in particular, often result from the interaction between sweat and skin in the absence of sunlight, creating a suitable environment for the growth of fungi and bacteria, which leads to infections. These infections can manifest as various conditions such as ringworm on the skin, dandruff on the scalp, and genital infections. Certain herbal extracts possess antibacterial and antifungal properties. The aim of the present study is to formulate and evaluate an antimicrobial activity of herbal soap using extracts of Sphaeranthus indicus, Acalypha indica, and Azadirachta indica. Sphaeranthus indicus (East Indian globe thistle), is one of the key ingredients. The antibacterial and antifungal activities of the prepared formulations were tested using the agar well diffusion method against specific organisms. The formulations were also evaluated for various physicochemical parameters. The results finding that the formulations of F4 shown intermediate effectiveness, particularly against fungus such as Aspergillus oryzae. Compare to standard soap solutions of Ketoconazole (Which exhibited advanced antimicrobial activity, highlighting its superior efficacy in inhibiting the growth of the tested microbial strains). The ingredient of our targeted plant are easily available and effectiveness of these plants offer manufacturers cost-effective benefits with minimal or no side effects.

No. of Pages : 21 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057844 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : IOT AND GENERATIVE AI BASED SMART CAR PARKING SYSTEM

(51) International classification	:G07B0015020000, G06Q0050300000, B60R0013100000, G06Q0020320000, G08G0001017000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Shivi Khanna
Address of Applicant :B6101, West End Heights Apartment , Akshay Nagar ---------- ----------
2)CHRIST University
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Shivi Khanna
Address of Applicant :School of Business and Management , CHRIST University Bangalore Bangalore ---------- ----------
2)Ms Poornima Purushotham
Address of Applicant :School of Business and Management , CHRIST University , Bangalore Bangalore ---------- ----------

(57) Abstract :
This technology will utilize IoT and Generative AI to develop a system of efficient, driver-convenient, Cashless, and anti-fraudulent Car parking facilities. Application of this technique will also ensure best utilization of parking space, and reduce fuel consumption of drivers while searching for parking slots at parking facilities. This technique will ensure that the driver does not need to have a specific parking mobile application (thus reducing technology hustle). It will link parking with vehicle license plate and Fastag, thus during vehicle exit driver experiences a cashless parking fee payment experience. For exit of the vehicle a unique OTP code will be required which will be sent to the registered phone no of the linked fastag and vehicle license owner, it will reduce the stealing of the vehicle and its future misuse by fraudulent. Also misuse of vehicles using incorrect license plates can be avoided.

No. of Pages : 13 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057873 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : WEATHER BASED CROP PREDICTION USING MACHINE LEARNING

(51) International classification :G06N0020000000, G06N0003040000, G06N0003080000, G06F0017180000, A01B0079000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)BTP Madhav
Address of Applicant :Department of ECE, Koneru Lakshmaiah Education Foundation, Vaddeswaram, AP, India ---------- ----------
2)Koneru Lakshmaiah Education Foundation
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)BALAM RUFUS
Address of Applicant :Koneru Lakshmaiah Education Foundation, Guntur District, Andhra Pradesh, India, Pin Code-522302. Vaddeswaram ---------- ----------
2)PALNATI HARI PRAKASH
Address of Applicant :Koneru Lakshmaiah Education Foundation, Guntur District, Andhra Pradesh, India, Pin Code-522302. Vaddeswaram ---------- ----------
3)M. SIVA KUMAR
Address of Applicant :Koneru Lakshmaiah Education Foundation, Guntur District, Andhra Pradesh, India, Pin Code-522302. Vaddeswaram ---------- ----------
4)N.NANDA PRAKASH
Address of Applicant :Koneru Lakshmaiah Education Foundation, Guntur District, Andhra Pradesh, India, Pin Code-522302. Vaddeswaram ---------- ----------
5)B T P Madhav
Address of Applicant :Koneru Lakshmaiah Education Foundation, Guntur District, Andhra Pradesh, India, Pin Code-522302. Vaddeswaram ---------- ----------
6)Sk. Hasane Ahammad
Address of Applicant :Koneru Lakshmaiah Education Foundation, Guntur District, Andhra Pradesh, India, Pin Code-522302. Vaddeswaram ---------- ----------

(57) Abstract :
Weather-based crop prediction using machine learning has emerged as a transformative approach in modern agriculture, offering the potential to optimize resource management, enhance yield predictions, and mitigate risks associated with climate variability. This abstract provides a concise overview of the theoretical and practical aspects involved in leveraging machine learning for crop prediction based on weather conditions. The foundation of this methodology lies in the careful selection and integration of diverse datasets, including historical weather patterns, soil characteristics, and crop-specific variables. Various machine learning algorithms, ranging from traditional regression models to advanced neural networks, are employed to analyze these data sets and identify intricate patterns that influence crop growth. Theoretical considerations encompass model training, validation methodologies, and the interpretation of predictive analytics, ensuring robustness and accuracy. The integration of remote sensing technologies and IoT devices further enhances real-time data acquisition, providing timely insights into crop health and environmental parameters. Ethical and social implications, as well as scalability and adaptability to diverse agricultural landscapes, are critical components of the theoretical framework. Continuous learning mechanisms and model updates address the dynamic nature of agricultural systems. Ultimately, the theoretical analytics of weather-based crop prediction using machine learning underscore the potential for revolutionizing agricultural practices by facilitating data-driven decision- making, optimizing resource utilization, and contributing to sustainable and resilient farming systems.

No. of Pages : 14 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202441057879 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : ARTIFICIAL INTELLIGENCE BASED WATER PURIFICATION SYSTEM TO SUPPLY DRINKING WATER WITH RIGHT NUTRIENTS

(51) International classification	:C02F0001000000, C02F0001280000, C02F0001440000, C02F0001500000, C02F0001320000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr. R. MURUGADOSS
Address of Applicant :PROFESSOR DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE V.S.B. COLLEGE OF ENGINEERING TECHNICAL CAMPUS KINATHUKADAVU COIMBATORE - 642109 TAMILNADU COIMBATORE ---------- ----------
2)Dr. D. SHAMIA
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. R. MURUGADOSS
Address of Applicant :PROFESSOR DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE V.S.B. COLLEGE OF ENGINEERING TECHNICAL CAMPUS KINATHUKADAVU COIMBATORE - 642109 TAMILNADU COIMBATORE ---------- ----------
2)Dr. D. SHAMIA
Address of Applicant :PROFESSOR DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING V.S.B. COLLEGE OF ENGINEERING TECHNICAL CAMPUS KINATHUKADAVU COIMBATORE - 642109 TAMILNADU COIMBATORE ---------- ----------

(57) Abstract :
Artificial Intelligence based water purification system to supply drinking water with right nutrients is the proposed invention. The proposed invention focuses on designing a water filter that will filter of the water using the ceramic candles, one of the oldest methodologies to filter water. The ceramic candle is used such that the water is not cleaned too much, which is the major drawback of the existing water filters. The proposed water filter is designed to include the minerals, such that they can be added in required amount. This will help the water purifier users to stay away from the problems of mineral deficiency and stay healthy.

No. of Pages : 20 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :31/07/2024
(21) Application No.202441057896 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : LI-FI BASED ROAD SAFETY AND AUTOMATIC TRAFFIC CLEARANCE SYSTEM

(51) International classification :G07C0005000000, G08G0001010000, G08G0001160000, G08G0001090000, B60R0021000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Karpagam Academy of Higher Education
Address of Applicant :Pollachi Main Road, Eachaneri Post, Coimbatore 641 021 Coimbatore ---------- ----------
2)Karpagam College of Engineering
3)E.J.Priyadharsini
4)Inigo Arputha Allwin J
5)Jairam G
6)Jayasurya P
7)Amuthan R
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)E.J.Priyadharsini
Address of Applicant :Department of ECE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore Coimbatore ---------- ----------
2)Inigo Arputha Allwin J
Address of Applicant :Department of ECE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore Coimbatore ---------- ----------
3)Jairam G
Address of Applicant :Department of ECE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore Coimbatore ---------- ----------
4)Jayasurya P
Address of Applicant :Department of ECE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore Coimbatore ---------- ----------
5)Amuthan R
Address of Applicant :Department of ECE, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari Post, Coimbatore Coimbatore ---------- ----------

(57) Abstract :
Due to the extensive usage of traffic accident detection in intelligent transportation systems, it is currently one of the most fascinating issues. Inexperienced drivers, driving under the influence, traveling too quickly, and fatigue are the leading causes of these traffic incidents. It has been the subject of numerous campaigns to stop these auto accidents. Still, not all of them could avoid this. We provide in this work an enhanced LIFI-based accident detection system. This article presents an intelligent method for preventing and detecting accidents that save human lives. This prophylactic section contains a multitude of sensors, including alcohol, ultrasonic, and eye blink ones.

No. of Pages : 12 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :31/07/2024
(21) Application No.202441057897 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DEVELOPING EFFECTIVE COMMUNICATION SKILLS FOR LEADERSHIP IN MULTINATIONAL TEAMS

(51) International classification	:G08G0001000000, G06Q0010100000, G06Q0050200000, C12N0009120000, B29L0009000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Mrs. Rinki Sanyal
Address of Applicant :Assistant Professor, Department of FME, St. Martin's Engineering College, Dhullapally, Secunderabad, Telangana -500010, India. Secunderabad ---------- ----------
2)Dr. V. Umamaheswari
3)Dr. B. Satyakeerthiraju
4)Mr. M. Thande Devarajan
5)Mr. Vinod N. Alone
6)Dr. Anupam Sharma
7)Ms. B. Rajeswari
8)Mr. Vemuganti Sreehari
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mrs. Rinki Sanyal
Address of Applicant :Assistant Professor, Department of FME, St. Martin's Engineering College, Dhullapally, Secunderabad, Telangana -500010, India. Secunderabad ---------- ----------
2)Dr. V. Umamaheswari
Address of Applicant :Associate Professor, Research Department of English, A.D.M. College for Women (Autonomous), No.01, College Road, Velippalayam, Nagapattinam, Tamilnadu- 611001, India. Nagapattinam ---------- ----------
3)Dr. B. Satyakeerthiraju
Address of Applicant :Assistant Professor of English, Department of BS&H, BVRIT, Narsapur, Medak, Telangana- 502313, India. Medak ---------- ----------
4)Mr. M. Thande Devarajan
Address of Applicant :Assistant Professor, Department of English, Velammal College of Engineering and Technology (Autonomous), Madurai, Tamil Nadu – 625007, India. Madurai ---------- ----------
5)Mr. Vinod N. Alone
Address of Applicant :Assistant Professor, Department of Computer Engineering, VPPCOE & VA, Sion, Mumbai, Maharashtra - 400022, India. Mumbai ---------- ----------
6)Dr. Anupam Sharma
Address of Applicant :Associate Professor, Department of Applied Sciences & Humanities, Delhi Technical Campus, Greater Noida, Uttar Pradesh – 201310, India. Greater Noida ---------- ----------
7)Ms. B. Rajeswari
Address of Applicant :Assistant Professor, Department of FME, St. Martin's Engineering College, Dhullapally, Secunderabad, Telangana -500010, India. Secunderabad ---------- ----------
8)Mr. Vemuganti Sreehari
Address of Applicant :Assistant Professor, Department of English, Malla Reddy Engineering College, Maisammaguda, Dhulapally, Opp: Forest Academy, Secunderabad, Telangana -500100, India. Secunderabad ---------- ----------

(57) Abstract :
Developing Effective Communication Skills for Leadership in Multinational Teams ABSTRACT For leaders to successfully negotiate the challenges that come with their involvement in a wide variety of multilateral work situations, they need to build the necessary abilities. The process of encouraging efficient collaboration among members of the platoon who come from a variety of diverse backgrounds emphasizes the significance of artistic awareness, emotional intelligence, and adaptable communication approaches. This is because the platoon members come from a wide range of various backgrounds. This invention aims to identify these approaches to find fashionable ways of prostrating linguistic boundaries and creative misconstructions that regularly affect platoon performance. The goal of this invention is to identify these approaches. The accomplishment of this purpose is accomplished via the use of the analysis of case studies as well as the collection of empirical data. In addition to this, it sheds light on the role that technology plays in enabling communication that is not only effective but also clear across a variety of time zones and geographical locations. One of the most important contributions that technology makes is this fact. One of the ultimate goals of the invention is to provide leaders with a comprehensive framework that will enable them to improve their communication abilities. This is one of the many ultimate goals that the invention has. This, in turn, will ultimately result in increased unit cohesion, productivity, and overall organizational performance in an environment that is defined by globalization.

No. of Pages : 10 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :31/07/2024
(21) Application No.202441057932 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN IN-WHEEL IMPULSE GENERATING APPARATUS FOR A LOCOMOTORY DEVICE

(51) International classification	:B60K0007000000, A61B0017860000, F03D0017000000, A61H0001000000, B25B0021020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)SRIVARU MOTORS PRIVATE LIMITED
Address of Applicant :SF NO. 224/2, RD OPP TO NEPC TEXTILES, NAICKEN THOTTAM, KANNAMPALAYAM POST, TRICHY ROAD, SULUR, COIMBATORE - 641402, TAMIL NADU, INDIA Coimbatore ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mohanraj Ramasamy
Address of Applicant :No. 2/82, Rajammal Thottam, Kullakapalayam, Pollachi – 641002 Pollachi ---------- ----------
2)Yuvaraj Sankar J
Address of Applicant :No. 3/15, Annama Naicker Street, Kuniyamuthur, Coimbatore – 641008 Coimbatore ---------- ----------
3)Venkateswaran C
Address of Applicant :No. 626, V T Medu, Vellithiruppur, Anthiyur, Erode – 638314 Anthiyur ---------- ----------

(57) Abstract :
An in-wheel impulse generating apparatus, for a locomotory device, is disclosed. Said apparatus broadly comprises: a pirouetting mechanism; and an impulse generating mechanism. The pirouetting mechanism broadly comprises a detachable rim (10) and an at least one fastening member (11). The impulse generating mechanism broadly comprises: an at least one pirouetting member (12); an at least one rooted member (13); an at least one impulse transmitting member (17); a plurality of supporting members (18A, 18B); a plurality of bowering members (19A, 19B); a plurality of occluding members (20A, 20B); and a plurality of fixing members (21A, 21B). The disclosed apparatus offers at least the following advantages: is simple in construction; is cost-effective; offers a high efficiency; and offers easy maintenance of the apparatus, when failures or damages occur.

No. of Pages : 22 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :31/07/2024
(21) Application No.202441057933 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN IMPULSE GENERATING APPARATUS FOR A LOCOMOTORY DEVICE

(51) International classification :B25B0023145000, H02K0007060000, B25B0021020000, G02B0019000000, E05D0011100000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)SRIVARU MOTORS PRIVATE LIMITED
Address of Applicant :SF NO. 224/2, RD OPP TO NEPC TEXTILES, NAICKEN THOTTAM, KANNAMPALAYAM POST, TRICHY ROAD, SULUR, COIMBATORE - 641402, TAMIL NADU, INDIA Coimbatore ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mohanraj Ramasamy
Address of Applicant :No. 2/82, Rajammal Thottam, Kullakapalayam, Pollachi – 641002 Pollachi ---------- ----------
2)Yuvaraj Sankar J
Address of Applicant :No. 3/15, Annama Naicker Street, Kuniyamuthur, Coimbatore – 641008 Coimbatore ---------- ----------
3)Venkateswaran C
Address of Applicant :No. 626, V T Medu, Vellithiruppur, Anthiyur, Erode – 638314 Anthiyur ---------- ----------

(57) Abstract :
An impulse generating apparatus, for a locomotory device, is disclosed. Said apparatus broadly comprises: a rotating mechanism; a torque generating mechanism; and an at least one controlling member. The rotating mechanism broadly comprises a detachable rim (10). The torque generating mechanism broadly comprises: an at least one magnetic member (10); an at least one torque transmitting member (11); an at least one angular position sensing member (12); a first plurality of winding members (13); a second plurality of winding members (14); a plurality of stator frame holes (15); a plurality of yoking members (20); a detachable rim (21); an at least one twirling member (22); an at least one static member (23); a plurality of pivoting members (24A, 24B); a plurality of shielding members (25A, 25B); a plurality of sealing members (26A, 26B); and a plurality of locking members (27A, 27B). The disclosed apparatus offers at least the following advantages: is simple in construction; is cost-effective; offers a high efficiency; and/or offers easy maintenance, when failures or damages occur.

No. of Pages : 24 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :31/07/2024
(21) Application No.202441057970 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : FOOT STEERING SYSTEM FOR THREE-WHEELED VEHICLES TO ENHANCE ACCESSIBILITY FOR DISABLED INDIVIDUALS

(51) International classification	:B62D0005040000, B62K0005050000, B62K0005027000, B62K0005100000, B62K0005080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Mr.Murugan.J
Address of Applicant :Nobel Science Project Center, 8/165 Ward, 8, Pillayar Kovil Street, Rengasamy Puram, Keelaiyur Post, Melur Taluk, Madurai- 625106, Tamilnadu. Email: murugangrscientist@gmail.com ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr.Murugan.J
Address of Applicant :Nobel Science Project Center, 8/165 Ward, 8, Pillayar Kovil Street, Rengasamy Puram, Keelaiyur Post, Melur Taluk, Madurai- 625106, Tamilnadu. Email: murugangrscientist@gmail.com ---------- ----------

(57) Abstract :
The three-wheeled vehicle with a foot steering system (100) includes a base unit (502) and a steering mechanism (202). The steering mechanism (202) includes a steering column (204), a steering handle (302), and a foot steering unit (402) and those are interconnected to provide accessibility for disabled individuals to steering the three-wheeled vehicle (102). This system enhances the accessibility of three-wheeled vehicles by providing steering accessibility through the foot steering unit for those with disabilities, especially individuals who have lost their leg/s at a low cost and easily adopted the foot steering unit with the existing three-wheeled vehicle.

No. of Pages : 23 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :31/07/2024
(21) Application No.202441057971 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : UNMANNED AERIAL VEHICLE (UAV)-BASED RIVER POLLUTION DETECTION SYSTEM AND METHOD THEREOF

(51) International classification	:B64C0039020000, G01N0015140000, G06N0020000000, G06T0007110000, G01N0033000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)NITTE (DEEMED TO BE UNIVERSITY)
Address of Applicant :6TH FLOOR, UNIVERSITY ENCLAVE, MEDICAL SCIENCES COMPLEX, DERALAKATTE, MANGALURU, KARNATAKA 575018 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)PRASHANTHA KUMAR K
Address of Applicant :DEPARTMENT OF CIVIL ENGINEERING, NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE - 574110, KARNATAKA, INDIA Udupi ---------- ----------
2)DR. S. SAKTHINATHAN
Address of Applicant :DEPARTMENT OF MATERIALS AND MINERAL RESOURCES ENGINEERING, NATIONAL TAIPEI UNIVERSITY OF TECHNOLOGY (NTUT), NO. 1, SECTION 3, CHUNG-HSIAO EAST ROAD, TAIPEI, TAIWAN 106 (ROC) ---------- ----------
3)DR. K. SAKTHIPANDI
Address of Applicant :SRM TRP ENGINEERING COLLEGE, TIRUCHIRAPPALLI 621 105, TAMIL NADU, INDIA TIRUCHIRAPPALLI ---------- ----------

(57) Abstract :
Disclosed herein is an unmanned aerial vehicle (UAV)-based river pollution detection system and method thereof (100) that comprises a a data acquisition unit (102) configured to; deploy an unmanned aerial vehicle (UAV) (104) equipped with an image capturing unit (106), capture image and/or video data of the river using the image capturing unit (106). The system (100) includes a data processing unit (108) operatively connected to the data acquisition unit (102), the data processing unit (108) configured to; pre-process the data to remove noise and enhance relevant features, extract meaningful features from the pre-processed data for pollution detection. The system (100) also includes a machine learning unit (112) operatively connected to the data processing unit (108), the machine learning unit (112) configured to; classify pollution types in real-time or near real-time based on the extracted features.

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :31/07/2024
(21) Application No.202441058020 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A DEVICE FOR DELIVERING SUPPLIES

(51) International classification :G16H0040630000, G16H0040200000, G06K0007100000, A61B0018000000, A61B0005020500
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)NATIONAL ENGINEERING COLLEGE - NEW GENERATION INNOVATION AND ENTREPRENEURSHIP DEVELOPMENT CENTRE
Address of Applicant :K.R.NAGAR, KOVILPATTI - 628503, TAMIL NADU, INDIA Kovilpatti ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr J Naskath
Address of Applicant :National Engineering College, KR Nagar, Kovilpatti – 628503, Tamil Nadu Kovilpatti ---------- ----------
2)Dr B Shunmugapriya
Address of Applicant :National Engineering College, KR Nagar, Kovilpatti – 628503, Tamil Nadu Kovilpatti ---------- ----------
3)Alhaseena K M
Address of Applicant :National Engineering College, KR Nagar, Kovilpatti – 628503, Tamil Nadu Kovilpatti ---------- ----------
4)Francis Selvaraj Pandian R
Address of Applicant :National Engineering College, KR Nagar, Kovilpatti – 628503, Tamil Nadu Kovilpatti ---------- ----------

(57) Abstract :
A device for delivering supplies, is disclosed. Said device is unmanned, self-navigating, and enabling a healthcare worker to interact with patients, from remote location, without direct contact. The device broadly comprises: an upper member (1) that comprises: an at least a power supply (4), an at least a disinfecting module (5), an at least a RFID reader (6), an at least an absorbing member (7), an at least an interacting member (9), and an at least a vitals monitoring module (10); a body member (2) that comprises: an at least a communication member (8), an at least a marshalling member (11), a plurality of obstacle detecting members (12), an at least a displaying member (13), a plurality of trays (14), and a plurality of indicators (15); and a base member (3) that comprises: a plurality of impulse generating members (16), an at least a drive controller (17), a plurality of drive wheels (18), a plurality of driven wheels (19), and a plurality of mudguards.

No. of Pages : 28 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :01/07/2024
(21) Application No.202443050122 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD AND SYSTEM OF OBJECT RECOGNITIONUSING AN ASSISTIVE DEVICE FOR ASSISTING VISUALLY IMPAIRED INDIVIDUALS

(51) International classification :G09B0021000000, A61H0003060000, A61H0003000000, G06K0009620000, G06F0003160000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :
Filed on :01/01/1900
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)JSS Academy of Higher Education & Research (Deemed to be university)
Address of Applicant :Sri Shivarathreeshwara Nagara, Mysuru, Karnataka, India 570015 Mysore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Sunil Kumar D
Address of Applicant :Department of Community Medicine, JSS Medical College, Mysuru– 570015, India Mysore ---------- ----------
2)Dr Shweta Neminath Kurkuri
Address of Applicant :Department of Community Medicine, JSS Medical College, Mysuru– 570015, India Mysore ---------- ----------
3)Dr M S Mallikarjunaswamy
Address of Applicant :Department of Electronics & Instrumentation Engineering, Sri Jayachamarajendra College of Engineering, J.S.S. Science & Technology University, Mysuru-570006, India Mysore ---------- ----------
4)Dr Soumya H V
Address of Applicant :Department of Ophthalmology, JSS Medical College, JSS Academy of Higher Education and Research, Mysuru– 570015, India Mysore ---------- ----------

(57) Abstract :
METHOD AND SYSTEM OF OBJECT RECOGNITION USING AN ASSISTIVE DEVICE FOR VISUALLY IMPAIRED INDIVIDUALS 5 ABSTRACT A method and system for object recognition via an assistive device (100) for visually impaired individuals is provided. The method includes capturing one or more object 10 images of a region in the vicinity of the assistive device (100) using a pi-camera (104) associated with the assistive device, identifying an object present in front of the picamera (104) based on the captured one or more object images using machine-learning, and generating an audio output via a speaker of the assistive device based on the identification of the object, the audio output enables the visually impaired individual to 15 identify one or more individuals in the vicinity of the assistive device (100) thereby enabling autonomous mobility of the visually impaired without obstruction. The assistive device (100) is detachably attached to the body of the visually impaired individual. [FIG. 3]

No. of Pages : 43 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2024
(21) Application No.202443050432 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN ASSISTIVE DEVICE AND A METHOD FOR TEXT RECOGNITION BYVISUALLY IMPAIRED INDIVIDUALS

(51) International classification :G09B0021000000, A61H0003000000, G06N0003080000, H04N0001000000, A61H0003060000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :
Filed on :01/01/1900
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)JSS Academy of Higher Education & Research (Deemed to be university)
Address of Applicant :Sri Shivarathreeshwara Nagara, Mysuru, Karnataka, India 570015 Mysore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Shweta Neminath Kurkuri
Address of Applicant :Department of Community Medicine, JSS Medical College, Mysuru– 570015, India Mysore ---------- ----------
2)Dr Sunil Kumar D
Address of Applicant :Department of Community Medicine, JSS Medical College, Mysuru– 570015, India Mysore ---------- ----------
3)Dr M S Mallikarjunaswamy
Address of Applicant :Department of Electronics & Instrumentation Engineering, Sri Jayachamarajendra College of Engineering, J.S.S. Science & Technology University, Mysuru-570006, India Mysore ---------- ----------
4)Dr Soumya H V
Address of Applicant :Department of Ophthalmology, JSS Medical College, JSS Academy of Higher Education and Research, Mysuru– 570015, India Mysore ---------- ----------

(57) Abstract :
AN ASSISTIVE DEVICE AND A METHOD FOR TEXT RECOGNITION BY VISUALLY IMPAIRED INDIVIDUALS ABSTRACT 5 A method (500) and an assistive device (100) for text recognition by visually impaired individuals is provided. The method includes capturing (502) one or more images of a region in the vicinity of the assistive device (100) using a pi-camera (104) associated with the assistive device (100). The method further includes identifying (504) a text in 10 the captured one or more images using machine-learning and optical character recognition. The method further includes generating (506) an audio output via a speaker (110) of the assistive device (100) based on the identification of the text. The audio output enables the visually impaired individual to read text displayed in the vicinity of the assistive device (100), enabling autonomous mobility of the visually impaired with15 out obstruction, the assistive device (100) is detachably attached to the body of the visually impaired individual. [FIG. 5]

No. of Pages : 46 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :08/07/2024
(21) Application No.202443051977 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : METHOD AND 5 AN ASSISTIVE DEVICEFOR TRACKING LOCATION OF VISUALLY IMPAIRED INDIVIDUALS

(51) International classification	:G09B0021000000, A61H0003060000, H04W0084120000, H04W0004800000, A61H0003000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filed on	: :01/01/1900
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)JSS Academy of Higher Education & Research (Deemed to be university)
Address of Applicant :Sri Shivarathreeshwara Nagara, Mysuru, Karnataka, India, 570015 Mysore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr M S Mallikarjunaswamy
Address of Applicant :Department of Electronics & Instrumentation Engineering, Sri Jayachamarajendra College of Engineering, J.S.S. Science & Technology University, Mysuru Mysore ---------- ----------
2)Dr Sunil Kumar D
Address of Applicant :Department of Community Medicine, JSS Medical College, Mysuru– 570015 Mysore ---------- ----------
3)Dr Shweta Neminath Kurkuri
Address of Applicant :Department of Community Medicine, JSS Medical College, Mysuru– 570015 Mysore ---------- ----------
4)Dr Soumya H V
Address of Applicant :Department of Ophthalmology, JSS Medical College, JSS Academy of Higher Education and Research, Mysuru– 570015 Mysore ---------- ----------

(57) Abstract :
METHOD AND AN ASSISTIVE DEVICE FOR TRACKING LOCATION OF VISUALLY IMPAIRED INDIVIDUALS ABSTRACT 5 A method (500) and an assistive device (100) for tracking location of visually impaired individuals via an assistive device for the visually impaired individuals is provided. The method includes tracking (502) the location of the assistive device (100) associated with the visually impaired individuals via a GPS module (106) associated with the as10 sistive device (100). The method (500) further includes generating a short message service (SMS) indicative of the location of the assistive device via of the GPS module (106) using a Twilio application programming interface (API). The assistive device includes a camera (104) connected to a computing unit (102). The assistive device (100) further includes the computing unit (102). The assistive device (100) further in15 cludes a global positioning module (GPS) module (106) interfaced with the computing unit (102). The assistive device (100) further includes a speaker (110) for generating an audio output. [FIG. 2B]

No. of Pages : 36 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2024
(21) Application No.202443055076 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A MULTI-PORT CONVERTER SYSTEM AND METHOD FOR CONVERTING ALTERNATING CURRENT (AC) TO DIRECT CURRENT (DC)

(51) International classification :H02M7/155, H02M7/162, H02M3/335, H02M7/48, H02M1/00, H02M1/42, B60L53/22, H02J7/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :
Filed on :01/01/1900
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Indian Institute of Science
Address of Applicant :Indian Institute of Science, C.V. Raman Road, Bangalore - 560012, Karnataka, India Bangalore ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Vishnu Mahadeva Iyer
Address of Applicant :Indian Institute of Science, C.V. Raman Road, Bangalore - 560012, Karnataka, India Bangalore ---------- ----------
2)Himanshu Bhusan Sandhibigraha
Address of Applicant :Indian Institute of Science, C.V. Raman Road, Bangalore - 560012, Karnataka, India Bangalore ---------- ----------

(57) Abstract :
ABSTRACT A MULTI-PORT CONVERTER SYSTEM AND METHOD FOR CONVERTING ALTERNATING CURRENT (AC) TO DIRECT CURRENT (DC) A multi-port converter system for converting Alternating Current (AC) to Direct Current (DC) is disclosed. The system includes a multi-port converter (100), a plurality of voltage sensors (602), a plurality of current sensors (604), and a controller unit (300). The converter (100) includes a primary stage (104a) and a plurality of secondary stages (104b-n), each stage (104a,104b-n) includes switches. The converter (100) is configured to convert AC to DC with power factor correction (PFC) and allow regulation of range of DC output voltages and powers with DC ports (124a-n). The multi-port converter (100) is configured to transfer active power between the plurality of converter DC ports (124a-n) and the AC port (118). The primary stage (104a) and each of the plurality of secondary stages (104b-n) is galvanically isolated from each other using a high-frequency multi-winding transformer (120). FIG. 1

No. of Pages : 58 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2024
(21) Application No.202444053436 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : DEVICE ENABLING DATA TRANSMISSION AND SYNCHRONIZATION OF DEPTH DATA, RGB DATA WITH THE REAL TIME AND METHOD THEREOF

(51) International classification	:H04L0012280000, G06N0003040000, G06N0003080000, G01N0021890000, G08B0021220000
(31) Priority Document No	:18/395032
(32) Priority Date	:22/12/2023
(33) Name of priority country	:----------
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)E-CON SYSTEMS INDIA PRIVATE LIMITED
Address of Applicant :Unit No.43 and 44 SDF-1, MEPZ-SEZ Tambaram, Chennai - 600045, Tamil Nadu, India Chennai ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)PRABU KUMAR KESAVAN
Address of Applicant :No. 43 & 44, SDF-1, MEPZ-SEZ, Tambaram- 600045 Chennai, Tamil Nadu, India Chennai ---------- ----------

(57) Abstract :
The invention discloses a device enabling data transmission in a network communication. The device comprises a plurality of sensors and a processor. Each sensor from the plurality of sensors is configured for sensing the data in a predefined area. The processor in the device further comprises an encoder and a transmitter. The processor is configured to strip a first line of data from the predefined data received from the sensors and combine strip data to obtain a combined data stream. The encoder is configured to generate an output data stream by using the combined data stream. The transmitter is configured for transmitting the output data stream to a host processor for reconstructing an image form the output data stream.

No. of Pages : 22 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/05/2023
(21) Application No.202331037152 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM FOR COLLECTION OF EGG OF ZEBRAFISHES AND THE PROCESS FOR COLLECTION OF THE SAME

(51) International classification :G16H0050200000, C10M0171000000, G06F0013400000, B01D0069020000, A01K0067027000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)ASSAM AGRICULTURAL UNIVERSITY
Address of Applicant :C/O DIRECTORATE OF RESEARCH,AAU JORHAT,ASSAM-785013,INDIA ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)RAKTIM SARMAH
Address of Applicant :JORHAT,ASSAM-785013,INDIA ---------- ----------
2)RAJDEEP DUTTA
Address of Applicant :JORHAT, ASSAM, INDIA, 785013 ---------- ----------
3)SARADA KANTA BHAGABATI
Address of Applicant :JORHAT, ASSAM, INDIA, 785013 ---------- ----------

(57) Abstract :
This invention relates to a system for collection of Egg of zebrafishes and the process for collection of the same and in particular, this invention relates to the process for collection of the Egg of zebrafishes. More particularly, this present invention relates to the system for collection of Egg of zebrafishes wherein dissolve Oxygen level (>5 ppm) of the water in the breeding jar is maintained by using air pump with an air stone. Furthermore, this invention also relates to the system for collection of Egg of zebrafishes has the advantages of convenient and reliable in overall installation; and the use and maintenance cost is low.

No. of Pages : 22 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/07/2023

(21) Application No.202331046993 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A BIODEGRADABLE DISPOSABLE UTILITY PRODUCT

(51) International classification	:B01J0035000000, A61L0027580000, B01J0023780000, B65D0065460000, A23K0010260000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)TEZPUR UNIVERSITY
Address of Applicant :(Central University), Napaam, Tezpur Assam India Tezpur ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Sriram M
Address of Applicant :Department of Food Engineering and Technology, Tezpur University, (Central University) Napaam, Tezpur Assam India 784028 Tezpur ---------- ----------
2)Laxmikant S. Badwaik
Address of Applicant :Department of Food Engineering and Technology, Tezpur University, (Central University) Napaam, Tezpur Assam India 784028 Tezpur ---------- ----------

(57) Abstract :
ABSTRACT Title: A BIODEGRADABLE DISPOSABLE UTILITY PRODUCT A biodegradable disposable utility product including plate/table ware/packaging material comprising corn starch powder (CSP) matrix 20-60% blended with egg shells powder(ESP) and sugarcane bagasse powder(SCBP) in the proportion of 20-60wt %, the most preferable proportion being ESP:SCBP:CSP 60wt%: 20wt%:20wt% wherein sugarcane bagasse powder(SCBP) has moisture content reduced to =5% from 45% . Said plates have density ranging from 0.23-0.29 g/cm-3; Plate thickness ranging from (3.12 to 3.28 mm), Water activity between 0.878 and 0.887 (Table 5) having maximum tensile strength (MTS)from 3.7 to 6.5MPa, tensile strain at the breaking point (TSB)from 4.9 to 5.5 % and young's modulus (YM)ranging from 44 to 63MPa and biodegradable having 35% - 50% mass loss after 5 weeks. Fig. 6

No. of Pages : 36 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :21/07/2023
(21) Application No.202331049299 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SERVICE PROVIDER SYSTEM FOR AUTHENTICATING A USER AND A METHOD THEREOF

(51) International classification	:H04L0009320000, G06Q0020380000, G06Q0020320000, G06F0021340000, H04L0067020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)INDIAN INSTITUTE OF TECHNOLOGY PATNA
Address of Applicant :BIHTA, PATNA-801106, BIHAR, INDIA ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Somanath Tripathy
Address of Applicant :Dept. of CSE, Indian Institute of Technology, Patna, Bihta, Patna, Bihar-801106, India ---------- ----------

(57) Abstract :
ABSTRACT A SERVICE PROVIDER SYSTEM FOR AUTHENTICATING A USER AND A METHOD THEREOF A service provider system for authenticating a user and a method thereof is disclosed. A processor registers a computing device (18, 20) of the user via a web application of the service provider system by providing the credentials of the user. It generates a QR code in the web application. Further, it registers the computing device (18, 20) via a device application of the service provider system by providing the credentials used for registering in the web application. The QR code generated on the web application is scanned by the computing device (18, 20). Further, the processor authenticates the user by the details of the scanned QR code and it stores the user credentials and a device ID in the service provider system. The processor receives a request for transaction by the user in the service provider system and it accesses the device application of the computing device (18, 20) by providing the user credentials. Further, it initiates a request to generate a one-time-password (OTP) on the device application. The QR code on the web application is scanned wherein the QR code includes the user credentials and a random number. The processor further generates the OTP by the device application based on the scanned QR code. The generated OTP is entered on the web application and the transaction is completed by authenticating the generated OTP entered by the user. Refer Fig. 2

No. of Pages : 20 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2023
(21) Application No.202331050590 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : PRESERVATIVE-FREE METFORMIN BASED OCULAR INSERT AND METHOD FOR PREPARATION THEREOF

(51) International classification	:A61K0031155000, A61K0008730000, A61K0009000000, A61K0036480000, A61K0031715000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Siksha 'O' Anusandhan (Deemed to be University)
Address of Applicant :J-15, Khandagiri Square, Bhubaneswar-751030, Odisha, India. Bhubaneswar ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Bharat Bhusan Subudhi
Address of Applicant :Professor, Department of Drug Development and Analysis Lab, School of Pharmaceutical Sciences, Siksha 'O' Anusandhan (Deemed to be University), J-15, Khandagiri Square, Bhubaneswar-751030, Odisha, India. Bhubaneswar ---------- ----------
2)Regu Varaprasada Rao
Address of Applicant :Department of Drug Development and Analysis Lab, School of Pharmaceutical Sciences, Siksha 'O' Anusandhan (Deemed to be University), J-15, Khandagiri Square, Bhubaneswar-751030, Odisha, India. Bhubaneswar ---------- ----------
3)Dr. Ranjit Prasad Swain
Address of Applicant :Assistant Professor, Department of Drug Development and Analysis Lab, School of Pharmaceutical Sciences, Siksha 'O' Anusandhan (Deemed to be University), J-15, Khandagiri Square, Bhubaneswar-751030, Odisha, India. Bhubaneswar ---------- ----------

(57) Abstract :
The present invention relates to a preservative-free metformin based ocular insert comprising; i) a tamarind seed polysaccharide (TSP) in range of 0.5-1.5% w/v, ii) a propylene glycol in range of 1.5-2.5% w/v, iii) a metformin in range of 3.001-3.004% w/v and distilled water in range of 96.00-97.99% w/v. A method for preparation of the ocular insert comprises of: dissolving the tamarind seed polysaccharide(TSP) in distilled water to obtain a solution, cooling the obtained solution up to room temperature, adding and stirring the metformin into cooled solution to obtain a homogenous solution followed by adding and mixing of the propylene glycol to obtain a clear solution, sonicating the clear solution for a pre-defined time period to remove air bubbles, followed by pouring solution onto a petri-dish of pre-defined surface area and incubating at predefined temperature and time to form a film which is cut into 6mm diameter to obtain an insert.

No. of Pages : 43 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/06/2024
(21) Application No.202431044155 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A CARRIER FREQUENCY OFFSET MITIGATION TECHNIQUE FOR NON-ORTHOGONAL MULTIPLE ACCESS SYSTEM

(51) International classification :H04L27/26, H04J11/00, H04L1/00, H04B1/10
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)INDIAN INSTITUTE OF TECHNOLOGY PATNA
Address of Applicant :Bihta, Patna-801106, Bihar, India Patna ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SHUBHAM ANAND
Address of Applicant :IIT Patna, Bihta, Patna-801106, Bihar, India Patna ----------
2)PREETAM KUMAR
Address of Applicant :IIT Patna, Bihta, Patna-801106, Bihar, India Patna ----------

(57) Abstract :
ABSTRACT A CARRIER FREQUENCY OFFSET MITIGATION TECHNIQUE FOR NON-ORTHOGONAL MULTIPLE ACCESS SYSTEM The present subject matter disclosed herein relates to a method (100) and an associated system to mitigate carrier offset frequency for wireless communication using NOMA-OFDM. The method (100)comprises receiving (101) a signal, converting (102) the received signal into bits for signal processing, modulating (103) the received signal, allocating (104) power to modulated received signal, combining (105) the modulated received signal, employing (106) an IDFRFT on a combined modulated received signals wherein an angle (α) is calculated based on a CFO value, inserting (107) a Cyclic Prefix (CP) on a transformed received signal, equalizing (108) the transformed received signal and demodulating (109) and decoding an equalized received signal using modulation schemes and error correction coding techniques. The carrier offset frequency mitigator system further comprises of a transmitter module and a receiver module, where the receiver module estimates optimal α (alpha) values for various CFO scenarios. {FIG. 1}

No. of Pages : 33 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :11/06/2024
(21) Application No.202431045108 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : SMART SURVEILLANCE SYSTEM FOR ENABLING DYNAMIC MOTION DETECTION AND MEMORY OPTIMIZATION, AND METHOD THEREOF

(51) International classification	:H04N0007010000, H04L0012400000, G06F0030170000, H04N0007180000, H04N0019147000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)National Institute of Technology Agartala
Address of Applicant :NIT Agartala, Barjala, Jirania, Agartala, Tripura - 799046, India. Agartala ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)BHATTACHARYA, Diptendu
Address of Applicant :Associate Professor, Computer Science & Engineering Department, NIT Agartala, Barjala, Jirania, Agartala, Tripura - 799046, India. Agartala ---------- ----------
2)BISWAS, Tamal
Address of Applicant :Ph.D. Scholar, Computer Science & Engineering Department, NIT Agartala, Barjala, Jirania, Agartala, Tripura - 799046, India. Agartala ---------- ----------
3)MANDAL, Gouranga
Address of Applicant :Assistant Professor Sr. Grade, School of Computer Science and Engineering, VIT-AP University, Inavolu, Amaravati, Andhra Pradesh - 522237, India. Amaravati ---------- ----------

(57) Abstract :
Present invention relates to communication system (102) for enabling dynamic motion detection and memory optimization, and method thereof. System (102) receive one or more data packets from at least one image capturing unit (108). The one or more data packets pertains to a continuous recording state of an image and a video. System (102) extracts first set of frames from the one or more data packets based on a motion detection of one or more objects. System (102) enables dynamic switch of recording from low-resolution state to high-resolution state. System (102) obtains second set of frames in the high-resolution state, and apply image enhancement technique to enhance a contrast of the image and the video. System (102) determines a storage area for the second set of frames based on an image quality comprises at least one of High Definition (HD) image quality, Standard Definition (SD) image quality, and skipped image.

No. of Pages : 28 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/07/2024
(21) Application No.202431055575 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A SYSTEM AND METHOD FOR REVERSING PESTICIDE-INDUCED APLASTIC ANEMIA USING RECOMBINANT SONIC HEDGEHOG

(51) International classification	:A61P0007060000, A61P0043000000, A61P0007000000, C12N0005078000, A61K0035140000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Brainware University, Kolkata
Address of Applicant :398, Ramkrishnapur Rd, Near Jagadighata Market, Barasat, Kolkata, West Bengal 700125 ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Sujata Law
Address of Applicant :Professor, Department of Biotechnology, Brainware University. 398, Ramkrishnapur Road, Kolkata-700125 ---------- ----------
2)Dr. Malay Chaklader
Address of Applicant :Junior Faculty, UT Southwestern Medical Centre, University of Texas, USA, 184/6/A Sashi Babu Road, P.O. Kanchrapara, WB 743145 ---------- ----------

(57) Abstract :
The invention presents a novel system and method for treating pesticide-induced aplastic anemia using recombinant Sonic Hedgehog (rSHH). Aplastic anemia, a serious condition characterized by bone marrow failure and insufficient blood cell production, is often caused by prolonged pesticide exposure in agricultural settings. This invention leverages rSHH, a signaling molecule from the hedgehog signaling pathway, to stimulate hematopoiesis by enhancing the generation of stromal colony-forming unit fibroblasts (CFU-F), CFU-granulocyte erythroid monocyte macrophage (CFU-GEMM), and CFU-granulocyte macrophage (CFU-GM). Our studies demonstrate that rSHH effectively promotes bone marrow regeneration and restores the hematopoietic system in individuals with pesticide-induced aplastic anemia. This method offers a promising therapeutic approach to a condition with limited treatment options, aiming to improve patient outcomes by facilitating blood cell production and addressing the underlying causes of anemia. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 19 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/07/2024

(21) Application No.202431056200 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : Engineering control for reducing risk/accidents during work at heights

(51) International classification	:G06Q0010060000, A62B0035000000, B66C0001360000, G01R0019155000, H01M0004580000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Shantanu Paul
Address of Applicant :Jojobera Power plant, The Tata Power Company Limited P.O.-Rahargora , Jamshedpur-831016. Jamshedpur ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Shantanu Paul
Address of Applicant :Jojobera Power plant, The Tata Power Company Limited P.O.-Rahargora , Jamshedpur-831016. Jamshedpur ---------- ----------
2)Basudev Hansdah
Address of Applicant :Jojobera Power plant, The Tata Power Company Limited P.O.-Rahargora , Jamshedpur-831016. Jamshedpur ---------- ----------
3)Chandrashekhar Singh
Address of Applicant :Jojobera Power plant, The Tata Power Company Limited P.O.-Rahargora , Jamshedpur-831016. Jamshedpur ---------- ----------

(57) Abstract :
The implementation of engineering control in the safety belt offers numerous advantages in terms of safety. Here's an overview of the benefits and features of this novel project: Majority of the incidents or accidents that occur during work at height is because of the complacency. The workmen during the course of job execution unwillingly unlatch the safety latch of the safety harness from the support structure and the fact that the absence of any mechanism that can detect this issue is the main under lying reason for the high potential incidents. In this innovation we have addressed this issue by mounting the sensors on the safety latch which will detect if the workmen has or has not latched the safety latch with support. This sensor after detection gives signal to PCB which in turn makes the RED LED glow along with a small buzzer which produces sound to make the workmen aware in case if the safety latch is not hooked with the support to correct himself. Through the RED LED the field supervisor can also check some unsafe act is going on and thereby correct the workmen also. In case if both the safety latch is hooked with the support then the sensor will detect the same and pass on the signal and make the Green LED glow and along with no sound in buzzer, there by giving a clear indication of safe behavior. This innovation has significantly enhanced workplace safety and minimizes the risk of accidents or incidents. The novel project results in safety enhancement and has a big potential to avoid the high potential safety incidents.

No. of Pages : 25 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/07/2024

(21) Application No.202431057040 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : A nanocomposite silk scaffold for wound care and method for synthesizing the same

(51) International classification :A61P0031040000, A61K0009107000, A61P0017020000, A61K0033380000, A61K0035630000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)RAIGANJ UNIVERSITY
Address of Applicant :University Road, College Para, Raiganj, Uttar Dinajpur-733134, West Bengal, India Uttar Dinajpur ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DAM, Paulami
Address of Applicant :Department of Sericulture, Raiganj University, College Para, Raiganj, Uttar Dinajpur -733134, West Bengal, India Uttar Dinajpur ---------- ----------
2)SHAW, Shubhajit
Address of Applicant :Department of Sericulrure, Raiganj University, College Para, Raiganj, Uttar Dinajpur-733134, West Bengal, India Uttar Dinajpur ---------- ----------
3)MONDAL, Rittick
Address of Applicant :Department of Sericulture, Raiganj University, College Para, Raiganj, Uttar Dinajpur-733134, West Bengal, India Uttar Dinajpur ---------- ----------
4)SADAT, Dr. Abdul
Address of Applicant :Department of Sericulture, Raiganj University, College Para, Raiganj, Uttar Dinajpur-733134, West Bengal, India Uttar Dinajpur ---------- ----------
5)MANDAL, Dr. Amit Kumar
Address of Applicant :Department of Sericulture, Raiganj University, College Para, Raiganj, Uttar Dinajpur -733134, West Bengal, India Uttar Dinajpur ---------- ----------

(57) Abstract :
Disclosed herein is a silk cocoon-based scaffold for wound healing applications. The silver nanoparticle-coated silk cocoon scaffold shows bioactivity against burn-wound associated multiple-drug-resistant (MDR) bacteria Pseudomonas aeruginosa and Staphylococuus aureus. The main material of scaffold, i.e., cocoon is obtained from a non-mulberry silkworm. UV-vis spectrophotometry and other analytical techniques confirm the formation of silver nanoparticle-coated silk-based wound dressing framework. The invention shows excellent thermal stability and hydrophobicity fulfilling the criterion of a standard water-proof dressing material with antibacterial activity.

No. of Pages : 38 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2024
(21) Application No.202431057135 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : STEADY STATE VOLTAGE STABILITY CONSIDERING DYNAMICS OF GENERATORS AND SHUNT COMPENSATORS

(51) International classification	:H02J3/18, G06F113/04, H02J3/00, G06F30/367
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)DREAM INSTITUTE OF TECHNOLOGY
Address of Applicant :Thakupukur Bakhrahat Road, Samali, Kolkata - 700104, West Bengal, India Kolkata ---------- ----------
2)Dr. Dipankar Sarkar
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Dipankar Sarkar
Address of Applicant :Professor and Principal, Department of Electrical Engineering, Dream Institute of Technology, Thakupukur Bakhrahat Road, Samali, Kolkata - 700104, West Bengal, India Kolkata ---------- ----------

(57) Abstract :
Steady-state voltage stability is crucial for maintaining reliable power system operation, particularly under varying load conditions. This abstract presents an analysis of voltage stability by incorporating the dynamic behaviors of generators and shunt compensators. Generators, with their inherent dynamic response, and shunt compensators, which adjust reactive power, play significant roles in voltage regulation and stability. This study integrates these dynamics into a steady-state stability framework, using advanced modeling techniques to capture their effects on voltage profiles and system resilience. The analysis employs dynamic load models and compensator strategies to assess their impact on voltage stability margins. Key parameters such as generator reactive power capability, compensator response time, and their interaction with load variations are examined. The results provide insights into optimizing generator and compensator settings to enhance voltage stability, contributing to more robust and efficient power system operations.

No. of Pages : 27 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/07/2024
(21) Application No.202431057167 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : RELAY-BASED SYSTEM AND METHOD FOR AUTOMATIC WATER LEVEL CONTROL

(51) International classification :G05B11/01, G05D9/12, G01F23/36, G01F23/40
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)National Institute of Technology Patna
Address of Applicant :Ashok Rajpath, Patna - 800005, Bihar, India. Patna ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SAH, Abhishek Kumar
Address of Applicant :Department of Electrical Engineering, National Institute of Technology Patna, Ashok Rajpath, Patna - 800005, Bihar, India. Patna ---------- ----------
2)KUMAR, Ashiwani
Address of Applicant :Department of Electrical Engineering, National Institute of Technology Patna, Ashok Rajpath, Patna - 800005, Bihar, India. Patna ---------- ----------
3)SHANKAR, Ravi
Address of Applicant :Department of Electrical Engineering, National Institute of Technology Patna, Ashok Rajpath, Patna - 800005, Bihar, India. Patna ---------- ----------

(57) Abstract :
The present disclosure discloses a system (100) that uses float sensors (106) to detect water levels in a water tank (104), interfacing with a relay-based controller (102). The controller (102) receives sensor data (106), comparing it to predetermined levels. If water levels fall below the threshold, the controller (102) triggers the water supply via the starter mechanism. Conversely, when levels exceed the threshold, the system (100) shuts off the supply. The system (100) offers manual or automatic operation modes, enhancing flexibility and user control. Additionally, terminals facilitate integration with existing starters. This system (100) optimizes water management, ensuring efficient usage, enhancing safety, and offering customizable configurations for various applications. Its scalability, compatibility, and energy efficiency make it a valuable solution for diverse water storage systems.

No. of Pages : 22 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202431057265 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : INSTRUMENT SET FOR REMOVAL OF SPINAL CORD THROUGH VERTEBRAL CANAL WITHOUT VERTEBRAE INCISION

(51) International classification	:A61B0017700000, A61F0002440000, A61B0017160000, A61B0017020000, A61B0017170000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Dr Daunipaia Slong
Address of Applicant :Associate Professor, Department of Forensic Medicine, NEIGRIHMS, Mawdiangdiang, Shillong, East Khasi Hills, Meghalaya, 793018 Shillong ---------- ----------
2)Prof A J Patowary
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Daunipaia Slong
Address of Applicant :Associate Professor, Department of Forensic Medicine, NEIGRIHMS, Mawdiangdiang, Shillong, East Khasi Hills, Meghalaya, 793018 Shillong ---------- ----------
2)Prof A J Patowary
Address of Applicant :Professor and HOD, Department of Forensic Medicine, NEIGRIHMS, Mawdiangdiang, Shillong, East Khasi Hills, Meghalaya, 793018 Shillong ---------- ----------

(57) Abstract :
The present invention discloses an instrument set (300) for the removal of the spinal cord through the vertebral canal without cutting the vertebrae. The instrument set (300) comprises a flexible metallic rod (100) with a hook end (101) and a ring end (102), and a flexible metallic wire (200). The hook end (101) of the metallic rod (100) is designed to cut the spinal roots and other attachments of the spinal cord. The flexible metallic wire (200) is configured to pass behind the cervical spinal cord and be pulled until it reaches the other end. The two ends of the flexible metallic wire (200) are passed through the ring end (102) of the metallic rod (100), which is then lowered towards the spinal cord until the wire (200) completely encircles it. The ring end (102) is then pushed into the vertebral canal, pulling the wire (200) along with it. The method involves using an up-and-down motion to cut the spinal cord and removing it along with the brain through the foramen magnum. This procedure is efficient, minimizes the need for additional incisions, and is less time-consuming compared to conventional methods. Refer to Figure 1 and 2.

No. of Pages : 18 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202431057486 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : PRECIPITATION DETECTION AND CLASSIFICATION SYSTEM

(51) International classification	:G01W0001140000, G01S0013870000, H01L0023310000, G01S0013950000, A61B0005363000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Narula Institute of Technology
Address of Applicant :81, Nilgunj Road, Agarpara, Kolkata - 700 109, West Bengal, India. Kolkata ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Tuhina Halder
Address of Applicant :Narula Institute of Technology, 81, Nilgunj Road, Agarpara, Kolkata - 700 109, West Bengal, India. Kolkata ---------- ----------

(57) Abstract :
A precipitation detection and classification system, comprises of plurality of structures 101 each constructed with a pair of hollow cylindrical frames 102 connected with each other via a trapezium-shaped body 103, an anchor plate 104 provides support to the structure on the ground, a disdrometer 106 detects presence of precipitation in the surrounding as well as the particle size, plurality of pressure sensors detects pressure applied by the drops over the pressure sensor, an acoustic sensor determines the type of precipitation, a GPS module detects real time location of the bodies 103, a rain radar module detects intensity of precipitation in nearby area, a cylindrical unit 107 collects the drops of the precipitation and an anemometer 108 detects direction of wind.

No. of Pages : 17 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202431057488 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : FARM PRODUCE MANAGEMENT DEVICE

(51) International classification	:A61H0007000000, A61M0039020000, H04M0001724090, B33Y0040000000, F16K0031400000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)Narula Institute of Technology
Address of Applicant :81, Nilgunj Road, Agarpara, Kolkata - 700 109, West Bengal, India. Kolkata ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Maitreyi Ray Kanjilal
Address of Applicant :Narula Institute of Technology, 81, Nilgunj Road, Agarpara, Kolkata - 700 109, West Bengal, India. Kolkata ---------- ----------
2)Sumanta Kundu
Address of Applicant :Narula Institute of Technology, 81, Nilgunj Road, Agarpara, Kolkata - 700 109, West Bengal, India. Kolkata ---------- ----------
3)Soumya Bhattacharyya
Address of Applicant :Narula Institute of Technology, 81, Nilgunj Road, Agarpara, Kolkata - 700 109, West Bengal, India. Kolkata ---------- ----------
4)Dr. Shambhu Nath Saha
Address of Applicant :Narula Institute of Technology, 81, Nilgunj Road, Agarpara, Kolkata - 700 109, West Bengal, India. Kolkata ---------- ----------
5)Dr. Sourav Saha
Address of Applicant :Narula Institute of Technology, 81, Nilgunj Road, Agarpara, Kolkata - 700 109, West Bengal, India. Kolkata ---------- ----------
6)Ayan Sanyal
Address of Applicant :Narula Institute of Technology, 81, Nilgunj Road, Agarpara, Kolkata - 700 109, West Bengal, India. Kolkata ---------- ----------
7)Anish Kumar
Address of Applicant :Narula Institute of Technology, 81, Nilgunj Road, Agarpara, Kolkata - 700 109, West Bengal, India. Kolkata ---------- ----------
8)Raju Kumar
Address of Applicant :Narula Institute of Technology, 81, Nilgunj Road, Agarpara, Kolkata - 700 109, West Bengal, India. Kolkata ---------- ----------
9)Avinash Gupta
Address of Applicant :Narula Institute of Technology, 81, Nilgunj Road, Agarpara, Kolkata - 700 109, West Bengal, India. Kolkata ---------- ----------
10)Siddhanta Ganguly
Address of Applicant :Narula Institute of Technology, 81, Nilgunj Road, Agarpara, Kolkata - 700 109, West Bengal, India. Kolkata ---------- ----------

(57) Abstract :
A farm produce management device, comprising a housing 101 installed with a hopper 102 for storing farm produce and are collected in a chamber 103 attached within the body, a touch screen 104 installed within the housing 101 for enabling a user input commands, an electronic nozzle 105 installed within the chamber 103 connected a container 106 for dispensing water for washing the farm produce, a rotatable member 107 installed within the chamber 103 for rotating the farm produce along with the water to facilitate in washing of the farm produce, a suction unit 108 paired with the chamber 103 to withdraw water from the chamber 103, an air blower 109 mounted within the chamber 103 for drying the farm produce and a receptacle 110 installed within the housing 101 for transferring farm produce on a platform 113 installed within the housing 101 via a motorized slider 114.

No. of Pages : 26 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/07/2024
(21) Application No.202431057497 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : MAGNETICALLY CONTROLLABLE FOR BIO-MEDICAL SENSING BASED ON INAS METASURFACE ABSORBER

(51) International classification	:G02B0005000000, G02F0001350000, G02B0001000000, H01L0021680000, H01Q0015000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)National Institute of Technology Patna
Address of Applicant :Ashok Rajpath, Patna - 800005, Bihar, India. Patna ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)NEHA NIHARIKA
Address of Applicant :National Institute of Technology Patna, Ashok Rajpath, Patna – 800005, Bihar, India. Patna ---------- ----------
2)SANGEETA SINGH
Address of Applicant :National Institute of Technology Patna, Ashok Rajpath, Patna – 800005, Bihar, India. Patna ---------- ----------

(57) Abstract :
The present disclosure pertains to an ultrathin metasurface absorber (100) designed for unity absorption under the influence of a magnetic field, configurable in three distinct magnetostatic-field orientations. Among the configurations tested, the Voigt-X orientation demonstrates high absorptivity and tunability across the frequency spectrum, while the Voigt-Y configuration maintains high absorptivity with minimal frequency shift. Conversely, the Faraday configuration shows a significant reduction in absorptivity by 97.3% with magnetic field variation along the z-axis. The metasurface absorber (100) features a periodicity of meta-atoms at 9 µm and an overall structural thickness of 3.5 µm. The proposed THz metasurface absorber (100) exhibits perfect narrowband absorption, high tunability, and quality factor, making it ideal for biosensor applications. The sensor mechanism involves placing a test medium with varying refractive indices over the metasurface, inducing changes in resonance frequency through impedance matching adjustments.

No. of Pages : 31 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202431057548 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : CONDUCTIVE SOY PROTEIN ISOLATE (SPI) AMYLOID BASED HYDROGEL AND PROCESS FOR PREPARING OF SAME

(51) International classification	:B82Y0030000000, B32B0037120000, B82Y0005000000, B32B0003260000, A61K0008020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)National Institute of Technology Rourkela
Address of Applicant :National Institute of Technology Rourkela, Rourkela - 769008, Dist: Sundargarh, Odisha, Rourkela ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)SARKAR, Dr. Nandini
Address of Applicant :Department of Biotechnology and Medical Engineering, National Institute of Technology Rourkela, Rourkela - 769008, Dist: Sundargarh, Odisha, India Rourkela ---------- ----------
2)CHOWDHURY, Srijita
Address of Applicant :Department of Biotechnology and Medical Engineering, National Institute of Technology Rourkela, Rourkela - 769008, Dist: Sundargarh, Odisha, India Rourkela ---------- ----------
3)MITRA, Amit
Address of Applicant :Department of Biotechnology and Medical Engineering, National Institute of Technology Rourkela, Rourkela - 769008, Dist: Sundargarh, Odisha, India Rourkela ---------- ----------

(57) Abstract :
The present invention discloses a process of preparing an amyloid-based hydrogel matrix. The process includes dissolving SPI powder in distilled water to form a solution, adding a solution of aspartic acid-coated gold nanoparticles to the SPI solution for making a mixture, stirring the mixture at a temperature of about 50-60 °C for about 4 hours, centrifuging the mixture at about 4000-5000 rpm for about 10 minutes for removing bubbles from the resulting mixture, subjecting the mixture to a water bath at about 80-100°C for 15-20 minutes, thereby resulting in gel formation, cooling the resulting gel at room temperature and refrigerating the resulting gel at about 4°C for extending preservation.

No. of Pages : 31 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024

(21) Application No.202431057759 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AI-Enabled Blood Pressure Measuring Machine with Predicting Stroke Risk

(51) International classification :G16H0050300000, A61B0005349000, A61B0005021000, C12Q0001688300, A23L0033120000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Sudip Bhattacharya
Address of Applicant :Department of CFM,ACADEMIC BUILDING, ZONE 1, FLOOR 1, AIIMS, DEOGHAR, JHARKHAND DEOGHAR ---------- ----------
2)Prof. Dr. Reena Singh
3)Mr. Pawan Kumar Singh
4)Prof. Dr. B.K.Sarkar
5)Prof.(Dr.) Vandana Singh
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Sudip Bhattacharya
Address of Applicant :Department of CFM,ACADEMIC BUILDING, ZONE 1, FLOOR 1, AIIMS, DEOGHAR, JHARKHAND DEOGHAR ---------- ----------
2)Prof. Dr. Reena Singh
Address of Applicant :Co- Founder, Research Unit -Geh Research Office T “A” 1104, Chembur -400071, M West, Mumbai, MH, India. Mumbai ---------- ----------
3)Mr. Pawan Kumar Singh
Address of Applicant :Co-Founder ,Geh Press Office, Rajeev Nagar, Lucknow UP, India-226002 Lucknow ---------- ----------
4)Prof. Dr. B.K.Sarkar
Address of Applicant :Patent Guru, Research Unit -Geh Research Office T “A” 1104, Chembur -400071, M West, Mumbai, MH, India. Mumbai ---------- ----------
5)Prof.(Dr.) Vandana Singh
Address of Applicant :Founder, Geh Press Office, Rajeev Nagar, Lucknow UP, India-226002 Lucknow ---------- ----------

(57) Abstract :
ABSTRACT Typically, a blood pressure (BP) instrument measures BP and provides data indicating whether it is normal or abnormal, without the ability to predict a patient's 10-year stroke risk. However, by integrating the WHO risk prediction chart into the BP instrument, it will not only measure the current BP but also predict stroke risk (for next 10 years) by incorporating THREE additional data points: • 1. Whether the patient is a male or female • 2. Whether the patient is a smoker. • 3. Whether the patient has diabetes. By inputting this information into the BP machine, the 10-year stroke risk can be easily calculated IN PERCENTAGE BY SEEING THE WHO RISK PREDICTION COLOUR CODING CHART FOR HEART ATTACK (MYOCARDIAL INFARCTION) OR STROKE. This innovative method allows a non-medical person to perform it at home (ambulatory), CAN PREDICT RISK FOR 10 YEARS AND THUS helping to modify high-risk behaviors for stroke if necessary.

No. of Pages : 8 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/07/2024
(21) Application No.202431057819 A
(43) Publication Date : 02/08/2024

(54) Title of the invention : AN ADVANCED ANOMALY DETECTION ENABLED VOICE-ACTIVATED SECURE RAPID PROTOTYPING MACHINE SYSTEM USING FILAMENT DEPOSITION

(51) International classification	:B29C0064118000, B33Y0010000000, B33Y0030000000, B29C0064106000, B33Y0050020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)National Institute Of Technology Silchar
Address of Applicant :National Institute of Technology Silchar Cachar, Assam. Pin Code: 788010 Cachar ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr Anup Kumar Sharma
Address of Applicant :Electronics & Instrumentation Engineering Departme Nt Nit Silchar, Assam-788010 Cachar ---------- ----------
2)Harsh Kumar Singh
Address of Applicant :Electrical Engineering Department, Nit Silchar, Assam-788010 Cachar ---------- ----------
3)Abhishek Raj
Address of Applicant :Mechanical Engineering Department, NIT Silchar, Assam-788010 Cachar ---------- ----------
4)Mayukh Bhattacharya
Address of Applicant :Mechanical Engineering Department, Nit Silchar, Assam-788010 Cachar ---------- ----------
5)Himanshu Yadav
Address of Applicant :Mechanical Engineering Department, Nit Silchar, Assam-788010 Cachar ---------- ----------
6)Dr. Sushant Negi
Address of Applicant :Mechanical Engineering Department, Nit Silchar, Assam-788010 Cachar ---------- ----------
7)Dr Simanchal Kar
Address of Applicant :Mechanical Engineering Department, Nit Silchar, Assam-788010 Cachar ---------- ----------

(57) Abstract :
The present invention discloses an advanced anomaly detection enabled voice-activated secure rapid prototyping machine system using filament deposition for material extrusion-based additive manufacturing. It features a wooden structure with an aluminum heated bed, compatible with various thermoplastic filaments. Precise temperature control, heat dissipation mechanisms, and smooth filament feeding ensure optimal printing quality. Real-time monitoring, automatic shutdown for safety, and camera-based coordinate tracking enhance usability and accuracy. Secure remote communication protocols with encryption, VPN access, and voice command support enable secure and accessible operation. Robust authentication, authorization, and logging mechanisms safeguard against unauthorized access. Strategically placed precision shims ensure meticulous bed leveling for consistent prints. The system's eco-friendly design allows using recycled thermoplastic waste, promoting sustainability. Overall, this innovative system offers advanced capabilities, precision, security, and user-friendly features for efficient and reliable additive manufacturing.

No. of Pages : 29 No. of Claims : 10