(19) INDIA

(22) Date of filing of Application :18/04/2025

(43) Publication Date: 09/05/2025

$(54) \ Title \ of the invention: A \ PNEUMATIC \ CONTROLLED \ MOBILE \ DENTAL \ TROLLEY \ SYSTEM \ AND \ A \ METHOD \ FOR \ OPERATING \ THEREOF \ AND \ A \ METHOD \ A \ METHOD \ FOR \ OPERATING \ THEREOF \ AND \ A \ METHOD \ A$

(51) International classification	:A62C0099000000, A61C0001180000, F15B0015220000, A61C0001050000, G05D0001000000
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

1)JSS Academy of Higher Education & Research (Deemed to be university) Address of Applicant :Sri Shivarathreeshwara Nagara, Mysuru, Karnataka, India Mysore --

Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1)Dr. Pradeep Subbaiah

Address of Applicant :Department of Orthodontics, JSS Dental College & Hospital, JSS Academy of Higher Education and Research, Mysuru, Karnataka, 570015, India Mysore - 2)Mr. Jayachandran PP

Address of Applicant :Department of Dental Mechatronics, JSS Dental College & Hospital, JSS Academy of Higher Education and Research, Mysuru, Karnataka – 570015 Mysore -------

3)Mr. Shivakumar

Address of Applicant :Dental equipment Technician, JSS dental College & Hospital, JSS Academy of Higher Education and Research, Mysuru, Karnataka –570015, India Mysore -------

(57) Abstract:

A PNEUMATIC CONTROLLED MOBILE DENTAL TROLLEY SYSTEM AND METHOD OF OPERATING THEREOF ABSTRACT A pneumatic controlled mobile dental trolley system (100) 5 and a method operating thereof is provided. The system includes an air compressor (102) for regulating air pressure of a pneumatic cylinder (108) operatively coupled to a mobile dental trolley. The system further includes an automatic hand control (104) for controlling the movement of the mobile dental trolley upwards and down10 wards. The system further includes a pneumatic cylinder (108) for conducting the compressed air and allowing the mobile dental trolley to perform travelling up and down. The system further includes a flow control valve (114), associated with the pneumatic cylinder (108), for regulating a piston (112) inside the pneumatic cylinder (108) for moving up and down. The system further includes a 15 pilot non return valve (NRV) (116) for preventing back siphoning and the pilot NRV (116) opens for an outlet to exhaust air flow to a hand piece (110). [FIGS.1A -1B]

No. of Pages: 25 No. of Claims: 12