(19) INDIA

(22) Date of filing of Application: 11/09/2023 (43) Publication Date: 06/10/2023

(54) Title of the invention: A BIODEGRADABLE PANTY-TYPE SANITARY MENSTRUATION UNDERGARMENT AND A PROCESS OF MAKING THEREOF

(71)Name of Applicant:

1)JSS College of Pharmacy, Ooty- JSS Academy of Higher Education & Research, Mysuru

Address of Applicant : Rocklands, Post Box No.: 20, Ooty-643001,

The Nilgiris, Tamilnadu, India The Nilgiris -----

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. Gomathi Swaminathan

Address of Applicant :Lecturer, Department of Pharmaceutical Chemistry, JSS College of Pharmacy, JSS Academy of Higher Education

& Research, Ooty-643001, The Nilgiris, Tamilnadu Nilgiris -----

(51) International classification

:A61F0013840000, A61F0013472000, A61F0005455000, A61F0005440000,

A61B0010000000

(86) International Application No Filing Date

:NA :NA

(87) International : NA Publication No

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

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

2)Dr. Kalirajan Rajagopal

Address of Applicant: Associate Professor & Head, Department of Pharmaceutical Chemistry, JSS College of Pharmacy, JSS Academy of Higher Education & Research, Ooty-643001, The Nilgiris, Tamilnadu Nilgiris -----

3)Mr. Kannan Raman

Address of Applicant: Research Scholar, Department of Pharmaceutical Chemistry, JSS College of Pharmacy, JSS Academy of Higher Education & Research, Ooty-643001, The Nilgiris, Tamilnadu Nilgiris -----

4)Ms. J. Rebekal

Address of Applicant :II M. Pharm Student, Department of Pharmaceutical Chemistry, JSS College of Pharmacy, JSS Academy of Higher Education & Research, Ooty-643001, The Nilgiris, Tamilnadu Nilgiris -----

5)Dr. Srikanth Jupudi

Address of Applicant: Lecturer, Department of Pharmaceutical Chemistry, JSS College of Pharmacy, JSS Academy of Higher Education & Research, Ooty-643001, The Nilgiris, Tamilnadu Nilgiris -----

6)M. Anand B.E., M.E., PGDIPPRA

Address of Applicant :Director / Scientist, LAMS Automation Private Limited, 49/A, Bishopdown, Ooty- 643001, The Nilgiris, Tamilnadu, India Ooty Nilgiris -----

(57) Abstract:

The present invention provides a biodegradable panty-type sanitary menstruation undergarment comprises an antimicrobial and skin protecting top layer; a plurality of middle layers; an impermeable and anti-leakage providing bottom layer; biodegradable fabrics; extract materials; and an elastic material for making a waistband of the said undergarment wherein the menstrual blood or urinary discharge enters the said top layer, and passes through the said plurality of middle layers which absorb and retain the menstrual blood or urinary discharge and slightly change the blood pH from alkaline to acidic followed by providing antileakage protection by the said bottom layer. A process of making the same is also provided. The invention's objective is to address the needs of all age groups women, bed-ridden patients, postpartum haemorrhage, vaginal discharge and diabetes patients who really are prone to urinary tract infections (UTIs).

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