

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202431092143 A

(19) INDIA

(22) Date of filing of Application :26/11/2024

(43) Publication Date : 29/11/2024

(54) Title of the invention : A biodegradable water-repellent PLA coated jute and a process for the preparation thereof

(51) International classification :F28D0021000000, A61B0005000000, A61N0001040000, B05D0003020000, D06M0023000000

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) 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 (INDIAN SCHOOL OF MINES), DHANBAD

Address of Applicant :Dhanbad - 826004, Jharkhand, India Dhanbad -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Sapan Kumar Pandit

Address of Applicant :Department of Chemical Engineering, Indian Institute of Technology (Indian School of Mines), Dhanbad, Dhanbad - 826004, Jharkhand, India Dhanbad -----

2)Prof. Aditya Kumar

Address of Applicant :Department of Chemical Engineering, Indian Institute of Technology (Indian School of Mines), Dhanbad, Dhanbad - 826004, Jharkhand, India Dhanbad -----

(57) Abstract :

The present invention relates to a biodegradable water-repellent PLA coated jute and a process for the preparation thereof. The process for the preparation of the PLA coated jute comprises preparing a PLA gel, applying the gel onto at least one surface of the jute fabric using a controlled coating technique, and then curing the coated jute to form a uniform and thin PLA film thereon. Fig. 1

No. of Pages : 20 No. of Claims : 8