

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202411004472 A

(19) INDIA

(22) Date of filing of Application :23/01/2024

(43) Publication Date : 02/02/2024

(54) Title of the invention : IRON ORE SLIME DERIVED MAGNETITE SUPPORTED NI FOR SELECTIVE CONVERSION OF FURFURAL TO FURFURYL ALCOHOL

(51) International classification :B01J0035000000, C07D0307440000, B01J0035100000, B01J0023460000, B01J0035060000

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

(87) International Publication No : NA

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

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

(71)Name of Applicant :

1)Chitkara University

Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

2)Chitkara Innovation Incubator Foundation

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Dr. Subhashree Mishra

Address of Applicant :Department of Chemistry, Central University of Jharkhand, Ranchi, Brambe, 835205, Jharkhand, India Ranchi -----

2)Dr. Amulya Prasad Panda

Address of Applicant :Chitkara University Research & Innovation Network (CURIN), Chitkara University Institute of Engineering and Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

(57) Abstract :

IRON ORE SLIME DERIVED MAGNETITE SUPPORTED NI FOR SELECTIVE CONVERSION OF FURFURAL TO FURFURYL ALCOHOL The present invention relates to a Ni-loaded nanocatalyst for selective conversion of furfural to furfuryl alcohol and a method for preparing the Ni-loaded nanocatalyst. Magnetite nanoparticles derived from Iron ore slime are used as a support for loading of the active catalyst (Ni) and Pluronic® P 123 is used as the surfactant to synthesise the catalyst. Reference Fig 1

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