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(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)Aakash Rajpoot

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

2)Dr. Afaq Ahmad Khan

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

3)Dr. Ejaz Ahmad

Address of Applicant :Department of Chemical Engineering & Naresh Vashisht Centre for Hydrogen, Carbon Capture, Utilization, and Storage Technologies, Indian Institute of Technology (Indian School of Mines) Dhanbad, Dhanbad - 826004, Jharkhand, India Dhanbad -----

(57) Abstract :

This invention relates to a stoichiometrically tuned Fe5-Co-Zn/ γ -Al2O3 nanocatalyst for use in methane cracking, comprises 50 wt% of Fe, 30 wt% of γ -Al2O3, 0 to 20 wt% Zn, and 20 to 0 wt% Co, where Fe5-Co-Zn is supported on γ -Al2O3. This invention further relates to a process for the preparation of the stoichiometrically tuned Fe5-Co-Zn/ γ -Al2O3. Fig. 1

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