

REF: LHKAC/11593/2020
October 06, 2020

To,
DALIAN EAST PATENT AGENT LTD.
Room 608 No.263 Huanghe Road, Xigang
District, Dalian Liaoning Province,
China

Via Email Only

Kind Attn. : Ying Wang Esq.

Reference : Indian Patent Application No.: **202027034316**

Title : ORGANIC BASE MODIFIED COMPOSITE CATALYST AND
METHOD FOR PRODUCING ETHYLENE BY
HYDROGENATION OF CARBON MONOXIDE

Applicant : DALIAN INSTITUTE OF CHEMICAL PHYSICS, CHINESE
ACADEMY OF SCIENCES

Your Ref : C20011IN0

Dear Ying Wang Esq.,

With reference to the above stated Indian Patent Application, we would like to inform you that the above mentioned Patent Application has been published in "The Official Journal of Patents" under section 11A.

We are enclosing herewith the copy of publication for your record and reference. We are also enclosing herewith debit note for our professional services.

Further, we shall keep inform you as and when we receive any further communication from The Controller of Patents.

Thanking you,
Sincerely yours,
For, Law Office of
H K ACHARYA & COMPANY

International Division

Encl.:

1. Copy of Publication.
2. Debit Note.

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202027034316 A

(19) INDIA

(22) Date of filing of Application :10/08/2020

(43) Publication Date : 02/10/2020

(54) Title of the invention : ORGANIC BASE MODIFIED COMPOSITE CATALYST AND METHOD FOR PREPARING ETHYLENE BY MEANS OF HYDROGENATION OF CARBON MONOXIDE

(51) International classification	:B01J 29/18, B01J 29/26	(71)Name of Applicant :
(31) Priority Document No	:201810079670.5	1)DALIAN INSTITUTE OF CHEMICAL PHYSICS, CHINESE ACADEMY OF SCIENCES
(32) Priority Date	:26/01/2018	Address of Applicant :No. 457 Zhongshan Road Dalian, Liaoning 116023 China
(33) Name of priority country	:China	(72)Name of Inventor :
(86) International Application No	:PCT/CN2019/073387	1)PAN, Xiulian
Filing Date	:28/01/2019	2)JIAO, Feng
(87) International Publication No	:WO 2019/144953	3)BAO, Xinhe
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An organic base modified composite catalyst and a method for preparing ethylene by means of hydrogenation by carbon monoxide. Mixed gas of carbon monoxide and hydrogen is used as a reaction raw material to carry out a conversion reaction on a fixed bed or a moving bed. The catalyst is a composite catalyst prepared by combining component I and component II together in a mechanical mixing manner; the active ingredient of component I is a metal oxide, and component II is a molecular sieve with an organic base modified MOR structure; and the organic base is aliphatic amine. The reaction process has high product yield and selectivity; the C2-C3 olefin selectivity is as high as 78-87%, wherein the selectivity of hydrocarbon products containing four or more C atoms is less than 10%; the selectivity of a by-product methane is extremely low (

No. of Pages : 19 No. of Claims : 9