

Title (en)

METHANE CONVERSION APPARATUS AND PROCESS USING A SUPERSONIC FLOW REACTOR

Title (de)

METHANUMWANDLUNGSVORRICHTUNG UND -VERFAHREN UNTER VERWENDUNG EINEM ULTRASCHALLSTRÖMUNGSREAKTOR

Title (fr)

APPAREIL DE CONVERSION DU MÉTHANE ET PROCÉDÉ QUI UTILISE UN RÉACTEUR À ÉCOULEMENT SUPERSONIQUE

Publication

**EP 2888038 A4 20160420 (EN)**

Application

**EP 13831716 A 20130819**

Priority

- US 201261691303 P 20120821
- US 201313964396 A 20130812
- US 2013055529 W 20130819

Abstract (en)

[origin: US2014056766A1] Apparatus and methods are provided for converting methane in a feed stream to acetylene. A hydrocarbon stream is introduced into a supersonic reactor and pyrolyzed to convert at least a portion of the methane to acetylene. The reactor effluent stream may be treated to convert acetylene to another hydrocarbon process.

IPC 8 full level

**B01J 19/10** (2006.01); **C07C 11/24** (2006.01); **F23M 5/00** (2006.01); **F23R 3/00** (2006.01)

CPC (source: EP US)

**B01J 3/08** (2013.01 - EP US); **B01J 19/02** (2013.01 - EP US); **B01J 19/26** (2013.01 - EP US); **C07C 2/82** (2013.01 - EP US); **C10H 17/00** (2013.01 - US); **B01J 2219/00006** (2013.01 - EP US); **B01J 2219/0004** (2013.01 - EP US); **B01J 2219/00081** (2013.01 - EP US); **B01J 2219/00083** (2013.01 - EP US); **B01J 2219/00123** (2013.01 - EP US); **B01J 2219/0227** (2013.01 - EP US); **B01J 2219/0263** (2013.01 - EP US)

Citation (search report)

- [X] US 4136015 A 19790123 - KAMM GERARD R, et al
- See references of WO 2014031516A1

Cited by

EP3013469A4; WO2014210297A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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**US 201313964396 A 20130812**; EA 201500260 A 20130819; EP 13831716 A 20130819; US 2013055529 W 20130819; ZA 201501931 A 20150320