

Title (en)

METHOD FOR CONVERTING METHANE-CONTAINING GASEOUS HYDROCARBON MIXTURES TO LIQUID HYDROCARBONS

Title (de)

VERFAHREN ZUR UMWANDLUNG VON METHANHALTIGEN GASFÖRMIGEN KOHLENWASSERSTOFFGEMISCHEN IN FLÜSSIGE KOHLENWASSERSTOFFE

Title (fr)

PROCEDE PERMETTANT DE CONVERTIR DES MELANGES D'HYDROCARBURES GAZEUX, CONTENANT DU METHANE, EN HYDROCARBURES LIQUIDES

Publication

**EP 1532228 A4 20060816 (EN)**

Application

**EP 02807530 A 20020614**

Priority

US 0219026 W 20020614

Abstract (en)

[origin: CA2489383A1] An improved process for the conversion of normally gaseous methane-hydrocarbon mixtures (1), such as natural gas, to a normally liquid hydrocarbon product (10) comprises separating the methane component of the gaseous mixture from the heavier hydrocarbon component, cracking the separated heavier hydrocarbon component (3) at a relatively low temperature and optionally cracking the methane component at a relatively high temperature. The low temperature cracking product and any high temperature cracking product (11) are separated into a light product (31) of principally hydrogen and a heavy product (7) comprising unsaturated hydrocarbons. This heavy product is reacted with methane in the presence of an acidic alkalization catalyst. The resulting product mixture (9) is separated into a light product (61), a portion of which is recycled, and the normally liquid hydrocarbon product (10).

IPC 8 full level

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CPC (source: EP)

**C10G 29/205** (2013.01); **C10G 51/06** (2013.01); **C10G 57/005** (2013.01)

Citation (search report)

- [DA] US 6130260 A 20001010 - HALL KENNETH R [US], et al
- [A] US 5012028 A 19910430 - GUPTA VICTOR [US], et al
- [A] GB 2191212 A 19871209 - BRITISH PETROLEUM CO PLC
- See references of WO 03106593A1

Cited by

CN113444553A

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