

Title (en)

PARTIAL DEHYDROGENATION OF ORGANIC LIQUIDS

Title (de)

PARTIELLE DEHYDRIERUNG VON ORGANISCHEN FLÜSSIGKEITEN

Title (fr)

DÉSHYDROGÉNATION PARTIELLE DE LIQUIDES ORGANIQUES

Publication

EP 4114790 A1 20230111 (FR)

Application

EP 21714929 A 20210301

Priority

- FR 2002116 A 20200303
- FR 2021050344 W 20210301

Abstract (en)

[origin: WO2021176170A1] The present invention concerns a process for producing hydrogen by partial dehydrogenation of an organic liquid, said process comprising a step of supplying at least one organic liquid having a Degree of Hydrogenation DHplus, a step of partially dehydrogenating said liquid, a step of recovering firstly gaseous hydrogen and secondly said organic liquid having a Degree of Hydrogenation DHminus, and in which the ratio DHplus/DHminus is between 1 and 25, endpoints excluded. The invention also concerns a hydrogenation/dehydrogenation cycle comprising at least the process for producing hydrogen by partial dehydrogenation of an organic liquid of the invention and at least one reaction of hydrogenation of said organic liquid.

IPC 8 full level

C01B 3/22 (2006.01); **C01B 3/00** (2006.01)

CPC (source: EP KR US)

C01B 3/0015 (2013.01 - EP KR US); **C01B 3/22** (2013.01 - EP KR US); **C01B 2203/0277** (2013.01 - EP KR US); **C01B 2203/1211** (2013.01 - EP KR); **C01B 2203/1252** (2013.01 - US); **Y02E 60/32** (2013.01 - EP)

Citation (search report)

See references of WO 2021176170A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

WO 2021176170 A1 20210910; AU 2021229632 A1 20220901; CN 115210176 A 20221018; EP 4114790 A1 20230111; FR 3107843 A1 20210910; JP 2023517857 A 20230427; KR 20220148825 A 20221107; US 2023137373 A1 20230504

DOCDB simple family (application)

FR 2021050344 W 20210301; AU 2021229632 A 20210301; CN 202180018468 A 20210301; EP 21714929 A 20210301; FR 2002116 A 20200303; JP 2022552545 A 20210301; KR 20227030401 A 20210301; US 202117905424 A 20210301