Title (en)

METHOD FOR THE PREPARATION OF A GASEOUS FUEL

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES GASFÖRMIGEN BRENNSTOFFS

Title (fr)

PROCÉDÉ DE PRÉPARATION D'UN COMBUSTIBLE GAZEUX

Publication

EP 4305695 A1 20240117 (EN)

Application

EP 22712558 A 20220309

Priority

- DK PA202100250 A 20210310
- EP 2022055989 W 20220309

Abstract (en)

[origin: WO2022189484A1] Method for the preparation of a gaseous fuel comprising the steps of: (a) providing a gaseous stream of ammonia; (b) splitting the gaseous stream of ammonia into a first and second substream; (c) introducing the first substream into a solid oxide fuel cell; (d) cracking the gaseous ammonia in the first substream hydrogen and nitrogen by means of heat created by electro-chemical reactions performed in the solid oxide fuel cell; (e) withdrawing an off-gas from the solid oxide fuel cell containing the hydrogen and nitrogen formed in step (d); (f) mixing the off-gas with the second substream of the gaseous ammonia to provide the gaseous fuel, wherein the solid oxide fuel cell is operated at a fuel utilization of between 35% and 70%.

IPC 8 full level

H01M 8/0606 (2016.01); **C01B 3/04** (2006.01); **H01M 8/12** (2016.01); **H01M 8/22** (2006.01)

CPC (source: EP KR)

C01B 3/047 (2013.01 - EP KR); **H01M 8/04089** (2013.01 - KR); **H01M 8/0606** (2013.01 - EP KR); **H01M 8/12** (2013.01 - EP KR); **H01M 8/222** (2013.01 - EP KR); C01B 2203/066 (2013.01 - EP KR); H01M 2008/1293 (2013.01 - KR); H01M 2250/407 (2013.01 - EP KR); Y02E 60/50 (2013.01 - EP KR)

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 2022189484 A1 20220915; EP 4305695 A1 20240117; JP 2024513317 A 20240325; KR 20230154824 A 20231109

DOCDB simple family (application)

EP 2022055989 W 20220309; EP 22712558 A 20220309; JP 2023555175 A 20220309; KR 20237029585 A 20220309