

Title (en)
FUEL GAS SUPPLY APPARATUS AND FUEL GAS SUPPLY METHOD

Title (de)
BRENNGASVERSORGUNGSVORRICHTUNG UND BRENNGASVERSORGUNGSVERFAHREN

Title (fr)
APPAREIL D'ALIMENTATION EN GAZ COMBUSTIBLE ET PROCÉDÉ D'ALIMENTATION EN GAZ COMBUSTIBLE

Publication
EP 3425028 A4 20191127 (EN)

Application
EP 17760064 A 20170301

Priority
• JP 2016039205 A 20160301
• JP 2017008079 W 20170301

Abstract (en)
[origin: EP3425028A1] In order to provide a technique for supplying fuel gas obtained by reforming heavy hydrocarbon gas and containing methane gas at a high concentration, there are provided a reforming device 10 including a gas generating section 11 configured to effect a decomposing reaction in which the heavy hydrocarbon gas desulfurized by a desulfurizing device 20 is decomposed into methane through steam reforming thereof to generate methane-containing mixture gas and a resynthesizing section 12 for resynthesizing methane from carbon monoxide and hydrogen contained in the mixture gas by a catalyst. There are also provided a heavy hydrocarbon gas supplying passage L1 for supplying heavy hydrocarbon gas to the reforming device 10 via the desulfurizing device 20, a heat exchanging section for effecting, within the resynthesizing section 12, heat exchange between the mixture gas supplied from the gas generating section 11 and the heavy hydrocarbon gas before its desulfurization by the desulfurizing device 20 which flows in the heavy hydrocarbon gas supplying passage L1, a recycling passage L4 for recycling a portion of the mixture gas generated in the gas generating section 11 to the heavy hydrocarbon gas supplying passage L1, and a fuel gas supplying passage L5 for supplying the fuel gas discharged from the resynthesizing section 12 to a combustion device (gas engine GE).

IPC 8 full level
C10L 3/08 (2006.01); **C07C 4/02** (2006.01); **C07C 4/06** (2006.01); **C07C 9/04** (2006.01); **C10L 3/10** (2006.01)

CPC (source: EP KR)
C10G 9/36 (2013.01 - KR); **C10G 45/02** (2013.01 - KR); **C10L 3/08** (2013.01 - EP KR); **C10L 3/103** (2013.01 - EP); **C10L 2270/02** (2013.01 - EP); **C10L 2270/04** (2013.01 - EP); **C10L 2290/04** (2013.01 - EP); **C10L 2290/06** (2013.01 - EP); **C10L 2290/10** (2013.01 - EP)

Citation (search report)
• [A] US 3870738 A 19750311 - YAMAMOTO KENZO, et al
• [A] WO 2010004300 A1 20100114 - JOHNSON MATTHEY PLC [GB], et al
• [A] WO 02067351 A1 20020829 - CERAMIC FUEL CELLS LTD [AU], et al
• [A] GB 2432369 A 20070523 - TOTAL SA [FR]
• See references of WO 2017150600A1

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JP2019157673A

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

DOCDB simple family (publication)
EP 3425028 A1 20190109; EP 3425028 A4 20191127; CN 108699466 A 20181023; JP WO2017150600 A1 20181227; KR 20180123065 A 20181114; WO 2017150600 A1 20170908

DOCDB simple family (application)
EP 17760064 A 20170301; CN 201780014780 A 20170301; JP 2017008079 W 20170301; JP 2018503366 A 20170301; KR 20187028286 A 20170301