

Title (en)
PROCESS AND SYSTEM FOR PROVIDING HYDROGEN GAS

Title (de)
VERFAHREN UND ANLAGE ZUM BEREITSTELLEN VON WASSERSTOFFGAS

Title (fr)
PROCÉDÉ ET SYSTÈME DE FOURNITURE DE GAZ HYDROGÈNE

Publication
EP 4326667 A1 20240228 (DE)

Application
EP 22723081 A 20220414

Priority
• DE 102021203885 A 20210419
• EP 2022060063 W 20220414

Abstract (en)
[origin: WO2022223445A1] A process for providing hydrogen gas involves providing a liquid hydrogen carrier material (LOHC), eliminating oxygen-carrying and/or sulfur-carrying and/or halogen-carrying components from the liquid hydrogen carrier material (LOHC), releasing hydrogen gas (H₂) by catalytic dehydration of the purified hydrogen carrier material (LOHC), and conditioning the released hydrogen gas (H₂).

IPC 8 full level
B01D 15/00 (2006.01); **C01B 3/00** (2006.01); **B01D 53/047** (2006.01); **C01B 3/22** (2006.01); **C01B 3/50** (2006.01)

CPC (source: EP)
B01D 53/0407 (2013.01); **B01D 53/047** (2013.01); **B01D 53/52** (2013.01); **B01D 53/62** (2013.01); **B01D 53/864** (2013.01); **C01B 3/0015** (2013.01); **C01B 3/50** (2013.01); **B01D 2253/102** (2013.01); **B01D 2253/104** (2013.01); **B01D 2253/106** (2013.01); **B01D 2253/108** (2013.01); **B01D 2253/1124** (2013.01); **B01D 2255/102** (2013.01); **B01D 2255/20761** (2013.01); **B01D 2255/20792** (2013.01); **B01D 2256/16** (2013.01); **B01D 2257/2045** (2013.01); **B01D 2257/206** (2013.01); **B01D 2257/2064** (2013.01); **B01D 2257/304** (2013.01); **B01D 2257/306** (2013.01); **B01D 2257/502** (2013.01); **B01D 2257/80** (2013.01)

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)
DE 102021203885 A1 20221020; EP 4326667 A1 20240228; WO 2022223445 A1 20221027

DOCDB simple family (application)
DE 102021203885 A 20210419; EP 2022060063 W 20220414; EP 22723081 A 20220414