

Title (en)

METHOD AND FACILITY FOR STORING AND DISTRIBUTING LIQUEFIED HYDROGEN

Title (de)

VERFAHREN UND ANLAGE ZUR SPEICHERUNG UND VERTEILUNG VON VERFLÜSSIGTEM WASSERSTOFF

Title (fr)

PROCÉDÉ ET INSTALLATION DE STOCKAGE ET DE DISTRIBUTION D'HYDROGÈNE LIQUÉFIÉ

Publication

**EP 3791120 A1 20210317 (FR)**

Application

**EP 19730396 A 20190429**

Priority

- FR 1853927 A 20180507
- FR 2019050994 W 20190429

Abstract (en)

[origin: WO2019215403A1] The invention relates to a method for storing and distributing liquefied hydrogen using a facility (1) that comprises a store (4) of liquid hydrogen at a predetermined storage pressure, a source (2) of hydrogen gas, a liquefier (3) comprising an inlet connected to the source (2) and an outlet connected to the liquid hydrogen store (4), the store (4) comprising a pipe (10) for drawing liquid, comprising one end connected to the liquid hydrogen store (4) and one end intended for being connected to at least one mobile tank (8), the method comprising a step of liquefying hydrogen gas supplied by the source (2) and a step of transferring the liquefied hydrogen into the store (4), characterised in that the hydrogen liquefied by the liquefier (3) and transferred into the store (4) has a temperature lower than the bubble temperature of hydrogen at the storage pressure.

IPC 8 full level

**F25J 1/00** (2006.01); **F17C 5/04** (2006.01); **F25J 1/02** (2006.01)

CPC (source: EP KR US)

**F17C 5/04** (2013.01 - KR US); **F25J 1/001** (2013.01 - EP KR US); **F25J 1/0245** (2013.01 - EP KR); **F25J 1/0254** (2013.01 - EP KR);  
**F25J 1/0257** (2013.01 - EP KR); **F25J 1/0274** (2013.01 - EP KR); **F17C 2221/012** (2013.01 - EP KR US); **F17C 2223/0161** (2013.01 - EP KR US);  
**F17C 2223/033** (2013.01 - EP KR US); **F17C 2225/0161** (2013.01 - EP KR); **F17C 2225/033** (2013.01 - EP KR);  
**F17C 2265/061** (2013.01 - EP KR US); **F25J 2210/90** (2013.01 - EP KR US); **F25J 2290/34** (2013.01 - EP KR US);  
**F25J 2290/62** (2013.01 - EP KR); **Y02E 60/32** (2013.01 - EP KR); **Y02P 90/45** (2015.11 - EP KR)

Citation (search report)

See references of WO 2019215403A1

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

DOCDB simple family (publication)

**FR 3080906 A1 20191108; FR 3080906 B1 20210115; CN 112154295 A 20201229; EP 3791120 A1 20210317; JP 2021523326 A 20210902;**  
JP 7346453 B2 20230919; KR 20210005914 A 20210115; US 2021254789 A1 20210819; WO 2019215403 A1 20191114

DOCDB simple family (application)

**FR 1853927 A 20180507; CN 201980034511 A 20190429; EP 19730396 A 20190429; FR 2019050994 W 20190429;**  
JP 2020562119 A 20190429; KR 20207033835 A 20190429; US 201917052921 A 20190429