

Title (en)

DEVICE FOR LIQUEFYING GASEOUS DIHYDROGEN FOR OFFSHORE OR ONSHORE STRUCTURE

Title (de)

VORRICHTUNG ZUR VERFLÜSSIGUNG VON GASFÖRMIGEM DIHYDROGEN FÜR OFFSHORE- ODER ONSHORE-STRUKTUR

Title (fr)

DISPOSITIF DE LIQUÉFACTION DE DIHYDROGÈNE GAZEUX POUR OUVRAGE FLOTTANT OU TERRESTRE

Publication

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Application

**EP 22722310 A 20220414**

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Abstract (en)

[origin: WO2022223909A1] The present invention relates to a device (11) for liquefying gaseous dihydrogen resulting from the evaporation of dihydrogen in the liquid state (9) stored in at least one tank (3, 5). The liquefaction device (11) comprising at least one heat exchanger (13), at least one feed branch (21) configured to convey at least one portion of the gaseous dihydrogen from the tank (3, 5) to a gaseous dihydrogen consumer (7), a part of the feed branch passing through the heat exchanger inside of which is placed a catalyst (151) that is involved in the conversion of the parahydrogen to orthohydrogen, at least one cooling branch (23) comprising at least one compression member (25); a portion of the cooling branch (23) passing through the heat exchanger (13) exchanges heat with the first pass (15) in order to liquefy at least one portion of the dihydrogen circulating in the cooling branch and to heat the dihydrogen circulating in the feed branch (21).

IPC 8 full level

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