

Title (en)

HYDROGEN OFFLOADING IN AN ELECTROCHEMICAL GENERATOR UNIT INCLUDING A HYDROGEN FUEL CELL

Title (de)

WASSERSTOFFABLADUNG BEI EINEM ELEKTROCHEMISCHEN GENERATOR MIT EINER WASSERSTOFFBRENNSTOFFZELLE

Title (fr)

DÉSTOCKAGE D'HYDROGÈNE DANS UNE UNITÉ GÉNÉRATRICE ÉLECTROCHIMIQUE COMPRENANT UNE PILE À HYDROGÈNE

Publication

EP 2686901 A1 20140122 (FR)

Application

EP 12706872 A 20120306

Priority

- FR 1152220 A 20110317
- EP 2012053828 W 20120306

Abstract (en)

[origin: WO2012123290A1] In order to render an electrochemical generator unit including a hydrogen fuel cell (10) autonomous particularly in terms of water, the generator unit (1) includes a condenser (13) provided with a fan (13V) and a radiator (13R) contacting a tank (12) for storing hydrogen as a hydride. The condenser simultaneously transfers the heat from steam-laden air (17E) to an endothermic reaction of the hydride into an alloy and hydrogen via the radiator, and condenses the steam into condensed water (13EC) which is collected by a tank (14) supplying an electrolyzer (11) with water in order to generate hydrogen to be stored.

IPC 8 full level

H01M 8/06 (2006.01); **H01M 8/04** (2006.01); **H01M 8/18** (2006.01)

CPC (source: EP US)

C25B 1/04 (2013.01 - EP US); **F17C 11/005** (2013.01 - EP US); **H01M 8/04216** (2013.01 - EP US); **H01M 8/065** (2013.01 - EP US); **H01M 8/186** (2013.01 - EP US); **Y02E 60/32** (2013.01 - EP US); **Y02E 60/36** (2013.01 - EP US); **Y02E 60/50** (2013.01 - EP US)

Citation (search report)

See references of WO 2012123290A1

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