

Title (en)

PLANT AND PROCESS FOR THE EFFICIENT UTILIZATION OF EXCESS ELECTRIC ENERGY

Title (de)

ANLAGE UND VERFAHREN ZUR EFFIZIENTEN NUTZUNG VON ÜBERSCHÜSSIGER ELEKTRISCHER ENERGIE

Title (fr)

INSTALLATION ET PROCÉDÉ D'UTILISATION EFFICACE D'UNE ÉNERGIE ÉLECTRIQUE EN EXCÉDENT

Publication

**EP 3011076 A1 20160427 (DE)**

Application

**EP 14725685 A 20140520**

Priority

- DE 102013010034 A 20130617
- EP 2014060310 W 20140520

Abstract (en)

[origin: WO2014202314A1] In a plant comprising a first apparatus for the electrochemical or electrothermal production of hydrogen, which produces a first hydrogen stream; a second apparatus for producing hydrogen from a hydrocarbon by steam reforming, partial oxidation or dehydrogenation, which produces a second hydrogen stream; a hydrogen conduit or a hydrogen consumer to which both the first hydrogen stream and the second hydrogen stream are fed; and a control device which matches the production of hydrogen in the first apparatus and in the second apparatus in such a way that the total amount of first hydrogen stream and second hydrogen stream corresponds to a predetermined value, excess electric energy can be efficiently utilized by operating the apparatus for the electrochemical or electrothermal production of hydrogen with excess electric energy.

IPC 8 full level

**C01B 3/34** (2006.01); **C01B 3/36** (2006.01); **C01D 3/02** (2006.01); **C25B 1/04** (2006.01); **H01L 31/0525** (2014.01)

CPC (source: EP US)

**B01J 19/0033** (2013.01 - US); **C01B 3/24** (2013.01 - US); **C01B 3/34** (2013.01 - EP US); **C01B 3/36** (2013.01 - US); **C01C 1/0488** (2013.01 - EP US); **C25B 1/04** (2013.01 - EP US); **C25B 1/34** (2013.01 - EP US); **B01J 2219/00038** (2013.01 - US); **C01B 2203/0205** (2013.01 - EP US); **C01B 2203/025** (2013.01 - EP US); **C01B 2203/0266** (2013.01 - EP US); **C01B 2203/06** (2013.01 - US); **C01B 2203/1235** (2013.01 - US); **C01B 2203/1241** (2013.01 - EP US); **C01B 2203/142** (2013.01 - EP US); **C01B 2203/1647** (2013.01 - US); **Y02E 60/36** (2013.01 - EP US); **Y02E 70/30** (2013.01 - EP); **Y02P 20/133** (2015.11 - EP US); **Y02P 20/52** (2015.11 - EP US)

Citation (search report)

See references of WO 2014202314A1

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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