

Title (en)

HYDROGEN GAS ELECTROLYSIS AND SUPPLY APPARATUS AND METHOD

Title (de)

WASSERSTOFFGASELEKTROLYSE- UND -VERSORGUNGSVORRICHTUNG UND -VERFAHREN

Title (fr)

APPAREIL ET PROCEDE D'ELECTROLYSE ET D'ALIMENTATION EN HYDROGENE GAZEUX

Publication

EP 1756332 A4 20071226 (EN)

Application

EP 05757597 A 20050615

Priority

- NZ 2005000131 W 20050615
- NZ 52261904 A 20040618

Abstract (en)

[origin: WO2005122708A2] An electrode assembly for use in an electrochemical cell, said electrode being in the proportion(s) of a pyramid with the proportions of the pyramidal shape being determined by a specific formula where the height is multiplied by a figure between 1 and 2 to determine the four side lengths and the height is multiplied by a figure between 1.20 and 2.22 to determine the four base lengths. The invention also comprises methods and techniques for adjusting an internal combustion engine and/or electric power generator to allow for the engine to run on hydrogen generated from water using an electrolysis cell. The methods have been developed to reduce the likelihood of hydrogen ignition flame back.

IPC 8 full level

C25B 1/02 (2006.01); **C25B 1/16** (2006.01); **C25B 1/26** (2006.01); **C25B 9/19** (2021.01); **F02M 21/06** (2006.01); **F02M 25/12** (2006.01); **H01M 4/00** (2006.01)

CPC (source: EP KR US)

C25B 1/04 (2013.01 - EP US); **C25B 9/19** (2021.01 - EP US); **C25B 11/02** (2013.01 - KR); **C25B 11/043** (2021.01 - EP US); **F02D 19/022** (2013.01 - EP US); **F02M 21/0206** (2013.01 - EP US); **F02M 21/0227** (2013.01 - EP US); **F02M 21/06** (2013.01 - EP US); **F02M 25/12** (2013.01 - EP US); **F02D 19/027** (2013.01 - EP US); **Y02E 60/36** (2013.01 - EP US); **Y02T 10/12** (2013.01 - EP US); **Y02T 10/30** (2013.01 - EP US); **Y10T 29/49117** (2015.01 - EP US)

Citation (search report)

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- [X] US 4450060 A 19840522 - GONZALEZ ERNESTO [US]
- [X] DE 3031050 A1 19820325 - BITTNER SIEGFRIED [DE]
- [X] DATABASE WPI Week 198409, Derwent World Patents Index; AN 1984-051068, XP002458751
- See references of WO 2005122708A2

Designated contracting state (EPC)

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DOCDB simple family (publication)

WO 2005122708 A2 20051229; **WO 2005122708 A3 20060202**; AU 2005253902 A1 20051229; CA 2570922 A1 20051229; CN 101076616 A 20071121; EP 1756332 A2 20070228; EP 1756332 A4 20071226; JP 2008502802 A 20080131; KR 20070040793 A 20070417; NZ 522619 A 20050826; US 2007272548 A1 20071129

DOCDB simple family (application)

NZ 2005000131 W 20050615; AU 2005253902 A 20050615; CA 2570922 A 20050615; CN 200580019959 A 20050615; EP 05757597 A 20050615; JP 2007516417 A 20050615; KR 20077001322 A 20070118; NZ 52261904 A 20040618; US 57087105 A 20050615