

Title (en)

METHOD FOR PRODUCING PURE GASES, IN PARTICULAR HYDROGEN AND OXYGEN

Title (de)

VERFAHREN ZUR HERSTELLUNG VON REINEN GASEN, INSBESONDERE WASSERSTOFF UND SAUERSTOFF

Title (fr)

METHODE POUR LA PRODUCTION DES GAZS PURS, EN PARTICULIER D'HYDROGENE ET D'OXYGENE

Publication

**EP 1506131 A1 20050216 (FR)**

Application

**EP 03752799 A 20030512**

Priority

- FR 0301454 W 20030512
- FR 0206061 A 20020517

Abstract (en)

[origin: WO03097524A1] The invention concerns the control of production of separate gases, in particular in the production of hydrogen and oxygen by thermal dissociation of water. It concerns the manufacture of compact appliances, optionally mobile, for hydrogen production. The invention aims at improvement of such appliances. The volume of a reactor (1) holds evaporated water. It comprises a crucible (2) and two cavities (3 and 4) for collecting the separate gases. The gases are extracted through oxygen-permeable (5) and hydrogen-permeable (6) membranes. The water is conveyed by a conduit (7) towards a jet nozzle (8) inside the reactor. The spout (9) of the crucible is fed by a fuel gas conduit (10), the exhaust gases are discharged through the gas conduits. One conduit (12) is used for oxygen, which will be added to the fuel gas circuit. The other conduit (13) will transport hydrogen to its destination. The inventive device is particularly designed for mobile production of hydrogen on a small scale.

IPC 1-7

**C01B 3/04**; C01B 3/50; C01B 13/02; B01J 19/24

IPC 8 full level

**B01J 19/24** (2006.01); **C01B 3/04** (2006.01); **C01B 3/50** (2006.01); **C01B 13/02** (2006.01)

CPC (source: EP)

**B01J 19/2475** (2013.01); **C01B 3/045** (2013.01); **C01B 3/501** (2013.01); **C01B 13/0207** (2013.01); **C01B 13/0251** (2013.01); **B01J 2219/00157** (2013.01); **C01B 2203/041** (2013.01); **C01B 2203/0465** (2013.01); **C01B 2210/0053** (2013.01); **Y02E 60/36** (2013.01)

Citation (search report)

See references of WO 03097524A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 03097524 A1 20031127**; AU 2003254531 A1 20031202; EP 1506131 A1 20050216; FR 2839713 A1 20031121; FR 2839713 B1 20050311

DOCDB simple family (application)

**FR 0301454 W 20030512**; AU 2003254531 A 20030512; EP 03752799 A 20030512; FR 0206061 A 20020517