

Title (en)

FUEL CELL COMPRISING A PERFORATED FILM THAT DISTRIBUTES THE COMBUSTIBLE GAS ACROSS THE ELECTRODE SURFACE

Title (de)

BRENNSTOFF-ZELLE MIT EINER DAS BRENNGAS BER DER ELEKTRODEN- OBERFL CHE VERTEILENDEN PERFORIERTEN FOLIE

Title (fr)

PILE COMBUSTIBLE POURVUE D'UN FILM PERFOR R PARTISSANT LE GAZ DE COMBUSTION SUR LA SURFACE DE L' ELECTRODE

Publication

EP 1530812 A2 20050518 (DE)

Application

EP 03740435 A 20030708

Priority

- DE 10238860 A 20020824
- EP 0307307 W 20030708

Abstract (en)

[origin: WO2004021487A2] The invention relates to a fuel cell comprising a cathode-electrolyte-anode unit (7) and a structure which distributes the combustible gas across the electrode surface thereof. The surface of said structure, which faces the electrode (7A), is formed by a perforated film (1). The longitudinal axes (2a, 2a') of at least some of the holes (2, 2') or passage openings forming the perforation are differently inclined relative to the surface of the film such that the outlet port (2c) of the holes (2), which faces the electrode (7A), is preferably at least slightly directed towards the discharge (8A) side of the combustible gas from the fuel cell on the intake side (8Z) of the combustible gas into the fuel cell while the inlet port (2c') of the holes (2'), which faces the electrode (7A), is preferably at least slightly directed towards the intake side (8Z) of the combustible gas into the fuel cell on the discharge side (8A) of the combustible gas from the fuel cell. Alternatively, holes (2, 2') can be arranged essentially next to each other within the film (1), the inlet port (2b) of said holes (2, 2'), which lies opposite the electrode (7A), being alternately directed towards the combustible gas intake side (8Z) and towards the combustible gas discharge side (8A).

IPC 1-7

H01M 8/02

IPC 8 full level

H01M 8/02 (2006.01); **H01M 8/04** (2006.01); **H01M 8/12** (2006.01)

CPC (source: EP US)

H01M 8/0206 (2013.01 - EP US); **H01M 8/0247** (2013.01 - EP US); **H01M 8/026** (2013.01 - US); **H01M 8/04089** (2013.01 - EP US); **H01M 8/241** (2013.01 - US); **H01M 8/2432** (2016.02 - EP); **H01M 8/12** (2013.01 - EP US); **Y02E 60/50** (2013.01 - EP)

Citation (search report)

See references of WO 2004021487A2

Designated contracting state (EPC)

CH DE FR GB LI

DOCDB simple family (publication)

DE 10238860 A1 20040304; EP 1530812 A2 20050518; US 2005175884 A1 20050811; US 7261969 B2 20070828; WO 2004021487 A2 20040311; WO 2004021487 A3 20041229

DOCDB simple family (application)

DE 10238860 A 20020824; EP 0307307 W 20030708; EP 03740435 A 20030708; US 6362005 A 20050224