

Title (en)

FUEL CELL ARRANGEMENT HAVING DIFFERENTIAL PRESSURE CONTROL FOR AN H<sub>2</sub>/O<sub>2</sub> FUEL CELL

Title (de)

BRENNSTOFFZELLENANORDNUNG MIT DIFFERENZDRUCKREGELUNG FÜR EINE H<sub>2</sub>/O<sub>2</sub>-BRENNSTOFFZELLE

Title (fr)

AGENCEMENT DE PILE À COMBUSTIBLE POURVU D'UNE RÉGULATION DE PRESSION DIFFÉRENTIELLE POUR UNE PILE À COMBUSTIBLE H<sub>2</sub>/O<sub>2</sub>

Publication

**EP 3738163 A1 20201118 (DE)**

Application

**EP 19701290 A 20190109**

Priority

- DE 102018200350 A 20180111
- EP 2019050365 W 20190109

Abstract (en)

[origin: WO2019137924A1] The invention relates to a fuel cell arrangement (10) having an anode (26) connected to an H<sub>2</sub> inflow (48) and a cathode (30) connected to an O<sub>2</sub> inflow (50), wherein a differential pressure control device (52) is arranged between the H<sub>2</sub> inflow (48) and the O<sub>2</sub> inflow (50) for controlling the differential pressure between the H<sub>2</sub> inflow (48) and the O<sub>2</sub> inflow (50), the differential pressure control device (52) having a fluid connection (54) between the H<sub>2</sub> inflow (48) and the O<sub>2</sub> inflow (50) in which a deflectable diaphragm is arranged, to which a pin (64) is coupled which, when the diaphragm (56) is deflected, opens a valve (58) arranged in the H<sub>2</sub> inflow (48) as a result of positive O<sub>2</sub> pressure.

IPC 8 full level

**H01M 8/04089** (2016.01); **H01M 8/04746** (2016.01)

CPC (source: EP US)

**G05D 16/028** (2018.12 - EP US); **G05D 16/0663** (2013.01 - EP US); **G05D 16/0672** (2013.01 - EP); **H01M 8/04104** (2013.01 - EP US); **H01M 8/04753** (2013.01 - US); **H01M 8/04783** (2013.01 - EP US); **H01M 2250/20** (2013.01 - EP); **Y02E 60/50** (2013.01 - EP); **Y02T 90/40** (2013.01 - EP)

Citation (search report)

See references of WO 2019137924A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**DE 102018200350 A1 20190711**; CN 111587505 A 20200825; EP 3738163 A1 20201118; US 11289719 B2 20220329; US 2020365919 A1 20201119; WO 2019137924 A1 20190718

DOCDB simple family (application)

**DE 102018200350 A 20180111**; CN 201980008160 A 20190109; EP 19701290 A 20190109; EP 2019050365 W 20190109; US 201916960655 A 20190109