

Title (en)

RECIRCULATING LOOP FOR A FUEL CELL

Title (de)

REZIRKULATIONSKREIS FÜR EINE BRENNSTOFFZELLE

Title (fr)

BOUCLE DE RECYCLAGE POUR PILE A COMBUSTIBLE

Publication

**EP 2671277 A1 20131211 (FR)**

Application

**EP 12701350 A 20120126**

Priority

- FR 1150749 A 20110201
- EP 2012051197 W 20120126

Abstract (en)

[origin: WO2012104191A1] The invention relates to a recirculating loop (11R or 12Ra) for a gas circuit of a fuel cell (1a), which recirculating loop forms a connection duct beginning at the outlet of one of the two anode or cathode circuits of the fuel cell stack (1) and terminating on one of the two supply circuits, either on the fuel-gas supply duct (11A) or on the oxidant-gas supply duct (12A). The recirculating loop recirculates the gas contained in the anode or cathode circuits of the fuel cell, said recirculating loop comprising a pump (115 or 125) for recirculating said gas. The recirculating loop comprises a multi-way valve (119 or 129) that divides the loop into a first section (11R1 or 12R1) and a second section (11R2a or 12R2a), said multi-way valve having: a first stable operating position which establishes continuity between the first and second sections of the loop; and a second stable operating position which simultaneously interrupts the continuity between the first and second sections of the recirculating loop and brings said recirculating loop into contact with the atmosphere, by moving the multi-way valve.

IPC 8 full level

**H01M 8/04** (2006.01)

CPC (source: EP US)

**H01M 8/04097** (2013.01 - EP US); **H01M 8/04164** (2013.01 - EP US); **H01M 8/04231** (2013.01 - EP US); **H01M 8/04402** (2013.01 - EP US); **H01M 8/0441** (2013.01 - EP US); **H01M 8/04514** (2013.01 - EP US); **H01M 8/04559** (2013.01 - EP US); **H01M 8/04589** (2013.01 - EP US); **H01M 8/04753** (2013.01 - EP US); **H01M 8/04761** (2013.01 - EP US); **H01M 2008/1095** (2013.01 - EP US); **Y02E 60/50** (2013.01 - EP)

Citation (search report)

See references of WO 2012104191A1

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