

Title (en)

FUEL CELL SYSTEM

Title (de)

BRENNSTOFFZELLENSYSTEM

Title (fr)

SYSTÈME DE PILE À COMBUSTIBLE

Publication

EP 3912214 A1 20211124 (DE)

Application

EP 19812946 A 20191126

Priority

- DE 102019200459 A 20190116
- EP 2019082560 W 20191126

Abstract (en)

[origin: WO2020148010A1] The present invention relates to a fuel cell system (10), comprising at least one fuel cell (14), a hydrogen store (26), in which hydrogen is stored under positive pressure, and which is connected to an anode compartment (18) of the fuel cell (14) via a hydrogen feed line (22), and an anode circuit (58), by means of which unused hydrogen at an outlet (50) of the anode compartment (18) can be recirculated into an inlet (42) of the anode compartment (18). At least one electrically driven recirculation blower (62) is provided between the outlet (50) and the inlet (42) of the anode compartment (18), by means of which blower the unused hydrogen can be fed to the inlet (42) of the anode compartment (18), and at least some of the hydrogen fed to the anode compartment (18) from the hydrogen store (26) can be introduced into at least one gas bearing (70) of the electrically driven recirculation blower (62), and the gas bearing (70) can thus be statically supportive.

IPC 8 full level

H01M 8/04089 (2016.01); **F25B 1/00** (2006.01)

CPC (source: EP)

H01M 8/04097 (2013.01); **Y02E 60/50** (2013.01)

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 102019200459 A1 20200716; CN 113330616 A 20210831; CN 113330616 B 20240322; EP 3912214 A1 20211124;
WO 2020148010 A1 20200723

DOCDB simple family (application)

DE 102019200459 A 20190116; CN 201980089349 A 20191126; EP 19812946 A 20191126; EP 2019082560 W 20191126