

Title (en)

AIR SUPPLY APPARATUS FOR FUEL CELL SYSTEMS, AND FUEL CELL SYSTEM

Title (de)

LUFTVERSORGUNGSVORRICHTUNG FÜR BRENNSTOFFZELLENSYSTEME UND BRENNSTOFFZELLENSYSTEM

Title (fr)

APPAREIL D'ALIMENTATION EN AIR POUR SYSTÈMES DE PILE À COMBUSTIBLE ET SYSTÈME DE PILE À COMBUSTIBLE

Publication

EP 4150688 A1 20230322 (DE)

Application

EP 21727091 A 20210512

Priority

- DE 102020206162 A 20200515
- EP 2021062565 W 20210512

Abstract (en)

[origin: WO2021228908A1] The invention relates to an air supply apparatus (1) for fuel cell systems (2, 3), having a flow compressor and having an electric drive motor (4) for the flow compressor, wherein the flow compressor has two compressor impellers (6, 7) which are of substantially symmetrical configuration and which are arranged, together with the electric drive motor (4) arranged between them, on a common shaft (5). The air supply apparatus according to the invention is distinguished by the fact that the two compressor impellers (6, 7) are, on a pressure side, connected to two systems (2, 3, 10, 13) which are pneumatically not permanently connected. Also claimed is a fuel cell system (2, 3) which utilizes an air supply apparatus (1) of said type.

IPC 8 full level

H01M 8/04111 (2016.01); **H01M 8/04089** (2016.01)

CPC (source: EP KR US)

H01M 8/04089 (2013.01 - EP KR US); **H01M 8/04097** (2013.01 - EP KR US); **H01M 8/04111** (2013.01 - EP KR US); **H01M 8/04761** (2013.01 - US); **F04D 13/06** (2013.01 - US); **Y02E 60/50** (2013.01 - EP)

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

DE 102020206162 A1 20211118; CN 115552670 A 20221230; EP 4150688 A1 20230322; JP 2023524852 A 20230613; JP 7486608 B2 20240517; KR 20230009954 A 20230117; US 2023178764 A1 20230608; WO 2021228908 A1 20211118

DOCDB simple family (application)

DE 102020206162 A 20200515; CN 202180034485 A 20210512; EP 2021062565 W 20210512; EP 21727091 A 20210512; JP 2022568369 A 20210512; KR 20227043293 A 20210512; US 202117998778 A 20210512