

Title (en)

METHOD FOR MANAGING HEAT IN A VEHICLE FUEL CELL SYSTEM

Title (de)

VERFAHREN ZUR WÄRMEVERWALTUNG IN EINEM FAHRZEUGBRENNSTOFFZELLENSYSTEM

Title (fr)

PROCÉDÉ DE GESTION THERMIQUE D'UN SYSTÈME À PILE À COMBUSTIBLE DE VÉHICULE

Publication

**EP 4222799 A1 20230809 (FR)**

Application

**EP 21786130 A 20210928**

Priority

- FR 2010005 A 20200930
- EP 2021076625 W 20210928

Abstract (en)

[origin: WO2022069463A1] Disclosed is a method for managing heat in a vehicle power supply system (2) that comprises: - a hydrogen fuel cell, - a plurality of cartridges (16) for storing ammonia, - a circuit (20) for injecting each cartridge (16) into the fuel cell (6), - a circuit (8) for cooling the fuel cell, the circuit containing a heat transfer fluid, and - a heat sink (14), at least one of the cartridges (16) being active and at least one of the cartridges (16) being passive. According to the method, at least one of the following steps is implemented: a) increasing the ammonia pressure inside at least one of the active cartridges, b) circulating, in at least one of the passive cartridges (16), the heat transfer fluid leaving the fuel cell (6), c) increasing the speed of ammonia desorption in one of the active cartridges (16), a portion of the desorbed ammonia being stored in one of the passive cartridges (16).

IPC 8 full level

**H01M 8/04029** (2016.01); **H01M 8/04082** (2016.01); **H01M 8/0606** (2016.01)

CPC (source: EP KR)

**H01M 8/04029** (2013.01 - EP KR); **H01M 8/04208** (2013.01 - EP KR); **H01M 8/04216** (2013.01 - EP KR); **H01M 8/0606** (2013.01 - EP KR); **H01M 2008/1095** (2013.01 - EP KR); **H01M 2250/20** (2013.01 - EP KR); **Y02E 60/36** (2013.01 - EP KR); **Y02E 60/50** (2013.01 - EP KR); **Y02T 90/40** (2013.01 - EP KR)

Citation (search report)

See references of WO 2022069463A1

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)

**FR 3114692 A1 20220401**; **FR 3114692 B1 20220826**; EP 4222799 A1 20230809; JP 2023546799 A 20231108; KR 102584021 B1 20230927; KR 20230051314 A 20230417; WO 2022069463 A1 20220407

DOCDB simple family (application)

**FR 2010005 A 20200930**; EP 2021076625 W 20210928; EP 21786130 A 20210928; JP 2023519740 A 20210928; KR 20237011559 A 20210928