

Title (en)

SYSTEM FOR COOLING A FUEL CELL AND FUEL CELL EQUIPPED WITH SUCH A SYSTEM

Title (de)

SYSTEM ZUR KÜHLUNG EINER BRENNSTOFFZELLE UND BRENNSTOFFZELLE MIT EINEM SOLCHEN SYSTEM

Title (fr)

SYSTÈME DE REFROIDISSEMENT D'UNE PILE À COMBUSTIBLE ET PILE À COMBUSTIBLE ÉQUIPÉE D'UN TEL SYSTÈME

Publication

**EP 4165707 A1 20230419 (FR)**

Application

**EP 21731880 A 20210610**

Priority

- FR 2006105 A 20200611
- EP 2021065719 W 20210610

Abstract (en)

[origin: WO2021250213A1] The invention relates to a system for cooling a fuel cell (10) of a transport vehicle, such as an aircraft, comprising a cooling heat exchanger (30) configured to be able to exchange heat between a loop (20) for cooling the cell and a channel for circulating dynamic air; a device (22, 23) for recovering water produced by the fuel cell; a tank (25) for storing recovered water; a device (50) for spraying water into the dynamic air channel (40) upstream of the heat exchanger (30); a computer (28) for controlling the amount of sprayed water as a function of a measurement representing the temperature of the fuel cell (10).

IPC 8 full level

**H01M 8/04014** (2016.01); **B64D 37/00** (2006.01); **H01M 8/04007** (2016.01); **H01M 8/04089** (2016.01); **H01M 8/04119** (2016.01); **H01M 8/0432** (2016.01); **H01M 8/04828** (2016.01); **H01M 8/04992** (2016.01)

CPC (source: EP US)

**B64D 13/06** (2013.01 - US); **H01M 8/04014** (2013.01 - EP); **H01M 8/04074** (2013.01 - EP US); **H01M 8/04097** (2013.01 - EP); **H01M 8/04156** (2013.01 - EP); **H01M 8/04164** (2013.01 - EP US); **H01M 8/04358** (2013.01 - EP US); **H01M 8/04828** (2013.01 - EP); **H01M 8/04992** (2013.01 - EP US); **B64D 2013/0659** (2013.01 - EP US); **B64D 2041/005** (2013.01 - EP); **H01M 2250/20** (2013.01 - EP US); **Y02E 60/50** (2013.01 - EP); **Y02T 90/40** (2013.01 - EP)

Citation (search report)

See references of WO 2021250213A1

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 3111477 A1 20211217**; CN 115606021 A 20230113; EP 4165707 A1 20230419; US 2023187662 A1 20230615; WO 2021250213 A1 20211216

DOCDB simple family (application)

**FR 2006105 A 20200611**; CN 202180035377 A 20210610; EP 2021065719 W 20210610; EP 21731880 A 20210610; US 202117926620 A 20210610