

Title (en)

LIQUID-COOLED FUEL CELL BATTERY COMPRISING AN INTEGRATED HEAT EXCHANGER

Title (de)

FLÜSSIGKEITSGEKÜHLTE BRENNSTOFFZELLENBATTERIE MIT INTEGRIERTEM WÄRMETAUSCHER

Title (fr)

BATTERIE DE PILES A COMBUSTIBLE A REFROIDISSEMENT LIQUIDE COMPORTANT UN ECHANGEUR DE CHALEUR INTEGRE

Publication

**EP 1145352 A2 20011017 (DE)**

Application

**EP 00904806 A 20000103**

Priority

- DE 0000007 W 20000103
- DE 19900166 A 19990105

Abstract (en)

[origin: DE19900166C1] A liquid-cooled fuel-cell battery includes a primary coolant circulation and a secondary coolant circulation, into which is integrated a heat-exchanger. The primary coolant circulation lines extend from the fuel-cell stack to the heat-exchanger and lie within the fuel cell battery. The heat-exchanger used is specifically a plate heat-exchanger (3) and a coolant pump (1) for the primary coolant circulation is flanged onto one end-plate (5) of the battery. The heated, used coolant of the primary coolant circulation is regenerated in a heat-exchanger which is integrated into the fuel cell battery.

IPC 1-7

**H01M 8/04**

IPC 8 full level

**B60K 1/04** (2006.01); **H01M 8/04029** (2016.01); **H01M 8/04119** (2016.01)

CPC (source: EP US)

**H01M 8/04029** (2013.01 - EP US); **H01M 8/04119** (2013.01 - EP US); **H01M 2250/20** (2013.01 - EP US); **H01M 2300/0082** (2013.01 - EP US); **Y02E 60/50** (2013.01 - EP); **Y02T 90/40** (2013.01 - EP US); **Y10T 428/249953** (2015.04 - EP US)

Citation (search report)

See references of WO 0041261A2

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**DE 19900166 C1 20000330**; CA 2358257 A1 20000713; CN 1341284 A 20020320; EP 1145352 A2 20011017; JP 2002534776 A 20021015; US 2002009648 A1 20020124; WO 0041261 A2 20000713; WO 0041261 A3 20011025

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