

Title (en)

SYSTEM CONSISTING OF A FUEL CELL AND OF A HEAT EXCHANGER

Title (de)

SYSTEM AUS BRENNSTOFFZELLE UND WÄRMETAUSCHER

Title (fr)

SYSTEME COMPRENANT UNE PILE A COMBUSTIBLE ET UN ECHANGEUR THERMIQUE

Publication

EP 1384278 A2 20040128 (DE)

Application

EP 02740443 A 20020403

Priority

- DE 10121666 A 20010504
- EP 0203708 W 20020403

Abstract (en)

[origin: WO02091509A2] The invention relates to a system consisting of a fuel cell and of a heat exchanger, whereby the heat exchanger is flow-coupled to the fuel cell in such a manner that a gaseous reactant for the fuel cell is preheated in the heat exchanger that is flow-connected upstream in relation to the fuel cell. In addition, at least a portion of the waste gas from the fuel cell is guided through the heat exchanger connected downstream in relation thereto. The aim of the invention is to simplify the entire system, to reduce the installation space and weight, and to improve its functioning. To these ends, the invention provides that the heat exchanger is placed directly against the fuel cell and is integrated therewith whereby resulting in the provision of a direct flow transfer from the heat exchanger to the fuel cell.

IPC 1-7

H01M 8/04; **H01M 8/24**

IPC 8 full level

H01M 8/04014 (2016.01); **H01M 8/2465** (2016.01)

CPC (source: EP US)

H01M 8/04014 (2013.01 - EP US); **H01M 8/2483** (2016.02 - EP US); **H01M 8/2484** (2016.02 - US); **H01M 8/04022** (2013.01 - EP US); **H01M 2300/0074** (2013.01 - EP US); **Y02E 60/50** (2013.01 - EP)

Citation (search report)

See references of WO 02091509A2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 02091509 A2 20021114; **WO 02091509 A3 20031002**; DE 10121666 A1 20021107; EP 1384278 A2 20040128; US 2004081874 A1 20040429

DOCDB simple family (application)

EP 0203708 W 20020403; DE 10121666 A 20010504; EP 02740443 A 20020403; US 68470103 A 20031015