

Title (en)

FUEL CELL SYSTEM AND METHOD FOR INFLUENCING THE THERMAL AND TEMPERATURE BUDGET OF A FUEL CELL STACK

Title (de)

BRENNSTOFFZELLENSYSTEM UND VERFAHREN ZUM BEEINFLUSSEN DES WÄRME- UND TEMPERATURHAUSHALTES EINES BRENNSTOFFZELLENSTAPELS

Title (fr)

SYSTÈME DE PILES À COMBUSTIBLE ET PROCÉDÉ POUR INFLUENCER LE POTENTIEL THERMIQUE ET DE TEMPÉRATURE D'UN EMPILEMENT DE PILES À COMBUSTIBLE

Publication

EP 2059968 A1 20090520 (DE)

Application

EP 07785593 A 20070705

Priority

- DE 2007001187 W 20070705
- DE 102006042107 A 20060907

Abstract (en)

[origin: WO2008028439A1] The invention relates to a fuel cell system having a fuel cell stack (10), an afterburner (12) for burning off gas emerging from the fuel cell stack, and a heat exchanger (16) which is arranged in an off-gas passage (14) from the afterburner and in which cathode supply air (18) to be supplied to the fuel cell stack can be heated. The invention provides for the capability to supply cathode supply air (20) to the fuel cell stack (10) without previously having been heated in the heat exchanger (16), and for the capability to use the total amount of cathode supply air supplied as well as the ratio of the component of the cathode supply air (18, 20) that has been heated in the heat exchanger and of that which has not been heated in the heat exchanger to influence the thermal and temperature budget of the fuel cell stack (10). The invention also relates to a method for influencing the thermal and temperature budget of a fuel cell stack.

IPC 8 full level

H01M 8/04 (2006.01)

CPC (source: EP US)

H01M 8/04014 (2013.01 - EP US); **H01M 8/0612** (2013.01 - EP US); **H01M 2008/1293** (2013.01 - EP US); **Y02E 60/50** (2013.01 - EP)

Citation (search report)

See references of WO 2008028439A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

WO 2008028439 A1 20080313; AU 2007294309 A1 20080313; CA 2662003 A1 20080313; CN 101584069 A 20091118; DE 102006042107 A1 20080327; EA 200970253 A1 20090828; EP 2059968 A1 20090520; JP 2010503158 A 20100128; US 2009191434 A1 20090730

DOCDB simple family (application)

DE 2007001187 W 20070705; AU 2007294309 A 20070705; CA 2662003 A 20070705; CN 200780037462 A 20070705; DE 102006042107 A 20060907; EA 200970253 A 20070705; EP 07785593 A 20070705; JP 2009527004 A 20070705; US 43964007 A 20070705