

Title (en)

METHOD FOR PRODUCING A MELT CARBONATE-FUEL CELL AND TO MELT CARBONATE FUEL CELLS

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER SCHMELZCARBONAT-BRENNSTOFFZELLE SOWIE SCHMELZCARBONAT-BRENNSTOFFZELLE

Title (fr)

PROCEDE POUR PRODUIRE UNE PILE A COMBUSTIBLE A CARBONATE FONDU ET PILE A COMBUSTIBLE A CARBONATE FONDU AINSI PRODUITE

Publication

EP 1317780 A1 20030611 (DE)

Application

EP 01980389 A 20010914

Priority

- DE 10045912 A 20000916
- EP 0110646 W 20010914

Abstract (en)

[origin: WO0223648A1] The invention relates to a method for producing a melt carbonate fuel cell comprising a cathode layer made from porous nickel oxide, an anode layer made from porous nickel and a melt arranged between the cathode layer and the anode layer, received in the form of a finely porous electrolyte matrix melt consisting of one or more alkali metal carbonates as electrolytes. In order to produce the cathode layer, a sintered, coated electrode path, coated with catalytically activating particles, made of porous nickel in the fuel cell operation mode is reacted to form nickel oxide. According to the invention, the electrode path is coated with catalytic activating particles made from one or more non-oxidic inorganic metal compounds, which are reacted to form the corresponding metal oxides under gas development. The invention relates to another similar fuel cell with increased activation of the cathode reaction.

IPC 1-7

H01M 4/88; H01M 4/90; H01M 4/86; H01M 8/14

IPC 8 full level

H01M 4/86 (2006.01); **H01M 4/88** (2006.01); **H01M 4/90** (2006.01); **H01M 8/14** (2006.01)

CPC (source: EP US)

H01M 4/8885 (2013.01 - EP US); **H01M 4/9016** (2013.01 - EP US); **H01M 8/142** (2013.01 - EP US); **H01M 2004/8689** (2013.01 - EP US); **H01M 2008/147** (2013.01 - EP US); **H01M 2300/0051** (2013.01 - EP US); **Y02E 60/50** (2013.01 - EP US)

Citation (search report)

See references of WO 0223648A1

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 0223648 A1 20020321; CA 2422585 A1 20030314; CA 2422585 C 20101123; DE 10045912 A1 20020404; DE 10045912 C2 20020801; EP 1317780 A1 20030611; JP 2004523059 A 20040729; US 2004043284 A1 20040304; US 7282280 B2 20071016

DOCDB simple family (application)

EP 0110646 W 20010914; CA 2422585 A 20010914; DE 10045912 A 20000916; EP 01980389 A 20010914; JP 2002527589 A 20010914; US 38037603 A 20030723