

Title (en)
METHOD FOR REGENERATING CO CONTAMINATION IN HT-PEM FUEL CELLS AND A CORRESPONDING FUEL-CELL SYSTEM

Title (de)
VERFAHREN ZUR REGENERIERUNG VON CO-VERGIFTUNGEN BEI HT-PEM-BRENNSTOFFZELLEN UND ZUGEHÖRIGE
BRENNSTOFFZELLENANLAGE

Title (fr)
PROCEDE DE REGENERATION DE CONTAMINATIONS PAR CO DANS DES PILES A COMBUSTIBLE HT-PEM ET DISPOSITIF DE PILES A
COMBUSTIBLE CORRESPONDANT

Publication
EP 1336213 A1 20030820 (DE)

Application
EP 01993032 A 20011030

Priority
• DE 0104103 W 20011030
• DE 10053851 A 20001030

Abstract (en)
[origin: WO0237591A1] The HT-PEM fuel cells that are constantly operated at high temperatures are less sensitive to CO contamination than PEM fuel cells that are operated at normal temperatures. The aim of the invention is to regenerate possible CO contamination caused by the starting of the fuel cell. To achieve this, the HT-PEM fuel cell is operated in pulse mode for a predetermined period during the warm-up phase or at operating temperature. This permits the regeneration of the electrodes of the fuel cells, which have CO deposits. To carry out a regeneration method of a control and/or regulation device (120) in a fuel-cell system comprising at least one fuel cell module that consists of a stack of HT-PEM fuel cells, with a control and/or regulation device for process management allocated thereto, said system is provided with a pulse device (125), which activates a pulse-mode operation for the fuel-cell stack (110), in accordance with predeterminable parameters.

IPC 1-7
H01M 8/04

IPC 8 full level
H01M 8/04223 (2016.01); **H01M 8/04537** (2016.01); **H01M 8/04664** (2016.01); **H01M 8/0606** (2016.01)

CPC (source: EP KR US)
H01M 8/04 (2013.01 - KR); **H01M 8/04225** (2016.02 - EP KR US); **H01M 8/04302** (2016.02 - EP KR); **H01M 8/04552** (2013.01 - EP US); **H01M 8/04559** (2013.01 - EP US); **H01M 8/04671** (2013.01 - EP US); **H01M 8/2425** (2013.01 - EP KR US); **H01M 8/2457** (2016.02 - EP KR US); **H01M 8/0606** (2013.01 - EP US); **Y02E 60/50** (2013.01 - EP)

Citation (search report)
See references of WO 0237591A1

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 0237591 A1 20020510; AU 1583502 A 20020515; CA 2427133 A1 20030428; CN 1473370 A 20040204; DE 10053851 A1 20020508; EP 1336213 A1 20030820; JP 2004513486 A 20040430; KR 20030044062 A 20030602; US 2003203248 A1 20031030

DOCDB simple family (application)
DE 0104103 W 20011030; AU 1583502 A 20011030; CA 2427133 A 20011030; CN 01818352 A 20011030; DE 10053851 A 20001030; EP 01993032 A 20011030; JP 2002540233 A 20011030; KR 20037005966 A 20030429; US 42682203 A 20030430