

Title (en)

BIPOLAR PLATE AND METHOD FOR PRODUCING A PROTECTIVE LAYER ON A BIPOLAR PLATE

Title (de)

BIPOLARPLATTE UND VERFAHREN ZUM HERSTELLEN EINER SCHUTZSCHICHT AN EINER BIPOLARPLATTE

Title (fr)

PLAQUE BIPOLAIRE ET PROCÉDÉ DE RÉALISATION D'UNE COUCHE DE PROTECTION SUR UNE PLAQUE BIPOLAIRE

Publication

EP 2220708 A1 20100825 (DE)

Application

EP 07856759 A 20071214

Priority

EP 2007011021 W 20071214

Abstract (en)

[origin: US2009155667A1] In order to provide a bipolar plate for a fuel cell unit, wherein the bipolar plate comprises a support layer and a protective layer, wherein the protective layer comprises an at least binary oxide system with at least two different types of metal cations, the protective layer of which reliably reduces chromium evaporation even in long-term operation and which also meets the other requirements set for a bipolar plate, it is proposed that one type of metal cation of the oxide system of the protective layer is Fe.

IPC 8 full level

H01M 8/02 (2006.01); **H01M 8/12** (2006.01)

CPC (source: EP US)

H01M 8/0219 (2013.01 - EP US); **H01M 8/0228** (2013.01 - EP US); **H01M 2008/1293** (2013.01 - EP US); **Y02E 60/50** (2013.01 - EP)

Citation (search report)

See references of WO 2009076977A1

Citation (examination)

KIEFER T ET AL: "Electrical conductivity and thermal expansion coefficients of spinels in the series $\text{MnCo}_2\text{-xFexO}_4$ for application as a protective layer in SOFC", SOLID STATE ELECTROCHEMISTRY : PROCEEDINGS OF THE 26TH RISØ INTERNATIONAL SYMPOSIUM ON MATERIALS SCIENCE, 4 - 8 SEPTEMBER 2005, RISØ NATIONAL LABORATORY, ROSKILDE, DENMARK, ROSKILDE, DENMARK : RISØ NATIONAL LABORATORY, DK, 4 September 2005 (2005-09-04), pages 261 - 266, XP008149469, ISBN: 87-550-3455-1

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)

US 2009155667 A1 20090618; EP 2220708 A1 20100825; WO 2009076977 A1 20090625

DOCDB simple family (application)

US 7955808 A 20080327; EP 07856759 A 20071214; EP 2007011021 W 20071214