

Title (en)

METHOD FOR MAKING PROTON CONDUCTING MEMBRANES FOR FUEL CELLS BY RADIOGRAFTING

Title (de)

VERFAHREN ZUR HERSTELLUNG VON PROTONENLEITENDEN MEMBRANEN FÜR BRENNSTOFFZELLEN DURCH RADIOGRAFTING

Title (fr)

PROCEDE D'ELABORATION DE MEMBRANES CONDUCTRICES DE PROTONS DE PILE A COMBUSTIBLE PAR RADIOGREFFAGE.

Publication

**EP 2210306 A1 20100728 (FR)**

Application

**EP 08804642 A 20080924**

Priority

- EP 2008062732 W 20080924
- FR 0757875 A 20070926

Abstract (en)

[origin: WO2009040365A1] The invention relates to a method for making a proton-conducting membrane for a fuel cell, that successively comprises: the step of irradiating a polymer matrix; the step of grafting the polymer matrix thus irradiated by a radical reaction with a first compound, that comprises contacting the irradiated polymer matrix with said first compound, wherein said compound includes at least one group capable of forming a covalent bond by radical reaction with said matrix, and includes at least one reactive group capable of reacting with a group of a second compound containing at least one proton-conducting acid group for forming a covalent bond; and the step of contacting the matrix thus grafted with the second compound, whereby a reaction occurs between the reactive groups from the first compound and the appropriate groups of the second compound.

IPC 8 full level

**H01M 8/10** (2006.01)

CPC (source: EP US)

**C08F 259/08** (2013.01 - EP US); **C08J 5/2237** (2013.01 - EP US); **C08J 7/18** (2013.01 - EP US); **C08L 51/003** (2013.01 - EP US); **H01M 8/1023** (2013.01 - EP US); **H01M 8/1025** (2013.01 - EP US); **H01M 8/1027** (2013.01 - EP US); **H01M 8/103** (2013.01 - EP US); **H01M 8/1039** (2013.01 - EP US); **H01M 8/1072** (2013.01 - EP US); **H01M 8/1088** (2013.01 - EP US); **C08J 2327/00** (2013.01 - EP US); **C08J 2351/00** (2013.01 - EP US); **C08J 2351/06** (2013.01 - EP US); **Y02E 60/50** (2013.01 - EP); **Y02P 70/50** (2015.11 - EP US)

C-Set (source: EP US)

**C08L 51/003** + **C08L 2666/02**

Citation (search report)

See references of WO 2009040365A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**FR 2921518 A1 20090327**; **FR 2921518 B1 20091211**; CN 101809799 A 20100818; EP 2210306 A1 20100728; JP 2011501857 A 20110113; US 2010311860 A1 20101209; WO 2009040365 A1 20090402

DOCDB simple family (application)

**FR 0757875 A 20070926**; CN 200880108961 A 20080924; EP 08804642 A 20080924; EP 2008062732 W 20080924; JP 2010526275 A 20080924; US 67930008 A 20080924