

Title (en)

IMPROVED MEMBRANE-ELECTRODE ASSEMBLIES AND LONG-LIFE FUEL CELLS

Title (de)

VERBESSERTE MEMBRAN-ELEKTRODENEINHEITEN UND BRENNSTOFFZELLEN MIT HOHER LEBENSDAUER

Title (fr)

ENSEMBLES MEMBRANE-ELECTRODES AMELIORES ET PILES A COMBUSTIBLE A DUREE DE VIE PLUS LONGUE

Publication

EP 1955400 A1 20080813 (DE)

Application

EP 06806596 A 20061028

Priority

- EP 2006010389 W 20061028
- DE 102005052378 A 20051031

Abstract (en)

[origin: DE102005052378A1] A method (M1) for the production of high-molecular weight polymers with phosphonic acid groups (A) by radical polymerisation of a composition (I) containing at least 80.0 wt.% ethylenically-unsaturated compounds (II), in which composition (I) contains at least one monomer (III) with phosphonic acid groups. Independent claims are included for (1) a method (M2) for the production of high-molecular weight polymers with sulfonic acid groups (A) by radical polymerisation of a composition (I) as above which contains at least one monomer (IV) with sulfonic acid groups; (2) polymers (A) obtained by M1 or M2, with a degree of polymerisation (weight-average) of more than 300; (3) compositions containing (A) and a different polymer (B); (4) membrane-electrode units (MEU) comprising two electrodes in contact with catalyst layers and separated by a polymer-electrolyte-membrane containing (A); and (5) fuel cells with at least one MEU as above.

IPC 8 full level

H01M 8/10 (2006.01); **C08J 5/22** (2006.01)

CPC (source: EP KR US)

C08F 30/02 (2013.01 - EP US); **C08F 130/02** (2013.01 - EP US); **C08F 230/02** (2013.01 - EP US); **C08J 5/22** (2013.01 - KR); **H01M 4/86** (2013.01 - KR); **H01M 8/10** (2013.01 - KR); **H01M 8/1023** (2013.01 - EP US); **H01M 8/1039** (2013.01 - EP US); **H01M 8/1048** (2013.01 - EP US); **H01M 8/1072** (2013.01 - EP US); **H01M 8/1081** (2013.01 - EP US); **Y02E 60/50** (2013.01 - EP); **Y02P 70/50** (2015.11 - EP US)

Citation (search report)

See references of WO 2007051570A1

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