

Title (en)

METHOD FOR THE PRODUCTION OF PROTON-CONDUCTING POLYMER MEMBRANES, IMPROVED POLYMER MEMBRANES, AND THE USE THEREOF IN FUEL CELLS

Title (de)

VERFAHREN ZUR HERSTELLUNG VON PROTONENLEITENDEN POLYMERMEMBRANEN, VERBESSERTE POLYMERMEMBRANEN UND DEREN ANWENDUNG IN BRENNSTOFFZELLEN

Title (fr)

PROCEDE POUR PRODUIRE DES MEMBRANES POLYMERES CONDUCTRICES DE PROTONS, MEMBRANES POLYMERES PERFECTIONNEES ET LEUR UTILISATION DANS DES PILES A COMBUSTIBLE

Publication

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Application

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Abstract (en)

[origin: WO2004024796A1] The invention relates to proton-conducting polymer membranes containing polyazole. Said polymer membranes are obtained by means of a method which comprises the steps of A) producing a mixture comprising polyphosphoric acid, at least one polyazole, and/or at least one or several compounds that are suitable for forming polyazoles when subjected to thermal treatment according to step B), B) heating the mixture obtained in step A) to temperatures of up to 400 DEG C under an inert gas atmosphere, C) applying a layer of the mixture obtained in step A) and/or B) to a carrier, D) treating the membrane formed in step C) until said membrane is self-supporting, the treatment being done by means of a hydrolysis liquid that contains phosphorus oxyacids and/or sulfur oxyacids.

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Citation (examination)

BROOKFILED: "Brookfield KF10 and KF20", pages 1 - 18, Retrieved from the Internet <URL:<http://www.viscometers.org/PDF/Manuals/laboratory/FallingBallMan.pdf>>

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