

Title (en)
METHOD FOR PRODUCING A PROTON-CONDUCTING MEMBRANE

Title (de)
VERFAHREN ZUR HERSTELLUNG EINER PROTONENLEITENDEN MEMBRAN

Title (fr)
PROCÉDÉ DE FABRICATION D'UNE MEMBRANE CONDUISANT LES PROTONS

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Abstract (en)
[origin: WO2010063489A1] The invention relates to a method for the production of a proton-conducting polymer membrane on the basis of polyazoles, comprising the steps of A) converting one or more aromatic tetra-amino compounds having one or more aromatic carboxylic acids, which contain at least two acid groups per carboxylic acid monomer, to form a salt comprising diammonium cations and carboxylate anions, B) mixing the salt from step A) with polyphosphoric acid to form a solution and/or dispersion, C) applying a layer using the mixture according to step B) onto a carrier, D) heating the planar formation/layer obtained according to step C) to temperatures of up to 350°C, preferably up to 280°C, to form the polyazole polymers, E) treating the membrane formed in step D) in the presence of moisture at temperatures and for a duration sufficient until it is self-supporting.

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