

Title (en)
METHOD FOR PREPARING ELECTRODE-MEMBRANE ASSEMBLIES, RESULTING ASSEMBLIES AND FUEL CELLS COMPRISING SAME

Title (de)
VERFAHREN ZUR HERSTELLUNG VON ELEKTRODE-MEMBRAN-ANORDNUNGEN, SO ERZEUGTE ANORDNUNGEN UND DIESE ANORDNUNGEN ENTHALTENDE BRENNSTOFFZELLEN

Title (fr)
PROCEDE DE PREPARATION D'ASSEMBLAGES ELECTRODE - MEMBRANE, ASSEMBLAGES AINSI OBTENUS ET PILES A COMBUSTIBLE COMPRENANT CES ASSEMBLAGES

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Application
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Priority
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Abstract (en)
[origin: FR2805927A1] To form an assembly with at least one electrode (13) with an active surface, and a membrane (1) of a thermostable polymer, a solution of the thermostable polymer is bonded to a carrier to give a film of the solution which is dried by evaporation of the solvents. An electrode is placed on the film before it is completely dry, with the active electrode surface towards the film surface. The assembly is dried, and the electrode/membrane are detached from the substrate. The carrier is reinforced before the layer of thermostable polymer solution is applied, using glass fibers or a polymer. When the thermostable polymer solution layer is in place, a reinforcement is introduced within it by lamination. The assembly can be produced with two electrodes flanking a membrane, where the process is repeated after the electrode/membrane have been separated from the substrate for an additional electrode to be bonded to the other side of the membrane in the same sequence as for the first electrode. The film of thermostable polymer can be formed by impregnating the carrier with the solution, and electrodes are placed on both sides of the film. The thermostable polymer is an ion exchange polymer e.g. a proton conductive polymer.

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IPC 8 full level
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