

Title (en)
METHOD FOR OPERATING A FUEL CELL, POLYMER-ELECTROLYTE MEMBRANE FUEL CELL OPERATED ACCORDING TO SAID METHOD AND METHOD FOR PRODUCING THE SAME

Title (de)
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Title (fr)
PROCEDE D'EXPLOITATION D'UNE PILE A COMBUSTIBLE, PILE A COMBUSTIBLE A MEMBRANE ELECTROLYTIQUE POLYMERE MISE EN OEUVRE ET SON PROCEDE DE FABRICATION

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Abstract (en)
[origin: WO0227837A2] The invention relates to a method for operating a polymer-electrolyte membrane (PEM) fuel cell. When operating known polymer electrolyte membrane fuel cells it has to be made sure that especially the phosphoric acid does not directly contact the metal bipolar plate of the fuel cell at high temperatures. In order to avoid such a contact, a sufficiently electroconducting intermediate layer (10, 20) is interposed between the membrane electrode unit (1) and the bipolar plate (3) of the fuel cell, which prevents phosphoric acid or a mixture of phosphoric acid and water that may escape from the membrane-electrode unit (1) from reaching the bipolar plate (3). For producing the fuel cell according to the invention an at least two-layer stratified structure (10, 20) is introduced which becomes more hydrophobic and more finely pored with increasing proximity to the bipolar plate (3).

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