

Title (en)

PEM (POLYMER ELECTROLYTE MEMBRANE) FUEL CELL AND METHOD FOR OPERATING A PEM FUEL CELL WITH LIQUID HUMIDIFICATION AND/OR COOLING

Title (de)

PEM-BRENNSTOFFZELLE UND VERFAHREN ZUM BETREIBEN EINES PEM- BRENNSTOFFZELLENSYSTEMS MIT FLÜSSIGER BEFEUCHTUNG UND/ODER KÜHLUNG

Title (fr)

PILE A COMBUSTIBLE A MEMBRANE POLYMERE-ELECTROLYTE ET PROCEDE POUR ACTIONNER UN SYSTEME DE PILES A COMBUSTIBLE A MEMBRANE POLYMERE-ELECTROLYTE AVEC HUMIDIFICATION ET/OU REFROIDISSEMENT LIQUIDE

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Abstract (en)

[origin: WO9960640A2] The invention relates to a PEM (polymer electrolyte membrane) fuel cell (BZ) with a novel humidification and cooling system. The inventive fuel cell consists of a membrane-electrode unit (ME) and at least one separator with structured channels. A liquid or a foam is added to the stream of fuel and/or the stream of oxidant for humidification and/or cooling.

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