

Title (en)

PEM (POLYMER ELECTROLYTE MEMBRANE) FUEL CELL SYSTEM WITH HUMIDIFICATION AND/OR COOLING WITH A LIQUID MEDIUM, AND METHOD FOR OPERATING THE SAME

Title (de)

PEM-BRENNSTOFFZELLENSYSTEM MIT BEFEUCHTUNG UND/ODER KÜHLUNG MIT FLÜSSIGEM MEDIUM UND BETRIEBSVERFAHREN DAZU

Title (fr)

SYSTEME DE CELLULES ELECTROLYTIQUES A CARBURANT EN POLYMERE DOTE D'UN DISPOSITIF D'HUMIDIFICATION ET/OU D'UN DISPOSITIF DE REFROIDISSEMENT AVEC UN AGENT LIQUIDE ET PROCEDE D'EXPLOITATION CORRESPONDANT

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Application

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Abstract (en)

[origin: DE19821766C1] The invention relates to a PEM (polymer electrolyte membrane) fuel cell system with humidification and/or cooling with a liquid medium, especially for use in mobile systems. A liquid distributor is provided in one or both axial process gas supply lines. With the help of sound waves, said liquid distributor produces droplets immediately in front of the gas inlet of each fuel cell unit of a fuel cell stack and adds these to the stream of process gas (cf. an ink jet printer).

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