

Title (en)

FLOW MODULE AND FUEL CELL HAVING SAID FLOW MODULE

Title (de)

SYSTEM UND VERFAHREN ZUM ÜBERTRAGEN DIGITALER DATEN

Title (fr)

SYSTEME ET PROCEDE DE TRANSMISSION DE DONNEES NUMERIQUES

Publication

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Application

**EP 02776771 A 20021002**

Priority

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- DE 10148878 A 20011004

Abstract (en)

[origin: WO03032641A2] The invention relates to a flow module for a fuel cell comprising an polymer electrolyte membrane (PEM), said module supporting compensation of partial water vapor pressure using simple means thereby countering the drying of areas in the membrane even when the process gases fed to the fuel cell are only slightly humid or not humid at all. The flow module comprises at least one inlet (1) and at least one outlet (2) for a gas that is to be guided by means of an electrode of the fuel cell. The surface of the flow module that faces the electrode is structured in such a way that at least one channel (3) connecting the inlet (1) and the outlet (2) is formed between the flow module and the electrode. According to the invention, the at least one inlet (1) and the at least one outlet (2) are arranged and the at least one channel (3) is guided in such a way that the segments of the channel having a higher relative humidity are arranged in the vicinity of the segments of the channel having a lower relative humidity so that the humidity gradient on the PEM is balanced out.

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