

Title (en)
FUEL CELL

Title (de)
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Title (fr)
CELLULE DE COMBUSTIBLE

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Abstract (en)
[origin: WO02082562A2] The invention relates to a fuel cell (1) comprising at least the following parts: a proton-conducting membrane (2) serving as an electrolyte; catalyst layers (3), which cover the membrane (2) on both sides; gas permeable electrodes provided in the form an anode (4) and cathode (5), which rest on the outwardly pointing surface of the catalyst layers (3); electrically conductive plates (6), which contact the electrodes in an electrically conductive manner while being located at small distances from one another, and which, together with the electrodes, delimit gas-conducting channels, and; gas connections for supplying hydrogen (H₂) on one side and oxygen (O₂) on the other. The inventive fuel cell (1) is characterized in that the membrane (2) is a hybrid membrane comprising a matrix into which a channel-forming protein is mixed. The invention also relates to advantageous variants of the membrane (2) in which the matrix, for example, contains a molecular sieve/protein adduct.

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