

Title (en)
FUEL CELL

Title (de)
PEM-BRENNSTOFFZELLE MIT EINEN VULKANISIERTEN KAUTSCHUK MIT POLAREN SEITENGRUPPEN ENTHALTENDER
POLYMERMEMBRAN

Title (fr)
CELLULE DE COMBUSTIBLE

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Application
EP 01987955 A 20010927

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Abstract (en)
[origin: WO0233772A1] The invention relates to a fuel cell (1), comprising at least the following components: a proton-conducting polymer membrane (2) as the electrolyte; catalyst layers (3) covering the polymer membrane (2) on both sides; gas-permeable electrodes in the form of an anode (4) and a cathode (5), which lie adjacent to the surface of the catalyst layers (3) that faces outwards; electroconductive plates (6), which come into electroconductive contact with the electrodes in at short distances and which together with the electrodes, delimit channels carrying gas; and gas connections for supplying hydrogen (H₂) and for supplying oxygen (O₂). The inventive fuel cell (1) is characterised in that the polymer membrane (2) is a mixture based on a polymer blend containing at least one first polymer group A which is based on a halogenated and/or sulphonated polyalkene, and one second polymer group B which is based on a vulcanised rubber with a polar character.

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