

Title (en)

METHOD FOR OPERATING A FUEL CELL SYSTEM AND A CORRESPONDING FUEL CELL INSTALLATION

Title (de)

VERFAHREN ZUM BETRIEB EINES BRENNSTOFFZELLENSYSTEMS UND ZUGEHÖRIGE BRENNSTOFFZELLENANLAGE

Title (fr)

PROCEDE POUR ACTIONNER UN SYSTEME DE PILES A COMBUSTIBLE ET INSTALLATION DE PILES A COMBUSTIBLE CORRESPONDANTE

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Application

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Abstract (en)

[origin: WO0215307A2] In fuel cells (DMFC) methanol, serving as the fuel, is supplied to the system, whereby anode fluid including waste gases, such as carbon dioxide or the like, have to be led away after combustion. According to the invention, the carbon dioxide, which develops on the anode, is separated when hot from the anode fluid after leaving the anode of the fuel cell stack. The vaporous fuel separated together with the carbon dioxide is depleted in the reverse flow using cold water, that is recovered in the condenser of the cathode waste gas, and the warmer water of the anode fluid is admixed. In the corresponding installation, a cooler (4) with a CO₂ trap (5) arranged downstream is provided at least for the anode fluid, and a unit (6) for carrying out rectification is provided with which fuel contained there is separated and returned into the fuel circuit.

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