

Title (en)

FUEL CELL UNIT WITH IMPROVED REACTION GAS UTILISATION

Title (de)

BRENNSTOFFZELLENANLAGE MIT VERBESSERTER REAKTIONSGAS AUSNUTZUNG

Title (fr)

INSTALLATION DE PILES A COMBUSTIBLE ASSURANT UNE MEILLEURE EXPLOITATION DU GAZ DE REACTION

Publication

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Application

EP 01971682 A 20010829

Priority

- DE 0103319 W 20010829
- DE 10045098 A 20000912

Abstract (en)

[origin: WO0223653A2] The invention relates to a fuel cell unit with a fuel cell stack with improved reaction gas utilisation by means of variable mass transfer coefficients within the stack. The reaction gas utilisation is optimised by means of matching and shaping of the process gas stream distribution channels, such that the laminar flow in the smooth channels is turned into a turbulent flow and thus an increase in the mass transfer coefficient beta in the back end of the stack occurs. According to a preferred embodiment, pole plates, tripping edges and deflectors are provided in the distribution channels, by means of which the main direction of flow may be diverted to the active cell surfaces.

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H01M 8/02

IPC 8 full level

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Citation (search report)

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