Title (en)

HIGH-TEMPERATURE FUEL CELL STACK AND PROCESS FOR PRODUCING IT.

Title (de)

HOCHTEMPERATUR-BRENNSTOFFZELLEN-STAPEL UND VERFAHREN ZU SEINER HERSTELLUNG.

Title (fr)

EMPILAGE DE PILES A COMBUSTIBLE HAUTE TEMPERATURE ET SON PROCEDE DE FABRICATION.

Publication

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Application

EP 93923441 A 19931026

Priority

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- DE 4237602 A 19921106

Abstract (en)

[origin: DE4237602A1] In joining a high-temperature fuel cell stack there arises the basic problem of the contact over a large area of the electrode-dipole plate boundary areas. Owing to the residual ripple of the electrolyte and the electrodes fitted thereto and the resultant formation of poorly electrically conductive inter-diffusion layers at contact gaps, the overall efficiency falls owing to the resultant rise in the internal resistance of the stack. To remedy this problem the invention provides for the arrangement in a high-temperature fuel cell stack (2) of at least one functional layer (20, 22) between the electrode (10, 12) and the dipole plate (16, 18), said functional layer being electronically conductive and easily deformable at the operating temperature of the stack (2). The invention is applicable to all high-temperature fuel cell stacks.

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IPC 8 full level

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