

Title (en)

HIGH TEMPERATURE FUEL CELL HAVING A METALLIC SUPPORTING STRUCTURE FOR THE SOLID OXIDE FUNCTIONAL LAYERS

Title (de)

HOCHTEMPERATUR-BRENNSTOFFZELLE MIT EINER METALLISCHEN TRAGSTRUKTUR FÜR DIE FESTOXID-FUNKTIONSSCHICHTEN

Title (fr)

CELLULE DE COMBUSTIBLE HAUTE TEMPERATURE DOTEE D'UNE STRUCTURE PORTEUSE METALLIQUE DESTINEE A DES COUCHES FONCTIONNELLES D'OXYDE SOLIDE

Publication

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Application

EP 06753826 A 20060524

Priority

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Abstract (en)

[origin: WO2006136257A1] The invention relates to a high temperature fuel cell having a metallic supporting structure which has through-openings for a gas, for the solid oxide functional layers, a fine-pored intermediate structure made of nickel or a nickel alloy being provided between the large-pored supporting structure and the functional layer facing it. The fine-pored intermediate structure is preferably formed by a network having a mesh width with an order of magnitude of less than 80 µm, while the supporting structure can be a perforated metal sheet or a perforated foil. The fuel cell can be manufactured by welding the fine-pored intermediate structure to the large-pored supporting structure and then placing catalytically active anode material in the pores of the intermediate structure.

IPC 8 full level

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