

Title (en)
GAS-TIGHT ELECTROLYTE LAYER AND METHOD FOR THE PRODUCTION THEREOF

Title (de)
GASDICHTE ELEKTROLYTSCHICHT SOWIE VERFAHREN ZUR HERSTELLUNG

Title (fr)
COUCHE D'ELECTROLYTE ETANCHE AUX GAZ ET SON PROCEDE DE PRODUCTION

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Application
EP 05814342 A 20051028

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Abstract (en)
[origin: WO2006050692A2] The invention relates to a method for producing a gas-tight solid electrolyte layer, in which an electrolyte layer that is applied to a substrate and is unsintered or has been presintered at temperatures below 1150^oC is first infiltrated at least once with a fluid containing zirconium and is dried and optionally baked. The fully infiltrated electrolyte layer is then sintered at temperatures lying below 1400^oC. The electrolyte layer produced according to the inventive method is advantageously provided with very low leakage rates of less than 5*10⁻⁵ mbar*l/s*cm², which are determined at a differential pressure of 100 mbar by means of a helium leakage test apparatus.

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