

Title (en)

METHOD FOR PRODUCING A SOLID ELECTROLYTE LAYER ON A SUBSTRATE

Title (de)

VERFAHREN ZUM ERZEUGEN EINER FESTELEKTROLYTSCHICHT AUF EINEM SUBSTRAT

Title (fr)

PROCEDE DE FABRICATION D'UNE COUCHE D'ELECTROLYTE SOLIDE SUR UN SUBSTRAT

Publication

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Application

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Priority

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- EP 0109761 W 20010823
- EP 00118429 A 20000824

Abstract (en)

[origin: WO0216669A1] According to the inventive method, a sintering additive (4) is added to a ZrO₂-starting material (2), a liquid phase is formed during a sintering process and liquid phase sintering is possible at a reduced temperature in comparison with the required sintering temperature without the sintering additive (4). The reduced sintering temperature substantially prevents the formation of a foreign phase layer between a substrate (10) and the gas-tight layer (12) applied thereon, consisting of fully stabilized ZrO₂. The inventive method is particularly suitable for producing a solid electrolyte layer (14) on a cathode (16) of a high temperature fuel cell (18).

IPC 1-7

C23C 24/10; H01M 8/12

IPC 8 full level

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CPC (source: EP US)

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