

Title (en)

FLUID FLOW FIELD PLATES FOR ELECTROCHEMICAL DEVICES

Title (de)

FLUIDVERTEILUNGSPLETTEN FÜR ELEKTROCHEMISCHE VORRICHTUNGEN

Title (fr)

PLAQUES DE DISTRIBUTION DE FLUIDE POUR APPAREILS ELECTRO-CHIMIQUES

Publication

**EP 1466375 A2 20041013 (EN)**

Application

**EP 02723443 A 20020227**

Priority

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- US 27163801 P 20010227

Abstract (en)

[origin: WO02069426A2] Disclosed is a novel fluid flow field plate for use in a solid polymer electrolyte fuel cell. The flow field plate is made of a suitable electrically conducting material and comprises a substantially planar surface, a flow field formed in said substantially planar surface, said flow field comprising a plurality of staggered lands defining a network of substantially symmetric interconnected orifices and diagonal channels in the flow field and a fluid supply manifold through which fuel and an oxidant are introduced to the flow field and a fluid exhaust manifold through which reaction by-products and excess fuel and oxidant are removed from the flow field. Streams of the fuel, oxidant and reaction by-products are continually separated and diverted into separate channels, and the separated streams are then mixed with streams from adjacent channels in the orifices.

IPC 1-7

**H01M 8/02**

IPC 8 full level

**H01M 8/02** (2006.01); **H01M 8/10** (2006.01)

CPC (source: EP KR US)

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Citation (search report)

See references of WO 02069426A2

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**WO 02069426 A2 20020906**; **WO 02069426 A3 20040226**; **WO 02069426 A9 20040325**; AU 2002254223 A1 20020912; CA 2433034 A1 20020906; CN 1610982 A 20050427; EP 1466375 A2 20041013; JP 2004526283 A 20040826; KR 20040031697 A 20040413; TW 573378 B 20040121

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