

Title (en)

POLARIZED GAS SEPARATOR AND LIQUID COALESCER FOR FUEL CELL STACK ASSEMBLIES

Title (de)

POLARISATIONS-GASTRENNVORRICHTUNG UND FLÜSSIGKEITSVEREINIGUNGSVORRICHTUNG FÜR  
BRENNSTOFFZELLENSTAPELBAUGRUPPEN

Title (fr)

SEPARATEUR DE GAZ POLARISE ET COALESCEUR DE LIQUIDE POUR EMPILEMENTS DE CELLULES ELECTROCHIMIQUES

Publication

**EP 1504480 A2 20050209 (EN)**

Application

**EP 01973696 A 20010906**

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Abstract (en)

[origin: WO0227815A2] The present invention is a polarized gas separator useful in the bipolar construction of a fuel cell stack. It comprises a porous conductive substrate and a barrier layer, the barrier layer having a first side and a second side, and laterally extending through the porous conductive substrate so that a first portion of the porous conductive substrate extends from the first side of the barrier layer and a second portion of the porous conductive substrate extends from the second side of the barrier layer. Effectively, the polarized gas separator is a single component system that not only enhances power performance of fuel cell stacks but also defeats several problems previously unsolvable by conventional bipolar plate assemblies.

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