

Title (en)  
AIR BREATHING DIRECT METHANOL FUEL CELL

Title (de)  
DIREKT-METHANOL-BRENNSTOFFZELLE MIT LUFTATMUNG

Title (fr)  
PILE A COMBUSTIBLE A METHANOL DIRECT-AIR

Publication  
**EP 1342282 A1 20030910 (EN)**

Application  
**EP 01996902 A 20011031**

Priority  
• US 0146140 W 20011031  
• US 71314600 A 20001114

Abstract (en)  
[origin: WO0241433A1] An air breathing direct methanol fuel cell is provided with a membrane electrode assembly (14), a conductive cathode assembly (18) that is permeable to air and directly open to atmospheric air, and a conductive anode assembly (16) that is permeable to methanol and directly contacting a liquid methanol source (12). Water loss from the cell is minimized by making the conductive cathode assembly (18) hydrophobic and the conductive anode assembly (16) hydrophilic.

IPC 1-7  
**H01M 8/10**

IPC 8 full level  
**H01M 4/86** (2006.01); **H01M 8/02** (2006.01); **H01M 8/04** (2006.01); **H01M 8/10** (2006.01); **H01M 8/24** (2006.01)

CPC (source: EP US)  
**H01M 8/1009** (2013.01 - EP); **H01M 8/1011** (2013.01 - US); **H01M 8/2455** (2013.01 - EP); **H01M 8/0202** (2013.01 - EP);  
**Y02E 60/50** (2013.01 - EP)

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AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

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**US 0146140 W 20011031**; AU 2016802 A 20011031; EP 01996902 A 20011031; JP 2002543732 A 20011031