

Title (en)  
APPARATUS AND METHODS FOR DEOXIDIZING METAL SURFACES

Title (de)  
VORRICHTUNG UND VERFAHREN ZUM DESOXIDIEREN VON METALLFLÄCHEN

Title (fr)  
APPAREIL ET PROCEDES DE DESOXYDATION DE SURFACES METALLIQUES

Publication  
**EP 1701806 A4 20080924 (EN)**

Application  
**EP 03819278 A 20031218**

Priority  
US 0340200 W 20031218

Abstract (en)  
[origin: WO2005068088A1] Methods for deoxidizing metallic surfaces are disclosed. Such a method may include contacting a surface of a metal strip (102) with one or more chemical solutions until a potential drop across a thickness of the metal strip (102) is less than a pre-selected value. To process a metal strip (102) such that it may be suitable for fabrication of a bipolar plate for use in a fuel cell, the metal strip (102) may be processed until the potential drop is less than about 15 mV. A surface of the metal strip (102) may be contacted for a first period of time with a first chemical solution having a pH of between 10 and 14. Thereafter, the surface may be contacted for a second period of time with a second chemical solution having a pH of between 1 and 3. A conductive organic coating may then be applied to the surface. Such methods are particularly suitable for use in connection with a coil coating process.

IPC 8 full level  
**H01M 8/02** (2006.01); **B05D 1/02** (2006.01); **B05D 1/18** (2006.01); **B05D 1/36** (2006.01); **B05D 3/10** (2006.01); **B05D 5/12** (2006.01); **C23G 1/08** (2006.01); **C23G 1/18** (2006.01); **C23G 3/02** (2006.01); **C25F 1/04** (2006.01); **C25F 1/06** (2006.01)

CPC (source: EP)  
**C23G 1/00** (2013.01); **C23G 1/08** (2013.01); **C23G 1/081** (2013.01); **C23G 1/086** (2013.01); **C23G 1/18** (2013.01); **C23G 3/02** (2013.01); **C23G 3/021** (2013.01); **C23G 3/023** (2013.01); **C23G 3/024** (2013.01); **C23G 3/027** (2013.01); **C25F 1/04** (2013.01); **C25F 1/06** (2013.01); **H01M 8/0206** (2013.01); **H01M 8/0221** (2013.01); **H01M 8/0228** (2013.01); **Y02E 60/50** (2013.01)

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Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2005068088 A1 20050728**; AU 2003297306 A1 20050803; CA 2554791 A1 20050728; EP 1701806 A1 20060920; EP 1701806 A4 20080924

DOCDB simple family (application)  
**US 0340200 W 20031218**; AU 2003297306 A 20031218; CA 2554791 A 20031218; EP 03819278 A 20031218