

Title (en)  
SUBSTRATE COMPRISING A POLAR PLASMA-POLYMERISED COATING

Title (de)  
SUBSTRAT MIT EINER POLAREN PLASMAPOLYMERISIERTEN SCHICHT

Title (fr)  
SUBSTRAT ENDUIT D'UNE COUCHE POLAIRE A POLYMERISATION PLASMA

Publication  
**EP 1581347 B1 20090225 (DE)**

Application  
**EP 03813057 A 20031217**

Priority  
• CH 0300822 W 20031217  
• CH 21512002 A 20021217

Abstract (en)  
[origin: WO2004054728A2] The invention relates to substrates (12), which are coated with a polar plasma-polymerised coating of a thickness (d) in the nanometer range, said coating having multi-functional properties with long-term stability. The process gas contains at least one hydrocarbon that can be substituted and at least one inorganic gas. In a first zone or stage, the substrate is coated using process gases that contain at least one hydrocarbon compound, at least one hydrocarbon compound comprising functional groups containing nitrogen or nitrogen and oxygen and/or at least one inorganic gas containing nitrogen or nitrogen and oxygen. A second zone or stage uses process gases that are devoid of nitrogen and comprise at least one hydrocarbon compound, at least one hydrocarbon compound with functional groups that contain oxygen and/or at least one inorganic gas containing oxygen. Said two stages permit a corresponding lower and upper coating (14, 16) to be applied to the substrate (12).

IPC 8 full level  
**B05D 7/24** (2006.01)

CPC (source: EP US)  
**B05D 1/62** (2013.01 - EP US); **Y10T 428/265** (2015.01 - EP US); **Y10T 428/31504** (2015.04 - EP US)

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 2004054728 A2 20040701**; **WO 2004054728 A3 20040930**; AT E423633 T1 20090315; AU 2003303016 A1 20040709; DE 50311232 D1 20090409; EP 1581347 A2 20051005; EP 1581347 B1 20090225; US 2006165975 A1 20060727

DOCDB simple family (application)  
**CH 0300822 W 20031217**; AT 03813057 T 20031217; AU 2003303016 A 20031217; DE 50311232 T 20031217; EP 03813057 A 20031217; US 53822905 A 20050912