

Title (en)
COATING METHOD

Title (de)
BESCHICHTUNGSVERFAHREN

Title (fr)
PROCEDE DE REVÊTEMENT

Publication
EP 1802783 A1 20070704 (FR)

Application
EP 05815486 A 20051020

Priority
• FR 2005050870 W 20051020
• FR 0452390 A 20041021

Abstract (en)
[origin: WO2006043006A1] The invention relates to a method for coating a surface with nanoparticles, to a nanostructured coating that can be obtained by using this method, and to a device for carrying out the inventive method. The method is characterized in that it involves an injection of a colloidal sol of these nanoparticles into a plasma jet that projects these onto the surface. The device (1) comprises plasma torch (3), at least one reservoir (5) containing the colloidal sol (7) of nanoparticles; a device (9) for fixing and displacing the substrate (S), and; an injection system (11) for injecting the colloidal sol into the plasma jet (13) of the plasma torch. The invention can be used in optical, electronic, and energy (battery, thermal barrier) devices comprising a nanostructured coating that can be obtained by using the aforementioned method.

IPC 8 full level
C23C 4/12 (2006.01)

CPC (source: EP US)
C23C 4/123 (2016.01 - EP US); **Y10T 428/26** (2015.01 - EP US); **Y10T 428/265** (2015.01 - EP US)

Citation (search report)
See references of WO 2006043006A1

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

DOCDB simple family (publication)
FR 2877015 A1 20060428; FR 2877015 B1 20071026; AT E550452 T1 20120415; EP 1802783 A1 20070704; EP 1802783 B1 20120321; ES 2384263 T3 20120703; JP 2008517159 A 20080522; JP 5970147 B2 20160817; US 2008090071 A1 20080417; WO 2006043006 A1 20060427

DOCDB simple family (application)
FR 0452390 A 20041021; AT 05815486 T 20051020; EP 05815486 A 20051020; ES 05815486 T 20051020; FR 2005050870 W 20051020; JP 2007537352 A 20051020; US 57725705 A 20051020