

Title (en)

PLASMA UNIT AND METHOD FOR GENERATION OF A FUNCTIONAL COATING

Title (de)

PLASMAANLAGE UND VERFAHREN ZUR ERZEUGUNG EINER FUNKTIONSBECKICHTUNG

Title (fr)

INSTALLATION AU PLASMA ET PROCEDE DE GENERATION D'UN REVETEMENT FONCTIONNEL

Publication

EP 1360880 A1 20031112 (DE)

Application

EP 01989367 A 20011205

Priority

- DE 0104564 W 20011205
- DE 10104614 A 20010202

Abstract (en)

[origin: WO02062114A1] A plasma unit with an inductively-coupled, high-frequency plasma beam source (5), comprising a burner body (25), defining a plasma generation chamber (27), an outlet opening (26) for the plasma beam (20), a coil (17) partly surrounding the plasma generation chamber (27), an inlet (10), for introduction of a gas or and/or precursor material into the plasma generation chamber (27) and a high frequency generator (16), connected to said coil (17), for initiating the plasma and injecting an electrical power into the plasma (21) is disclosed. The plasma beam source (5) further comprises an electrical component, by means of which the intensity of the plasma beam (20) may be intermittently altered in a periodic manner. The invention further relates to a method for the generation of a functional coating on a substrate (19) by means of the plasma unit.

IPC 1-7

H05H 1/30; H01J 37/32

IPC 8 full level

C23C 16/507 (2006.01); **C23C 16/513** (2006.01); **C23C 16/515** (2006.01); **C23F 4/00** (2006.01); **H01J 37/32** (2006.01); **H05H 1/24** (2006.01);
H05H 1/30 (2006.01)

CPC (source: EP US)

C23C 16/513 (2013.01 - EP US); **C23C 16/515** (2013.01 - EP US); **H01J 37/32357** (2013.01 - EP US); **H01J 37/32706** (2013.01 - EP US);
H05H 1/30 (2013.01 - EP US)

Citation (search report)

See references of WO 02062114A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

WO 02062114 A1 20020808; DE 10104614 A1 20020822; EP 1360880 A1 20031112; JP 2004518028 A 20040617; JP 4416402 B2 20100217;
US 2011129617 A1 20110602

DOCDB simple family (application)

DE 0104564 W 20011205; DE 10104614 A 20010202; EP 01989367 A 20011205; JP 2002562131 A 20011205; US 24047701 A 20011205