

Title (en)

METHOD AND DEVICE FOR CONTINUOUS COLD PLASMA DEPOSITION OF METAL COATINGS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR KONTINUIERLICHEN KALTPLASMA-ABSCHEIDUNG VON METALLSCHICHTEN

Title (fr)

PROCEDE ET DISPOSITIF PERMETTANT LE DEPOT DE COUCHES METALLIQUES EN CONTINU PAR PLASMA FROID

Publication

EP 1313889 A1 20030528 (FR)

Application

EP 01962497 A 20010823

Priority

- EP 01962497 A 20010823
- BE 0100142 W 20010823
- EP 00202942 A 20000823

Abstract (en)

[origin: EP1182272A1] A method for the deposition of a metal layer on a substrate (1) uses a cold plasma inside an enclosure (7) heated to avoid the formation of a metal deposit at its surface. The enclosure has an inlet (21) and an outlet (22) for the substrate with a source of metal vapor between them, made up of an electrode to form a plasma (6) with the substrate or a separate electrically conducting element as a counter-electrode. The deposition metal is introduced in the liquid state in a retention tank (8) and is maintained as a liquid at an essentially constant level during the formation of the metal layer on the substrate. An Independent claim is included for the device used to put this method of coating a substrate into service.

IPC 1-7

C23C 14/34; C23C 14/32; H01J 37/34

IPC 8 full level

G02B 6/44 (2006.01); **C03C 25/42** (2006.01); **C23C 14/24** (2006.01); **C23C 14/32** (2006.01); **C23C 14/34** (2006.01); **H01J 37/34** (2006.01)

CPC (source: EP US)

C23C 14/246 (2013.01 - EP US); **C23C 14/32** (2013.01 - EP US); **C23C 14/3414** (2013.01 - EP US); **H01J 37/3408** (2013.01 - EP US); **H01J 37/3432** (2013.01 - EP US)

Citation (search report)

See references of WO 0216664A1

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)

EP 1182272 A1 20020227; AU 8372501 A 20020304; BR 0113560 A 20030708; CA 2420243 A1 20020228; EP 1313889 A1 20030528; JP 2004507617 A 20040311; US 2004026234 A1 20040212; US 7156960 B2 20070102; WO 0216664 A1 20020228; ZA 200301531 B 20040225

DOCDB simple family (application)

EP 00202942 A 20000823; AU 8372501 A 20010823; BE 0100142 W 20010823; BR 0113560 A 20010823; CA 2420243 A 20010823; EP 01962497 A 20010823; JP 2002522334 A 20010823; US 36258503 A 20030818; ZA 200301531 A 20030225