

Title (en)
Regulated thermal coating

Title (de)
Geregelte thermische Beschichtung

Title (fr)
Revêtement thermique réglé

Publication
EP 2757174 A1 20140723 (DE)

Application
EP 13152231 A 20130122

Priority
EP 13152231 A 20130122

Abstract (en)
The method involves heating, fusing and melting the materials (Mx,y) of the material stream (42) by using a plasma or a flame. One of the target variables material current rate of the material stream and/or temperature of the material stream and/or voltage between an electrode (36) and the nozzle (30) are determined and controlled. The gas flow rate of the gases such as argon, helium and hydrogen of the nozzle are increased or decreased.

Abstract (de)
Durch die kombinierte Messung der Partikelgeschwindigkeit, -temperatur, -intensität, Brennerspannung und deren Regelung in einem Toleranzbereich ist es möglich, die Schichtstruktur, die Schichtdicke und das Schichtgewicht trotz verschleißbedingter Schwankungen im Beschichtungsprozess konstant zu halten.

IPC 8 full level
C23C 4/12 (2006.01)

CPC (source: EP US)
C23C 4/129 (2016.01 - EP US); **C23C 4/134** (2016.01 - EP US)

Citation (applicant)
• EP 1204776 B1 20040602 - SIEMENS AG [DE], et al
• EP 1306454 A1 20030502 - SIEMENS AG [DE]
• EP 1319729 A1 20030618 - SIEMENS AG [DE]
• WO 9967435 A1 19991229 - SIEMENS AG [DE], et al
• WO 0044949 A1 20000803 - SIEMENS AG [DE], et al
• US 6024792 A 20000215 - KURZ WILFRIED [CH], et al
• EP 0892090 A1 19990120 - SULZER INNOTEC AG [CH]
• EP 0486489 B1 19941102 - SIEMENS AG [DE]
• EP 0786017 B1 19990324 - SIEMENS AG [DE]
• EP 0412397 B1 19980325 - SIEMENS AG [DE]
• EP 1306454 A1 20030502 - SIEMENS AG [DE]

Citation (search report)
• [X1] US 2004245354 A1 20041209 - SRINIVASAN VASUDEVAN [US]
• [X1] WO 2005085489 A1 20050915 - MTU AERO ENGINES GMBH [DE], et al
• [X1] US 3949266 A 19760406 - VOGTS WILLIAM A, et al
• [X1] US 2004031776 A1 20040219 - GEVELBER MICHAEL ALAN [US], et al

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2757174 A1 20140723; CN 104937127 A 20150923; CN 104937127 B 20170531; EP 2931933 A1 20151021; US 2015361542 A1 20151217; WO 2014114577 A1 20140731

DOCDB simple family (application)
EP 13152231 A 20130122; CN 201480005540 A 20140120; EP 14702468 A 20140120; EP 2014050978 W 20140120; US 201414762530 A 20140120