

Title (en)

PROCESS FOR COATING USING THERMAL SPRAYING AND ELECTROPLATING

Title (de)

VERFAHREN ZUM BESCHICHTEN DURCH THERMISCHEN SPRITZEN UND GALVANISCHE PLATTIERUNG

Title (fr)

PROCÉDÉ DE REVÊTEMENT PAR PULVÉRISATION THERMIQUE ET PLACAGE ÉLECTROCHIMIQUE

Publication

EP 2516698 B1 20140402 (DE)

Application

EP 10784289 A 20101119

Priority

- DE 102009060937 A 20091222
- EP 2010067830 W 20101119

Abstract (en)

[origin: WO2011076499A1] The invention relates to a method for coating a work piece, wherein a layer is electrochemically produced from a first material (28). In order to generate an inhomogeneous expansion behavior of the layer, according to the invention a thermal spraying, in particular a cold gas spraying, achieves that specific zones (27) are created in the layer (29) from a material having a different thermal expansion behavior. Said zones expand more laterally than in the direction of the layer thickness so that directed internal stresses occur in the layer (29) upon heating or cooling of the component (11), which can be specifically utilized depending on the design conditions of the component (11).

IPC 8 full level

C25D 5/34 (2006.01); **C23C 4/02** (2006.01); **C23C 4/12** (2006.01); **C23C 4/18** (2006.01); **C25D 5/10** (2006.01); **C25D 3/66** (2006.01); **C25D 5/06** (2006.01); **C25D 7/04** (2006.01)

CPC (source: EP US)

C23C 4/02 (2013.01 - EP US); **C23C 4/12** (2013.01 - EP US); **C23C 4/18** (2013.01 - EP US); **C23C 24/04** (2013.01 - EP US); **C25D 5/34** (2013.01 - EP US); **C25D 5/605** (2020.08 - EP US); **C25D 5/617** (2020.08 - EP US); **C25D 5/67** (2020.08 - EP US); **C25D 3/66** (2013.01 - EP US); **C25D 5/06** (2013.01 - EP US); **C25D 7/04** (2013.01 - EP US)

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

DOCDB simple family (publication)

WO 2011076499 A1 20110630; DE 102009060937 A1 20110630; EP 2516698 A1 20121031; EP 2516698 B1 20140402; US 2012269982 A1 20121025

DOCDB simple family (application)

EP 2010067830 W 20101119; DE 102009060937 A 20091222; EP 10784289 A 20101119; US 201013518627 A 20101119