

Title (en)

PLASMA CHEMICAL METHOD FOR PRODUCING BLACK OXIDE CERAMIC COATINGS AND COATED ARTICLE

Title (de)

PLASMACHEMISCHES VERFAHREN ZUR HERSTELLUNG SCHWARZER OXIDKERAMIKSCHICHTEN UND ENTSPRECHEND BESCHICHTETER GEGENSTAND

Title (fr)

PROCÉDÉ PLASMA-CHIMIQUE DESTINÉ À FABRIQUER DES COUCHES EN CÉRAMIQUE OXYDÉE NOIRES ET OBJET REVÊTU CORRESPONDANT

Publication

EP 2857560 B1 20170322 (DE)

Application

EP 14184217 A 20140910

Priority

DE 102013110660 A 20130926

Abstract (en)

[origin: US2015083598A1] Plasma-chemical method for production of black oxide ceramic layers on aluminium, magnesium, titanium or alloys thereof and special materials containing these substances according to the process of anodic oxidation in aqueous electrolytes, wherein an electrolyte is used which contains iron and vanadium.

IPC 8 full level

C25D 11/02 (2006.01); **C25D 11/06** (2006.01); **C25D 11/10** (2006.01); **C25D 11/14** (2006.01); **C25D 11/26** (2006.01); **C25D 11/30** (2006.01); **C25D 11/16** (2006.01)

CPC (source: EP US)

C25D 11/026 (2013.01 - EP US); **C25D 11/06** (2013.01 - EP US); **C25D 11/10** (2013.01 - EP US); **C25D 11/14** (2013.01 - EP US); **C25D 11/26** (2013.01 - EP US); **C25D 11/30** (2013.01 - EP US); **C25D 11/16** (2013.01 - EP US)

Citation (opposition)

Opponent : Henkel AG & Co. KGaA

- EP 2857560 A1 20150408 - AHC OBERFLÄCHENTECHNIK GMBH [DE]
- US 2007221508 A1 20070927 - LUO ZHONG-WU [CN], et al
- US 2007246691 A1 20071025 - LUO ZHONG-WU [CN], et al
- WO 03021009 A2 20030313 - ELISHA HOLDING LLC [US]
- EP 2103718 A1 20090923 - NIHON PARKERIZING [JP]

Cited by

DE102018110905A1; DE102022206126A1; WO2021005031A1; WO2019214879A1; EP2857560B1

Designated contracting state (EPC)

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