

Title (en)

Process for preparing modified oxide ceramic coatings on barrier-layer metals and products obtained.

Title (de)

Verfahren zur Erzeugung von ggf. modifizierten Oxidkeramiksichten auf sperrschichtbildenden Metallen und damit erhaltene Gegenstände.

Title (fr)

Procédé de préparation d'une couche d'oxyde céramique modifiée sur des métaux formant couche barrière et produits obtenus.

Publication

EP 0545230 B1 19950628 (DE)

Application

EP 92120006 A 19921125

Priority

DE 4139006 A 19911127

Abstract (en)

[origin: EP0545230A1] In order to enhance the thickness and wear resistance of oxide-ceramic coatings on barrier-layer metals, a plasmachemical anodic oxidation in a chloride-free electrolyte bath is carried out at a pH from 2 to 8 and constant bath temperature, using a constant current density of at least 1 A/dm², until the voltage settles at a final value. Thus it is possible to generate, on objects made of aluminium or aluminium alloys, an oxide-ceramic coating which consists of corundum, and even on magnesium or titanium, coating thicknesses of up to 150 µm are achieved.

IPC 1-7

C25D 11/02

IPC 8 full level

C25D 11/02 (2006.01); **C25D 11/04** (2006.01); **C25D 11/06** (2006.01); **C25D 11/26** (2006.01); **C25D 11/30** (2006.01); **C25D 11/34** (2006.01)

CPC (source: EP US)

C25D 11/026 (2013.01 - EP US); **C25D 11/04** (2013.01 - EP US); **C25D 11/26** (2013.01 - EP US); **C25D 11/30** (2013.01 - EP US)

Cited by

DE202008010896U1; DE19516815A1; EP0867530A1; DE102006051709A1; DE102014219819A1; DE102005040648A1; CN103556204A; DE102004057403A1; DE102004057403B4; DE19506656A1; DE19506656B4; EP2273181A3; US8119243B2; US7323221B2; WO2016086914A3; WO2005078164A3; WO2005078164A2; US7780838B2; WO2011006932A1; EP2857560A1; DE102013110660A1; WO2009147044A1; WO2004092436A3; WO9840541A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0545230 A1 19930609; **EP 0545230 B1 19950628**; **EP 0545230 B2 20030312**; AT E124472 T1 19950715; DE 4139006 A1 19930603; DE 4139006 C2 19961024; DE 4139006 C3 20030710; DE 59202722 D1 19950803; JP 2912101 B2 19990628; JP H05239692 A 19930917; US 5385662 A 19950131; US 5811194 A 19980922

DOCDB simple family (application)

EP 92120006 A 19921125; AT 92120006 T 19921125; DE 4139006 A 19911127; DE 59202722 T 19921125; JP 34129492 A 19921127; US 66226596 A 19960607; US 98209292 A 19921125