

Title (en)
Hard anodize of cold spray aluminum layer

Title (de)
Hartanodisieren von Cold-Spray-Aluminiumschicht

Title (fr)
Anodisation dure de couche d'aluminium à pulvérisation à froid

Publication
EP 2204473 A2 20100707 (EN)

Application
EP 09252862 A 20091222

Priority
US 34214808 A 20081223

Abstract (en)
A process for repairing components (60) includes the steps of providing a component (60) having an affected area (44) on a surface (45) of a component (60) to be repaired; depositing a repair material over the affected area (44) on the surface (45) of the component (60) so that the repair material plastically deforms without melting and bonds to the affected area (44) upon impact with the affected area (44) and thereby covers the affected area (44); providing a sulfuric acid based anodizing solution; anodizing a deposited repair material on the surface (45) of said component (60) in the sulfuric acid based anodizing solution; consuming only a portion of the deposited repair material to form a hard anodized coating layer upon the deposited repair material to form a hard anodized coated component (60); providing a corrosion resistant sealant solution; and contacting a hard anodized coated component with the corrosion resistant sealant solution to form a corrosion resistant sealant coating on the hard anodized coated component (60).

IPC 8 full level
C23C 24/04 (2006.01); **C25D 11/08** (2006.01); **C25D 11/16** (2006.01); **C25D 11/24** (2006.01); **F01D 5/00** (2006.01)

CPC (source: EP US)
C23C 24/04 (2013.01 - EP US); **C23C 28/322** (2013.01 - EP US); **C23C 28/345** (2013.01 - EP US); **C25D 11/08** (2013.01 - EP US); **C25D 11/16** (2013.01 - EP US); **C25D 11/24** (2013.01 - EP US); **C25D 11/30** (2013.01 - EP US); **F01D 5/288** (2013.01 - EP US); **F05D 2230/31** (2013.01 - EP US); **F05D 2230/90** (2013.01 - EP US); **F05D 2300/121** (2013.01 - EP US)

Citation (applicant)
• US 2006134320 A1 20060622 - DEBICCARI ANDREW [US], et al
• US 2009011123 A1 20090108 - BUNTING BILLIE W [US], et al

Cited by
ITTO20110257A1; EP3936640A1; CN104894555A; CN103255410A; CN104562136A; US11898986B2; WO2012127457A1; WO2022008122A1; US11935662B2; US11662300B2

Designated contracting state (EPC)
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 SE SI SK SM TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
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DOCDB simple family (application)
EP 09252862 A 20091222; US 34214808 A 20081223