

Title (en)
Coated component

Title (de)
Bauteil mit einer Beschichtung

Title (fr)
Composant revetu

Publication
EP 1754801 B1 20140514 (DE)

Application
EP 06015645 A 20060727

Priority
DE 102005036162 A 20050802

Abstract (en)

[origin: EP1754801A2] In a component with a corrosion- and/or oxidation-resistant coating with a platinum (Pt)-aluminum (Al) substrate region (12), formed on a nickel (Ni)-based substrate surface (11) by depositing Pt and Al, the Pt-Al region has an outer zone (13) with a 2-phase or duplex structure of finely dispersed Pt-Al deposits in Ni-based mixed crystals; and an inner zone (14), between the substrate and outer zone, with a single-phase structure of Ni-based mixed crystals : Independent claims are included for: (1) a coating as described above; and (2) the production of a corrosion- and/or oxidation-resistant coating, by depositing Pt on a substrate or component surface, so that the Pt diffuses into the surface then aluminizing, where aluminization is carried out by depositing Al thermochemically in a high-activity gas phase process and the Al diffuses into the surface to give a 2-phase or duplex structure as described above.

IPC 8 full level

C23C 28/00 (2006.01); **C23C 10/16** (2006.01); **C23C 10/58** (2006.01); **F01D 5/28** (2006.01)

CPC (source: EP US)

C23C 10/16 (2013.01 - EP US); **C23C 10/58** (2013.01 - EP US); **C23C 28/042** (2013.01 - EP US); **C23C 28/048** (2013.01 - EP US);
F01D 5/288 (2013.01 - EP US); **F05C 2201/0466** (2013.01 - EP US); **F05D 2300/121** (2013.01 - EP US); **F05D 2300/143** (2013.01 - EP US);
Y10T 428/12611 (2015.01 - EP US); **Y10T 428/12618** (2015.01 - EP US); **Y10T 428/12736** (2015.01 - EP US); **Y10T 428/1275** (2015.01 - EP US);
Y10T 428/12875 (2015.01 - EP US)

Cited by

DE102009010109A1; EP1908857A3; DE102009010109A8; WO2008145093A3; WO2010094273A2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 1754801 A2 20070221; EP 1754801 A3 20080402; EP 1754801 B1 20140514; DE 102005036162 A1 20070208;
US 2008166589 A1 20080710; US 7655321 B2 20100202

DOCDB simple family (application)

EP 06015645 A 20060727; DE 102005036162 A 20050802; US 21003405 A 20050823