

Title (en)

QUASICRYSTALLINE COMPOUND AND THE USE THEREOF AS A HEAT INSULATING LAYER

Title (de)

QUASIKRISTALLINE VERBINDUNG UND DEREN VERWENDUNG ALS WÄRMEDÄMMSCHICHT

Title (fr)

COMPOSÉ QUASICRISTALLIN ET SON UTILISATION COMME COUCHE D'ISOLATION THERMIQUE

Publication

EP 1996795 B1 20110629 (DE)

Application

EP 07727208 A 20070322

Priority

- EP 2007052732 W 20070322
- EP 06006053 A 20060323
- EP 07727208 A 20070322

Abstract (en)

[origin: EP1837484A2] Compounds of formula: Al wCo xM yare new. M is Ni and/or Cr and at least 30 mass% of the compound has a quasi-crystalline structure. W = 70 - 76 and w + x + y = 100. Independent claims are included for: (A) coatings made from or containing the compounds; (B) coating systems containing a coating made from the compounds; (C) multi-layer coating systems containing two or more of the coating systems; (D) use of the compounds as heat-insulating coatings for components subjected to high temperature, especially turbine steam inlets (333) and blades (357); and (E) use of compounds containing aluminum and manganese, at least 30 mass% of the compound having a quasi-crystalline structure, for the same purpose.

IPC 8 full level

F01D 5/28 (2006.01); **C22C 21/00** (2006.01); **C23C 4/08** (2006.01); **C23C 28/00** (2006.01); **C23C 28/02** (2006.01); **C23C 30/00** (2006.01)

CPC (source: EP US)

C22C 21/00 (2013.01 - EP US); **C23C 4/08** (2013.01 - EP US); **C23C 28/321** (2013.01 - EP US); **C23C 28/3215** (2013.01 - EP US); **C23C 28/3455** (2013.01 - EP US); **C23C 30/00** (2013.01 - EP US); **F01D 5/288** (2013.01 - EP US); **F05C 2201/0466** (2013.01 - EP US); **F05D 2300/132** (2013.01 - EP US); **Y10T 428/12535** (2015.01 - EP US); **Y10T 428/31678** (2015.04 - EP US)

Cited by

DE102012219856A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1837484 A2 20070926; EP 1837484 A3 20071128; AT E514838 T1 20110715; CN 101405477 A 20090408; CN 101405477 B 20120627; EP 1996795 A2 20081203; EP 1996795 B1 20110629; JP 2009530498 A 20090827; PL 1996795 T3 20111130; US 2010227194 A1 20100909; WO 2007107602 A2 20070927; WO 2007107602 A3 20080117

DOCDB simple family (application)

EP 06006053 A 20060323; AT 07727208 T 20070322; CN 200780010370 A 20070322; EP 07727208 A 20070322; EP 2007052732 W 20070322; JP 2009500869 A 20070322; PL 07727208 T 20070322; US 22532807 A 20070322