

Title (en)

High temperature resistant part, made of single-crystal or polycrystalline nickel-base superalloy

Title (de)

Hochtemperaturbeständiges Bauteil aus einkristalliner oder polykristalliner Nickel-Basis-Superlegierung

Title (fr)

Pièce résistante à des températures élevées réalisé en superalliage polycristallin ou monocristallin à base de nickel

Publication

EP 1319729 B1 20070411 (DE)

Application

EP 01129743 A 20011213

Priority

EP 01129743 A 20011213

Abstract (en)

[origin: EP1319729A1] Component made from a nickel-based super alloy contains (in wt.%) 9-11 chromium (Cr), 3-5 tungsten (W), 0.5-2.5 molybdenum (Mo), 3-3.5 aluminium (Al), 3-5 titanium (Ti), 3-7 tantalum (Ta), 0-12 cobalt (Co), 0-1 niobium (Nb), 0-2 hafnium (Hf), 0-1 zirconium (Zr), 0-0.05 boron (B), 0-0.2 carbon (C), 1-5 rhenium (Re), 0.1-5 ruthenium (Ru), balance nickel (Ni) and impurities. <??>Preferably the alloy contains at least 2 wt.% Re and a maximum of 3 wt.% Ru. The component is a monocrystalline structure having an isotropic distribution of the orientation of the grain structure.

IPC 8 full level

C22C 19/03 (2006.01); **C22C 19/05** (2006.01); **C30B 29/52** (2006.01); **F01D 5/28** (2006.01)

CPC (source: EP)

C22C 19/056 (2013.01); **C22C 19/057** (2013.01); **F01D 5/28** (2013.01)

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Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
EP 1319729 A1 20030618; EP 1319729 A8 20031015; EP 1319729 B1 20070411; CA 2414019 A1 20030613; DE 50112339 D1 20070524;
JP 2003193161 A 20030709

DOCDB simple family (application)
EP 01129743 A 20011213; CA 2414019 A 20021213; DE 50112339 T 20011213; JP 2002356858 A 20021209