

Title (en)

Nickel based alloy for casting single crystal components

Title (de)

Nickel-Basislegierung für die giesstechnische Herstellung einkristallin erstarrter Bauteile

Title (fr)

Alliage à base de nickel pour la coulée des pièces en monocristal

Publication

EP 1223229 B1 20060222 (DE)

Application

EP 01129921 A 20011215

Priority

DE 10100790 A 20010110

Abstract (en)

[origin: EP1223229A1] Nickel-based alloy contains alloying additions of rhenium in an amount of at least 2.3 wt.%, tungsten and further elements such as aluminum, chromium and cobalt. Preferred Features: Tungsten is present in an amount of 3.0-3.7 wt.%, aluminum in an amount of 6.2-6.8 wt.%, cobalt in an amount of 7.2-7.8 wt.%, chromium in an amount of 5.8 -6.4 wt.%, hafnium in an amount of 0.01-0.15, molybdenum in an amount of 1.7-2.3 wt.%, tantalum in an amount of 2.0-2.6 wt.% and titanium in an amount of 0.9-1.1 wt.%.

IPC 8 full level

C22C 19/05 (2006.01); **F01D 5/28** (2006.01); **C22C 19/03** (2006.01); **C30B 11/00** (2006.01); **C30B 29/52** (2006.01)

CPC (source: EP US)

C22C 19/057 (2013.01 - EP US)

Citation (examination)

"Superalloys 1996", 1996, TMS

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DOCDB simple family (publication)

EP 1223229 A1 20020717; **EP 1223229 B1 20060222**; AT E318329 T1 20060315; CA 2366997 A1 20020710; CA 2366997 C 20130702; DE 10100790 A1 20020718; DE 10100790 C2 20030703; DE 50108994 D1 20060427; ES 2256147 T3 20060716; JP 2002302724 A 20021018; JP 4250363 B2 20090408; US 2002182100 A1 20021205; US 2005254991 A1 20051117; US 6936116 B2 20050830

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