

Title (en)  
Nickel-base superalloy

Title (de)  
Nickel-Basis-Superlegierung

Title (fr)  
Superalliage à base de nickel

Publication  
**EP 1420075 A1 20040519 (DE)**

Application  
**EP 03104108 A 20031106**

Priority  
US 29139202 A 20021112

Abstract (en)  
Nickel-base superalloy contains chromium (in weight %) (7-13), cobalt (4-10), molybdenum (0.5-2), tungsten (2-8), tantalum (4-6), aluminum (3-6), titanium (1-4), ruthenium (0.1-6), hafnium (0.01-0.5), silicon (0.001-0.15), carbon (0-700 ppm), boron (0-300 ppm) and remainder containing nickel and production-related impurities.

Abstract (de)  
Die Erfindung betrifft eine Nickel-Basis-Superlegierung zur Herstellung von Einkristall-Komponenten. Die erfindungsgemässe Legierung ist gekennzeichnet durch folgende chemische Zusammensetzung (Angaben in Gew.-%): 7-13 Cr, 4-10 Co, 0.5-2 Mo, 2-8 W, 4-6 Ta, 3-6 Al, 1-4 Ti, 0.1-6 Ru, 0.01-0.5 Hf, 0.001-0.15 Si, 0-700 ppm C, 0-300 ppm B, Rest Ni und herstellungsbedingte Verunreinigungen. <IMAGE>

IPC 1-7  
**C22C 19/05**; **C30B 11/00**; **C30B 29/52**

IPC 8 full level  
**F01D 5/28** (2006.01); **C22C 19/05** (2006.01); **F02C 7/00** (2006.01)

CPC (source: EP US)  
**C22C 19/056** (2013.01 - EP US); **C22C 19/057** (2013.01 - EP US)

Citation (search report)

- [A] US 4719080 A 19880112 - DUHL DAVID N [US], et al
- [A] PATENT ABSTRACTS OF JAPAN vol. 1999, no. 03 31 March 1999 (1999-03-31)

Cited by  
EP2145968A1; US8431073B2; WO2010006974A1

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**US 6706241 B1 20040316**; DE 50302468 D1 20060427; EP 1420075 A1 20040519; EP 1420075 B1 20060222; JP 2004285472 A 20041014; JP 4523264 B2 20100811

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