

Title (en)  
Nickel-base superalloy

Title (de)  
Nickel-Basis-Superlegierung

Title (fr)  
Superaliage à base de nickel

Publication  
**EP 1914327 A1 20080423 (EN)**

Application  
**EP 06021724 A 20061017**

Priority  
EP 06021724 A 20061017

Abstract (en)  
The invention relates to nickel-base superalloy comprising in wt%, especially consisting of: Co + Fe + Mn 0 - 20, Al 4 - 6, Cr >12 - 20, Ta >7.5 - 15, Ti 0 - <0.45, V 0 - 1, Nb 0 - <0.28, Mo 0 - 2.5, Mo + W + Re + Rh 2 - 8, Ru + Os + Ir + Pt + Pd 0 - 4, Hf 0 - 1.5, C + B + Zr 0 - 0.5, Ca + Mg + Cu 0 - 0.5, Y + La + Sc + Ce + Actinides + Lanthanides 0 - 0.5 Si 0 - 0.5 Ni balance and unavoidable impurities.

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

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

Citation (search report)  
• [Y] US 2005194068 A1 20050908 - CARON PIERRE [FR], et al  
• [Y] EP 0560296 A1 19930915 - HITACHI METALS LTD [JP], et al  
• [A] US 2003041930 A1 20030306 - DELUCA DANIEL P [US], et al  
• [A] EP 1054072 A1 20001122 - ABB ALSTOM POWER CH AG [CH]  
• [A] JP H11256258 A 19990921 - TOSHIBA CORP  
• [A] JP H10317080 A 19981202 - TOSHIBA CORP  
• [A] M.B. HENDERSON, J. HANNIS, G. MCCOLVIN, G. OGLE: "Materials issues for the design of industrial gas turbines", ADVANCED MATERIALS AND PROCESSES FOR GAS TURBINES, September 2002 (2002-09-01), TMS Publications, Warrendale, pages 3 - 13, XP009079117

Cited by  
EP2431489A1; EP2248923A1; WO2010124923A1; CN102876953A; CN102414331A; CN103119183A; EP4063045A1; RU2652920C1; DE102019201095A1; CN112575228A; WO2012038166A3; WO2012038166A2; US9593583B2; WO2022200175A1

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 NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA HR MK RS

DOCDB simple family (publication)  
**EP 1914327 A1 20080423**; CN 101528959 A 20090909; CN 101528959 B 20121010; EP 2076616 A1 20090708; EP 2076616 B1 20151028; JP 2010507016 A 20100304; JP 5124582 B2 20130123; US 2010296962 A1 20101125; WO 2008046708 A1 20080424

DOCDB simple family (application)  
**EP 06021724 A 20061017**; CN 200780038506 A 20070920; EP 07803558 A 20070920; EP 2007059936 W 20070920; JP 2009532751 A 20070920; US 31187307 A 20070920