

Title (en)
A nickel based superalloy

Title (de)
Nickelbasis-Superlegierung

Title (fr)
Superalliage à base de nickel

Publication
EP 2045345 A1 20090408 (EN)

Application
EP 08252916 A 20080902

Priority
GB 0719195 A 20071002

Abstract (en)
A nickel base superalloy consisting of 20 to 40wt% cobalt, 10 to 15wt% chromium, 3 to 6wt% molybdenum, 0 to 5wt% tungsten, 2.5 to 4wt% aluminium, 3.4 to 5wt% titanium, 1.35 to 2.5wt% tantalum, 0 to 2wt% niobium, 0.5 to 1wt% hafnium, 0 to 0.1wt% zirconium, 0.01 to 0.05wt% carbon, 0.01 to 0.05wt% boron, 0 to 2wt% silicon and the balance nickel plus incidental impurities. The gamma prime phase comprises (Ni/Co) 3 (Al/Ti/Ta).

IPC 8 full level
C22C 19/05 (2006.01); **C22C 19/07** (2006.01)

CPC (source: EP US)
C22C 1/0433 (2013.01 - EP US); **C22C 1/047** (2023.01 - EP US); **C22C 19/056** (2013.01 - EP US); **C22C 19/07** (2013.01 - EP US);
C22C 30/00 (2013.01 - EP US)

Citation (applicant)

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- Y GU ET AL., NEW NI-CO-BASE DISK SUPERALLOYS WITH HIGHER STRENGTH AND CREEP RESISTANCE, vol. 55, no. 9, November 2006 (2006-11-01), pages 815 - 818

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Designated contracting state (EPC)
DE ES FR GB IT SE

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
EP 2045345 A1 20090408; EP 2045345 B1 20110706; GB 0719195 D0 20071114; JP 2009097094 A 20090507; US 2009087338 A1 20090402;
US 2012269646 A1 20121025

DOCDB simple family (application)
EP 08252916 A 20080902; GB 0719195 A 20071002; JP 2008256141 A 20081001; US 201213538184 A 20120629; US 23074408 A 20080904