

Title (en)

LOW DENSITY NICKEL-BASED SUPERALLOY HAVING HIGH MECHANICAL STRENGTH AND ENVIRONMENTAL ROBUSTNESS AT A HIGH TEMPERATURE

Title (de)

NICKELBASIERTE SUPERLEGIERUNG MIT GERINGER DICHTE MIT HOHER MECHANISCHER FESTIGKEIT UND UMGEBUNGSROBUSTHEIT BEI HOHER TEMPERATUR

Title (fr)

SUPERALLIAGE A BASE DE NICKEL A FAIBLE DENSITE ET AVEC UNE TENUE MECANIQUE ET ENVIRONNEMENTALE ELEVEE A HAUTE TEMPERATURE

Publication

EP 3911773 A1 20211124 (FR)

Application

EP 20706568 A 20200114

Priority

- FR 1900389 A 20190116
- FR 2020050048 W 20200114

Abstract (en)

[origin: WO2020148503A1] The invention relates to a nickel-based superalloy comprising, in weight percentages, 6 to 8% of aluminum, 12 to 15% of cobalt, 4 to 8% of chromium, 0 to 0.2% of hafnium, 0.5 to 4% of molybdenum, 3.5 to 6% of rhenium, 4 to 6% of tantalum, 1 to 3% of titanium, 0 to 2% of tungsten, 0 to 0.1% of silicon, the remainder being nickel and inevitable impurities.

IPC 8 full level

C22C 19/05 (2006.01); **B23P 15/00** (2006.01); **C22C 19/03** (2006.01); **F01D 5/28** (2006.01)

CPC (source: EP US)

C22C 19/03 (2013.01 - EP); **C22C 19/05** (2013.01 - EP); **C22C 19/057** (2013.01 - EP US); **F01D 5/28** (2013.01 - EP US);
F05D 2300/175 (2013.01 - EP US); **F05D 2300/607** (2013.01 - EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

FR 3091708 A1 20200717; FR 3091708 B1 20210122; CN 113677815 A 20211119; EP 3911773 A1 20211124; EP 3911773 B1 20230301;
US 12123076 B2 20241022; US 2022081739 A1 20220317; WO 2020148503 A1 20200723

DOCDB simple family (application)

FR 1900389 A 20190116; CN 202080009467 A 20200114; EP 20706568 A 20200114; FR 2020050048 W 20200114;
US 202017421554 A 20200114