Title (en)

NICKEL-BASED SUPERALLOY, PROCESS THEREFORE, AND COMPONENTS FORMED THEREFROM

Title (de)

SUPERLEGIERUNG AUF NICKELBASIS, VERFAHREN DAFÜR UND DARAUS GEFORMTE KOMPONENTEN

Title (fr)

SUPERALLIAGE À BASE DE NICKEL, TRAITEMENT ASSOCIÉ ET COMPOSANTS FORMÉS À PARTIR DE CELUI-CI

Publication

EP 2872661 A2 20150520 (EN)

Application

EP 13826796 A 20130711

Priority

- US 201261670634 P 20120712
- US 2013049999 W 20130711

Abstract (en)

[origin: WO2014058491A2] A gamma prime nickel-based superalloy suitable for producing structural components (10), for example, turbine disks (10) and other turbomachinery components. The superalloy comprises an intentional amount of iron of up to 2.0 % and is preferably capable of exhibiting structural properties comparable to nickel-based superalloys without iron. The superalloy can be made using processes that lend themselves to advantageous scrap and revert usage of iron-containing alloys. The superalloy is free of an observable amount of sigma phase.

IPC 8 full level

C22C 19/05 (2006.01)

CPC (source: EP US)

C22C 1/023 (2013.01 - EP US); **C22C 19/056** (2013.01 - EP US); **F01D 5/28** (2013.01 - US); Y10T 428/211 (2015.01 - EP US)

Citation (search report)

See references of WO 2014058491A2

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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US 2013049999 W 20130711; BR 112015000531 A 20130711; CA 2878711 A 20130711; CN 201380037147 A 20130711; EP 13826796 A 20130711; JP 2015521791 A 20130711; US 201314413230 A 20130711