

Title (en)
DS superalloy and component

Title (de)
DS-Superlegierung und Bauteil

Title (fr)
Superalliage DS et composant

Publication
EP 2597167 A1 20130529 (DE)

Application
EP 11190432 A 20111124

Priority
EP 11190432 A 20111124

Abstract (en)
Nickel based directional solidified-alloy comprises (in wt.%): cobalt (9-11, preferably 10); chromium (4-6, preferably 5); molybdenum (1.7-2.1, preferably 1.9); tungsten (5.5-6.3, preferably 5.9); tantalum (6.8-7.6, preferably 7.2); titanium (0.8-1.2, preferably 1); aluminum (5.4-5.9, preferably 5.6); rhenium (1.8-2.2, preferably 2); hafnium (0.008-0.12, preferably 0.1); boron (0.006-0.01, preferably 0.008); carbon (0.13-0.15, preferably 0.12); and zirconium (0.004-0.006, preferably 0.005).

Abstract (de)
Durch die optimale Einstellung und der Gehalte von Rhenium, Tantal, Titan, Hafnium, Kohlenstoff, Bor und Zirkon wird eine hohe Gefügefestigkeit und Phasenstabilität bei erhöhten Temperaturen bei gleichzeitig guter Verarbeitbarkeit, hier insbesondere Gießbarkeit, erzielt.

IPC 8 full level
C22C 19/00 (2006.01)

CPC (source: EP US)
C22C 19/00 (2013.01 - EP US); **C22C 19/057** (2013.01 - EP US); **C22C 19/07** (2013.01 - US)

Citation (applicant)
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• EP 0892090 A1 19990120 - SULZER INNOTECH AG [CH]
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CN112853154A

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

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EP 2597167 A1 20130529; EP 2597167 B1 20140423; US 2013136649 A1 20130530

DOCDB simple family (application)
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