

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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Citation (search report)  
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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)  
**EP 2597167 A1 20130529; EP 2597167 B1 20140423; US 2013136649 A1 20130530**

DOCDB simple family (application)  
**EP 11190432 A 20111124; US 201213675266 A 20121113**