Title (en)

Ni-based alloy for forging, method for manufacturing the same, and turbine component

Title (de)

Ni-basierte Schmiedelegierung, Herstellungsverfahren dafür und Turbinenkomponente

Title (fr)

Alliage à base de Ni pour le forgeage, son procédé de fabrication et composant de turbine

Publication

EP 2835434 B1 20170607 (EN)

Application

EP 14179191 A 20140730

Priority

JP 2013164148 A 20130807

Abstract (en)

[origin: EP2835434A2] An Ni-based alloy for forging of an embodiment contains, in mass%, C: 0.01 to 0.07%, Cr: 14 to 26%, Co: 10 to 15%, Mo: 5 to 12%, Al: 0.8 to 3%, Ti: 0.8 to 3%, and B: 0.001 to 0.006%, the balance being made of Ni and an unavoidable impurity, and satisfies a relation of 10 mass% #¤ Mo + 0.176Cr + 0.037Co #¤ 15 mass%. Further, an average thickness of a carbide precipitated along a grain boundary is 250 nm or less.

IPC 8 full level

C22C 19/05 (2006.01); **C22F 1/10** (2006.01)

CPC (source: EP KR)

C22C 19/03 (2013.01 - KR); **C22C 19/05** (2013.01 - EP KR); **C22C 19/055** (2013.01 - EP KR); **C22C 19/056** (2013.01 - EP KR); **C22F 1/10** (2013.01 - EP KR)

Cited by

CN105170865A; US11453939B2; EP4023779A4; US11859262B2; US11131013B2; WO2020187368A1; WO2019125637A3

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

EP 14179191 A 20140730; CN 201410386619 A 20140807; JP 2013164148 A 20130807; KR 20140101004 A 20140806; KR 20160043494 A 20160408