

Title (en)

Ni based alloy for forging and components for steam turbine plant using same

Title (de)

Ni-basierte Legierung zum Schmieden und Komponenten für Dampfturbinenanlage damit

Title (fr)

Alliage à base de Ni pour forgeage et composants pour installation de turbine à vapeur l'utilisant

Publication

EP 2354262 A1 20110810 (EN)

Application

EP 11152974 A 20110201

Priority

JP 2010023693 A 20100205

Abstract (en)

It is an object of the present invention to provide an Ni based alloy for forging having high forging-related characteristics with a wide temperature range for high-temperature forging and high upper forging temperature limit. An Ni based alloy for forging, containing Cr at 12 to 20%, A1 at 3.5 to 5%, Co at 15 to 23%, W at 5 to 12%, C at 0.001 to 0.05%, and Nb, Ti and Ta at a total content of 0.5 to 1.0%, all percentages by mass, and a steam turbine plant component using the same.

IPC 8 full level

C22C 19/05 (2006.01)

CPC (source: EP US)

C22C 19/055 (2013.01 - EP US); **C22C 19/056** (2013.01 - EP US)

Citation (applicant)

JP 2009097052 A 20090507 - HITACHI LTD

Citation (search report)

- [X] EP 2050830 A2 20090422 - HITACHI LTD [JP]
- [A] EP 1065290 A1 20010103 - SUMITOMO METAL IND [JP]
- [A] US 4121950 A 19781024 - GUIMIER ALAIN R, et al
- [A] EP 0753704 A1 19970115 - HITACHI LTD [JP]

Cited by

CN109371344A; EP3985139A4; EP2537951A1; EP2677053A1; US8916092B2; US9878403B2

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Designated extension state (EPC)

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DOCDB simple family (application)

EP 11152974 A 20110201; CN 201110024681 A 20110124; CN 201310191363 A 20110124; JP 2010023693 A 20100205; US 201113019666 A 20110202