

Title (en)

Nickel-base alloy for a steam turbine rotor and steam turbine rotor thereof

Title (de)

Alliage à base de nickel pour rotor de turbine d'un système de turbine à vapeur et rotor de turbine de turbine à vapeur l'utilisant

Title (fr)

Legierung auf Nickelbasis für den Turbinenrotor eines Dampfturbinensystems und Turbinenrotor einer Dampfturbine damit

Publication

**EP 2233594 A1 20100929 (EN)**

Application

**EP 10002795 A 20100317**

Priority

JP 2009066517 A 20090318

Abstract (en)

A nickel (Ni)-base alloy for a turbine rotor of a steam turbine containing, in mass%, carbon (C): 0.01% to 0.15%, chromium (Cr): 18% to 28%, cobalt (Co): 10% to 15%, molybdenum (Mo): 8% to 12%, aluminum (Al): 0.5% to less than 1.5%, titanium (Ti): 0.7% to 3.0%, and boron (B): 0.001% to 0.006%, the balance being nickel (Ni) and unavoidable impurities.

IPC 8 full level

**C22C 1/02** (2006.01); **C22C 19/05** (2006.01); **C22F 1/10** (2006.01); **F01D 1/00** (2006.01)

CPC (source: EP US)

**C22C 1/02** (2013.01 - EP US); **C22C 1/023** (2013.01 - EP US); **C22C 19/05** (2013.01 - EP US); **C22C 19/055** (2013.01 - EP US); **C22C 19/056** (2013.01 - EP US); **C22F 1/10** (2013.01 - EP US); **F01D 5/28** (2013.01 - EP US); **F05D 2220/31** (2013.01 - EP US)

Citation (applicant)

JP H07150277 A 19950613 - INCO ALLOYS INT

Citation (search report)

- [A] EP 0633325 A1 19950111 - INCO ALLOYS INT [US]
- [AP] EP 2039789 A1 20090325 - TOSHIBA KK [JP]

Cited by

EP2407565A1; EP2835434A3

Designated contracting state (EPC)

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 SE SI SK SM TR

Designated extension state (EPC)

AL BA ME RS

DOCDB simple family (publication)

**EP 2233594 A1 20100929**; **EP 2233594 B1 20150617**; CN 101838757 A 20100922; JP 2010215989 A 20100930; JP 5127749 B2 20130123; US 2010239425 A1 20100923

DOCDB simple family (application)

**EP 10002795 A 20100317**; CN 201010144757 A 20100318; JP 2009066517 A 20090318; US 72507810 A 20100316