Title (en)

NI-BASED ALLOY HAVING EXCELLENT HYDROGEN EMBRITTLEMENT RESISTANCE, AND METHOD FOR PRODUCING NI-BASED ALLOY MATERIAL

Title (de)

LEGIERUNG AUF NI-BASIS MIT HERVORRAGENDER WASSERSTOFFVERSPRÖDUNGSBESTÄNDIGKEIT SOWIE VERFAHREN ZUR HERSTELLUNG EINES MATERIALS AUS EINER LEGIERUNG AUF NICKELBASIS

Title (fr)

ALLIAGE À BASE DE NI AYANT UNE EXCELLENTE RÉSISTANCE À LA FRAGILISATION PAR L'HYDROGÈNE ET UN PROCÉDÉ DE FABRICATION D'UNE MATIÈRE D'ALLIAGE À BASE DE NI

Publication

EP 2889387 B1 20180502 (EN)

Application

EP 13831112 A 20130822

Priority

- JP 2012184966 A 20120824
- JP 2013072431 W 20130822

Abstract (en)

[origin: EP2889387A1] An object is to provide a Ni-based alloy having high strength and excellent hydrogen embrittlement resistance even in a high-temperature and high-pressure environment and particularly capable of being used for an ammonothermal pressure vessel and the like. The present invention relates to a Ni-based alloy including, in terms of mass ratios, Fe: 30 to 40%, Cr: 14 to 16%, Ti: 1.2 to 1.7%, Al: 1.1 to 1.5%, Nb: 1.9 to 2.7%, and P: 40 to 150 ppm, with the remainder being Ni and unavoidable impurities.

IPC 8 full level

C22C 19/05 (2006.01); **C22C 30/00** (2006.01); **C22F 1/00** (2006.01); **C22F 1/10** (2006.01)

CPC (source: EP KR US)

C22C 19/05 (2013.01 - EP US); **C22C 19/056** (2013.01 - KR); **C22C 19/058** (2013.01 - EP KR US); **C22C 30/00** (2013.01 - EP KR US); **C22F 1/10** (2013.01 - EP KR US)

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

DOCDB simple family (publication)

EP 2889387 A1 20150701; **EP 2889387 A4 20160427**; **EP 2889387 B1 20180502**; CN 104583432 A 20150429; CN 104583432 B 20170524; JP 2014043597 A 20140313; JP 5599850 B2 20141001; KR 101704312 B1 20170207; KR 20150034282 A 20150402; US 2015225827 A1 20150813; WO 2014030705 A1 20140227

DOCDB simple family (application)

EP 13831112 A 20130822; CN 201380044315 A 20130822; JP 2012184966 A 20120824; JP 2013072431 W 20130822; KR 20157004576 A 20130822; US 201314423328 A 20130822