

Title (en)  
PRECIPITATION HARDENED FE-NI ALLOY

Title (de)  
AUSSCHIEDUNGSGEHÄRTETE FE-NI-LEGIERUNG

Title (fr)  
ALLIAGE FE-NI DURCI PAR PRÉCIPITATION

Publication  
**EP 2806047 B1 20160203 (EN)**

Application  
**EP 14169160 A 20140520**

Priority  
• JP 2013106957 A 20130521  
• JP 2014039222 A 20140228

Abstract (en)  
[origin: EP2806047A1] Provided is a precipitation hardened Fe-Ni alloy having the following constitutions: (1) the precipitation hardened Fe-Ni alloy including: from 0.01 to 0.08% by mass of C, from 0.02 to 1.0% by mass of Si, not more than 1.0% by mass of Mn, from 36.0 to 41.0% by mass of Ni, 14.0 or more and less than 20.0% by mass of Cr, from 0.01 to 3.0% by mass of Mo, from 0.1 to 1.0% by mass of Al, from 1.0 to 2.5% by mass of Ti, and from 2.0 to 3.5% by mass of Nb, with the balance being Fe and unavoidable impurities; (2) the precipitation hardened Fe-Ni alloy satisfying the following formulae:  $Ni \geq 6 \times Nb + 17$  and  $Nb / (Ti + Al) \geq 0.8$ .

IPC 8 full level  
**C22C 38/42** (2006.01); **C21D 6/00** (2006.01); **C21D 6/02** (2006.01); **C22C 19/05** (2006.01); **C22C 30/00** (2006.01); **C22C 30/02** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/44** (2006.01); **C22C 38/46** (2006.01); **C22C 38/48** (2006.01); **C22C 38/50** (2006.01); **C22C 38/54** (2006.01); **C22F 1/10** (2006.01); **C21D 1/18** (2006.01)

CPC (source: EP US)  
**C21D 6/004** (2013.01 - EP US); **C21D 6/02** (2013.01 - EP US); **C22C 19/056** (2013.01 - EP US); **C22C 30/00** (2013.01 - US); **C22C 30/02** (2013.01 - US); **C22C 38/002** (2013.01 - US); **C22C 38/005** (2013.01 - US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/42** (2013.01 - EP US); **C22C 38/44** (2013.01 - EP US); **C22C 38/46** (2013.01 - EP US); **C22C 38/48** (2013.01 - EP US); **C22C 38/50** (2013.01 - EP US); **C22C 38/54** (2013.01 - EP US); **C22F 1/10** (2013.01 - EP US); **C21D 1/18** (2013.01 - EP US)

Cited by  
RU2650353C1; EP3208355A1; CN107090556A; US10119182B2

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 2806047 A1 20141126**; **EP 2806047 B1 20160203**; JP 2015004125 A 20150108; JP 6337514 B2 20180606; US 2014345752 A1 20141127

DOCDB simple family (application)  
**EP 14169160 A 20140520**; JP 2014039222 A 20140228; US 201414278179 A 20140515