

Title (en)
IRON-NICKEL ALLOY

Title (de)
EISEN-NICKEL-LEGIERUNG

Title (fr)
ALLIAGE FER-NICKEL

Publication
EP 1979501 A1 20081015 (DE)

Application
EP 07721864 A 20070126

Priority
• DE 2007000141 W 20070126
• DE 102006005250 A 20060202

Abstract (en)
[origin: US8808475B2] Disclosed is a creep-resistant low-expansion iron-nickel alloy that is provided with increased mechanical resistance and contains 40 to 43 wt. % of Ni, a maximum of 0.1 wt. % of C, 2.0 to 3.5 wt. % of Ti, 0.1 to 1.5 wt. % of Al, 0.1 to 1.0 wt. % of Nb, 0.005 to 0.8 wt. % of Mn, 0.005 to 0.6 wt. % of Si, a maximum of 0.5 wt. % of Co, the remainder being composed of Fe and production-related impurities. Said alloy has a mean coefficient of thermal expansion $<5 \times 10^{-6}>/K$ in the temperature range of 20 to 200 DEG C.

IPC 8 full level
C22C 38/08 (2006.01); **C21D 6/00** (2006.01); **C22C 30/00** (2006.01); **C22C 38/10** (2006.01)

CPC (source: EP US)
C21D 6/001 (2013.01 - EP US); **C21D 6/02** (2013.01 - EP US); **C22C 30/00** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/08** (2013.01 - EP US); **C22C 38/105** (2013.01 - EP US); **C22C 38/12** (2013.01 - EP US); **C22C 38/14** (2013.01 - EP US)

Cited by
US2021340664A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2007087785 A1 20070809; AT E462021 T1 20100415; BR PI0707449 A2 20110503; BR PI0707449 B1 20150908; CA 2637790 A1 20070809; CA 2637790 C 20131022; CN 101495663 A 20090729; CN 101495663 B 20130522; CN 102965570 A 20130313; DE 102006005250 A1 20070816; DE 102006005250 B4 20100429; DE 502007003218 D1 20100506; EP 1979501 A1 20081015; EP 1979501 B1 20100324; ES 2341048 T3 20100614; JP 2009525399 A 20090709; JP 5175225 B2 20130403; US 2009047167 A1 20090219; US 8808475 B2 20140819

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