

Title (en)

IRON-NICKEL ALLOY WITH CREEP RESISTANCE AND LOW THERMAL EXPANSION

Title (de)

KRIECHBESTÄNDIGE WÄRMEUSDEHNUNGSARME EISEN-NICKEL-LEGIERUNG

Title (fr)

ALLIAGE FER-NICKEL RESISTANT AU FLUAGE ET A FAIBLE DILATATION

Publication

EP 1206588 A1 20020522 (DE)

Application

EP 00909178 A 20000216

Priority

- DE 19934401 A 19990722
- EP 0001236 W 20000216

Abstract (en)

[origin: WO0107673A1] The invention relates to iron-nickel alloys with creep resistance and low thermal expansion, which contain (% by mass) no more than about 0.2 % C, no more than 0.3 % Mn, no more than 0,3 % Si, from 0.05 to 3.0 % Al, 0.1 to 3.0 % Ti, no more than 1.0 % Nb, from 39.0 to 45.0 % Ni, wherein the rest is composed of iron and impurities that can be generated during the fabrication process. The inventive alloys have a thermal expansion coefficient $<6.0 \times 10^{-6} >/K$ in a temperature range between 20 and 100 DEG C.

IPC 1-7

C22C 30/00; **C22C 38/08**; **C22C 38/14**

IPC 8 full level

C22C 38/00 (2006.01); **C22C 30/00** (2006.01); **C22C 38/06** (2006.01); **C22C 38/08** (2006.01); **C22C 38/12** (2006.01); **C22C 38/14** (2006.01); **H01J 29/07** (2006.01)

CPC (source: EP KR)

C22C 30/00 (2013.01 - EP); **C22C 38/06** (2013.01 - EP); **C22C 38/08** (2013.01 - EP KR); **C22C 38/12** (2013.01 - EP); **C22C 38/14** (2013.01 - EP); **H01J 29/07** (2013.01 - EP); **H01J 2229/0733** (2013.01 - EP)

Citation (search report)

See references of WO 0107673A1

Designated contracting state (EPC)

DE FR GB IT NL

DOCDB simple family (publication)

WO 0107673 A1 20010201; CN 1140644 C 20040303; CN 1357056 A 20020703; DE 19934401 A1 20010322; DE 50008438 D1 20041202; EP 1206588 A1 20020522; EP 1206588 B1 20041027; HK 1047772 A1 20030307; HK 1047772 B 20040820; JP 2003505594 A 20030212; KR 100531951 B1 20051202; KR 20020016649 A 20020304; PL 195127 B1 20070831; PL 353027 A1 20031006; TW I234588 B 20050621

DOCDB simple family (application)

EP 0001236 W 20000216; CN 00809300 A 20000216; DE 19934401 A 19990722; DE 50008438 T 20000216; EP 00909178 A 20000216; HK 02109248 A 20021220; JP 2001512938 A 20000216; KR 20027000833 A 20020121; PL 35302700 A 20000216; TW 89104483 A 20000313