

Title (en)

Alloy with ultrafine crystal grains excellent in corrosion resistance.

Title (de)

Legierung mit ultrafeinen Kristallkörnern und hervorragender Korrosionsbeständigkeit.

Title (fr)

Alliage à grains cristallins ultrafins à résistance excellente à la corrosion.

Publication

EP 0585940 A1 19940309 (EN)

Application

EP 93114142 A 19930903

Priority

JP 23546792 A 19920903

Abstract (en)

There is provided an alloy with ultrafine crystal grains excellent in corrosion resistance, at least 50 % of the alloy structure being occupied by ultrafine crystal grains, the alloy having a surface layer containing hydroxide components in a total proportion of 65 % or more based on oxide components.

IPC 1-7

C22C 38/00; **C22C 38/48**; **C22C 38/34**; **C22C 38/14**; **C22C 38/16**; **C22C 19/00**; **H01F 10/00**; **H01F 10/12**

IPC 8 full level

C21D 6/00 (2006.01); **C22C 45/02** (2006.01); **C22C 45/04** (2006.01); **C23C 8/14** (2006.01); **H01F 1/153** (2006.01)

CPC (source: EP)

H01F 1/15383 (2013.01)

Citation (search report)

- [A] EP 0430085 A2 19910605 - HITACHI METALS LTD [JP]
- [A] EP 0429022 A2 19910529 - HITACHI METALS LTD [JP]
- [XP] CHEMICAL ABSTRACTS, vol. 117, no. 12, September 27, 1992, Columbus, Ohio, USA YOSHIZAWA, KATSUTO et al. "Ultrafine-grain iron alloys having asymmetric magnetization curve and their manufacture." page 273, column 1, abstract- no. 116 030y
- [X] CHEMICAL ABSTRACTS, vol. 117, no. 6, August 10, 1992, Columbus, Ohio, USA CHO, TSUTOMU et al. "Powder manufacture from melt-quenched iron alloy having soft magnetic properties." page 296, column 2, abstract- no. 53 350e
- [A] CHEMICAL ABSTRACTS, vol. 117, no. 6, August 10, 1992, Columbus, Ohio, USA HASEGAWA, NAOYA et al. "Soft magnetic alloy films." page 880, column 2, abstract- no. 61 307m
- [A] CHEMICAL ABSTRACTS, vol. 114, no. 22, June 3, 1991, Columbus, Ohio, USA YOSHIZAWA, KATSUTO et al. "Heat treatment in grain refinement of soft magnetic iron alloy." page 277, column 2, abstract- no. 211 608q
- [A] CHEMICAL ABSTRACTS, vol. 113, no. 26, December 24, 1990, Columbus, Ohio, USA YOSHIZAWA, KATSUTO et al. "Heat-resistant soft magnetic iron alloys." page 239, column 1, abstract- no. 235 443n
- [A] CHEMICAL ABSTRACTS, vol. 115, no. 22, December 2, 1991, Columbus, Ohio, USA HASEGAWA, NAOYA "Soft magnetic cobalt alloy film." page 989, column 1, abstract- no. 246 445q
- [AP] CHEMICAL ABSTRACTS, vol. 118, no. 12, March 22, 1993, Columbus, Ohio, USA CHEN, GUOJUN "New soft magnetic alloys - ultrafine crystalline alloys: structure and magnetism." page 916, column 1, abstract- no. 114 955a
- [A] CHEMICAL ABSTRACTS, vol. 116, no. 24, June 15, 1992, Columbus, Ohio, USA YOSHIZAWA, KATSUTO et al. "Ultrafine crystalline alloys having permivar characteristics." page 820, column 1, abstract- no. 247 191d

Cited by

EP0695812A1; DE102013224989A1; US8480864B2; DE102006024358A1; DE102006024358B4

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0585940 A1 19940309; **EP 0585940 B1 19980708**; CN 1037534 C 19980225; CN 1092112 A 19940914; DE 69319513 D1 19980813; DE 69319513 T2 19990114; JP H0681086 A 19940322

DOCDB simple family (application)

EP 93114142 A 19930903; CN 93117351 A 19930903; DE 69319513 T 19930903; JP 23546792 A 19920903