

Title (en)

IRON BASE, SOFT MAGNETIC STEEL MATERIAL

Publication

**EP 0429651 A4 19911204 (EN)**

Application

**EP 90900342 A 19891208**

Priority

JP 15502689 A 19890617

Abstract (en)

[origin: EP0429651A1] This invention relates to an iron base, soft magnetic steel material which has high permeability and moreover, can be produced economically. The steel material of this invention uses a pure iron type component as a base and contains 0.5 to 2.5 % of Al and, whenever necessary, 0.005 to 1.0 % of Ti. Its ferrite crystal grain size is at least 0.5 mm, its magnetic flux density is at least 11,000 G at 0.5 Oe under the state where a lattice strain is removed sufficiently, its magnetic flux density is at least 15,500 G at 25 Oe and its coercive force is up to 0.4 Oe.

IPC 1-7

**H01F 1/16**; **C22C 38/00**

IPC 8 full level

**C22C 38/00** (2006.01); **C21D 8/12** (2006.01); **C22C 38/06** (2006.01); **C22C 38/14** (2006.01); **H01F 1/147** (2006.01); **H01F 1/16** (2006.01)

CPC (source: EP KR)

**C22C 38/06** (2013.01 - EP); **H01F 1/147** (2013.01 - EP); **H01F 1/16** (2013.01 - KR)

Citation (search report)

- [A] IEEE TRANSACTIONS ON MAGNETICS, vol. MAG-7, no. 1, 1st March 1971, pages 48-60; M.F. LITTMANN: "Iron and silicon-iron alloys"
- See references of WO 9016076A1

Designated contracting state (EPC)

DE FR GB IT NL

DOCDB simple family (publication)

**EP 0429651 A1 19910605**; **EP 0429651 A4 19911204**; **EP 0429651 B1 19940302**; CA 2020464 A1 19901218; CN 1026597 C 19941116; CN 1048237 A 19910102; DE 68913544 D1 19940407; DE 68913544 T2 19940721; JP 2679258 B2 19971119; JP H0320447 A 19910129; KR 920700458 A 19920219; KR 970004566 B1 19970329; WO 9016076 A1 19901227

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