

Title (en)

Fe-based amorphous alloy ribbon and magnetic core formed thereby

Title (de)

Band aus amorpher Eisenbasislegierung und daraus gefertigter Magnetkern

Title (fr)

Bande en alliage amorphe de fer et noyau magnétique fabriqué de cette bande

Publication

**EP 1615240 A3 20080305 (EN)**

Application

**EP 05003334 A 20050216**

Priority

- JP 2004198197 A 20040705
- JP 2004376872 A 20041227

Abstract (en)

[origin: EP1615240A2] A magnetic core provided with a shape for a transformer by a cut-lap or step-lap method, which is constituted by an Fe-based amorphous alloy ribbon having excellent magnetic characteristics, which is represented by the general formula:  $\text{Fe } a \text{ Si } b \text{ B } c \text{ M } x \text{ or Fe } a \text{ Si } b \text{ B } c \text{ D } M x$  wherein M is Cr and/or Ni, a is 78 to 86 atomic %, b is 0.001 to 5 atomic %, c is 7 to 20 atomic %, x is 0.01 to 5 atomic %, and d is 0.001 to 4 atomic %, ( a + b + c + x ) or ( a + b + c + d + x ) being 100.

IPC 8 full level

**H01F 1/153** (2006.01); **H01F 3/04** (2006.01); **H01F 41/02** (2006.01)

CPC (source: EP US)

**H01F 1/15308** (2013.01 - EP US); **H01F 3/04** (2013.01 - EP US); **H01F 3/14** (2013.01 - EP US)

Citation (search report)

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- [XA] US 6057766 A 20000502 - O'HANDLEY ROBERT C [US], et al
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- [A] WO 9909567 A1 19990225 - ALLIED SIGNAL INC [US]
- [A] US 2002158744 A1 20021031 - NGO DUNG A [US], et al
- [X] DATABASE WPI Week 197820, Derwent World Patents Index; AN 1978-35378A, XP002465013

Cited by

EP2015321A4; US9177706B2

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 MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR LV MK YU

DOCDB simple family (publication)

**EP 1615240 A2 20060111**; **EP 1615240 A3 20080305**; JP 2006045660 A 20060216; JP 4636365 B2 20110223; TW 200602499 A 20060116; TW 201202439 A 20120116; TW I352740 B 20111121; TW I444483 B 20140711; US 2006000525 A1 20060105

DOCDB simple family (application)

**EP 05003334 A 20050216**; JP 2004376872 A 20041227; TW 100128515 A 20050218; TW 94104741 A 20050218; US 5930705 A 20050217