Title (en)

Core of a noise filter comprised of an amorphous alloy.

Title (de)

Kern eines Störungsfilters aus einer amorphen Legierung.

Title (fr)

Noyeau d'un filtre de bruit comportant un alliage amorphe.

Publication

EP 0384491 B1 19940810

Application

EP 90105789 A 19841102

Priority

- EP 84307588 A 19841102
- JP 20414184 A 19841001
- JP 20689883 A 19831105

Abstract (en)

[origin: EP0145245A2] The present invention relates to the core of a noise filter. <??>Conventionally, ferrite or iron powder is used as the core of a noise filter. Some patent publications disclose the core of a noise filter made of an amorphous magnetic alloy. <??>An amorphous magnetic alloy which has a low pulse-noise resistance deterioration percentage is that on or within the curve X and Y of Figure 3.
[origin: EP0145245A2] The core comprises a coiled thin strip of an alloy consisting of (a) Fe and opt. at least one transition metal element; (b) Al and/or Si; (c) B, C and/or P. For a first compsn., the amts. a, b, c fall on or within the curve x on a compositional diagram (Fig.3); and the alloy exhibits a permeability of 2000-5000 (measured at 100 kHz, magnetic field 2mOe); a residual flux density 3kG or less (determined in a BH curve at 2kHz and max. applied magnetic field 20e); and a magnetic flux density = 6-9 kG (measured at 20e). For a second compsn., the transition element is Mo, as up to 7% compsn.; the amts. a, b, c, fall on or within curve y and outside curve x on the same diagram. This alloy exhibits a permeability of 4000 or more, and magnetic flux density = 5-11 kG.

IPC 1-7

H01F 1/14; H01F 3/04

IPC 8 full level

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CPC (source: EP)

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Cited by

EP0970600A2; FR2780853A1

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EP 0145245 A2 19850619; **EP 0145245 A3 19870128**; **EP 0145245 B1 19910306**; DE 3484231 D1 19910411; DE 3486331 D1 19940915; DE 3486331 T2 19950406; EP 0384491 A2 19900829; EP 0384491 A3 19910109; EP 0384491 B1 19940810

DOCDB simple family (application)

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