Title (en)

CORE OF A NOISE FILTER COMPRISED OF AN AMORPHOUS ALLOY

Publication

EP 0145245 B1 19910306 (EN)

Application

EP 84307588 A 19841102

Priority

- 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.

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IPC 8 full level

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Cited by

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