

Title (en)  
CORE OF A NOISE FILTER COMPRISED OF AN AMORPHOUS ALLOY

Publication  
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Application  
**EP 90105789 A 19841102**

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• 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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CPC (source: EP)  
**H01F 1/15308** (2013.01); **H01F 3/04** (2013.01)

Citation (search report)  
• [AP] EP 0119432 A2 19840926 - ALLIED CORP [US]  
• [A] EP 0055327 A1 19820707 - ALLIED CORP [US]  
• [AD] PATENT ABSTRACTS OF JAPAN, vol. 7, no. 36 (E-158)[1181], 15th February 1983; & JP-A-57 190 304 (HITACHI KINZOKU K.K.) 22-11-1982

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

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