

Title (en)

High-frequency core and inductance component using the same

Title (de)

Hochfrequenz-Magnetkern und Verwendung in einem Induktiven Bauelement

Title (fr)

Noyau magnétique à haute fréquence et composant inductif l'utilisant

Publication

EP 1598836 A1 20051123 (EN)

Application

EP 05010020 A 20050509

Priority

JP 2004146595 A 20040517

Abstract (en)

A high-frequency core (1) is a molded body obtained by molding a mixture of a soft magnetic metallic glass powder and a binder in an amount of 10% or less in mass ratio. The powder has an alloy composition represented by $(\text{Fe}_{1-a}\text{Co}_a)_{100-x-y-z-q-r}(\text{M}_1\text{-pM}'_p)\text{xTyBzCqAlr}$ ($0 < a < 0.50$, $0 < p < 0.5$, $2 \text{ atomic\%} < x < 5 \text{ atomic\%}$, $8 \text{ atomic\%} < y < 12 \text{ atomic\%}$, $12 \text{ atomic\%} < z < 17 \text{ atomic\%}$, $0.1 \text{ atomic\%} < q < 1.0 \text{ atomic\%}$, $0.2 \text{ atomic\%} < r < 2.0 \text{ atomic\%}$ and $25 < (x+y+z+q+r) < 30$, M being at least one selected from Zr, Nb, Ta, Hf, Mo, Ti, V, Cr, and W, M' being at least one selected from Zn, Sn, and R (R being at least one element selected from rare earth metals including Y), T being at least one selected from Si and P). An inductance component (101, 102) is formed by the core and a winding (3). <IMAGE>

IPC 1-7

H01F 1/153

IPC 8 full level

H01F 1/153 (2006.01); **H01F 3/14** (2006.01); **H01F 17/06** (2006.01); **H01F 41/02** (2006.01)

CPC (source: EP US)

H01F 1/15308 (2013.01 - EP US); **H01F 1/15375** (2013.01 - EP US); **H01F 1/15316** (2013.01 - EP US); **H01F 1/15325** (2013.01 - EP US); **H01F 3/14** (2013.01 - EP US); **H01F 17/062** (2013.01 - EP US); **H01F 41/0246** (2013.01 - EP US); **H01F 2017/048** (2013.01 - EP US)

Citation (search report)

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EP 1598836 A1 20051123; **EP 1598836 B1 20081231**; CN 1700369 A 20051123; CN 1700369 B 20100512; DE 602005012020 D1 20090212; US 2005254989 A1 20051117

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