

Title (en)  
USE OF A MAGNETIC CORE FOR A CURRENT TRANSFORMER, METHOD FOR THE PRODUCTION OF A MAGNETIC CORE AND CURRENT TRANSFORMER WITH A MAGNETIC CORE

Title (de)  
VERWENDUNG EINES MAGNETKERNS FÜR EINEN STROMWANDLER, VERFAHREN ZUR HERSTELLUNG EINES MAGNETKERNS UND STROMWANDLER MIT EINEM MAGNETKERN

Title (fr)  
UTILISATION D'UN NOYAU MAGNETIQUE POUR UN TRANSFORMATEUR D'INTENSITE, PROCEDE DE FABRICATION D'UN NOYAU MAGNETIQUE ET TRANSFORMATEUR D'INTENSITE EQUIPE D'UN TEL NOYAU

Publication  
**EP 1129459 B1 20040602 (DE)**

Application  
**EP 99963240 A 19991115**

Priority  
• DE 9903630 W 19991115  
• DE 19852423 A 19981113

Abstract (en)  
[origin: WO0030131A1] The magnetic core (M) consists of a coiled amorphous ferromagnetic alloy strip (B) Its saturation-permeability is greater than 20 000 and lower than 300 000. The saturation-magnetostriction of the magnetic core (M) is less than 0.5 ppm. The core (M) is substantially free from mechanical stress and has an anisotropic axis (A) along which the magnetization of the magnetic core (M) can be oriented in a particularly easy manner and which is perpendicular to a plane in which the center line of the strip (B) runs. The composition of the alloy essentially corresponds to the formula  $\text{Co}_a(\text{Fe}_{1-x}\text{Mn}_x)_b\text{Ni}_c\text{X}_d\text{Si}_e\text{B}_f\text{C}_g$  whereby X is at least one of the elements V, Nb, Ta, Cr, Mo, W, Ge, P, a g is indicated in atom % and a, b, c, d, e, f, g and x meet the following conditions:  $40 \leq a \leq 82$ ;  $3 \leq b \leq 10$ ;  $0 \leq c \leq 30$ ;  $0 \leq d \leq 5$ ;  $0 \leq e \leq 20$ ;  $7 \leq f \leq 26$ ;  $0 \leq g \leq 3$ ; with  $15 \leq d + e + f + g \leq 33$  and  $0 \leq x \leq 1$ .

IPC 1-7  
**H01F 38/28**; **H01F 1/153**

IPC 8 full level  
**C22C 45/04** (2006.01); **H01F 1/153** (2006.01); **H01F 27/24** (2006.01); **H01F 38/28** (2006.01)

CPC (source: EP KR US)  
**H01F 1/15316** (2013.01 - EP US); **H01F 38/28** (2013.01 - EP KR US)

Citation (examination)  
WO 0017897 A1 20000330 - VACUUMSCHMELZE GMBH [DE], et al

Cited by  
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DOCDB simple family (application)  
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