

Title (en)
HALF-CYCLE TRANSDUCTOR WITH A MAGNETIC CORE, USE OF HALF-CYCLE TRANSDUCTORS AND METHOD FOR PRODUCING MAGNETIC CORES FOR HALF-CYCLE TRANSDUCTORS

Title (de)
TRANSDUKTORDROSSEL MIT MAGNETKERN, VERWENDUNG VON TRANSDUKTORDROSSELN SOWIE VERFAHREN ZUR HERSTELLUNG VON MAGNETKERNEN FÜR TRANSDUKTORDROSSELN

Title (fr)
TRANSDUCTEUR MAGNETIQUE A DEMI-PERIODE AVEC NOYAU MAGNETIQUE, UTILISATION DE TRANSDUCTEURS MAGNETIQUES A DEMI-PERIODE, AINSI QUE PROCEDE DE FABRICATION DE NOYAUX MAGNETIQUES POUR TRANSDUCTEURS MAGNETIQUES A DEMI-PERIODE

Publication
EP 1317758 B1 20100421 (DE)

Application
EP 01978352 A 20010907

Priority
• DE 10045705 A 20000915
• EP 0110362 W 20010907

Abstract (en)
[origin: WO0223560A1] The invention relates to a transductor regulator with a magnetic core which is made up of a nanocrystalline alloy which is almost free of magnetorestriction. The core has as low cyclic magnetization losses as possible and as rectangular a hysteresis cycle as possible. Said alloy has the composition: $\text{FeaCobCucM'dSixByM''z}$, M' representing an element from the group V, Nb, Ta, Ti, Mo, W, Zr, Hf or a combination of these and M'' representing an element from the group C, P, Ge, As, Sb, In, O, N or a combination of these and the following conditions applying: $a + b + c + d + x + y + z = 100 \%$, with $a = 100 \% - b - c - d - x - y - z$, $0 \leq b \leq 15$, $0,5 \leq c \leq 2$, $0,1 \leq d \leq 6$, $2 \leq x \leq 20$, $2 \leq y \leq 18$, $0 \leq z \leq 10$ and $x + y > 18$. The inventive transductor regulators are particularly advantageously used in motor vehicle voltage supplies, rail power supplies or in aircraft power supplies.

IPC 8 full level
C21D 6/00 (2006.01); **H01F 27/25** (2006.01); **C22C 38/00** (2006.01); **H01F 1/14** (2006.01); **H01F 1/153** (2006.01); **H01F 37/00** (2006.01); **H01F 41/02** (2006.01)

CPC (source: EP US)
H01F 1/15308 (2013.01 - EP US); **H01F 1/15333** (2013.01 - EP US); **H01F 41/0226** (2013.01 - EP US); **Y10T 29/4902** (2015.01 - EP US)

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
WO 0223560 A1 20020321; CN 1258779 C 20060607; CN 1475018 A 20040211; DE 10045705 A1 20020404; DE 50115446 D1 20100602; EP 1317758 A1 20030611; EP 1317758 B1 20100421; JP 2004509459 A 20040325; US 2004027220 A1 20040212; US 7442263 B2 20081028

DOCDB simple family (application)
EP 0110362 W 20010907; CN 01818768 A 20010907; DE 10045705 A 20000915; DE 50115446 T 20010907; EP 01978352 A 20010907; JP 2002527519 A 20010907; US 38071403 A 20030722