

Title (en)

Process for producing a magnetic core of nanocrystalline soft magnetic material

Title (de)

Herstellungsverfahren eines Magnetkernes aus weichmagnetischem nanokristallinen Material

Title (fr)

Procédé de fabrication d'un noyau magnétique en matériau magnétique doux nanocrystallin

Publication

EP 0844628 B1 20011205 (FR)

Application

EP 97402396 A 19971013

Priority

FR 9612996 A 19961025

Abstract (en)

[origin: US5922143A] Process for manufacturing at least one magnetic core made of an iron-based soft magnetic alloy having a nanocrystalline structure, wherein an amorphous ribbon is manufactured from the magnetic alloy, the annealing temperature Tm which, in the case of the ribbon, leads to maximum magnetic permeability, is determined, at least one core blank is manufactured from the ribbon and at least one core blank is subjected to at least one annealing operation, said annealing being carried out at a temperature T of between Tm+10 DEG C. and Tm+50 DEG C. for a temperature hold time t of between 0.1 and 10 hours so as to cause nanocrystals to form.

IPC 1-7

H01F 41/02; H01F 1/153

IPC 8 full level

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CPC (source: EP US)

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US 5922143 A 19990713; AT E210332 T1 20011215; AU 4102997 A 19980430; AU 715096 B2 20000113; CN 1134033 C 20040107; CN 1188317 A 19980722; CZ 293222 B6 20040317; CZ 337297 A3 19990113; DE 69708828 D1 20020117; DE 69708828 T2 20020620; EP 0844628 A1 19980527; EP 0844628 B1 20011205; ES 2166516 T3 20020416; FR 2755292 A1 19980430; FR 2755292 B1 19981120; HK 1011578 A1 19990716; HU 221412 B1 20020928; HU P9701672 D0 19971229; HU P9701672 A2 19990628; HU P9701672 A3 20020328; JP H10130797 A 19980519; KR 19980032982 A 19980725; PL 184054 B1 20020830; PL 322808 A1 19980427; SK 144597 A3 19980506; SK 284075 B6 20040908; TR 199701235 A2 19991021; TR 199701235 A3 19991021; TW 354842 B 19990321; ZA 979359 B 19980512

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