

Title (en)

LOW-FREQUENCY MAGNETIC SCREENING MADE FROM A SOFT MAGNETIC ALLOY

Title (de)

AUS EINER WEICHMAGNETISCHEN LEGIERUNG HERGESTELLTE NIEDERFREQUENZ-MAGNETABSCHIRMUNG

Title (fr)

BLINDAGE MAGNETIQUE BASSE FREQUENCE EN ALLIAGE MAGNETIQUE DOUX

Publication

EP 1474812 A1 20041110 (FR)

Application

EP 03722655 A 20030214

Priority

- FR 0300491 W 20030214
- FR 0201901 A 20020215

Abstract (en)

[origin: WO03069637A1] The invention relates to a magnetic screening for frequency fields between 50 Hz and 3000 Hz, made from a soft magnetic alloy of the following composition in wt. %: 30 % \leq Ni \leq 40 %, 0 % \leq Cu + Co \leq 4 %, 5 % \leq Cr + Mo \leq 17 %, 5 % \leq Cr, 0 % \leq Nb \leq 2 %, Mn \leq 0.35 %, Si \leq 0.2 %, C \leq 0.050 %, O \leq 0.0160 %, S \leq 0.0020 %, B \leq 0.0010 %, optionally at least one element selected from magnesium and calcium in amounts such that the sum thereof remains below 0.1 %, the rest being iron and production impurities. The chemical composition furthermore satisfies the following relationships: Cr + Mo \leq 0.8 x Ni + 0.9 x (Co + Cu) 18.4; Cr + Mo \leq 4 x Ni + 3 x (Co + Cu) - 124; 4 x (Cr + Mo) \geq 125 - 3 x Ni. The invention further relates to use of said alloy for the production of low-frequency magnetic screening.

IPC 1-7

H01F 1/147; **C22C 38/40**; **C22C 38/42**; **C22C 38/44**; **C22C 38/52**

IPC 8 full level

C22C 38/40 (2006.01); **C22C 38/42** (2006.01); **C22C 38/44** (2006.01); **C22C 38/52** (2006.01); **H01F 1/147** (2006.01); **H05K 9/00** (2006.01)

CPC (source: EP US)

C22C 38/40 (2013.01 - EP US); **C22C 38/42** (2013.01 - EP US); **C22C 38/44** (2013.01 - EP US); **C22C 38/52** (2013.01 - EP US); **H01F 1/14708** (2013.01 - EP US); **H05K 9/0075** (2013.01 - EP US)

Citation (search report)

See references of WO 03069637A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT SE SI SK TR

DOCDB simple family (publication)

WO 03069637 A1 20030821; AU 2003229824 A1 20030904; EP 1474812 A1 20041110; FR 2836156 A1 20030822; FR 2836156 B1 20050107; JP 2006510799 A 20060330; US 2006096670 A1 20060511

DOCDB simple family (application)

FR 0300491 W 20030214; AU 2003229824 A 20030214; EP 03722655 A 20030214; FR 0201901 A 20020215; JP 2003568672 A 20030214; US 50469805 A 20050310