

Title (en)
Nanocrystalline toroidal core

Title (de)
Nanokristalliner Ringkern

Title (fr)
Tore magnétique nanocristallin

Publication
EP 1335391 A1 20030813 (FR)

Application
EP 03290202 A 20030127

Priority
FR 0201428 A 20020206

Abstract (en)
The magnetic ring (1) comprises a winding (2) formed from a band of nano-crystalline material, wound around itself. This lies between an internal supporting fret, and an external toroidal box. Together these provide a complete enclosure for the winding. The nano-crystalline magnetic ring (1) comprises a winding (2) formed from a band of nano-crystalline material, wound around itself. It is gripped internally on an annular fret, and also held by an envelope (4) surrounding the winding. The wall has an overall toroidal shape, and is assembled with the fret (3) which forms the internal peripheral support for the winding. The nano-crystalline material forms a stack of overlapping turns which is less than 2mm thick. The envelope (4) may be formed as a box, constructed from two half boxes (4a, 4b) which fit together in a manner to support the fret between notches (9b).

Abstract (fr)
Le tore magnétique nanocristallin (1) comporte un enroulement (2) constitué d'une bande en matériau nanocristallin enroulée sur elle-même et serrée à sa partie interne sur une frette annulaire, ainsi qu'une enveloppe (4) entourant l'enroulement (2) et comportant une paroi de forme globalement torique. La paroi de l'enveloppe (4) est assemblée avec la frette (3) qui constitue au moins une partie périphérique interne de l'enveloppe (4) et un moyen de maintien de l'enroulement (2) à l'intérieur de l'enveloppe (4). <IMAGE>

IPC 1-7
H01F 27/26; **H01F 17/06**

IPC 8 full level
H01F 17/06 (2006.01); **H01F 27/26** (2006.01); **H01F 3/04** (2006.01); **H01F 27/25** (2006.01); **H01F 27/32** (2006.01)

CPC (source: EP)
H01F 17/06 (2013.01); **H01F 27/266** (2013.01); **H01F 3/04** (2013.01); **H01F 27/25** (2013.01); **H01F 27/324** (2013.01)

Citation (search report)
• [A] US 3099074 A 19630730 - POLZELLA LOUIS C, et al
• [A] EP 0524087 A1 19930120 - MECAGIS [FR]
• [A] EP 0677856 A1 19951018 - MITSUI PETROCHEMICAL IND [JP]

Cited by
DE10042573B4; EP4325536A3

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)
EP 1335391 A1 20030813; FR 2835646 A1 20030808; FR 2835646 B1 20040507

DOCDB simple family (application)
EP 03290202 A 20030127; FR 0201428 A 20020206