

Title (en)
ECONOMICAL FERRITE-TYPE MAGNETS WITH ENHANCED PROPERTIES

Title (de)
KOSTENGÜNSTIGE FERRITMAGNETE MIT VERBESSERTEN EIGENSCHAFTEN

Title (fr)
AIMANTS DE TYPE FERRITE ECONOMIQUES ET A PROPRIETES AMELIOREES

Publication
EP 1438270 A1 20040721 (FR)

Application
EP 02801367 A 20021014

Priority
• FR 0203516 W 20021014
• FR 0113542 A 20011019

Abstract (en)
[origin: FR2831317A1] Ferritic type magnets comprise a magnetoplumbite phase compound with a global performance index GIP of $Br + 0.5$ (Br is the remanent induction, as mT) and Hk of at least 580, preferably 585. Hk corresponds to the field H (kA.m) for B that is 0.9Br. Ferritic type magnets comprise a magnetoplumbite phase of formula (I). $M1-xR_xFe_{12-y}TyO_{19}$ (I) M = Sr, Ba, Ca or Pb; R = rare earth metal or Bi; T = Co, Mn, Ni or Zn; $x = 0.15-0.42$; and $\alpha = y/x$ that is 0.5-0.9. The ferrite magnet has a reduced amount of element T and a global performance index GIP of $Br + 0.5$ (Br is the remanent induction, as mT) and Hk of at least 580, preferably 585. Hk corresponds to the field H (kA.m) for B that is 0.9Br. Independent claims are included for the preparation and use of the magnets.

IPC 1-7
C04B 35/32; **C04B 35/40**; **H01F 1/11**; **C01G 49/00**

IPC 8 full level
C01G 49/00 (2006.01); **C01G 51/00** (2006.01); **C04B 35/26** (2006.01); **H01F 1/11** (2006.01); **H01F 41/02** (2006.01)

CPC (source: EP KR US)
C01G 49/00 (2013.01 - KR); **C01G 49/0018** (2013.01 - EP US); **C01G 49/009** (2013.01 - EP US); **C01G 51/006** (2013.01 - EP US); **C04B 35/26** (2013.01 - KR); **C04B 35/2633** (2013.01 - EP US); **C04B 35/2641** (2013.01 - EP US); **C04B 35/2622** (2013.01 - EP US); **H01F 1/01** (2013.01 - KR); **H01F 1/11** (2013.01 - EP US); **C01P 2002/52** (2013.01 - EP US); **C01P 2004/61** (2013.01 - EP US); **C01P 2004/62** (2013.01 - EP US); **C01P 2006/12** (2013.01 - EP US); **C01P 2006/42** (2013.01 - EP US); **C04B 2235/3213** (2013.01 - EP US); **C04B 2235/3227** (2013.01 - EP US); **C04B 2235/3272** (2013.01 - EP US); **C04B 2235/3274** (2013.01 - EP US); **C04B 2235/3275** (2013.01 - EP US); **C04B 2235/3277** (2013.01 - EP US); **C04B 2235/3418** (2013.01 - EP US); **C04B 2235/5409** (2013.01 - EP US); **C04B 2235/5436** (2013.01 - EP US); **C04B 2235/5445** (2013.01 - EP US); **C04B 2235/605** (2013.01 - EP US); **C04B 2235/608** (2013.01 - EP US); **C04B 2235/767** (2013.01 - EP US); **C04B 2235/77** (2013.01 - EP US); **C04B 2235/80** (2013.01 - EP US)

Citation (search report)
See references of WO 03033432A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)
FR 2831317 A1 20030425; **FR 2831317 B1 20041015**; BR 0213387 A 20041221; CN 100386288 C 20080507; CN 1571761 A 20050126; EP 1438270 A1 20040721; JP 2005505944 A 20050224; KR 100845201 B1 20080710; KR 20050036879 A 20050420; MX PA04003449 A 20040708; US 2004251997 A1 20041216; WO 03033432 A1 20030424

DOCDB simple family (application)
FR 0113542 A 20011019; BR 0213387 A 20021014; CN 02820664 A 20021014; EP 02801367 A 20021014; FR 0203516 W 20021014; JP 2003536177 A 20021014; KR 20047005733 A 20040417; MX PA04003449 A 20021014; US 49189504 A 20040602