

Title (en)

MAGNETIC MATERIAL, PERMANENT MAGNET, ROTARY ELECTRICAL MACHINE, AND VEHICLE

Title (de)

MAGNETMATERIAL, DAUERMAGNET, ELEKTRISCHE DREHMASCHINE UND FAHRZEUG

Title (fr)

MATÉRIAU MAGNÉTIQUE, AIMANT PERMANENT, MACHINE TOURNANTE ÉLECTRIQUE ET VÉHICULE

Publication

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Application

EP 17187467 A 20170823

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- JP 2017135371 A 20170711

Abstract (en)

An magnetic material is a magnetic material expressed by a composition formula: ##### (R 1-x Y x) a M b T c A d , which includes a main phase consisting of a ThMn 12 type crystal phase. 30 atomic percent or more of the element M in the composition formula is Fe.

IPC 8 full level

H01F 1/055 (2006.01); **H01F 1/059** (2006.01)

CPC (source: EP)

H01F 1/0557 (2013.01); **H01F 1/0593** (2013.01)

Citation (applicant)

- JP 2016058707 A 20160421 - TOYOTA MOTOR CORP
- US 2016071635 A1 20160310 - SAKUMA NORITSUGU [JP], et al
- JP H06283316 A 19941007 - HITACHI METALS LTD
- JP S601597 B2 19850116
- US 6419759 B1 20020716 - YANG YINGCHANG [CN], et al
- JP H04308062 A 19921030 - SHINETSU CHEMICAL CO
- US 2016148734 A1 20160526 - KARIMI ROMAN [DE], et al
- JP 2008029148 A 20080207 - TOSHIBA CORP
- JP 2008043172 A 20080221 - TOSHIBA CORP
- T. KUNO ET AL., AIP ADVANCES, vol. 6, 2016, pages 025221
- S. SUZUKI ET AL., J. MAGN. MAGN. MATER., vol. 401, 2016, pages 259
- E. P. YELSU KOV ET AL., J. MAGN. MAGN. MATER., vol. 115, 1992, pages 271
- G POURROY ET AL., J. ALLOYS COMPD., vol. 244, 1996, pages 90

Citation (search report)

- [XAI] EP 0386286 A1 19900912 - SHINETSU CHEMICAL CO [JP]
- [A] EP 0510578 A2 19921028 - SHINETSU CHEMICAL CO [JP]
- [XAI] CHANG W C ET AL: "Magnetic studies of (Y1-xNdx)(Fe1-yCoy)11.5Mo0.5N alloy powders", JOURNAL OF ALLOYS AND COMPOUNDS, ELSEVIER SEQUOIA, LAUSANNE, CH, vol. 222, no. 1-2, 1 May 1995 (1995-05-01), pages 87 - 91, XP004066536, ISSN: 0925-8388, DOI: 10.1016/0925-8388(94)04923-8
- [A] XIAO Y G ET AL: "Crystal structure and spin reorientation transition of Tb1-xYxFe11Mo compounds; Crystal structure and spin reorientation transition", JOURNAL OF PHYSICS D: APPLIED PHYSICS, INSTITUTE OF PHYSICS PUBLISHING LTD, GB, vol. 39, no. 4, 21 February 2006 (2006-02-21), pages 615 - 620, XP020095039, ISSN: 0022-3727, DOI: 10.1088/0022-3727/39/4/003
- [A] GABAY A M ET AL: "Low-cost Ce1-xSmx(Fe, Co, Ti)12alloys for permanent magnets", AIP ADVANCES, AMERICAN INSTITUTE OF PHYSICS, 2 HUNTINGTON QUADRANGLE, MELVILLE, NY 11747, vol. 6, no. 5, 1 January 1901 (1901-01-01), XP012205651, DOI: 10.1063/1.4944066

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