

Title (en)

Method of manufacturing a permanent magnet on the basis of NdFeB.

Title (de)

Verfahren zum Herstellen eines Dauermagneten auf Basis von NdFeB.

Title (fr)

Procédé pour la fabrication d'un aimant permanent à base de NdFeB.

Publication

**EP 0583041 A1 19940216 (EN)**

Application

**EP 93202359 A 19930811**

Priority

- EP 93202359 A 19930811
- EP 92202498 A 19920813

Abstract (en)

A description is given of a method of manufacturing a permanent magnet on the basis of NdFeB. In this method a powder of NdFeB and a powder of a Ga alloy, consisting mainly of Ga and one or more than one rare earth metals (RE), is mixed to form a mixture which is subsequently aligned, compressed and sintered. Such alloys can be ground into homogeneous, fine-grain powders in a simple manner. The composition of the alloy preferably corresponds to the formula  $REGa_x$ , where  $x = 1$  or  $x = 2$ . Alloys which are very suitable contain Dy and/or Tb as the rare earth metal.

IPC 1-7

**H01F 1/053**

IPC 8 full level

**B22F 1/00** (2006.01); **H01F 1/057** (2006.01)

CPC (source: EP US)

**B22F 1/09** (2022.01 - EP US); **H01F 1/0577** (2013.01 - EP US)

Citation (search report)

- [A] EP 0447567 A1 19910925 - KAWASAKI STEEL CO [JP]
- [DA] EP 0249973 A1 19871223 - TOKIN CORP [JP]
- [A] J.FIDLER ET AL, IEEE TRANSACTIONS ON MAGNETICS., vol. 26, no. 5, September 1990 (1990-09-01), NEW YORK US, pages 1948 - 1950

Cited by

CN106735202A; DE19636283A1; DE19636284A1; DE19636284C2; US6254659B1; EP4044202A1; US2022230805A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**EP 0583041 A1 19940216; EP 0583041 B1 19970205**

DOCDB simple family (application)

**EP 93202359 A 19930811**