

Title (en)
Anisotropic Rare Earth Magnet.

Title (de)
Anisotroper Seltenerd-Magnet.

Title (fr)
Aimant ayant des propriétés anisotropiques à base de terres rares.

Publication
EP 0522177 B1 19950712 (EN)

Application
EP 92903728 A 19920128

Priority

- JP 9200073 W 19920128
- JP 6082891 A 19910128
- JP 6083391 A 19910130
- JP 6083791 A 19910131
- JP 6086091 A 19910201

Abstract (en)
[origin: WO9213353A1] A hot press molding product or a HIP molding product having any of a composition comprising 10 to 20 at.% of R, 3 to 20 at.% of B, 0.001 to 5.0 at.% of one or more atoms selected among Ga, Zr and Hf, and the balance of Fe and unavoidable impurities, a composition comprising 10 to 20 at.% of R, 3 to 20 at.% of B, 0.001 to 5.0 at.% of one or more atoms selected among Ti, V, Nb, Ta, Al and Si, and the balance of Fe and unavoidable impurities, and a composition comprising 0.1 to 50 at.% of Co in addition to any of the two abovementioned compositions. It has an aggregate structure of crystal grains with a mean diameter of 0.05 to 20 μm wherein a tetragonal $\text{R}_2\text{Fe}_{14}\text{B}$ or $\text{R}_2(\text{Fe}, \text{Co})_{14}\text{B}$ intermetallic compound constitutes a main phase and crystal grains having a major axis (b) to minor axis (a) ratio of less than 2 account for at least 50 vol% of all the crystal grains.

IPC 1-7
H01F 1/053

IPC 8 full level
H01F 1/057 (2006.01)

CPC (source: EP)
H01F 1/0573 (2013.01); **H01F 1/0576** (2013.01)

Citation (examination)

- EP 0304054 A2 19890222 - MITSUBISHI METAL CORP [JP]
- EP 0306599 B1 19940608 - HITACHI METALS LTD [JP]
- EP 0101552 B1 19890809
- JP S63235406 A 19880930 - DAIDO STEEL CO LTD
- JP S63211705 A 19880902 - HITACHI METALS LTD
- JP S63178505 A 19880722 - HITACHI METALS LTD
- JP H02263404 A 19901026 - HITACHI METALS LTD
- JP H02138706 A 19900528 - DAIDO STEEL CO LTD

Designated contracting state (EPC)
DE FR GB IT NL

DOCDB simple family (publication)
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EP 0522177 A1 19930113; EP 0522177 A4 19930915; EP 0522177 B1 19950712; EP 0522177 B2 20030730

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