

Publication

**EP 0576282 A3 19940323**

Application

**EP 93304944 A 19930624**

Priority

- JP 4601093 A 19930209
- JP 9719093 A 19930330
- JP 12489393 A 19930428
- JP 19172792 A 19920624
- JP 19172892 A 19920624
- JP 28942092 A 19921001
- JP 28942192 A 19921001
- JP 28942292 A 19921001

Abstract (en)

[origin: EP0576282A2] The object of the invention is to provide a manufacturing method of a complex shaped R-Fe-B type sintered anisotropic magnet improved the moldability of injection molding and preventing the reaction between R ingredients and binder and controlled the degradation of magnetic characteristics due to residual carbon and oxygen. Utilizing the R-Fe-B type alloy powder or the resin coated said alloy powder, and methylcellulose and/or agar and water, instead of the usual thermoplastic binder, it is mixed and injection molded. The molded body is dehydrated by the freeze vacuum dry method to control the reaction between R ingredients and of the R-Fe-B alloy powder and water; furthermore, by administering the de-binder treatment in the hydrogen atmosphere, and sintering it after the dehydrogen treatment, residual oxygen and carbon in the R-Fe-B sintered body is drastically reduced, improving the moldability during the injection molding to obtain a three dimensionally complex shape sintered magnet.

IPC 1-7

**H01F 41/02**; **H01F 1/053**

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [A] PATENT ABSTRACTS OF JAPAN vol. 12, no. 127 (E - 602) 20 April 1988 (1988-04-20)
- [A] PATENT ABSTRACTS OF JAPAN vol. 13, no. 410 (E - 819) 11 September 1989 (1989-09-11)
- [A] PATENT ABSTRACTS OF JAPAN vol. 10, no. 121 (E - 401) 7 May 1986 (1986-05-07)

Cited by

EP1365422A4; EP2685472A4; EP0778594A4; US6126873A; CN106938332A; EP1199124A4; CN103081038A; EP2685474A4; EP3786989A1; US6669898B2; US6861028B2; WO9734720A1; WO9962660A1; WO0012248A1; US9281107B2; US9991034B2; US9991033B2

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