

Title (en)

Ferromagnetic-metal-based powder, powder core using the same, and manufacturing method for ferromagnetic-metal-based powder

Title (de)

Ferromagnetisches Metall-Pulver, Kern mit diesem Pulver und Herstellungsverfahren für dieses Pulver

Title (fr)

Poudre à base d'un métal ferromagnétique, noyau de poudre l'utilisant et méthode de fabrication de cette poudre

Publication

**EP 1246209 A3 20021218 (EN)**

Application

**EP 02006902 A 20020326**

Priority

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- JP 2001172529 A 20010607
- JP 2001364658 A 20011129
- JP 2002030142 A 20020206

Abstract (en)

[origin: EP1246209A2] An iron-based powder including a heat-resistant insulate coating and a powder core are suggested. A paint containing silicone resin and pigment is added to a raw material powder primarily containing a ferromagnetic metal, especially, iron, agitation and mixing are performed and, thereafter, a drying treatment is performed so as to form a coating containing silicone resin and pigment on the surface of the iron-based powder. The ratio of the silicone resin content to the pigment content in the coating is preferably 0.01 or more, but less than 4.0 on a mass basis. The pigment is preferably at least one selected from the group consisting of metal oxides, metal nitrides, metal carbides, minerals, and glass. The paint may be sprayed to the iron-based powder in a fluidized state. A coating containing at least one of Si compounds, Ti compounds, Zr compounds, P compounds, and Cr compounds may be formed as a lower layer of the aforementioned coating. <IMAGE>

IPC 1-7

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CPC (source: EP)

**H01F 1/24** (2013.01); **H01F 1/26** (2013.01); **H01F 41/0246** (2013.01)

Citation (search report)

- [X] EP 0869517 A1 19981007 - TDK CORP [JP]
- [A] FR 2545640 A1 19841109 - GEN ELECTRIC [US]
- [A] PATENT ABSTRACTS OF JAPAN vol. 005, no. 007 (E - 041) 17 January 1981 (1981-01-17)

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EP3199264A1; WO2017134039A1; EP2182530A4; EP2330602A4; US2019060992A1; WO2015091762A1; WO2015092002A1; US9583261B2; US11285533B2; WO2019002434A1; WO2012084801A1; WO2012136758A2; US9153368B2; EP3576110A1; WO2019229015A1; US12002608B2

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