Title (en)

HIGH CORROSION-RESISTANT R-Fe-B-BASE BONDED MAGNET AND METHOD OF MANUFACTURING THE SAME

Title (de)

KORROSIONSBESTÄNDIGE R-FE-B VERBUNDMAGNET UND HERSTELLUNGSVERFAHREN

Title (fr)

AIMANT LIE A BASE DE R-Fe-B EXTREMEMENT RESISTANT A LA CORROSION ET PROCEDE DE FABRICATION DUDIT AIMANT

Publication

EP 1028437 A4 20010613 (EN)

Application

EP 98950380 A 19981023

Priority

- JP 9804829 W 19981023
- JP 31643597 A 19971030
- JP 33368197 A 19971117
- JP 4455898 A 19980210
- JP 4455998 A 19980210
- JP 4882798 A 19980212
- JP 4882898 A 19980212
- JP 5604498 A 19980219
- JP 8301198 A 19980312
- JP 8301298 A 19980312
- JP 10349698 A 19980330

Abstract (en)

[origin: EP1028437A1] A method of efficiently manufacturing R-Fe-B-base bonded magnets of various shapes such as ring shape and disk shape having a high corrosion resistance and capable of being plated electrically with ease, wherein the corrosion resistance of the magnet is improved by forming a conductive film of a metal on the surface thereof with tight adhesion, uniformity and efficiency. The method comprises filling the holes of the magnet with polishing powder, inorganic powder and polishing chips, fixing these materials in the holes by fat of a vegetable medium and sealing the resultant holes, and barrel-polishing the magnet by a barrel unit in the dry process with indefinitely shaped, i.e. spherical, massive or acicular (wiry) pieces of a required size of Cu, Sn, Zn, Pb, Cd, In, Au, Ag, Fe, Ni, Co, Cr and Al and such pieces of alloys thereof used as a metallic medium. Said fine pieces of metals such as Cu are press fitted into a resin surface and holes of the bonded magnet and cover the surface and holes and further, cover the surfaces of particles of magnetic powder whereby a very uniform conductive film can be formed on the surface of the bonded magnet, so that it becomes possible to subject the bonded magnet to electric plating excellently and obtain a plated R-Fe-B-base bonded magnet of a high corrosion resistance and with minimum deterioration of the magnetic properties.

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IPC 8 full level

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CPC (source: EP KR)

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Citation (search report)

- [Y] EP 0502475 A2 19920909 - KANEGAFUCHI CHEMICAL IND [JP], et al
- [Y] PATENT ABSTRACTS OF JAPAN vol. 014, no. 218 (E - 0925) 9 May 1990 (1990-05-09)
- [A] PATENT ABSTRACTS OF JAPAN vol. 017, no. 073 (C - 1026) 15 February 1993 (1993-02-15)
- See references of WO 9923675A1

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