

Title (en)
SURFACE TREATMENT METHOD FOR RARE EARTH MAGNETIC POWDER, AND INJECTION MOLDED RARE EARTH MAGNETIC MATERIAL AND PREPARATION METHOD THEREFOR

Title (de)
OBERFLÄCHENBEHANDLUNGSVERFAHREN FÜR SELTENERDMAGNETPULVER UND SPRITZGEGOSSENES SELTENERDMAGNETMATERIAL UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)
PROCÉDÉ DE TRAITEMENT DE SURFACE POUR POUDRE MAGNÉTIQUE DE TERRES RARES, MATÉRIAU MAGNÉTIQUE DE TERRES RARES MOULÉ PAR INJECTION ET PROCÉDÉ DE PRÉPARATION ASSOCIÉ

Publication
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Application
EP 21827559 A 20211105

Priority

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- CN 2021129091 W 20211105

Abstract (en)
[origin: EP4199016A1] Provided are a surface treatment method of rare earth magnetic powder, an injection molding rare earth magnetic material and a preparation method thereof. The above surface treatment method includes: step S1, adding rare earth magnetic powder to weak acid solution, as to weakly acidify the surface of the rare earth magnetic powder, to form weakly acidified magnetic powder, herein a weak acid in the weak acid solution is an inorganic weak acid with an acidity coefficient pKa value greater than 4.5 and/or an organic weak acid with an acidity coefficient greater than 1.0; step S2, phosphating the weakly acidified magnetic powder with phosphating solution, to form phosphating magnetic powder; and step S3, mixing the phosphating magnetic powder with a coupling agent, as to coupling-treat the phosphating magnetic powder, and then drying, to obtain the rare earth magnetic powder after surface treatment. The present disclosure solves a problem in an existing technology that that the rare earth magnetic powder has weak oxidation resistance, so that the rare earth magnetic material after injection molding is poor in magnetic performance.

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Citation (search report)

- [X1] JP 2020023752 A 20200213 - NICHIA KAGAKU KOGYO KK
- [X1] CN 104637667 B 20180209
- [X1] US 2021098161 A1 20210401 - MAEHARA HISASHI [JP]
- See also references of WO 2023070735A1

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