

Title (en)

Flexible, moldable bonded magnet and process for producing same

Title (de)

Flexibler, gegossen und gebundener Magnet, und Verfahren zu seiner Herstellung

Title (fr)

Aimant flexible moulable à liant et procédé de fabrication d'un tel aimant

Publication

EP 1199729 A1 20020424 (EN)

Application

EP 01650115 A 20011009

Priority

US 69320900 A 20001020

Abstract (en)

Magnetic materials, such as ferrite, are produced. Mixing the magnetic powder with a thermoplastic elastomer material and a lubricant material using a twin screw compounding extruder forms the magnetic compound. After allowing for a mixing period, the mixed compound is granulated (i.e., reduced to small particles). Since the compound utilizes a thermoplastic elastomer rather than a thermoset elastomer material to achieve flexibility, the compound is amenable to further processing by injection molding. Thus the granulated compound is processed by an injection molding machine and the molded parts are afterwards pulse magnetized. Parts may be magnetized during injection molding. This results in a finished, flexible bonded magnet product formed according to complex shape specifications and magnetized in accordance with a variety of magnetization patterns. <IMAGE>

IPC 1-7

H01F 1/08; **H01F 1/117**; **H01F 1/057**; **H01F 1/055**; **H01F 1/059**

IPC 8 full level

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Citation (search report)

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