

Title (en)
MAGNETIC MATERIAL AND PERMANENT MAGNET OF THE NdFeB TYPE

Title (de)
MAGNETMATERIAL UND DAUERMAGNET DES NdFeB-TYPS

Title (fr)
MATERIAU MAGNETIQUE ET AIMANT PERMANENT DE TYPE NdFeB

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Application
EP 96938104 A 19961106

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Abstract (en)
[origin: DE19541948A1] The invention concerns a magnetic material and a permanent magnet of the NdFeB type. Intrinsic and structure-dependent resistance to corrosion is brought about by the specific addition of additives such as Dy, Co, Nb, Al, Ga and Cu to the base alloy of NdFeb. For standard applications, an additional coating can be dispensed with. However, the material is also more insensitive to the media to be contacted during electroplating, for example, and can be coated easily. Improved temperature coefficients of the residual magnetism and, with a suitable choice of alloys, high coercive field intensities even at high temperatures permit use at above 200 DEG C. Owing to higher magnetic flux densities in the temperature range of up to 200 DEG C, the proven but more expensive Sm₂(TM)₁₇ materials can be replaced in a great many applications.

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