

Title (en)
NEODYMIUM/IRON/BORON-BASED PERMANENT MAGNET

Title (de)
PERMANENTMAGNET AUF NEODYM/EISEN/BOR-BASIS

Title (fr)
AIMANT PERMANENT À BASE DE NÉODYME/FER/BORE

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Application
EP 12800074 A 20120615

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Abstract (en)
[origin: WO2012171490A1] A sintered neodymium/iron/boron-based permanent magnet is provided. The permanent magnet comprises 16 to 25wt. % of Nd, 4 to 10 wt.% of Dy, 0 to 1.2 wt.% of Tb, 2 to 13 wt.% of component R, wherein component R is selected from Pr, Ce, Gd, or Y, or any combination thereof, 1.4 to 9 wt.% of component T, wherein component T is selected from Co, Cu, or Al, or any combination thereof, 0.1 to 0.6 wt. % of component M, wherein component M is selected from Zr, Ti, or Mo, or any combination thereof, 0.9 to 1.1 wt.% of B, and the balance of Fe. The permanent magnet only contains a limited amount of Dy and very little or even no Tb, and yet has high coercivity and high thermal stability. An electric motor, a generator and an integrated electromotor comprising the permanent magnet are also provided.

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