

Title (en)
RARE EARTH-CONTAINING MAGNETS

Publication
EP 0157329 A3 19870616 (EN)

Application
EP 85103515 A 19850325

Priority
• US 59527784 A 19840330
• US 59529084 A 19840330

Abstract (en)
[origin: EP0157329A2] Compositions for the production of rare earth-ferromagnetic-metal permanent magnets comprise mixtures of rare earth-ferromagnetic-metal alloy powder and a lesser amount of a powdered second-phase sintering aid, wherein there is added up to about 2 percent by weight of a particulate refractory oxide, carbide, or nitride additive. Permanent magnets are prepared by mixing the components, aligning the mixture in a magnetic field, pressing and sintering. The refractory material inhibits grain growth in the second phase during sintering, improving the magnetic properties of the major phase.

IPC 1-7
H01F 1/08; H01F 1/04

IPC 8 full level
H01F 1/055 (2006.01)

CPC (source: EP)
H01F 1/0557 (2013.01)

Citation (search report)
• [X] CHEMICAL ABSTRACTS, vol. 80, no. 2, 14th January 1974, page 365, abstract no. 8485j, Columbus, Ohio, US; & JP-A-73 00 370 (SUWA SEIKOSHA CO., LTD) 08.01.1973
• [A] PATENTS ABSTRACTS OF JAPAN, vol. 7. no. 214 (E-199)[1359], 21st September 1983; & JP-A-58 108 707 (TOUHOKU KINZOKU KOGYO K.K.) 28.06.1983
• [AD] APPLIED PHYSICS LETTERS, vol. 18, no. 4, 15th February 1971, pages 107-108, New York, US; J. TSUI et al.: "Sintering of PrCo5 permanent magnets"
• [XP] IEEE TRANSACTIONS ON MAGNETICS, vol. MAG-20, no. 5, part 2, September 1984, pages 1611-1613, IEEE, New York, US; M.H. GHANDEHARI et al.: "Magnetic hardening of PrCo5 by oxide additives"

Cited by
CN104700972A; AU608309B2

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI LU NL SE

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