

Title (en)

Ductile magnetic alloys, method of making same and magnetic body.

Title (de)

Duktile magnetische Legierungen, Verfahren zu ihrer Herstellung und Magnet.

Title (fr)

Alliages magnétiques ductiles, procédé pour leur fabrication et corps magnétique.

Publication

EP 0018942 A1 19801112 (EN)

Application

EP 80810124 A 19800411

Priority

US 2947779 A 19790412

Abstract (en)

Magnetic alloys of a ternary composition as defined within the region A, B, C, D of the ternary diagram of fig. 5, wherein X is one or more metals selected from the group which consists of iron, nickel, aluminum, chromium, copper, molybdenum and manganese and preferably includes 0.1 to 10% atomic iron and/or chromium (most advantageously 1 to 5% atomic chromium of the entire alloy), are cast and rendered ductile by the formation within the material during solidification of at least two phases. One of the phases is preferably ductile and formed essentially of fibers or dendrites of Co and the other phase or phases are from those normally found in rare-earth/cobalt magnets. The alloy is magnetically hardened by precipitation hardening. The chromium appears predominantly in the fiber or dendrite phase and promotes the formation of the latter.

IPC 1-7

C22C 19/07; **H01F 1/04**

IPC 8 full level

C22F 1/10 (2006.01); **C22C 1/02** (2006.01); **C22C 19/07** (2006.01); **H01F 1/053** (2006.01); **H01F 1/055** (2006.01)

CPC (source: EP)

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Citation (search report)

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