

Title (en)

DUCTILE MAGNETIC ALLOYS, METHOD OF MAKING SAME AND MAGNETIC BODY

Publication

**EP 0018942 B1 19840704 (EN)**

Application

**EP 80810124 A 19800411**

Priority

US 2947779 A 19790412

Abstract (en)

[origin: EP0018942A1] 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.

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Cited by

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