

Title (en)

ARTICLE COMPRISING A MAGNETIC COMPONENT CONSISTING ESSENTIALLY OF AN ALLOY COMPRISING FE, CR AND CO

Publication

**EP 0024686 A3 19810819 (EN)**

Application

**EP 80104952 A 19800820**

Priority

US 6927879 A 19790824

Abstract (en)

[origin: EP0024686A2] This invention relates to magnetic Fe-Cr-Co alloys which additionally contain Cu. Disclosed are permanent magnet Fe-Cr-Co-Cu alloys which preferably contain 22-38 weight percent Cr, 3-30 weight percent Co, 0.2-5 weight percent Cu, and remainder essentially iron. Presence of limited amounts of other elements such as, e.g., ferrite stabilizing elements or rare earth elements is not precluded. The new alloys have superior magnet properties such as, typically, remanence Br in a range of 8000-14000 gauss, coercive force Hc in a range of 200-1500 oersted (15,920-119,400 A/m), and energy product (BH)max in a range of 1.0-15.0 million gauss-oersted (79.6-1194 MG A m). Alloys of the invention may be processed to yield either isotropic or anisotropic magnet properties

IPC 1-7

**H01F 1/04**; **C22C 38/30**

IPC 8 full level

**C22C 38/30** (2006.01); **H01F 1/04** (2006.01)

CPC (source: EP KR)

**C22C 38/30** (2013.01 - EP); **H01F 1/04** (2013.01 - EP KR)

Citation (search report)

- FR 2415145 A1 19790817 - AIMANTS UGIMAG SA [FR]
- CHEMICAL ABSTRACTS, vol. 86, no. 16, April 1977 page 569, abstract 114647x, Columbus, Ohio, USA, & JP-B-51 018884 (NIPPON GAKKI CO. LTD. (14-06-1976)

Cited by

EP0239838A1; GB2163778A; GB2177420A; GB2177420B

Designated contracting state (EPC)

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**EP 0024686 A2 19810311**; **EP 0024686 A3 19810819**; ES 494412 A0 19810801; ES 8106181 A1 19810801; JP S56501051 A 19810730; KR 830003786 A 19830622; PL 226314 A1 19810619; WO 8100643 A1 19810305

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