

Title (en)

Iron-cobalt based soft magnetic alloy and method for its manufacture

Title (de)

Weichmagnetische Legierung auf Eisen-Kobalt-Basis sowie Verfahren zu deren Herstellung

Title (fr)

Alliage légèrement magnétique à base de fer et de cobalt ainsi que son procédé de fabrication

Publication

EP 1918407 A1 20080507 (DE)

Application

EP 07113372 A 20070727

Priority

DE 102006051715 A 20061030

Abstract (en)

The soft magnetic alloy contains cobalt (in weight%) (10-22), vanadium (0-4), chromium (1.5-5), manganese (1-2), molybdenum (0-1), silicon (0.5-1.5), aluminum (0.1-1), and remainder of iron. The soft magnetic alloy contains cobalt (in weight%) (10-22), vanadium (0-4), chromium (1.5-5), manganese (1-2), molybdenum (0-1), silicon (0.5-1.5), aluminum (0.1-1), and remainder of iron. The sum total of silicon and aluminum content is 0.6-2 weight%. The sum total of chromium, manganese, molybdenum, silicon, aluminum and vanadium content is 4-9 weight%. The soft magnetic alloy further contains nitrogen (200 ppm or less), carbon (400 ppm or less) and oxygen (100 ppm or less) as impurities. An independent claim is included for manufacture of soft magnetic alloy.

Abstract (de)

Eine weichmagnetische Legierung besteht im Wesentlichen aus 10 Gew.-% # Co # 22 Gew.-%, 0 Gew.-% # V # 4 Gew.-%, 1,5 Gew.-% # Cr # 5 Gew.-%, 1 Gew.-% # Mn # 2 Gew.-%, 0 Gew.-% # Mo # 1 Gew.-%, 0,5 Gew.-% # Si # 1,5 Gew.-%, 0,1 Gew.-% # Al # 1,0 Gew.-%, Rest Eisen.

IPC 8 full level

C22C 38/10 (2006.01); **H01F 1/147** (2006.01); **C21D 8/12** (2006.01)

CPC (source: EP US)

C22C 38/02 (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/30** (2013.01 - EP US); **F02M 51/061** (2013.01 - EP US); **F02M 61/166** (2013.01 - EP US); **H01F 1/14708** (2013.01 - EP US); **C21D 8/1272** (2013.01 - EP US); **F02M 2200/9061** (2013.01 - EP US)

Citation (search report)

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- [A] DE 4444482 A1 19960627 - BOSCH GMBH ROBERT [DE]
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- [A] JP S6293342 A 19870428 - DAIDO STEEL CO LTD
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AL BA HR MK RS

DOCDB simple family (publication)

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