

Title (en)

Co BASED ALLOY AND PROCESS FOR PRODUCING THE SAME

Title (de)

LEGIERUNG AUF KOBALTBASIS UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

ALLIAGE A BASE DE Co ET SON PROCEDE DE FABRICATION

Publication

**EP 1959024 A1 20080820 (EN)**

Application

**EP 06833680 A 20061122**

Priority

- JP 2006323877 W 20061122
- JP 2005350431 A 20051205

Abstract (en)

A Co based alloy including at least one member selected from among 0.01 to 10% Fe, 0.01 to 30% Ni and 0.01 to 25% Mn, which Co based alloy has a metal structure wherein  $\mu$ -phase of h.c.p. structure having been generated by heat-induced or stress-induced transformation is formed in a ratio of 10 vol.% or more. According to necessity, there may be added at least one member selected from among 0.01 to 10% Al, 0.01 to 35% Cr, 0.01 to 20% V, 0.01 to 15% Ti, 0.01 to 30% Mo, 0.01 to 10% Nb, 0.01 to 3% Zr, 0.01 to 30% W, 0.01 to 10% Ta, 0.01 to 5% Hf, 0.01 to 8% Si, 0.001 to 3% C, 0.001 to 3% B, 0.001 to 3% P and 0.001 to 3% misch metal. The Co based alloy exhibits high elastic deformation capability and is good in ductility and workability. The Co based alloy is used as a functional material of, for example, sensor or actuator capable of displacement control by magnetic field application.

IPC 8 full level

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CPC (source: EP US)

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