

Title (en)

Cobalt alloy and method for its manufacture

Title (de)

Kobaltlegierung sowie Verfahren zu deren Herstellung

Title (fr)

Alliage de cobalt et son procédé de fabrication

Publication

EP 2371977 B1 20160316 (DE)

Application

EP 11158754 A 20110318

Priority

- EP 10157037 A 20100319
- EP 11158754 A 20110318

Abstract (en)

[origin: EP2371977A1] A cobalt alloy comprises (in weight%) cobalt (30), nickel (0-20), chromium (5-30), carbon (0.4-2.5) and carbide-forming metal(s) forming carbides with the carbon, where the atomic ratio in the alloy of the carbide-forming metal to the carbon amount is 0.8, and the alloy optionally contains molybdenum, tungsten, aluminum, titanium, niobium, iron, silicon, manganese, vanadium, boron, zirconium and/or contaminants. The carbides are present in the alloy in the form of a finely dispersed phase without a preferred direction. An independent claim is also included for a method for manufacturing a cobalt alloy.

IPC 8 full level

C22C 19/07 (2006.01)

CPC (source: EP US)

C22C 19/07 (2013.01 - EP US); **Y10T 29/49318** (2015.01 - EP US)

Citation (examination)

- SPIEKERMANN P: "LEGIERUNGEN - EIN BESONDERES PATENTRECHTLICHES PROBLEM? - LEGIERUNGSPRUEFUNG IM EUROPÄISCHEN PATENTAMT -", MITTEILUNGEN DER DEUTSCHEN PATENTANWÄLTE, HEYMANN, KOLN, DE, 1 January 1993 (1993-01-01), pages 178 - 190, XP000961882, ISSN: 0026-6884
- ELIHU F. BRADLEY: "Superalloys A Technical Guide", 1 May 1989, ASM INTERNATIONAL, Metals Park, OH 44073, pages: 39 - 40

Cited by

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