

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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Designated contracting state (EPC)

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