

Title (en)

HARD METAL BODY AND METHOD FOR PRODUCING THE SAME

Title (de)

HARTMETALLKÖRPER UND VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)

CORPS EN MÉTAL DUR ET PROCÉDÉ DE SON PRODUCTION

Publication

**EP 2010687 B1 20130605 (DE)**

Application

**EP 07724394 A 20070420**

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Abstract (en)

[origin: WO2007121931A2] The invention relates to a method for producing a hard metal body, a powder for producing the hard metal and a produced hard metal body. According to the invention, said hard metal body consists of a hard material phase containing 60 mass % to 100 mass % WC and upto 40 mass % of a carbide, nitride, carbonitride or oxycarbonitride and at least one of the metals Ti, Zr, Hf, V, Ta, Cr, Mo, and one binding phase containing Co or a Co-alloy having upto 50 mass % of Ni, Fe or Cr, which constitutes 4 to 20 mass % of total hard metal. According to the invention, at least 10 vol. % of the WC is obtained by reacting a ternary W-Co-C-phase with carbon, said ternary W-Co-C-phase containing, in the dissolved form, prior to sintering, at least two of the metals Ti, Zr, Hf, V, Nb, Ta, Cr, Mo, Fe, Ni, Sc, Y, La, Ce, Re, Ru, Rh, Pt.

IPC 8 full level

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