

Title (en)

Plate-crystalline tungsten carbide-containing hard alloy, composition for forming plate-crystalline tungsten carbide and process for preparing said hard alloy

Title (de)

Flächen-kristallines Wolframkarbid enthaltendes Hartmetall, Zusammensetzung zur Herstellung von flächen-kristallines Wolframkarbid und Verfahren zur Herstellung des Hartmetalls

Title (fr)

Alliage dur contenant du carbure de tungstène lamellaire, composition pour la préparation de carbure de tungstène lamellaire et procédé pour la préparation de l'alliage dur

Publication

**EP 0759480 A1 19970226 (EN)**

Application

**EP 95113238 A 19950823**

Priority

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Abstract (en)

Disclosed are a plate-crystalline tungsten carbide-containing hard alloy which comprises 4 to 40 % by volume of a binder phase containing at least one of iron group metals selected from Co, Ni and Fe as a main component; and the balance of a hard phase comprising tungsten carbide alone, or tungsten carbide and 50 % by volume or less of a compound with a cubic structure selected from at least one of carbide and nitride of the 4a (Ti, Zr and Hf), 5a (V, Nb and Ta) or 6a (Cr, Mo and W) group element of the periodic table and mutual solid solutions thereof, and inevitable impurities, wherein when peak intensities at a (001) face and a (101) face in X-ray diffraction using K alpha rays with Cu being a target are represented by h(001) and h(101), respectively, the tungsten carbide satisfies  $h(001)/h(101) \geq 0.50$ , a composition for forming a plate-crystalline tungsten carbide, and a process for preparing the plate-crystalline tungsten carbide-containing hard alloy.

IPC 1-7

**C22C 29/08**

IPC 8 full level

**C22C 1/05** (2006.01); **C22C 29/08** (2006.01)

CPC (source: EP)

**C22C 1/055** (2013.01); **C22C 29/08** (2013.01)

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- JP S4723049 B1
- JP S4723050 B1
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- [A] EP 0247985 A2 19871202 - SANTRADE LTD [CH]
- [XD] PATENT ABSTRACTS OF JAPAN vol. 018, no. 185 (C - 1185) 30 March 1994 (1994-03-30)

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