

Title (en)

HARD METAL BASED ON TITANIUMCARBONITRIDE

Publication

EP 0425061 A3 19910814 (DE)

Application

EP 90250269 A 19901022

Priority

DD 33380689 A 19891023

Abstract (en)

[origin: EP0425061A2] Hard metal, titanium carbonitride, sintered shaped parts, cutting, steel, microstructure, particle size of hard material, fibre length distribution, median value The invention relates to a hard metal based on titanium carbonitride. Objects to which the invention relates are carbonitride hard metals which are bound with auxiliary metals and are used as sintered shaped parts, in particular for the cutting of steel. According to the invention, the microstructure of these hard metals has a narrow distribution of the grain size of the hard material, in which the fibre length distribution fulfils the condition $195/150 \leq 2.5$ and $0.2 \mu\text{m} \leq 150 \leq 5 \mu\text{m}$ is applicable for the median value 150 of this distribution and the content of titanium-rich alpha '-phase, based on the total volume of the hard material phase, is at least 15 parts by volume.

IPC 1-7

C22C 29/04

IPC 8 full level

C22C 29/04 (2006.01)

CPC (source: EP)

C22C 29/04 (2013.01)

Citation (search report)

- [X] FR 2311098 A1 19761210 - SANDVIK AB [SE]
- [AD] US 4120719 A 19781017 - NOMURA TOSHIO, et al
- [AD] US 3971656 A 19760727 - RUDY ERWIN

Cited by

EP0518840A1; EP2130807A1

Designated contracting state (EPC)

AT DE FR GB LU SE

DOCDB simple family (publication)

EP 0425061 A2 19910502; EP 0425061 A3 19910814; EP 0425061 B1 19940713; AT E108493 T1 19940715; DD 288623 A5 19910404;
DE 59006418 D1 19940818

DOCDB simple family (application)

EP 90250269 A 19901022; AT 90250269 T 19901022; DD 33380689 A 19891023; DE 59006418 T 19901022