

Title (en)  
Hard metal based on titaniumcarbonitride.

Title (de)  
Hartmetall auf der Basis von Titankarbonitrid.

Title (fr)  
Métal dur à base de carbonitruure de titane.

Publication  
**EP 0425061 B1 19940713**

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  $0.2 \mu m \leq 150 \leq 5 \mu m$  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)

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