

Title (en)

ROTARY CUTTING TOOL FOR WORKING OF WOOD OR WOOD COMPOSITE MATERIAL

Title (de)

ROTIERENDES SCHNEIDWERKZEUG ZUM BEARBEITEN VON HOLZ ODER HOLZVERBUNDWERKSTOFF.

Title (fr)

OUTIL DE COUPE ROTATIF POUR LE TRAVAIL DU BOIS OU D'UN MATERIAU COMPOSITE A BASE DE BOIS

Publication

**EP 0739697 B2 20040922 (EN)**

Application

**EP 94927063 A 19940919**

Priority

- JP 9401537 W 19940919
- JP 25932393 A 19930921

Abstract (en)

[origin: WO9508423A1] A rotary cutting tool has a cutting blade which is formed with an outer peripheral surface edge and a side surface edge. A flank (4) of the side surface edge having a clearance angle of not more than 10 DEG in a direction of rotation of the side surface edge is finished to have a surface roughness Rmax of 1 to 10 mu m. The outermost surface is covered with chromium or one of chromium nitride, carbide and carbide nitride whereby a harmful resin is prevented from adhering to the tool. The use of this tool provides more than ten times the life of a conventional tool and permits the use of high speed tool steel as a material for a blade edge in place of cemented carbide to make the tool inexpensive.

IPC 1-7

**B27G 13/00**; **B27G 15/00**

IPC 8 full level

**B27G 13/08** (2006.01); **B23D 61/04** (2006.01); **B27G 13/00** (2006.01); **B27G 15/00** (2006.01); **C23C 30/00** (2006.01)

CPC (source: EP)

**B23D 61/04** (2013.01); **B27G 13/00** (2013.01); **B27G 15/00** (2013.01); **C23C 30/005** (2013.01)

Citation (opposition)

Opponent :

- DE 4114964 A1 19911212 - TOKYO SILICONE CO [JP]
- EP 0500253 B1 19971112 - SUMITOMO ELECTRIC INDUSTRIES [JP]
- DIN 4762 (Jan. 1989)
- "Beschichtung von Werkzeugteilen und Verschleisssteilen in High-Tech Oberflächen" p.23-32 (10.12.91)

Cited by

CN106113171A; EP1591184A1; GB2352207A; GB2352207B; CN1305650C; DE102004043550B4; EP1424176A4; US2011033722A1; EP2279837A4; US8435651B2; US8492008B2; US7246586B2; EP1322453B1

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**WO 9508423 A1 19950330**; CA 2172366 A1 19950330; DE 69425277 D1 20000817; DE 69425277 T2 20010222; DE 69425277 T3 20050623; EP 0739697 A1 19961030; EP 0739697 A4 19980128; EP 0739697 B1 20000712; EP 0739697 B2 20040922; JP 2673655 B2 19971105; JP H0788806 A 19950404

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