

Title (en)

MULTILAYERED COATED CUTTING TOOL

Title (de)

MIT MEHREREN SCHICHTEN BESCHICHTETES SCHNEIDWERKZEUG

Title (fr)

OUTIL DE COUPE A REVETEMENT MULTICOUCHE

Publication

**EP 1017871 A1 20000712 (EN)**

Application

**EP 98921929 A 19980327**

Priority

- SE 9800564 W 19980327
- SE 9701181 A 19970327

Abstract (en)

[origin: WO9844163A1] The present invention relates to a cutting tool comprising a body (1) of sintered cemented carbide or cermet, ceramic or high speed steel on which at least on the functioning parts of the surface of the body, a thin, adherent, hard and wear resistant coating (2) is applied. The coating comprises a laminar, multilayered structure of refractory compounds in polycrystalline, repetitive form, (MX/NX) lambda /(MX/NX) lambda / MX/NX) lambda /(MX/NX) lambda /... where the alternating layers MX (3) and NX (4) are composed of metalnitrides or carbides with the metal element selected from Ti, Nb, Hf, V, Ta, Mo, Zr, Cr and W. The repeat period lambda (5) is essentially constant throughout the entire multilayered structure, and larger than 3 nm but smaller than 100 nm, preferably smaller than 25 nm. The total thickness of said multilayered coating is larger than 0.5 mu m but smaller than 20 mu m.

IPC 1-7

**C23C 14/06**; **C23C 30/00**; **B23B 27/14**

IPC 8 full level

**B23B 27/14** (2006.01); **C23C 14/06** (2006.01); **C23C 28/04** (2006.01); **C23C 30/00** (2006.01)

CPC (source: EP)

**C23C 14/0641** (2013.01); **C23C 28/044** (2013.01); **C23C 28/42** (2013.01); **C23C 30/005** (2013.01)

Citation (search report)

See references of WO 9844163A1

Designated contracting state (EPC)

AT CH DE FR GB IT LI SE

DOCDB simple family (publication)

**WO 9844163 A1 19981008**; EP 1017871 A1 20000712; JP 2001517156 A 20011002; SE 9701181 D0 19970327

DOCDB simple family (application)

**SE 9800564 W 19980327**; EP 98921929 A 19980327; JP 54155498 A 19980327; SE 9701181 A 19970327