



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : C23C 14/06, 14/00, 14/54, B23C 5/10		A1	(11) International Publication Number: WO 99/14391
			(43) International Publication Date: 25 March 1999 (25.03.99)
(21) International Application Number: PCT/IB97/01089		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).	
(22) International Filing Date: 12 September 1997 (12.09.97)			
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(54) Title: TOOL WITH PROTECTIVE LAYER SYSTEM

(57) Abstract

There is proposed a tool with a tool body and a wear resistant layer system, which layer system comprises at least one layer of MeX. Me comprises titanium and aluminum and X is nitrogen or carbon. The tool has a tool body of high speed steel (HSS) or of cemented carbide, but it is not a solid carbide end mill and not a solid carbide ball nose mill. In the MeX layer the quotient Q_I as defined by the ratio of the diffraction intensity $I(200)$ to $I(111)$ assigned respectively to the (200) and (111) plains in the X-ray diffraction of the material using $\theta-2\theta$ method is selected to be ≥ 1 . Further, the $I(200)$ is at least twenty times larger than the intensity average noise value, both measured with a well-defined equipment and setting thereof.

