

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
3 November 2005 (03.11.2005)

PCT

(10) International Publication Number
WO 2005/102559 A3

(51) International Patent Classification⁷: **B23P 13/04**,
C21D 1/00

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(21) International Application Number:
PCT/US2005/007040

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(22) International Filing Date: 3 March 2005 (03.03.2005)

(25) Filing Language: English

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
ZM, ZW.

(26) Publication Language: English

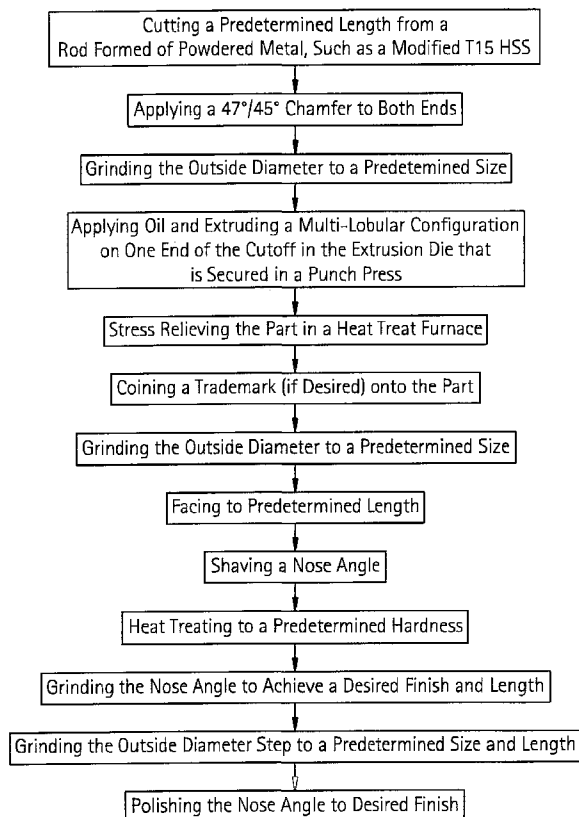
(30) Priority Data:
60/561,728 13 April 2004 (13.04.2004) US
11/052,438 7 February 2005 (07.02.2005) US

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(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: POWDERED METAL MULTI-LOBULAR TOOLING AND METHOD OF FABRICATION



(57) Abstract: A tool (10) made of powdered metal, such as a modified T15 HSS in powdered form, and having a multi-lobular end profile (12) for punching multi-lobular recesses into workpieces, such as into the heads of fasteners. The tool (10) is homogenous and contains only carbides which are relatively small, such as in the 1-4 micron range. Also provided is a method of fabricating such a tool. The method requires that a powdered metal bar is cut and then the cut piece is worked to provide the multi-lobular tool. The final part is theoretically 100% dense, as opposed to being only 95-98% dense as in metal injection molded parts. In use, the final part, due to how it is fabricated, has increased column strength and increased impact resistance.

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GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
22 December 2005

Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.