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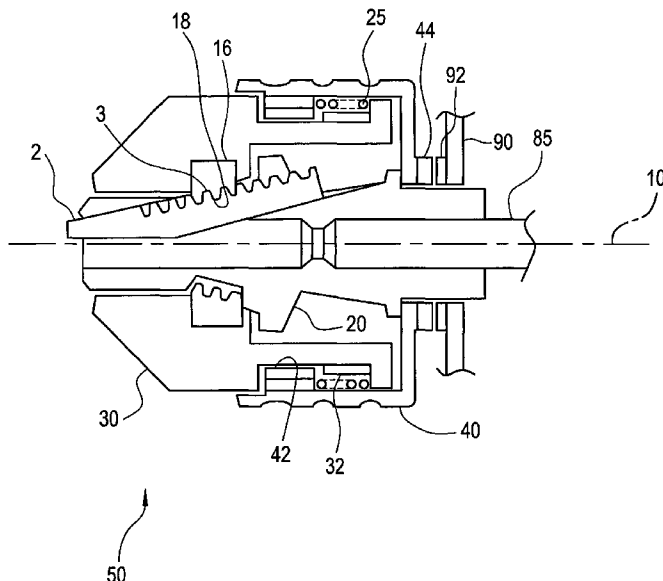
**Declarations under Rule 4.17:**

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(U))*

[Continued on next page]

(54) **Title:** TOOL CHUCK WITH SLIDING SLEEVE AND CHUCK MECHANISM

**FIG. 1**



(57) **Abstract:** A tool chuck may include a chuck body defining a longitudinal axis. A sleeve may be mounted on the chuck body for movement between a first axial position in which the chuck body is rotatable together with the sleeve, and a second axial position in which the chuck body is rotatable relative to the sleeve to actuate the tool chuck. The chuck body may be rotatable in a first direction to actuate the tool chuck up to a first torque threshold, and rotatable in a second direction to actuate the tool chuck up to a second, different torque threshold.

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<b>B FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) IPC B23B 5/22 (2008 04) USPC 279/60 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC 279/60 9 1, Backward/forward citation searches Text Search Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WEST (PGPB, USPT, USOCR EPAB, JPAB), Terms chuck and tool and keyless and (disengagement engagement dsengag\$3 engag\$3) with torque, Google ("keyless tool chuck")		
<b>C DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X -- Y  Y  A	US 4,682,918 A (Palm) 28 Jul 1987 (28 07 1987) figs 1-9 and col 2, ln 35- col 3, ln 55  US 2003/0026670 A1 (Temple-Wilson) 06 Feb 2003 (06 02 2003) figs 3-6 and para [0036-0040]  US 4,621,820 A (Rohm) 11 Nov 1986 (11 11 1986) figs 1-4	1-5 and 8-20 ----- 6 and 7  6 and 7  1-20
<b>D</b> Further documents are listed in the continuation of Box C <input type="checkbox"/>		
* Special categories of cited documents "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family		
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Name and mailing address of the ISA/US Mail Stop PCT, Attn ISA/US, Commissioner for Patents P O Box 1450, Alexandria, Virginia 22313-1450 Facsimile No 571-273-3201		Authorized officer Lee W Young PCT Helpdesk 571-272-4300 PCTOSP 571-272-7774