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(75) Inventor/Applicant (for US only): WALEN, James, G. [US/US]; 2501 Townhouse Lane, Kalamazoo, MI 49001

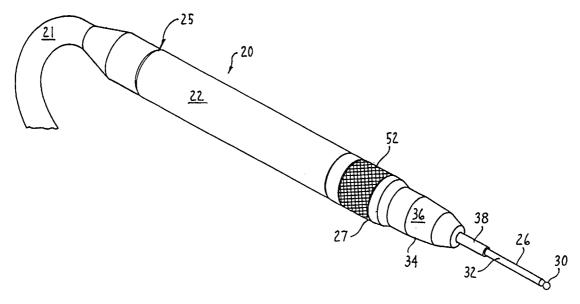
(74) Agents: GOLDENBERG, David, S. et al.; Flynn, Thiel, Boutell & Tanis, P.C., 2026 Rambling Road, Kalamazoo, MI 49008(81) Designated States: JP, US, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

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(54) Title: MULTI-PURPOSE SURGICAL TOOL SYSTEM



(57) Abstract

A surgical tool system (20) with replaceable surgical cutting accessories (26) and attachments (34) for holding the tools. This system includes a handpiece (22) to which the cutting accessory and attachment are releasably attached. Collet (50) located inside a drill housing (44) located at one end of the handpiece securely fastens the surgical tool to a motor (24) also located in the handpiece. Leaf spring assembly (46) flush with the drill housing releasably secures the attachment in place. A single actuating collar (52) located around the outside of the drill housing both controls the locking force supplied by the collet and selectively relaxes the leaf spring assembly.

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Interi Jual Application No PCT/US 97/14491

CLASSIFICATION OF SUBJECT MATTER PC 6 A61B17/16 A. CLASS According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC 6 A61B A61C B25F B23B Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Category 9 Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. US 4 310 310 A (R.L.BAILEY) 12 January Α 1 - 31982 Α US 4 515 564 A (G.LÖHN) 7 May 1985 1,11,32 Α US 3 827 149 A (T.J.BRENNAN) 6 August 1974 11,12, 32,35 Α WO 96 10962 A (THE ANSPACH EFFORT) 18 11,14, April 1996 32,33,35 EP 0 670 149 A (KALTENBACH & VOIGT) 6 Α 11,16, September 1995 17,33 Α US 3 835 858 A (C.A.HAGEN) 17 September 11,32,35 1974 -/--Χ Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents : "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 "A" document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention filing date cannot be considered novel or cannot be considered to "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention citation or other special reason (as specified) cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of theinternational search Date of mailing of the international search report 5 February 1998 1 3, 02, 98 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016 Nice, P

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Inter onal application No.

PCT/US 97/14491

| Box I | Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet) |
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| This Inte | ernational Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons: |
| 1. | Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely: |
| 2. | Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically: |
| 3. | Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a). |
| Box II | Observations where unity of invention is lacking (Continuation of item 2 of first sheet) |
| This Int | ernational Searching Authority found multiple inventions in this international application, as follows: |
| 1. 2. | CLAIMS: 1-21, 32-36 CLAIMS: 22-31 |
| | |
| 1. X | As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims. |
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