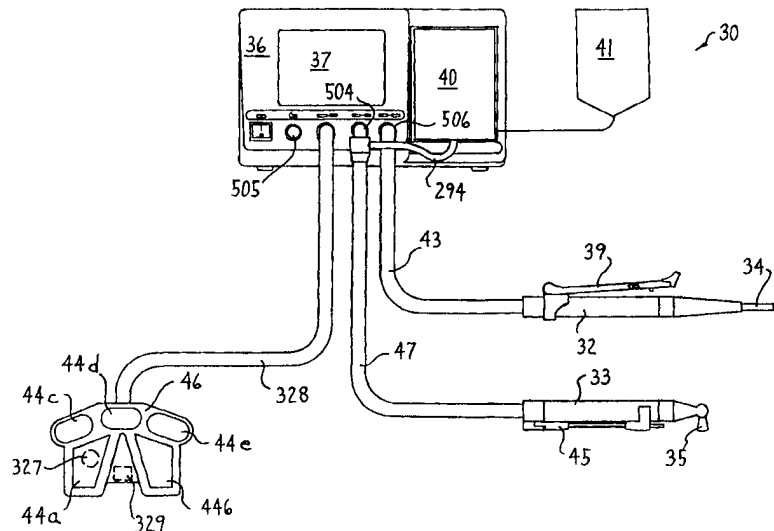


INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification ⁶ : A61B 17/00</p>	<p>A3</p>	<p>(11) International Publication Number: WO 98/06338</p> <p>(43) International Publication Date: 19 February 1998 (19.02.98)</p>
<p>(21) International Application Number: PCT/US97/15242</p> <p>(22) International Filing Date: 14 August 1997 (14.08.97)</p> <p>(30) Priority Data: 08/689,866 15 August 1996 (15.08.96) US</p> <p>(60) Parent Application or Grant (63) Related by Continuation US 08/689,866 (CON) Filed on 15 August 1996 (15.08.96)</p> <p>(71) Applicant (for all designated States except US): STRYKER CORPORATION [US/US]; 2725 Fairfield Road, P.O. Box 4085, Kalamazoo, MI 49003-4085 (US).</p> <p>(72) Inventors; and (75) Inventors/Applicants (for US only): CULP, Jerry, A. [US/US]; 351 Lodge Lane, Kalamazoo, MI 49009 (US). SCHEMANSKY, Kevin, J. [US/US]; 30140 Winthrop, Madison Heights, MI 48071 (US). MONK, David, E. [US/US]; 8632 Newhouse Street, Portage, MI 49002 (US). FINLEY, Marshall, Eric [US/US]; 2580 Boxwood Lane, Fairfield, CA 94533 (US). TYLER, Steven, Anthony [US/US]; 59 Peralta Avenue, San Francisco, CA 94110 (US). FRATICELLI,</p>		<p>Michael, John [US/US]; 880 North Winchester Boulevard No. 103, Santa Clara, CA 95050 (US).</p> <p>(74) Agents: GOLDENBERG, David, S. et al.; Flynn, Thiel, Boutell & Tanis, P.C., 2026 Rambling Road, Kalamazoo, MI 49008-1699 (US).</p> <p>(81) Designated States: CA, CN, JP, KR, US, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).</p> <p>Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments</i></p> <p>(88) Date of publication of the international search report: 11 June 1998 (11.06.98)</p>

(54) Title: INTEGRATED SYSTEM FOR POWERED SURGICAL TOOLS



(57) Abstract

An integrated surgical tool system (30) for energizing different powered surgical handpieces (32, 33). Internal to each handpiece is a non-volatile memory (72) which stores data regarding the operating parameters of the handpiece. This data includes information about the speeds at which any motor internal to the handpiece should be driven, the maximum current that should be drawn by the handpiece and the maximum internal temperature of the handpiece. The handpiece is plugged into a complementary control console (36). The control console reads the data in the internal memory. Based on the retrieved data and manual control signals, the control console supplies energization signals to the handpiece so as to cause the appropriate actuation of the handpiece.

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 97/15242

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 A61B17/00

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 B23Q A61C

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 °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 400 267 A (D.J.DENEN ET AL.) 21 March 1995 see column 1, line 61 - column 2, line 56 see column 3, line 15 - line 36 see column 3, line 49 - column 4, line 12 see column 4, line 60 - column 5, line 43 see column 6, line 16 - line 27 see column 7, line 33 - line 46; figure 1 see column 9, line 35 - line 54 ---	1-4,12,13,35
X	WO 94 10921 A (EP TECHNOLOGIES) 26 May 1994 see abstract; claims 1,8 see page 12, line 27 - line 32 see page 14, line 24 - line 33 --- -/--	1,12,35

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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Date of the actual completion of the international search <p style="text-align: center; font-size: 1.2em;">8 April 1998</p>	Date of mailing of the international search report <p style="text-align: center; font-size: 1.2em;">15. 04. 98</p>
Name and mailing address of the ISA 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	Authorized officer <p style="text-align: center; font-size: 1.2em;">Nice, P</p>

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 97/15242

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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A	EP 0 329 944 A (RICHARD WOLF) 30 August 1989 see column 3, line 24 - column 4, line 9; figure 1 ---	1,12,35
A	DE 40 40 537 A (OLYMPUS OPTICAL) 8 August 1991 see abstract; figures 1,2 see page 2, line 18 - line 30 see page 4, line 65 - page 5, line 19 ---	1,12,35
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A	see column 2, line 40 - line 42 see column 2, line 54 - line 57 see column 4, line 42 - line 50 see column 4, line 55 - line 68 see column 5, line 17 - line 20 see column 5, line 46 - line 53 see column 5, line 64 - line 68 see column 6, line 6 - line 19 see column 6, line 43 - line 45 ---	26
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International Application No

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
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A	DE 39 23 024 A (SIEMENS) 1 February 1990 see column 1, line 23 - line 34 see column 1, line 51 - column 2, line 11 see column 2, line 29 - line 40 ---	32-34,36
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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 97/ 15242

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International 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 International Searching Authority found multiple inventions in this international application, as follows:

1. Claims: 1-20, 35
 2. Claims: 21-29
 3. Claims: 30-31
 4. Claims: 32-34
 5. Claims: 36
1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
 2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
 3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

21-29, 32-34, 36
 4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 97/15242

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