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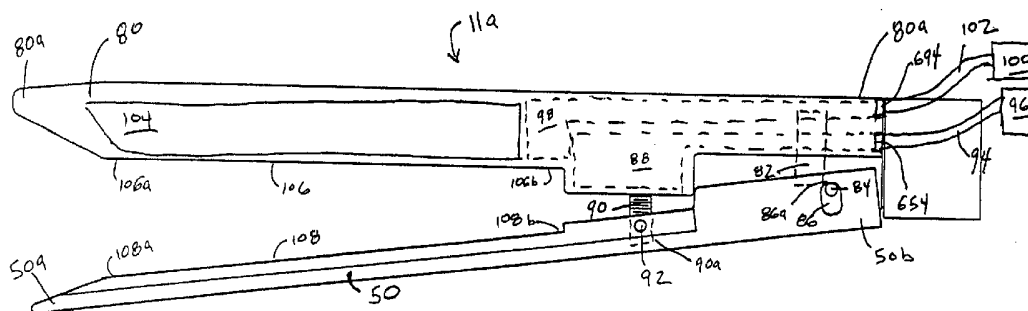
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(88) Date of publication of the international search report:
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DEVICE FOR CLAMPING CUTTING AND STAPLING TISSUE



(57) Abstract: A surgical device (11a) that includes a first jaw (50) having a distal end (50a) and a second jaw (80) having a distal end (80a). The second jaw is disposed in opposed correspondence with the first jaw. The first jaw is pivotably coupled to the second jaw. The surgical device also includes a biasing element (82), such as a spring, that biases the distal end of the first jaw towards the distal end of the second jaw. The device may also include a first driver (88) disposed in the second jaw and coupled to the first jaw. The first driver is configured to cause separation of the first jaw and the second jaw when the first driver is actuated for opening the jaws and to close the first jaw and the second jaw when the first driver is actuated for closing the jaws. The device may also include at least one of a cutting element and a stapling element (104) disposed within the second jaw, preferably a blade rotatably mounted on a wedge. A second driver (98) is configured to move the cutting element and/or the stapling element proximally from a distal end toward the proximal end of the second jaw to at least one of cut and staple a section of tissue disposed between the first and second jaws. By biasing the distal ends of the first and second jaws towards each other, the surgical device may prevent a section of tissue which is disposed between the first and second jaws from escaping out from between the distal ends of the first and second jaws.

WO 2003/105702 A3

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 03/18520

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61B17/068 A61B17/28 A61B17/32 A61B17/072

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 7 A61B

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)

EP0-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 447 265 A (VIDAL CLAUDE A ET AL) 5 September 1995 (1995-09-05)	1-4, 6-10,14, 15
A	column 8, line 5 - column 9, line 56 column 10, line 29 - line 56 figures 16-18,26,27 -----	5
A	WO 01/017448 A (CONMED CORP) 15 March 2001 (2001-03-15) page 9, line 19 - page 10, line 10 figures 7A-7E -----	5

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

° 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 document 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

Date of the actual completion of the international search

7 November 2003

Date of mailing of the international search report

- 3. 03. 2004

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 03/18520

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.: **48-63**
because they relate to subject matter not required to be searched by this Authority, namely:
Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery
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:

see additional sheet

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.:
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.:
1-10,14,15

Remark on Protest

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

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.1

Claims Nos.: 48-63

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-5,6-10,14,15

Surgical instrument comprising a first and second jaw member pivotally mounted to each other and a driver to open and close said jaws; and a biasing element that biases the distal end of the first jaw towards the distal end of the second jaw wherein the biasing element causes the distal end of the first jaw to contact the distal end of the second jaw before the said driver completes closing the jaws.

2. claims: 1-4,11-13

Gearing arrangement for the driver of a surgical instrument comprising a pair of jaw elements.

3. claims: 1,16-19,20-24

A surgical instrument comprising a stapler and cutter assembly and a driver configured to operate said stapler and cutter assembly.

4. claims: 1,25,73-82

Surgical instrument comprising a first and second jaw, wherein the first jaw is curved such that the distal end of the first jaw is curved towards the distal end of the second jaw.

5. claims: 26-47

Electro-mechanical surgical system comprising an elongated shaft and a surgical instrument configured to detachably couple to the distal end of said elongated shaft; and a motor system configured to drive said instrument.

6. claims: 64-72

Surgical instrument comprising a first and second jaw, wherein the proximal end of the first jaw is pivotally jointed to the proximal end of the second jaw, and wherein the first jaw is additionally pivotable relative to the second jaw at a position between its proximal and distal ends.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 03/18520

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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