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*[Continued on next page]*

(54) Title: SPECULUM WITH SECONDARY BILLS

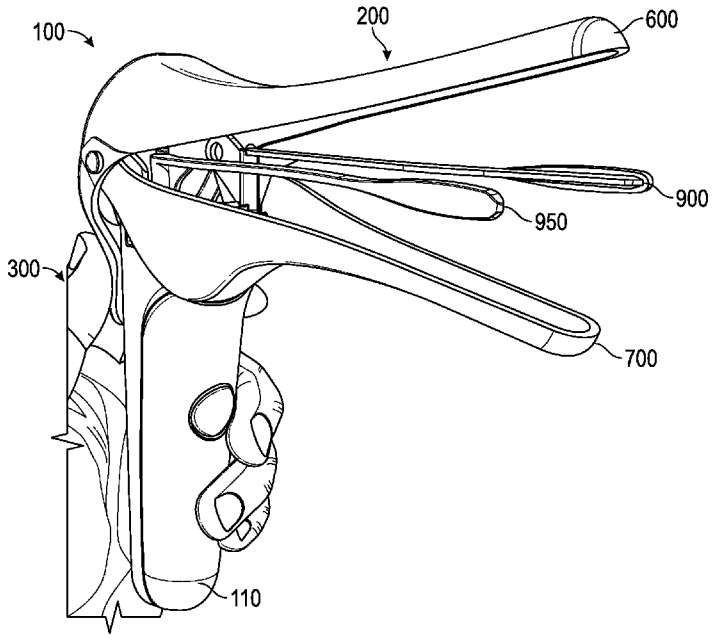



FIG. 1E

(57) Abstract: The disclosure relates to methods and apparatuses relating to a speculum. The speculum includes a handle, a first bill and a second bill, where a proximal end portion of the first bill and the second bill are coupled to an upper portion of the handle and configured to open along a first axis, a third bill and a fourth bill, where a proximal end portion of the third bill and the fourth bill are coupled to the upper portion of the handle and configured to open along a second axis substantially orthogonal to the first axis and an actuation mechanism that causes the first bill and the second bill to move between an open position and a closed position. In some embodiments, the speculum includes a locking mechanism with a rocker mechanism, a lock strip contained in a handle of the speculum, and a pawl coupled to the handle.

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DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

**Published**:

— *with international search report (Art. 21(3))*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

**(88) Date of publication of the international search report**:
10 August 2017

# INTERNATIONAL SEARCH REPORT

International application No
PCT/US2016/069043

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61B1/303 A61B1/32
ADD.

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)
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 practicable, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|---|---|---|
| X | US 5 377 667 A (PATTON MICHAEL T [US] ET AL) 3 January 1995 (1995-01-03)<br>figures 1-4<br>claim 1<br>column 3, lines 16-19<br>column 4, lines 8-35<br>column 9, lines 65-66<br>----- | 1,2,8,9, 21 |
| X | WO 98/11818 A1 (MEDITECH INT PTY LTD [AU]; DA SILVA PRACAS ALEXANDRE YORG [AU])<br>26 March 1998 (1998-03-26)<br>figures 1-6<br>page 6, lines 3-18<br>page 7, lines 13-15<br>----- | 1,2,8 |
| X | US 2008/306345 A1 (BALAS KONSTANTINOS [GR]) 11 December 2008 (2008-12-11)<br>paragraphs [0038] - [0041]<br>figure 1<br>----- | 1,2 |

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

☒ See patent family 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 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

| Date of the actual completion of the international search | Date of mailing of the international search report |
|---|---|
| 26 April 2017 | 07/07/2017 |

| Name and mailing address of the ISA/ | Authorized officer |
|---|---|
| European Patent Office, P.B. 5818 Patentlaan 2<br>NL - 2280 HV Rijswijk<br>Tel. (+31-70) 340-2040,<br>Fax: (+31-70) 340-3016 | Olapinski, Michael |

# INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2016/069043

**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 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. [X] Claims Nos.: 26-30
because they relate to subject matter not required to be searched by this Authority, namely:

see FURTHER INFORMATION sheet PCT/ISA/210

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 No. III Observations where unity of invention is lacking (Continuation of item 3 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 fees, this Authority did not invite payment of additional fees.

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. [X] 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.:

2, 8, 9, 21(completely); 1, 26, 29(partially)

**Remark on Protest**

[ ] The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.

[ ] The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.

[ ] No protest accompanied the payment of additional search fees.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/** 210

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

1. claims: 2, 8, 9, 21(completely); 1, 26, 29(partially)

   specifications of an actuation mechanism

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2. claims: 3-7, 27, 28(completely); 1, 26, 29, 30(partially)

   a secondary pair of bills

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3. claims: 10-14, 22-25(completely); 1, 26, 29, 30(partially)

   specifications of a locking mechanism

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4. claims: 15-19(completely); 1, 26, 29(partially)

   specifications of angle between handle and insertion portion

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5. claims: 20(completely); 1, 26, 29(partially)

   special lighting module

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**FURTHER INFORMATION CONTINUED FROM PCT/ISA/** 210

Continuation of Box II.1

Claims Nos.: 26-30

Claims 26-30 are directed to methods for treatment of the human or animal body by surgery for which search and/or international preliminary examination is not required (Rules 39.1(iv) and 67.1 (iv) PCT). These methods define steps of "inserting" a speculum into the vaginal cavity, which qualifies the methods as an invasive endoscopic procedure involving substantial health risks. Such procedures are considered to represent methods of treatment of the human or animal body by surgery in the sense of Rules Rules 39.1(iv) and 67.1 (iv) PCT.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2016/069043

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