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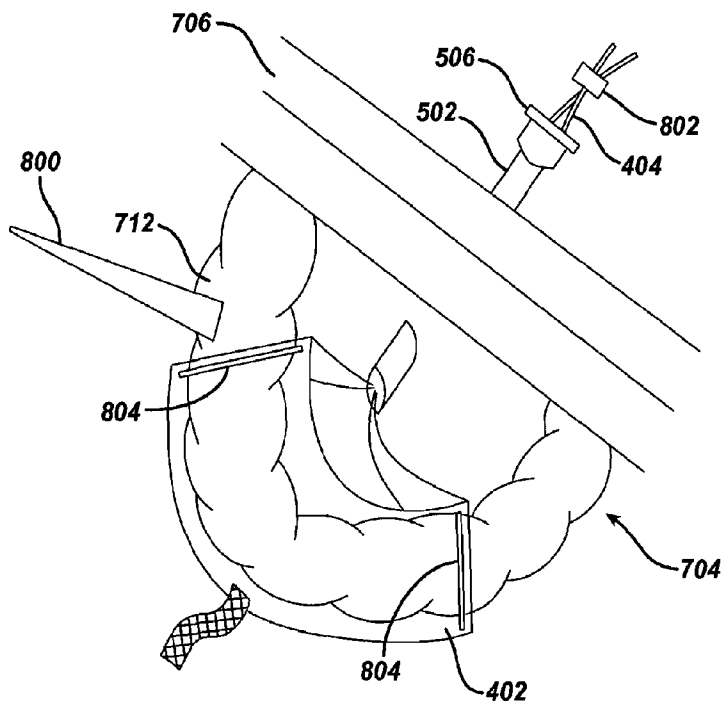
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[Continued on next page]

(54) **Title:** TISSUE RETRACTORS

**FIG. 8**



(57) **Abstract:** Methods and devices are provided for performing surgical procedures using tissue retractors. In general, the methods and devices allow a surgeon to use a retractor to capture a large or small amount of tissue in a fabric and to move the fabric to relocate the tissue to one or more convenient locations during the procedure. The flexible nature of the fabric can allow the fabric to be moveable between an open position, in which the fabric can support tissue, and a closed position, in which the fabric can be folded, rolled, or otherwise compressed in size and fit through a port, such as a trocar or an incision in a tissue wall. Furthermore, the position of the fabric and thus the tissue held in the fabric can be adjusted and readjusted by pushing or pulling one or more grasping elements coupled to the fabric.



**Published:**

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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

2 July 2009

# INTERNATIONAL SEARCH REPORT

International application No

PCT/US2008/074276

## A. CLASSIFICATION OF SUBJECT MATTER

INV. A61B17/02

ADD. 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)

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)

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 2005/203344 A1 (ORBAN JOSEPH P III [US] ET AL ORBAN III JOSEPH P [US] ET AL) 15 September 2005 (2005-09-15)  paragraph [0075] - paragraph [0078] -----	1-4, 7, 11, 12, 14-17, 21, 24-26
X	US 5 301 658 A (ZHU YONG HUA [US] ET AL) 12 April 1994 (1994-04-12) column 6, line 11 - line 36 -----	1-4, 13, 16, 20
X	US 5 337 736 A (REDDY PRATAP K [US]) 16 August 1994 (1994-08-16) column 1, line 9 - line 27 -----	1, 4
A	US 2005/131391 A1 (CHU MICHAEL S H [US] ET AL) 16 June 2005 (2005-06-16) paragraph [0354] -----	2, 3

**D**

Further documents are listed in the continuation of Box C

**K**

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 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

"S" document member of the same patent family

Date of the actual completion of the international search

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Name and mailing address of the ISA/

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# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2008/074276

## 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. ☒ Claims Nos.: 27-39  
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 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 allsearchable 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. ☒ 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.:

see annex

### 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: 1-4,7,11-17,20,21,24-26

A surgical retractor directed to facilitating its deployment within a body cavity.  
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2. claims: 5,6,22,23

A surgical retractor directed to improving its rigidity.  
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3. claims: 8-10,18,19

A surgical retractor directed to alternative means for stiffening and deploying the surgical retractor.  
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2008/074276

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