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(71) Applicant and

(72) Inventor: DONAHUE, John R. [US/US]; 840 King of Prussia Road, Radnor, Pennsylvania 19087 (US).

(74) Agent: HUIS, Randolph, J.; Volpe and Koenig, P.C., United Plaza, Suite 1600, 30 South 17th Street, Philadelphia, Pennsylvania 19103 (US).

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(54) Title: RETRACTOR AND SEALING SYSTEM FOR SURGICAL/NON-SURGICAL INSTRUMENTS

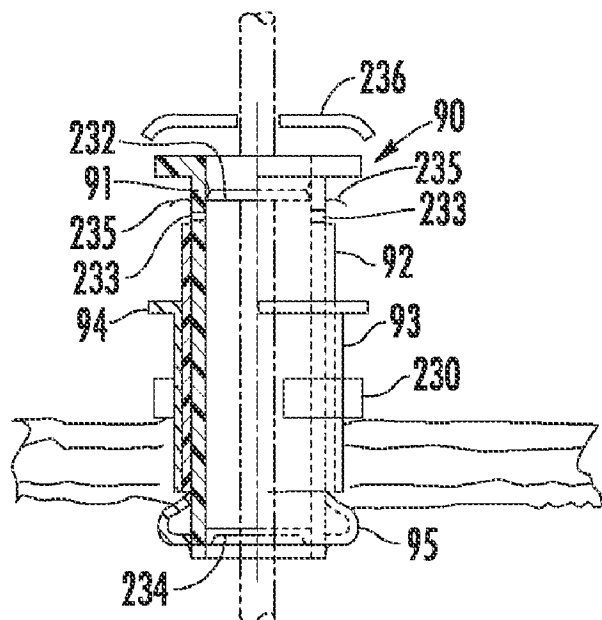


FIG. 23

(57) Abstract: A universal retractor and sealing system used in conjunction with surgical instruments such as canulas, endoscopes surgical or non-surgical instruments or other tools. The user manipulates the instrument so as to create a projecting surface located inside the cavity. An outward force applied to the instrument body seats the projecting surface against the inner wall of the cavity, which can be used to form at least a partial seal against fluid. With the projecting surface positioned against the cavity wall, the instrument can be manipulated so as to act as a retractor, expanding the workable area and/or the field of view as required.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 08/85645

A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - A61B 17/02 (2009.01) USPC - 600/203 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 - A61B 17/02 (2009.01) USPC - 600/203 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched IPC - A61B17/34, 17/00 (2009.01); A61M39/00, 39/02 (2009.01) USPC - 600/201, 204; 606/198, 191; 604/48, 93.01, 264, 536, 534, 539 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PubWEST, DB=PGPB,USPT,USOC,EPAB,JPAB, Google Scholar		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 2007/0088258 A1 (WENCHELL et al.) 19 April 2007 (19.04.2007) entire document, especially para [0027] to [0040]; Fig 1-4	1-3, 5-7, 14, 19, 21 ----- 12-13, 15, 17-18, 20, 22
X --- Y	US 6,451,042 B1 (BONUTTI) 17 September 2002 (17.09.2002) entire document, especially col 2, lns 38-43, col 4, lns 40-68, col 5, lns 1-44, col 7, lns 7-31, col 9, lns 34-48, col 11, lns 9-50; Fig 1-4, 11	1-2, 4, 8, 9, 11, 16, 23-27 ----- 10, 20, 22
Y	US 3,626,935 A (POLLOCK et al.) 14 December 1971 (14.12.1971) col 3, lns 50-64; Fig 2, 6	10
Y	US 2004/0210116 A1 (NAKAO) 21 October 2004 (21.10.2004) para [0041]	12-13
Y	US 6,840,951 B2 (DE LA TORRE et al.) 11 January 2005 (11.01.2005) col 9, lns 45-62; Fig 24-25	15
Y	US 2007/0088275 A1 (STEARNS et al.) 19 April 2007 (19.04.2007) para [0122], [0124], [0131]; Fig 24, 26, 34	17-18
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/>		
* 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 23 April 2009 (23.04.2009)		Date of mailing of the international search report 04 MAY 2009
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201		Authorized officer: Lee W. Young PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 08/85645

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.:
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 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:
There are considered to be 2 inventions as follows:

- Group I: claims 1-27 characterized by a system for sealing and affixing a surgical instrument with a deployable portion
- Group II: claim 28 characterized by a sealing cap for a cannula

The inventions listed above do not relate to a single general inventive concept under PCT rule 13.1 because, under PCT Rule 13.2 the inventions lack the same or corresponding special technical features. Neither of these technical features is common to the other group nor do they correspond to a special technical feature in the other groups.

- 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 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.:
Claims 1-27

- 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.