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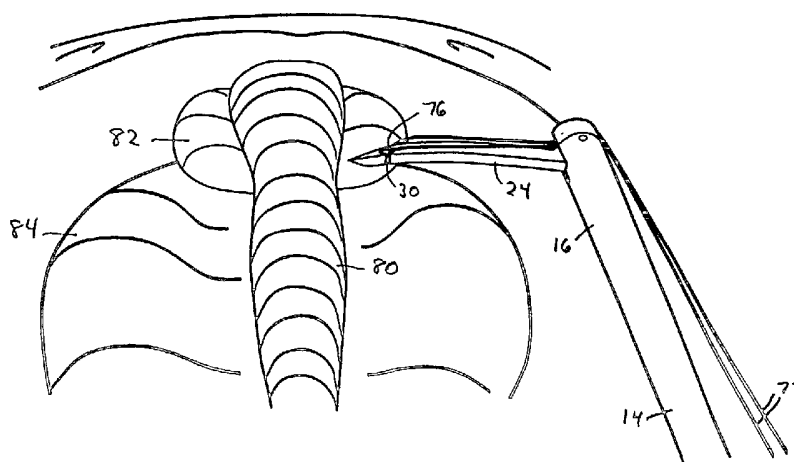
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- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: APPARATUS FOR SEWING TISSUE AND METHOD OF USE



(57) Abstract: An apparatus (10) for sewing tissue especially useful for tissue ligation, is provided having a housing (12) and a hollow shaft (14) which extends from the housing. At the distal end (16) of the shaft (14) along its interior is a movable driver member (19) disposed opposite a fixed member (20). A needle (24) is pivotably mounted at one end to the driver member (18) to extend, when the driver member is moved forward, through a slot (21) in the fixed member (20) and an opening (23) in the shaft (14), and to retract back into the shaft (14) when the driver member (18) is moved backward. At the distal end of needle (24) is a slotted hook (30) for capturing a loop of suture (76). The free ends (77) of the loop of suture (76) extend through a hole (32) of the fixed member (20). A lever (42) pivotably mounted in the housing (12) is coupled to the driver member (18) to translate linear motion forwards or backwards to the driver member to extend or retract needle (24), respectively.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/07741

A. CLASSIFICATION OF SUBJECT MATTER		
IPC(7) : A61B 17/00, 17/12 17/04		
US CL : 606/139, 144, 148		
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) U.S. : 606/139, 144, 148		
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)		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,319,272 B1 (BRENNEMAN et al) 20 November 2001 (20.11.2001), figures 9-11	1-7, 10-14
X	US 5,948,001 A (LARSEN) 7 September 1999 (07.09.1999), column 4, lines 10-56.	1, 8
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> 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	"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	
"E" earlier application or patent published on or after the international filing date	"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	
"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)	"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	
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family	
"P" document published prior to the international filing date but later than the priority date claimed		
Date of the actual completion of the international search	Date of mailing of the international search report	
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Alexandria, Virginia 22313-1450		
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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/07741

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

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claim Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claim 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. Claim 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:
Please See Continuation 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.: 1-14
- Remark on Protest The additional search fees were accompanied by the applicant's protest.
 No protest accompanied the payment of additional search fees.

BOX II. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claim(s) 1-14, drawn to an apparatus for sewing tissue.

Group II, claim(s) 15-18, drawn to a method of ligating tissue.

Group III, claim(s) 19-26, drawn to a method of sewing tissue.

The inventions listed as Groups I-III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the three inventions do not share a special technical feature because the apparatus of group I is not being used by methods II or III. Methods II and III are general ways to perform the indicated surgery and could be performed with a variety of instruments. Thus the groups do not share a technical feature, because the apparatus of Group I isn't being used by the methods of Groups II-III.