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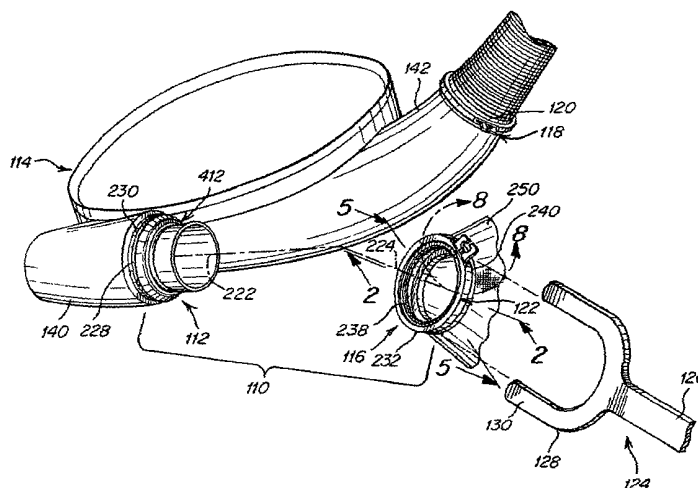
(43) International Publication Date  
17 August 2000 (17.08.2000)

PCT

(10) International Publication Number  
WO 00/47270 A3

- (51) International Patent Classification<sup>7</sup>: A61M 39/10, (74) Agent: MORRIS, James, H.; Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue, Boston, MA 02210 (US).
- (21) International Application Number: PCT/US00/03580 (81) Designated States (national): CA, IL, JP.
- (22) International Filing Date: 11 February 2000 (11.02.2000) (84) Designated States (regional): European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 09/248,970 12 February 1999 (12.02.1999) US
- (71) Applicant: ABIOMED, INC. [US/US]; 22 Cherry Hill Drive, Danvers, MA 01923 (US).
- (72) Inventor: ANDRULITIS, William, B.; 822 Hilldale Avenue, Haverhill, MA 01832 (US).
- Published:  
— With international search report.
- (88) Date of publication of the international search report:  
7 December 2000
- 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: MEDICAL CONNECTOR



(57) Abstract: A medical connector (110) for connecting a cardiac assist device to vascular tissue includes a base connector (112) adapted to be attached to the cardiac assist device (114) and a vascular tissue connector (116) adapted to be attached to the vascular tissue. A retaining ring (238) holds the base connector (112) to the vascular tissue connector (116). The medical connector (110) also includes an alignment feature (410) and an engagement feature (412), each defined by a portion of either the base connector (112) or the vascular tissue connector (116) and a portion of the retaining ring (238). The alignment feature (410) causes the vascular tissue connector (116) to axially self-align with the base connector (112). The engagement feature (412) causes the retaining ring (238) to move first into a biased position and then to snap into engagement when the vascular tissue (116) attached to the base connector (112) in an axially-oriented motion.



WO 00/47270 A3

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/03580

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 A61M39/10 A61M1/10

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 A61M F16L

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

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	EP 0 143 517 A (RENAL SYSTEMS) 5 June 1985 (1985-06-05) page 6, line 15 -page 10, column 20; figures 1-3	1-5,7,8, 14-16 17-19
X A	--- US 4 668 217 A (ISONO) 26 May 1987 (1987-05-26) column 7, line 66 -column 8, line 47; figures 10-12,15	1-4,7,16 10
A	--- US 5 089 014 A (HOLFERT) 18 February 1992 (1992-02-18) column 3, line 22 - line 49; figures 3-5 -----	1-3,19

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.
- \*Z\* document member of the same patent family

Date of the actual completion of the international search

9 August 2000

Date of mailing of the international search report

21.08.00

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
 NL - 2280 HV Rijswijk  
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
 Fax: (+31-70) 340-3016

Authorized officer

Germano, A

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 00/03580

## 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.: 21-26  
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 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:

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.:

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.: 21-26

Claims 21 to 26 refer to a method which includes within this scope treatment of the living body by surgery, namely suturing a connection member to a vascular tissue. According to Rule Art. 17(2)(a)(i) and Rule 39.1(iv) the ISA is not required to carry out a search for these these methods.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/03580

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