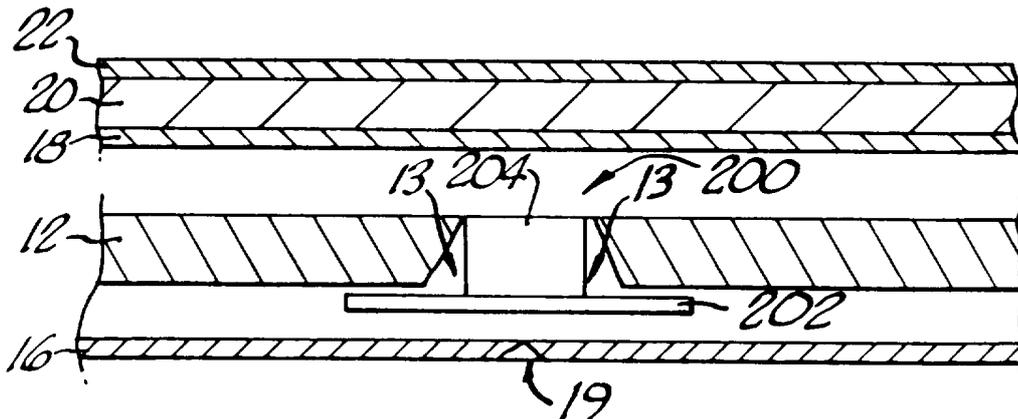




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification ⁵ : A61B 17/04</p>	<p>A3</p>	<p>(11) International Publication Number: WO 92/19162 (43) International Publication Date: 12 November 1992 (12.11.92)</p>
<p>(21) International Application Number: PCT/US92/03363 (22) International Filing Date: 23 April 1992 (23.04.92) (30) Priority data: 690,774 24 April 1991 (24.04.91) US (71)(72) Applicant and Inventor: SEID, Arnold, S. [US/US]; 427 16th Street, Santa Monica, CA 90402 (US). (74) Agents: BRUEGGEMANN, James, R. et al.; Pretty, Schroeder, Brueggemann & Clark, 444 South Flower Street, Suite 2000, Los Angeles, CA 90071-2921 (US).</p>		<p>(81) Designated States: AT (European patent), BE (European patent), CH (European patent), DE (European patent), DK (European patent), ES (European patent), FR (European patent), GB (European patent), GR (European patent), IT (European patent), LU (European patent), MC (European patent), NL (European patent), SE (European patent). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 10 December 1992 (10.12.92)</p>

(54) Title: SURGICAL IMPLANTATION DEVICE AND RELATED METHOD OF USE



(57) Abstract

A surgical implantation device (200 or 30) to be placed within a patient's body and seal a hernial rupture (13) in the abdominal fascia (12). One embodiment (200) includes a single planar member (202), large enough to cover the fascia opening (13), and a locating member (204) sized to be placed in the opening (13). A second embodiment (30) includes first and second planar members (32 and 34) connected by a locating member (36) sized to pass through the fascia opening (13). The surgical implantation device (200 or 30) can be folded upon itself and compressed to fit with a surgical tube and inserted into the patient to the hernial site. The device (200 or 30) is then forced from the tube and automatically expands so the planar members (202 or 32 and 34) assume their flat shape and the locating member (204 or 36) assumes its elongated shape.

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AT	Austria	FI	Finland	MI	Mali
AU	Australia	FR	France	MN	Mongolia
BB	Barbados	GA	Gabon	MR	Mauritania
BE	Belgium	GB	United Kingdom	MW	Malawi
BF	Burkina Faso	GN	Guinea	NI	Netherlands
BG	Bulgaria	GR	Greece	NO	Norway
BJ	Benin	HU	Hungary	PL	Poland
BR	Brazil	IE	Ireland	RO	Romania
CA	Canada	IT	Italy	RU	Russian Federation
CF	Central African Republic	JP	Japan	SD	Sudan
CG	Congo	KP	Democratic People's Republic of Korea	SE	Sweden
CH	Switzerland	KR	Republic of Korea	SN	Senegal
CI	Côte d'Ivoire	LI	Liechtenstein	SU	Soviet Union
CM	Cameroon	LK	Sri Lanka	TD	Chad
CS	Czechoslovakia	LU	Luxembourg	TG	Togo
DE	Germany	MC	Monaco	US	United States of America
DK	Denmark	MG	Madagascar		
ES	Spain				

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US92/03363

A. CLASSIFICATION OF SUBJECT MATTER

IPC(5) :A61B 17/04
US CL :606/215

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. : 606/213,232,151

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.
A	US.A, 3,707,150 (MONTGOMERY ET AL) 26 DECEMBER 1972 ABSTRACT	1-20
X Y	US.A, 3,874,388 (KING ET AL.) 01 APRIL 1975 Figures 1-4,9, and 11-12	<u>5-7,11-13,15-17,20</u> 8-10,19
A	US.A, 4,007,743 (BLAKE) 15 SEPTEMBER 1977 ABSTRACT & FIGURES	1-20
A	US.A, 4,013,569 (JACOB) 28 JUNE 1977 ABSTRACT	1-20
X	US.A, 4,854,316 (DAVIS) 08 AUGUST 1989 Entire reference	5-20

Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	*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
A document defining the general state of the art which is not considered to be part of particular relevance	*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
E earlier document published on or after the international filing date	*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
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)	*G*	document member of the same patent family
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		

Date of the actual completion of the international search 21 AUGUST 1992	Date of mailing of the international search report 22 OCT 1992
Name and mailing address of the ISA/ Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231	Authorized officer <i>Elizabeth Burke</i> ELIZABETH BURKE
Facsimile No. NOT APPLICABLE	Telephone No. (703) 308-2996

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US92/03363

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US,A, 4,917,089 (SIDERIS) 17 APRIL 1990 Figures 1-8, Col. 2, line 66, col. 4, line 40	21-24
A,P	US,A, 5,021,059 (KENSEY ET AL) 04 JUNE 1991 ABSTRACT AND FIGURES	1-20
A,E	US,A, 5,108,420 (MARKS) 28 APRIL 1992 FIGURES	5-20
A,E	US,A, 5,108,421 (FAVLER) 28 APRIL 1992 Entire reference	21-25
<u>X,E</u> Y	US,A, 5,116,357 (EBERBACH) 26 MAY 1992 Figures 23,24; col. 11, line 37; col. 12, line 19	<u>1-4</u> 19
A,E	US,A, 5,122,155 (EBERBACH) 16 JUNE 1992 ABSTRACT AND FIGURES	1-4,21-25
A	WO,A, 90/14796 (VAN DE MOER) 13 DECEMBER 1990 ENTIRE REFERENCE	1-25