



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification ⁶ : A61F 2/06</p>	A3	<p>(11) International Publication Number: WO 98/40033</p> <p>(43) International Publication Date: 17 September 1998 (17.09.98)</p>																																																						
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p>(21) International Application Number: PCT/US98/04779</p> <p>(22) International Filing Date: 12 March 1998 (12.03.98)</p> <p>(30) Priority Data:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">08/815,096</td> <td style="width: 40%;">12 March 1997 (12.03.97)</td> <td style="width: 30%;">US</td> </tr> <tr> <td>08/857,323</td> <td>16 May 1997 (16.05.97)</td> <td>US</td> </tr> <tr> <td>08/984,481</td> <td>1 December 1997 (01.12.97)</td> <td>US</td> </tr> <tr> <td>08/982,246</td> <td>1 December 1997 (01.12.97)</td> <td>US</td> </tr> <tr> <td>08/982,120</td> <td>1 December 1997 (01.12.97)</td> <td>US</td> </tr> <tr> <td>08/982,247</td> <td>1 December 1997 (01.12.97)</td> <td>US</td> </tr> </table> <p>(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Applications</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">US</td> <td style="width: 40%;">08/815,096 (CIP)</td> <td style="width: 30%;"></td> </tr> <tr> <td>Filed on</td> <td>12 March 1997 (12.03.97)</td> <td></td> </tr> <tr> <td>US</td> <td>08/857,323 (CIP)</td> <td></td> </tr> <tr> <td>Filed on</td> <td>16 May 1997 (16.05.97)</td> <td></td> </tr> <tr> <td>US</td> <td>08/982,247 (CIP)</td> <td></td> </tr> <tr> <td>Filed on</td> <td>1 December 1997 (01.12.97)</td> <td></td> </tr> <tr> <td>US</td> <td>08/982,246 (CIP)</td> <td></td> </tr> <tr> <td>Filed on</td> <td>1 December 1997 (01.12.97)</td> <td></td> </tr> <tr> <td>US</td> <td>08/982,120 (CIP)</td> <td></td> </tr> <tr> <td>Filed on</td> <td>1 December 1997 (01.12.97)</td> <td></td> </tr> <tr> <td>US</td> <td>08/984,481 (CIP)</td> <td></td> </tr> <tr> <td>Filed on</td> <td>1 December 1997 (01.12.97)</td> <td></td> </tr> </table> <p>(71) Applicant (for all designated States except US): CARDIOSYN-OP SIS, INC. [US/US]; 910 West Maude, Sunnyvale, CA 94086 (US).</p> </div> <div style="width: 48%;"> <p>(72) Inventors; and</p> <p>(75) Inventors/Applicants (for US only): EDWARDS, Stuart, D. [US/US]; 658 Westridge Drive, Portola Valley, CA 94028 (US). SKALNYI, Eugene V. [MD/US]; 1765 Ednamary Way #L, Mountain View, CA 94040 (US). PARKER, Theodore, L. [US/US]; 634 Dunhill Drive, Danville, CA 94506 (US). WEHMAN, Thomas [US/US]; 10449 Mary Avenue, Cupertino, CA 94014 (US). KUCKLICK, Theodore [US/US]; 116 Las Astas Drive, Los Gatos, CA 95014 (US). STEIN, Alan [US/US]; 649 Lancaster Boulevard, Moss Beach, CA 94038 (US).</p> <p>(74) Agent: WEITZ, David, J.; Wilson, Sonsini, Goodrich & Rosati, 650 Page Mill Road, Palo Alto, CA 94304-1050 (US).</p> <p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p> <p>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></p> <p>(88) Date of publication of the international search report: 14 January 1999 (14.01.99)</p> </div> </div>			08/815,096	12 March 1997 (12.03.97)	US	08/857,323	16 May 1997 (16.05.97)	US	08/984,481	1 December 1997 (01.12.97)	US	08/982,246	1 December 1997 (01.12.97)	US	08/982,120	1 December 1997 (01.12.97)	US	08/982,247	1 December 1997 (01.12.97)	US	US	08/815,096 (CIP)		Filed on	12 March 1997 (12.03.97)		US	08/857,323 (CIP)		Filed on	16 May 1997 (16.05.97)		US	08/982,247 (CIP)		Filed on	1 December 1997 (01.12.97)		US	08/982,246 (CIP)		Filed on	1 December 1997 (01.12.97)		US	08/982,120 (CIP)		Filed on	1 December 1997 (01.12.97)		US	08/984,481 (CIP)		Filed on	1 December 1997 (01.12.97)	
08/815,096	12 March 1997 (12.03.97)	US																																																						
08/857,323	16 May 1997 (16.05.97)	US																																																						
08/984,481	1 December 1997 (01.12.97)	US																																																						
08/982,246	1 December 1997 (01.12.97)	US																																																						
08/982,120	1 December 1997 (01.12.97)	US																																																						
08/982,247	1 December 1997 (01.12.97)	US																																																						
US	08/815,096 (CIP)																																																							
Filed on	12 March 1997 (12.03.97)																																																							
US	08/857,323 (CIP)																																																							
Filed on	16 May 1997 (16.05.97)																																																							
US	08/982,247 (CIP)																																																							
Filed on	1 December 1997 (01.12.97)																																																							
US	08/982,246 (CIP)																																																							
Filed on	1 December 1997 (01.12.97)																																																							
US	08/982,120 (CIP)																																																							
Filed on	1 December 1997 (01.12.97)																																																							
US	08/984,481 (CIP)																																																							
Filed on	1 December 1997 (01.12.97)																																																							
<p>(54) Title: <i>IN SITU FORMED STENT</i></p> <div style="text-align: center; margin: 20px 0;"> </div> <p>(57) Abstract</p> <p>A radioactive stent formed in a body lumen is provided. The radioactive stent includes an article shaped to provide support to a section of a body lumen and allow biological material which would otherwise flow through the body lumen to flow through the article, the article including a non-fluent stent composition containing a radioactive isotope with a short half-life in intimate contact with the section of the body lumen which was delivered through the body lumen to the section as a fluent pre-stent composition and transformed adjacent the section of the body lumen to the non-fluent stent composition.</p>																																																								

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.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece			TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	IT	Italy	MX	Mexico	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	NZ	New Zealand		
CM	Cameroon			PL	Poland		
CN	China	KR	Republic of Korea	PT	Portugal		
CU	Cuba	KZ	Kazakstan	RO	Romania		
CZ	Czech Republic	LC	Saint Lucia	RU	Russian Federation		
DE	Germany	LI	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia	LR	Liberia	SG	Singapore		

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 98/04779

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 A61F2/06

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 6 A61F 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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 649 637 A (SLEPIAN MARVIN J) 26 April 1995	1,3,4,6, 8,10-21, 30-32, 34-36, 58-71, 73,74
A	see column 9, line 19 - column 13, line 28; claims; figures --- -/--	5,33,75

☒ 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.
- *&* document member of the same patent family

Date of the actual completion of the international search

17 July 1998

Date of mailing of the international search report

17. 11. 98

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

NEUMANN, E

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 98/04779

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>US 5 591 199 A (PORTER CHRISTOPHER H ET AL) 7 January 1997</p> <p>see column 3, line 43 - column 6, line 18; figures</p> <p>---</p>	<p>1,3,6, 8-10, 17-21, 30, 34-36, 58-63, 65-69,74</p>
X	<p>US 5 092 841 A (SPEARS JAMES R) 3 March 1992</p> <p>see column 4, line 67 - column 9, line 49; figures</p> <p>-----</p>	<p>1,3,4,6, 11-14, 17-21, 30-32, 34-36, 58-63, 66-69,74</p>

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 98/ 04779

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.: 22-29, 37-57, 107-138
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 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:

see annex

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.:

1-21, 30-36, 58-75

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

MULTIPLE INVENTIONS:

1. Claims: 1-21,30-36,58-75

A stent having a fluent composition and is transformed by energy absorbtion into a non-fluent stent composition.

2. Claims: 76-95,96-101,102-106

A catheter having at least one delivery port for a fluent stent composition, at least one expandable member at the proximal or distal section and a lumen which connects the delivery port with the outside of the catheter.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 206

Claims Nos.: 22-29,37-57,107-138

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 98/04779

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0649637 A	26-04-1995	AT 121954 T	15-05-1995
		AU 4191989 A	23-03-1990
		CA 1336755 A	22-08-1995
		DE 68922497 D	08-06-1995
		DE 68922497 T	14-09-1995
		DK 418989 A	25-02-1990
		EP 0431046 A	12-06-1991
		JP 4501670 T	26-03-1992
		WO 9001969 A	08-03-1990
		US 5575815 A	19-11-1996
		US 5674287 A	07-10-1997
		US 5749922 A	12-05-1998
		US 5634946 A	03-06-1997
		US 5800538 A	01-09-1998
		US 5749915 A	12-05-1998
		US 5213580 A	25-05-1993

US 5591199 A	07-01-1997	AU 6043496 A	30-12-1996
		EP 0836448 A	22-04-1998
		WO 9640000 A	19-12-1996
		US 5766204 A	16-06-1998

US 5092841 A	03-03-1992	EP 0528869 A	03-03-1993
		WO 9117731 A	28-11-1991
		US 5199951 A	06-04-1993
