(19) World Intellectual Property **Organization**

International Bureau



(43) International Publication Date 24 March 2005 (24.03.2005)

PCT

(10) International Publication Number WO 2005/025449 A3

(51) International Patent Classification⁷: A61F 02/06

(21) International Application Number:

PCT/US2004/029310

(22) International Filing Date:

9 September 2004 (09.09.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/501,801

10 September 2003 (10.09.2003)

(71) Applicant (for all designated States except US): SPHERIC PRODUCTS, LTD [US/US]; 15303 Huebner Road, Unit 10, San Antonio, TX 78248 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): WATSON, Richard, L., Jr. [US/US]; 1985 Cougar Trail, McPherson, KS 67640

(74) Agent: WHITE, Cline, H.; Loeffler, Jonas & Tuggey LLP, 755 E. Mulberry, Suite 200, San Antonio, TX 78212 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

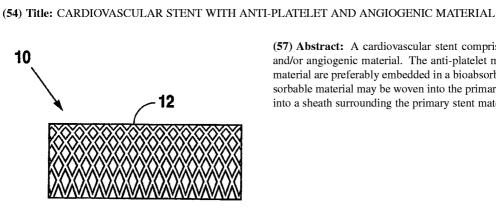
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 1 September 2005

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.



(57) Abstract: A cardiovascular stent comprising anti-platelet material and/or angiogenic material. The anti-platelet material and/or angiogenic material are preferably embedded in a bioabsorbable material. The bioabsorbable material may be woven into the primary stent material or formed into a sheath surrounding the primary stent material.



INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/29310

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. Iso 56,153,252 A (Hossainy et al.) 28 November 2000 (28.11.00) col 7 line 56 through col 8 Line 35 W. US Prient Application Publication 20020062147 A1 (Yang) 23 Mary 2002 (23.05.02) I -5 W. Special categories of cited documents **A* document defining the pareal state of the at which is not considered to be of perturbal relevance Perturbal relevance To document which may throw doubte on pricely claim (to) or which is cited to expectable published and or a fact the international filing date To document which may throw doubte on pricely claim (to) or which is cited to expectable). The document which may throw doubte on pricely plain (to) or which is cited to expectable). The document which may throw doubte on pricely plain (to) or which is cited to expectable). The document which may throw doubte on pricely plain (to) or which is cited to expectable). The document which may throw doubte on pricely plain (to) or which is cited to expectable). The document which may throw doubte on pricely plain (to) or which is cited to expectable). The document which may throw doubte on pricely plain (to) or which is cited to expectable). The document which may throw doubte on pricely plain (to) or which is cited to expectable). The document which may throw doubte on pricely plain (to) or which is cited to expectable). The document which may throw doubte on pricely plain (to) or which is cited to expectable to an expectable to have been considered to which as an animal to exclude the observable of the source of pricely claims (to expectable) and the constitution of the international search to expectable to a price was filled in the art of countered to an expectable to an expectable to a price was filled in the art of countered to an e	A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : A61F 02/06 US CL : 623/1.13,1.15,1.23,1.38,1.42, 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.: 623/1.13,1.15,1.23,1.38,1.42, Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched						
C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages							
Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. US 6,153,252 A (Hossainy et al.) 28 November 2000 (28.11.00) col 7 line 56 through col 8 [1,69]	Electronic da	ta base consulted during the international search (name	of data base and, wher	e practicable, sear	ch terms used)		
See patent family annex. See patent family annex.	C. DOCT	UMENTS CONSIDERED TO BE RELEVANT					
See patent family annex.			propriate, of the relevan	nt passages	Relevant to claim No.		
Y X US Patent Application Publication 20020062147 A1 (Yang) 23 May 2002 (23.05.02) 1-5 Further documents are listed in the continuation of Box C. * Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance particular relevance. "B" earlier application or patent published an or after the international filing date or principly of the cateful the publication date of another citation or other special reason (as specified) "C" document softring to an oral diaclosure, use, exhibition or other means "P" document softring to an oral diaclosure, use, exhibition or other means "P" document softring to an oral diaclosure, use, exhibition or other means "P" document softring to an oral diaclosure, use, exhibition or other means "P" document softring to an oral diaclosure, use, exhibition or other means "P" document softring to an oral diaclosure, use, exhibition or other means "P" document softring to an oral diaclosure, use, exhibition or other means "P" document softring to an oral diaclosure, use, exhibition or other means "P" document softring to an oral diaclosure, use, exhibition or other means "A" document softring to an oral diaclosure, use, exhibition or other means "A" document softring to an oral diaclosure, use, exhibition or other means "A" document referring to an oral diaclosure, use, exhibition or other means "A" document referring to an oral diaclosure, use, exhibition or other means "A" document referring to an oral diaclosure, use, exhibition or other special reason (as specified) "Y" document referring to an oral diaclosure, use, exhibition or other means "A" document referring to an oral diaclosure, use, exhibition or other means "A" document referring to an oral diaclosure, use, exhibition or other means "A" document referring to an oral diaclosure, use, exhibition or other means "A" document referring to an oral diaclosure, use, exhibition or other special reason (as specified) "Y" documen		US 6,153,252 A (Hossainy et al.) 28 November 2000	(28.11.00) col 7 line 50	5 through col 8	1,6-9		
paragraphs [0043,] [0044.] and [0045] Further documents are listed in the continuation of Box C. See patent family annex. "T" later document published after the memational filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the newton. document defining the general state of the art which is not considered to be of particular relevance general state of the art which is not considered to be of particular relevance provided in the publication of particular relevance in the principle or theory underlying the newton of considered nowled to another cluston or other special reason (to establish the publication date of unother clustons or other special reasons (to establish the publication date of unother clustons or other special reasons (to establish the publication date of unother clustons or other special reasons (to establish the publication date of unother clustons or other special reasons (to establish the publication date of unother clustons or other special reasons (to establish the publication date of unother clustons or other special reasons (to establish the publication date of unother clustons or other special reasons (to establish the publication date of unother clustons or other special reasons (to establish the publication date of unother clustons or other special reasons (to establish the publication date to unother clustons to ensidered to unother clustons in ventions of particular relevance; the claimed invention cannot be considered to unother an inventive step when the document is combined when the document is combined to exclusion to a person skilled in the art "A" document valished prior to the international search "B" document published prior to the international search preport "A" document valished prior to the international search preport "A" document valished prior to the international search preport "A" document valished prior to the international search preport "B" document valished prior to the internat	<u></u> Ү	line 35			22-5	1	
Further documents are listed in the continuation of Box C. * Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "B" earlier application or patent published on or after the international filing date "C" document which may throw doubts on priority olain(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 disolosure, use, exhibition or other means "P" document published prior to the international filing date but later than the principle of the cryunderford to unvolve an inventive step when the document is excimined with one or more other such document is combined to a work and the principle of the or undered to work an av	x		(Yang) 23 May 2002 (2	3.05.02)	1-5		
** 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 published on or after the international filing date or priority cate and not m conflict with the application but cited to understand the principle or theory underlying the mvention cannot be considered novel or cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to unvolve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to unvolve 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 "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 I May 2005 (11.05.2005) Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230							
"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent 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 Date of the actual completion of the international search 11 May 2005 (11.05.2005) Name and mailing address of the ISA/US Mail Stop PCT, Atm. ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Further	documents are listed in the continuation of Box C.					
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document staken 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) "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 I1 May 2005 (11.05.2005) 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. (703) 305-3230	"A" document	t defining the general state of the art which is not considered to be of	date and not in	conflict with the applic	ation but cited to understand the		
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 Date of the actual completion of the international search 11 May 2005 (11.05.2005) 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. (703) 305-3230 "Y" document of particular relevance; the claimed invention cannot be considered to uvolve 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 mailing of the international search report Corrine McDermott Telephone No Telephone No	•		considered nov	el or cannot be conside			
"O" document referring to an oral disclosure, use, exhibition or other means obvious to a person skilled in the art "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 11 May 2005 (11.05.2005) Name and mailing address of the ISA/US Mail Stop PCT, Atn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230 Date of mailing of the international search report Corrine McDermott Telephone No	establish the publication date of another citation or other special reason (as "Y" document of particular re specified) considered to involve an		nvolve an inventive step	when the document is combined			
Date of the actual completion of the international search 11 May 2005 (11.05.2005) Name and mailing address of the ISA/US Mail Stop PCT, Atn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230 Date of mailing of the international search report Authorized o fficer Corrine McDermott Telephone No	"O" documen	t referring to an oral disclosure, use, exhibition or other means					
11 May 2005 (11.05.2005) 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. (703) 305-3230 Authorized officer. Corrine McDermott Telephone No			"&" document member of the same patent family				
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. (703) 305-3230 Authorized of ficer. Corrine McDermott Telephone No	·		Date of mailing of the	international sear	ch report		
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230 Corrine McDermott Telephone No			Authorized Officer	Z- CUUSI			
Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230 Corrine McDermott Telephone No				<u> مار</u>	100		
	Cor P.O Ale	nmissioner for Patents . Box 1450 xandria, Virginia 22313-1450					
		· · · · ·					