

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
27 March 2008 (27.03.2008)

PCT

(10) International Publication Number
WO 2008/036554 A3

(51) International Patent Classification:

A61L 31/02 (2006.01) A61L 31/14 (2006.01)
A61L 31/08 (2006.01) A61F 2/82 (2006.01)
A61L 31/10 (2006.01)

(21) International Application Number:

PCT/US2007/078429

(22) International Filing Date:

13 September 2007 (13.09.2007)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/845,478 18 September 2006 (18.09.2006) US

(71) Applicant (for all designated States except US): **BOSTON SCIENTIFIC SCIMED, INC.** [US/US]; One Scimed Place, Maple Grove, Minnesota 55311-1566 (US).

(72) Inventors; and

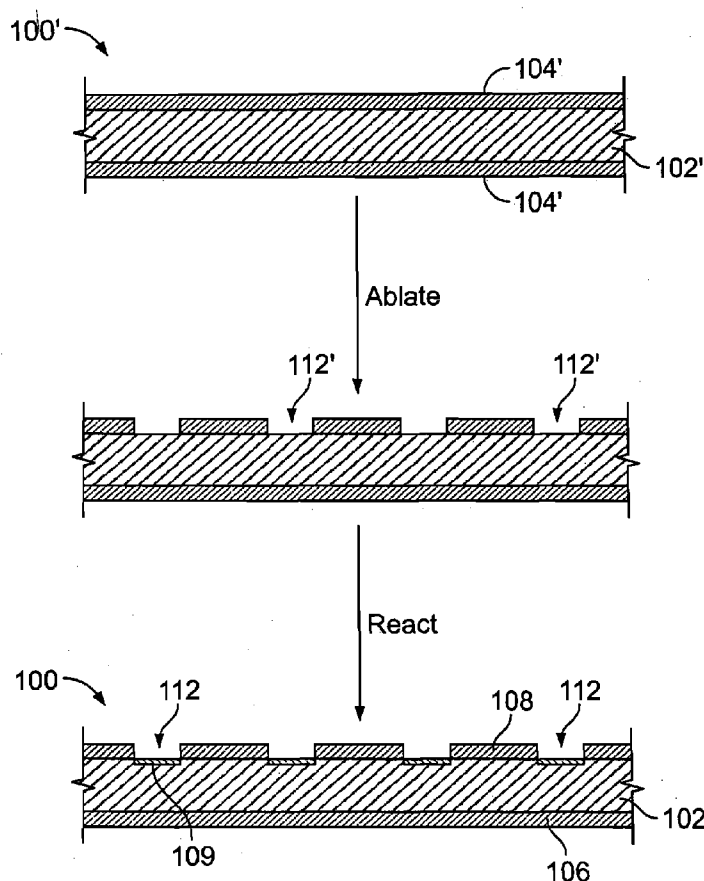
(75) Inventors/Applicants (for US only): **WEBER, Jan** [NL/NL]; Holdaal 49, NL-6228 GJ Maastricht (NL). **ATANASOSKA, Liliana** [US/US]; 5209 Windsor Avenue, Edina, Minnesota 55436 (US). **LARSEN, Steven R.** [US/US]; 6048 Foxtail Drive, Lino Lakes, Minnesota 55110 (US). **MERTENS, Steven P.** [US/US]; 18220 46th Avenue North, Plymouth, Minnesota 55446 (US).

(74) Agents: **SHIPSIDES, Geoffrey P.** et al.; Fish & Richardson P.C., P.O. Box 1022, Minneapolis, Minnesota 55440-1022 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY,

[Continued on next page]

(54) Title: ENDOPROSTHESES



(57) Abstract: An implantable endoprosthesis comprising a bioerodible body and a protective coating, the protective coating preventing direct contact between the bioerodible body and bodily material when the endoprosthesis is in a body and in an unexpanded state, wherein upon expansion from the unexpanded state to an expanded state, the protective coating no longer prevents direct contact between the bioerodible body and the bodily material when implanted.

WO 2008/036554 A3



TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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, IS, IT, LT, LU, LV, MC, MT, 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).

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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:

15 May 2008

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2007/078429

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61L31/02 A61L31/08 A61L31/10 A61L31/14 A61F2/82

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)

A61L A61F

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, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2006/193892 A1 (FURST JOSEPH G [US] ET AL) 31 August 2006 (2006-08-31) paragraphs [0007], [0009], [0011], [0014], [0017], [0023], [0027], [0029], [0062], [0063], [0067] - [0072], [0077], [0078]; figures 1-10	1-8, 10-15
X	EP 0 966 979 A (BIOTRONIK MESS & THERAPIEG [DE] BIOTRONIK AG [CH]) 29 December 1999 (1999-12-29) paragraphs [0001], [0007] - [0019]	1, 4, 5, 7-9, 11
X	US 2003/033007 A1 (SIRHAN MOTASIM [US] ET AL) 13 February 2003 (2003-02-13) paragraphs [0018], [0024], [0025], [0031] - [0035], [0043], [0051], [0054], [0058], [0059]; figures 1-3E-3G	1, 4-8, 10, 12-15
	-/--	

☒ Further documents are listed in the continuation of Box C.

☒ 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
- *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 March 2008

Date of mailing of the international search report

28/03/2008

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

Geuer, Melanie

INTERNATIONAL SEARCH REPORT

International application No

PCT/US2007/078429

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 2005/283229 A1 (DUGAN STEVE [US] ET AL) 22 December 2005 (2005-12-22) paragraphs [0026] - [0030], [0053], [0060], [0065] - [0077]; figures 1-8B -----	1,4-8, 10,12, 14,15
P,X	WO 2006/108065 A (ELIXIR MEDICAL CORP [US]; CRYER BRETT [US]; BHAT VINAYAK D [US]; YAN J) 12 October 2006 (2006-10-12) paragraphs [0013] - [0026], [0052] - [0055], [0058] - [0061], [0070] - [0072], [0088], [0095], [0096], [0100] - [0119] -----	1-15

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2007/078429

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 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.: 16-18
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 No. III Observations where unity of invention is lacking (Continuation of item 3 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 allsearchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search reportcovers 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 and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2007/078429

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2006193892 A1	31-08-2006	US 2007123973 A1 WO 2006110197 A2	31-05-2007 19-10-2006
EP 0966979 A	29-12-1999	US 6287332 B1	11-09-2001
US 2003033007 A1	13-02-2003	US 2003050692 A1 US 2003139801 A1	13-03-2003 24-07-2003
US 2005283229 A1	22-12-2005	NONE	
WO 2006108065 A	12-10-2006	AU 2006231652 A1 CA 2604419 A1 EP 1865882 A2	12-10-2006 12-10-2006 19-12-2007