

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
28 February 2008 (28.02.2008)

PCT

(10) International Publication Number
WO 2008/024596 A3

- (51) **International Patent Classification:**
B05D 1/32 (2006.01) A61M 25/09 (2006.01)
- (21) **International Application Number:**
PCT/US2007/074638
- (22) **International Filing Date:** 27 July 2007 (27.07.2007)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
11/509,204 24 August 2006 (24.08.2006) US
- (71) **Applicant (for all designated States except US):** BOSTON SCIENTIFIC LIMITED [IE/BB]; P.O. Box 1317, Seaton House, Hastings, Christ Church (BB).

[US/US]; 20953 Norbert Weber Lane, Rogers, Minnesota 55374 (US).

(74) **Agent:** CROMPTON, David M.; Crompton, Seager & Tufte, Lie, 1221 Nicollet Avenue, Suite 800, Minneapolis, Minnesota 55403 (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, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

- (72) **Inventors; and**
- (75) **Inventors/Applicants (for US only):** CHEN, Hancun [US/US]; 18655 63rd Place North, Maple Grove, Minnesota 55311 (US). LARSON, Scott [US/US]; 3705 Urban Dale Lane, Plymouth, Minnesota 55446 (US). ROMANOWSKI, Jason [US/US]; 7232 Emerson Avenue South, Richfield, Minnesota 55423 (US). MESSER, Ryan

(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).

[Continued on next page]

(54) **Title:** ELONGATE MEDICAL DEVICE AND METHOD OF COATING THE SAME

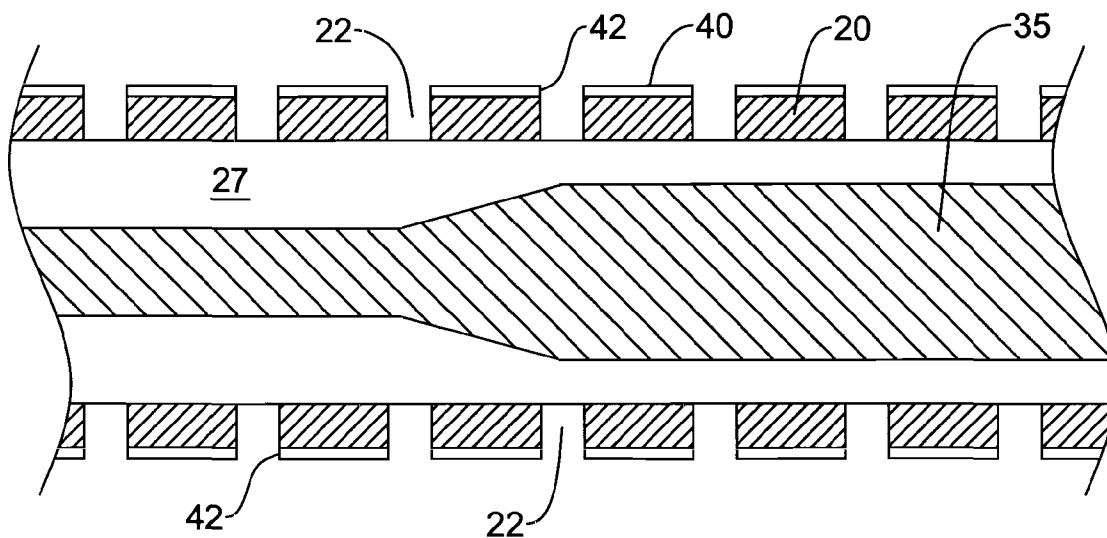


figure 3

(57) **Abstract:** An elongate medical device including a coating extending over a portion of the elongate medical device having a plurality of apertures formed thereon and a method of applying a coating to such an elongate medical device are disclosed. Prior to applying a coating to the elongate medical device, a removable liquid is dispensed in the plurality of apertures. Subsequently, the removable liquid is removed from the plurality of apertures, leaving the plurality of apertures free of, unobstructed by, or otherwise not filled with the coating.

WO 2008/024596 A3



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:

9 October 2008

INTERNATIONAL SEARCH REPORT

International application No

PCT/US2007/074638

A. CLASSIFICATION OF SUBJECT MATTER

INV. B05D1/32 A61M25/09

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)
B05D

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.
A	US 5 902 647 A (VENKATARAMANI VENKAT SUBRAMANI [US] ET AL) 11 May 1999 (1999-05-11) the whole document -----	1,16
A	EP 0 500 229 A (MATSUTANI SEISAKUSHO [JP]) 26 August 1992 (1992-08-26) the whole document -----	1,16
A	US 5 891 507 A (JAYARAMAN SWAMINATHAN [IN]) 6 April 1999 (1999-04-06) the whole document -----	1,16
A	WO 01/13984 A (NEURON THERAPEUTICS INC [US]; GUNASEKARA INDAKA [US]; GRIFFIN MARK [US]) 1 March 2001 (2001-03-01) the whole document -----	1,16

D 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

30 November 2007

Date of mailing of the international search report

30/07/2008

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

Brothier, J

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2007/074638

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.:
because they relate to subject matter not required to be searched by this Authority, namely:

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:

see additional sheet

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 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.:

1-22

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.

FURTHER INFORMATION CONTINUED FROM PCTASA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-22

Coating process as described in claim 1 or 16

2. claims: 23-30

Coated elongate medical device with a plurality of holes

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2007/074638

Patent document cited in search report	A	Publication date	Patent family member(s)	Publication date
US 5902647	A	11-05-1999	US 2001007708 A1	12-07-2001
EP 0500229	A	26-08-1992	JP 3124564 B2 JP 4266749 A	15-01-2001 22-09-1992
US 5891507	A	06-04-1999	NONE	
WO 0113984	A	01-03-2001	AU 8034000 A CA 2382871 A1 CN 1370086 A EP 1207931 A2 JP 2003507140 T MX PA02001866 A	19-03-2001 01-03-2001 18-09-2002 29-05-2002 25-02-2003 25-09-2003