



(51) International Patent Classification:

A61B 5/0215 (2006.01) A61B 5/00 (2006.01)
A61B 5/07 (2006.01)

(21) International Application Number:

PCT/US2019/068551

(22) International Filing Date:

26 December 2019 (26.12.2019)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/784,887 26 December 2018 (26.12.2018) US
16/243,183 09 January 2019 (09.01.2019) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ,

(54) Title: SENSOR DELIVERY SYSTEM AND METHOD

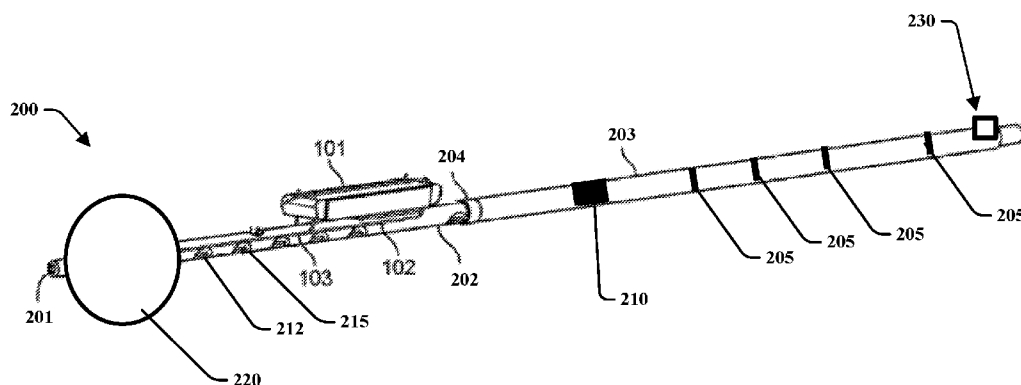


FIG. 2

(57) Abstract: Provided are various embodiments of improvements made to methods, systems and assemblies of implant delivery systems and the associated implants. In one embodiment, provided is an implant delivery system comprising an implant, a first sheath and a second sheath each extending from a proximal end of said implant delivery system, the first sheath is translatable relative to said second sheath wherein said implant is connected to an exterior surface of said first sheath, and wherein said first sheath and said second sheath are movable with respect to one another to deploy said implant to a target site in an anatomy. Said delivery system may be configured to be partially inserted into a blood vessel of a human body such that said proximal end remains external to said body and said distal end is internal to said body.





CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP,
KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME,
MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ,
OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA,
SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

(88) Date of publication of the international search report:

20 August 2020 (20.08.2020)

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2019/068551

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61B5/0215 A61B5/07 A61B5/00
ADD.

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)
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 practicable, 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 2015/208929 A1 (ROWLAND HARRY [US] ET AL) 30 July 2015 (2015-07-30)	1-9, 11-16
Y	the whole document	10,17-19
Y	US 2016/324443 A1 (ROWLAND HARRY [US] ET AL) 10 November 2016 (2016-11-10) paragraph [0076]; figure 15	10,17-19
A	US 2006/135963 A1 (KICK GEORGE F [US] ET AL) 22 June 2006 (2006-06-22) paragraph [0074]	11,12
X	US 2003/125790 A1 (FASTOVSKY VITALY [IL] ET AL) 3 July 2003 (2003-07-03) paragraphs [0032] - [0041]	1-9, 13-16
	----- -/-	

☒ 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 application or patent 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

3 April 2020

Date of mailing of the international search report

25/06/2020

Name and mailing address of the ISA/

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Trachterna, Morten

INTERNATIONAL SEARCH REPORT

International application No

PCT/US2019/068551

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 2008/176271 A1 (SILVER JAMES H [US] ET AL) 24 July 2008 (2008-07-24) paragraphs [0250] - [0255], [0257] -----	1-10, 13-16
X	US 5 411 551 A (WINSTON THOMAS R [US] ET AL) 2 May 1995 (1995-05-02) column 3, line 45 - column 4, line 39 -----	1-10, 13-15

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2019/068551

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.: 20-27
because they relate to subject matter not required to be searched by this Authority, namely:
see FURTHER INFORMATION sheet PCT/ISA/210
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 all searchable 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.:
1-19

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 PCT/ISA/ 210

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

1. claims: 1-19

An implant delivery system according to claim 1

2. claims: 28-31

A method for attaching a wire anchor to a rigid implant body according to claim 28

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.1

Claims Nos.: 20-27

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery Independent claims 20, 24 and the dependent claims 21-23, 25-27 relate to a method for implanting an implant device in the vasculature of a human body at least comprising steps of: -establishing access to the vasculature; -inserting a first catheter; - removing said first catheter. These claims are thus considered to involve a method for treatment of the human or animal body by surgery within the meaning of Art. 17(2(a)(i) and Rule 39.1(iv) PCT. No opinion will be formulated with respect to the novelty, inventive step or industrial applicability of the subject-matter of these claims.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2019/068551

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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