

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
26 March 2009 (26.03.2009)

(10) International Publication Number  
**WO 2009/039427 A3**

- (51) **International Patent Classification:**  
A61N 1/05 (2006.01) H01B 7/08 (2006.01)
- (21) **International Application Number:**  
PCT/US2008/077099
- (22) **International Filing Date:**  
19 September 2008 (19.09.2008)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**  
60/973,897 20 September 2007 (20.09.2007) 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, 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, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA,  
UG, US, UZ, VC, VN, ZA, ZM, ZW.

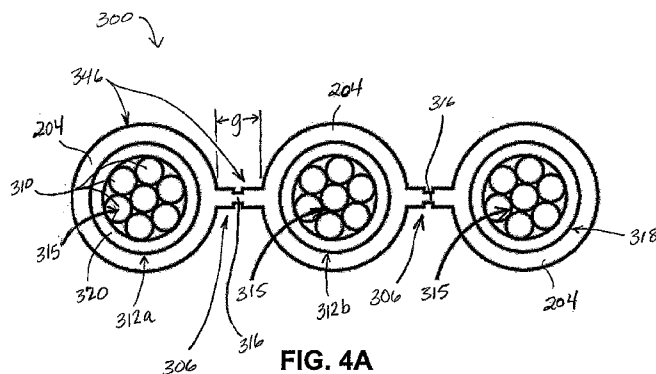
(84) **Designated States (unless otherwise indicated, for every  
kind of regional protection available):** ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ,  
TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,  
MC, MT, NL, NO, 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 (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 2009

(54) **Title:** MEDICAL ELECTRICAL LEADS AND CONDUCTOR ASSEMBLIES THEREOF



**FIG. 4A**

(57) **Abstract:** A conductor assembly for a medical electrical lead includes a web and plurality of conductors. The web includes a plurality of longitudinally extending elements, or sidewalls, each of which define a longitudinally extending lumen, and a plurality of longitudinally extending connectors, each of which join a pair of adjacent sidewalls. Each of the plurality of conductors extends within a corresponding lumen, and each may include an insulative jacket. If each conductor includes an insulative jacket, the jacket is preferably formed from one or more of the following materials: PEEK, PVDF and polysulfone. One or more of the connectors of the web may be flexible to allow for a connected separation, or a gap between adjacent sidewalls; and one or more of these connectors may further include a discrete wall section adapted to facilitate widening of the corresponding gap. Preferably the conductor assembly is coiled for incorporation into the lead.



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## INTERNATIONAL SEARCH REPORT

International application No  
PCT/US2008/077099

## A. CLASSIFICATION OF SUBJECT MATTER

INV. A61N1/05  
ADD. H01B7/08

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)

A61N H01B

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.
Y	US 4 467 138 A (BROREIN WILLIAM J [US]) 21 August 1984 (1984-08-21)	8-19
A	column 3, line 14 - line 66 column 4, line 13 - line 39 column 5, line 50 - column 6, line 8; figures 4-9	1-4,6
X	US 5 209 987 A (PENNECK RICHARD J [GB] ET AL) 11 May 1993 (1993-05-11)	1-4
A	column 18, line 59 - line 66; figure 3 column 19, line 8 - line 14; figures 1,3	8,9, 12-15,19
Y	US 2005/016657 A1 (BLUGER HENRY [CA]) 27 January 2005 (2005-01-27)	1-7
A	paragraphs [0014], [0015], [0031] - [0037]; figures	8-19
	-/--	

 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)
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- \*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.
- \*Z\* document member of the same patent family

Date of the actual completion of the international search

25 March 2009

Date of mailing of the international search report

03/07/2009

Name and mailing address of the ISA/

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Authorized officer

Rakotondrajaona, C

# INTERNATIONAL SEARCH REPORT

International application No PCT/US2008/077099
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4 564 723 A (LANG DONALD D [US]) 14 January 1986 (1986-01-14) column 3, line 18 - column 4, line 63; figures 1-6 <div style="text-align: center; margin-top: 10px;">-----</div>	1-19

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2008/077099

## 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.:

1-19

### 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

A conductor assembly for a medical electrical lead  
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2. claims: 20-30

A medical electrical lead and method of fabrication  
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2008/077099
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Patent document cited in search report	A	Publication date	Patent family member(s)	Publication date
US 4467138	A	21-08-1984	CA 1214527 A1	25-11-1986
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