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(71) Applicant (for all designated States except US):  
MEDTRONIC, INC. [US/US]; 710 Medtronic Parkway  
MS LC340, Minneapolis, MN 55432 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): RUTTEN, Jean  
Joseph, Gerardus [NL/NL]; Persoonstraat 21, NL-6351  
EL Bochtoltz (NL). SMITS, Karel, F.A.A. [NL/NL]; Gel-  
restraat 2, NL-6151 JA Munstergeleen (NL). LAZE-  
ROMS, Markus, J. [NL/BE]; Lafelterweg 2, B-3770  
Vronhoven-Riemst (BE).

(74) Agents: SOLDNER, Michael C. et al.; 710 Medtronic  
Parkway MS LC340, Minneapolis, MN 55432 (US).

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CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO,  
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NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD,  
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(54) Title: SUBCUTANEOUSLY IMPLANTABLE LEAD INCLUDING DISTAL FIXATION MECHANISM

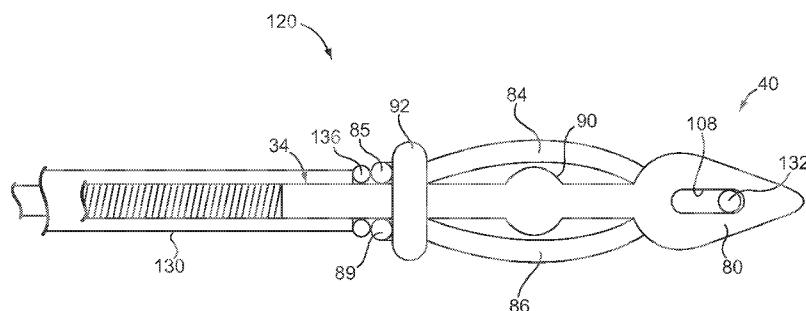


FIG. 4

(57) Abstract: A subcutaneously implantable lead includes a coil disposed along a portion of the lead, and a lead tip coupled to a distal end of the lead. The lead tip includes at least one component that is movable relative to the distal end of the lead and configured to anchor the lead tip in subcutaneous tissue.

## INTERNATIONAL SEARCH REPORT

International application No

PCT/US2009/051368

## A. CLASSIFICATION OF SUBJECT MATTER

INV. A61N1/05

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

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 4 913 164 A (GREENE DONALD R [US] ET AL) 3 April 1990 (1990-04-03) column 7, line 25 - line 41; figures 1-6 column 8, line 11 - line 37	1-4,9-12
X	US 2002/151948 A1 (KING GARY WILLIAM [US] ET AL KING GARY W [US] ET AL) 17 October 2002 (2002-10-17) paragraph [0065] - paragraph [0066]; figures 8A-8C	1-4,9-12
P,X	WO 2008/106338 A (MEDTRONIC INC [US]; SMITS KAREL F A A [NL]; RUTTEN JEAN JOSEPH GERARDU) 4 September 2008 (2008-09-04) page 3 - page 18	1-3,9-12



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

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Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040,  
Fax: (+31-70) 340-3016

Authorized officer

Sopelana Martínez, J

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2009/051368

## 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 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.:

see annex

### 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: 1-12

A subcutaneous implantable lead comprising a coil disposed along a portion of the lead and a lead tip comprising at least one component that is movable relative to the distal end of the lead and configured to anchor the lead tip.

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2. claims: 13-15

A subcutaneous implantable lead system comprising a lead with a defibrillation electrode, a lead tip comprising at least one arm that is movable relative to a central axis of the lead tip, A tunneling tool configured to removably couple with the lead tip and advance the lead tip subcutaneously, and a tubular member movable axially along the tunneling tool to displace a portion of the arm laterally away from the central axis of the lead tip.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2009/051368

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4913164	A	03-04-1990	NONE	
US 2002151948	A1	17-10-2002	NONE	
WO 2008106338	A	04-09-2008	EP 2131908 A2	16-12-2009
			US 2008208247 A1	28-08-2008
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