



- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(Hi))* — *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))*

Published:

- *with international search report (Art. 21(3))*

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

29 March 2012

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2011/041773

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61N1/378 H01Q1/00
ADD. A61N1/372

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 A61F H01Q

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.
A	US 2009/192575 A1 (CARBUNARU RAFAEL [US] ET AL) 30 July 2009 (2009-07-30) abstract paragraph [0030] -----	1-10
X	US 2006/184209 A1 (JOHN CONSTANCE M [US] ET AL) 17 August 2006 (2006-08-17) abstract; figures 8A, 8B paragraphs [0023], [0063], [0064] -----	1, 3, 4, 6-10
X	US 2004/085247 A1 (MICKLE MARLIN H [US] ET AL) 6 May 2004 (2004-05-06) paragraphs [0052], [0075] -----	4, 10
A	US 2007/191908 A1 (JACOB DOREEN K [US] ET AL) 16 August 2007 (2007-08-16) abstract; figure 1 paragraphs [0039] - [0044] -----	1, 3, 4, 6-10



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

26 September 2011

Date of mailing of the international search report

31/01/2012

Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2011/041773

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. :

1, 3, 4, 6-10

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/US2011/041773

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2009192575 A1	30-07-2009	US 2009192575 A1 WO 2009097249 A2	30-07-2009 06-08-2009
US 2006184209 A1	17-08-2006	US 2006184209 A1 WO 2006029007 A2	17-08-2006 16-03-2006
US 2004085247 A1	06-05-2004	AU 2003278703 A1 EP 1547193 A2 JP 4181542 B2 JP 2005536150 A US 2004085247 A1 WO 2004017456 A2	03-03-2004 29-06-2005 19-11-2008 24-11-2005 06-05-2004 26-02-2004
US 2007191908 A1	16-08-2007	US 2007191908 A1 WO 2007098367 A2	16-08-2007 30-08-2007

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, 3, 4, 6-10

IMD comprising a rectifier for converting an electric field received at an antenna to a DC voltage.

2. claims: 2, 5, 21-23

Implantable stimulation device with a stimulation lead comprising an antenna for receiving an electric field for charging the battery

3. claims: 11-20

Implantable medical device system with an external device for generating an electric field for charging the battery of an implanted device.
