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Declarations under Rule 4.17:

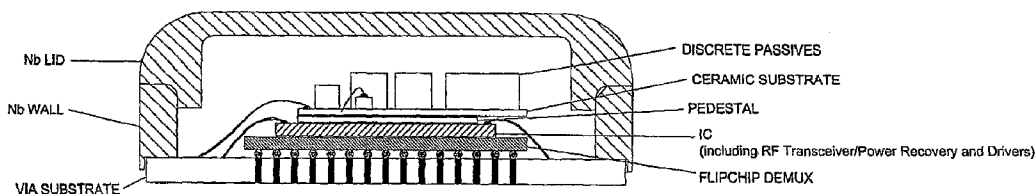
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))
- of inventorship (Rule 4.17(iv))

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:
22 May 2008

(54) Title: PACKAGE FOR AN IMPLANTABLE NEURAL STIMULATION DEVICE



(57) Abstract: The present invention is an improved hermetic package for implantation in the human body. The implantable device comprises an electrically non-conductive substrate; a plurality of electrically conductive vias through said electrically non-conductive substrate; a flip-chip circuit attached to said electrically non-conductive substrate using conductive bumps and electrically connected to a first subset of said plurality of electrically conductive vias, wherein said flip-chip circuit contains one or more stacks or a folded stack; a wire bonded circuit attached to said electrically non-conductive substrate and electrically connected to a second subset of said electrically conductive vias; and a cover bonded to said electrically non-conductive substrate, said cover, said electrically non-conductive substrate and said electrically conductive vias forming a hermetic package.

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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2007/018315

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61N1/00

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 2003/233134 A1 (GREENBERG ROBERT J [US] ET AL) 18 December 2003 (2003-12-18) abstract; figures 1-5,7,10 paragraphs [0006], [0012], [0013], [0019] - [0022], [0045] - [0050], [0053], [0057] - [0060], [0071], [0083], [0088], [0118]	1,4,5,7, 10-20
Y	-----	2,6,8,9
Y	US 2003/048621 A1 (BLOOD JAMES E [US] ET AL) 13 March 2003 (2003-03-13) the whole document	2
Y	US 2005/228467 A1 (JIANG GUANGQIANG [US]) 13 October 2005 (2005-10-13) the whole document	6,8,9
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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.
- *Z* document member of the same patent family

Date of the actual completion of the international search

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01/04/2008

Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

 International application No
 PCT/US2007/018315

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,P	WO 2006/118679 A (SECOND SIGHT MEDICAL PRODUCTS [US]; GREENBERG ROBERT J [US]; NEYSMITH) 9 November 2006 (2006-11-09) the whole document -----	1-20
X,P	US 2007/041164 A1 (GREENBERG ROBERT J [US] ET AL) 22 February 2007 (2007-02-22) the whole document -----	1-20
X,P	US 2006/247734 A1 (GREENBERG ROBERT J [US] ET AL) 2 November 2006 (2006-11-02) the whole document -----	1-20
A	US 2006/173511 A1 (GREENBERG ROBERT J [US] ET AL) 3 August 2006 (2006-08-03) the whole document -----	1-20
A,P	WO 2007/035774 A (SECOND SIGHT MEDICAL PRODUCTS [US]; GREENBERG ROBERT J [US]; MCMAHON M) 29 March 2007 (2007-03-29) the whole document -----	1-20

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2007/018315

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.: 3
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:
see FURTHER INFORMATION sheet PCT/ISA/210

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:

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.:

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

Continuation of Box II.2

Claims Nos.: 3

An error seems to have been introduced during the draft of the claims. Dependent claim 3 seems to be part of the independent claim 2. Therefore, its contents have been considered to be a part of said independent claim and dependent claim 3 has been removed. The rest of dependent claims (4-19) and independent claim 20 should then be redrafted according to the removal of dependent claim 3.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.2), should the problems which led to the Article 17(2)PCT declaration be overcome.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2007/018315

Patent document cited in search report	A1	Publication date	Patent family member(s)	Publication date
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US 2006247734	A1	02-11-2006	NONE	
US 2006173511	A1	03-08-2006	US 2006190058 A1	24-08-2006
WO 2007035774	A	29-03-2007	NONE	