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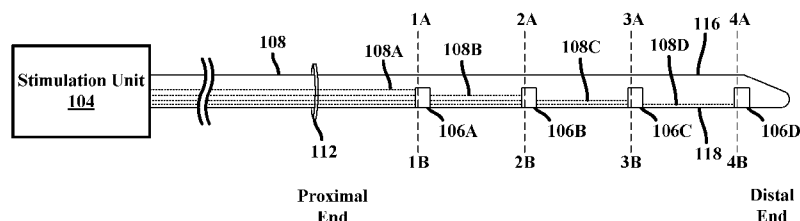
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(54) Title: IMPLANTED MEDICAL DEVICES HAVING ELECTRODE ASSEMBLIES



**FIG. 1B**

(57) Abstract: Disclosed herein are electrode assemblies configured for use with a medical device, such as an implantable medical device. In one aspect, the disclosed electrode assembly includes at least a first electrode and a second electrode, each of which is configured to deliver electrical stimuli to a body part of a recipient. The electrode assembly also includes a first wire that is attached at one end to the first electrode and comprises a conductor that has a first diameter, and a second wire that is attached to the second electrode and comprises a conductor that has a second diameter, with the first diameter being greater than the second diameter. Additionally, each of the first wire and the second wire pass through a proximal end of the assembly to be configured to connect the one of the electrodes to a stimulation unit of a medical device.

## INTERNATIONAL SEARCH REPORT

International application No.  
**PCT/IB2015/054809****A. CLASSIFICATION OF SUBJECT MATTER****A61N 1/05(2006.01)i**

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 1/05; A61F 11/04; A61N 1/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) &amp; keywords: electrode, wire, cochlear, diameter, material

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages                                           | Relevant to claim No. |
|-----------|------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| X         | US 2009-0005836 A1 (CHANG, Y. J. et al.) 1 January 2009<br>See abstract; paragraphs [0018], [0037], [0050]; figures 3, 4, 8. | 1,3-20                |
| Y         |                                                                                                                              | 2                     |
| Y         | US 2007-0135885 A1 (RISI, F.) 14 June 2007<br>See paragraph [0055]; figure 2A.                                               | 2                     |
| A         | US 2007-0282411 A1 (FRANZ, B. et al.) 6 December 2007<br>See entire document.                                                | 1-20                  |
| A         | US 7587246 B2 (HOCHMAIR, E. et al.) 8 September 2009<br>See entire document.                                                 | 1-20                  |
| A         | US 7319906 B2 (KUZMA, J. A. et al.) 15 January 2008<br>See entire document.                                                  | 1-20                  |



Further documents are listed in the continuation of Box C.



See patent family annex.

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

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| Patent document<br>cited in search report | Publication<br>date | Patent family<br>member(s)                                                                                                                                                    | Publication<br>date                                                                                                        |
|-------------------------------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
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