(54) Title: NEURAL STIMULATION SYSTEM AND OPTICAL MONITORING SYSTEMS AND METHODS

(57) Abstract: Neural stimulation and optical monitoring systems and methods are disclosed. In one embodiment, an apparatus for treating a neural condition includes a signal delivery device configured to be implanted into a patient proximate to a skull of the patient and positioned to apply electromagnetic signals to one or more target sites within the patient. The apparatus also includes an implantable optical monitoring assembly configured to monitor optical properties at one or more optical monitoring sites within the patient. The apparatus further includes a controller configured to be implanted into the patient. The controller is operatively coupled to the signal delivery device and the optical monitoring assembly and programmed to control both the signal delivery device and the optical monitoring assembly. The controller also includes a power source to power both the signal delivery device and the optical monitoring assembly.
INTERNATIONAL SEARCH REPORT

International application No
PCT/US06/41171

A CLASSIFICATION OF SUBJECT MATTER
IPCP(8) - A61N 1/00 (2007 01)
USPC - 607/62
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)
IPCP(8) - A61N 1/00 (2007 01)
USPC - 607/62, 2, 604/66, 891 1, 600/547

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 practicable, search terms used)
MicroPatent, IP com, DialogPro

C DOCUMENTS CONSIDERED TO BE RELEVANT

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<tr>
<th>Category*</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
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Date of the actual completion of the international search
05 July 2007

Date of mailing of the international search report
27 JUL 2007

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Form PCT/ISA/210 (second sheet) (April 2007)