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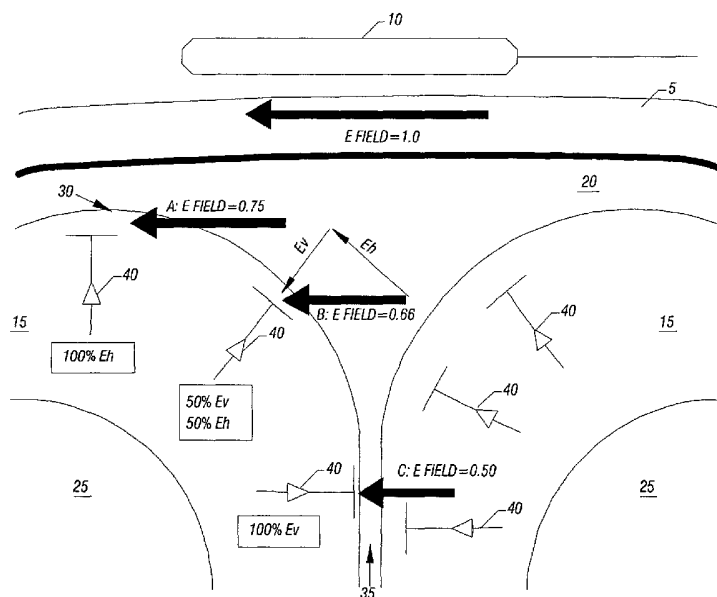
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[Continued on next page]

(54) Title: APPARATUS AND METHODS FOR DELIVERY OF TRANSCRANIAL MAGNETIC STIMULATION



(57) Abstract: Disclosed are apparatus and methods for delivery of transcranial magnetic stimulation. The apparatus includes a TMS coil (10) which when energized generates an electric field substantially parallel to a long axis of the coil (10) and substantially normal to a surface of the coil (10). Furthermore disclosed an apparatus for delivery of TMS in which a coil (10) is adapted to a robotic member for computer-aided control and delivery. Further disclosed are methods of TMS planning and delivery in which subject images are utilized to plan, position and orient the TMS coil (10) for precise delivery. Disclosed also are TMS coils (10) having unique designs to better focus and direct magnetic stimulation.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/14157

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61N 1/00

US CL : 600/13

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)

U.S. : 600/13, 9, 14, 15, 410, 411, 415, 416

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)
Please See Continuation Sheet**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6,179,770 B1 (MOULD) 30 January 2001, see entire document.	1-50
A	US 6,132,361 A (EPSTEIN et al) 17 October 2000, see entire document.	1-50
A, P	US 6,366,814 B1 (BOVEJA et al) 02 April 2002, see entire document.	1-50



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

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"P" document published prior to the international filing date but later than the priority date claimed

"T"

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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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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/14157

Continuation of B. FIELDS SEARCHED Item 3:

WEST: coil; TMS; wire; winding; transcranial magnetic stimulation; former; robot; core; wing; ferrite; iron; insert; region of interest; target