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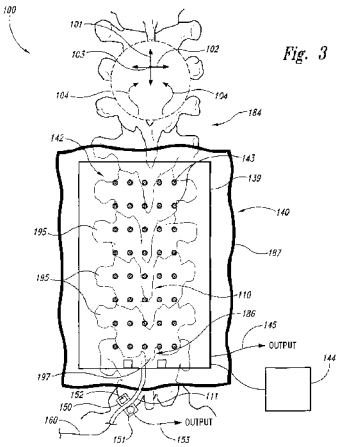


Fig. 3

(57) Abstract: Systems and methods for positioning implanted devices in a patient are disclosed. A method in accordance with a particular embodiment includes, for each of a plurality of patients, receiving a target location from which to deliver a modulation signal to the patient's spinal cord. The method further includes implanting a signal delivery device within a vertebral foramen of each patient, and positioning an electrical contact carried by the signal delivery device to be within ± 5 mm. of the target location, without the use of fluoroscopy. The method can still further include, for each of the plurality of patients, activating the electrical contact to modulate neural activity at the spinal cord. In further particular embodiments, RF signals, ultrasound, magnetic fields, and/or other techniques are used to locate the signal delivery device.

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# INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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USPC - 607/117
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)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
IPC(8) - A61N 1/00, 1/02, 1/04; 1/05
USPC - 607/1, 2, 46, 60, 62, 115, 116, 117, 154

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
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Search Terms: Neural, pain, treat, relief, inhibit, modulate, signal, deliver, generate, propagate, implant, location, position, choose, decide, receive, spine, spinal, vertebrae, foramen, lead, contact, electrode, error, within, accurate, target, location, position, fluoroscopy,

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|---|---|---|
| X<br>=======<br>Y | US 2008/0039738 A1 (DINSMOOR et al.) 14 February 2008 (14.02.2008) Abstract; Fig. 1-6; Para [0007]-[0008], [0024]-[0030], [0037], [0051]-[0054], [0057], [0063]-[0065], [0068]-[0070], [0083]-[0085] | 1-4<br>==========<br>5-37, 39-40, 44-61 |
| Y | US 6,198,963 B1 (HAIM et al.) 06 May 2001 (06.05.2001) Fig 1-2B, 4-5B, 13; col 4, ln 27-37, col 4, ln 60-63, col 9, ln 18-52, col 10, ln 43 to col 12, ln 34, col 14, ln 5-34, col 15, ln 49-55 | 5-58, 60-61 |
| Y | US 2007/0106289 A1 (O'SULLIVAN) 10 May 2007 (10.05.2007) Fig. 1; Para [0032] | 7-8 |
| Y | US 2010/0204569 A1 (BURNSIDE et al.) 12 August 2010 (12.08.2010) Fig. 1-2, 5, 8A-8C, 41; Para [0054], [0059], [0063]-[0065], [0071]-[0076], [0078]-[0080], [0156] | 9, 18-19, 29-30, 38-43, 45-46, 59-61 |
| Y | US 2005/0288759 A1 (JONES et al.) 29 December 2005 (29.12.2005) Fig. 3A-4B, 6B, 8; Para [0083], [0090]-[0091], [0094], [0102] | 19, 20, 38-43, 46, 59-61 |
| Y | US 5,871,487 A (WARNER et al.) 16 February 1999 (16.02.1999) Fig. 2-3; col 5, ln 51 to col 6, ln 32 | 34, 36-37, 39, 56-58 |
| Y | US 2009/0204173 A1 (FANG et al.) 13 August 2009 (13.08.2009) Abstract; Fig. 1, 3; Para [0015]-[0018], [0043]-[0044], [0047]-[0048], [0058], [0123] | 38-43 |
| Y | US 5,078,140 A (KWOH) 07 January 1992 (07.01.1992) Abstract; Fig. 1-7; col 5, ln 18-59 | 57 |
| A | US 2010/0069736 A1 (FINNERAN et al.) 18 March 2010 (18.03.2010) Fig. 2-3, 26, 31; Para [0030], [0075]-[0078], [0084], [0095], [0163]-[0167] | 1-61 |

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