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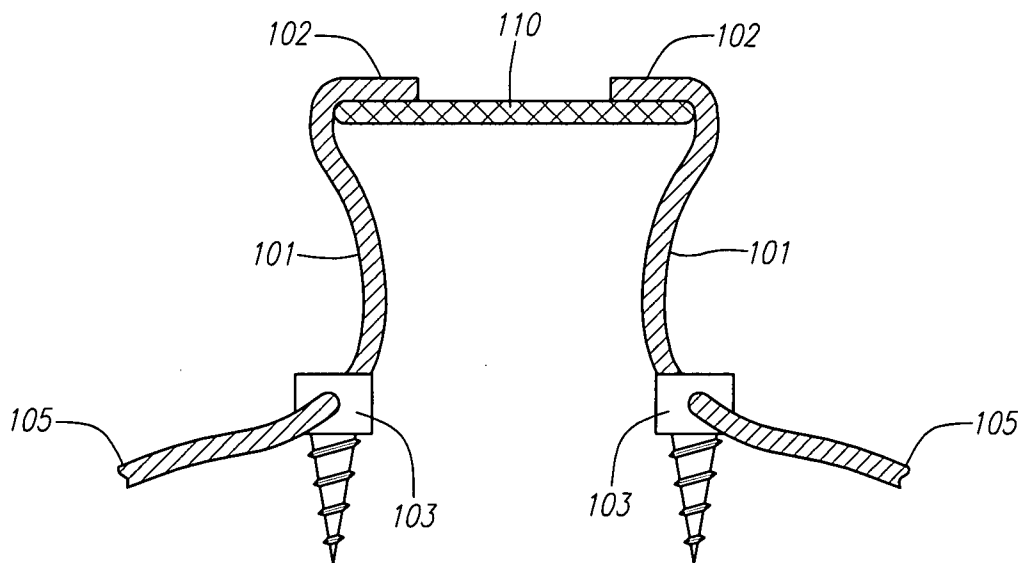
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(54) Title: FASTENING ASSEMBLIES FOR DISC HERNIATION REPAIR AND METHODS OF USE



(57) Abstract: Devices and methods for fixing defects in the annulus fibrosus (vertebral disc) of a patient are described. The devices include a mesh patch, and first and second suture assemblies, each of which include an anchor and a suture. The anchor has a first portion adapted to be inserted into a bone and a second portion having an opening therethrough. The suture is adapted to be disposed through the opening and has a first end adapted to couple to the mesh patch. The method of treatment includes inserting the first portion of the first anchor into a cranial vertebra and inserting the second portion of the second anchor into a caudal vertebra. The first ends of the sutures are attached to the mesh patch. The mesh patch is positioned adjacent the defect by pulling on, or applying tension to, the second ends of the sutures.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 07/12630

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A61F 2/44 (2008.01)

USPC - 623/17.11

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)

IPC(8): A61F 2/44 (2008.01)

USPC: 623/17.11

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

USPC: 623/17.11, 17.16, 16.11

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

WEST (PGPB, USPT,USOC,EPAB,JPAB; PLUR), Google Patents;

search terms: anulus fibrosus, screw, anchor, weld, welding, welded, patch, seal, pore, barriers, sheet, cover

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2004/0260397 A1 (LAMBRECHT et al.) 23 December 2004 (23.12.2004) para [0016]; para [0119]; para [0120]; para [0125]; para [0126]; para [0133]; para [0134]; para [0139]; para [0156]; para [0157]; para [0197]; para [0198]; para [0203]; para [0204]; para [0206]; para [0208]; para [0223]; Fig. 11; Fig. 57.	1-85
A	US 2006/0100711 A1 (CAUTHEN J.) 11 May 2006 (11.05.2006) para [0112]; Fig. 44a.	1-85
A	US 2005/0234557 A1 (LAMBRECHT et al.) 20 October 2005 (20.10.2005) para [0094]; Fig. 44a.	1-85

 Further documents are listed in the continuation of Box C.

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"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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