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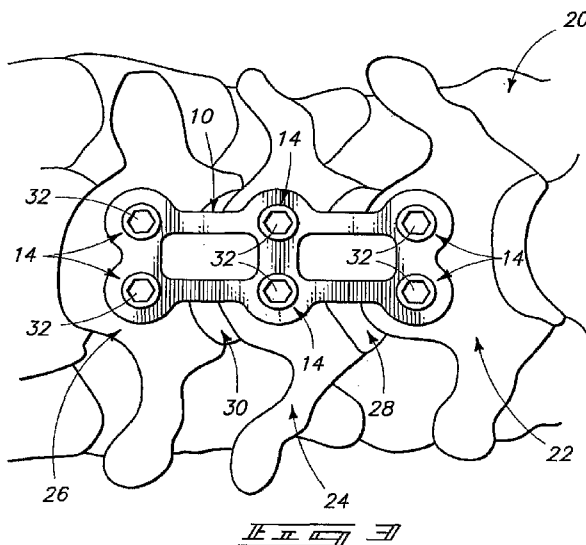
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(54) Title: THERAPEUTIC STRUCTURES



(57) Abstract: The invention includes skeletal support structures. The structures can be spinal plates (such as cervical plates), rods, hooks, vertebral spacers, vertebral structural replacement, joint replacement prosthetics, or screws; and can be formed of a carbon/metal matrix encapsulated with pyrocarbon. The screws and/or hooks can contain pores configured to receive growing bone to enhance union of the screws and/or hooks with skeletal material. The invention also includes therapeutic constructions containing structures attached to vertebrae through fasteners.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 06/48286

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A61L 27/42

USPC - 427/2.26

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) - A61L 27/42

USPC - 427/2.26

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
IPC(8) - A61L 27/00, 27/02, 27/04, 27/06, 27/08, 27/14, 27/30, 27/40, 27/42 (2009.01); A61F 2/30, 2/32, 2/44 (2009.01); A61B 17/58, 17/68, 17/80, 17/84, 17/86 (2009.01) (text search) (Continued in Supplemental Box)

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

PubWEST (PGPB, USPT, USOC, EPAB, JPAB); DialogPRO (Engineering) and Google Scholar.

Search Terms: skeletal, spinal, vertebral, carbon, tungsten, orthopedic, pyrocarbon, pyrolyti\$, vertebra\$, spine, intervertebra\$, interbody, cage, spacer, cervical, plate, hook, graphite, pore, porous, percent, percentage, porous screw, bone

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 2005/0079201 A1 (RATHENOW et al.) 14 April 2005 (14.04.2005) para [0032], [0033]-[0035], [0039], [0040], [0099], [0107], [0117], [0123]-[0125], [0132], [0166].	1, 2, 20-22, 24, 43-46 ----- 3-19, 23, 25-42, 47-93
Y	US 2002/0115742 A1 (TRIEU et al.) 22 August 2002 (22.08.2002) para [0010], [0017], [0022], [0043].	3-14, 23, 25-31
Y	US 5,397,363 A (GELBARD) 14 March 1995 (14.03.1995) col 2, ln 1-21, 48-51.	15-19, 32-42
Y	US 2005/0090905 A1 (HAWKINS et al.) 28 April 2005 (28.04.2005) para [0002].	17, 39, 59
Y	US 4,484,570 A (SUTTER et al.) 27 November 1984 (27.11.1984) fig 2; col 1, ln 9-17; col 5, ln 26-63; col 6, ln 29-34.	47-62
Y	US 4,164,794 A (SPECTOR et al.) 21 August 1979 (21.08.1979) col 11, ln 40-57.	63
Y	US 2005/0080414 A1 (KEYER et al.) 14 April 2005 (14.04.2005) para [0004], [0018], [0025], [0026].	64-79
Y	US 2004/0199260 (POPE et al.) 07 October 2004 (07.10.2004) para [0004], [0006], [0029], [0117], [0118], [0123], [0126].	80-89
Y	US 2001/0031966 A1 (TORMALA et al.) 18 October 2001 (18.10.2001) para [0016].	90-93

 Further documents are listed in the continuation of Box C.

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"&" document member of the same patent family

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Continuation of:

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