

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
21 December 2007 (21.12.2007)

PCT

(10) International Publication Number
WO 2007/146738 A3

(51) International Patent Classification:

A61F 2/44 (2006.01) A61B 17/58 (2006.01)
A61B 17/56 (2006.01) A61F 2/30 (2006.01)

(21) International Application Number:

PCT/US2007/070602

(22) International Filing Date: 7 June 2007 (07.06.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

11/450,600 8 June 2006 (08.06.2006) US

(71) Applicant and

(72) Inventor: PFLUM, Francis [US/US]; 165 Mcclees Road,
Middletown, NJ 07701 (US).

(74) Agents: GENOVA, John, M. et al.; White & Case LLP,
1155 Avenue Of The Americas, New York, NY 10036
(US).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG,
ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL,
IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK,
LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW,
MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,
PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA,
ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL,
PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

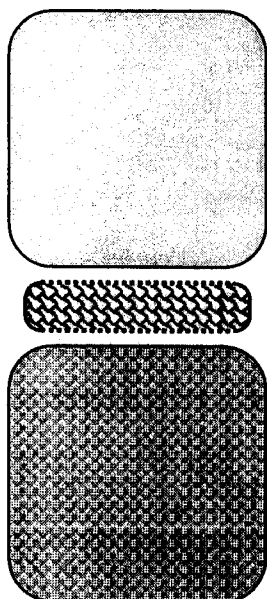
Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

(88) Date of publication of the international search report:

17 July 2008

(54) Title: SAC FOR USE IN SPINAL SURGERY



(57) Abstract: A method for fusing spinal bone is provided. The method comprises placing a sac between two or more adjacent sections of the spine to be fused, and filling the sac with bone tissue. The surfaces of the sac abutting the sections of the spine comprise porous material for allowing bone to grow between the spine and the sac. Surfaces of the sac not abutting the sections of the spine are nonporous to bodily fluids and thereby prevent premature deterioration of the bone tissue inside the sac. A sac for fusing spinal bone and a kit comprising the sac are also provided.



WO 2007/146738 A3

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/US07/70602

A. CLASSIFICATION OF SUBJECT MATTER
 IPC: **A61F 2/44**(2006.01);**A61B 17/56**(2006.01);**A61B 17/58**(2006.01);**A61F 2/30**(2006.01)
A61F 2/44(2006.01);**A61B 17/56**(2006.01);**A61B 17/58**(2006.01);**A61F 2/30**(2006.01)
 USPC: 623/17.11-17.16;606/60,61,92,93,94
 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. : 623/17.11-17.16;606/60,61,92,93,94

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)

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 6,969,405 B2 (SUDDABY) 29 November 2005 (29.11.2005), Figs. 8e and 9e, column 4, lines 24-65.	18-26 ----- 27-29
X Y	US 6,582,467 B1 (TEITELBAUM et al) 24 June 2003 (24.06.2003), Fig. 1c, column 2, lines 41-67, column 3 and column 4, lines 1-64. US 6,800,245 B1 (ERBE et al) 5 October 2004 (5.10.2004), column 13, lines 37-65.	1-17 27-29
X	US 6,958,077 B2 (SUDDABY) 25 October 2005 (25.10.2005), Figures 6-8, column 4, lines 9-46.	18-28

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

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

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" 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
 15 April 2008 (15.04.2008)

Date of mailing of the international search report
06 MAY 2008

Name and mailing address of the ISA/US
 Mail Stop PCT, Attn: ISA/US
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 Facsimile No. (571) 273-3201

Authorized officer
 Anu Ramana
 Telephone No. (571) 272-4718

Anuradha Ramana
ANURADHA RAMANA
 PRIMARY EXAMINER