

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
29 December 2005 (29.12.2005)

PCT

(10) International Publication Number
WO 2005/123155 A3

(51) International Patent Classification:
A61L 24/00 (2006.01) A61L 27/46 (2006.01)

(21) International Application Number:
PCT/US2005/020484

(22) International Filing Date: 10 June 2005 (10.06.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/578,610 10 June 2004 (10.06.2004) US

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(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,

GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ,
OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
VN, YU, 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, MC, 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:
2 February 2006

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: FLEXIBLE BONE COMPOSITE

(57) Abstract: The present invention relates in general to implantable flexible bone composites, and method for preparing the same. The flexible bone composite includes at least one polymeric layer and at least one calcium-containing layer. The polymeric layer can be a polymeric layer including a synthetic polymer. The calcium-containing layer can include a calcium compound such as β -Ca₃(PO₄)₂. The flexible bone composites of the invention are useful as bone void fillers and have improved handling characteristics.



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INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2005/020484

A. CLASSIFICATION OF SUBJECT MATTER
A61L24/00 A61L27/46

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)
A61B A61F A61L

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 practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 824 088 A (KIRSCH ET AL) 20 October 1998 (1998-10-20) column 2, lines 52-65 column 3, lines 1,2,52-58 column 4, lines 47-60 -----	1-4, 6, 10-15, 18, 21-29
X	WO 2004/032988 A (OSTEOTECH, INC; SHIMP, LAWRENCE, A; KNAACK, DAVID) 22 April 2004 (2004-04-22) page 5, lines 16-26 page 7, lines 1-18 page 8, lines 3-7 page 18, lines 17-32 pages 19,20,22 page 29, lines 13-18 ----- -/--	1-4, 7-9, 14, 15

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in 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 document but 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)
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- *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

29 November 2005

Date of mailing of the international search report

12/12/2005

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2005/020484

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 766 618 A (LAURENCIN ET AL) 16 June 1998 (1998-06-16) column 1, lines 13-15 column 3, lines 1-8 column 4, lines 10-26 column 5, line 54 - column 6, line 48 column 7, lines 35-40 column 8, lines 6-21 claims	1-4, 6-8, 29
A	US 5 380 328 A (MORGAN ET AL) 10 January 1995 (1995-01-10) column 3, lines 55-60 column 4, lines 21-28	1, 19, 21, 27, 29
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A	DE 197 21 661 A1 (ZIMMER, MARKUS, DR., 83666 WAAKIRCHEN, DE; JANSSON, VOLKMAR, PRIV.DOZ.) 26 November 1998 (1998-11-26) column 4, lines 23-29	1-4, 19, 21, 27, 29
A	LIU Q ET AL: "Covalent bonding of PMMA, PBMA, and poly(HEMA) to hydroxyapatite particles" JOURNAL OF BIOMEDICAL MATERIALS RESEARCH, WILEY, NEW YORK, NY, US, vol. 40, no. 2, May 1998 (1998-05), pages 257-263, XP002336326 ISSN: 0021-9304 page 257	1-4

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2005/020484

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claim 29 directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the flexible bone composite.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2005/020484

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