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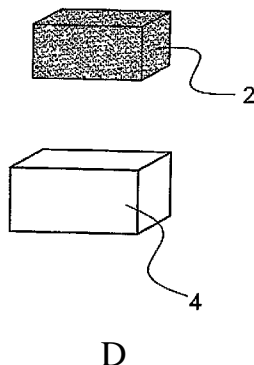
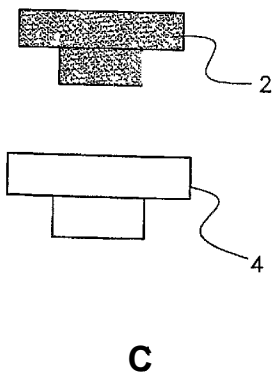
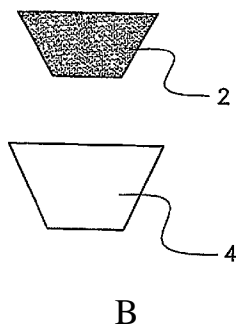
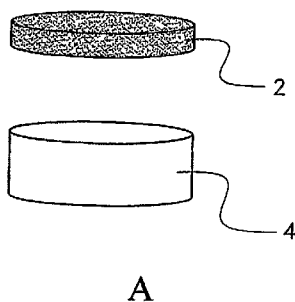
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[Continued on next page]

(54) Title: OSTEOGRAFT TREATMENT TO PROMOTE OSTEOINDUCTION AND OSTEOGRAFT INCORPORATION



(57) Abstract: The invention provides a bone implant, or osteograft, with improved retention of bioactive agents within the surface of the osteograft. Pits or pits formed within the surface of the osteograft have porous plugs placed within them to retain fluid comprising bioactive agents. Pits can also be formed so that the dimensions of the pits facilitate retention of fluid within a pit by hydrostatic attraction of fluid molecules within the pit.

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Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(H))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(Hi))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

Published:

- *with international search report*

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

6 March 2008

INTERNATIONAL SEARCH REPORT

International application No

PCT/US2006/024389

A. CLASSIFICATION OF SUBJECT MATTER ,
 INV. A61L27/54 A61F2/28

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)
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 4 950 296 A (MCINTYRE JONATHAN L [US]) 21 August 1990 (1990-08-21) column 1, lines 45-47 column 2, lines 1-45 figure 1	1-11, 20-38
A	US 2004/082937 A1 (AUSIELLO DENNIS [US] ET AL) 29 April 2004 (2004-04-29) pages 2,6,9; figure 3	1-11, 20-38
A	DE 34 45 709 A1 (DRAENERT KLAUS) 19 June 1986 (1986-06-19) claims 2,8,14,15,24	

D

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 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)

"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

12 September 2007

Date of mailing of the international search report

14/01/2008

Name and mailing address of the ISA/

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Authorized officer

Qui ncy, Marie-France

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2006/024389

Box No. 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 **D** Claims Nos. :
because they relate to subject matter not required to be searched by this Authority, namely
- 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 No. 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

see additional sheet

- 1 ☐ As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.
- 2 ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
- 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 pad by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.

31-34 (parti al ly) , 1-11 , 20-30, 35-38

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCTASA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-11, 20-30, 31-34 (partially), 35-38

An osteograft containing pits and plugs of complementary geometric shape.

2. claims: 13, 31-34 (partially), 39-41

An osteograft containing a pit with an opening diameter that is less than the base diameter of the pit.

3. claims: 12, 14-19

An osteograft containing a plug which is placed into a pit so that it does not fill the pit, thereby creating a reservoir.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2006/024389

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4950296	A	21-08-1990	NONE
US 2004082937	A1	29-04-2004	NONE
DE 3445709	A1	19-06-1986	WO 8603667 A1 03-07-1986
		EP 0205512 A1 30-12-1986	
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