Abstract: Described are implantable, malleable medical materials comprising mineral particles, insoluble collagen fibers, and a gel-forming polysaccharide component and/or another added gel-former. The malleable medical materials can be used treat bone or other tissue defects in patients, including in conjunction with biologically active factors such as osteogenic proteins. Also described are methods and materials that can be used to prepare the malleable medical materials.

Published:

— with international search report (Art. 21(3)),

before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report: 17 June 2010
A. CLASSIFICATION OF SUBJECT MATTER

INV. A61L27/26 A61L27/54 A61L27/44
ADD.

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 database consulted during the international search (name of database and, where practical, search terms used)
EPO-Internal, BIOSIS, EMBASE, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category*</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>US 2007/190083 A1 (SCIFERT JEFFREY L [US] ET AL) 16 August 2007 (2007-08-16) paragraphs [0021], [0 23], [0 46] - [0051], [0 55] example 1 figure 1 claims 1-45</td>
<td>1-3, 5-7, 9, 11-14</td>
</tr>
<tr>
<td>X</td>
<td>US 2007/254042 A1 (DRAPEAU SUSAN J [US] ET AL) 1 November 2007 (2007-11-01) paragraphs [0013], [0 28] - [0031], [0 35], [0 41], [0 50] example 1 figures 1, 2 claims 1-3, 6-9, 14</td>
<td>9-12</td>
</tr>
</tbody>
</table>

Further documents are listed in the continuation of Box C. X 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.

**S** document member of the same patent family

Date of the actual completion of the international search

21 April 2010

Date of mailing of the international search report

03/05/2010

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016

Authorized officer

López García, Mónica
<table>
<thead>
<tr>
<th>Patent document cited in search report</th>
<th>Publication date</th>
<th>Patent family member(s)</th>
<th>Publication date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>EP 2010237 A2</td>
<td>07-01-2009</td>
</tr>
<tr>
<td></td>
<td></td>
<td>JP 2009533165 T</td>
<td>17-09-2009</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WO 2007130753 A2</td>
<td>15-11-2007</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CA 2650955 A1</td>
<td>15-11-2007</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CN 101466415 A</td>
<td>24-06-2009</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EP 2021044 A2</td>
<td>11-02-2009</td>
</tr>
<tr>
<td></td>
<td></td>
<td>US 2008152691 A1</td>
<td>26-06-2008</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WO 2007130906 A2</td>
<td>15-11-2007</td>
</tr>
</tbody>
</table>