Title: DELIVERY SYSTEM FOR BONE GROWTH PROMOTING MATERIAL

Abstract: A delivery system that includes a bone growth promoting material encapsulated within a water absorptive gelatinizable covering is used to promote bone growth in order to repair a bone defect and/or strengthen a weakened bone region. The delivery system may be shaped and sized in order to fit within a bleeding wound (e.g. one that is formed in the gingiva when a tooth is extracted). The covering may be formed of a gelatinizible gauze that forms a gel-like material when moistened with water. The delivery system is contained within a moisture resistant package prior to use. Alternatively, the delivery system comprises a bone growth promoting material and thickening agent contained within a syringe that, upon adding water, forms a viscous gel or stiff putty.
A. CLASSIFICATION OF SUBJECT MATTER
   IPC: AGIK 35/32 (2006.01)
   USPC: 424/549
   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.: 424/549

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)
   Please See Continuation Sheet

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>Y</td>
<td>US 2003/0026770 A1 (ZYMAMITYS) 06 Feb 2003 (06.02.2003), abstract, summary of the invention, pages 3-4, in particular.</td>
<td>1-27</td>
</tr>
<tr>
<td>Y</td>
<td>US 6,440,427 B1 (WADSTROM) 27 August 2002 (27.08.2002), abstract, columns 1, and 3-6, in particular.</td>
<td>1-24</td>
</tr>
<tr>
<td>Y</td>
<td>US 5,620,702 (PODELL et al) 15 April 1997 (15.04.1997), abstract, summary of the invention, column 8, 1st paragraph, in particular.</td>
<td>1-24</td>
</tr>
<tr>
<td>Y</td>
<td>US 5,635,162 (FISCHER) 03 June 1997 (03.06.1997), abstract, summary of the invention, columns 4, 8-10.</td>
<td>1-27</td>
</tr>
</tbody>
</table>

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

Date of the actual completion of the international search: 28 February 2006 (28.02.2006)
Date of mailing of the international search report: 23 March 2006

Authorized officer: Satyendra P. Singh
Telephone No. 371-272-8790

Form PCT/ISA/210 (second sheet) (April 2005)
## INTERNATIONAL SEARCH REPORT

### C. (Continuation) 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>Y</td>
<td>US 6,458,162 B1 (KOBLISH et al) 01 Oct 2002 (01.10.2002), abstract, summary of the invention, column 12, figure 6, in particular.</td>
<td>1-24</td>
</tr>
<tr>
<td>Y</td>
<td>US 4,578,055 (FISCHER) 25 March 1986 (25.03.1986), abstract, and summary of the invention.</td>
<td>1-27</td>
</tr>
</tbody>
</table>
Continuation of B. FIELDS SEARCHED Item 3:
EAST: USPAT, USOCR, PG-PUB, JPO, EPO, DERWENT
STN (STIC-SEARCHED): REGISTRY, HCAPLUS
SEARCH STRATEGY:
tooth or teeth or dental or orthodont? or periodont? and socket or void or gap
gauze and cellulose and gelat? and cat gut and adhesive and fibrin
hydroxyapatite or ceramic or calcium and bone
pouch or tube or plug and fill? and hemost? and syringe and putty or gel
resin and polymer? and photocrosslink? or crosslink?