Title: A METHOD FOR CLEANING DENTAL PLAQUE FROM TEETH USING AN ADHERENT PEELABLE GEL

Abstract: The method for cleaning dental plaque biofilm from the teeth includes the steps of applying a liquid gelable composition to the teeth, the composition including a positively charged polymer such as chitosan, the liquid composition having a viscosity which results in coverage of substantially all of the exposed areas of the teeth. The liquid composition is then gelled by the addition of a second composition, such as a negatively charged compound. The resulting gelled composition has an adherence to the plaque biofilm which is greater than the adherence between the biofilm and the teeth. The gel layer with the biofilm is peeled off of the teeth, removing the dental plaque.
# INTERNATIONAL SEARCH REPORT

**A. CLASSIFICATION OF SUBJECT MATTER**

INV. A61Q11/00 A61K8/04 A61K8/73

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)

A61K A61Q

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, 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>Y</td>
<td>US 5 310 563 A (CURTIS JOHN [US] ET AL) 10 May 1994 (1994-05-10) column 4, line 31 - line 41 column 6, line 36 - line 53 claim 1 ----</td>
<td>1-10</td>
</tr>
<tr>
<td>A</td>
<td>US 5 000 942 A (LIBIN BARRY M [US]) 19 March 1991 (1991-03-19) claims 1,9 ----</td>
<td>1-10</td>
</tr>
</tbody>
</table>

[X] 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

- "I" 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

29 October 2008

Date of mailing of the international search report

06/11/2008

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2 NL-3330 HG Dordrecht
Tel: (+31-70) 340-2040, Fax: (+31-70) 340-3016

Authorized officer

Krattinger, B
<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>A</td>
<td>EP 0 563 013 A (CIBA GEIGY AG [CH] CIBA GEIGY AG [AT]) 29 September 1993 (1993-09-29) claim 1 page 6, line 34 - line 56 page 7, line 4</td>
<td>1-10</td>
</tr>
<tr>
<td>A</td>
<td>WO 02/11681 A (S &amp; C POLYMER SILICON UND COMP [DE]; ENGELBRECHT JUERGEN [DE]) 14 February 2002 (2002-02-14) claim 1; example 2</td>
<td>1-10</td>
</tr>
<tr>
<td>Patent document cited in search report</td>
<td>Publication date</td>
<td>Patent family member(s)</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-----------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>US 5639445 A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BR 0311261 A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CA 2487078 A1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CN 1671350 A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EP 1507506 A1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MX PA04011571 A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RU 2286762 C2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WO 03099246 A1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>US 2004175333 A1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ZA 200409448 A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AU 3551193 A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BR 9301334 A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CA 2092513 A1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DE 59306229 D1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>JP 6041202 A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MX 9301732 A1</td>
</tr>
<tr>
<td>US 2005175959 A1</td>
<td>11-08-2005</td>
<td>NONE</td>
</tr>
<tr>
<td>WO 0211681 A</td>
<td>14-02-2002</td>
<td>AU 8587501 A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>JP 2004506051 T</td>
</tr>
<tr>
<td></td>
<td></td>
<td>US 2003183124 A1</td>
</tr>
</tbody>
</table>