Title: ORTHODONTIC BRACKET WITH ROTARY LIGATING COVER

Abstract: The present invention provides designs for a self-ligating orthodontic bracket. According to one embodiment, the self-ligating orthodontic bracket includes a mounting base for attachment to a tooth surface, an archwire slot formed upon the base and sized for receiving an orthodontic archwire, a rotary ligating cover selectively rotatable between an open position permitting access to the archwire slot and a closed position covering the archwire slot, and one or more locking features for holding the rotary ligating cover in a closed position. In one embodiment, the bracket includes one or more locking tabs on the rotary ligating cover aligned in coplanar relation to the rotary ligating cover and cooperatively mating with cutout portions in the base. In one embodiment, the bracket includes at least one resilient retention mechanism adjacent to the one or more locking tabs and aligned in coplanar relation to the rotary ligating cover. The resilient retention mechanism may include one or more relief channels permitting flexing of at least portions of the rotary ligating cover adjacent to the one or more locking tabs.
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: 5 June 2008
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPC: A61C 3(00) (2006.01)
USPC: 433/8,10
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.: 433/8, 10

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)

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 5,685,711 (Hanson) 11 November 1997 (11.11.1997) column 6, lines 6-8 and column 7, paragraph 24-30, 28-38</td>
<td>1-2, 4-8, 11-15, 19-24, 26-29, 32-34, 40-50 and 52-53</td>
</tr>
<tr>
<td>Y</td>
<td>US 6,168,428 B1 (Voudouris) 2 January 2001 (02.01.2001), column 10, paragraph 17-18.</td>
<td>20 and 41</td>
</tr>
<tr>
<td></td>
<td>US 6,364,798 B1 (HUFF et al) 28 May 2002 (28.05.2002), column 6, paragraph 22-23, 26-27</td>
<td>22-23 and 43-44</td>
</tr>
</tbody>
</table>

Further documents are listed in the continuation of Box C. See patent family annex.

Date of the actual completion of the international search: 18 March 2008 (18.03.2008)
Date of mailing of the international search report: 27 MAR 2008

Name and mailing address of the ISA/US
Mail Stop PCT. Attn: ISA/US
Commissioner for Patents
P O Box 1450
Alexandria, Virginia 22313-1450
Facsimile No. (571) 273-3201

Authorized officer /John J Wilson/  
Telephone No. 571-272-3700

Form PCT/ISA/210 (second sheet) (April 2007)