(54) Title: SURGICAL MEASUREMENT AND RESECTION FRAMEWORK

(57) Abstract: A frame is attachable to first and second bone portions of a patient to facilitate measurement and resection of one or more bony landmarks. The frame has two anchoring features, each of which has a semispherical surface that permits rotational adjustment of the frame against the bone portions until the frame is secured. A bridging structure couples the anchoring features together such that the anchoring features are lockably movable with respect to each other. The bridging structure may have three linear sliders that provide the relative motion. A locking mechanism exerts pressure on all three sliders to lock them in place. An external anchoring feature enables attachment of the frame to a stationary reference to stabilize the frame. The frame also has registration features that permit attachment of measurement or resection tools to the frame. The frame is particularly useful for measuring and resecting spinal facets for facet replacement.
Published:
— with international search report

(88) Date of publication of the international search report:
23 March 2006

For two-letter codes and other abbreviations, refer to the “Guidance Notes on Codes and Abbreviations” appearing at the beginning of each regular issue of the PCT Gazette.
INTERNATIONAL SEARCH REPORT

International application No.
PCT/US05/18127

A. CLASSIFICATION OF SUBJECT MATTER
IPC(7) : A61F 5/00; A61B 17/58
US CL : 606/87, 102
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. : 606/53, 54, 56-61, 79, 80, 82, 83, 86, 87, 102, 103, 623/17.11-17.16

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 6,221,082 B1 (MARINO et al) 24 April 2001 (24.04.2001), see Figures 1B, 3-5 and 8; column 1, lines 37-43, column 2, lines 53-62, column 3, lines 22-35, column 4, lines 45-49, and column 4, line 63-column 5, line 4.</td>
<td>16-19, 21, 22, 38-42, 44, 45</td>
</tr>
<tr>
<td>---</td>
<td></td>
<td>23, 46</td>
</tr>
<tr>
<td>Y</td>
<td>US 6,579,319 B2 (GOBLE et al) 17 June 2003 (17.06.2003), see Figures 2 and 3; column 3, lines 18-23.</td>
<td>23, 46</td>
</tr>
<tr>
<td>X</td>
<td>US 4,907,577 (WU) 13 March 1990 (13.03.1990), see Figures 3-6; column 1, lines 50-65, column 2, line 40 to column 4, line 12.</td>
<td>31, 32</td>
</tr>
<tr>
<td>---</td>
<td></td>
<td>33-37</td>
</tr>
<tr>
<td>A</td>
<td>US 4,586,497 (DAPRA et al) 06 May 1986 (06.05.1986), see entire document.</td>
<td>1-46</td>
</tr>
<tr>
<td>A</td>
<td>US 6,126,664 A (TROXELL et al) 03 October 2000 (03.10.2000), see entire document.</td>
<td>1-46</td>
</tr>
</tbody>
</table>

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

* Special category 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 ord dissertation, 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 novel or 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

Date of mailing of the international search report
8 JAN 2006

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) 272-3201

Authorized officer
Urmil Chattopadhyay

Telephone No. (571) 272-4748

Form PCT/ISA/210 (second sheet) (April 2005)