A dental tool for guiding a drill or biopsy punch during a dental implant procedure includes a drill bushing pivotally attached to a bushing holder. The bushing holder, in turn, is attached to a surgical stent that fits a patient's teeth, gums, and/or jaw. The pivotal connection between the drill bushing and the bushing holder allows the angular orientation of the drill bushing to be adjusted, so the trajectory of the drill or biopsy punch can be aimed directly into the patient's jawbone. Once the drill bushing is properly oriented, the bushing is bonded to the bushing holder to prevent further movement between the bushing and the holder.
# INTERNATIONAL SEARCH REPORT

**International application No.**  
PCT/US04/13359

## A. CLASSIFICATION OF SUBJECT MATTER

<table>
<thead>
<tr>
<th>IPC(7)</th>
<th>A61 C 3/02, 19/04, 3/00</th>
</tr>
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<tbody>
<tr>
<td>US CL</td>
<td>433/75,76,72,173,408/214,72,115,606/80,96</td>
</tr>
</tbody>
</table>

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. : 433/75,76,72,173,408/214,72,115,606/80,96

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 5,800,168 A (CASCIONE et al.) 01 September 1998 (01.09.1998), See entire document.</td>
<td>1,4,7,8,11,14,51,54-58,60,61</td>
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<td></td>
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<td>9,10,12,13,52,53,59</td>
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<tr>
<td>Y</td>
<td>US 2003/0083667 A1 (RALPH et al) 01 May 2003 (01.05.2003), See entire document.</td>
<td>1-6,15-17</td>
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<tr>
<td></td>
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<td>9,10,12,13,52,53,59</td>
</tr>
</tbody>
</table>

Further documents are listed in the continuation of Box C.

See patent family annex.

- "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

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principles 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
- "A" document member of the same patent family

**Date of the actual completion of the international search:** 22 November 2004 (22.11.2004)

**Date of mailing of the international search report:** 28 JAN 2005

**Name and mailing address of the ISA/US**  
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Melba Bumgarner  
Telephone No. 703-308-0858

Form PCT/ISA/210 (second sheet) (January 2004)
### INTERNATIONAL SEARCH REPORT

**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. □ Claims Nos.:__
   
because they relate to subject matter not required to be searched by this Authority, namely:

2. □ Claims Nos.:__
   
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. □ Claims Nos.:__
   
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)**

This International Searching Authority found multiple inventions in this international application, as follows:

Please See Continuation Sheet

1. □ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. □ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. □ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:__

4. ■ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-17 and 51-61

**Remark on Protest**

□ The additional search fees were accompanied by the applicant’s protest.

□ No protest accompanied the payment of additional search fees.

Form PCT/ISA/210 (continuation of first sheet(2)) (January 2004)
BOX III. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING:

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claim(s) 1-17, 51-61, drawn to a dental tool for guiding a drill bit.

Group II, claim(s) 18-37, drawn to method for adjusting a drill bushing.

Group III, claim(s) 47-50, 62-70, drawn to a dental tool method.

Group IV, claim(s) 71-79, drawn to method for installing a dental implant.

Group V, claim(s) 87-90, drawn to method for installing a dental implant.

Group VI, claim(s) 91-95, drawn to method of making an osteotomy.

Group VII, claim(s) 96-97, drawn to a two part ruler.

Group VIII, claim(s) 98-99, drawn to a tissue punch.

Group IX, claim(s) 80-86, drawn to a method for installing a dental implant.

Group X, claim(s) 38-46, drawn to a dental tool for guiding a drill bit.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group I invention is a dental tool comprising a bushing holder, while the special technical feature of Group II invention is a method of adjusting a drill bushing comprising the step of creating an overall image. Since the special technical feature of Group I invention is not present in the Group III invention being claimed and the special technical feature of Group III invention is not present in the Group I invention being claimed, unity of invention is lacking.

The inventions listed as Groups I and III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group I invention is a bushing holder, while the special technical feature of Group III invention is a dental tool method comprising the step of forming a seat about a plug. Since the special technical feature
of Group I invention is not present in the Group II invention being claimed and the special technical feature of Group II invention is not present in the Group I invention being claimed, unity of invention is lacking.

The inventions listed as Groups I and IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group I invention is a bushing holder, while the special technical feature of Group IV invention is a method for installing a dental implant comprising the step of taking a tomographical scan of the bone. Since the special technical feature of Group I invention is not present in the Group IV invention being claimed and the special technical feature of Group IV invention is not present in the Group I invention being claimed, unity of invention is lacking.

The inventions listed as Groups I and V do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group I invention is a bushing holder, while the special technical feature of Group V invention is a method for installing a dental implant comprising the step of attaching a healing cap. Since the special technical feature of Group I invention is not present in the Group V invention being claimed and the special technical feature of Group V invention is not present in the Group I invention being claimed, unity of invention is lacking.

The inventions listed as Groups I and VI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group I invention is a bushing holder, while the special technical feature of Group VI invention is a method of making an osteotomy comprising the step of making a bone incision with a tissue punch. Since the special technical feature of Group I invention is not present in the Group VI invention being claimed and the special technical feature of Group VI invention is not present in the Group I invention being claimed, unity of invention is lacking.

The inventions listed as Groups I and VII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group I invention is a dental tool comprising a bushing holder, while the special technical feature of Group VII invention is a two part ruler comprising a sliding portion. Since the special technical feature of Group I invention is not present in the Group VII invention being claimed and the special technical feature of Group VII invention is not present in the Group I invention being claimed, unity of invention is lacking.

The inventions listed as Groups I and VIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group I invention is a dental tool comprising a bushing holder, while the special technical feature of Group VIII invention is a tissue punch comprising an elongated tooth. Since the special technical feature of Group I invention is not present in the Group VIII invention being claimed and the special technical feature of Group VIII invention is not present in the Group I invention being claimed, unity of invention is lacking.

The inventions listed as Groups I and IX do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group I invention is a dental tool comprising a bushing holder, while the special technical feature of Group IX invention is a method of installing a dental implant comprising the step of creating a model of at least one of the upper jaw and the lower jaw. Since the special technical feature of Group I invention is not present in the Group IX invention being claimed and the special technical feature of Group IX invention is not present in the Group I invention being claimed, unity of invention is lacking.

The inventions listed as Groups I and X do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group I invention is a dental tool comprising a bushing holder, while the special technical feature of Group X invention is a drill bushing having a generally spherical surface. Since the special technical feature of Group I invention is not present in the Group X invention being claimed and the special technical feature of Group X invention is not present in the Group I invention being claimed, unity of invention is lacking.
The inventions listed as Groups II and III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group II invention is a method for adjusting a drill bushing comprising the step of creating an overall image, while the special technical feature of Group III invention is the step of forming a stent about a plug. Since the special technical feature of Group II invention is not present in the Group III invention being claimed and the special technical feature of Group III invention is not present in the Group II invention being claimed, unity of invention is lacking.

The inventions listed as Groups II and IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group II invention is the step of creating an overall image, while the special technical feature of Group IV invention is the step of taking a tomographical scan of the bone. Since the special technical feature of Group II invention is not present in the Group IV invention being claimed and the special technical feature of Group IV invention is not present in the Group II invention being claimed, unity of invention is lacking.

The inventions listed as Groups II and V do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group II invention is the step of creating an overall image, while the special technical feature of Group V invention is the step of attaching a healing cap. Since the special technical feature of Group II invention is not present in the Group V invention being claimed and the special technical feature of Group V invention is not present in the Group II invention being claimed, unity of invention is lacking.

The inventions listed as Groups II and VI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group II invention is the step of creating an overall image, while the special technical feature of Group VI invention is the step of making a bone incision with a tissue punch. Since the special technical feature of Group II invention is not present in the Group VI invention being claimed and the special technical feature of Group VI invention is not present in the Group II invention being claimed, unity of invention is lacking.

The inventions listed as Groups II and VII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group II invention is the step of creating an overall image, while the special technical feature of Group VII invention is a two part ruler comprising a sliding portion. Since the special technical feature of Group II invention is not present in the Group VII invention being claimed and the special technical feature of Group VII invention is not present in the Group II invention being claimed, unity of invention is lacking.

The inventions listed as Groups II and VIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group II invention is the step of creating an overall image, while the special technical feature of Group VIII invention is a tissue punch comprising an elongated tooth. Since the special technical feature of Group II invention is not present in the Group VIII invention being claimed and the special technical feature of Group VIII invention is not present in the Group II invention being claimed, unity of invention is lacking.

The inventions listed as Groups II and IX do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group II invention is the step of creating an overall image, while the special technical feature of Group IX invention is the step of creating a model of at least one of the upper jaw and the lower jaw. Since the special technical feature of Group II invention is not present in the Group IX invention being claimed and the special technical feature of Group IX invention is not present in the Group II invention being claimed, unity of invention is lacking.

The inventions listed as Groups II and X do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group II invention is the step of creating an overall image, while the special technical feature of Group X invention is a drill bushing having a generally spherical surface. Since the special technical feature of Group II invention is not present in the Group X invention being claimed and the special technical feature of Group X invention is not present in the Group II invention being claimed, unity of invention is lacking.

Form PCT/ISA/210 (extra sheet) (January 2004)
The inventions listed as Groups III and IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group III invention is a dental tool comprising the step of forming a stent about a plug, while the special technical feature of Group IV invention is the step of taking a tomographical scan of the bone. Since the special technical feature of Group III invention is not present in the Group IV invention being claimed and the special technical feature of Group IV invention is not present in the Group III invention being claimed, unity of invention is lacking.

The inventions listed as Groups III and V do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group III invention is the step of forming a stent about a plug, while the special technical feature of Group V invention is the step of attaching a healing cap. Since the special technical feature of Group III invention is not present in the Group V invention being claimed and the special technical feature of Group V invention is not present in the Group III invention being claimed, unity of invention is lacking.

The inventions listed as Groups III and VI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group III invention is the step of forming a stent about a plug, while the special technical feature of Group VI invention is the step of making a bone incision with a tissue punch. Since the special technical feature of Group III invention is not present in the Group VI invention being claimed and the special technical feature of Group VI invention is not present in the Group III invention being claimed, unity of invention is lacking.

The inventions listed as Groups III and VII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group III invention is the step of forming a stent about a plug, while the special technical feature of Group VII invention is a two part rule comprising a sliding portion. Since the special technical feature of Group III invention is not present in the Group VII invention being claimed and the special technical feature of Group VII invention is not present in the Group III invention being claimed, unity of invention is lacking.

The inventions listed as Groups III and VIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group III invention is the step of forming a stent about a plug, while the special technical feature of Group VIII invention is a tissue punch comprising an elongated tooth. Since the special technical feature of Group III invention is not present in the Group VIII invention being claimed and the special technical feature of Group VIII invention is not present in the Group III invention being claimed, unity of invention is lacking.

The inventions listed as Groups III and IX do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group III invention is the step of forming a stent about a plug, while the special technical feature of Group IX invention is the step of creating a model of at least one of the upper jaw and the lower jaw. Since the special technical feature of Group III invention is not present in the Group IX invention being claimed and the special technical feature of Group IX invention is not present in the Group III invention being claimed, unity of invention is lacking.

The inventions listed as Groups III and X do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group III invention is the step of forming a stent about a plug, while the special technical feature of Group X invention is a drill bushing comprising a generally spherical surface. Since the special technical feature of Group III invention is not present in the Group X invention being claimed and the special technical feature of Group X invention is not present in the Group III invention being claimed, unity of invention is lacking.

The inventions listed as Groups IV and V do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group IV invention is a method for installing a dental implant comprising the step of taking a tomographical scan, while the special technical feature of Group V invention is the step of attaching a healing cap. Since the special technical feature of Group IV invention is not present in the Group V invention being claimed and
the special technical feature of Group V invention is not present in the Group IV invention being claimed, unity of invention is lacking.

The inventions listed as Groups IV and VI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group IV invention is the step of taking a tomographical scan of the bone, while the special technical feature of Group VI invention is the step of making a bone incision with a tissue punch. Since the special technical feature of Group IV invention is not present in the Group VI invention being claimed and the special technical feature of Group VI invention is not present in the Group IV invention being claimed, unity of invention is lacking.

The inventions listed as Groups IV and VII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group IV invention is the step of taking a tomographical scan, while the special technical feature of Group VII invention is a two-part ruler comprising a sliding portion. Since the special technical feature of Group IV invention is not present in the Group VII invention being claimed and the special technical feature of Group VII invention is not present in the Group IV invention being claimed, unity of invention is lacking.

The inventions listed as Groups IV and VIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group IV invention is the step of taking a tomographical scan, while the special technical feature of Group VII invention is a tissue punch comprising an elongated tooth. Since the special technical feature of Group IV invention is not present in the Group VIII invention being claimed and the special technical feature of Group VIII invention is not present in the Group IV invention being claimed, unity of invention is lacking.

The inventions listed as Groups IV and IX do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group IV invention is the step of taking a tomographical scan, while the special technical feature of Group IX invention is the step of creating a model of at least one of the upper jaw and the lower jaw. Since the special technical feature of Group IV invention is not present in the Group IX invention being claimed and the special technical feature of Group IX invention is not present in the Group IV invention being claimed, unity of invention is lacking.

The inventions listed as Groups IV and X do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group IV invention is the step of taking a tomographical scan, while the special technical feature of Group X invention is a drill bushing having a generally spherical surface. Since the special technical feature of Group IV invention is not present in the Group X invention being claimed and the special technical feature of Group X invention is not present in the Group IV invention being claimed, unity of invention is lacking.

The inventions listed as Groups V and VI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group V invention is a method for installing a dental implant comprising the step of attaching a healing cap, while the special technical feature of Group VI invention is the step of making a bone incision with a tissue punch. Since the special technical feature of Group V invention is not present in the Group VI invention being claimed and the special technical feature of Group VI invention is not present in the Group V invention being claimed, unity of invention is lacking.

The inventions listed as Groups V and VII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group V invention is the step of attaching a healing cap, while the special technical feature of Group VII invention is a two-part ruler comprising a sliding portion. Since the special technical feature of Group V invention is not present in the Group VII invention being claimed and the special technical feature of Group VII invention is not present in the Group V invention being claimed, unity of invention is lacking.

The inventions listed as Groups V and VIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group V invention is a method for installing a dental implant comprising the step of attaching a healing cap, while the special technical feature of Group VIII invention is a two-part ruler comprising a sliding portion. Since the special technical feature of Group V invention is not present in the Group VIII invention being claimed and the special technical feature of Group VIII invention is not present in the Group V invention being claimed, unity of invention is lacking.
the special technical feature of the Group V invention is the step of attaching a healing cap, while the special technical feature of Group VIII invention is a tissue punch comprising an elongated tooth. Since the special technical feature of Group V invention is not present in the Group VIII invention being claimed and the special technical feature of Group VIII invention is not present in the Group V invention being claimed, unity of invention is lacking.

The inventions listed as Groups V and IX do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group V invention is the step of attaching a healing cap, while the special technical feature of Group IX invention is the step of creating a model of at least one of the upper jaw and the lower jaw. Since the special technical feature of Group V invention is not present in the Group IX invention being claimed and the special technical feature of Group IX invention is not present in the Group V invention being claimed, unity of invention is lacking.

The inventions listed as Groups V and X do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group V invention is the step of attaching a healing cap, while the special technical feature of Group X invention is a drill bushing having a generally spherical surface. Since the special technical feature of Group V invention is not present in the Group X invention being claimed and the special technical feature of Group X invention is not present in the Group V invention being claimed, unity of invention is lacking.

The inventions listed as Groups VI and VII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group VI invention is a method of making an osteotomy comprising the step of making a bone incision with a tissue punch, while the special technical feature of Group VII invention is a two part ruler comprising a sliding portion. Since the special technical feature of Group VI invention is not present in the Group VII invention being claimed and the special technical feature of Group VII invention is not present in the Group VI invention being claimed, unity of invention is lacking.

The inventions listed as Groups VI and VIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group VI invention is the step of making a bone incision with a tissue punch, while the special technical feature of Group VIII invention is a tissue punch comprising an elongated tooth. Since the special technical feature of Group VI invention is not present in the Group VIII invention being claimed and the special technical feature of Group VIII invention is not present in the Group VI invention being claimed, unity of invention is lacking.

The inventions listed as Groups VII and VIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group VII invention is a two part ruler, while the special technical feature of Group VIII invention is a tissue punch. Since the special technical feature of Group VII invention is not present in the Group VIII invention being claimed and the special technical feature of Group VIII invention is not present in the Group VII invention being claimed, unity of invention is lacking.

The inventions listed as Groups VII and IX do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group VII invention is a two part ruler, while the special technical feature of Group IX invention is the step of creating a model of at least one of the upper jaw and the lower jaw. Since the special technical feature of Group VII invention is not present in the Group IX invention being claimed and the special technical feature of Group IX invention is not present in the Group VII invention being claimed, unity of invention is lacking.

The inventions listed as Groups VII and X do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group VII invention is a two part ruler, while the special technical feature of Group X invention is a drill bushing having a generally spherical surface. Since the special technical feature of Group VII invention is not present in the Group X invention being claimed and the special technical feature of Group X invention is not present in the Group VII invention being claimed, unity of invention is lacking.
The inventions listed as Groups VIII and IX do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group VIII invention is a tissue punch, while the special technical feature of Group IX invention is the step of creating a model of at least one of the upper jaw and the lower jaw. Since the special technical feature of Group VIII invention is not present in the Group IX invention being claimed and the special technical feature of Group IX invention is not present in the Group VIII invention being claimed, unity of invention is lacking.

The inventions listed as Groups VIII and X do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group VIII invention is a tissue punch, while the special technical feature of Group X invention is a drill bushing having a generally spherical surface. Since the special technical feature of Group VIII invention is not present in the Group X invention being claimed and the special technical feature of Group X invention is not present in the Group VIII invention being claimed, unity of invention is lacking.

The inventions listed as Groups IX and X do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group IX invention is the step of creating a model of at least one of the upper jaw and the lower jaw, while the special technical feature of Group X invention is a drill bushing having a generally spherical surface. Since the special technical feature of Group IX invention is not present in the Group X invention being claimed and the special technical feature of Group X invention is not present in the Group IX invention being claimed, unity of invention is lacking.