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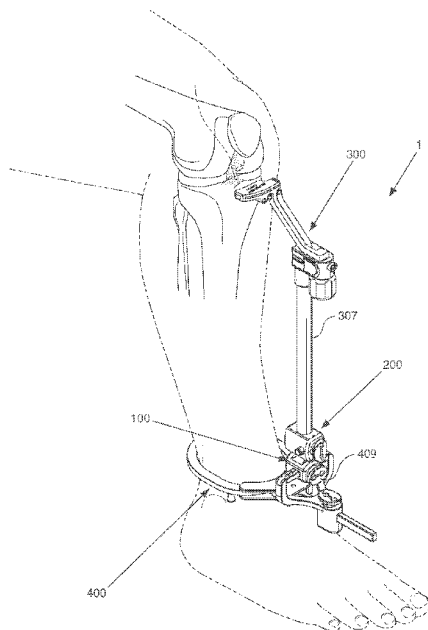
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(54) Title: CUTTING GUIDE AND METHOD

FIG. 1



(57) Abstract: Embodiments of the invention include a cutting guide (360) and methods of using the cutting guide to prepare bone for one or more knee arthroplasty implants. Some embodiments include an alignment mechanism (200), a cutting head (300), and an ankle clamp (400).



**Published:**

- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

**(88) Date of publication of the international search report:**

24 October 2019 (24.10.2019)

INTERNATIONAL SEARCH REPORT

International application No  
PCT/US2018/048727

A. CLASSIFICATION OF SUBJECT MATTER  
INV. A61B17/15  
ADD.  
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)  
A61B

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)  
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2005/187557 A1 (COLLAZO CARLOS E [US]) 25 August 2005 (2005-08-25)  paragraph [0023] - paragraph [0031] figures 1-6  -----	1-57, 64-67, 82,88-91
A	US 2014/324054 A1 (DMUSCHEWSKY KLAUS [DE] ET AL) 30 October 2014 (2014-10-30) abstract paragraph [0044] - paragraph [0049] figures 1,2,4  -----	1,47
A	US 5 197 944 A (STEELE JOHN [US]) 30 March 1993 (1993-03-30) column 2, line 65 - column 4, line 28 figures 1-3  -----  -/--	1,64

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 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

- "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 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

21 November 2018

Date of mailing of the international search report

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Name and mailing address of the ISA/

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# INTERNATIONAL SEARCH REPORT

International application No  
PCT/US2018/048727

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2014/094815 A1 (KECMAN MAJA [GB] ET AL) 3 April 2014 (2014-04-03) paragraph [0023] - paragraph [0035] figures 2-4 -----	1

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2018/048727

## 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.: 68-81, 83-87, 92-99  
because they relate to subject matter not required to be searched by this Authority, namely:  
Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery.
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:

see additional 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 fees, this Authority did not invite payment of additional fees.
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.:  
1-57, 64-67, 82, 88-91

### Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-57, 64-67, 82, 88-91

A tibial cutting guide comprising: a guide base; a cutting head comprising: a cutting head base, and a removable mechanism that includes at least: a coupler releasably interconnectable with the cutting head base and configured to detach from the cutting head base upon activation, a blade guide, and a microadjustment element connected to the coupler and coupled to the blade guide, the microadjustment element being configured to move the blade guide to multiple positions relative to the coupler, wherein operation of the microadjustment element is independent from operation of the coupler between the cutting head base and the removable mechanism; an alignment mechanism coupled between the guide base and the cutting head comprising: a body that couples with the guide base and the cutting head base, an engagement element movable relative to the body to selectively restrict or permit movement of the guide base relative to the cutting head base, and a mode selector configured to allow the engagement element to be selectively engaged and disengaged to restrict or permit movement of the guide base relative to the cutting head base when the mode selector is in a first state and configured to apply a force to the engagement element to urge the engagement element to continuously permit movement of the guide base relative to the cutting head base in a second state; and an ankle clamp coupled to the guide base comprising: a housing, a first arm with a first pivot and two or more first gear teeth spaced along a radius from the first pivot, the first arm being pivotally coupled to the housing at the first pivot, and a second arm with a second pivot and two or more second gear teeth spaced along a radius from the second pivot, the second arm being pivotally coupled to the housing at the second pivot, and having its two or more second gear teeth interdigitating with the two or more first gear teeth of the first arm.

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2. claims: 58-63

A blade guide comprising: a body; an opening in the body sized and oriented to direct a blade by having a substantially close fit between a wider proportion side of the blade and the opening, wherein the opening has a greater longitudinal direction and a lesser height substantially perpendicular to the longitudinal direction; and a pin slot in the body having a width in substantially the same direction as the longitudinal direction of the opening and a height less than the width, wherein the pin slot is sized to have a substantially close fit between its height and a pin configured to be inserted through the pin slot and a looser fit between its width and the pin such that the pin is able to be moved along the width of the pin slot and pivot about

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

an axis parallel to the height of the pin slot.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2018/048727

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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