Abstract: The invention relates to improving a surgical system for bonding bodily tissue, comprising a surgical instrument having a bonding device for bonding bodily tissue, said bonding device comprising two tool elements replaceable relative to each other, wherein the instrument comprises a cutting device having a cutting element for cutting through tissue, and the cutting element is replaceably disposed relative to at least one of the tool elements, such that the cutting device is implemented in the form of an HF cutting device, wherein the cutting element comprises a cutting edge defining a cutting plane at an angle relative to a longitudinal axis defined by the instrument in the region of the bonding device.


Bezeichnung: CHIRURGISCHES SYSTEM ZUM VERBINDEN VON KÖRPERGEWEBE UND VERFAHREN ZUM ABTRENNEN ÜBERSTEHENDER GEWEBES

Title: SURGICAL SYSTEM FOR BONDING BODILY TISSUE AND METHOD FOR CUTTING OFF PROTRUDING TISSUE

(54) Title: SURGICAL SYSTEM FOR BONDING BODILY TISSUE AND METHOD FOR CUTTING OFF PROTRUDING TISSUE
(54) Bezeichnung: CHIRURGISCHES SYSTEM ZUM VERBINDEN VON KÖRPERGEWEBE UND VERFAHREN ZUM ABTRENNEN ÜBERSTEHENDER GEWEBES

FIG. 2

WO 2011/083026 A3

Dürbeck (DE), ROTHWEILER, Christoph [DE/DE]; Vaterstraße 12, 78166 Donaueschingen (DE).

Anwalt: HOEGER, STELLRECHT & PARTNER; Ullandstrasse 14c, 70182 Stuttgart (DE).


(74) Anwalt: HOEGER, STELLRECHT & PARTNER; Ullandstrasse 14c, 70182 Stuttgart (DE).


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(43) Internationales Veröffentlichungsdatum

(10) Internationale Veröffentlichungssachenummer
WO 2011/083026 A3

(51) Internationale Patentsachenummern:
A61B 17/11 (2006.01)  A61B 17/064 (2006.01)
A61B 18/14 (2006.01)  A61B 17/115 (2006.01)


(22) Internationales Anmeldedatum:

(25) Einreichungssprache: Deutsch
(26) Veröffentlichungssprache: Deutsch

(30) Angaben zur Priorität:
10 2009 059 195.8


(72) Erfinder: und

(54) Title: SURGICAL SYSTEM FOR BONDING BODILY TISSUE AND METHOD FOR CUTTING OFF PROTRUDING TISSUE
(54) Bezeichnung: CHIRURGISCHES SYSTEM ZUM VERBINDEN VON KÖRPERGEWEBE UND VERFAHREN ZUM ABTRENNEN ÜBERSTEHENDER GEWEBES

(57) Abstract: The invention relates to improving a surgical system for bonding bodily tissue, comprising a surgical instrument having a bonding device for bonding bodily tissue, said bonding device comprising two tool elements replaceable relative to each other, wherein the instrument comprises a cutting device having a cutting element for cutting through tissue, and the cutting element is replaceably disposed relative to at least one of the tool elements, such that the cutting device is implemented in the form of an HF cutting device, wherein the cutting element comprises a cutting edge defining a cutting plane at an angle relative to a longitudinal axis defined by the instrument in the region of the bonding device.
Veröffentlicht:

— mit internationalem Recherchenbericht (Artikel 21 Absatz 3) vor Ablauf der für Änderungen der Ansprüche geltenden Frist; Veröffentlichung wird wiederholt, falls Änderungen eingehen (Regel 48 Absatz 2 Buchstabe h)

(88) Veröffentlichungsdatum des internationalen Recherchenberichts:

2. Februar 2012
**A. CLASSIFICATION OF SUBJECT MATTER**

INV. A61B17/11 A61B18/14
ADD. A61B17/064 A61B17/115

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 practical, search terms used)
EPO-Internal, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

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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 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

**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: 24 November 2011
Date of mailing of the international search report: 01/12/2011

Name and mailing address of the ISA/
European Patent Office, P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk
Tel.: (+31-70) 340-2040, Fax: (+31-70) 340-3016

Authorized officer: Neef, Tatjana
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Form PCT/ISA/210 (continuation of second sheet) (April 2005)
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**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. **X** Claims Nos.: 28 - 30  
   because they relate to subject matter not required to be searched by this Authority, namely:
   
   **PCT Rule 39.1(iv) - methods 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. **X** 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 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.:

**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.  

**X** No protest accompanied the payment of additional search fees.
The International Searching Authority has found that the international application contains multiple (groups of) inventions, as follows:

1. Claims 1-8, 12, 16, 17, 19-21, 23-27

Surgical system for bonding bodily tissue, comprising an instrument having a bonding device, said bonding device comprising two tool elements which are displaceable relative to each other, wherein the instrument comprises a cutting element for cutting through tissue, said cutting element being displaceable relative to at least one tool element, wherein the cutting element has a cutting edge defining a cutting plane at an angle relative to the longitudinal axis of the bonding device, and wherein the cutting device is designed in the form of an HF cutting device.

2. Claims 1, 9-11, 13-15, 18, 22, 27

Surgical system for bonding bodily tissue, comprising an instrument having a bonding device, said bonding device comprising two tool elements which are displaceable relative to each other, wherein the instrument comprises a cutting element for cutting through tissue, said cutting element being displaceable relative to at least one tool element, wherein the cutting element has a cutting edge defining a cutting plane at an angle relative to the longitudinal axis of the bonding device, and wherein the tool elements comprise in each case one electrode, said electrodes being opposite each other and facing one another in an approach setting.
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### B. RECHERCHIERTE GEBIETE

Recherchierter Mindestprüffstoff (Klassifikationssystem und Klassifikationssymbole)

A61B

Recherchierte, aber nicht zum Mindestprüffstoff gehörende Veröffentlichungen, soweit diese unter die recherchierten Gebiete fallen

### C. ALS WESENTLICH ANGESEHENEN UNTERLAGEN

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* Weitere Veröffentlichungen sind der Fortsetzung von Feld C zu entnehmen

* Betr. Anspruch Nr. zeigt die in Betracht kommenden Teile der Veröffentlichung

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Absendedatum des internationalen Rechercheberichts: 01/12/2011

Name und Postanschrift der Internationalen Recherchenbehörde:
Europäisches Patentamt, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk
Tel. (+31-70) 340-2040
Fax: (+31-70) 340-3016

Bevollmächtigter Bediensteter: Neef, Tatjana

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Formblatt PCT/ISA/2.10 (Fortsetzung von Blatt 2) (April 2005)
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Gesetzliche Berichterstattung

Gemäß Artikel 17(2)a wurde aus folgenden Gründen für bestimmte Ansprüche kein internationaler Recherchenbericht erstellt:

1. X Ansprüche Nr. 28-30
   weil sie sich auf Gegenstände beziehen, zu denen Recherche diese Behörde nicht verpflichtet ist, nämlich
   Regel 39.1 iv) PCT - Verfahren zur chirurgischen Behandlung des menschlichen oder tierischen Körpers

2. □ Ansprüche Nr.
   weil sie sich auf Teile der internationalen Anmeldung beziehen, die den vorgeschriebenen Anforderungen so wenig entsprechen, dass eine sinnvolle internationale Recherche nicht durchgeführt werden kann, nämlich

3. □ Ansprüche Nr.
   weil es sich dabei um abhängige Ansprüche handelt, die nicht entsprechend Satz 2 und 3 der Regel 6.4 a) abgefasst sind.

Bemerkungen hinsichtlich eines Widerspruchs

□ Der Anmelder hat die zusätzlichen Recherchengebühren unter Widerspruch entrichtet und die gegebenenfalls erforderliche Widerspruchsgebühr gezahlt.

□ Die zusätzlichen Recherchengebühren wurden vom Anmelder unter Widerspruch gezahlt, jedoch wurde die entsprechende Widerspruchsgebühr nicht innerhalb der in der Aufforderung angegebenen Frist entrichtet.

X Die Zahlung der zusätzlichen Recherchengebühren erfolgte ohne Widerspruch.

Diese Internationale Recherchenbehörde hat festgestellt, dass diese internationale Anmeldung mehrere Erfindungen enthält:

siehe Zusatzblatt

1. X Da der Anmelder alle erforderlichen zusätzlichen Recherchengebühren rechtzeitig entrichtet hat, erstreckt sich dieser internationale Recherchenbericht auf alle rechtmäßig beanstandeten Ansprüche.

2. □ Da für alle rechtmäßigen beanstandeten Ansprüche die Recherche ohne einen Arbeitsaufwand durchgeführt werden konnte, der zusätzliche Recherchengebühr gerechtfertigt hätte, hat die Behörde nicht zur Zahlung solcher Gebühren aufgefordert.

3. □ Da der Anmelder nur einige der erforderlichen zusätzlichen Recherchengebühren rechtzeitig entrichtet hat, erstreckt sich dieser internationale Recherchenbericht nur auf die Ansprüche, für die Gebühren entrichtet worden sind, nämlich auf die Ansprüche Nr.

4. □ Der Anmelder hat die erforderlichen zusätzlichen Recherchengebühren nicht rechtzeitig entrichtet. Dieser internationale Recherchenbericht beschränkt sich daher auf die in den Ansprüchen zuerst erwähnte Erfindung, diese ist in folgenden Ansprüchen erfasst.

Formblatt PCT/ISA/210 (Fortsetzung von Blatt 1 (2)) (April 2005)
Die internationale Recherchenbehörde hat festgestellt, dass diese internationale Anmeldung mehrere (Gruppen von) Erfindungen enthält, nämlich:

1. Ansprüche: 1-8, 12, 16, 17, 19-21, 23-27


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2. Ansprüche: 1, 9-11, 13-15, 18, 22, 27


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