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- (71) Applicant: ETHICON ENDO-SURGERY, LLC
[US/US]; #475 Street C, Los Frailes Industrial Park,
Guaynabo, PUERTO RICO 00969 (US).
- (72) Inventors: NALAGATLA, Anil K.; 4545 Creek Road,
Cincinnati, Ohio 45242 (US). PATEL, Sudhir B.; 4545
Creek Road, Cincinnati, Ohio 45242 (US). SHELTON,
IV, Frederick E.; 4545 Creek Road, Cincinnati, Ohio
45242 (US).
- (74) Agents: SHIRTZ, Joseph F. et al.; JOHNSON & JOHN-
SON, One Johnson & Johnson Plaza, New Brunswick,
New Jersey 08933 (US).
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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

- with international search report (Art. 21(3))
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(54) Title: SURGICAL INSTRUMENT COMPRISING SYSTEMS FOR ASSURING THE PROPER SEQUENTIAL OPERATION OF THE SURGICAL INSTRUMENT

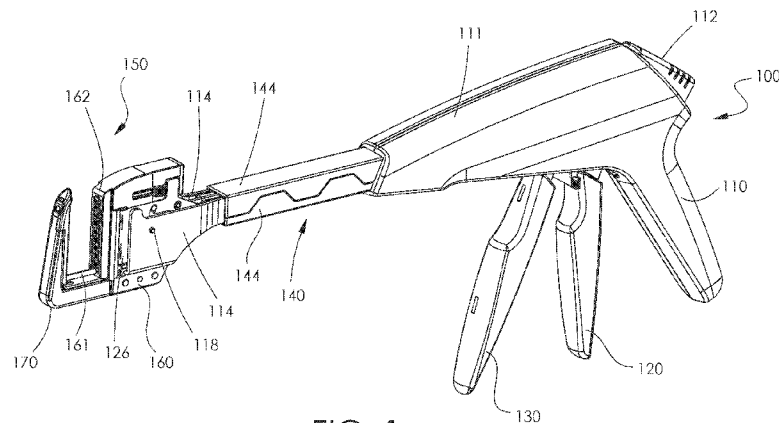


FIG. 1

(57) Abstract: A surgical instrument is disclosed which comprises a tissue clamping system, a staple firing system, and a tissue cut-
ting system. The systems of the surgical instrument can co-operate with one another to prevent the systems from being operated out
of order, and/or prevent the systems from being operated in an undesirable order.



INTERNATIONAL SEARCH REPORT

International application No
PCT/US2016/042744

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61B17/072
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.
X	WO 2012/125628 A1 (ETHICON ENDO SURGERY INC [US]; SWAYZE JEFFREY S [US]) 20 September 2012 (2012-09-20) para. 39, 40; figures 1, 2	1
X	WO 2014/004208 A1 (ETHICON ENDO SURGERY INC [US]) 3 January 2014 (2014-01-03) para. 579, 585, 593-597, 600, 737; figures 1-4	1-3,6-9
X	WO 2014/172210 A2 (ETHICON ENDO SURGERY INC [US]) 23 October 2014 (2014-10-23) para. 181, 246-248, 249, 264; figures 1, 38-41,63A, 63B, 64	1
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Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents :

<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"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</p> <p>"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</p> <p>"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</p> <p>"&" document member of the same patent family</p>
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Date of the actual completion of the international search 17 January 2017	Date of mailing of the international search report 03/02/2017
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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 Kamp, Martin
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INTERNATIONAL SEARCH REPORT

International application No
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 2 248 474 A2 (TYCO HEALTHCARE [US]) 10 November 2010 (2010-11-10)	4-6,10, 11,18,19
A	para. 55 - 59, 65, 74; figures 5-27	16,17, 20,21
A	----- WO 2014/062455 A1 (ETHICON ENDO SURGERY INC [US]) 24 April 2014 (2014-04-24) para. 53-56, 80 exposure of knife -> protection; figures 1-7, 15-18, 27 -----	6-9, 12-15,18

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2016/042744

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:

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.:

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: 1-3

Surgical stapler comprising an end effector;
a firing driver;
a cutting member configured to perform a cutting stroke and
a retraction stroke;
and further means for preventing said end effector to be
returned into an open configuration until after said cutting
member has been retracted.

2. claims: 4, 5, 10, 11, 16-18(completely); 19-21(partially)

Surgical stapler comprising an end effector comprising a
tissue pin and a tissue pin actuator.

3. claims: 6-9, 12-15(completely); 19-21(partially)

Surgical stapler comprising an end effector with two jaws;
a closure system configured to move the jaws from a closed
configuration to an open configuration and vice versa;
a cutting member comprising a cutting edge, being exposed
during a cutting stroke;
and means for preventing said closure system from being
returned to said open configuration while said cutting
member is exposed.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2016/042744

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