



(51) International Patent Classification:

A61B 17/00 (2006.01) A61B 17/29 (2006.01)
A61B 17/072 (2006.01)

(21) International Application Number:

PCT/US2015/064917

(22) International Filing Date:

10 December 2015 (10.12.2015)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

14/574,500 18 December 2014 (18.12.2014) US

(71) Applicant: **ETHICON ENDO-SURGERY, LLC**
[US/US]; #475 Street C, Los Frailes Industrial Park,
Guaynabo, Puerto Rico 00969 (US).

(72) Inventors: **BAXTER, III, Chester O.**; 4545 Creek Road,
Cincinnati, Ohio 45242 (US). **DUNKI-JACOBS, Adam
R.**; 6191 Tulane Road, Cincinnati, Ohio 45212 (US).
SWAYZE, Jeffrey S.; 4545 Creek Road, Cincinnati, Ohio
45242 (US). **BABER, Daniel L.**; 4545 Creek Road, Cin-
cinnati, Ohio 45242 (US). **SHELTON, IV, Frederick E.**;
4545 Creek Road, Cincinnati, Ohio 45242 (US).

(74) Agents: **PLANTZ, Bernard F.** et al.; Johnson & Johnson,
One Johnson & Johnson Plaza, New Brunswick, New Jer-
sey 08933 (US).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY,
BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR,
KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG,
MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM,
PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC,
SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ,
TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU,
TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE,
DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU,
LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK,
SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, KM, ML, MR, NE, SN, TD, TG).

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:

11 August 2016

(54) Title: SURGICAL INSTRUMENT ASSEMBLY COMPRISING A LOCKABLE ARTICULATION SYSTEM

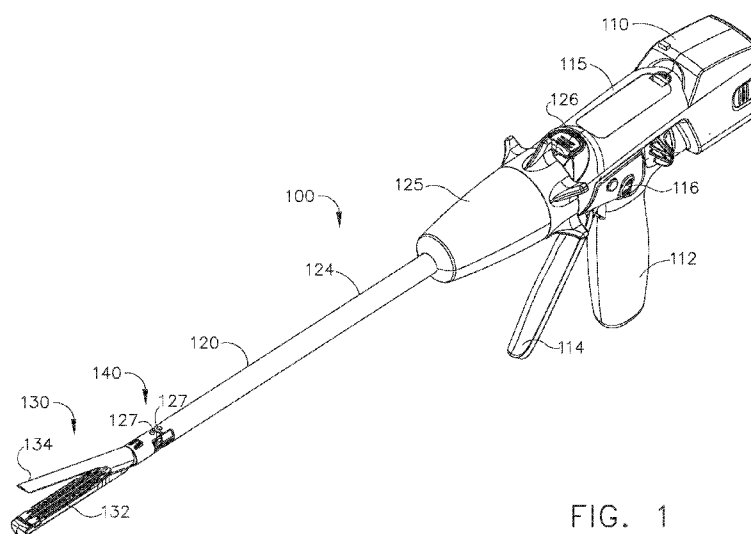


FIG. 1

(57) Abstract: A surgical stapling apparatus is disclosed which comprises a shaft, an end effector, and an articulation joint, wherein the end effector is rotatable relative to the shaft about the articulation joint. The stapling apparatus further comprises a firing drive responsive to an input, an articulation drive, and a switch assembly configured to selectively couple the articulation drive to the input. The switch assembly is configured to lock the articulation drive in position when the articulation drive is not coupled to the input.

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2015/064917

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61B17/00 A61B17/072 A61B17/29
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	EP 2 777 522 A1 (ETHICON ENDO SURGERY INC [US]) 17 September 2014 (2014-09-17)	1-4,9-12
Y	figures 131-150 paragraph [0116] - paragraph [0117] paragraph [0144] - paragraph [0151] paragraph [0170]	5,7
Y	----- US 2011/288573 A1 (YATES DAVID C [US] ET AL) 24 November 2011 (2011-11-24)	5
A	figures 81, 86-91 paragraph [0272] paragraph [0278] - paragraph [0279]	1-4,6, 9-12
Y	----- US 2011/295270 A1 (GIORDANO JAMES R [US] ET AL) 1 December 2011 (2011-12-01)	7
A	figures 1, 87 paragraph [0306]	1
	----- -/-	



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

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"&" document member of the same patent family

Date of the actual completion of the international search

1 June 2016

Date of mailing of the international search report

14/06/2016

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

Etienne, Nicolas

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2015/064917

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2014/263554 A1 (LEIMBACH RICHARD L [US] ET AL) 18 September 2014 (2014-09-18) cited in the application figures 131-149 paragraph [0364] - paragraph [0371] -----	1-4,9-12
X A	US 5 704 534 A (HUITEMA THOMAS W [US] ET AL) 6 January 1998 (1998-01-06) figures 1-28B column 7, line 54 - column 12, line 47 -----	13-16 1,7,8, 19,20

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2015/064917

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.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2015/064917

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FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. claims: 1-6, 9-12

Shaft assembly comprising a rotatable articulation driver.

2. claims: 7, 8

Shaft assembly comprising a pinion gear which can be operably engaged and disengaged from the articulation actuators.

3. claims: 13-20

Shaft assembly comprising a plurality of discs and cable actuators which can be hold in position by a locking system.
