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(71) Applicant (for all designated States except US): **TYCO HEALTHCARE GROUP LP** [US/US]; 60 Middletown Avenue, North Haven, CT 06473 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CABRERA, Ramiro** [US/US]; 67 Newbridge Circle, Cheshire,

CT 06410 (US). **WINGARDNER, Thomas** [US/US]; 50 Mansfield Road, North Haven, CT 06473 (US). **TAYLOR, Eric, J.** [US/US]; 5 Blue Meadow Road, Middletown, CT 06457 (US). **HATHAWAY, Peter** [US/US]; 210 Clubhouse Road, Lebanon, CT 06249 (US). **HORTON, Kenneth, W.** [US/US]; 66 Great Pond Road, South Glasstonbury, CT 06073 (US).

(74) Agents: **WADADLI, Aryn** et al.; Covidien, 60 Middletown Avenue, North Haven, CT 06473 (US).

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(54) Title: FLEXIBLE ENDOSCOPIC STITCHING DEVICES

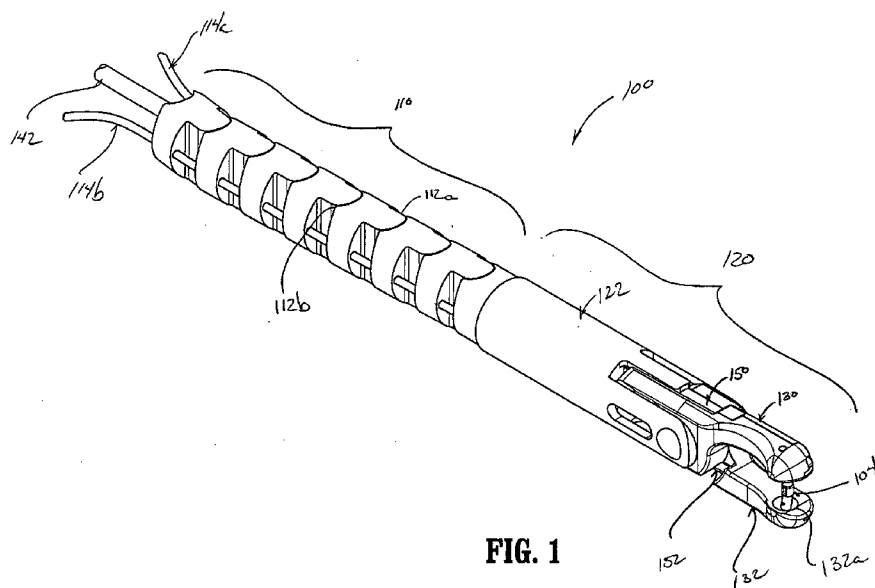


FIG. 1

(57) Abstract: An endoscopic stitching device is provided including a tool assembly having a pair of juxtaposed jaws each defining a needle receiving recess formed in a tissue contacting surface thereof; a selectively rotatably camming hub defining a helical groove formed in an outer surface thereof; a pair of axially translatable needle engaging blades slidably supported, one each, in a respective jaw, each blade having an advanced position wherein a distal end of the blade is engageable with a suture needle, and a retracted position wherein the distal end of the blade is out of engagement with the suture needle, wherein a proximal end of each blade is configured for slidably engagement in the helical groove of the camming hub; and a suture needle operatively associated with the tool assembly.



European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL,  
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## INTERNATIONAL SEARCH REPORT

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## A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A61B 1/00; A61B 17/10 (2008.01)

USPC - 600/104; 606/139

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)

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USPC - 600/104; 606/139

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

USPC - 600/104; 606/139

(Text Search)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PubWEST (PGPB, USPT, USOC, EPAB, JPAB); DialogPRO (Engineering), Google Scholar and PubMed.

Search Terms: endoscopic, stitch, stitching, suture, suturing, jaw, blade, neck, camming, rotat\$, rod, hub, groove, rotate, rotating, rotatable, rotatably, translation, translate, translating, opposite, rotation, sleeve, position

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages                                                                  | Relevant to claim No. |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Y         | US 2005/0096694 A1 (LEE) 05 May 2005 (05.05.2005) fig 1, 4, 7A, 7B, 7D; para [0053], [0054], [0058]-[0061], [0065], [0068], [0089], [0092], [0095]. | 1-27                  |
| Y         | US 2003/0105476 A1 (SANCOFF et al.) 05 June 2003 (05.06.2003) fig 2; para [0017], [0018], [0020], [0065], [0071], [0073], [0088], [0110].           | 1-27                  |
| Y         | US 5,938,668 A (SCIRICA et al.) 17 August 1999 (17.08.1999) col 2, ln 59-67; col 3, ln 1-4; col 7, ln 10-32; col 8, ln 47-67; col 9, ln 1-30.       | 1-27                  |
| Y         | US 2003/0116670 A1 (GENTRY) 26 June 2003 (26.06.2003) para [0001], [0003].                                                                          | 1-27                  |
| Y         | US 2005/0126876 A1 (SIMMONS) 16 June 2005 (16.06.2005) para [0007], [0008], [0029], [0032], [0034].                                                 | 3-9, 16-23            |
| Y         | US 2004/0193186 A1 (KORTENBACH et al.) 30 September 2004 (30.09.2004) fig 4; para [0061], [0078].                                                   | 12, 13, 26, 27        |

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"&amp;" document member of the same patent family

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Mail Stop PCT, Attn: ISA/US, Commissioner for Patents  
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Authorized officer:

Lee W. Young

PCT Helpdesk: 571-272-4300  
PCT OSP: 571-272-7774