

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
26 October 2006 (26.10.2006)

PCT

(10) International Publication Number
WO 2006/113216 A3

(51) International Patent Classification:

A61B 17/28 (2006.01)

(21) International Application Number:

PCT/US2006/013398

(22) International Filing Date: 11 April 2006 (11.04.2006)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/671,189	14 April 2005 (14.04.2005)	US
11/242,642	3 October 2005 (03.10.2005)	US
11/302,654	14 December 2005 (14.12.2005)	US

(71) Applicant (for all designated States except US): **CAMBRIDGE ENDOSCOPIC DEVICES, INC.** [US/US];
119 Herbert Street, Framingham, MA 01702 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **LEE, Woojin** [US/US]; 69 East Street, Hopkinton, MA 01748 (US).
CHAMORRO, Andres [US/US]; 98 Boston Avenue, #2, Medford, MA 02155 (US).

(74) Agent: **DRICOLL, David, M.**; 1201 Canton Avenue, Milton, MA 02186 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

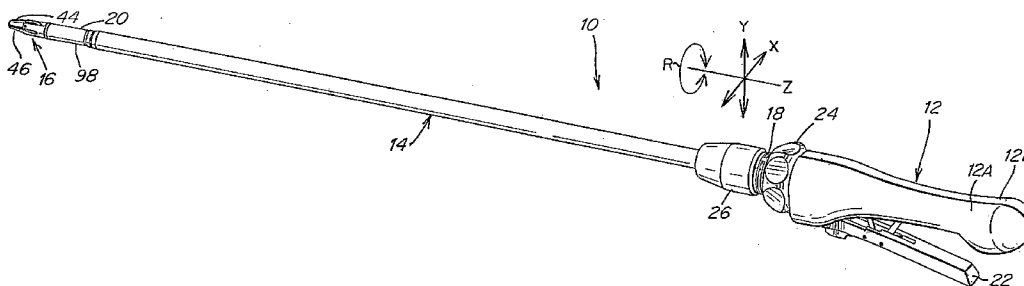
— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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

31 May 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SURGICAL INSTRUMENT



(57) Abstract: The surgical instrument includes a distal tool, a rigid or flexible elongated shaft that supports the distal tool, and a proximal handle or control member, where the tool and the handle are coupled to the respective distal and proximal ends of the elongated shaft via distal and proximal bendable motion members. Actuation means extends between said distal and proximal members whereby any deflection of said control handle with respect to said elongated instrument shaft causes a corresponding bending of said distal motion member for control of said working member. A manually rotatable member is arranged adjacent to the control handle for manually rotating the instrument shaft and working member relative to the control handle.



WO 2006/113216 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/13398

A. CLASSIFICATION OF SUBJECT MATTER

IPC: A61B 17/28(2006.01)

USPC: 606/205

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)

U.S. : 606/205

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)

EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,314,424 A (NICHOLAS) 24 May 1994.	
A	US 5,643,294 A (TOVEY et al.) 01 July 1997.	

☐ 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 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

14 March 2007 (14.03.2007)

Date of mailing of the international search report

28 MAR 2007

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (571) 273-3201

Authorized officer

ALLAN SHOAP
Telephone No. 571-272-3700