(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 30 May 2002 (30.05.2002)

PCT

(10) International Publication Number WO 02/041796 A3

- (51) International Patent Classification⁷: A61B 17/34, 17/00, 17/17
- (21) International Application Number: PCT/US01/46006
- (22) International Filing Date: 23 October 2001 (23.10.2001)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:

09/695,566 24 October 2000 (24.10.2000) US

- (71) Applicant: KYPHON INC. [US/US]; 1350 Bordeaux Drive, Sunnyvale, CA 95086 (US).
- (72) Inventors: REILEY, Mark, A.; 304 Pala Avenue, Piedmont, CA 94611 (US). REO, Michael; 701 Baltic Circle, NO. 731, Redwood City, CA 94065 (US). SCRIBNER, Robert, M.; 7042 Quiet Retreat Court, Niwot, CO 80503 (US). FERDINAND, Arthur, E.; 5423 Century Park Way, San Jose, CA 95111 (US).

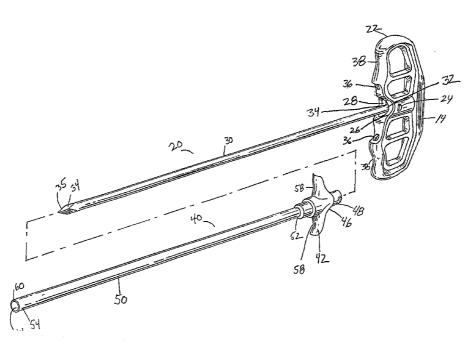
- (74) Agents: RYAN, Daniel, D. et al.; P.O. Box 26618, Milwaukee, WI 53226 (US).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (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

[Continued on next page]

(54) Title: HAND-HELD INSTRUMENTS THAT ACCESS INTERIOR BODY REGIONS



(57) Abstract: A composite instrument is provided comprising a first functional instrument and a second functional instrument when the first functional instrument is coupled with the second functional instrument. A composite handle for the composite instrument is provided comprising a first handle and a second handle when the first handle is coupled with the second handle. The handle makes possible the reliable transmission, with increased mechanical advantage, of both torsional and longitudinal loads by the physician to the composite instrument, while resisting relative rotation between the first and second instruments.



7O 02/041796 A3

WO 02/041796 A3



(88) Date of publication of the international search report: 28 November 2002

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.

INTERNATIONAL SEARCH REPORT

ational Application No PCT/US 01/46006

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 A61B17/34 A61E A61B17/00 A61B17/17 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) IPC 7 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 Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Category ° 1-10 X US 4 013 080 A (FRONING) 22 March 1977 (1977-03-22) the whole document GB 2 243 788 A (ABUL) 1-10 X 13 November 1991 (1991-11-13) abstract; figures EP 0 591 851 A (UNITED STATES SURGICAL 1 - 10X CORPORATION) 13 April 1994 (1994-04-13) abstract; figures column 5, line 12 -column 6, line 18 WO 99 37212 A (KYPHON INC.) Α 29 July 1999 (1999-07-29) figures -/--Further documents are listed in the continuation of box C. Patent family members are listed in annex. Χ ° Special categories of cited documents: '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 "A" document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international "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 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) "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 docu-"O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled in the art. "P" document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 23/09/2002 16 September 2002 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016 Giménez Burgos, R

INTERNATIONAL SEARCH REPORT

itional Application No
PCT/US 01/46006

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT								
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.						
P,X	WO 01 28439 A (KYPHON INC.) 26 April 2001 (2001-04-26) the whole document	1-10						

ernational application No. PCT/US 01/46006

INTERNATIONAL SEARCH REPORT

Box I Observations where certain claims were found unsearchable (Continuation of item 1 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.: 11 because they relate to subject matter not required to be searched by this Authority, namely: Rule 39.1(iv) PCT — Method for treatment of the human or animal body by
surgery
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 II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
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 fee, this Authority did not invite payment of any additional fee.
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.
No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

tional Application No
PCT/US 01/46006

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 4013080	Α	22-03-1977	US US	3941127 3964480		02-03-1976 22-06-1976
GB 2243788	Α	13-11-1991	US	5203866	Α	20-04-1993
EP 0591851	A	13-04-1994	US CA DE DE EP	5356421 2105321 69325227 69325227 0591851	A1 D1 T2	18-10-1994 08-04-1994 15-07-1999 11-11-1999 13-04-1994
WO 9937212	Α	29-07-1999	AU CA EP JP WO	2560399 2319050 1051110 2002500912 9937212	A1 T	09-08-1999 29-07-1999 15-11-2000 15-01-2002 29-07-1999
WO 0128439	A	26-04-2001	AU EP NO WO	1093201 1223871 20021814 0128439	A1 A	30-04-2001 24-07-2002 12-06-2002 26-04-2001