## (19) World Intellectual Property Organization

International Bureau



# 

#### (43) International Publication Date 3 April 2008 (03.04.2008)

### (10) International Publication Number WO 2008/039789 A3

(51) International Patent Classification: A61B 1/32 (2006.01)

(21) International Application Number:

PCT/US2007/079439

(22) International Filing Date:

25 September 2007 (25.09.2007)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/847,481 26 September 2006 (26.09.2006)

(71) Applicant (for all designated States except US): TRIN-ITY ORTHOPEDICS, LLC [US/US]; 8817 Production Avenue, San Diego, California 92121 (US).

(72) Inventor; and

- (75) Inventor/Applicant (for US only): MARINO, James, F. [US/US]; 2620 St. Tropez Place, La Jolla, California 92037 (US).
- (74) Agent: HERNANDEZ, Fred C.; FISH & RICHARD-SON P.C., P.O. Box 1022, Minneapolis, Minnesota 5540-1022 (US).

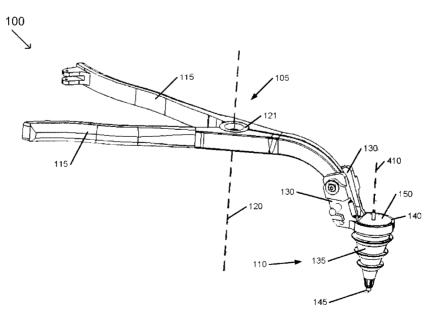
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, 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, 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, MT, 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:

8 May 2008

(54) Title: SPECULUM



(57) Abstract: Disclosed are devices and methods for accessing and channeling through biological tissue One embodiment is a bone access tool including a handle assembly and speculum assembly coupled to the handle assembly The handle assembly has First and second portions that are movable relative to one another The speculum assembly has first and second speculum members movably positioned relative to one another The speculum members define an internal shaft arranged about a central axis and a tapered shape when positioned adjacent one another The tapered shape gradually reduces in size from a proximal  $\pi$ m to a distal edge of the speculum assembly The speculum assembly also has at least one nb extending outwardly from each of the first and second speculum members, the  $\pi$ b having an upper surface and an inclined lower surface.



#### INTERNATIONAL SEARCH REPORT

International application No. PCT/US07/79439

IPC(8) - USPC -	SSIFICATION OF SUBJECT MATTER A61B 1/32 (2007.10) 600/219 o International Patent Classification (IPC) or to both n	ational classification and IPC	
B. FIEL	DS SEARCHED		
	ocumentation searched (classification system followed by B 1/32 (2007.10)   219	classification symbols)	
Documentati	ion searched other than minimum documentation to the ex	ctent that such documents are included in the	fields searched
Electronic da PatBase	ata base consulted during the international search (name o	of data base and, where practicable, search te	rms used)
C. DOCUI	MENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where a	ppropriate, of the relevant passages	Relevant to claim No.
X  Y	US 6,450,952 B1 (RIOUX et al) 17 September 2002 (1	7.09.2002) entire document	1-3, 5, 6, 13-16 
Y	US 5,797,959 A (CASTRO et al) 25 August 1998 (25.0	08.1998) entire document	4
Y	   US 5,916,150 A (SILLMAN) 29 June 1999 (29.06.1999	9) entire document	7, 9-12, 17-21
Y	   US 6,592,587 B1 (ROGER) 15 July 2003 (15.07.2003)	) entire document	8-12
Y	US 5,891,147 A (MOSKOVITZ et al) 06 April 1999 (06	.04.1999) entire document	21
Furthe	er documents are listed in the continuation of Box C.		
* 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  "X" 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		ation but cited to understand nvention	
filing d	filing date considered novel or cannot be considered to involve an inventive		
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			claimed invention cannot be step when the document is
"O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than "&"		being obvious to a person skilled in the	art
the priority date claimed		"&" document member of the same patent family	
21 December 2007		28 JAN 2008	
Mail Stop PC	nailing address of the ISA/US T, Attn: ISA/US, Commissioner for Patents O, Alexandria, Virginia 22313-1450	Authorized officer:  Blaine R. Copenher	aver
	0. 571-273-3201	PCT Mefpdesk: 571-272-4300 PCT OSP: 571-272-7774	