PCT

(30) Priority Data:

(US).

WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6:
A61M 5/178

A3

(11) International Publication Number: WO 98/09561

(43) International Publication Date: 12 March 1998 (12.03.98)

(21) International Application Number: PCT/US96/10684 (81) Designated States: CA, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

(22) International Filing Date: 25 June 1996 (25.06.96)

Published

08/497,117 30 June 1995 (30.06.95) US Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of

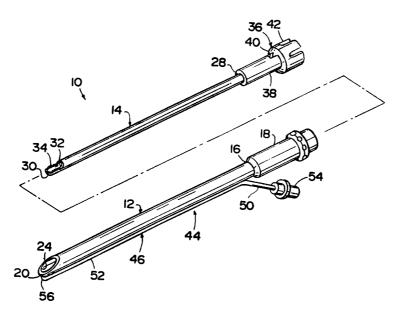
(71) Applicant: XOMED SURGICAL PRODUCTS, INC. [US/US];
6743 Southpoint Drive, North Jacksonville, FL 32216-0980

(72) Inventor: BAYS, F., Barry; 1929 Bays Manor, Clearwater, FL 34624 (US).

(74) Agent: EPSTEIN, Robert, H.; Epstein, Edell & Retzer, Suite 400, 1901 Reearch Boulevard, Rockville, MD 20850-3164 (US). (88) Date of publication of the international search report: 29 October 1998 (29.10.98)

With international search report.

(54) Title: SURGICAL SUCTION CUTTING INSTRUMENT WITH INTERNAL IRRIGATION



(57) Abstract

A surgical suction cutting instrument includes a tubular outer member (12) defining a cutting chamber with an opening, an inner member (14) with a distal cutting edge movably received in the outer tubular member and a flushing mechanism for supplying fluid to the cutting chamber via an outlet communicating with the cutting chamber. The cutting edge of the inner member is disposed within the cutting chamber adjacent the opening to engage bodily tissue through the opening, and a lumen is preferably defined through the inner tubular member in communication with the cutting chamber for aspirating cut bodily tissue. In one embodiment, the flushing mechanism includes a tubular member disposed alongside the outer tubular member and having an outlet communicating with the cutting chamber for supplying fluid to the cutting chamber to prevent and clear clogging of the passage without the need of having to remove the cutting instrument from the surgical site.

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
ΑU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
ΑZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	ТJ	Tajikistan
\mathbf{BE}	Belgium	GN	Guinea	MK	The former Yugoslav	TM	Turkmenistan
\mathbf{BF}	Burkina Faso	GR	Greece		Republic of Macedonia	TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	IT	Italy	MX	Mexico	$\mathbf{U}\mathbf{Z}$	Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	zw	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's	NZ	New Zealand		
CM	Cameroon		Republic of Korea	PL	Poland		
CN	China	KR	Republic of Korea	PT	Portugal		
CU	Cuba	KZ	Kazakstan	RO	Romania		
CZ	Czech Republic	LC	Saint Lucia	RU	Russian Federation		
\mathbf{DE}	Germany	LI	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia	LR	Liberia	SG	Singapore		

INTERNATIONAL SEARCH REPORT

International application No. PCT/US96/10684

A. CLASSIFICATION OF SUBJECT MATTER IPC(6) :A61M 5/178 US CL :606/167-171 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. : 6	506/167-171							
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)								
c. Doc	UMENTS CONSIDERED TO BE RELEVANT							
Category*	Citation of document, with indication, where app	propriate, of the relevant passages	Relevant to claim No.					
Y	US 5,370,651 A (SUMMERS) 06 Dece	ember 1994, entire patent.	1-16					
Y	US 5,395,313 A (NAVES et al) 07 Ma	1-16						
Y	US 5,403,276 A (SCHECHTER et al)	1-16						
Further documents are listed in the continuation of Box C. See patent family annex.								
"A" do	pecial categories of cited documents: ocument defining the general state of the art which is not considered be of particular relevance	"Y" 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						
Į.	arlier document published on or after the international filing date ocument which may throw doubts on priority claim(s) or which is							
ci sp "O" de	ited to establish the publication date of another citation or other pecial reason (as specified) ocument referring to an oral disclosure, use, exhibition or other leans							
"P" de	ocument published prior to the international filing date but later than ne priority date claimed	"&" document member of the same pater						
	e actual completion of the international search	Date of mailing of the international search report						
22 JUNE	E 1998	0 4 SEP 1998						
Commissi Box PCT Washingto	mailing address of the ISA/US ioner of Patents and Trademarks on, D.C. 20231 No. (703) 305-3230	MANUEL MENDEZ Telephone No. (703) 308-2221	o Common					