



US00D619253S

(12) **United States Design Patent**
Way et al.

(10) **Patent No.:** **US D619,253 S**
(45) **Date of Patent:** **** *Jul. 6, 2010**

- (54) **TISSUE MODIFICATION DEVICE**
- (75) Inventors: **Bryce Way**, San Jose, CA (US); **Alberto Cantu**, San Francisco, CA (US); **Minh Tran**, Fountain Valley, CA (US)
- (73) Assignee: **Vertos Medical, Inc.**, Aliso Viejo, CA (US)
- (*) Notice: This patent is subject to a terminal disclaimer.
- (**) Term: **14 Years**
- (21) Appl. No.: **29/326,748**
- (22) Filed: **Oct. 23, 2008**
- (51) **LOC (9) Cl.** **24-02**
- (52) **U.S. Cl.** **D24/147; D24/133; D24/146**
- (58) **Field of Classification Search** **D24/133, D24/143-147, 170; 600/131, 210, 562, 564, 600/566-567, 65; 606/42, 45-52, 108, 167, 606/170, 205-207, 172, 171, 48, 83; 604/22, 604/64, 164.01, 165.01, 164.1, 264**
See application file for complete search history.

(56) **References Cited**
U.S. PATENT DOCUMENTS

1,493,240 A	5/1924	Bohn
3,628,524 A	12/1971	Jamshidi
3,732,858 A	5/1973	Banko
3,893,445 A	7/1975	Hofsess
3,929,123 A	12/1975	Jamshidi
3,945,372 A	3/1976	Milan et al.
4,103,690 A	8/1978	Harris
4,201,213 A	5/1980	Townsend
4,283,129 A	8/1981	Bennick, Jr.
4,535,773 A	8/1985	Yoon
4,603,694 A	8/1986	Wheeler
4,682,606 A	7/1987	DeCaprio
4,708,147 A	11/1987	Haaga
4,733,663 A	3/1988	Farley
4,777,948 A	10/1988	Wright
4,801,293 A	1/1989	Jackson

4,811,734 A 3/1989 McGurk-Burleson et al.
4,834,729 A 5/1989 Sjostrom
4,844,064 A 7/1989 Thimsen et al.

(Continued)

FOREIGN PATENT DOCUMENTS

WO WO 97/34536 A2 9/1997

(Continued)

OTHER PUBLICATIONS

Brunette, et al. Comparative rheology of low- and iso-osmolarity contrast agents at different temperatures. *Catheter Cardiovasc Interv.* Jan. 1, 2008;71(1):78-83.

(Continued)

Primary Examiner—Ian Simmons
Assistant Examiner—Wan Laymon

(74) *Attorney, Agent, or Firm*—Finnegan, Henderson, Farabow, Garrett & Dunner, LLP

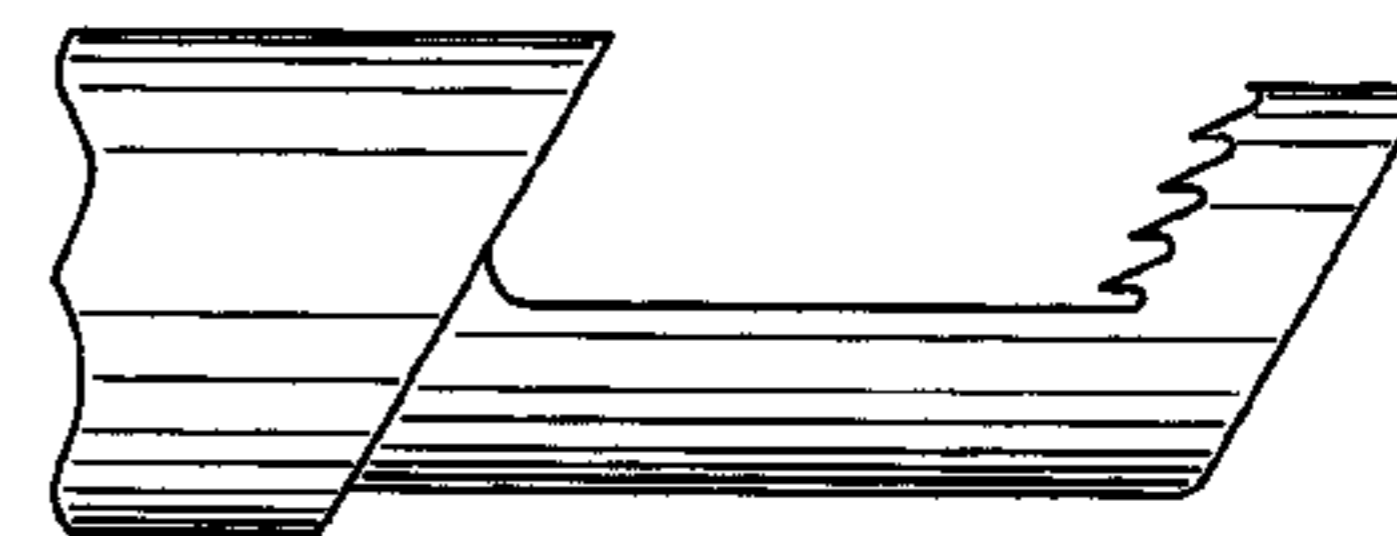
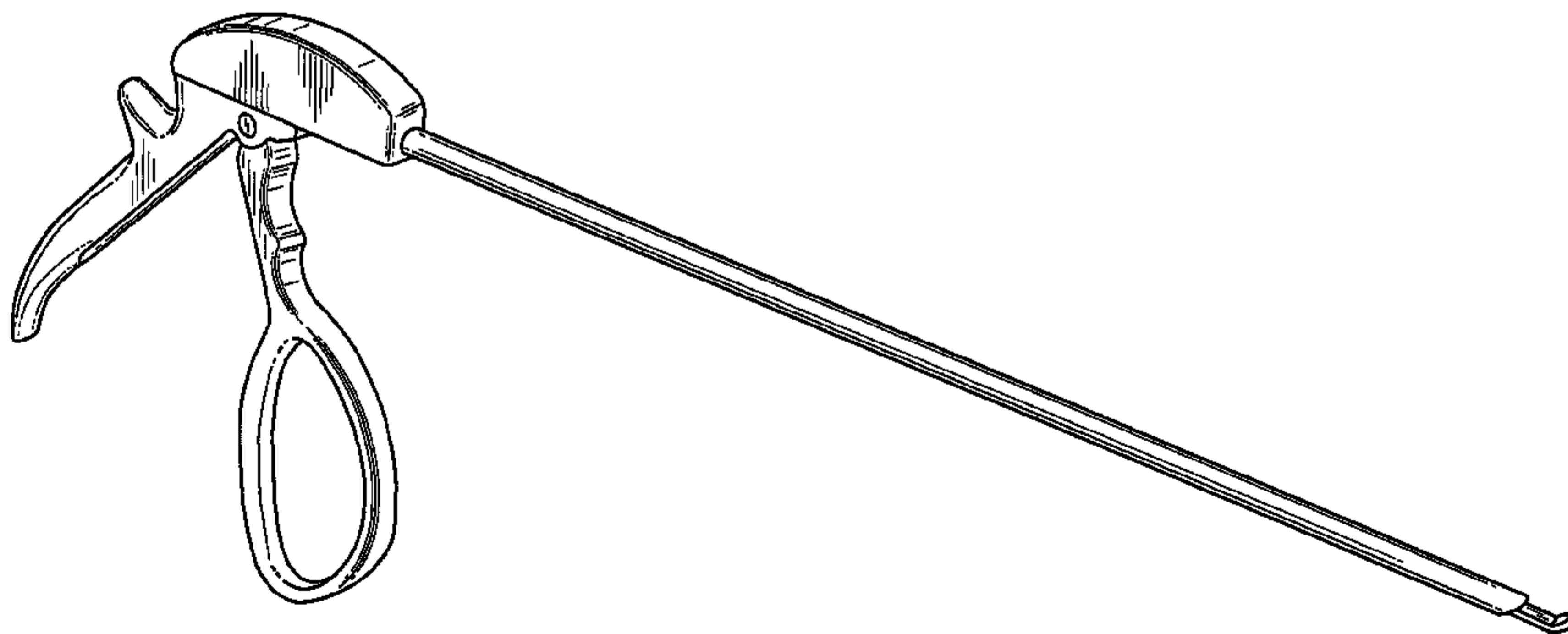
(57) **CLAIM**

We claim the ornamental design for a tissue modification device, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of the tissue excision device of the present invention showing the new design;
FIG. 2 is a top plan view thereof;
FIG. 3 is a front elevational view thereof;
FIG. 4 is a right side elevational view thereof;
FIG. 5 is a left side elevational view thereof;
FIG. 6 is a rear elevational view thereof;
FIG. 7 is a bottom plan view thereof;
FIG. 8 is a bottom perspective view thereof;
FIG. 9 is an enlarged rear perspective view thereof; and,
FIG. 10 is an enlarged fragmentary view of the distal tip thereof.

1 Claim, 8 Drawing Sheets



US D619,253 S

Page 2

U.S. PATENT DOCUMENTS							
		5,985,320	A	11/1999	Edwards et al.		
4,850,354	A	7/1989	McGurk-Burleson et al.	6,010,493	A	1/2000	Snoke
4,867,157	A	9/1989	McGurk-Burleson et al.	6,019,765	A	2/2000	Thornhill et al.
4,931,059	A	6/1990	Markham	6,022,362	A	2/2000	Lee et al.
4,991,600	A	2/1991	Taylor	6,083,237	A	7/2000	Huitema et al.
4,994,072	A	2/1991	Bhate et al.	6,096,053	A	8/2000	Bates
5,026,375	A	6/1991	Linovitz et al.	6,142,997	A	11/2000	Michelson
5,026,386	A	6/1991	Michelson et al.	6,221,006	B1	4/2001	Dubrul et al.
5,040,542	A	8/1991	Gray	6,241,747	B1	6/2001	Ruff
5,061,269	A *	10/1991	Muller 606/83	6,258,093	B1	7/2001	Edwards et al.
5,108,403	A	4/1992	Stern	6,261,294	B1	7/2001	Stihl et al.
5,127,916	A	7/1992	Spencer et al.	6,261,582	B1	7/2001	Needham et al.
5,172,702	A	12/1992	Leigh et al.	6,264,087	B1	7/2001	Whitman
5,180,393	A	1/1993	Commarmond	6,264,617	B1	7/2001	Bales et al.
5,190,759	A	3/1993	Lindblad et al.	6,268,405	B1	7/2001	Yao et al.
5,215,105	A	6/1993	Kizelshteyn et al.	6,273,862	B1	8/2001	Privitera et al.
5,226,910	A	7/1993	Kajiyama et al.	6,287,304	B1	9/2001	Eggers et al.
5,269,785	A	12/1993	Bonutti	6,296,639	B1	10/2001	Truckai et al.
5,273,519	A *	12/1993	Koros et al. 606/83	6,306,156	B1	10/2001	Clark
5,290,303	A	3/1994	Pingleton et al.	6,332,886	B1	12/2001	Green et al.
5,300,045	A	4/1994	Plassche	6,358,217	B1	3/2002	Bourassa
5,327,896	A *	7/1994	Schmieding 600/566	6,358,254	B1	3/2002	Anderson
5,354,266	A	10/1994	Snoke	6,375,659	B1	4/2002	Erbe et al.
5,366,477	A	11/1994	Lemarie et al.	6,419,684	B1	7/2002	Heisler et al.
5,373,854	A	12/1994	Kolozsi	6,423,332	B1	7/2002	Huxel et al.
5,385,570	A	1/1995	Chin et al.	6,425,859	B1	7/2002	Foley et al.
D358,645	S *	5/1995	Ryan et al. D24/147	6,428,486	B2	8/2002	Ritchart et al.
5,429,138	A	7/1995	Jamshidi	6,428,498	B2	8/2002	Uflacker
5,439,464	A	8/1995	Shapiro	6,443,910	B1	9/2002	Krueger et al.
5,451,227	A	9/1995	Michaelson	6,454,767	B2	9/2002	Alleyne
5,458,112	A	10/1995	Weaver	6,464,682	B1	10/2002	Snoke
5,462,062	A	10/1995	Rubinstein	6,470,209	B2	10/2002	Snoke
5,496,269	A	3/1996	Snoke	6,478,805	B1	11/2002	Marino et al.
5,514,379	A	5/1996	Weissleder et al.	6,488,636	B2	12/2002	Bryan et al.
5,531,749	A	7/1996	Michelson	6,506,190	B1	1/2003	Walshe
5,540,693	A	7/1996	Fisher	6,514,256	B2	2/2003	Zucherman et al.
5,562,102	A	10/1996	Taylor	6,520,907	B1	2/2003	Foley et al.
5,569,258	A	10/1996	Gambale	6,530,933	B1	3/2003	Yeung et al.
5,569,284	A	10/1996	Young et al.	6,572,563	B2	6/2003	Ouchi
5,575,794	A *	11/1996	Walus et al. 606/116	6,575,919	B1	6/2003	Reiley et al.
5,582,618	A	12/1996	Chin et al.	6,575,968	B1	6/2003	Eggers et al.
5,595,186	A	1/1997	Rubinstein et al.	6,575,977	B1 *	6/2003	Michelson 606/83
5,613,972	A	3/1997	Lee et al.	6,599,310	B2	7/2003	Leung et al.
5,638,827	A	6/1997	Palmer et al.	6,602,248	B1	8/2003	Sharps et al.
5,645,075	A	7/1997	Palmer et al.	6,605,294	B2	8/2003	Sawhney et al.
5,681,337	A	10/1997	Bray, Jr.	6,620,185	B1	9/2003	Harvie et al.
5,705,485	A	1/1998	Cini et al.	6,626,916	B1	9/2003	Yeung et al.
5,709,697	A	1/1998	Ratcliff et al.	6,645,213	B2	11/2003	Sand et al.
5,718,237	A	2/1998	Haaga	6,652,558	B2	11/2003	Patel et al.
5,730,754	A	3/1998	Obenchain	6,669,729	B2	12/2003	Chin et al.
5,759,185	A	6/1998	Grinberg et al.	6,692,445	B2	2/2004	Roberts et al.
5,762,639	A *	6/1998	Gibbs 604/272	6,716,216	B1	4/2004	Boucher et al.
5,772,597	A	6/1998	Goldberger et al.	6,746,093	B2	6/2004	Martinez et al.
5,775,333	A	7/1998	Burbank et al.	6,746,451	B2	6/2004	Middleton et al.
5,782,849	A	7/1998	Miller	6,772,012	B2	8/2004	Ricart et al.
5,827,289	A	10/1998	Reiley et al.	6,783,534	B2	8/2004	Mehdizadeh
5,827,305	A	10/1998	Gordon	6,818,001	B2	11/2004	Wulfman et al.
5,836,948	A	11/1998	Zucherman et al.	6,852,095	B1	2/2005	Ray
5,840,338	A	11/1998	Roos et al.	6,858,229	B1	2/2005	Hubbell et al.
5,853,366	A	12/1998	Dowlatshahi	6,925,323	B2	8/2005	Snoke
5,857,996	A	1/1999	Snoke	6,991,633	B2 *	1/2006	Agbodoe 606/83
5,860,991	A	1/1999	Klein et al.	7,008,433	B2	3/2006	Voellmicke et al.
5,868,745	A	2/1999	Alleyne	7,011,663	B2 *	3/2006	Michelson 606/83
5,873,886	A	2/1999	Larsen et al.	7,025,771	B2	4/2006	Kuslich et al.
5,879,353	A	3/1999	Terry	7,041,050	B1	5/2006	Ronald
5,879,365	A	3/1999	Whitfield et al.	7,066,942	B2	6/2006	Treace
5,916,858	A	6/1999	Kim et al.	7,070,596	B1	7/2006	Woloszko et al.
5,925,050	A	7/1999	Howard, III	7,101,382	B2	9/2006	George et al.
5,925,056	A	7/1999	Thomas et al.	7,137,956	B2	11/2006	Nishtalas et al.
5,931,855	A	8/1999	Buncke	7,189,206	B2	3/2007	Quick et al.
5,964,782	A	10/1999	Lafontaine	7,201,722	B2	4/2007	Krueger
5,980,525	A	11/1999	Bryant et al.	7,276,032	B2	10/2007	Hibner
				7,297,147	B2 *	11/2007	Michelson 606/83

US D619,253 S

Page 3

7,322,978	B2	1/2008	West, Jr.	2006/0184175	A1	8/2006	Schomer et al.	
7,329,402	B2	2/2008	Unger et al.	2006/0206115	A1	9/2006	Schomer et al.	
7,445,634	B2	11/2008	Trieu	2006/0235334	A1	10/2006	Corvi et al.	
2001/0005778	A1	6/2001	Ouchi	2006/0235451	A1	10/2006	Schomer et al.	
2003/0009125	A1	1/2003	Nita et al.	2006/0235452	A1	10/2006	Schomer et al.	
2003/0077225	A1	4/2003	Laurent et al.	2006/0264994	A1	11/2006	Schomer et al.	
2003/0165555	A1	9/2003	Ding et al.	2007/0005084	A1	1/2007	Clague et al.	
2003/0220650	A1	11/2003	Major et al.	2007/0027464	A1	2/2007	Way et al.	
2004/0049217	A1	3/2004	Ross et al.	2007/0055263	A1	3/2007	Way et al.	
2004/0059370	A1	3/2004	Greene, Jr. et al.	2007/0123888	A1	5/2007	Bleich et al.	
2004/0138701	A1	7/2004	Haluck	2007/0162061	A1	7/2007	Way et al.	
2004/0210231	A1	10/2004	Boucher et al.	2007/0198019	A1	8/2007	Schomer et al.	
2005/0037079	A1	2/2005	Son et al.	2007/0225703	A1	9/2007	Schmitz et al.	
2005/0038432	A1	2/2005	Shaolian et al.	2007/0276390	A1	11/2007	Solsberg et al.	
2005/0075630	A1	4/2005	Truckai et al.	2008/0161809	A1*	7/2008	Schmitz et al.	606/79
2005/0080441	A1	4/2005	Dodge et al.	2008/0200941	A1*	8/2008	Mitusina	606/171
2005/0137602	A1	6/2005	Assell et al.	2008/0221383	A1	9/2008	Way et al.	
2005/0209610	A1	9/2005	Carrison	2009/0118709	A1*	5/2009	Sand et al.	604/540
2005/0228403	A1	10/2005	Ho et al.					
2005/0267503	A1*	12/2005	Hunstad					
2006/0030785	A1	2/2006	Field et al.					
2006/0036211	A1	2/2006	Solsberg et al.					
2006/0036271	A1	2/2006	Schomer et al.					
2006/0036272	A1	2/2006	Solsberg et al.					
2006/0089609	A1	4/2006	Bleich et al.					
2006/0089633	A1	4/2006	Bleich et al.					
2006/0089640	A1	4/2006	Bleich et al.					
2006/0094976	A1	5/2006	Bleich et al.					
2006/0095028	A1	5/2006	Bleich et al.					
2006/0095059	A1	5/2006	Bleich et al.					
2006/0100651	A1	5/2006	Bleich					
2006/0122458	A1	6/2006	Bleich					
2006/0122535	A1	6/2006	Daum					
2006/0135882	A1	6/2006	Bleich					
2006/0178682	A1	8/2006	Boehlke					

FOREIGN PATENT DOCUMENTS

WO	WO 97/34536	A3	11/1997
WO	WO 00/45868	A1	8/2000
WO	WO 01/08571	A1	2/2001
WO	WO 02/076311	A2	10/2002
WO	WO 02/076311	A3	2/2004

OTHER PUBLICATIONS

International Search Report and Written Opinion for Appl. No. PCT/US06/04342 dated Sep. 18, 2007.

International Search Report and Written Opinion for Appl. No. PCT/US2006/030299 dated Aug. 2007.

International Search Report for International Application No. PCT/US05/27216 dated Nov. 29, 2005.

* cited by examiner

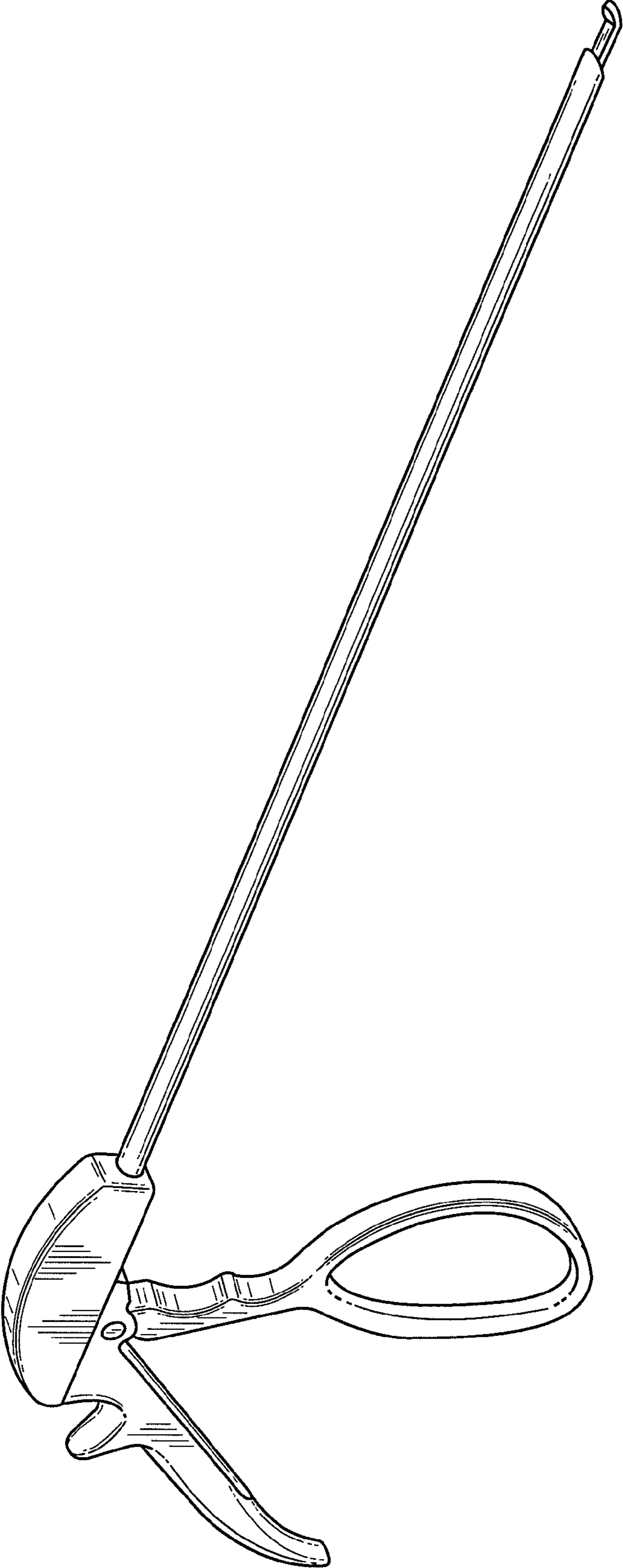


FIG. 1

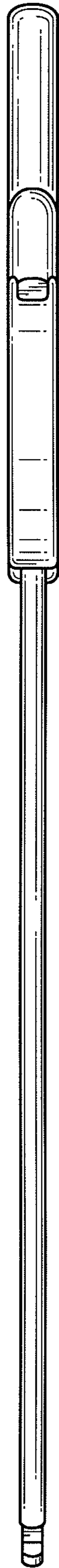


FIG. 2



FIG. 3

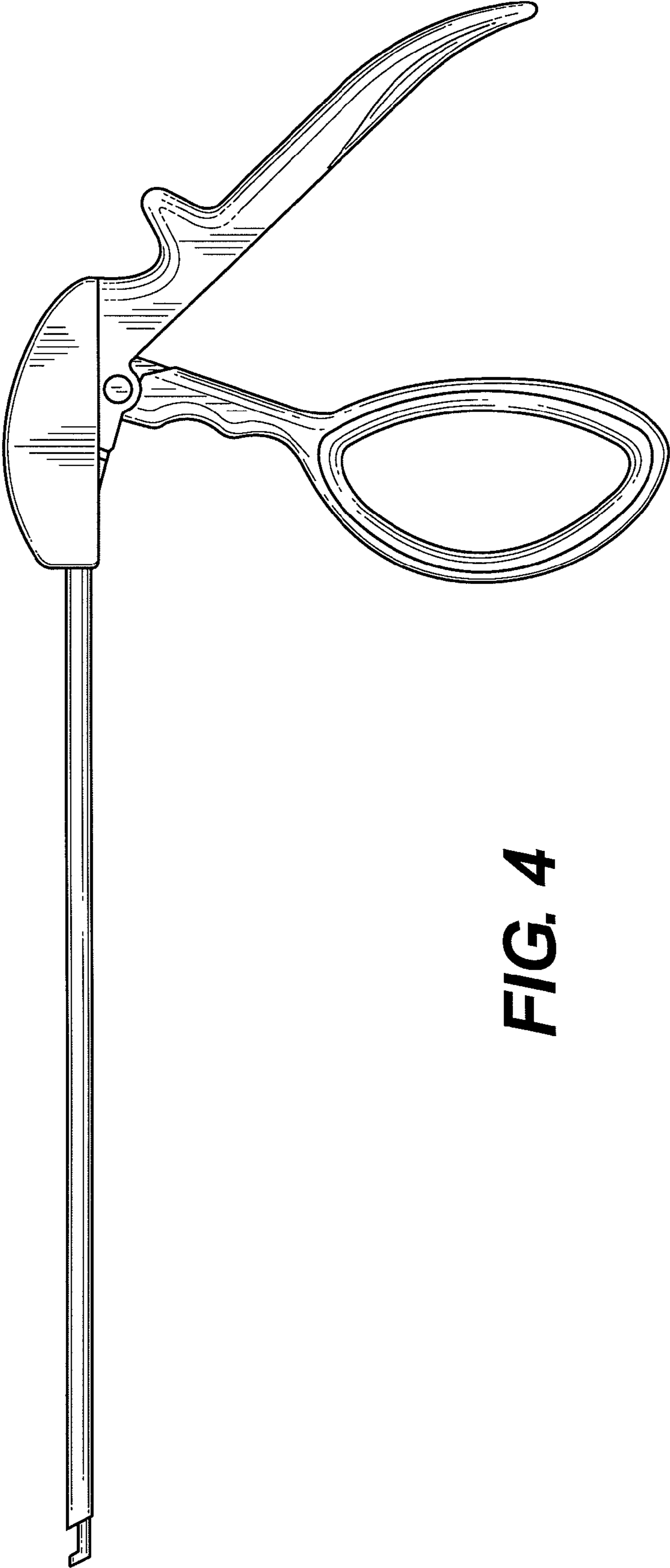


FIG. 4

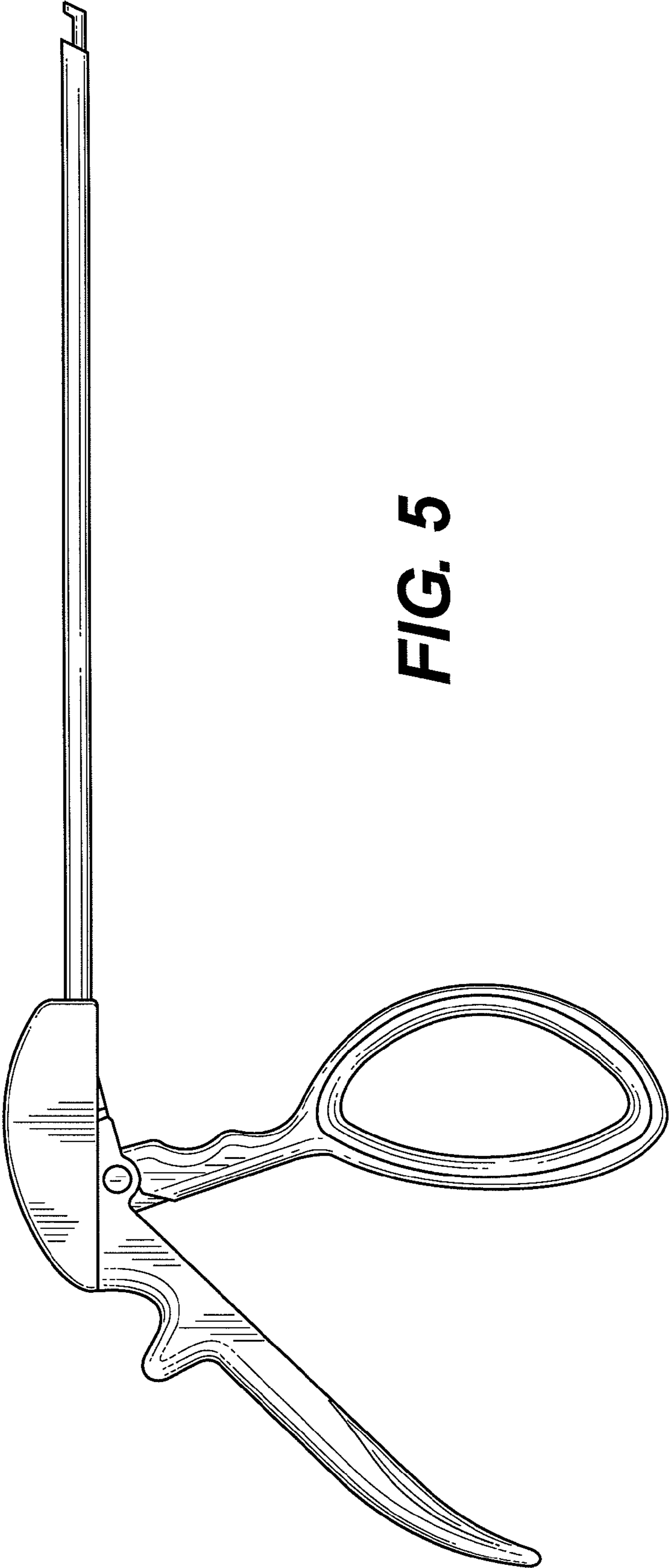
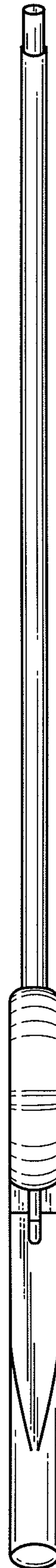


FIG. 5

FIG. 6



FIG. 7



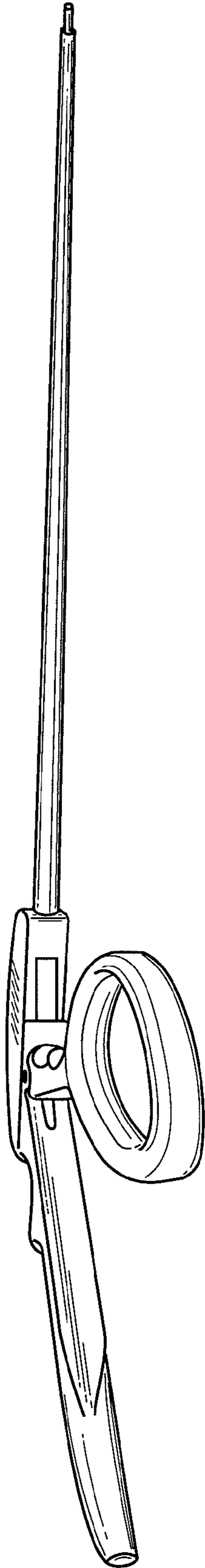


FIG. 8

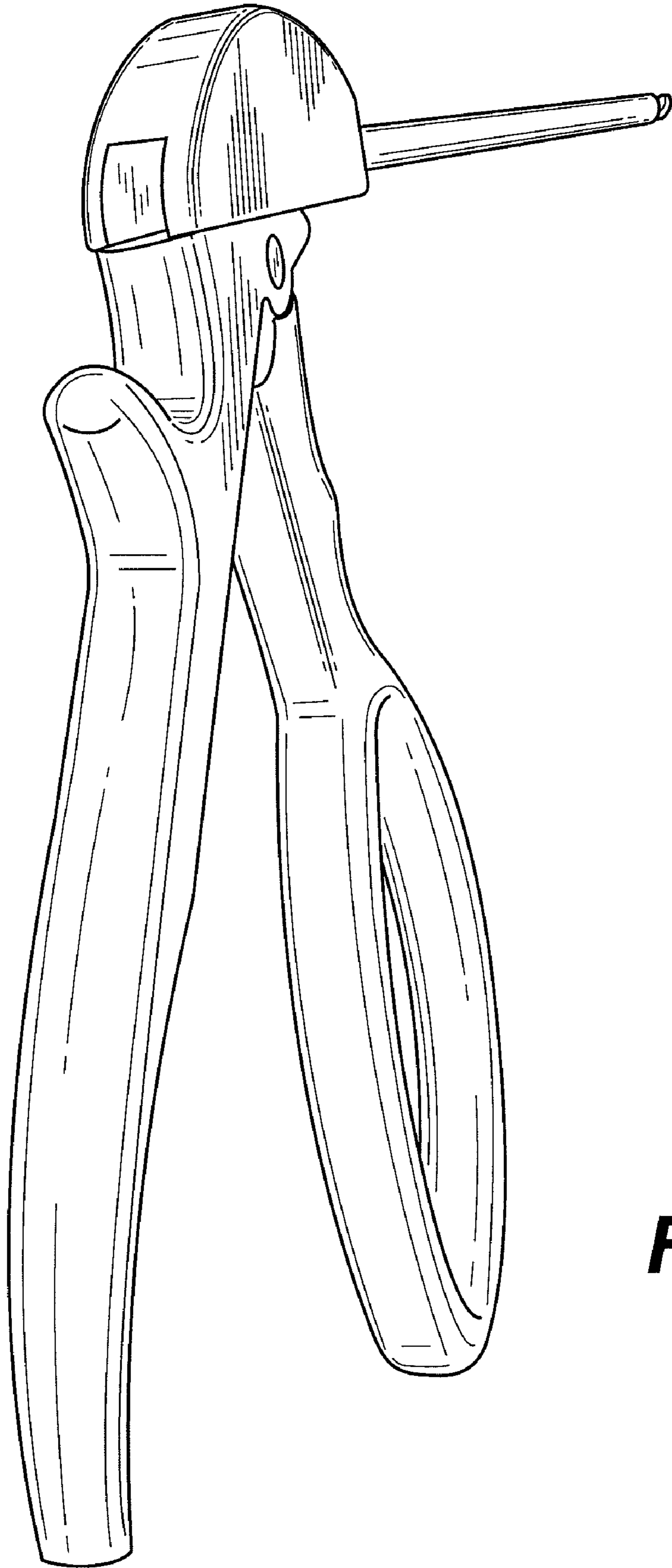


FIG. 9

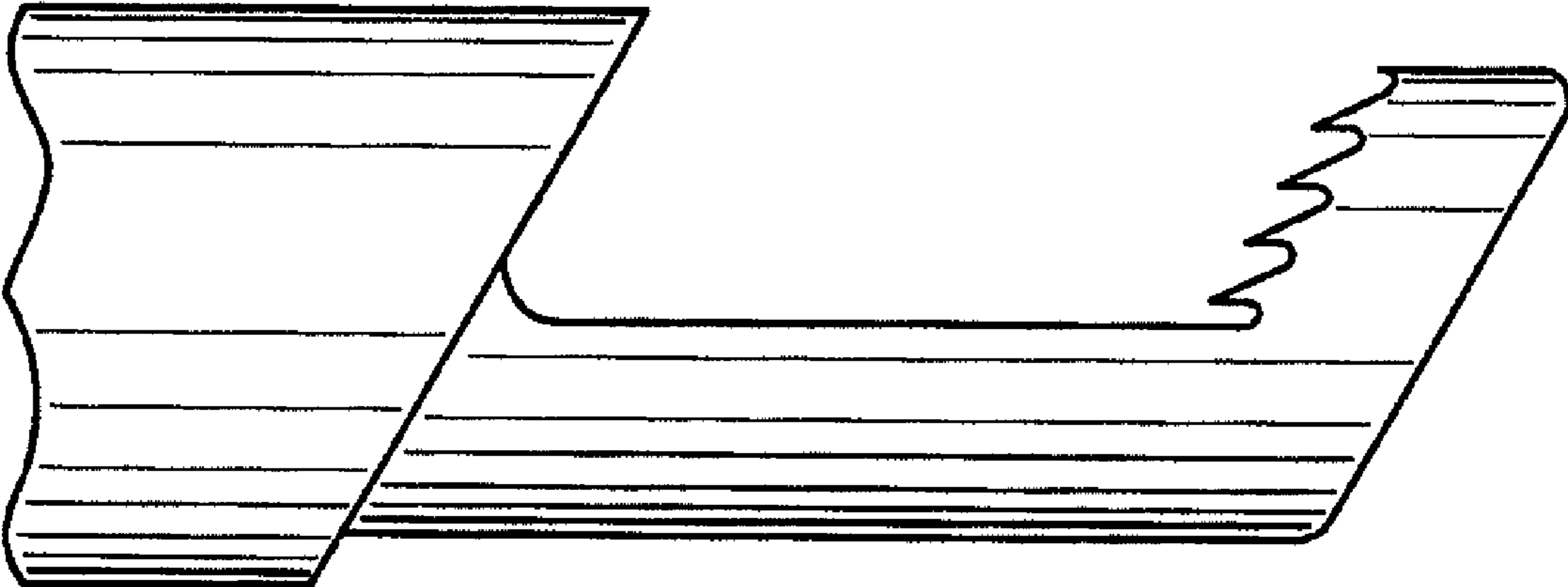


FIG. 10