



US00D457958S

(12) **United States Design Patent** (10) **Patent No.:** **US D457,958 S**  
**Dycus et al.** (45) **Date of Patent:** **\*\* May 28, 2002**

(54) **VESSEL SEALER AND DIVIDER**  
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(\*\*) Term: **14 Years**

(21) Appl. No.: **29/139,846**

(22) Filed: **Apr. 6, 2001**

(51) **LOC (7) Cl.** ..... **24-02**

(52) **U.S. Cl.** ..... **D24/144; D24/145**

(58) **Field of Search** ..... D24/143, 144, D24/153, 145; 606/40, 41, 51, 45, 42, 49, 48, 208, 206, 207, 50, 52

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

371,664 A	10/1887	Brannan et al.
702,472 A	6/1902	Pignolet
728,883 A	5/1903	Downes
1,586,645 A	6/1926	Bierman
2,002,594 A	5/1935	Wappler et al.
2,176,479 A	10/1939	Willis
3,643,663 A	2/1972	Sutter
3,651,811 A	3/1972	Hildebrandt et al.
3,920,021 A	11/1975	Hiltebrandt
3,938,527 A	2/1976	Rioux et al.
3,952,749 A	4/1976	Fridolph et al.
4,005,714 A	2/1977	Hiltebrandt
4,370,980 A	2/1983	Lottick
4,552,143 A	11/1985	Lottick
4,597,379 A	7/1986	Kihn et al.
4,671,274 A	6/1987	Sorochenko
4,685,459 A	8/1987	Xoch et al.
4,763,669 A	8/1988	Jaeger
4,887,612 A	12/1989	Esser et al.
4,938,761 A	7/1990	Ensslin

5,026,370 A	6/1991	Lottick
5,116,332 A	5/1992	Lottick
5,151,102 A	9/1992	Xamiyama et al.
5,215,101 A	6/1993	Jacobs et al.
5,217,458 A	6/1993	Parins
5,250,047 A	10/1993	Rydell
5,258,006 A	11/1993	Rydell et al.
5,277,201 A	1/1994	Stern
5,318,589 A	6/1994	Lichtman
5,324,289 A	6/1994	Eggers

(List continued on next page.)

**FOREIGN PATENT DOCUMENTS**

CA	2104423	2/1994
EP	0 584 787 A1	3/1994
EP	0 853 922 A1	7/1998
SU	401367	5/1971

**OTHER PUBLICATIONS**

Int'l Search Report PCT/US98/18640, Sep. 1998.  
Int'l Search Report PCT/US98/23950, Nov. 1998.  
Int'l Search Report PCT/US99/24869, Oct. 1999.  
Bergdahl et al. "Studies of Coagulation . . .".  
Sigel et al. "The Mechanism of Blood", @ 91.

*Primary Examiner*—Ian Simmons

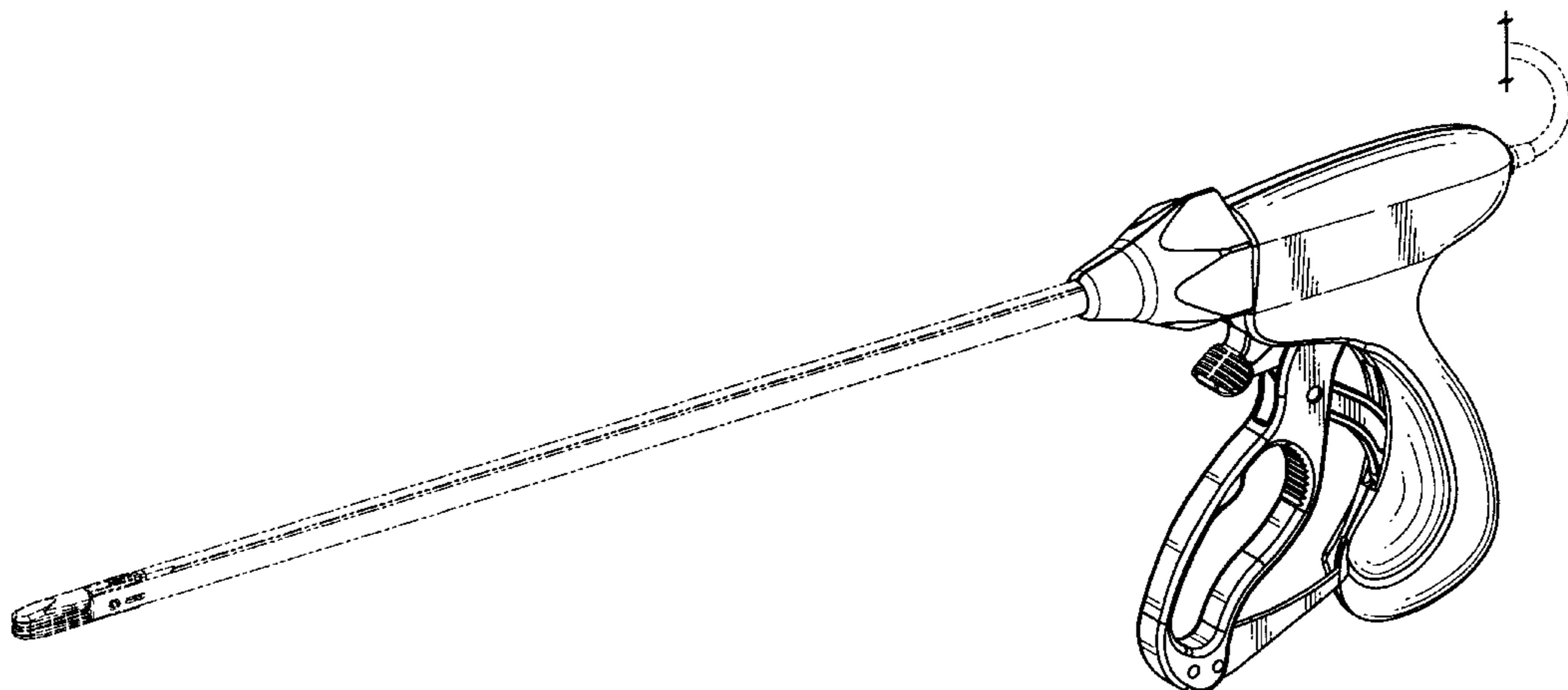
(57) **CLAIM**

We claim the ornamental design for a vessel sealer and divider, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of a vessel sealer and divider showing our new design; FIG. 2 is a right side view of the vessel sealer and divider; FIG. 3 is a left side view of the vessel sealer and divider; FIG. 4 is a front view of the vessel sealer and divider; FIG. 5 is a rear view of the vessel sealer and divider; FIG. 6 is a top view of the vessel sealer and divider; and, FIG. 7 is a bottom view of the vessel sealer and divider. The broken line showing in FIGS. 1 through 7 are for illustrative purposes only and forms no part of the claimed design.

**1 Claim, 4 Drawing Sheets**

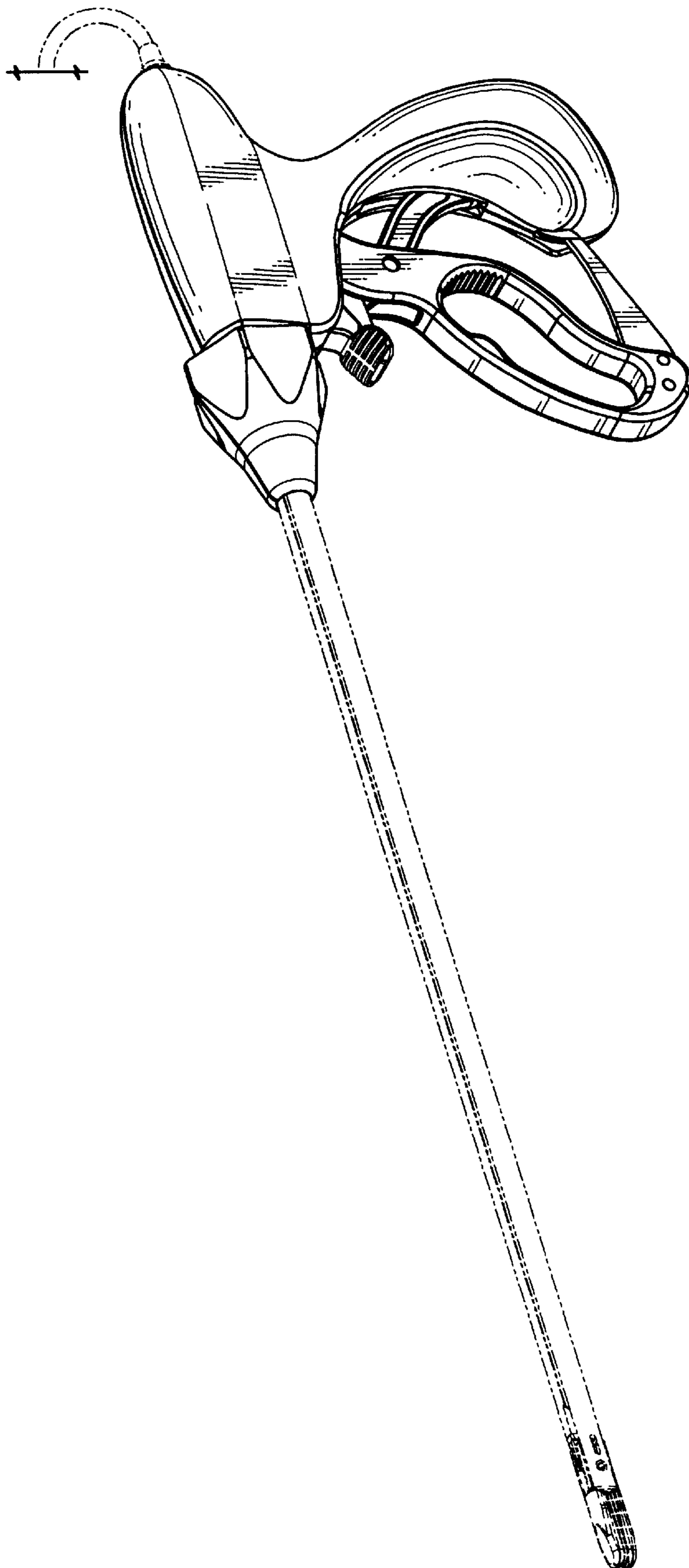


# US D457,958 S

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U.S. PATENT DOCUMENTS					
5,330,471 A	7/1994	Eggers	5,702,390 A	12/1997	Austin et al.
5,334,215 A	8/1994	Chen	5,707,369 A	1/1998	Vaitekunas et al.
5,342,359 A	8/1994	Rydell	5,766,166 A	6/1998	Hooven
5,352,222 A	10/1994	Rydell	5,766,170 A	6/1998	Eggers
5,356,408 A	10/1994	Rydell	5,769,849 A	6/1998	Eggers
D354,564 S *	1/1995	Medema ..... D24/145	5,776,128 A	7/1998	Eggers
5,389,098 A	2/1995	Tsuruta et al.	5,776,130 A	7/1998	Buysse et al.
5,389,104 A	2/1995	Hahnen et al.	5,792,137 A	8/1998	Carr et al.
5,391,166 A	2/1995	Eggers	5,800,449 A	9/1998	Wales
5,403,312 A	4/1995	Yates et al.	5,814,043 A	9/1998	Shapeton
5,411,519 A	5/1995	Tovey et al.	5,827,279 A	10/1998	Hughett et al.
5,431,674 A	7/1995	Basile et al.	5,827,281 A	10/1998	Levin
5,443,463 A	8/1995	Stern et al.	5,843,080 A	12/1998	Fleenor et al.
5,443,464 A	8/1995	Russell et al.	5,891,142 A	4/1999	Eggers et al.
5,443,480 A	8/1995	Jacobs et al.	5,913,874 A	6/1999	Berns et al.
5,445,658 A	8/1995	Durrfeld et al.	5,921,984 A	7/1999	Sutcu et al.
5,456,684 A	10/1995	Schmidt et al.	5,935,126 A	8/1999	Riza
5,462,546 A	10/1995	Rydell	5,951,549 A	9/1999	Richardson et al.
5,472,443 A	12/1995	Cordis et al.	5,954,720 A	9/1999	Wilson et al.
5,478,351 A	12/1995	Meade et al.	D416,089 S *	11/1999	Barton et al. .... D24/145
5,480,409 A *	1/1996	Riza ..... 606/52	6,004,335 A	12/1999	Vaitekunas et al.
5,484,436 A	1/1996	Eggers et al.	6,039,733 A	3/2000	Buysse et al.
5,509,922 A	4/1996	Aranyi et al.	6,050,996 A	4/2000	Schmaltz et al.
5,527,313 A	6/1996	Scott et al.	6,053,914 A	4/2000	Eggers et al.
5,531,744 A	7/1996	Nardella et al.	6,083,223 A	7/2000	Baker
5,540,684 A	7/1996	Hassler, Jr.	6,086,586 A	7/2000	Hooven
5,558,672 A	9/1996	Edwards et al.	6,090,107 A	7/2000	Borgmeier et al.
5,569,241 A	10/1996	Edwardds	6,096,037 A *	8/2000	Mulier et al. .... 606/51
5,573,535 A	11/1996	Viklund	6,099,550 A	8/2000	Yoon
5,603,723 A	2/1997	Aranyi et al.	6,113,596 A	9/2000	Hooven et al.
5,618,304 A *	4/1997	Hart et al. .... 606/52	6,113,598 A	9/2000	Baker
5,626,578 A	5/1997	Tihon	6,126,658 A	10/2000	Baker
5,637,110 A	6/1997	Pennybacker et al.	6,152,923 A	11/2000	Ryan
5,658,281 A	8/1997	Heard	6,174,309 B1	1/2001	Wrublewski et al.
5,667,526 A	9/1997	Levin	6,179,837 B1	1/2001	Hooven
5,674,220 A	10/1997	Fox et al.	6,183,467 B1	2/2001	Shapeton et al.
5,693,051 A	12/1997	Schulze et al.	6,187,003 B1	2/2001	Buysse et al.
5,700,261 A	12/1997	Brinkerhoff	6,206,877 B1	3/2001	Kese et al.

\* cited by examiner



**FIG. 1**



FIG. 2

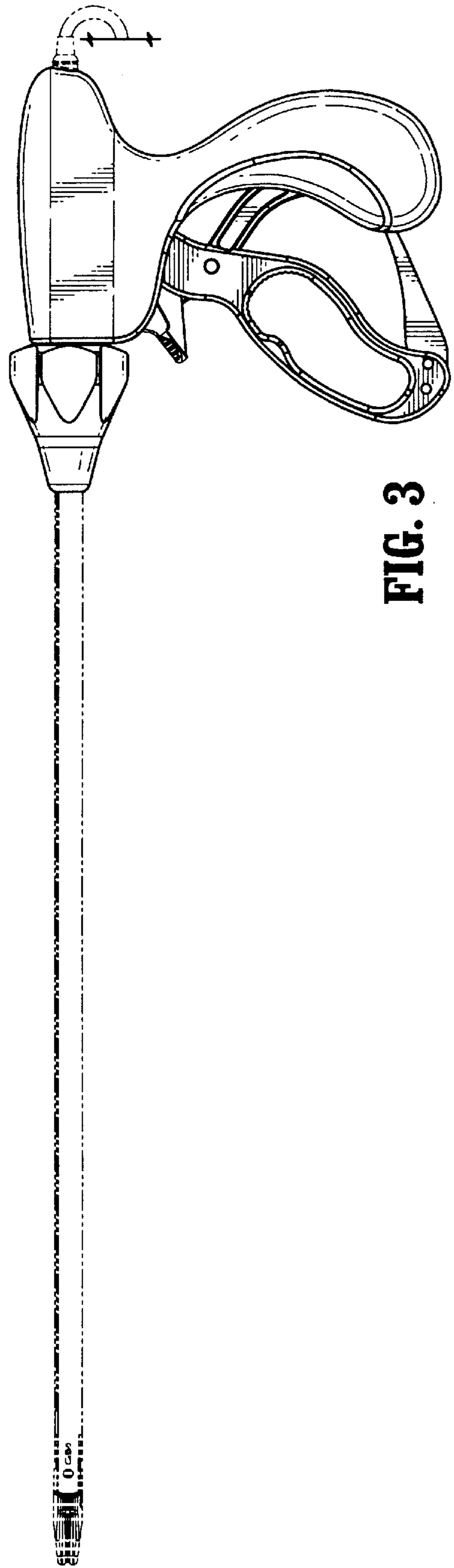
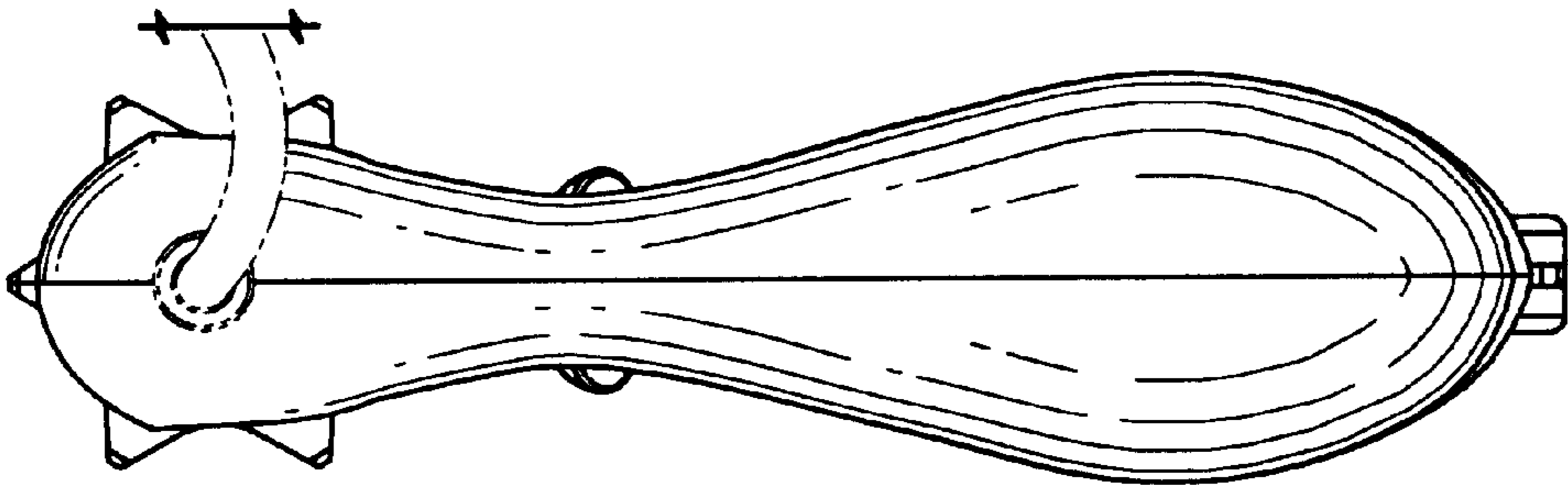
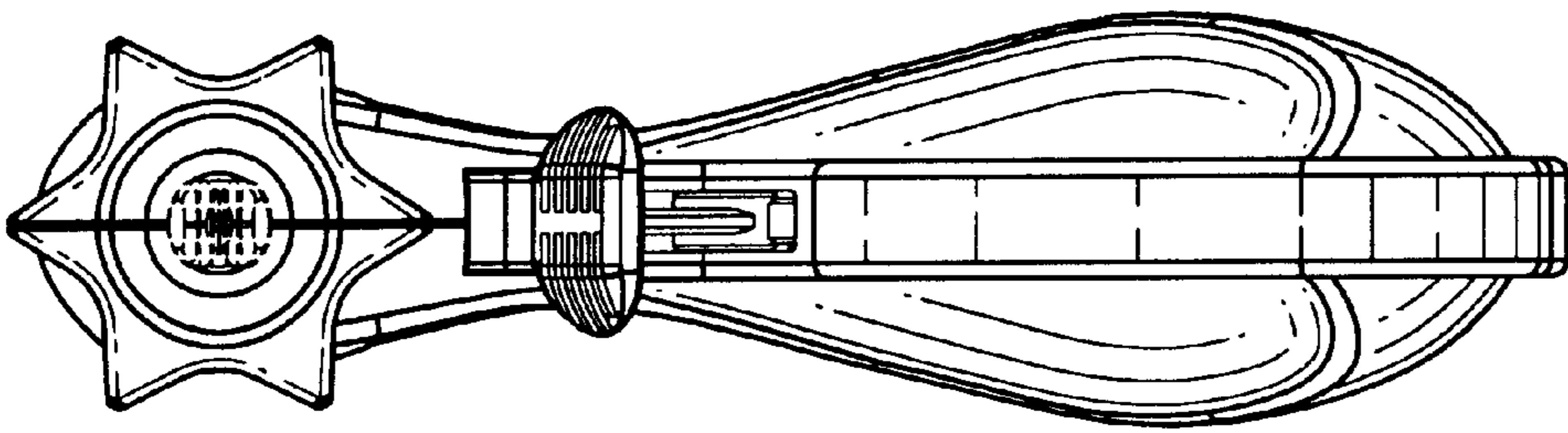


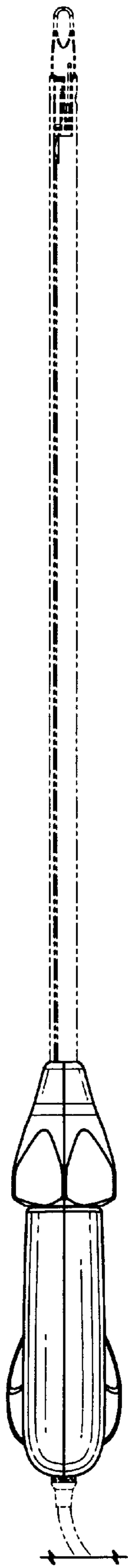
FIG. 3



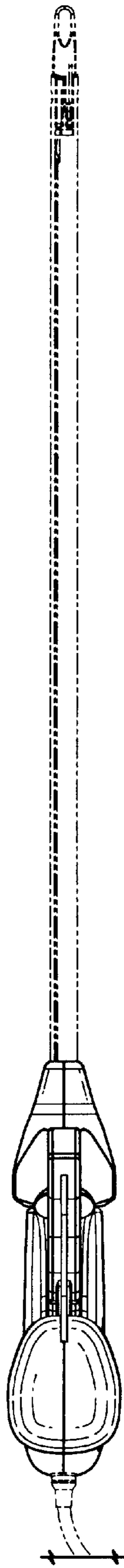
**FIG. 5**



**FIG. 4**



**FIG. 6**



**FIG. 7**