



US00D832430S

(12) **United States Design Patent** (10) **Patent No.:** **US D832,430 S**
Denenburg et al. (45) **Date of Patent:** **** Oct. 30, 2018**

(54) **DUAL VIAL ADAPTER ASSEMBLAGE**
(71) Applicant: **MEDIMOP Medical Projects Ltd.,**
Ra'anana (IL)

2,931,668 A 4/1960 Baley
2,968,497 A 1/1961 Treleman
3,059,643 A 10/1962 Barton
(Continued)

(72) Inventors: **Igor Denenburg,** Gedera (IL); **Amir Lev,** Kfar Saba (IL); **Uri David,** Nes Ziona (IL)

FOREIGN PATENT DOCUMENTS

CN 1950049 A 4/2007
DE 1913926 A1 9/1970
(Continued)

(73) Assignee: **West Pharma. Services IL, Ltd.,**
Ra'anana (IL)

OTHER PUBLICATIONS

(**) Term: **15 Years**

IV disposables sets catalogue, Cardinal Health, Alaris® products, SmartSite® access devices and accessories product No. 10013365, SmartSite add-on bag access device with spike adapter and needle-free valve bag access port, pp. 1-5, Fall edition (2007).

(21) Appl. No.: **29/584,446**

(Continued)

(22) Filed: **Nov. 15, 2016**

(51) **LOC (11) Cl.** **24-02**

(52) **U.S. Cl.**

USPC **D24/129**

(58) **Field of Classification Search**

USPC D24/110.5, 110.6, 128-130, 172;
D7/397, 387, 398; D8/363, 396
CPC A61J 1/2048; A61J 1/2013; A61J 1/2055;
A61J 1/2089; A61J 1/2096; A61M
16/0816; A61M 5/00; A61M 5/162
See application file for complete search history.

Primary Examiner — Sheryl Lane

Assistant Examiner — Calvin E Vansant

(74) *Attorney, Agent, or Firm* — Panitch Schwarze
Belisario & Nadel LLP

(57) **CLAIM**

The ornamental design for a dual vial adapter assemblage, as shown and described.

DESCRIPTION

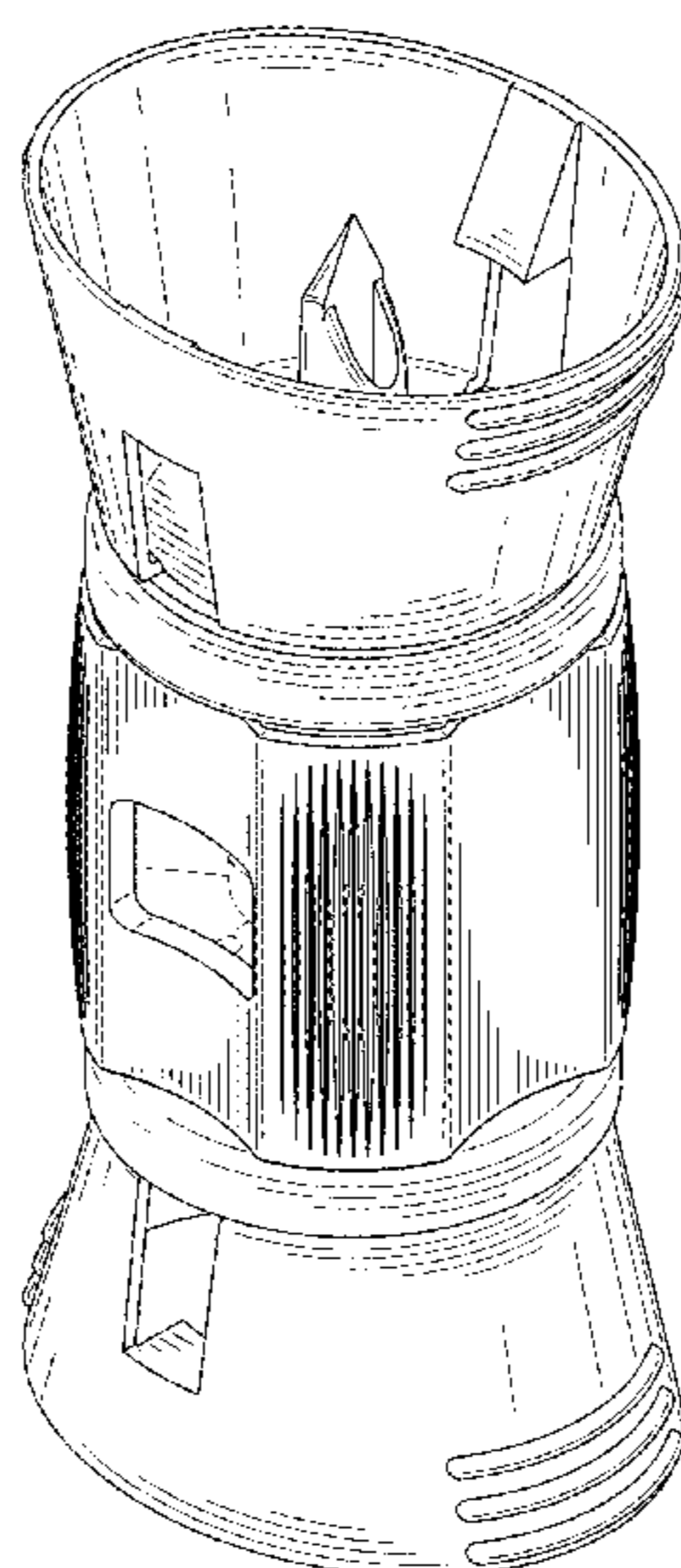
(56) **References Cited**

U.S. PATENT DOCUMENTS

D62,333 S	2/1867	Holl
247,975 A	10/1881	Wickes
254,444 A	2/1882	Vogel
300,060 A	6/1884	Ford
1,021,681 A	3/1912	Jennings
1,704,817 A	3/1929	Ayers
1,930,944 A	10/1933	Schmitz, Jr.
2,326,490 A	8/1943	Perelson
2,560,162 A	7/1951	Garwood
2,748,769 A	6/1956	Huber
2,830,587 A	4/1958	Everett

FIG. 1 is a front top perspective view of a dual vial adapter assemblage, showing our new design; FIG. 2 is a front bottom perspective 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 top plan view thereof; and, FIG. 8 is a bottom plan view thereof. The broken lines are directed to environment and form no part of the claimed design.

1 Claim, 7 Drawing Sheets



US D832,430 S

(56)

References Cited

U.S. PATENT DOCUMENTS

				4,743,243 A	5/1988	Vaillancourt	
				4,752,292 A	6/1988	Lopez et al.	
				4,758,235 A	7/1988	Tu	
				4,759,756 A *	7/1988	Forman	A61J 1/2089
							604/413
D198,499 S	6/1964	Harautuneian		4,778,447 A	10/1988	Velde et al.	
3,225,763 A	12/1965	Waterman		4,787,898 A	11/1988	Raines	
3,277,893 A	10/1966	Clark		4,797,898 A	1/1989	Martinez	
3,308,822 A	3/1967	De Luca		D300,060 S	2/1989	Molgaard-Nielsen	
3,484,849 A	12/1969	Huebner et al.		4,804,366 A	2/1989	Zdeb et al.	
3,618,637 A	11/1971	Santomieri		4,826,492 A	5/1989	Magasi	
3,757,981 A	9/1973	Harris, Sr. et al.		4,832,690 A	5/1989	Kuu	
3,788,524 A	1/1974	Davis et al.		4,834,152 A	5/1989	Howson et al.	
3,822,700 A	7/1974	Pennington		D303,013 S	8/1989	Konopka	
3,826,261 A	7/1974	Killinger		4,857,062 A	8/1989	Russell	
3,872,992 A	3/1975	Larson		4,865,592 A	9/1989	Rycroft	
3,885,607 A	5/1975	Peltier		4,871,463 A	10/1989	Taylor et al.	
3,938,520 A *	2/1976	Scislowicz	A61J 1/2089	4,898,209 A	2/1990	Zbed	
			141/330	4,909,290 A	3/1990	Coccia	
3,957,052 A	5/1976	Topham		4,927,423 A	5/1990	Malmborg	
3,977,555 A	8/1976	Larson		4,931,040 A	6/1990	Haber et al.	
3,993,063 A	11/1976	Larrabee		4,932,944 A	6/1990	Jagger et al.	
4,020,839 A	5/1977	Klapp		4,967,797 A	11/1990	Manska	
4,051,852 A	10/1977	Villari		D314,050 S	1/1991	Sone	
D247,975 S	5/1978	Luther		D314,622 S	2/1991	Andersson et al.	
D248,568 S	7/1978	Ismach		4,997,430 A	3/1991	Van der Heiden et al.	
4,109,670 A	8/1978	Slagel		5,006,114 A	4/1991	Rogers et al.	
4,121,585 A	10/1978	Becker, Jr.		5,035,686 A	7/1991	Crittenden et al.	
4,161,178 A	7/1979	Genese		5,041,105 A	8/1991	D'Alo et al.	
4,187,848 A	2/1980	Taylor		5,045,066 A	9/1991	Scheuble et al.	
D254,444 S	3/1980	Levine		5,049,129 A	9/1991	Zdeb et al.	
4,203,067 A	5/1980	Fitzky et al.		5,053,015 A	10/1991	Gross	
4,203,443 A	5/1980	Genese		5,061,248 A	10/1991	Sacco	
4,210,173 A	7/1980	Choksi et al.		5,088,996 A	2/1992	Kopfer et al.	
D257,286 S	10/1980	Folkman		5,096,575 A	3/1992	Cosack	
4,253,501 A	3/1981	Ogle		5,104,387 A	4/1992	Pokorney et al.	
4,296,786 A	10/1981	Brignola		5,113,904 A	5/1992	Aslanian	
4,303,067 A	12/1981	Connolly et al.		5,122,124 A	6/1992	Novacek et al.	
4,312,349 A	1/1982	Cohen		5,125,908 A	6/1992	Cohen	
4,314,586 A	2/1982	Folkman		5,125,915 A	6/1992	Berry et al.	
4,328,802 A	5/1982	Curley et al.		D328,788 S	8/1992	Sagae et al.	
4,335,717 A	6/1982	Bujan et al.		5,171,230 A	12/1992	Eland et al.	
D267,199 S	12/1982	Koenig		5,201,705 A	4/1993	Berglund et al.	
4,376,634 A	3/1983	Prior et al.		5,201,717 A	4/1993	Wyatt et al.	
D268,871 S	5/1983	Benham et al.		5,203,771 A	4/1993	Melker et al.	
4,392,850 A	7/1983	Elias et al.		5,203,775 A	4/1993	Frank et al.	
D270,282 S	8/1983	Gross		5,211,638 A	5/1993	Dudar et al.	
4,410,321 A	10/1983	Pearson		5,232,029 A	8/1993	Knox et al.	
4,411,662 A	10/1983	Pearson		5,232,109 A	8/1993	Tirrell et al.	
D271,421 S	11/1983	Fetterman		5,242,432 A	9/1993	DeFrank	
4,434,823 A	3/1984	Hudspith		5,247,972 A	9/1993	Tetreault	
4,465,471 A	8/1984	Harris et al.		D341,420 S	11/1993	Conn	
4,475,915 A	10/1984	Sloane		5,269,768 A	12/1993	Cheung	
4,493,348 A	1/1985	Lemmons		5,270,219 A	12/1993	DeCastro et al.	
4,505,709 A	3/1985	Froning et al.		5,279,576 A	1/1994	Loo et al.	
4,507,113 A	3/1985	Dunlap		5,288,290 A	2/1994	Brody	
D280,018 S	8/1985	Scott		5,300,034 A	4/1994	Behnke et al.	
4,532,969 A	8/1985	Kwaan		5,301,685 A	4/1994	Guirguis	
4,564,054 A	1/1986	Gustaysson		5,304,163 A	4/1994	Bonnici et al.	
4,573,993 A	3/1986	Hoag et al.		5,304,165 A	4/1994	Haber et al.	
4,576,211 A	3/1986	Valentini et al.		5,308,483 A	5/1994	Sklar et al.	
4,581,014 A	4/1986	Millerd et al.		5,312,377 A	5/1994	Dalton	
4,585,446 A	4/1986	Kempf		5,328,474 A	7/1994	Raines	
4,588,396 A	5/1986	Stroebel et al.		D349,648 S	8/1994	Tirrell et al.	
4,588,403 A	5/1986	Weiss et al.		5,334,163 A	8/1994	Sinnett	
D284,603 S	7/1986	Loignon		5,334,179 A	8/1994	Poll et al.	
4,604,093 A	8/1986	Brown et al.		5,342,346 A	8/1994	Honda et al.	
4,607,671 A	8/1986	Aalto et al.		5,344,417 A	9/1994	Wadsworth, Jr.	
4,614,437 A	9/1986	Buehler		5,348,548 A	9/1994	Meyer et al.	
4,638,975 A	1/1987	Iuchi et al.		5,350,372 A	9/1994	Ikeda et al.	
4,639,019 A	1/1987	Mittleman		5,364,386 A	11/1994	Fukuoka et al.	
4,667,927 A	5/1987	Oscarsson		5,364,387 A	11/1994	Sweeney	
4,675,020 A	6/1987	McPhee		5,374,264 A	12/1994	Wadsworth, Jr.	
4,676,530 A	6/1987	Nordgren et al.		5,385,547 A	1/1995	Wong et al.	
4,683,975 A	8/1987	Booth et al.		5,397,303 A	3/1995	Sancoff et al.	
4,697,622 A	10/1987	Swift et al.		D357,733 S	4/1995	Matkovich	
4,721,133 A	1/1988	Sundblom		5,429,614 A	7/1995	Fowles et al.	
4,729,401 A	3/1988	Raines		5,433,330 A	7/1995	Yatsko et al.	
4,735,608 A	4/1988	Sardam		5,445,630 A	8/1995	Richmond	
4,743,229 A	5/1988	Chu					

(56)

References Cited

U.S. PATENT DOCUMENTS

5,445,631 A	8/1995	Uchida	5,873,872 A	2/1999	Thibault et al.
D362,718 S	9/1995	Deily et al.	5,879,337 A	3/1999	Kuracina et al.
5,451,374 A	9/1995	Molina	5,879,345 A	3/1999	Aneas
5,454,805 A	10/1995	Brony	5,887,633 A	3/1999	Yale et al.
5,464,111 A	11/1995	Vacek et al.	5,890,610 A	4/1999	Jansen et al.
5,464,123 A	11/1995	Scarrow	5,891,129 A	4/1999	Daubed et al.
5,466,219 A	11/1995	Lynn et al.	5,893,397 A	4/1999	Peterson et al.
5,466,220 A	11/1995	Brenneman	5,897,526 A	4/1999	Vaillancourt
5,470,327 A	11/1995	Helgren et al.	5,899,468 A	5/1999	Apps et al.
5,471,994 A	12/1995	Guirguis	5,902,280 A	5/1999	Powles et al.
5,472,022 A	12/1995	Michel et al.	5,902,298 A	5/1999	Niedospial, Jr. et al.
5,478,337 A	12/1995	Okamoto et al.	D410,740 S	6/1999	Molina
5,492,147 A	2/1996	Challender et al.	5,911,710 A	6/1999	Barry et al.
D369,406 S	4/1996	Niedospial et al.	5,919,182 A	7/1999	Avallone
5,505,714 A	4/1996	Dassa et al.	5,921,419 A	7/1999	Niedospial, Jr. et al.
5,509,433 A	4/1996	Paradis	5,924,584 A	7/1999	Hellstrom et al.
5,515,871 A	5/1996	Bittner et al.	5,925,029 A	7/1999	Jansen et al.
5,520,659 A	5/1996	Hedges	5,935,112 A	8/1999	Stevens et al.
5,526,853 A	6/1996	McPhee et al.	5,941,848 A	8/1999	Nishimoto et al.
5,527,306 A	6/1996	Haining	5,944,700 A	8/1999	Nguyen et al.
5,531,695 A	7/1996	Swisher	5,954,104 A	9/1999	Daubert et al.
5,547,471 A	8/1996	Thompson et al.	5,968,022 A	10/1999	Saito
5,549,577 A	8/1996	Siegel et al.	5,971,181 A	10/1999	Niedospial, Jr. et al.
5,554,128 A	9/1996	Hedges	5,971,965 A	10/1999	Mayer
5,562,696 A	10/1996	Nobles et al.	5,989,237 A	11/1999	Fowles et al.
5,566,729 A	10/1996	Grabenkort et al.	6,003,566 A	12/1999	Thibault et al.
5,569,191 A	10/1996	Meyer	6,004,278 A	12/1999	Botich et al.
5,573,281 A	11/1996	Keller	6,019,750 A	2/2000	Fowles et al.
5,578,015 A	11/1996	Robb	6,022,339 A	2/2000	Fowles et al.
5,583,052 A	12/1996	Portnoff et al.	6,036,171 A	3/2000	Weinheimer et al.
5,584,819 A	12/1996	Kopfer	6,039,093 A	3/2000	Mrotzek et al.
5,591,143 A	1/1997	Trombley, III et al.	6,039,302 A	3/2000	Cote, Sr. et al.
5,603,706 A	2/1997	Wyatt et al.	D422,357 S	4/2000	Niedospial, Jr. et al.
5,607,439 A	3/1997	Yoon	6,063,068 A	5/2000	Fowles et al.
5,611,576 A	3/1997	Guala	D427,308 S	6/2000	Zinger
5,616,203 A	4/1997	Stevens	D427,309 S	6/2000	Molina
5,636,660 A	6/1997	Pfleiderer et al.	6,070,623 A	6/2000	Aneas
5,637,101 A	6/1997	Shillington	6,071,270 A	6/2000	Fowles et al.
5,641,010 A	6/1997	Maier	6,080,132 A	6/2000	Cole et al.
5,645,538 A	7/1997	Richmond	D428,141 S	7/2000	Brotspies et al.
5,647,845 A	7/1997	Haber et al.	6,086,762 A	7/2000	Guala
5,651,776 A	7/1997	Appling et al.	6,089,541 A	7/2000	Weinheimer et al.
5,653,686 A	8/1997	Coulter et al.	6,090,091 A	7/2000	Fowles et al.
5,674,195 A	10/1997	Truthan	6,090,093 A	7/2000	Thibault et al.
5,676,346 A	10/1997	Leinsing	6,092,692 A	7/2000	Riskin
5,685,845 A	11/1997	Grimard	D430,291 S	8/2000	Jansen et al.
D388,172 S	12/1997	Cipes	6,099,511 A	8/2000	Devos et al.
5,699,821 A	12/1997	Paradis	6,113,068 A	9/2000	Ryan
5,702,019 A	12/1997	Grimard	6,113,583 A	9/2000	Fowles et al.
5,718,346 A	2/1998	Weiler	6,117,114 A	9/2000	Paradis
D393,722 S	4/1998	Fangrow, Jr. et al.	D431,864 S	10/2000	Jansen
5,738,144 A	4/1998	Rogers	6,139,534 A	10/2000	Niedospial, Jr. et al.
5,743,312 A	4/1998	Pfeifer et al.	6,142,446 A	11/2000	Leinsing
5,746,733 A	5/1998	Capaccio et al.	6,146,362 A	11/2000	Turnbull et al.
5,752,942 A	5/1998	Doyle et al.	6,149,623 A	11/2000	Reynolds
5,755,696 A	5/1998	Caizza	6,156,025 A	12/2000	Niedospial, Jr. et al.
5,766,211 A	6/1998	Wood et al.	6,159,192 A	12/2000	Fowles et al.
5,772,630 A	6/1998	Ljungquist	6,168,037 B1	1/2001	Grimard
5,772,652 A	6/1998	Zielinski	6,171,287 B1	1/2001	Lynn et al.
RE35,841 E	7/1998	Frank et al.	6,171,293 B1	1/2001	Rowley et al.
5,776,116 A	7/1998	Lopez et al.	6,173,852 B1	1/2001	Browne
5,782,872 A	7/1998	Muller	6,173,868 B1	1/2001	DeJonge
5,806,831 A	9/1998	Paradis	6,174,304 B1	1/2001	Weston
5,810,792 A	9/1998	Fangrow, Jr. et al.	6,179,822 B1	1/2001	Niedospial, Jr.
D399,559 S	10/1998	Molina	6,179,823 B1	1/2001	Niedospial, Jr.
5,817,082 A	10/1998	Niedospial, Jr. et al.	6,206,861 B1	3/2001	Mayer
5,820,621 A	10/1998	Yale et al.	6,221,041 B1	4/2001	Russo
5,827,262 A	10/1998	Nefitel et al.	6,221,054 B1	4/2001	Martin et al.
5,832,971 A	11/1998	Yale et al.	6,221,065 B1	4/2001	Davis
5,833,213 A	11/1998	Ryan	6,238,372 B1	5/2001	Zinger et al.
5,834,744 A	11/1998	Risman	6,245,044 B1	6/2001	Daw et al.
5,839,715 A	11/1998	Leinsing	D445,501 S	7/2001	Niedospial, Jr.
5,853,406 A	12/1998	Masuda et al.	D445,895 S	7/2001	Svendson
D405,522 S	2/1999	Hoening et al.	6,253,804 B1	7/2001	Safabash
5,871,110 A	2/1999	Grimard et al.	6,258,078 B1	7/2001	Thilly
			6,280,430 B1	8/2001	Nefitel et al.
			6,290,688 B1	9/2001	Lopez et al.
			6,296,621 B1	10/2001	Masuda et al.
			6,299,131 B1	10/2001	Ryan

(56)

References Cited

U.S. PATENT DOCUMENTS

6,343,629 B1	2/2002	Wessman et al.	D506,256 S	6/2005	Miyoshi et al.
6,348,044 B1	2/2002	Coletti et al.	6,901,975 B2	6/2005	Aramata et al.
6,358,236 B1	3/2002	DeFoggi et al.	6,945,417 B2	9/2005	Jansen et al.
6,364,866 B1	4/2002	Furr et al.	6,948,522 B2	9/2005	Newbrough et al.
6,378,576 B2	4/2002	Thibault et al.	6,949,086 B2	9/2005	Ferguson et al.
6,378,714 B1	4/2002	Jansen et al.	6,951,613 B2	10/2005	Reif et al.
6,379,340 B1	4/2002	Zinger et al.	6,957,745 B2	10/2005	Thibault et al.
D457,954 S	5/2002	Wallace et al.	6,960,164 B2	11/2005	O'Heeron
6,382,442 B1	5/2002	Thibault et al.	6,979,318 B1	12/2005	McDonald et al.
6,386,397 B2	5/2002	Brotspies et al.	RE38,996 E	2/2006	Crawford et al.
6,408,897 B1	6/2002	Laurent et al.	6,994,315 B2	2/2006	Ryan et al.
6,409,708 B1	6/2002	Wessman	6,997,916 B2	2/2006	Simas, Jr. et al.
6,440,107 B1	8/2002	Trombley, III et al.	6,997,917 B2	2/2006	Niedospial, Jr. et al.
6,453,949 B1	9/2002	Chau	7,024,968 B2	4/2006	Raudabough et al.
6,453,956 B2	9/2002	Safabash	7,070,589 B2	7/2006	Lolachi et al.
6,474,375 B2	11/2002	Spero et al.	7,074,216 B2	7/2006	Fowles et al.
6,478,788 B1	11/2002	Aneas	7,083,600 B2	8/2006	Meloul
D468,015 S	12/2002	Horppu	7,086,431 B2	8/2006	D'Antonio et al.
6,499,617 B1	12/2002	Niedospial, Jr. et al.	7,100,890 B2	9/2006	Cote, Sr. et al.
6,503,240 B1	1/2003	Niedospial, Jr. et al.	7,140,401 B2	11/2006	Wilcox et al.
6,503,244 B2	1/2003	Hayman	7,150,735 B2	12/2006	Hickle
6,520,932 B2	2/2003	Taylor	7,192,423 B2	3/2007	Wong
6,524,278 B1	2/2003	Campbell et al.	7,195,623 B2	3/2007	Burroughs et al.
6,524,295 B2	2/2003	Daubert et al.	7,241,285 B1	7/2007	Dikeman
D472,316 S	3/2003	Douglas et al.	7,294,122 B2	11/2007	Kubo et al.
6,530,903 B2	3/2003	Wang et al.	7,306,199 B2	12/2007	Leinsing et al.
6,537,263 B1	3/2003	Aneas	D561,348 S	2/2008	Zinger et al.
D472,630 S	4/2003	Douglas et al.	7,326,188 B1	2/2008	Russell et al.
6,544,246 B1	4/2003	Niedospial, Jr.	7,326,194 B2	2/2008	Zinger et al.
6,551,299 B2	4/2003	Miyoshi et al.	7,350,764 B2	4/2008	Raybuck
6,558,365 B2	5/2003	Zinger et al.	7,354,422 B2	4/2008	Riesenberger et al.
6,571,837 B2	6/2003	Jansen et al.	7,354,427 B2	4/2008	Fangrow
6,572,591 B2	6/2003	Mayer	7,425,209 B2	9/2008	Fowles et al.
6,575,955 B2	6/2003	Azzolini	7,435,246 B2	10/2008	Zihlmann
6,581,593 B1	6/2003	Rubin et al.	D580,558 S	11/2008	Shigesada et al.
6,582,415 B1	6/2003	Fowles et al.	7,452,348 B2	11/2008	Hasegawa
D476,731 S	7/2003	Cise et al.	7,470,257 B2	12/2008	Norton et al.
6,591,876 B2	7/2003	Safabash	7,470,265 B2	12/2008	Bragger et al.
6,599,273 B1	7/2003	Lopez	7,472,932 B2	1/2009	Weber et al.
6,601,721 B2	8/2003	Jansen et al.	7,488,297 B2	2/2009	Flaherty
6,626,309 B1	9/2003	Jansen et al.	7,491,197 B2	2/2009	Jansen et al.
6,638,244 B1	10/2003	Reynolds	7,497,848 B2	3/2009	Leinsing et al.
D482,121 S	11/2003	Harding et al.	7,523,967 B2	4/2009	Steppe
D482,447 S	11/2003	Harding et al.	7,530,546 B2	5/2009	Ryan et al.
6,651,956 B2	11/2003	Miller	D595,420 S	6/2009	Suzuki et al.
6,652,509 B1	11/2003	Helgren et al.	D595,421 S	6/2009	Suzuki et al.
D483,487 S	12/2003	Harding et al.	7,540,863 B2	6/2009	Haindl
D483,869 S	12/2003	Tran et al.	7,540,865 B2	6/2009	Griffin et al.
6,656,433 B2	12/2003	Sasso	7,544,191 B2	6/2009	Peluso et al.
6,666,852 B2	12/2003	Niedospial, Jr.	D595,862 S	7/2009	Suzuki et al.
6,681,810 B2	1/2004	Weston	D595,863 S	7/2009	Suzuki et al.
6,681,946 B1	1/2004	Jansen et al.	7,611,487 B2	11/2009	Woehr et al.
6,682,509 B2	1/2004	Lopez	7,611,502 B2	11/2009	Daly
6,692,478 B1	2/2004	Paradis	7,615,041 B2	11/2009	Sullivan et al.
6,692,829 B2	2/2004	Stubler et al.	7,628,779 B2	12/2009	Aneas
6,695,829 B2	2/2004	Hellstrom et al.	7,632,261 B2	12/2009	Zinger et al.
6,699,229 B2	3/2004	Zinger et al.	D608,900 S	1/2010	Giraud et al.
6,706,022 B1	3/2004	Leinsing et al.	7,654,995 B2	2/2010	Warren et al.
6,706,031 B2	3/2004	Manera	7,670,326 B2	3/2010	Shemesh
6,715,520 B2	4/2004	Andreasson et al.	7,695,445 B2	4/2010	Yuki
6,729,370 B2	5/2004	Norton et al.	D616,090 S	5/2010	Kawamura
6,736,798 B2	5/2004	Ohkubo et al.	7,713,247 B2	5/2010	Lopez
6,745,998 B2	6/2004	Doyle	7,717,886 B2	5/2010	Lopez
6,746,438 B1	6/2004	Amissolle	7,722,090 B2	5/2010	Burton et al.
6,752,180 B2	6/2004	Delay	D616,984 S	6/2010	Gilboa
D495,416 S	8/2004	Dimeo et al.	7,731,678 B2	6/2010	Tennican et al.
D496,457 S	9/2004	Prais et al.	7,743,799 B2	6/2010	Mosler et al.
6,802,490 B2	10/2004	Leinsing et al.	7,744,581 B2	6/2010	Wallen et al.
6,832,994 B2	12/2004	Niedospial, Jr. et al.	7,757,901 B2	7/2010	Welp
6,852,103 B2	2/2005	Fowles et al.	7,758,082 B2	7/2010	Weigel et al.
6,875,203 B1	4/2005	Fowles et al.	7,758,560 B2	7/2010	Connell et al.
6,875,205 B2	4/2005	Leinsing	7,762,524 B2	7/2010	Cawthon et al.
6,878,131 B2	4/2005	Novacek et al.	7,766,304 B2	8/2010	Phillips
6,884,253 B1	4/2005	McFarlane	7,771,383 B2	8/2010	Truitt et al.
6,890,328 B2	5/2005	Fowles et al.	D624,641 S	9/2010	Boclet
			7,799,009 B2	9/2010	Niedospial, Jr. et al.
			7,803,140 B2	9/2010	Fangrow, Jr.
			D627,216 S	11/2010	Fulginiti
			D630,732 S	1/2011	Lev et al.

(56)

References Cited

U.S. PATENT DOCUMENTS

7,862,537 B2	1/2011	Zinger et al.	D720,451 S *	12/2014	Denenburg	D24/129
7,867,215 B2	1/2011	Akerlund et al.	D720,452 S	12/2014	Jordan	
7,879,018 B2	2/2011	Zinger et al.	8,900,212 B2	12/2014	Kubo	
7,895,216 B2	2/2011	Longshaw et al.	D720,850 S	1/2015	Hsia et al.	
D634,007 S	3/2011	Zinger et al.	D732,660 S	6/2015	Ohashi	
7,900,659 B2	3/2011	Whitley et al.	D732,664 S	6/2015	Woehr et al.	
D637,713 S	5/2011	Nord et al.	D733,291 S	6/2015	Wang	
D641,080 S	7/2011	Zinger et al.	D733,292 S	6/2015	Rogers	
7,985,216 B2	7/2011	Daily et al.	D733,293 S	6/2015	Rogers	
D644,104 S	8/2011	Maeda et al.	D738,494 S	9/2015	Kashmirian	
7,993,328 B2	8/2011	Whitley	D741,457 S	10/2015	Guest	
8,007,461 B2	8/2011	Huo et al.	D750,235 S	2/2016	Maurice	
8,012,132 B2	9/2011	Lum et al.	D757,933 S *	5/2016	Lev	D24/129
8,016,809 B2	9/2011	Zinger et al.	D794,183 S *	8/2017	Lev	D24/127
8,021,325 B2	9/2011	Zinger et al.	2001/0000347 A1	4/2001	Hellstrom et al.	
8,025,653 B2	9/2011	Capitaine et al.	2001/0025671 A1	10/2001	Safabash	
8,029,472 B2	10/2011	Leinsing et al.	2001/0029360 A1	10/2001	Miyoshi et al.	
8,038,123 B2	10/2011	Ruschke et al.	2001/0051793 A1	12/2001	Weston	
8,066,688 B2	11/2011	Zinger et al.	2002/0017328 A1	2/2002	Loo	
8,070,739 B2	12/2011	Zinger et al.	2002/0066715 A1	6/2002	Niedospial	
8,075,550 B2	12/2011	Nord et al.	2002/0087118 A1	7/2002	Reynolds	
8,096,525 B2	1/2012	Ryan	2002/0087141 A1	7/2002	Zinger et al.	
8,105,314 B2	1/2012	Fangrow, Jr.	2002/0087144 A1	7/2002	Zinger et al.	
D654,166 S	2/2012	Lair	2002/0121496 A1	9/2002	Thiebault et al.	
D655,017 S	2/2012	Mosler et al.	2002/0123736 A1	9/2002	Fowles et al.	
8,122,923 B2	2/2012	Kraus et al.	2002/0127150 A1	9/2002	Sasso	
8,123,736 B2	2/2012	Kraushaar et al.	2002/0128628 A1	9/2002	Fathallah	
D655,071 S	3/2012	Davila	2002/0138045 A1	9/2002	Moen	
D657,461 S	4/2012	Schembre et al.	2002/0173752 A1	11/2002	Polzin	
8,157,784 B2	4/2012	Rogers	2002/0193777 A1	12/2002	Aneas	
8,167,863 B2	5/2012	Yow	2003/0028156 A1	2/2003	Juliar	
8,172,824 B2	5/2012	Pfeifer et al.	2003/0036725 A1	2/2003	Lavi et al.	
8,177,768 B2	5/2012	Leinsing	2003/0068354 A1	4/2003	Reif et al.	
8,182,452 B2	5/2012	Mansour et al.	2003/0069550 A1	4/2003	Sharp	
8,187,248 B2	5/2012	Zihlmann	2003/0073971 A1	4/2003	Saker	
8,196,614 B2	6/2012	Kriheli	2003/0100866 A1	5/2003	Reynolds	
8,197,459 B2	6/2012	Jansen et al.	2003/0109846 A1	6/2003	Zinger et al.	
8,211,069 B2	7/2012	Fangrow	2003/0120209 A1	6/2003	Jensen et al.	
8,225,959 B2	7/2012	Lambrecht	2003/0153895 A1	8/2003	Leinsing	
8,241,268 B2	8/2012	Whitley	2003/0187420 A1	10/2003	Akenund et al.	
8,262,628 B2	9/2012	Fangrow, Jr.	2003/0191445 A1	10/2003	Wallen et al.	
8,262,641 B2	9/2012	Vedrine et al.	2003/0195479 A1	10/2003	Kuracina et al.	
8,267,127 B2	9/2012	Kriheli	2003/0199846 A1	10/2003	Fowles et al.	
D669,980 S	10/2012	Lev et al.	2003/0199847 A1	10/2003	Akerlund et al.	
8,287,513 B2	10/2012	Ellstrom et al.	2003/0205843 A1	11/2003	Adams	
8,328,784 B2	12/2012	Jensen et al.	2003/0236543 A1	12/2003	Brenneman et al.	
D673,673 S	1/2013	Wang	2004/0024354 A1	2/2004	Reynolds	
D674,084 S	1/2013	Linnenschmidt	2004/0039365 A1	2/2004	Aramata et al.	
D674,088 S	1/2013	Lev et al.	2004/0044327 A1	3/2004	Hasegawa	
D681,230 S	4/2013	Mosler et al.	2004/0073189 A1	4/2004	Wyatt et al.	
8,454,573 B2	6/2013	Wyatt et al.	2004/0143218 A1	7/2004	Das	
8,469,939 B2	6/2013	Fangrow, Jr.	2004/0143226 A1	7/2004	Marsden	
8,475,404 B2	7/2013	Foshee et al.	2004/0153047 A1	8/2004	Blank et al.	
8,480,645 B1	7/2013	Choudhury et al.	2004/0162540 A1	8/2004	Walenciak et al.	
8,480,646 B2	7/2013	Nord et al.	2004/0167472 A1	8/2004	Howell et al.	
8,506,548 B2	8/2013	Okiyama	2004/0181192 A1	9/2004	Cuppy	
8,511,352 B2	8/2013	Kraus et al.	2004/0199139 A1	10/2004	Fowles et al.	
8,512,309 B2	8/2013	Shemesh et al.	2004/0204699 A1	10/2004	Hanly et al.	
D690,009 S	9/2013	Schembre et al.	2004/0217315 A1	11/2004	Doyle	
D690,418 S	9/2013	Rosenquist	2004/0225274 A1	11/2004	Jansen et al.	
8,523,837 B2	9/2013	Wiggins et al.	2004/0236305 A1	11/2004	Jansen et al.	
8,545,476 B2	10/2013	Ariagno et al.	2004/0249341 A1	12/2004	Newbrough et al.	
8,551,067 B2	10/2013	Zinger et al.	2004/0255952 A1	12/2004	Carlsen et al.	
8,556,879 B2	10/2013	Okiyama	2005/0015070 A1	1/2005	Delnevo et al.	
8,562,582 B2	10/2013	Tuckwell et al.	2005/0016626 A1	1/2005	Wilcox et al.	
8,608,723 B2	12/2013	Lev et al.	2005/0055008 A1	3/2005	Paradis et al.	
8,628,508 B2	1/2014	Weitzel et al.	2005/0082828 A1	4/2005	Wicks et al.	
8,684,992 B2	4/2014	Sullivan et al.	2005/0124964 A1	6/2005	Niedospial et al.	
8,684,994 B2	4/2014	Lev et al.	2005/0137523 A1	6/2005	Wyatt et al.	
8,752,598 B2	6/2014	Denenburg et al.	2005/0137566 A1	6/2005	Fowles et al.	
D714,935 S	10/2014	Nishioka et al.	2005/0148994 A1	7/2005	Leinsing	
D717,406 S	11/2014	Stanley et al.	2005/0159724 A1	7/2005	Enerson	
D717,948 S	11/2014	Strong et al.	2005/0182383 A1	8/2005	Wallen	
D719,650 S	12/2014	Arinobe et al.	2005/0209554 A1	9/2005	Landau	
D720,067 S	12/2014	Rosenquist	2005/0261637 A1	11/2005	Miller	
			2005/0277896 A1	12/2005	Messerli et al.	
			2006/0030832 A1	2/2006	Niedospial et al.	
			2006/0079834 A1	4/2006	Tennican et al.	
			2006/0089594 A1	4/2006	Landau	

(56)

References Cited

U.S. PATENT DOCUMENTS

2006/0089603 A1 4/2006 Truitt et al.
 2006/0095015 A1 5/2006 Hobbs et al.
 2006/0106360 A1 5/2006 Wong
 2006/0135948 A1 6/2006 Varma
 2006/0155257 A1 7/2006 Reynolds
 2006/0161192 A1 7/2006 Young
 2006/0178646 A1 8/2006 Harris et al.
 2006/0212004 A1 9/2006 Atil
 2006/0253084 A1 11/2006 Nordgren
 2006/0259004 A1 11/2006 Connell et al.
 2007/0024995 A1 2/2007 Hayashi
 2007/0060904 A1 3/2007 Vedrine et al.
 2007/0078428 A1 4/2007 Reynolds et al.
 2007/0079894 A1 4/2007 Kraus et al.
 2007/0083164 A1 4/2007 Barrelle et al.
 2007/0088252 A1 4/2007 Pestotnik et al.
 2007/0088293 A1 4/2007 Fangrow
 2007/0088313 A1 4/2007 Zinger et al.
 2007/0106244 A1 5/2007 Mosler et al.
 2007/0112324 A1 5/2007 Hamedi-Sangsari
 2007/0156112 A1 7/2007 Walsh
 2007/0167904 A1 7/2007 Zinger et al.
 2007/0191760 A1 8/2007 Iguchi et al.
 2007/0191764 A1 8/2007 Zihlmann
 2007/0191767 A1 8/2007 Hennessy et al.
 2007/0203451 A1 8/2007 Murakami et al.
 2007/0219483 A1 9/2007 Kitani et al.
 2007/0244447 A1 10/2007 Capitaine et al.
 2007/0244461 A1 10/2007 Fangrow
 2007/0244462 A1 10/2007 Fangrow
 2007/0244463 A1 10/2007 Warren et al.
 2007/0249995 A1 10/2007 Van Manen
 2007/0255202 A1 11/2007 Kitani et al.
 2007/0265574 A1 11/2007 Tennican et al.
 2007/0265581 A1 11/2007 Funamura et al.
 2007/0270778 A9 11/2007 Zinger et al.
 2007/0287953 A1 12/2007 Ziv et al.
 2007/0299404 A1 12/2007 Katoh et al.
 2008/0009789 A1 1/2008 Zinger et al.
 2008/0009822 A1 1/2008 Enerson
 2008/0015496 A1 1/2008 Hamedi-Sangsari
 2008/0135051 A1 6/2008 Lee
 2008/0172024 A1 7/2008 Yow
 2008/0188799 A1 8/2008 Mueller-Beckhaus et al.
 2008/0249479 A1 10/2008 Zinger et al.
 2008/0249498 A1 10/2008 Fangrow
 2008/0262465 A1 10/2008 Zinger et al.
 2008/0287905 A1 11/2008 Hiejima et al.
 2008/0294100 A1 11/2008 de Costa et al.
 2008/0306439 A1 12/2008 Nelson et al.
 2008/0312634 A1 12/2008 Helmerson et al.
 2009/0012492 A1 1/2009 Zihlmann
 2009/0054834 A1 2/2009 Zinger et al.
 2009/0082750 A1 3/2009 Denenburg et al.
 2009/0143758 A1 6/2009 Okiyama
 2009/0177177 A1 7/2009 Zinger et al.
 2009/0177178 A1 7/2009 Pedersen
 2009/0187140 A1 7/2009 Racz
 2009/0216212 A1 8/2009 Fangrow, Jr.
 2009/0267011 A1 10/2009 Hatton et al.
 2009/0299325 A1 12/2009 Vedrine et al.
 2009/0318946 A1 12/2009 Tamesada
 2009/0326506 A1 12/2009 Hasegawa et al.
 2010/0010443 A1 1/2010 Morgan et al.
 2010/0016811 A1 1/2010 Smith
 2010/0022985 A1 1/2010 Sullivan et al.
 2010/0030181 A1 2/2010 Helle et al.
 2010/0036319 A1 2/2010 Drake et al.
 2010/0076397 A1 3/2010 Reed et al.
 2010/0087786 A1 4/2010 Zinger et al.
 2010/0137827 A1 6/2010 Warren et al.
 2010/0160889 A1 6/2010 Smith et al.
 2010/0168664 A1 7/2010 Zinger et al.
 2010/0168712 A1 7/2010 Tuckwell et al.
 2010/0179506 A1 7/2010 Shemesh et al.

2010/0198148 A1 8/2010 Zinger et al.
 2010/0204670 A1 8/2010 Kraushaar et al.
 2010/0228220 A1 9/2010 Zinger et al.
 2010/0241088 A1 9/2010 Ranalletta et al.
 2010/0274184 A1 10/2010 Chun
 2010/0286661 A1 11/2010 Raday et al.
 2010/0312220 A1 12/2010 Kalitzki
 2011/0004143 A1 1/2011 Beiriger et al.
 2011/0004184 A1 1/2011 Proksch et al.
 2011/0044850 A1 2/2011 Solomon et al.
 2011/0054440 A1 3/2011 Lewis
 2011/0087164 A1 4/2011 Mosier et al.
 2011/0160701 A1 6/2011 Wyatt et al.
 2011/0172636 A1 7/2011 Aasmul
 2011/0175347 A1 7/2011 Okiyama
 2011/0218511 A1 9/2011 Yokoyama
 2011/0224640 A1 9/2011 Kuhn et al.
 2011/0230856 A1 9/2011 Kyle et al.
 2011/0264037 A1 10/2011 Foshee et al.
 2011/0264069 A1 10/2011 Bochenko
 2011/0276007 A1 11/2011 Denenburg
 2011/0319827 A1 12/2011 Leinsing et al.
 2012/0022469 A1 1/2012 Alpert
 2012/0053555 A1 3/2012 Ariagno et al.
 2012/0059346 A1 3/2012 Sheppard et al.
 2012/0067429 A1 3/2012 Mosler et al.
 2012/0078214 A1* 3/2012 Finke A61J 1/2089
 2012/0123382 A1 5/2012 Kubo
 2012/0184938 A1 7/2012 Lev et al.
 2012/0215182 A1 8/2012 Mansour et al.
 2012/0220977 A1 8/2012 Yaw
 2012/0220978 A1 8/2012 Lev et al.
 2012/0265163 A1 10/2012 Cheng et al.
 2012/0271229 A1 10/2012 Lev et al.
 2012/0296307 A1 11/2012 Holt et al.
 2012/0310203 A1 12/2012 Khaled et al.
 2012/0323172 A1 12/2012 Lev et al.
 2012/0323187 A1 12/2012 Iwase et al.
 2012/0323210 A1 12/2012 Lev et al.
 2013/0046269 A1 2/2013 Lev et al.
 2013/0053814 A1 2/2013 Mueller-Beckhaus et al.
 2013/0096493 A1 4/2013 Kubo et al.
 2013/0144248 A1 6/2013 Putter et al.
 2013/0199669 A1 8/2013 Moy et al.
 2013/0226100 A1 8/2013 Lev
 2013/0231630 A1 9/2013 Kraus et al.
 2013/0237904 A1 9/2013 Denenburg et al.
 2013/0253448 A1 9/2013 Baron et al.
 2013/0289530 A1 10/2013 Wyatt et al.
 2014/0020793 A1 1/2014 Denenburg et al.
 2014/0096862 A1 4/2014 Aneas
 2014/0150911 A1 6/2014 Hanner et al.
 2014/0221940 A1 8/2014 Clauson et al.
 2014/0277052 A1 9/2014 Haselby et al.
 2014/0352845 A1 12/2014 Lev et al.
 2015/0082746 A1 3/2015 Ivošević et al.
 2015/0088078 A1 3/2015 Lev et al.
 2015/0290390 A1 10/2015 Ring et al.
 2015/0305770 A1 10/2015 Fill et al.
 2016/0088995 A1 3/2016 Ueda et al.
 2016/0287475 A1* 10/2016 Yevmenenko A61J 1/2089

FOREIGN PATENT DOCUMENTS

DE 4122476 A1 1/1993
 DE 19504413 A1 8/1996
 DE 202004012714 U1 11/2004
 DE 202009011019 U1 12/2010
 EP 0192661 A1 9/1986
 EP 0195018 A1 9/1986
 EP 0258913 A2 3/1988
 EP 0416454 A2 3/1991
 EP 0282545 B1 2/1992
 EP 0518397 A1 12/1992
 EP 0521460 A1 1/1993
 EP 0598918 A1 6/1994
 EP 0637443 A1 2/1995
 EP 761562 A1 3/1997

604/411

(56)

References Cited

FOREIGN PATENT DOCUMENTS

EP 765652 A1 4/1997
 EP 765853 A1 4/1997
 EP 0806597 A1 11/1997
 EP 0814866 A1 1/1998
 EP 829248 A2 3/1998
 EP 0856331 A2 8/1998
 EP 882441 A2 12/1998
 EP 897708 A2 2/1999
 EP 0898951 A2 3/1999
 EP 960616 A2 12/1999
 EP 1008337 A1 6/2000
 EP 1029526 A1 8/2000
 EP 1034809 A1 9/2000
 EP 1051988 A2 11/2000
 EP 1323403 A1 7/2003
 EP 1329210 A1 7/2003
 EP 1396250 A1 3/2004
 EP 1454609 A1 9/2004
 EP 1454650 A1 9/2004
 EP 1498097 A2 1/2005
 EP 1872824 A1 1/2008
 EP 1919432 A1 5/2008
 EP 1930038 A2 6/2008
 EP 2090278 A1 8/2009
 EP 2351548 A1 8/2011
 EP 2351549 A1 8/2011
 EP 2462913 A1 6/2012
 EP 2512399 A1 10/2012
 FR 2029242 A5 10/1970
 FR 2856660 A1 12/2004
 FR 2869795 A1 11/2005
 FR 2931363 A1 11/2009
 GB 1444210 A 7/1976
 JP 03-062426 B 9/1991
 JP 4329954 A 11/1992
 JP 06-050656 U 7/1994
 JP H08-000710 A 1/1996
 JP 09-104460 A 4/1997
 JP 09-104461 A 4/1997
 JP 10-118158 A 5/1998
 JP H10-504736 A 5/1998
 JP 11503627 T 3/1999
 JP 11-319031 A 11/1999
 JP 2000-508934 A 7/2000
 JP 2000-237278 A 9/2000
 JP 2000262497 A 9/2000
 JP 2001-505083 A 4/2001
 JP 2002-035140 A 2/2002
 JP 2002-355318 A 12/2002
 JP 2003-033441 A 2/2003
 JP 2003-102807 A 4/2003
 JP 2004-097253 A 4/2004
 JP 2004-522541 A 7/2004
 JP 200661421 A 3/2006
 JP 2010-179128 A 8/2010
 JP 2012-205769 A 10/2012
 WO 8601712 A1 3/1986
 WO 3605683 A1 10/1986
 WO 9003536 A1 4/1990
 WO 9403373 A1 2/1994
 WO 9507066 A1 3/1995
 WO 9600053 A1 1/1996
 WO 9629113 A1 9/1996
 WO 9736636 A1 10/1997
 WO 9832411 A1 7/1998
 WO 9837854 A1 9/1998
 WO 9961093 A1 12/1999
 WO 0128490 A1 4/2001
 WO 0130425 A1 5/2001
 WO 0132524 A1 5/2001
 WO 0160311 A1 8/2001
 WO 0191693 A2 12/2001
 WO 200209797 A1 2/2002
 WO 0236191 A2 5/2002
 WO 02066100 A2 8/2002

WO 02089900 A1 11/2002
 WO 03051423 A2 6/2003
 WO 03070147 A2 8/2003
 WO 03079956 A1 10/2003
 WO 2004041148 A1 5/2004
 WO 2005002492 A1 1/2005
 WO 2005041846 A2 5/2005
 WO 2006099441 A2 9/2006
 WO 2007015233 A1 2/2007
 WO 2007017868 A1 2/2007
 WO 2007052252 A1 5/2007
 WO 2007101772 A1 9/2007
 WO 2007105221 A1 9/2007
 WO 2008081424 A2 7/2008
 WO 2008126090 A1 10/2008
 WO 2009026443 A2 2/2009
 WO 2009038860 A2 3/2009
 WO 2009040804 A2 4/2009
 WO 2009087572 A1 7/2009
 WO 2009093249 A1 7/2009
 WO 2009112489 A1 9/2009
 WO 2009146088 A1 12/2009
 WO 2010061743 A1 6/2010
 WO 2010117580 A1 10/2010
 WO 2011004360 A1 1/2011
 WO 2011039747 A1 4/2011
 WO 2011058545 A1 5/2011
 WO 2011058548 A1 5/2011
 WO 2011077434 A1 6/2011
 WO 2011104711 A1 9/2011
 WO 2012143921 A1 10/2012
 WO 2012150587 A1 11/2012
 WO 2013127813 A1 9/2013
 WO 2013156944 A1 10/2013
 WO 2013156994 A1 10/2013
 WO 2014033706 A2 3/2014
 WO 2014033710 A1 3/2014
 WO 2014174278 A1 10/2014
 WO 2016023590 A1 2/2016

OTHER PUBLICATIONS

Article with picture of West Pharmaceutical Services' Vial2Bag Needleless System, [on-line]; ISIPS Newsletter, Oct. 26, 2007]; retrieved from Internet Feb. 16, 2010]; URL:<http://www.isips.org/reports/ISIPS_Newsletter_October_26_2007.html> (7 pages. see pp. 5-6).

Int'l Preliminary Report on Patentability issued May 6, 2008 in Int'l Application No. PCT/IL2006/001228.

Int'l Preliminary Report on Patentability issued Sep. 24, 2013 in Int'l Application No. PCT/IL2012/000354.

Int'l Search Report and Written Opinion issued Jan. 7, 2014 in Int'l Application No. PCT/IL2012/050721.

Int'l Search Report and Written Opinion issued May 8, 2014 in Int'l Application No. PCT/IL2013/050706.

Int'l Preliminary Report on Patentability issued Jan. 14, 2014 in Int'l Application No. PCT/IL2012/050516.

Int'l Search Report and Written Opinion issued Jul. 16, 2014 in Int'l Application No. PCT/IL2014/050327.

Written Opinion issued Jul. 1, 2013 in Int'l Application No. PCT/IL2013/050180.

Int'l Preliminary Report on Patentability issued Apr. 1, 2014 in Int'l Application No. PCT/IL2013/050180.

Written Opinion issued Jul. 31, 2013 in Int'l Application No. PCT/IL2013/050313.

Int'l Search Report and Written Opinion issued Sep. 2, 2014 in Int'l Application No. PCT/IL2014/050405.

Int'l Search Report and Written Opinion issued Oct. 17, 2014 in Int'l Application No. PCT/IL2014/050680.

Int'l Preliminary Report on Patentability issued Aug. 20, 2014 in Int'l Application No. PCT/IL2012/050407.

Written Opinion issued Apr. 10, 2015 in Int'l Application No. PCT/IL2014/050405.

Response to Written Opinion dated Mar. 9, 2015 in Int'l Application No. PCT/IL2014/050405.

(56)

References Cited

OTHER PUBLICATIONS

Int'l Preliminary Report on Patentability issued Aug. 24, 2015 in Int'l Application No. PCT/IL2014/050405.

Youtube.com, Vial2Bag DC, Aug. 21, 2014, <https://www.youtube.com/watch?v=FEOkglxNBrs>.

Notice of Allowance issued Jan. 12, 2016 in U.S. Appl. No. 14/385,212 by LEV.

Int'l Search Report and Written Opinion issued Sep. 14, 2016 in Int'l Application No. PCT/IL2016/050709.

Int'l Search Report and Written Opinion issued Oct. 11, 2016 in Int'l Application No. PCT/IL2016/050782.

Novel Transfer, Mixing and Drug Delivery Systems, MOP Medimop Medical Projects Ltd. Catalog, 4 pages, Rev. 4, 2004.

Smart Site.RTM. Alaris Medical Systems Product Brochure, 4 pages, Issue 1, Oct. 1999.

Smart Site.RTM. Needle-Free Systems, Alaris Medical Systems Webpage, 4 pages, Feb. 2006.

Overview—Silicone Rubber [retrieved from http://www.knovel.com/web/portal/browse/display?_EXT_KNOVEL_DISPLAY_bookid=1023&VerticalID=0 on Feb. 9, 2011].

Kipp, "Plastic Material Data Sheets," retrieved from the internet: http://www.knovel.com/web/portal/browse/display?_EXT_KNOVEL_DISPLAY_bookid=1023&VerticalID=0, retrieved on Feb. 9, 2011.

* cited by examiner

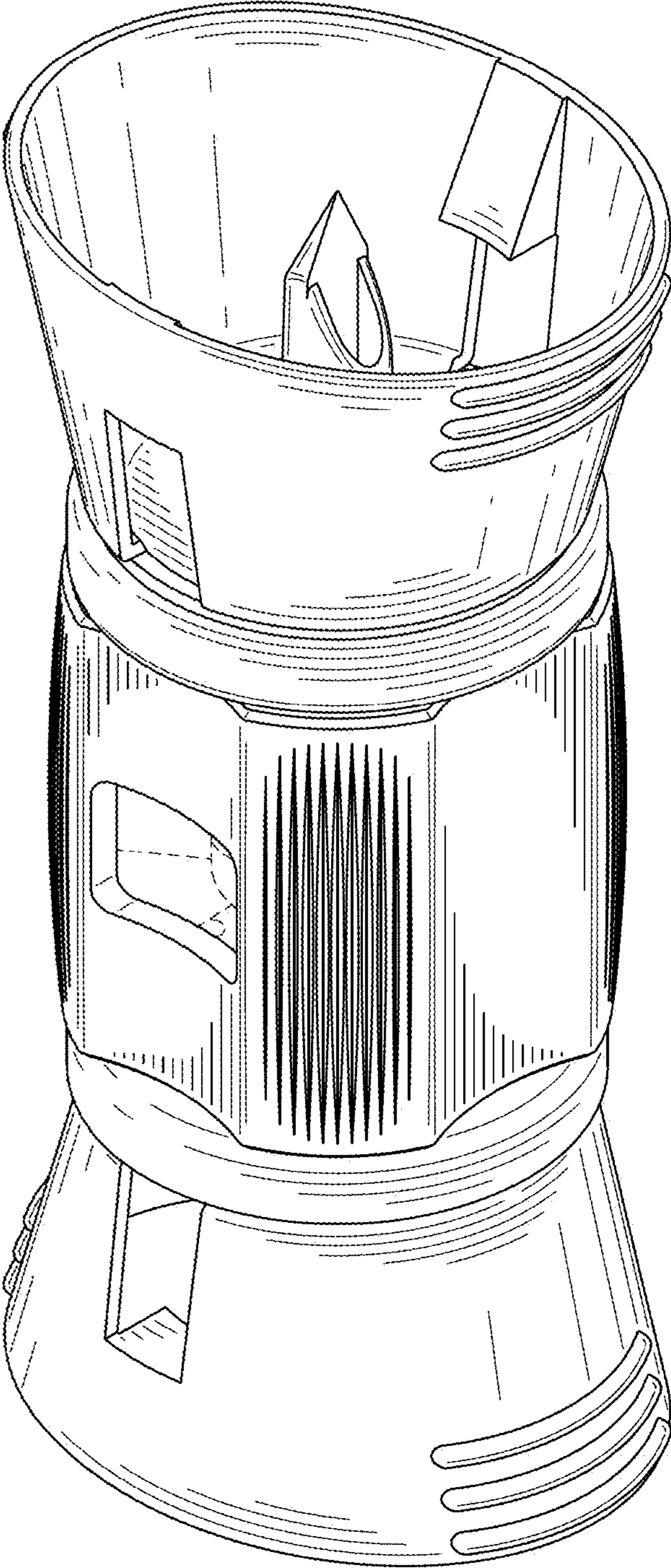


FIG. 1

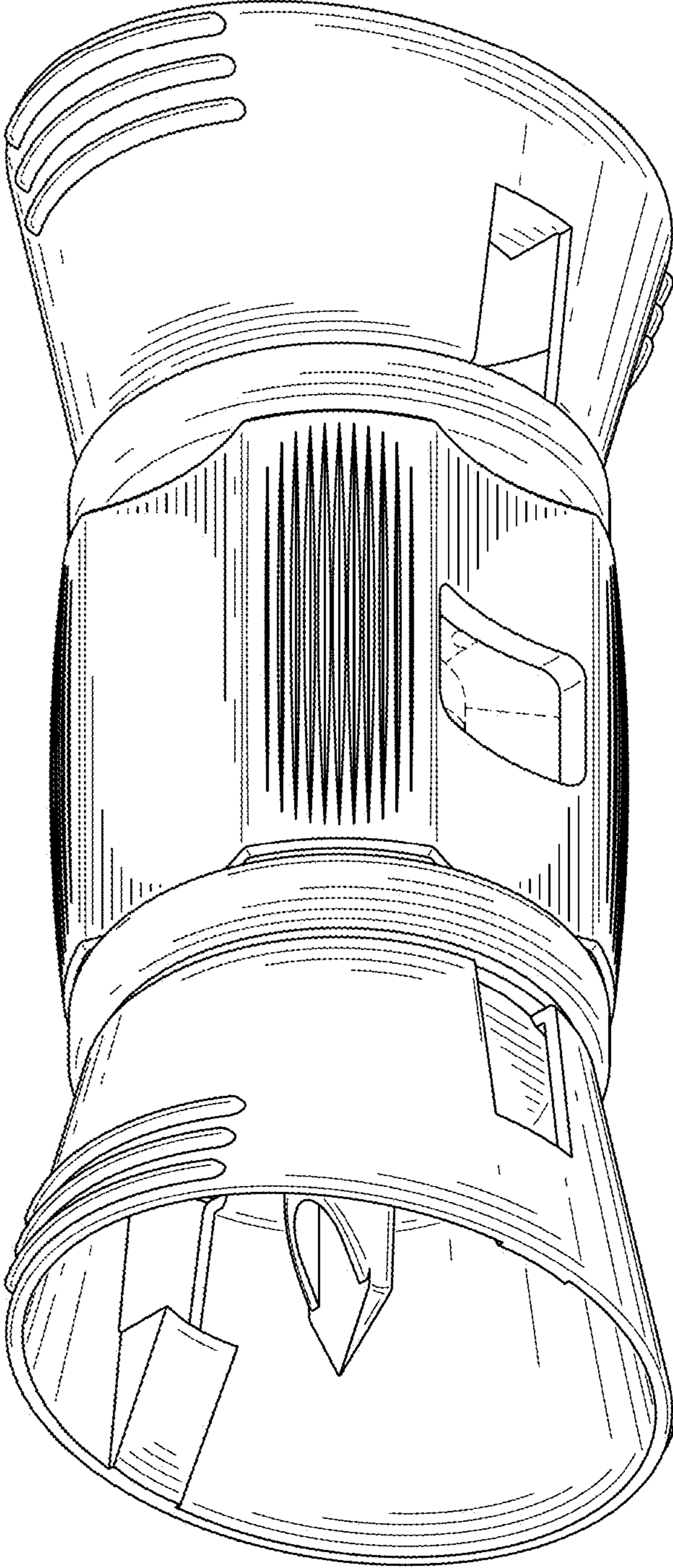


FIG. 2

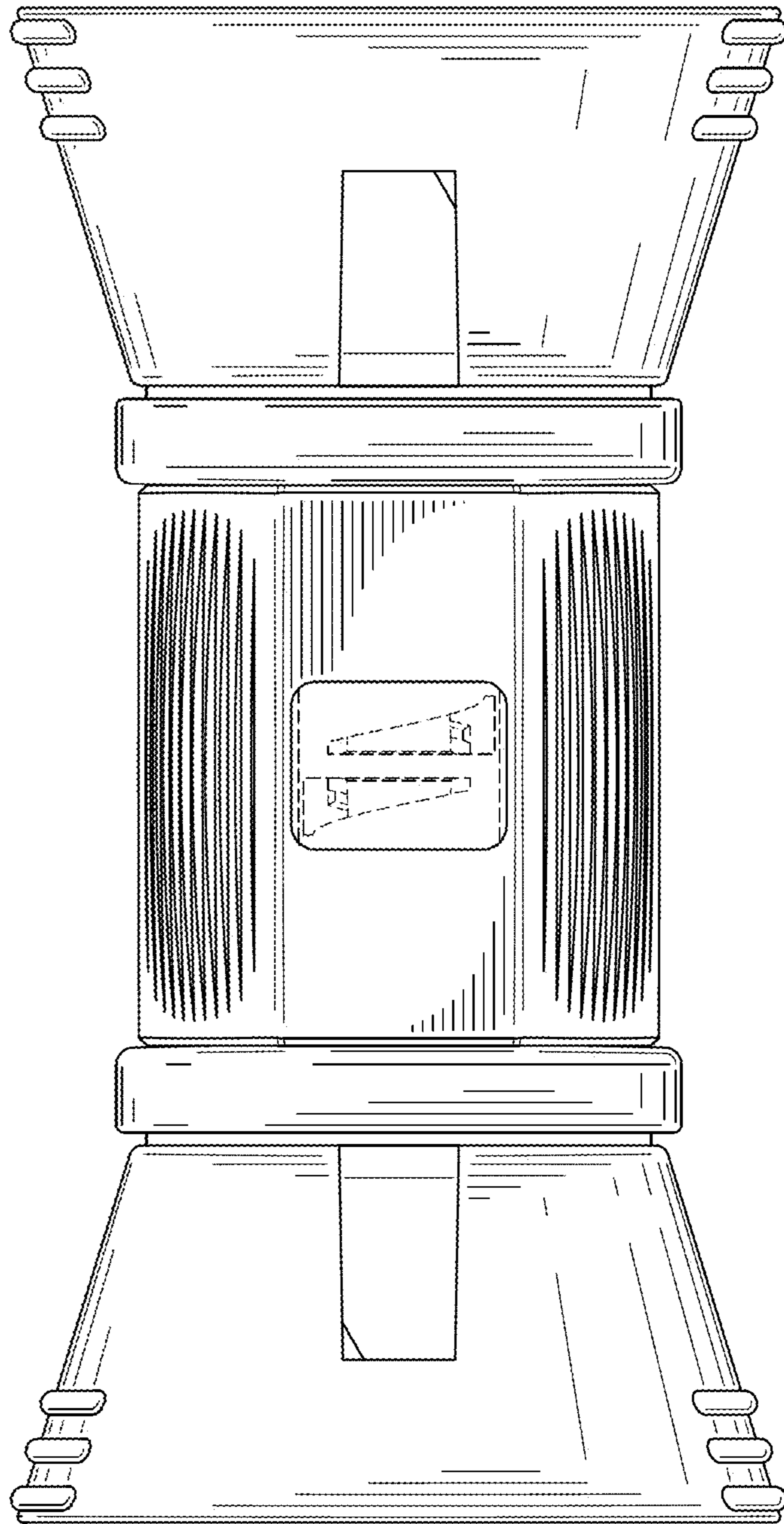


FIG. 3

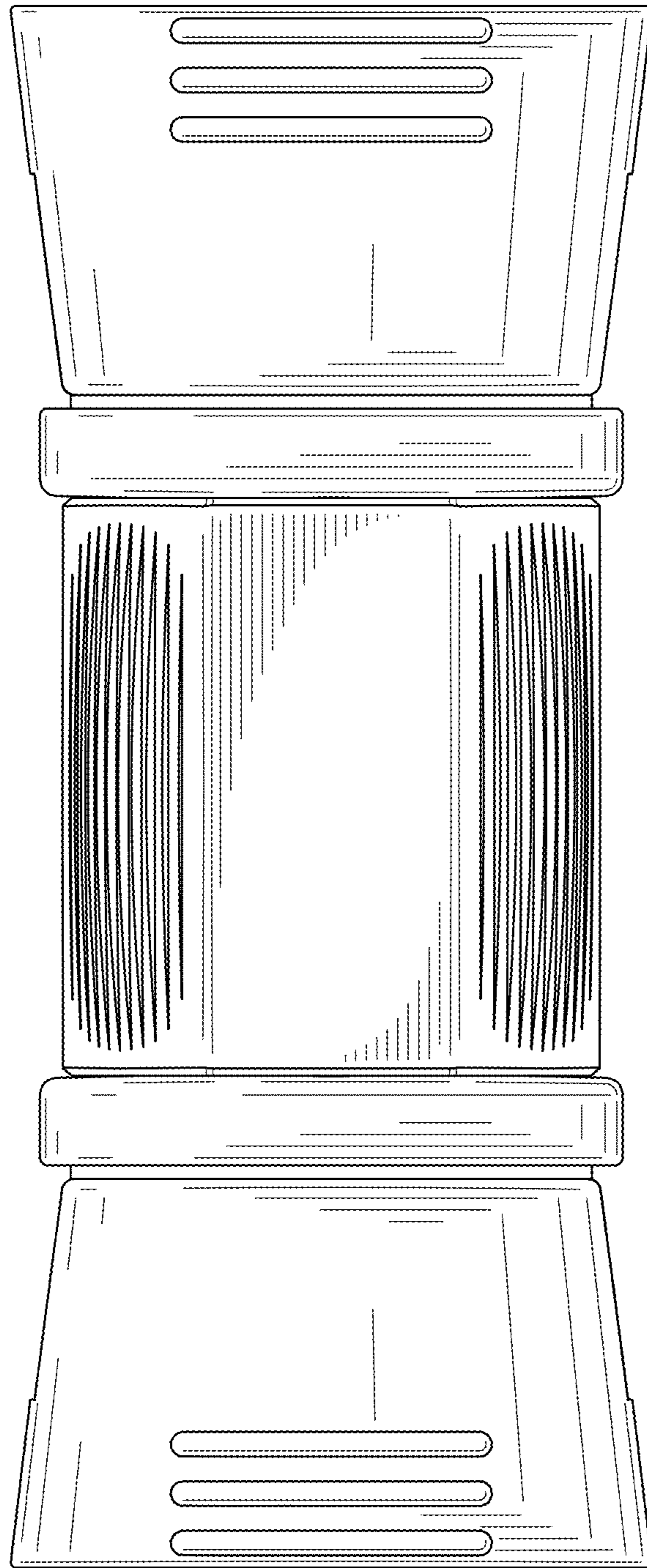


FIG. 4

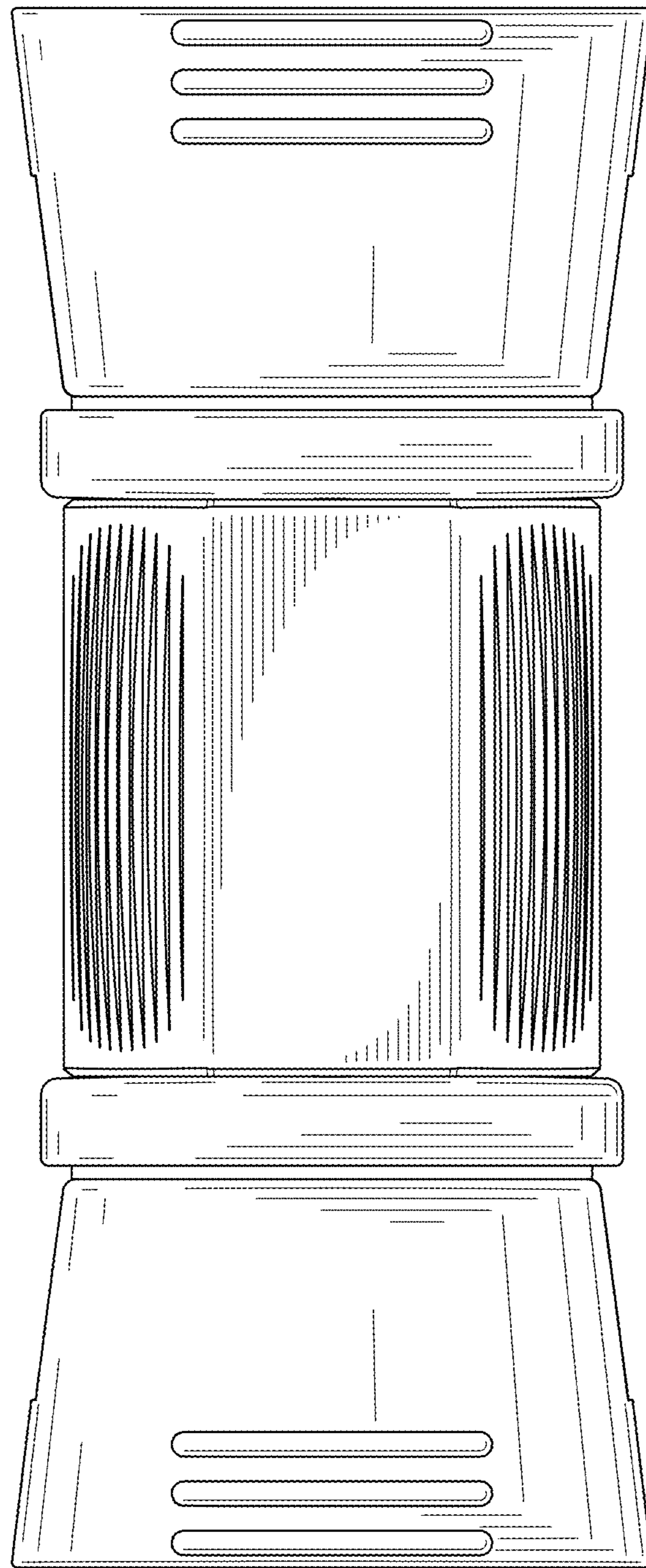


FIG. 5

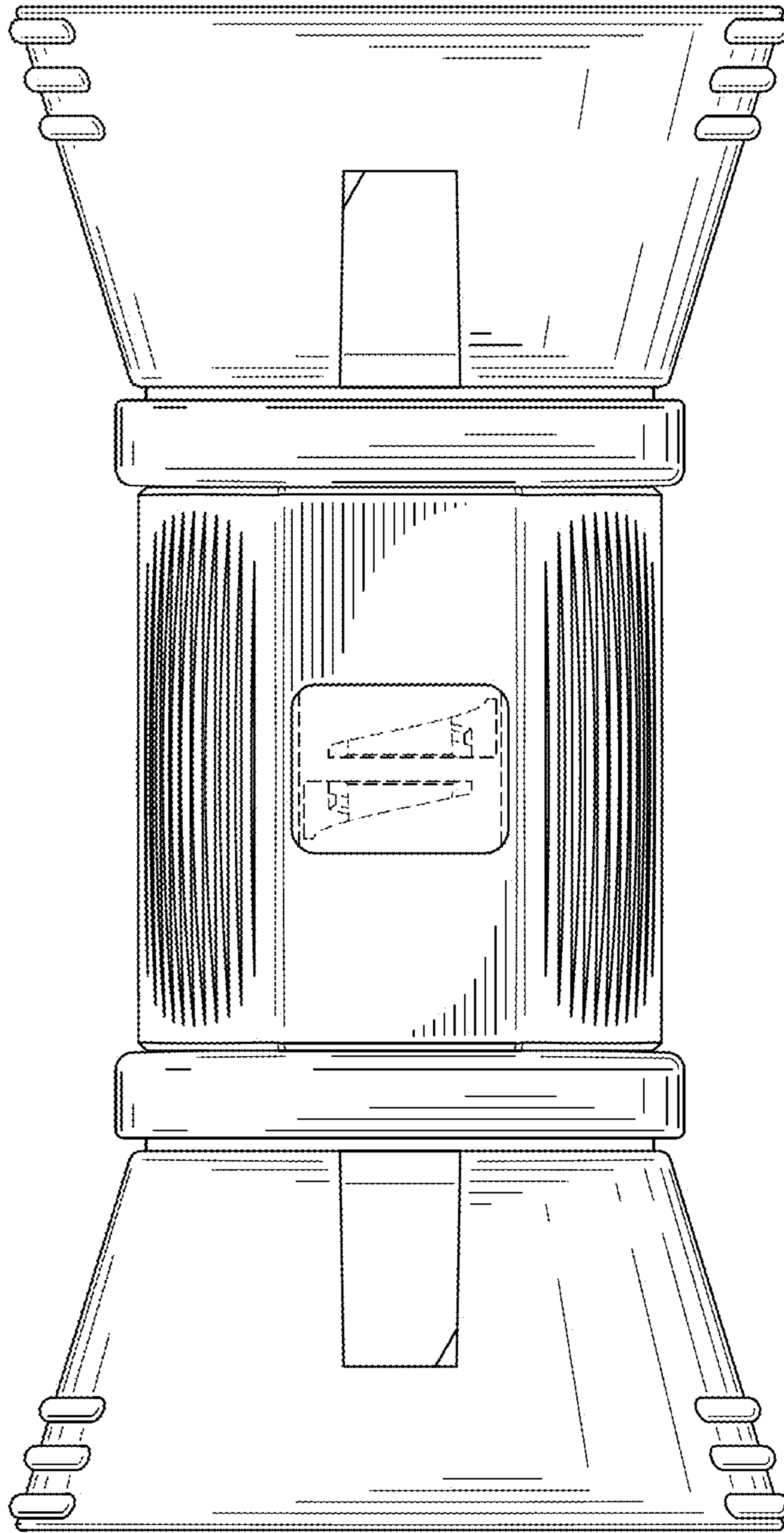


FIG. 6

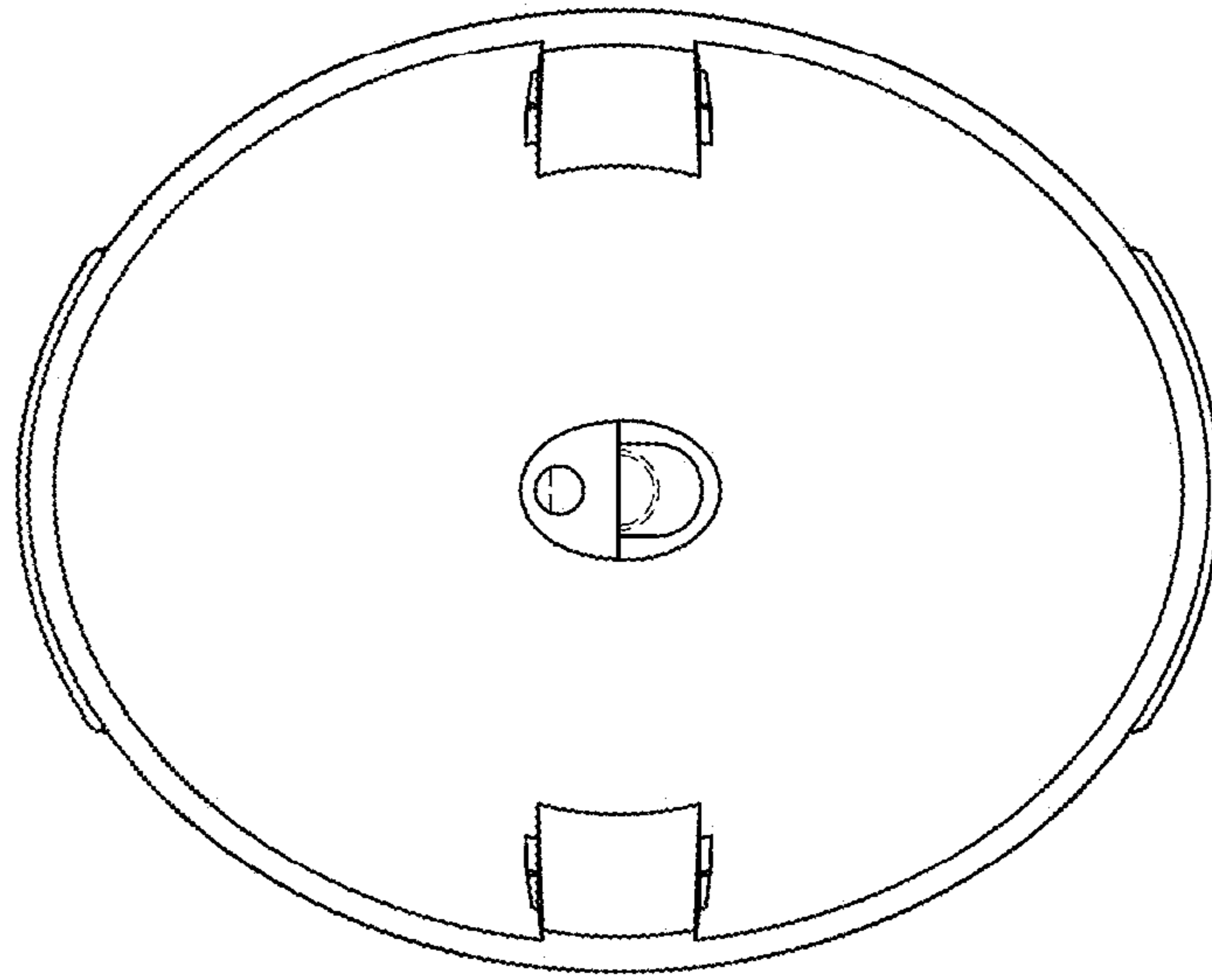


FIG. 7

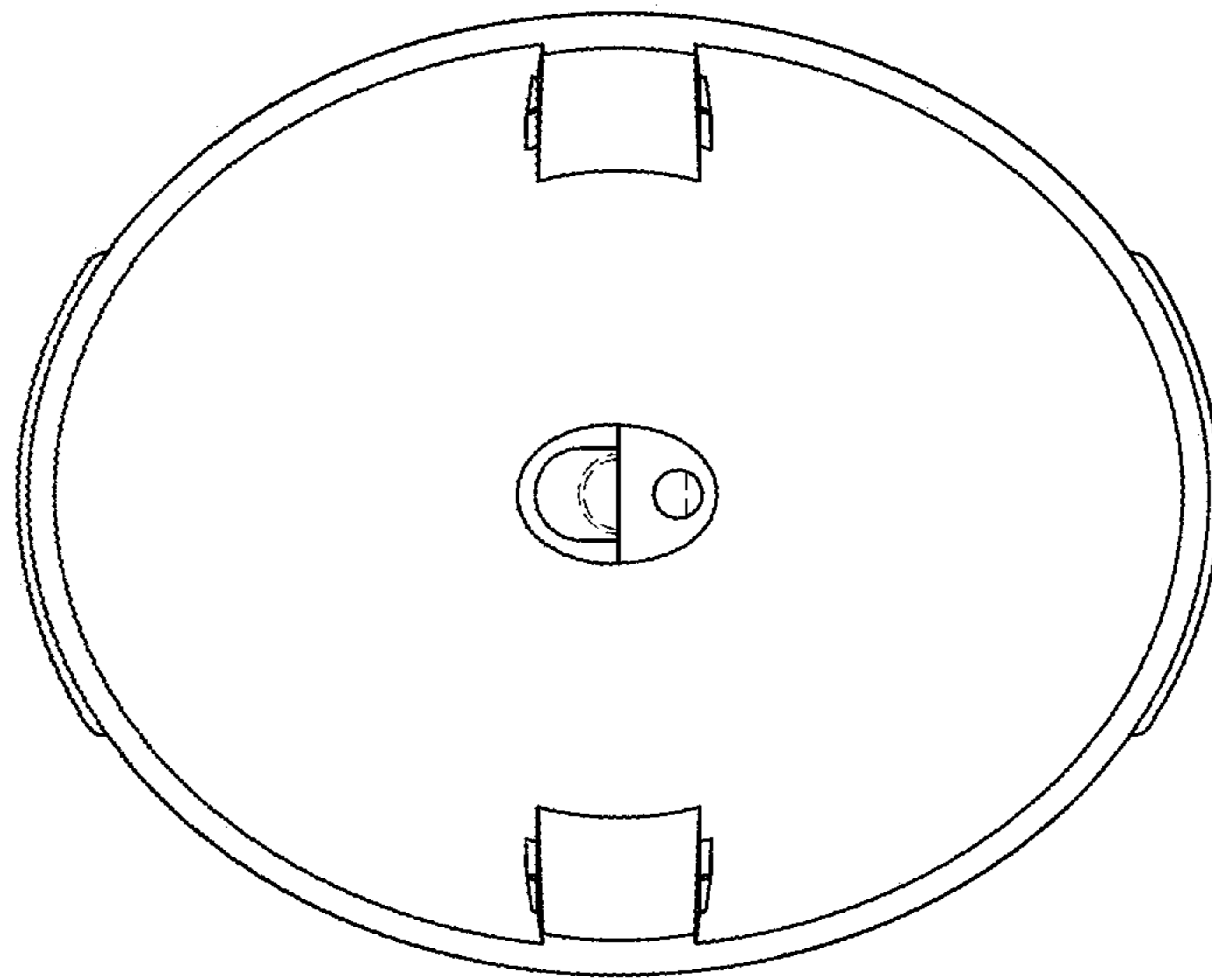


FIG. 8