



US00D673649S

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

(10) **Patent No.:** **US D673,649 S**
(45) **Date of Patent:** **** Jan. 1, 2013**

(54) **RING-SHAPED WALL MOUNT SHOWERHEAD**

FOREIGN PATENT DOCUMENTS

CA 659510 3/1963
(Continued)

(75) Inventors: **Michael J. Quinn**, Windsor, CO (US);
Leland C. Leber, Fort Collins, CO
(US); **Harold A. Luetngen**, Windsor, CO
(US); **Joseph W. Cacka**, Berthoud, CO
(US)

OTHER PUBLICATIONS

Author Unknown, "Flipside: The Bolder Look of Kohler," 1 page, at least as early as Jun. 2011.

(73) Assignee: **Water Pik, Inc.**, Fort Collins, CO (US)

(Continued)

(**) Term: **14 Years**

Primary Examiner — Robin V Webster

(21) Appl. No.: **29/426,318**

(74) *Attorney, Agent, or Firm* — Dorsey & Whitney LLP

(22) Filed: **Jul. 3, 2012**

(57) **CLAIM**

The ornamental design for a ring-shaped wall mount showerhead, as shown and described.

Related U.S. Application Data

(62) Division of application No. 29/411,966, filed on Jan. 27, 2012.

(51) **LOC (9) Cl.** **23-01**

(52) **U.S. Cl.** **D23/213**

(58) **Field of Classification Search** D23/213,
D23/223, 229–230; 239/462, 282–283; 4/615
See application file for complete search history.

DESCRIPTION

FIG. 1 is a front isometric view of a ring-shaped wall mount showerhead.

FIG. 2 is a front elevation view of the ring-shaped wall mount showerhead of FIG. 1.

FIG. 3 is a rear elevation view of the ring-shaped wall mount showerhead of FIG. 1.

FIG. 4 is a right side elevation view of the ring-shaped wall mount showerhead of FIG. 1.

FIG. 5 is a left side elevation view of the ring-shaped wall mount showerhead of FIG. 1.

FIG. 6 is a top plan view of the ring-shaped wall mount showerhead of FIG. 1; and,

FIG. 7 is a bottom plan view of the ring-shaped wall mount showerhead of FIG. 1.

The broken lines shown in the drawings are only for purposes of illustrating environment and defining the bounds of the claimed design and form no part of the claimed design.

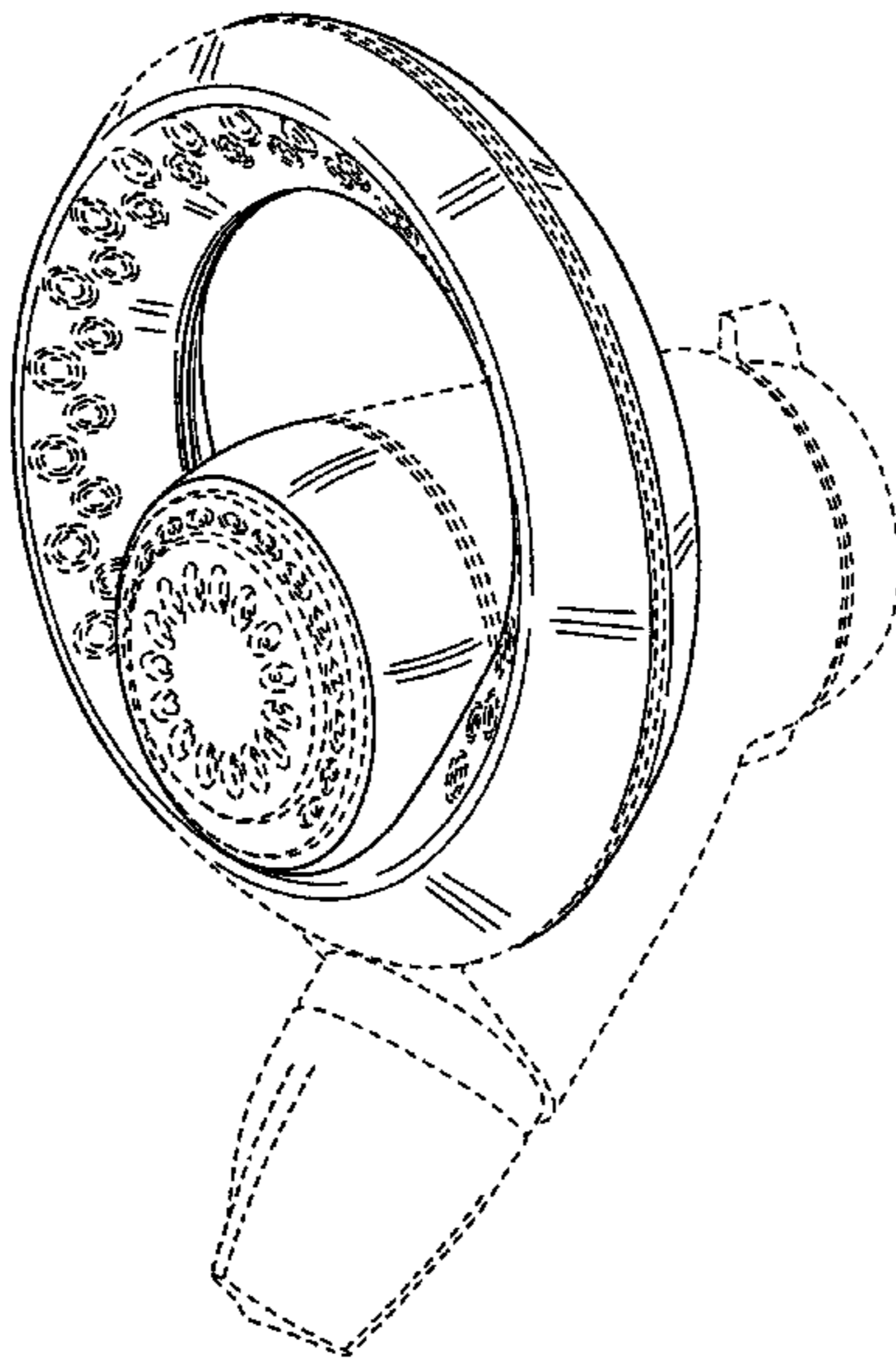
(56) **References Cited**

U.S. PATENT DOCUMENTS

203,094	A	4/1878	Wakeman
204,333	A	5/1878	Josias
309,349	A	12/1884	Hart
428,023	A	5/1890	Schoff
432,712	A	7/1890	Taylor
445,250	A	1/1891	Lawless
453,109	A	5/1891	Dreisorner
486,986	A	11/1892	Schinke
566,384	A	8/1896	Engelhart
566,410	A	8/1896	Schinke
570,405	A	10/1896	Jerguson et al.
694,888	A	3/1902	Pfluger

(Continued)

1 Claim, 7 Drawing Sheets



US D673,649 S

Page 2

U.S. PATENT DOCUMENTS							
800,802	A	10/1905	Franquist	2,949,242	A	8/1960	Blumberg et al.
832,523	A	10/1906	Andersson	2,957,587	A	10/1960	Tobin
835,678	A	11/1906	Hammond	2,966,311	A	12/1960	Davis
845,540	A	2/1907	Ferguson	D190,295	S	5/1961	Becker
854,094	A	5/1907	Klein	2,992,437	A	7/1961	Nelson et al.
926,929	A	7/1909	Dusseau	3,007,648	A	11/1961	Fraser
1,001,842	A	8/1911	Greenfield	D192,935	S	5/1962	Becker
1,003,037	A	9/1911	Crowe	3,032,357	A	5/1962	Shames et al.
1,018,143	A	2/1912	Vissering	3,034,809	A	5/1962	Greenberg
1,046,573	A	12/1912	Ellis	3,037,799	A	6/1962	Mulac
1,130,520	A	3/1915	Kenney	3,081,339	A	3/1963	Green et al.
1,203,466	A	10/1916	Benson	3,092,333	A	6/1963	Gaiotto
1,217,254	A	2/1917	Winslow	3,098,508	A	7/1963	Gerdes
1,218,895	A	3/1917	Porter	3,103,723	A	9/1963	Becker
1,255,577	A	2/1918	Berry	3,104,815	A	9/1963	Schultz
1,260,181	A	3/1918	Gamero	3,104,827	A	9/1963	Aghnides
1,276,117	A	8/1918	Riebe	3,111,277	A	11/1963	Grimsley
1,284,099	A	11/1918	Harris	3,112,073	A	11/1963	Larson et al.
1,327,428	A	1/1920	Gregory	3,143,857	A	8/1964	Eaton
1,451,800	A	4/1923	Agner	3,196,463	A	7/1965	Farneth
1,459,582	A	6/1923	Dubee	3,231,200	A	1/1966	Heald
1,469,528	A	10/1923	Owens	3,236,545	A	2/1966	Parkes et al.
1,500,921	A	7/1924	Bramson et al.	3,239,152	A	3/1966	Bachli et al.
1,560,789	A	11/1925	Johnson et al.	3,266,059	A	8/1966	Stelle
1,597,477	A	8/1926	Panhorst	3,272,437	A	9/1966	Coson
1,633,531	A	6/1927	Keller	3,273,359	A	9/1966	Fregeolle
1,692,394	A	11/1928	Sundh	3,306,634	A	2/1967	Groves et al.
1,695,263	A	12/1928	Jacques	3,323,148	A	6/1967	Burnon
1,724,147	A	8/1929	Russell	3,329,967	A	7/1967	Martinez et al.
1,724,161	A	8/1929	Wuesthoff	3,341,132	A	9/1967	Parkison
1,736,160	A	11/1929	Jonsson	3,342,419	A	9/1967	Weese
1,754,127	A	4/1930	Srulowitz	3,344,994	A	10/1967	Fife
1,758,115	A	5/1930	Kelly	3,363,842	A	1/1968	Burns
1,778,658	A	10/1930	Baker	3,383,051	A	5/1968	Fiorentino
1,821,274	A	9/1931	Plummer	3,389,925	A	6/1968	Gottschald
1,849,517	A	3/1932	Fraser	3,393,311	A	7/1968	Dahl
1,890,156	A	12/1932	Konig	3,393,312	A	7/1968	Dahl
1,906,575	A	5/1933	Goeriz	3,404,410	A	10/1968	Sumida
1,934,553	A	11/1933	Mueller et al.	3,492,029	A	1/1970	French et al.
1,946,207	A	2/1934	Haire	3,516,611	A	6/1970	Piggott
2,011,446	A	8/1935	Judell	3,546,961	A	12/1970	Marton
2,024,930	A	12/1935	Judell	3,550,863	A	12/1970	McDermott
2,033,467	A	3/1936	Groeniger	3,552,436	A	1/1971	Stewart
2,044,445	A	6/1936	Price et al.	3,565,116	A	2/1971	Gabin
2,085,854	A	7/1937	Hathaway et al.	3,566,917	A	3/1971	White
2,096,912	A	10/1937	Morris	3,580,513	A	5/1971	Martin
2,117,152	A	5/1938	Crosti	3,584,822	A	6/1971	Oram
D113,439	S	2/1939	Reinecke	3,596,835	A	8/1971	Smith et al.
2,196,783	A	4/1940	Shook	3,612,577	A	10/1971	Pope
2,197,667	A	4/1940	Shook	3,637,143	A	1/1972	Shames et al.
2,216,149	A	10/1940	Weiss	3,641,333	A	2/1972	Gendron
D126,433	S	4/1941	Enthof	3,647,144	A	3/1972	Parkison et al.
2,251,192	A	7/1941	Krumslek et al.	3,663,044	A	5/1972	Contreras et al.
2,268,263	A	12/1941	Newell et al.	3,669,470	A	6/1972	Deurloo
2,285,831	A	6/1942	Pennypacker	3,672,648	A	6/1972	Price
2,342,757	A	2/1944	Roser	3,682,392	A	8/1972	Kint
2,402,741	A	6/1946	Draviner	3,685,745	A	8/1972	Peschcke-Koedt
D147,258	S	8/1947	Becker	D224,834	S	9/1972	Laudell
D152,584	S	2/1949	Becker	3,711,029	A	1/1973	Bartlett
2,467,954	A	4/1949	Becker	3,722,798	A	3/1973	Bletcher et al.
2,546,348	A	3/1951	Schuman	3,722,799	A	3/1973	Rauh
2,567,642	A	9/1951	Penshaw	3,731,084	A	5/1973	Trevorrow
2,581,129	A	1/1952	Muldoon	3,754,779	A	8/1973	Peress
D166,073	S	3/1952	Dunkelberger	D228,622	S	10/1973	Juhlin
2,648,762	A	8/1953	Dunkelberger	3,762,648	A	10/1973	Deines et al.
2,664,271	A	12/1953	Arutunoff	3,768,735	A	10/1973	Ward
2,671,693	A	3/1954	Hyser et al.	3,786,995	A	1/1974	Manoogian et al.
2,676,806	A	4/1954	Bachman	3,801,019	A	4/1974	Trenary et al.
2,679,575	A	5/1954	Haberstump	3,810,580	A	5/1974	Rauh
2,680,358	A	6/1954	Zublin	3,826,454	A	7/1974	Zieger
2,726,120	A	12/1955	Bletcher et al.	3,840,734	A	10/1974	Oram
2,759,765	A	8/1956	Pawley	3,845,291	A	10/1974	Portyrata
2,776,168	A	1/1957	Schweda	3,860,271	A	1/1975	Rodgers
2,792,847	A	5/1957	Spencer	3,861,719	A	1/1975	Hand
2,873,999	A	2/1959	Webb	3,865,310	A	2/1975	Elkins et al.
2,930,505	A	3/1960	Meyer	3,869,151	A	3/1975	Fletcher et al.
2,931,672	A	4/1960	Merritt et al.	3,896,845	A	7/1975	Parker
2,935,265	A	5/1960	Richter	3,902,671	A	9/1975	Symmons
				3,910,277	A	10/1975	Zimmer

US D673,649 S

Page 3

D237,708 S	11/1975	Grohe	4,553,775 A	11/1985	Halling
3,929,164 A	12/1975	Richter	D281,820 S	12/1985	Oba et al.
3,929,287 A	12/1975	Givler et al.	4,561,593 A	12/1985	Cammack et al.
3,958,756 A	5/1976	Trenary et al.	4,564,889 A	1/1986	Bolson
D240,322 S	6/1976	Staub	4,571,003 A	2/1986	Roling et al.
3,967,783 A	7/1976	Halsted et al.	4,572,232 A	2/1986	Gruber
3,979,096 A	9/1976	Zieger	D283,645 S	4/1986	Tanaka
3,997,116 A	12/1976	Moen	4,587,991 A	5/1986	Chorkey
3,998,390 A	12/1976	Peterson et al.	4,588,130 A	5/1986	Trenary et al.
3,999,714 A	12/1976	Lang	4,598,866 A	7/1986	Cammack et al.
4,005,880 A	2/1977	Anderson et al.	4,614,303 A	9/1986	Moseley, Jr. et al.
4,006,920 A	2/1977	Sadler et al.	4,616,298 A	10/1986	Bolson
4,023,782 A	5/1977	Eifer	4,618,100 A	10/1986	White et al.
4,042,984 A	8/1977	Butler	4,629,124 A	12/1986	Gruber
4,045,054 A	8/1977	Arnold	4,629,125 A	12/1986	Liu
D245,858 S	9/1977	Grube	4,643,463 A	2/1987	Halling et al.
D245,860 S	9/1977	Grube	4,645,244 A	2/1987	Curtis
4,068,801 A	1/1978	Leutheuser	RE32,386 E	3/1987	Hunter
4,081,135 A	3/1978	Tomaro	4,650,120 A	3/1987	Kress
4,084,271 A	4/1978	Ginsberg	4,650,470 A	3/1987	Epstein
4,091,998 A	5/1978	Peterson	4,652,025 A	3/1987	Conroy, Sr.
D249,356 S	9/1978	Nagy	4,654,900 A	4/1987	McGhee
4,117,979 A	10/1978	Lagarelli et al.	4,657,185 A	4/1987	Rundzaitis
4,129,257 A	12/1978	Eggert	4,669,666 A	6/1987	Finkbeiner
4,130,120 A	12/1978	Kohler, Jr.	4,669,757 A	6/1987	Bartholomew
4,131,233 A	12/1978	Koenig	4,674,687 A	6/1987	Smith et al.
4,133,486 A	1/1979	Fanella	4,683,917 A	8/1987	Bartholomew
4,135,549 A	1/1979	Baker	4,703,893 A	11/1987	Gruber
D251,045 S	2/1979	Grube	4,717,180 A	1/1988	Roman
4,141,502 A	2/1979	Grohe	4,719,654 A	1/1988	Blessing
4,151,955 A	5/1979	Stouffer	4,733,337 A	3/1988	Bieberstein
4,151,957 A	5/1979	Gecewicz et al.	D295,437 S	4/1988	Fabian
4,162,801 A	7/1979	Kresky et al.	4,739,801 A	4/1988	Kimura et al.
4,165,837 A	8/1979	Rundzaitis	4,749,126 A	6/1988	Kessener et al.
4,167,196 A	9/1979	Morris	D296,582 S	7/1988	Haug et al.
4,174,822 A	11/1979	Larsson	4,754,928 A	7/1988	Rogers et al.
4,185,781 A	1/1980	O'Brien	D297,160 S	8/1988	Robbins
4,190,207 A	2/1980	Fienhold et al.	4,764,047 A	8/1988	Johnston et al.
4,191,332 A	3/1980	De Langis et al.	4,778,104 A	10/1988	Fisher
4,203,550 A	5/1980	On	4,787,591 A	11/1988	Villacorta
4,209,132 A	6/1980	Kwan	4,790,294 A	12/1988	Allred, III et al.
D255,626 S	7/1980	Grube	4,801,091 A	1/1989	Sandvik
4,219,160 A	8/1980	Allred, Jr.	4,809,369 A	3/1989	Bowden
4,221,338 A	9/1980	Shames et al.	4,839,599 A	6/1989	Fischer
4,239,409 A	12/1980	Osrwo	4,842,059 A	6/1989	Tomek
4,243,253 A	1/1981	Rogers, Jr.	D302,325 S	7/1989	Charet et al.
4,244,526 A	1/1981	Arth	4,850,616 A	7/1989	Pava
D258,677 S	3/1981	Larsson	4,854,499 A	8/1989	Neuman
4,254,914 A	3/1981	Shames et al.	4,856,822 A	8/1989	Parker
4,258,414 A	3/1981	Sokol	4,865,362 A	9/1989	Holden
4,272,022 A	6/1981	Evans	D303,830 S	10/1989	Ramsey et al.
4,274,400 A	6/1981	Baus	4,871,196 A	10/1989	Kingsford
4,282,612 A	8/1981	King	4,896,658 A	1/1990	Yonekubo et al.
D261,300 S	10/1981	Klose	D306,351 S	2/1990	Charet et al.
D261,417 S	10/1981	Klose	4,901,927 A	2/1990	Valdivia
4,303,201 A	12/1981	Elkins et al.	4,903,178 A	2/1990	Englot et al.
4,319,608 A	3/1982	Raikov et al.	4,903,897 A	2/1990	Hayes
4,330,089 A	5/1982	Finkbeiner	4,903,922 A	2/1990	Harris, III
D266,212 S	9/1982	Haug et al.	4,907,137 A	3/1990	Schladitz et al.
4,350,298 A	9/1982	Tada	4,907,744 A	3/1990	Jousson
4,353,508 A	10/1982	Butterfield et al.	4,909,435 A	3/1990	Kidouchi et al.
4,358,056 A	11/1982	Greenhut et al.	4,914,759 A	4/1990	Goff
D267,582 S	1/1983	Mackay et al.	4,946,202 A	8/1990	Perricone
D268,359 S	3/1983	Klose	4,951,329 A	8/1990	Shaw
D268,442 S	3/1983	Darmon	4,953,585 A	9/1990	Rollini et al.
D268,611 S	4/1983	Klose	4,964,573 A	10/1990	Lipski
4,383,554 A	5/1983	Merriman	4,972,048 A	11/1990	Martin
4,396,797 A	8/1983	Sakuragi et al.	D313,267 S	12/1990	Lenci et al.
4,398,669 A	8/1983	Fienhold	4,976,460 A	12/1990	Newcombe et al.
4,425,965 A	1/1984	Bayh, III et al.	D314,246 S	1/1991	Bache
4,432,392 A	2/1984	Paley	D315,191 S	3/1991	Mikol
D274,457 S	6/1984	Haug	4,998,673 A	3/1991	Pilolla
4,461,052 A	7/1984	Mostul	5,004,158 A	4/1991	Halem et al.
4,465,308 A	8/1984	Martini	D317,348 S	6/1991	Geneve et al.
4,467,964 A	8/1984	Kaeser	5,020,570 A	6/1991	Cotter
4,495,550 A	1/1985	Visciano	5,022,103 A	6/1991	Faist
4,527,745 A	7/1985	Butterfield et al.	5,032,015 A	7/1991	Christianson
4,540,202 A	9/1985	Amphoux et al.	5,033,528 A	7/1991	Volcani
4,545,081 A	10/1985	Nestor et al.	5,033,897 A	7/1991	Chen

US D673,649 S

Page 4

D319,294 S	8/1991	Kohler, Jr. et al.	D346,426 S	4/1994	Warshawsky
D320,064 S	9/1991	Presman	D346,428 S	4/1994	Warshawsky
5,046,764 A	9/1991	Kimura et al.	D346,430 S	4/1994	Warshawsky
D321,062 S	10/1991	Bonbright	D347,262 S	5/1994	Black et al.
5,058,804 A	10/1991	Yonekubo et al.	D347,265 S	5/1994	Gottwald
D322,119 S	12/1991	Haug et al.	5,316,216 A	5/1994	Cammack et al.
D322,681 S	12/1991	Yuen	D348,720 S	7/1994	Haug et al.
5,070,552 A	12/1991	Gentry et al.	5,329,650 A	7/1994	Zaccai et al.
D323,545 S	1/1992	Ward	D349,947 S	8/1994	Hing-Wah
5,082,019 A	1/1992	Tetrault	5,333,787 A	8/1994	Smith et al.
5,086,878 A	2/1992	Swift	5,333,789 A	8/1994	Garneys
5,090,624 A	2/1992	Rogers	5,340,064 A	8/1994	Heimann et al.
5,100,055 A	3/1992	Rokitenetz et al.	5,340,165 A	8/1994	Sheppard
D325,769 S	4/1992	Haug et al.	D350,808 S	9/1994	Warshawsky
D325,770 S	4/1992	Haug et al.	5,344,080 A	9/1994	Matsui
5,103,384 A	4/1992	Drohan	5,349,987 A	9/1994	Shieh
D326,311 S	5/1992	Lenci et al.	5,356,076 A	10/1994	Bishop
D327,115 S	6/1992	Rogers	5,356,077 A	10/1994	Shames
5,121,511 A	6/1992	Sakamoto et al.	D352,092 S	11/1994	Warshawsky
D327,729 S	7/1992	Rogers	D352,347 S	11/1994	Dannenberg
5,127,580 A	7/1992	Fu-I	D352,766 S	11/1994	Hill et al.
5,134,251 A	7/1992	Martin	5,368,235 A	11/1994	Drozdoiff et al.
D328,944 S	8/1992	Robbins	5,369,556 A	11/1994	Zeller
5,141,016 A	8/1992	Nowicki	5,370,427 A	12/1994	Hoelle et al.
D329,504 S	9/1992	Yuen	5,385,500 A	1/1995	Schmidt
5,143,300 A	9/1992	Cutler	D355,242 S	2/1995	Warshawsky
5,145,114 A	9/1992	Monch	D355,703 S	2/1995	Duell
5,148,556 A	9/1992	Bottoms et al.	D356,626 S	3/1995	Wang
D330,068 S	10/1992	Haug et al.	5,397,064 A	3/1995	Heitzman
D330,408 S	10/1992	Thacker	5,398,872 A	3/1995	Joubran
D330,409 S	10/1992	Raffo	5,398,977 A	3/1995	Berger et al.
5,153,976 A	10/1992	Benchaar et al.	5,402,812 A	4/1995	Moineau et al.
5,154,355 A	10/1992	Gonzalez	5,405,089 A	4/1995	Heimann et al.
5,154,483 A	10/1992	Zeller	5,414,879 A	5/1995	Hiraishi et al.
5,161,567 A	11/1992	Humpert	5,423,348 A	6/1995	Jezek et al.
5,163,752 A	11/1992	Copeland et al.	5,433,384 A	7/1995	Chan et al.
5,171,429 A	12/1992	Yasuo	D361,399 S	8/1995	Carbone et al.
5,172,860 A	12/1992	Yuch	D361,623 S	8/1995	Huen
5,172,862 A	12/1992	Heimann et al.	5,441,075 A	8/1995	Clare
5,172,866 A	12/1992	Ward	5,449,206 A	9/1995	Lockwood
D332,303 S	1/1993	Klose	D363,360 S	10/1995	Santarsiero
D332,994 S	2/1993	Huen	5,454,809 A	10/1995	Janssen
D333,339 S	2/1993	Klose	5,468,057 A	11/1995	Megerle et al.
5,197,767 A	3/1993	Kimura et al.	D364,935 S	12/1995	deBlois
D334,794 S	4/1993	Klose	D365,625 S	12/1995	Bova
D335,171 S	4/1993	Lenci et al.	D365,646 S	12/1995	deBlois
5,201,468 A	4/1993	Freier et al.	5,476,225 A	12/1995	Chan
5,206,963 A	5/1993	Wiens	D366,309 S	1/1996	Huang
5,207,499 A	5/1993	Vajda et al.	D366,707 S	1/1996	Kaiser
5,213,267 A	5/1993	Heimann et al.	D366,708 S	1/1996	Santarsiero
5,220,697 A	6/1993	Birchfield	D366,709 S	1/1996	Szmanski
D337,839 S	7/1993	Zeller	D366,710 S	1/1996	Szymanski
5,228,625 A	7/1993	Grassberger	5,481,765 A	1/1996	Wang
5,230,106 A	7/1993	Henkin et al.	D366,948 S	2/1996	Carbone
D338,542 S	8/1993	Yuen	D367,315 S	2/1996	Andrus
5,232,162 A	8/1993	Chih	D367,333 S	2/1996	Swyst
D339,492 S	9/1993	Klose	D367,696 S	3/1996	Andrus
D339,627 S	9/1993	Klose	D367,934 S	3/1996	Carbone
D339,848 S	9/1993	Gottwald	D368,146 S	3/1996	Carbone
5,246,169 A	9/1993	Heimann et al.	D368,317 S	3/1996	Swyst
5,246,301 A	9/1993	Hirasawa	5,499,767 A	3/1996	Morand
D340,376 S	10/1993	Klose	D368,539 S	4/1996	Carbone et al.
5,253,670 A	10/1993	Perrott	D368,540 S	4/1996	Santarsiero
5,253,807 A	10/1993	Newbegin	D368,541 S	4/1996	Kaiser et al.
5,254,809 A	10/1993	Martin	D368,542 S	4/1996	deBlois et al.
D341,007 S	11/1993	Haug et al.	D369,204 S	4/1996	Andrus
D341,191 S	11/1993	Klose	D369,205 S	4/1996	Andrus
D341,220 S	11/1993	Eagan	5,507,436 A	4/1996	Ruttenberg
5,263,646 A	11/1993	McCauley	D369,873 S	5/1996	deBlois et al.
5,265,833 A	11/1993	Heimann et al.	D369,874 S	5/1996	Santarsiero
5,268,826 A	12/1993	Greene	D369,875 S	5/1996	Carbone
5,276,596 A	1/1994	Krenzel	D370,052 S	5/1996	Chan et al.
5,277,391 A	1/1994	Haug et al.	D370,250 S	5/1996	Fawcett et al.
5,286,071 A	2/1994	Storage	D370,277 S	5/1996	Kaiser
5,288,110 A	2/1994	Allread	D370,278 S	5/1996	Nolan
5,294,054 A	3/1994	Benedict et al.	D370,279 S	5/1996	deBlois
5,297,735 A	3/1994	Heimann et al.	D370,280 S	5/1996	Kaiser
5,297,739 A	3/1994	Allen	D370,281 S	5/1996	Johnstone et al.
D345,811 S	4/1994	Van Deursen et al.	5,517,392 A	5/1996	Rouso et al.

US D673,649 S

Page 5

5,521,803 A	5/1996	Eckert et al.	5,749,552 A	5/1998	Fan
D370,542 S	6/1996	Santarsiero	5,749,602 A	5/1998	Delaney et al.
D370,735 S	6/1996	deBlois	D394,899 S	6/1998	Caroen et al.
D370,987 S	6/1996	Santarsiero	D395,074 S	6/1998	Neibrook
D370,988 S	6/1996	Santarsiero	D395,075 S	6/1998	Kolada
D371,448 S	7/1996	Santarsiero	D395,142 S	6/1998	Neibrook
D371,618 S	7/1996	Nolan	5,764,760 A	6/1998	Grandbert et al.
D371,619 S	7/1996	Szymanski	5,765,760 A	6/1998	Kuo
D371,856 S	7/1996	Carbone	5,769,802 A	6/1998	Wang
D372,318 S	7/1996	Szymanski	5,772,120 A	6/1998	Huber
D372,319 S	7/1996	Carbone	5,778,939 A	7/1998	Hok-Yin
5,531,625 A	7/1996	Zhong	5,788,157 A	8/1998	Kress
5,539,624 A	7/1996	Dougherty	D398,370 S	9/1998	Purdy
D372,548 S	8/1996	Carbone	5,806,771 A	9/1998	Loschelder et al.
D372,998 S	8/1996	Carbone	5,819,791 A	10/1998	Chronister et al.
D373,210 S	8/1996	Santarsiero	5,820,574 A	10/1998	Henkin et al.
D373,434 S	9/1996	Nolan	5,823,431 A	10/1998	Pierce
D373,435 S	9/1996	Nolan	5,823,442 A	10/1998	Guo
D373,645 S	9/1996	Johnstone et al.	5,826,803 A	10/1998	Cooper
D373,646 S	9/1996	Szymanski et al.	5,833,138 A	11/1998	Crane et al.
D373,647 S	9/1996	Kaiser	5,839,666 A	11/1998	Heimann et al.
D373,648 S	9/1996	Kaiser	D402,350 S	12/1998	Andrus
D373,649 S	9/1996	Carbone	D403,754 S	1/1999	Gottwald
D373,651 S	9/1996	Szymanski	D404,116 S	1/1999	Bosio
D373,652 S	9/1996	Kaiser	5,855,348 A	1/1999	Fornara
5,551,637 A	9/1996	Lo	5,860,599 A	1/1999	Lin
5,552,973 A	9/1996	Hsu	5,862,543 A	1/1999	Reynoso et al.
5,558,278 A	9/1996	Gallorini	5,862,985 A	1/1999	Neibrook et al.
D374,271 S	10/1996	Fleischmann	D405,502 S	2/1999	Tse
D374,297 S	10/1996	Kaiser	5,865,375 A	2/1999	Hsu
D374,298 S	10/1996	Swyst	5,865,378 A	2/1999	Hollinshead et al.
D374,299 S	10/1996	Carbone	5,873,647 A	2/1999	Kurtz et al.
D374,493 S	10/1996	Szymanski	D408,893 S	4/1999	Tse
D374,494 S	10/1996	Santarsiero	D409,276 S	5/1999	Ratzlaff
D374,732 S	10/1996	Kaiser	D410,276 S	5/1999	Ben-Tsur
D374,733 S	10/1996	Santarsiero	5,918,809 A	7/1999	Simmons
5,560,548 A	10/1996	Mueller et al.	5,918,811 A	7/1999	Denham et al.
5,567,115 A	10/1996	Carbone	D413,157 S	8/1999	Ratzlaff
D375,541 S	11/1996	Michaluk	5,937,905 A	8/1999	Santos
5,577,664 A	11/1996	Heitzman	5,938,123 A	8/1999	Heitzman
D376,217 S	12/1996	Kaiser	5,941,462 A	8/1999	Sandor
D376,860 S	12/1996	Santarsiero	5,947,388 A	9/1999	Woodruff
D376,861 S	12/1996	Johnstone et al.	D415,247 S	10/1999	Haverstraw et al.
D376,862 S	12/1996	Carbone	5,961,046 A	10/1999	Joubran
5,605,173 A	2/1997	Arnaud	5,967,417 A	10/1999	Mantel
D378,401 S	3/1997	Neufeld et al.	5,979,776 A	11/1999	Williams
5,613,638 A	3/1997	Blessing	5,992,762 A	11/1999	Wang
5,613,639 A	3/1997	Storm et al.	D418,200 S	12/1999	Ben-Tsur
5,615,837 A	4/1997	Roman	5,997,047 A	12/1999	Pimentel et al.
5,624,074 A	4/1997	Parisi	6,003,165 A	12/1999	Loyd
5,624,498 A	4/1997	Lee et al.	D418,902 S	1/2000	Haverstraw et al.
D379,212 S	5/1997	Chan	D418,903 S	1/2000	Haverstraw et al.
D379,404 S	5/1997	Spelts	D418,904 S	1/2000	Milrud
5,632,049 A	5/1997	Chen	D421,099 S	2/2000	Mullenmeister
D381,405 S	7/1997	Waidele et al.	6,021,960 A	2/2000	Kehat
D381,737 S	7/1997	Chan	D422,053 S	3/2000	Brenner et al.
D382,936 S	8/1997	Shfaram	6,042,027 A	3/2000	Sandvik
5,653,260 A	8/1997	Huber	6,042,155 A	3/2000	Lockwood
5,667,146 A	9/1997	Pimentel et al.	D422,336 S	4/2000	Haverstraw et al.
D385,332 S	10/1997	Andrus	D422,337 S	4/2000	Chan
D385,333 S	10/1997	Caroen et al.	D423,083 S	4/2000	Haug et al.
D385,334 S	10/1997	Caroen et al.	D423,110 S	4/2000	Cipkowski
D385,616 S	10/1997	Dow et al.	D424,160 S	5/2000	Haug et al.
D385,947 S	11/1997	Dow et al.	D424,161 S	5/2000	Haug et al.
D387,230 S	12/1997	von Buelow et al.	D424,162 S	5/2000	Haug et al.
5,697,557 A	12/1997	Blessing et al.	D424,163 S	5/2000	Haug et al.
5,699,964 A	12/1997	Bergmann et al.	D426,290 S	6/2000	Haug et al.
5,702,057 A	12/1997	Huber	D427,661 S	7/2000	Haverstraw et al.
D389,558 S	1/1998	Andrus	D428,110 S	7/2000	Haug et al.
5,704,080 A	1/1998	Kuhne	D428,125 S	7/2000	Chan
5,707,011 A	1/1998	Bosio	6,085,780 A	7/2000	Morris
5,718,380 A	2/1998	Schorn et al.	D430,267 S	8/2000	Milrud et al.
D392,369 S	3/1998	Chan	6,095,801 A	8/2000	Spiewak
5,730,361 A	3/1998	Thonnes	D430,643 S	9/2000	Tse
5,730,362 A	3/1998	Cordes	6,113,002 A	9/2000	Finkbeiner
5,730,363 A	3/1998	Kress	6,123,272 A	9/2000	Havican et al.
5,742,961 A	4/1998	Casperson et al.	6,123,308 A	9/2000	Faisst
D394,490 S	5/1998	Andrus et al.	D432,624 S	10/2000	Chan
5,746,375 A	5/1998	Guo	D432,625 S	10/2000	Chan

US D673,649 S

Page 6

D433,096 S	10/2000	Tse	6,515,070 B2	2/2003	Kobylanska et al.
D433,097 S	10/2000	Tse	D471,253 S	3/2003	Tse
6,126,091 A	10/2000	Heitzman	D471,953 S	3/2003	Colligan et al.
6,126,290 A	10/2000	Veigel	6,533,194 B2	3/2003	Marsh et al.
D434,109 S	11/2000	Ko	6,537,455 B2	3/2003	Farley
6,164,569 A	12/2000	Hollinshead et al.	D472,958 S	4/2003	Ouyoung
6,164,570 A	12/2000	Smeltzer	6,550,697 B2	4/2003	Lai
D435,889 S	1/2001	Ben-Tsur et al.	6,585,174 B1	7/2003	Huang
D439,305 S	3/2001	Slothower	6,595,439 B1	7/2003	Chen
6,199,580 B1	3/2001	Morris	6,607,148 B1	8/2003	Marsh et al.
6,202,679 B1	3/2001	Titus	6,611,971 B1	9/2003	Antoniello et al.
D440,276 S	4/2001	Slothower	6,637,676 B2	10/2003	Zieger et al.
D440,277 S	4/2001	Slothower	6,641,057 B2	11/2003	Thomas et al.
D440,278 S	4/2001	Slothower	D483,837 S	12/2003	Fan
D441,059 S	4/2001	Fleischmann	6,659,117 B2	12/2003	Gilmore
6,209,799 B1	4/2001	Finkbeiner	6,659,372 B2	12/2003	Marsh et al.
D443,025 S	5/2001	Kollmann et al.	D485,887 S	1/2004	Luetzgen et al.
D443,026 S	5/2001	Kollmann et al.	D486,888 S	2/2004	Lobermeier
D443,027 S	5/2001	Kollmann et al.	6,691,338 B2	2/2004	Zieger
D443,029 S	5/2001	Kollmann et al.	6,691,933 B1	2/2004	Bosio
6,223,998 B1	5/2001	Heitzman	D487,301 S	3/2004	Haug et al.
6,230,984 B1	5/2001	Jager	D487,498 S	3/2004	Blomstrom
6,230,988 B1	5/2001	Chao et al.	6,701,953 B2	3/2004	Agosta
6,230,989 B1	5/2001	Haverstraw et al.	6,715,699 B1	4/2004	Greenberg et al.
D443,335 S	6/2001	Andrus	6,719,218 B2	4/2004	Cool et al.
D443,336 S	6/2001	Kollmann et al.	D489,798 S	5/2004	Hunt
D443,347 S	6/2001	Gottwald	D490,498 S	5/2004	Golichowski
6,241,166 B1	6/2001	Overington et al.	6,736,336 B2	5/2004	Wong
6,250,572 B1	6/2001	Chen	6,739,523 B2	5/2004	Haverstraw et al.
D444,865 S	7/2001	Gottwald	6,739,527 B1	5/2004	Chung
D445,871 S	7/2001	Fan	D492,004 S	6/2004	Haug et al.
6,254,014 B1	7/2001	Clearman et al.	D492,007 S	6/2004	Kollmann et al.
6,270,278 B1	8/2001	Mauro	6,742,725 B1	6/2004	Fan
6,276,004 B1	8/2001	Bertrand et al.	D493,208 S	7/2004	Lin
6,283,447 B1	9/2001	Fleet	D493,864 S	8/2004	Haug et al.
6,286,764 B1	9/2001	Garvey et al.	D494,655 S	8/2004	Lin
D449,673 S	10/2001	Kollmann et al.	D494,661 S	8/2004	Zieger et al.
D450,370 S	11/2001	Wales et al.	D495,027 S	8/2004	Mazzola
D450,805 S	11/2001	Lindholm et al.	6,776,357 B1	8/2004	Naito
D450,806 S	11/2001	Lindholm et al.	6,789,751 B1	9/2004	Fan
D450,807 S	11/2001	Lindholm et al.	D496,987 S	10/2004	Glunk
D451,169 S	11/2001	Lindholm et al.	D497,974 S	11/2004	Haug et al.
D451,170 S	11/2001	Lindholm et al.	D498,514 S	11/2004	Haug et al.
D451,171 S	11/2001	Lindholm et al.	D500,121 S	12/2004	Blomstrom
D451,172 S	11/2001	Lindholm et al.	D500,549 S	1/2005	Blomstrom
6,321,777 B1	11/2001	Wu	D501,242 S	1/2005	Blomstrom
6,322,006 B1	11/2001	Guo	D502,760 S	3/2005	Zieger et al.
D451,583 S	12/2001	Lindholm et al.	D502,761 S	3/2005	Zieger et al.
D451,980 S	12/2001	Lindholm et al.	D503,211 S	3/2005	Lin
D452,553 S	12/2001	Lindholm et al.	6,863,227 B2	3/2005	Wollenberg et al.
D452,725 S	1/2002	Lindholm et al.	6,869,030 B2	3/2005	Blessing et al.
D452,897 S	1/2002	Gillette et al.	D503,774 S	4/2005	Zieger
6,336,764 B1	1/2002	Liu	D503,775 S	4/2005	Zieger
D453,369 S	2/2002	Lobermeier	D503,966 S	4/2005	Zieger
D453,370 S	2/2002	Lindholm et al.	6,899,292 B2	5/2005	Titinet
D453,551 S	2/2002	Lindholm et al.	D506,243 S	6/2005	Wu
6,349,735 B2	2/2002	Gul	D507,037 S	7/2005	Wu
D454,617 S	3/2002	Curbbun et al.	6,935,581 B2	8/2005	Titinet
D454,938 S	3/2002	Lord	D509,280 S	9/2005	Bailey et al.
6,375,342 B1	4/2002	Koren et al.	D509,563 S	9/2005	Bailey et al.
D457,937 S	5/2002	Lindholm et al.	D510,123 S	9/2005	Tsai
6,382,531 B1	5/2002	Tracy	D511,809 S	11/2005	Haug et al.
D458,348 S	6/2002	Mullenmeister	D512,119 S	11/2005	Haug et al.
6,412,711 B1	7/2002	Fan	6,981,661 B1	1/2006	Chen
D461,224 S	8/2002	Lobermeier	D516,169 S	2/2006	Wu
D461,878 S	8/2002	Green et al.	7,000,854 B2	2/2006	Malek et al.
6,450,425 B1	9/2002	Chen	7,004,409 B2	2/2006	Okubo
6,454,186 B2	9/2002	Haverstraw et al.	7,004,410 B2	2/2006	Li
6,463,658 B1	10/2002	Larsson	D520,109 S	5/2006	Wu
6,464,265 B1	10/2002	Mikol	7,040,554 B2	5/2006	Drennow
D465,552 S	11/2002	Tse	7,048,210 B2	5/2006	Clark
D465,553 S	11/2002	Singtoroj	7,055,767 B1	6/2006	Ko
6,484,952 B2	11/2002	Koren	7,070,125 B2	7/2006	Williams et al.
D468,800 S	1/2003	Tse	7,077,342 B2	7/2006	Lee
D469,165 S	1/2003	Lim	D527,440 S	8/2006	Macan
6,502,796 B1	1/2003	Wales	7,093,780 B1	8/2006	Chung
6,508,415 B2	1/2003	Wang	7,097,122 B1	8/2006	Farley
6,511,001 B1	1/2003	Huang	D528,631 S	9/2006	Gillette et al.
D470,219 S	2/2003	Schweitzer	7,100,845 B1	9/2006	Hsieh

US D673,649 S

7,111,795 B2	9/2006	Thong	D629,867 S *	12/2010	Rexach et al. D23/213
7,111,798 B2	9/2006	Thomas et al.	D641,831 S	7/2011	Williams
D530,389 S	10/2006	Glenslak et al.	8,020,787 B2	9/2011	Leber
D530,392 S	10/2006	Tse	8,020,788 B2	9/2011	Luetttgen et al.
D531,259 S	10/2006	Hsieh	8,028,935 B2	10/2011	Leber
7,114,666 B2	10/2006	Luetttgen et al.	8,109,450 B2	2/2012	Luetttgen et al.
D533,253 S	12/2006	Luetttgen et al.	8,132,745 B2	3/2012	Leber et al.
D534,239 S	12/2006	Dingler et al.	8,146,838 B2	4/2012	Luetttgen et al.
D535,354 S	1/2007	Wu	2003/0062426 A1	4/2003	Gregory et al.
D536,060 S	1/2007	Sadler	2004/0118949 A1	6/2004	Marks
7,156,325 B1	1/2007	Chen	2004/0244105 A1	12/2004	Tsai
D538,391 S	3/2007	Mazzola	2005/0001072 A1	1/2005	Bolus et al.
D540,424 S	4/2007	Kirar	2005/0284967 A1	12/2005	Korb
D540,425 S	4/2007	Endo et al.	2006/0016908 A1	1/2006	Chung
D540,426 S	4/2007	Cropelli	2006/0016913 A1	1/2006	Lo
D540,427 S	4/2007	Bouroullec et al.	2006/0163391 A1	7/2006	Schorn
D542,391 S	5/2007	Gilbert	2006/0219822 A1	10/2006	Miller et al.
D542,393 S	5/2007	Haug et al.	2007/0040054 A1	2/2007	Farzan
7,229,031 B2	6/2007	Schmidt	2007/0200013 A1	8/2007	Hsiao
7,243,863 B2	7/2007	Glunk	2007/0246577 A1	10/2007	Leber
7,246,760 B2	7/2007	Marty et al.	2007/0252021 A1	11/2007	Cristina
D552,713 S	10/2007	Rexach	2007/0272770 A1	11/2007	Leber et al.
7,278,591 B2	10/2007	Clearman et al.	2008/0073449 A1	3/2008	Haynes et al.
D556,295 S	11/2007	Genord et al.	2008/0083844 A1	4/2008	Leber et al.
7,299,510 B2	11/2007	Tsai	2008/0156897 A1	7/2008	Leber
D557,763 S	12/2007	Schonherr et al.	2008/0223957 A1	9/2008	Schorn
D557,764 S	12/2007	Schonherr et al.	2008/0272591 A1	11/2008	Leber
D557,765 S	12/2007	Schonherr et al.	2009/0200404 A1	8/2009	Cristina
D558,301 S	12/2007	Hoernig	2009/0218420 A1	9/2009	Mazzola
7,303,151 B2	12/2007	Wu	2009/0307836 A1	12/2009	Blattner et al.
D559,357 S	1/2008	Wang et al.	2010/0065665 A1	3/2010	Whitaker
D559,945 S	1/2008	Patterson et al.	2010/0127096 A1	5/2010	Leber
D560,269 S	1/2008	Tse	2011/0000983 A1	1/2011	Chang
D562,937 S	2/2008	Schonherr et al.	2011/0011953 A1	1/2011	Macan et al.
D562,938 S	2/2008	Blessing et al.	2011/0121098 A1	5/2011	Luetttgen et al.
D562,941 S	2/2008	Pan	2012/0048968 A1	3/2012	Williams
7,331,536 B1	2/2008	Zhen et al.			
7,347,388 B2	3/2008	Chung			
D565,699 S	4/2008	Berberet			
D565,702 S	4/2008	Daunter et al.	CA	2341041	8/1999
D565,703 S	4/2008	Lammel et al.	CH	234284	3/1963
D566,228 S	4/2008	Neagoe	DE	352813	5/1922
D566,229 S	4/2008	Rexach	DE	848627	9/1952
D567,328 S	4/2008	Spangler et al.	DE	854100	10/1952
7,360,723 B2	4/2008	Lev	DE	2360534	6/1974
7,364,097 B2	4/2008	Okuma	DE	2806093	8/1979
7,374,112 B1	5/2008	Bulan et al.	DE	3107808	9/1982
7,384,007 B2	6/2008	Ho	DE	3246327	6/1984
D577,099 S	9/2008	Leber	DE	3440901	7/1985
D577,793 S	9/2008	Leber	DE	3706320	3/1988
D580,012 S	11/2008	Quinn et al.	DE	8804236	6/1988
D580,513 S	11/2008	Quinn et al.	DE	4034695	5/1991
D581,013 S	11/2008	Citterio	DE	19608085	9/1996
D581,014 S	11/2008	Quinn et al.	DE	202005000881	3/2005
7,503,345 B2	3/2009	Paterson et al.	DE	102006032017	1/2008
D590,048 S	4/2009	Leber et al.	EP	0167063	6/1985
7,520,448 B2	4/2009	Luetttgen et al.	EP	0478999	4/1992
D592,276 S	5/2009	Shoenherr et al.	EP	0514753	11/1992
D592,278 S	5/2009	Leber	EP	0435030	7/1993
7,537,175 B2	5/2009	Miura et al.	EP	0617644	10/1994
D600,777 S *	9/2009	Whitaker et al. D23/213	EP	0683354	11/1995
D603,935 S	11/2009	Leber	EP	0687851	12/1995
7,617,990 B2	11/2009	Huffman	EP	0695907	2/1996
D605,731 S	12/2009	Leber	EP	0700729	3/1996
D606,623 S	12/2009	Whitaker et al.	EP	0719588	7/1996
D608,412 S	1/2010	Barnard et al.	EP	0721082	7/1996
D608,413 S	1/2010	Barnard et al.	EP	0733747	9/1996
D616,061 S *	5/2010	Whitaker et al. D23/213	EP	0808661	11/1997
7,721,979 B2	5/2010	Mazzola	EP	0726811	1/1998
7,740,186 B2	6/2010	Macan et al.	EP	2164642	10/2010
D621,904 S	8/2010	Yoo et al.	EP	2260945	12/2010
D621,905 S	8/2010	Yoo et al.	FR	538538	6/1922
7,770,820 B2	8/2010	Clearman et al.	FR	873808	7/1942
7,770,822 B2	8/2010	Leber	FR	1039750	10/1953
D624,156 S	9/2010	Leber	FR	1098836	8/1955
7,789,326 B2	9/2010	Luetttgen et al.	FR	2596492	10/1987
D625,776 S	10/2010	Williams	FR	2695452	3/1994
7,832,662 B2	11/2010	Gallo	GB	3314	0/1914
D628,676 S *	12/2010	Lee D23/213	GB	10086	0/1894
			GB	129812	7/1919

US D673,649 S

Page 8

GB	204600	10/1923
GB	634483	3/1950
GB	971866	10/1964
GB	1111126	4/1968
GB	2066074	1/1980
GB	2066704	7/1981
GB	2068778	8/1981
GB	2121319	12/1983
GB	2155984	10/1985
GB	2156932 A	10/1985
GB	2199771	7/1988
GB	2298595	11/1996
GB	2337471	11/1999
IT	327400	7/1935
IT	350359	7/1937
IT	563459	5/1957
JP	S63-181459	11/1988
JP	H2-78660	6/1990
JP	4062238	2/1992

JP	4146708	5/1992
NL	8902957	6/1991
WO	WO93/12894	7/1993
WO	WO93/25839	12/1993
WO	WO96/00617	1/1996
WO	WO98/30336	7/1998
WO	WO99/59726	11/1999
WO	WO00/10720	3/2000
WO	WO2010/004593	1/2010

OTHER PUBLICATIONS

Color Copy, Labeled 1A, Gemlo, available at least as early as Dec. 2, 1998.

Color Copy, Labeled 1B, Gemlo, available at least as early as Dec. 2, 1998.

* cited by examiner

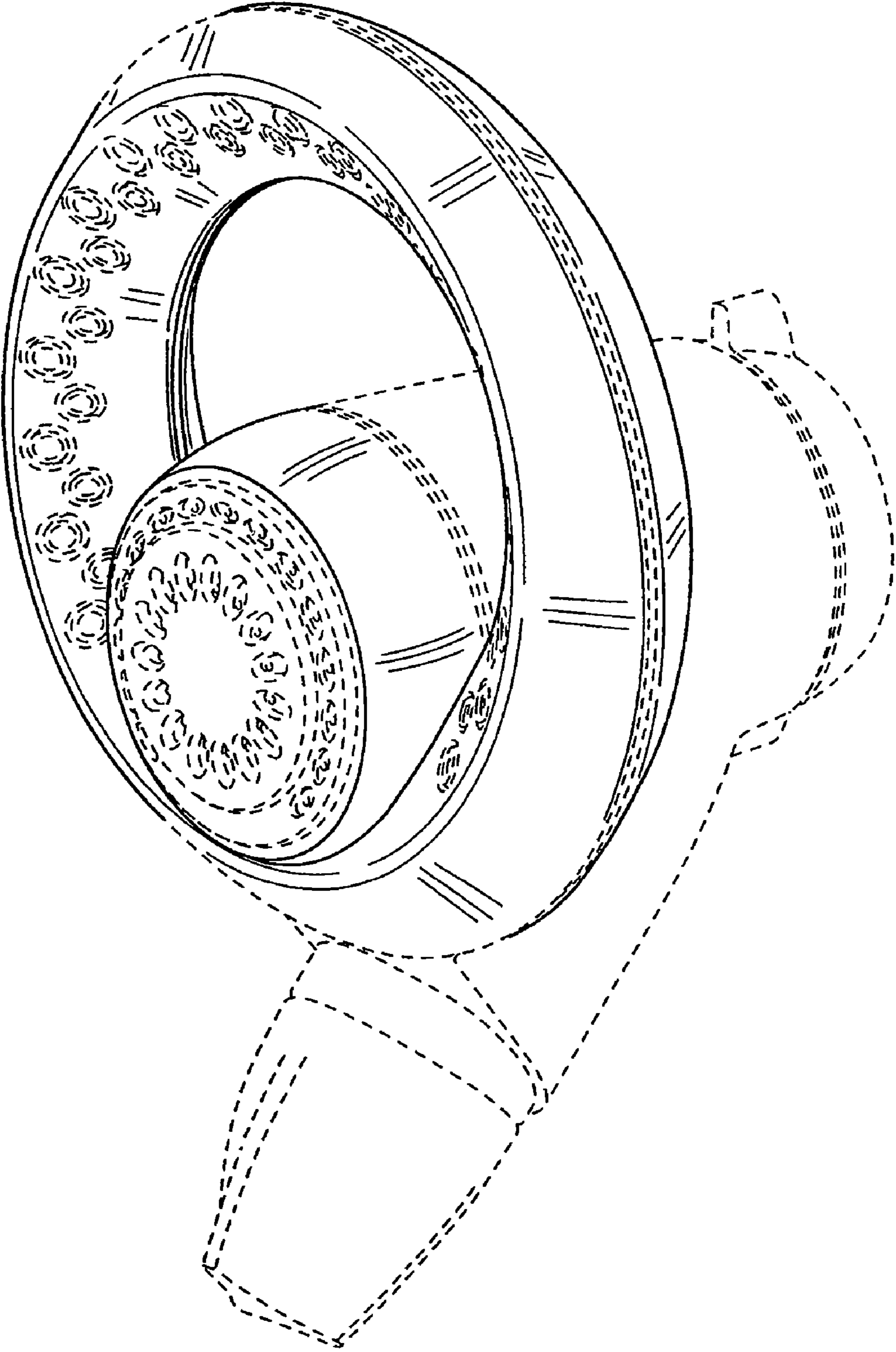


FIG. 1

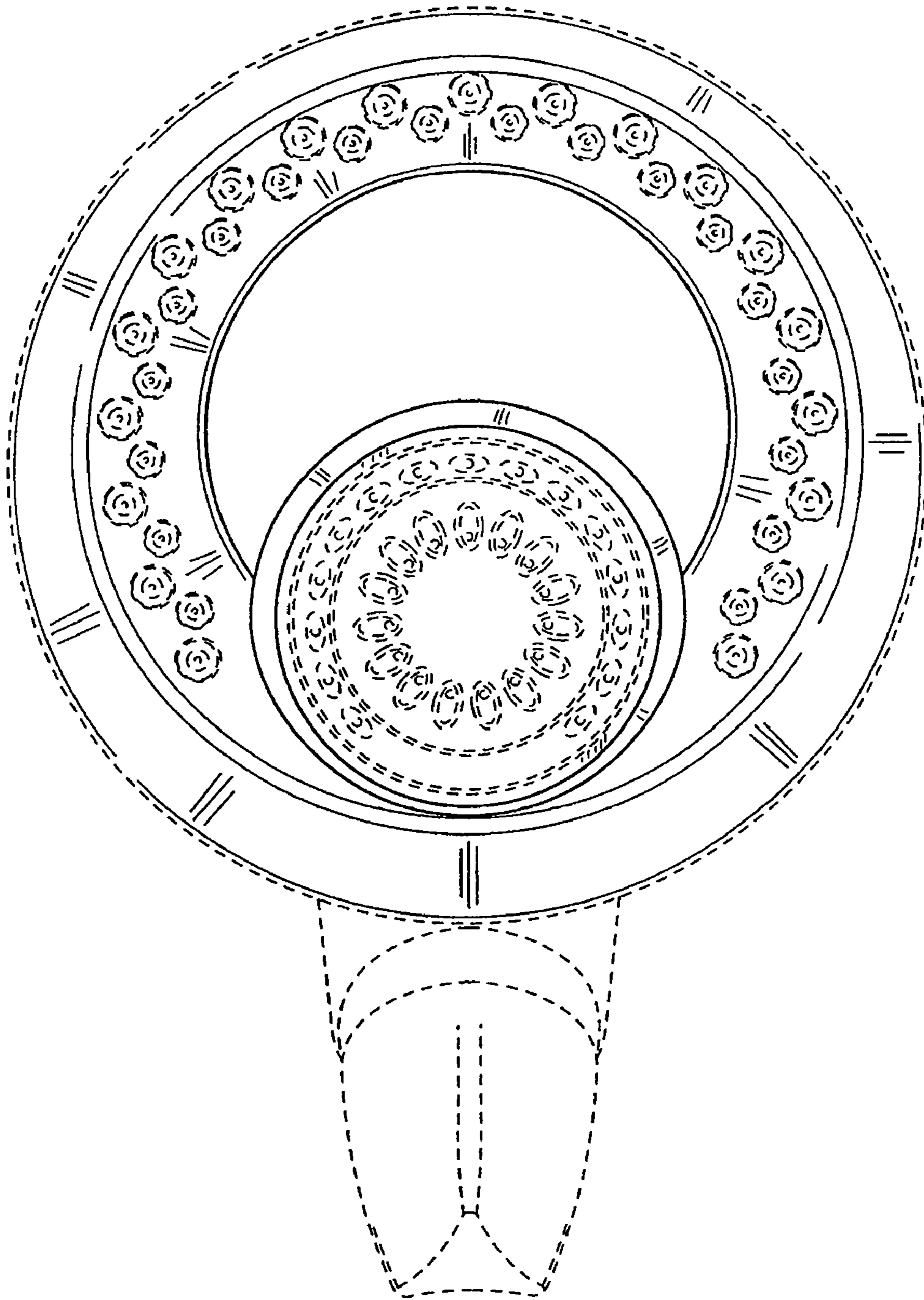


FIG. 2

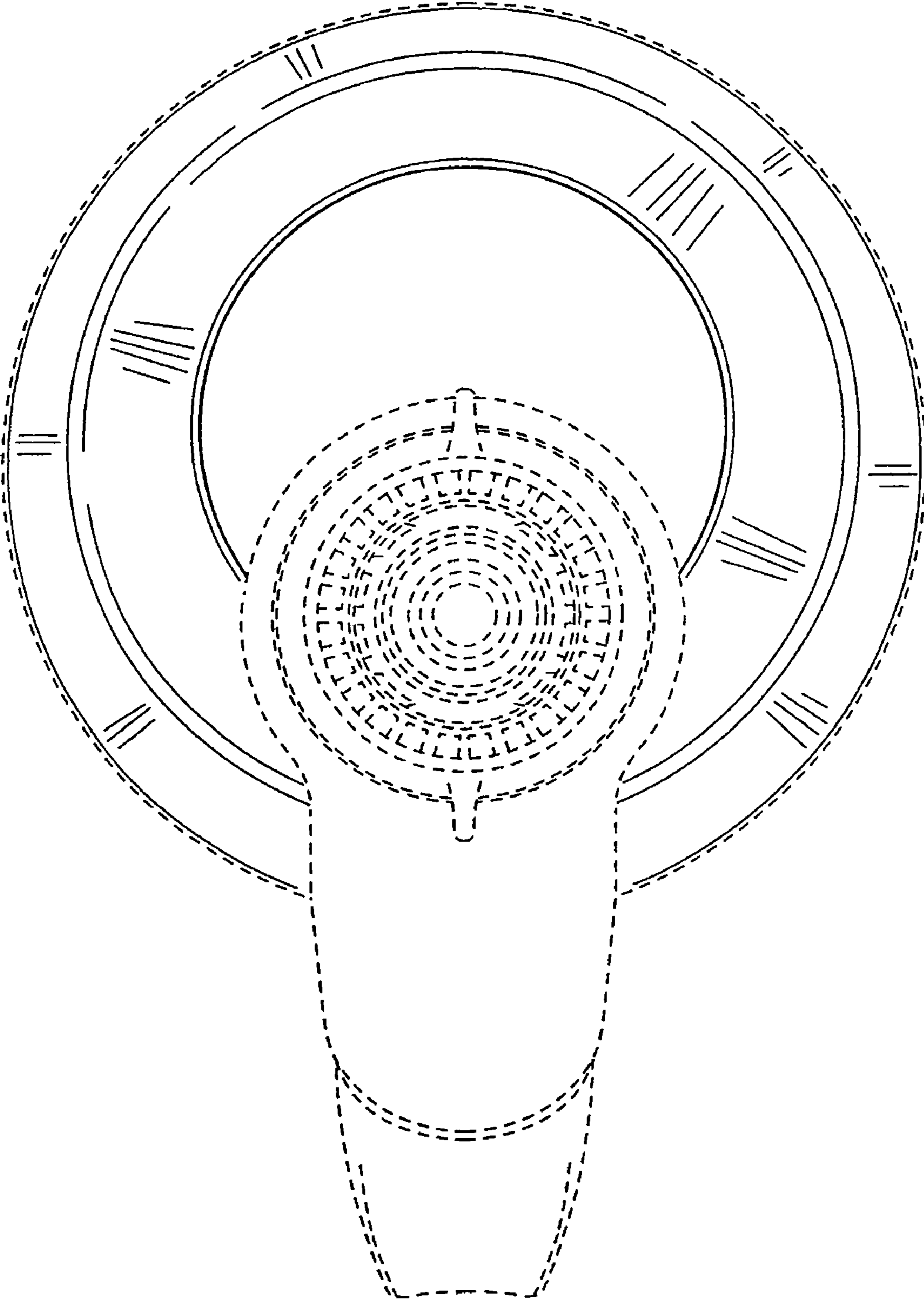


FIG. 3

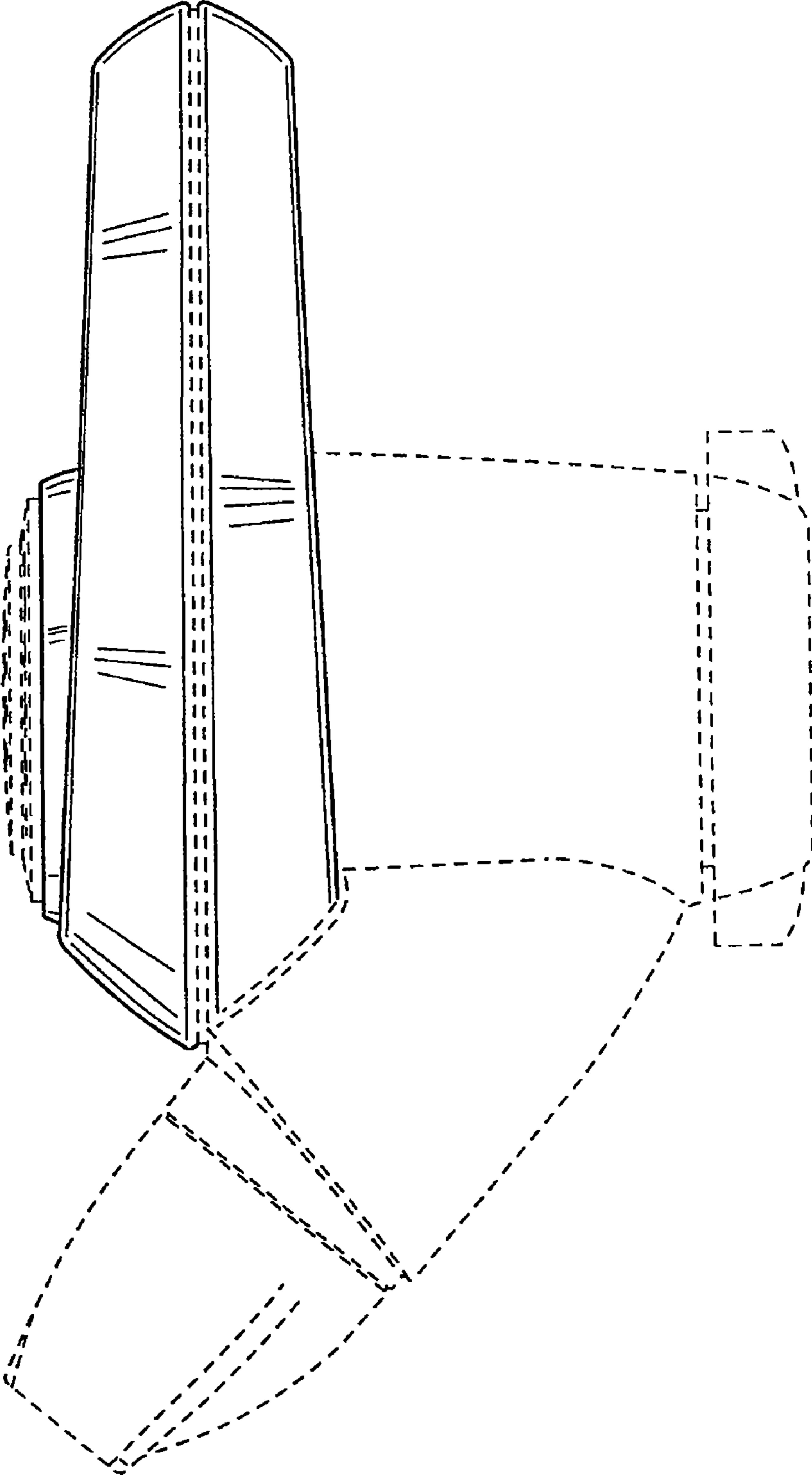


FIG. 4

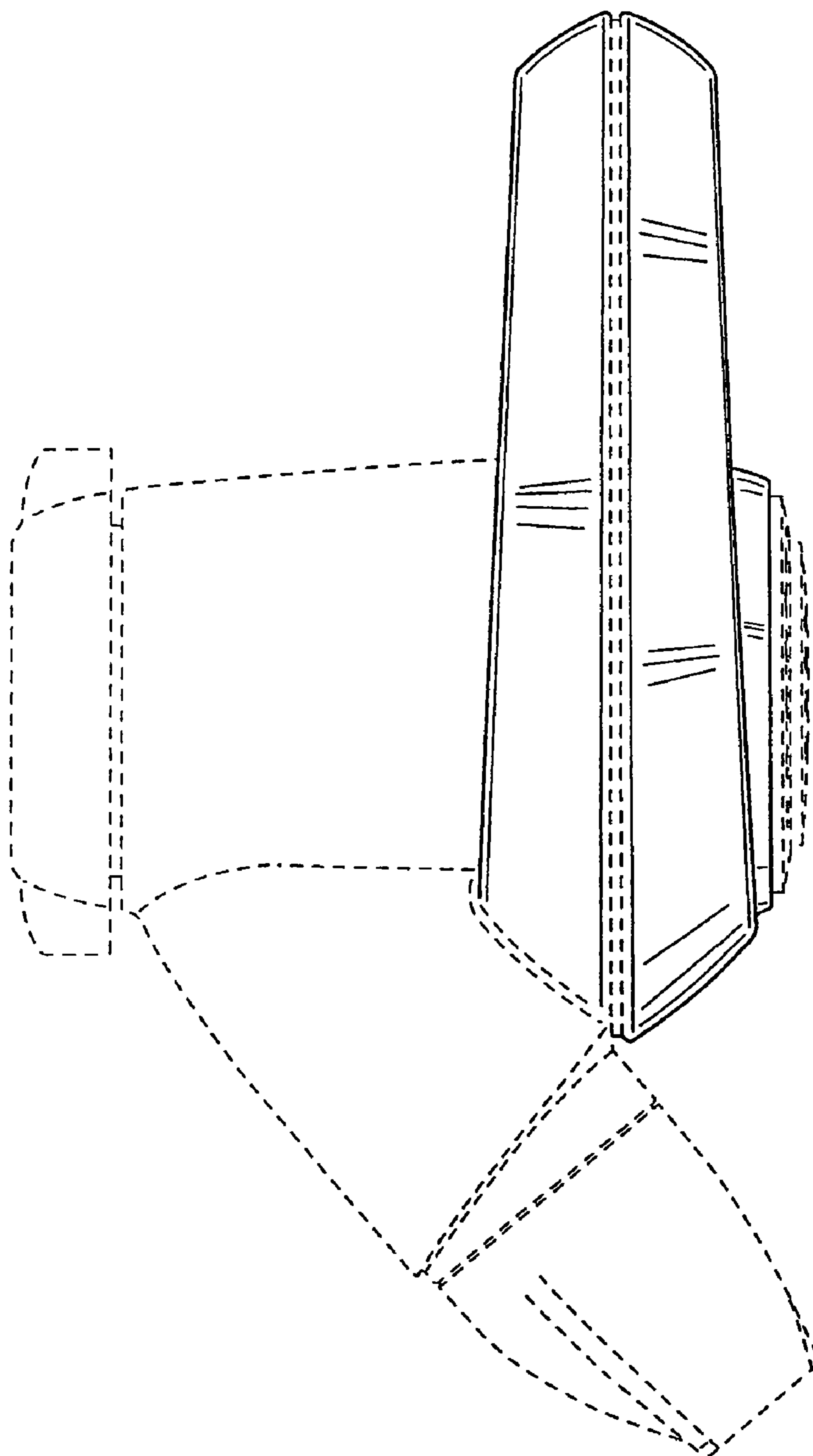


FIG. 5

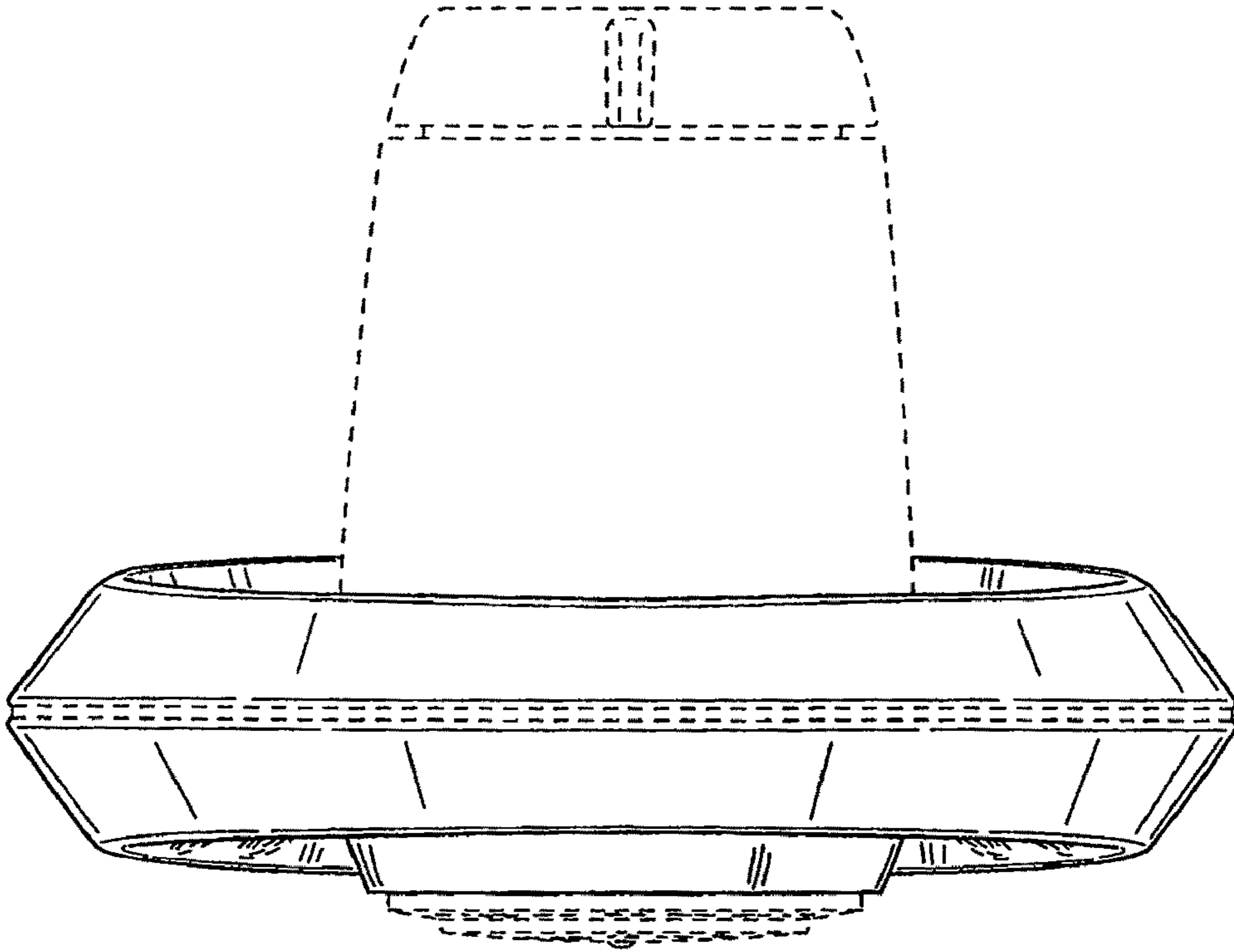


FIG. 6

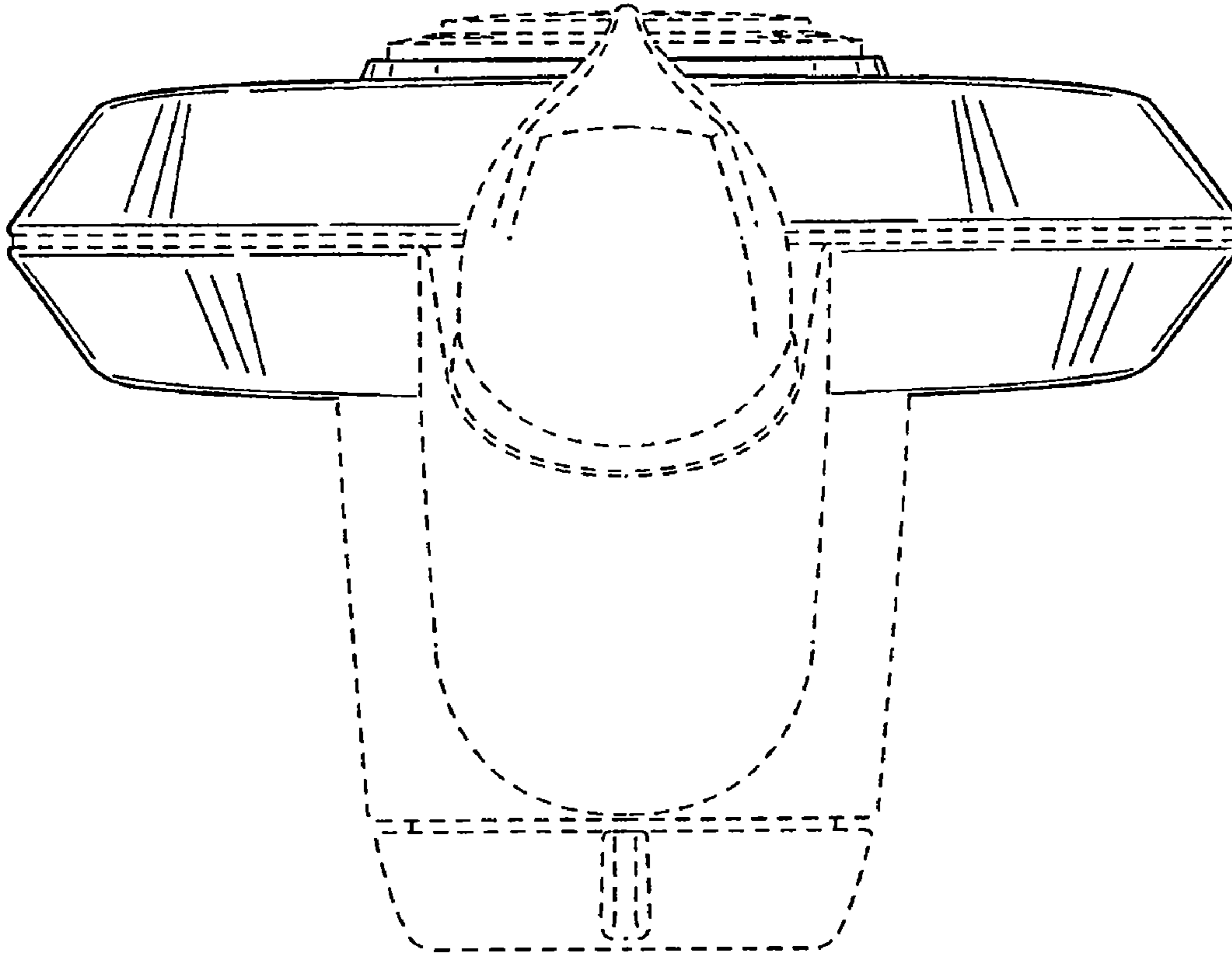


FIG. 7