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(12) **United States Design Patent**
Leber

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(54) **HAND SHOWER**

(75) Inventor: **Leland C. Leber**, Fort Collins, CO (US)

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

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

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(52) **U.S. Cl.** **D23/223**

(58) **Field of Classification Search** D23/223,
D23/213, 226, 229-230; 239/394, 282-283
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

203,094 A 4/1878 Wakeman

(Continued)

FOREIGN PATENT DOCUMENTS

CA 659610 3/1963

(Continued)

OTHER PUBLICATIONS

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

(Continued)

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(57) **CLAIM**

The ornamental design for a hand shower, as shown and described.

DESCRIPTION

FIG. 1 is a bottom perspective view of a hand shower, with the broken lines showing nozzles and user-engagement features for illustrative purposes only and forming no part of the claimed invention;

FIG. 2 is a bottom view of the hand shower of FIG. 1, with the nozzles and user-engagements feature not shown in this figure;

FIG. 3 is a top view of the hand shower of FIG. 1, with the user-engagement feature not shown in this figure;

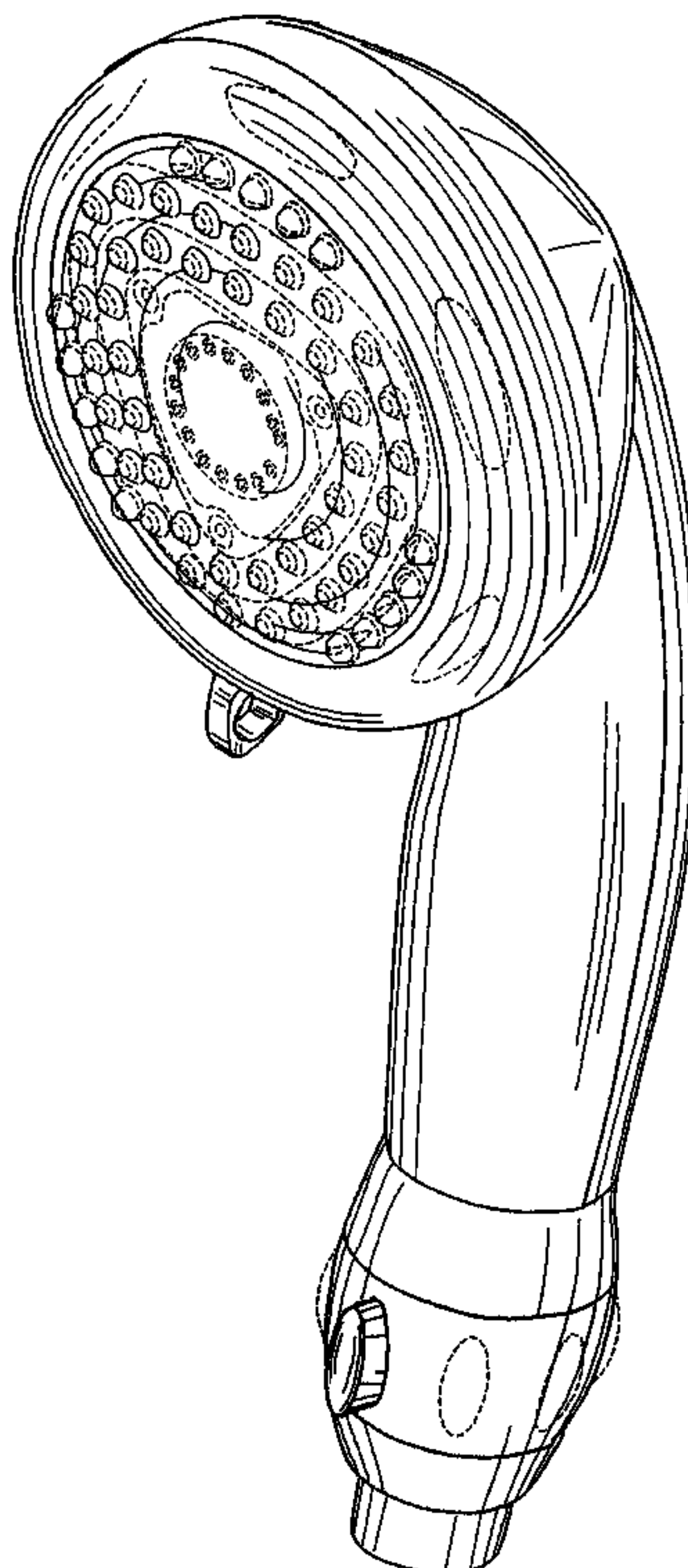
FIG. 4 is a back view of the hand shower of FIG. 1, with the nozzles and user-engagement features not shown in this figure;

FIG. 5 is a right side view of the hand shower of FIG. 1, with the nozzles and user-engagement features not shown in this figure; and,

FIG. 6 is a left side view of the hand shower of FIG. 1, with the nozzles and user-engagement features not shown in this figure.

The front view of the hand shower is a mirror image of the back view.

1 Claim, 3 Drawing Sheets



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U.S. PATENT DOCUMENTS					
204,333	A	5/1878 Josias	D166,073	S	3/1952 Dunkelberger
309,349	A	12/1884 Hart	2,648,762	A	8/1953 Dunkelberger
428,023	A	5/1890 Schoff	2,664,271	A	12/1953 Arutunoff
432,712	A	7/1890 Taylor	2,671,693	A	3/1954 Hyser et al.
445,250	A	1/1891 Lawless	2,676,806	A	4/1954 Bachman
486,986	A	11/1892 Schinke	2,679,575	A	5/1954 Haberstump
566,384	A	8/1896 Engelhart	2,680,358	A	6/1954 Zublin
566,410	A	8/1896 Schinke	2,726,120	A	12/1955 Bletcher et al.
570,405	A	10/1896 Jerguson et al.	2,759,765	A	8/1956 Pawley
694,888	A	3/1902 Pfluger	2,776,168	A	1/1957 Schweda
800,802	A	10/1905 Franquist	2,792,847	A	5/1957 Spencer
832,523	A	10/1906 Andersson	2,873,999	A	2/1959 Webb
835,678	A	11/1906 Hammond	2,930,505	A	3/1960 Meyer
854,094	A	5/1907 Klein	2,931,672	A	4/1960 Merritt et al.
926,929	A	7/1909 Dusseau	2,935,265	A	5/1960 Richter
1,001,842	A	8/1911 Greenfield	2,949,242	A	8/1960 Blumberg et al.
1,003,037	A	9/1911 Crowe	2,957,587	A	10/1960 Tobin
1,018,143	A	2/1912 Vissering	2,966,311	A	12/1960 Davis
1,046,573	A	12/1912 Ellis	D190,295	S	5/1961 Becker
1,203,466	A	10/1916 Benson	2,992,437	A	7/1961 Nelson et al.
1,217,254	A	2/1917 Winslow	3,007,648	A	11/1961 Fraser
1,218,895	A	3/1917 Porter	D192,935	S	5/1962 Becker
1,255,577	A	2/1918 Berry	3,032,357	A	5/1962 Shames et al.
1,260,181	A	3/1918 Garnero	3,034,809	A	5/1962 Greenberg
1,276,117	A	8/1918 Riebe	3,037,799	A	6/1962 Mulac
1,284,099	A	11/1918 Harris	3,081,339	A	3/1963 Green et al.
1,327,428	A	1/1920 Gregory	3,092,333	A	6/1963 Gaiotto
1,451,800	A	4/1923 Agner	3,098,508	A	7/1963 Gerdes
1,459,582	A	6/1923 Dubee	3,103,723	A	9/1963 Becker
1,469,528	A	10/1923 Owens	3,104,815	A	9/1963 Schultz
1,500,921	A	7/1924 Bramson et al.	3,104,827	A	9/1963 Aghnides
1,560,789	A	11/1925 Johnson et al.	3,111,277	A	11/1963 Grimsley
1,597,477	A	8/1926 Panhorst	3,143,857	A	8/1964 Eaton
1,633,531	A	6/1927 Keller	3,196,463	A	7/1965 Farneth
1,692,394	A	11/1928 Sundh	3,231,200	A	1/1966 Heald
1,695,263	A	12/1928 Jacques	3,236,545	A	2/1966 Parkes et al.
1,724,147	A	8/1929 Russell	3,239,152	A	3/1966 Bachli et al.
1,724,161	A	8/1929 Wuesthoff	3,266,059	A	8/1966 Stelle
1,736,160	A	11/1929 Jonsson	3,273,359	A	9/1966 Fregeolle
1,754,127	A	4/1930 Srulowitz	3,306,634	A	2/1967 Groves et al.
1,758,115	A	5/1930 Kelly	3,323,148	A	6/1967 Burnon
1,778,658	A	10/1930 Baker	3,329,967	A	7/1967 Martinez et al.
1,821,274	A	9/1931 Plummer	3,341,132	A	9/1967 Parkison
1,849,517	A	3/1932 Fraser	3,342,419	A	9/1967 Weese
1,890,156	A	12/1932 Konig	3,344,994	A	10/1967 Fife
1,906,575	A	5/1933 Goeriz	3,363,842	A	1/1968 Burns
1,934,553	A	11/1933 Mueller et al.	3,383,051	A	5/1968 Fiorentino
1,946,207	A	2/1934 Haire	3,389,925	A	6/1968 Gottschald
2,011,446	A	8/1935 Judell	3,393,311	A	7/1968 Dahl
2,024,930	A	12/1935 Judell	3,393,312	A	7/1968 Dahl
2,033,467	A	3/1936 Groeniger	3,404,410	A	10/1968 Sumida
2,044,445	A	6/1936 Price et al.	3,492,029	A	1/1970 French et al.
2,085,854	A	7/1937 Hathaway et al.	3,516,611	A	6/1970 Piggott
2,096,912	A	10/1937 Morris	3,546,961	A	12/1970 Marton
2,117,152	A	5/1938 Crosti	3,550,863	A	12/1970 McDermott
D113,439	S	2/1939 Reinecke	3,552,436	A	1/1971 Stewart
2,196,783	A	4/1940 Shook	3,565,116	A	2/1971 Gabin
2,197,667	A	4/1940 Shook	3,566,917	A	3/1971 White
2,216,149	A	10/1940 Weiss	3,580,513	A	5/1971 Martin
D126,433	S	4/1941 Enthof	3,584,822	A	6/1971 Oram
2,251,192	A	7/1941 Krumsiek et al.	3,596,835	A	8/1971 Smith et al.
2,268,263	A	12/1941 Newell et al.	3,612,577	A	10/1971 Pope
2,285,831	A	6/1942 Pennypacker	3,637,143	A	1/1972 Shames et al.
2,342,757	A	2/1944 Roser	3,641,333	A	2/1972 Gendron
2,402,741	A	6/1946 Draviner	3,647,144	A	3/1972 Parkison et al.
D147,258	S	8/1947 Becker	3,663,044	A	5/1972 Contreras et al.
D152,584	S	2/1949 Becker	3,669,470	A	6/1972 Deurloo
2,467,954	A	4/1949 Becker	3,672,648	A	6/1972 Price
2,546,348	A	3/1951 Schuman	3,682,392	A	8/1972 Kint
2,567,642	A	9/1951 Penshaw	3,685,745	A	8/1972 Peschcke-keodt
2,581,129	A	1/1952 Muldoon	D224,834	S	9/1972 Laudell
			3,711,029	A	1/1973 Bartlett
			3,722,798	A	3/1973 Bletcher et al.

US D603,935 S

Page 3

3,722,799 A	3/1973	Rauh	4,330,089 A	5/1982	Finkbeiner
3,731,084 A	5/1973	Trevorrow	D266,212 S	9/1982	Haug et al.
3,754,779 A	8/1973	Peress	4,350,298 A	9/1982	Tada
3,762,648 A	10/1973	Deines et al.	4,353,508 A	10/1982	Butterfield et al.
3,768,735 A	10/1973	Ward	4,358,056 A	11/1982	Greenhut et al.
3,786,995 A	1/1974	Manoogian et al.	D267,582 S	1/1983	Mackay et al.
3,801,019 A	4/1974	Trenary et al.	D268,359 S	3/1983	Klose
3,810,580 A	5/1974	Rauh	D268,442 S	3/1983	Darmon
3,826,454 A	7/1974	Zieger	D268,611 S	4/1983	Klose
3,840,734 A	10/1974	Oram	4,383,554 A	5/1983	Merriman
3,845,291 A	10/1974	Portyrata	4,396,797 A	8/1983	Sakuragi et al.
3,860,271 A	1/1975	Rodgers	4,398,669 A	8/1983	Fienhold
3,861,719 A	1/1975	Hand	4,425,965 A	1/1984	Bayh, III et al.
3,865,310 A	2/1975	Elkins et al.	4,432,392 A	2/1984	Paley
3,869,151 A	3/1975	Fletcher et al.	D274,457 S	6/1984	Haug
3,896,845 A	7/1975	Parker	4,461,052 A	7/1984	Mostul
3,902,671 A	9/1975	Symmons	4,465,308 A	8/1984	Martini
3,910,277 A	10/1975	Zimmer	4,467,964 A	8/1984	Kaeser
D237,708 S	11/1975	Grohe	4,495,550 A	1/1985	Visciano
3,929,164 A	12/1975	Richter	4,527,745 A	7/1985	Butterfield et al.
3,958,756 A	5/1976	Trenary et al.	4,540,202 A	9/1985	Amphoux et al.
D240,322 S	6/1976	Staub	4,545,081 A	10/1985	Nestor et al.
3,967,783 A	7/1976	Halsted et al.	4,553,775 A	11/1985	Halling
3,979,096 A	9/1976	Zieger	D281,820 S	12/1985	Oba et al.
3,997,116 A	12/1976	Moen	4,561,593 A	12/1985	Cammack et al.
3,998,390 A	12/1976	Peterson et al.	4,564,889 A	1/1986	Bolson
3,999,714 A	12/1976	Lang	4,571,003 A	2/1986	Roling et al.
4,005,880 A	2/1977	Anderson et al.	4,572,232 A	2/1986	Gruber
4,006,920 A	2/1977	Sadler et al.	D283,645 S	4/1986	Tanaka
4,023,782 A	5/1977	Eifer	4,587,991 A	5/1986	Chorkey
4,042,984 A	8/1977	Butler	4,588,130 A	5/1986	Trenary et al.
4,045,054 A	8/1977	Arnold	4,598,866 A	7/1986	Cammack et al.
D245,858 S	9/1977	Grube	4,614,303 A	9/1986	Moseley, Jr. et al.
D245,860 S	9/1977	Grube	4,616,298 A	10/1986	Bolson
4,068,801 A	1/1978	Leutheuser	4,618,100 A	10/1986	White et al.
4,081,135 A	3/1978	Tomaro	4,629,124 A	12/1986	Gruber
4,084,271 A	4/1978	Ginsberg	4,629,125 A	12/1986	Liu
4,091,998 A	5/1978	Peterson	4,643,463 A	2/1987	Halling et al.
D249,356 S	9/1978	Nagy	4,645,244 A	2/1987	Curtis
4,117,979 A	10/1978	Lagarelli et al.	4,650,120 A	3/1987	Kress
4,129,257 A	12/1978	Eggert	4,650,470 A	3/1987	Epstein
4,130,120 A	12/1978	Kohler, Jr.	4,652,025 A	3/1987	Conroy, Sr.
4,131,233 A	12/1978	Koenig	4,654,900 A	4/1987	McGhee
4,133,486 A	1/1979	Fanella	4,657,185 A	4/1987	Rundzaitis
4,135,549 A	1/1979	Baker	4,669,666 A	6/1987	Finkbeiner
D251,045 S	2/1979	Grube	4,669,757 A	6/1987	Bartholomew
4,141,502 A	2/1979	Grohe	4,674,687 A	6/1987	Smith et al.
4,151,955 A	5/1979	Stouffer	4,683,917 A	8/1987	Bartholomew
4,151,957 A	5/1979	Gecewicz et al.	4,703,893 A	11/1987	Gruber
4,162,801 A	7/1979	Kresky et al.	4,719,654 A	1/1988	Blessing
4,165,837 A	8/1979	Rundzaitis	4,733,337 A	3/1988	Bieberstein
4,167,196 A	9/1979	Morris	D295,437 S	4/1988	Fabian
4,174,822 A	11/1979	Larsson	4,739,801 A	4/1988	Kimura et al.
4,185,781 A	1/1980	O'Brien	4,749,126 A	6/1988	Kessener et al.
4,190,207 A	2/1980	Fienhold et al.	D296,582 S	7/1988	Haug et al.
4,191,332 A	3/1980	De Langis et al.	4,754,928 A	7/1988	Rogers et al.
4,203,550 A	5/1980	On	D297,160 S	8/1988	Robbins
4,209,132 A	6/1980	Kwan	4,764,047 A	8/1988	Johnston et al.
D255,626 S	7/1980	Grube	4,778,104 A	10/1988	Fisher
4,219,160 A	8/1980	Allred, Jr.	4,787,591 A	11/1988	Villacorta
4,221,338 A	9/1980	Shames et al.	4,790,294 A	12/1988	Allred, III et al.
4,243,253 A	1/1981	Rogers, Jr.	4,801,091 A	1/1989	Sandvik
4,244,526 A	1/1981	Arth	4,809,369 A	3/1989	Bowden
D258,677 S	3/1981	Larsson	4,839,599 A	6/1989	Fischer
4,254,914 A	3/1981	Shames et al.	4,842,059 A	6/1989	Tomek
4,258,414 A	3/1981	Sokol	D302,325 S	7/1989	Charet et al.
4,272,022 A	6/1981	Evans	4,850,616 A	7/1989	Pava
4,274,400 A	6/1981	Baus	4,854,499 A	8/1989	Neuman
4,282,612 A	8/1981	King	4,856,822 A	8/1989	Parker
D261,300 S	10/1981	Klose	4,865,362 A	9/1989	Holden
D261,417 S	10/1981	Klose	4,871,196 A	10/1989	Kingsford
4,303,201 A	12/1981	Elkins et al.	4,896,658 A	1/1990	Yonekubo et al.
4,319,608 A	3/1982	Raikov et al.	D306,351 S	2/1990	Charet et al.

US D603,935 S

4,901,927 A	2/1990	Valdivia	5,213,267 A	5/1993	Heimann et al.
4,903,178 A	2/1990	Englot et al.	5,220,697 A	6/1993	Birchfield
4,903,897 A	2/1990	Hayes	D337,839 S	7/1993	Zeller
4,903,922 A	2/1990	Harris, III	5,228,625 A	7/1993	Grassberger
4,907,137 A	3/1990	Schladitz et al.	5,230,106 A	7/1993	Henkin et al.
4,907,744 A	3/1990	Jousson	D338,542 S	8/1993	Yuen
4,909,435 A	3/1990	Kidouchi et al.	5,232,162 A	8/1993	Chih
4,914,759 A	4/1990	Goff	D339,492 S	9/1993	Klose
4,946,202 A	8/1990	Perricone	D339,627 S	9/1993	Klose
4,951,329 A	8/1990	Shaw	D339,848 S	9/1993	Gottwald
4,953,585 A	9/1990	Rollini et al.	5,246,169 A	9/1993	Heimann et al.
4,964,573 A	10/1990	Lipski	D340,376 S	10/1993	Klose
4,972,048 A	11/1990	Martin	5,253,670 A	10/1993	Perrott
D313,267 S	12/1990	Lenci et al.	5,253,807 A	10/1993	Newbegin
4,976,460 A	12/1990	Newcombe et al.	5,254,809 A	10/1993	Martin
D314,246 S	1/1991	Bache	D341,007 S	11/1993	Haug et al.
D315,191 S	3/1991	Mikol	D341,191 S	11/1993	Klose
4,998,673 A	3/1991	Pilolla	D341,220 S	11/1993	Eagan
5,004,158 A	4/1991	Halem et al.	5,263,646 A	11/1993	McCauley
D317,348 S	6/1991	Geneve et al.	5,265,833 A	11/1993	Heimann et al.
5,020,570 A	6/1991	Cotter	5,268,826 A	12/1993	Greene
5,022,103 A	6/1991	Faist	5,276,596 A	1/1994	Krenzel
5,032,015 A	7/1991	Christianson	5,277,391 A	1/1994	Haug et al.
5,033,528 A	7/1991	Volcani	5,286,071 A	2/1994	Storage
5,033,897 A	7/1991	Chen	5,288,110 A	2/1994	Allread
D319,294 S	8/1991	Kohler, Jr. et al.	5,294,054 A	3/1994	Benedict et al.
D320,064 S	9/1991	Presman	5,297,735 A	3/1994	Heimann et al.
5,046,764 A	9/1991	Kimura et al.	5,297,739 A	3/1994	Allen
D321,062 S	10/1991	Bonbright	D345,811 S	4/1994	Van Deursen et al.
5,058,804 A	10/1991	Yonekubo et al.	D346,426 S	4/1994	Warshawsky
D322,119 S	12/1991	Haug et al.	D346,428 S	4/1994	Warshawsky
D322,681 S	12/1991	Yuen	D346,430 S	4/1994	Warshawsky
5,070,552 A	12/1991	Gentry et al.	D347,262 S	5/1994	Black et al.
D323,545 S	1/1992	Ward	D347,265 S	5/1994	Gottwald
5,082,019 A	1/1992	Tetrault	5,316,216 A	5/1994	Cammack et al.
5,086,878 A	2/1992	Swift	D348,720 S	7/1994	Haug et al.
5,090,624 A	2/1992	Rogers	5,329,650 A	7/1994	Zaccai et al.
5,100,055 A	3/1992	Rokitenetz et al.	D349,947 S	8/1994	Hing-Wah
D325,769 S	4/1992	Haug et al.	5,333,787 A	8/1994	Smith et al.
D325,770 S	4/1992	Haug et al.	5,333,789 A	8/1994	Garneys
5,103,384 A	4/1992	Drohan	5,340,064 A	8/1994	Heimann et al.
D326,311 S	5/1992	Lenci et al.	5,340,165 A	8/1994	Sheppard
D327,115 S *	6/1992	Rogers D23/223	D350,808 S	9/1994	Warshawsky
5,121,511 A	6/1992	Sakamoto et al.	5,344,080 A	9/1994	Matsui
D327,729 S	7/1992	Rogers	5,349,987 A	9/1994	Shieh
5,127,580 A	7/1992	Fu-I	5,356,076 A	10/1994	Bishop
5,134,251 A	7/1992	Martin	5,356,077 A	10/1994	Shames
D328,944 S	8/1992	Robbins	D352,347 S	11/1994	Dannenber
5,141,016 A	8/1992	Nowicki	D352,766 S	11/1994	Hill et al.
D329,504 S	9/1992	Yuen	5,368,235 A	11/1994	Drozdoff et al.
5,143,300 A	9/1992	Cutler	5,369,556 A	11/1994	Zeller
5,145,114 A	9/1992	Monch	5,370,427 A	12/1994	Hoelle et al.
D330,068 S	10/1992	Haug et al.	5,385,500 A	1/1995	Schmidt
D330,408 S	10/1992	Thacker	D355,242 S	2/1995	Warshawsky
D330,409 S	10/1992	Raffo	D355,703 S	2/1995	Duell
5,153,976 A	10/1992	Benchaar et al.	D356,626 S	3/1995	Wang
5,154,355 A	10/1992	Gonzalez	5,397,064 A	3/1995	Heitzman
5,154,483 A	10/1992	Zeller	5,398,872 A	3/1995	Joubran
5,161,567 A	11/1992	Humpert	5,398,977 A	3/1995	Berger et al.
5,163,752 A	11/1992	Copeland et al.	5,402,812 A	4/1995	Moineau et al.
5,171,429 A	12/1992	Yasuo	5,405,089 A	4/1995	Heimann et al.
5,172,860 A	12/1992	Yuch	5,414,879 A	5/1995	Hiraishi et al.
5,172,862 A	12/1992	Heimann et al.	5,423,348 A	6/1995	Jezek et al.
5,172,866 A	12/1992	Ward	5,433,384 A	7/1995	Chan et al.
D332,303 S	1/1993	Klose	D361,399 S	8/1995	Carbone et al.
D332,994 S	2/1993	Huen	D361,623 S	8/1995	Huen
D333,339 S	2/1993	Klose	5,441,075 A	8/1995	Clare
5,197,767 A	3/1993	Kimura et al.	5,449,206 A	9/1995	Lockwood
D334,794 S	4/1993	Klose	D363,360 S	10/1995	Santarsiero
D335,171 S	4/1993	Lenci et al.	5,454,809 A	10/1995	Janssen
5,201,468 A	4/1993	Freier et al.	5,468,057 A	11/1995	Megerle et al.
5,206,963 A	5/1993	Wiens	D364,935 S	12/1995	deBlois
5,207,499 A	5/1993	Vajda et al.	D365,625 S	12/1995	Bova

US D603,935 S

Page 5

D365,646 S	12/1995	deBlois	5,577,664 A	11/1996	Heitzman
5,476,225 A	12/1995	Chan	D376,217 S	12/1996	Kaiser
D366,309 S	1/1996	Huang	D376,860 S	12/1996	Santarsiero
D366,707 S	1/1996	Kaiser	D376,861 S	12/1996	Johnstone et al.
D366,708 S	1/1996	Santarsiero	D376,862 S	12/1996	Carbone
D366,709 S	1/1996	Szymanski	5,605,173 A	2/1997	Arnaud
D366,710 S	1/1996	Szymanski	D378,401 S	3/1997	Neufeld et al.
5,481,765 A	1/1996	Wang	5,613,638 A	3/1997	Blessing
D366,948 S	2/1996	Carbone	5,613,639 A	3/1997	Storm et al.
D367,315 S	2/1996	Andrus	5,615,837 A	4/1997	Roman
D367,333 S	2/1996	Swyst	5,624,074 A	4/1997	Parisi
D367,696 S	3/1996	Andrus	5,624,498 A	4/1997	Lee et al.
D367,934 S	3/1996	Carbone	D379,212 S	5/1997	Chan
D368,146 S	3/1996	Carbone	D379,404 S	5/1997	Spelts
D368,317 S	3/1996	Swyst	5,632,049 A	5/1997	Chen
5,499,767 A	3/1996	Morand	D381,405 S	7/1997	Waidele et al.
D368,539 S	4/1996	Carbone et al.	D381,737 S	7/1997	Chan
D368,540 S	4/1996	Santarsiero	D382,936 S	8/1997	Shfaram
D368,541 S	4/1996	Kaiser et al.	5,653,260 A	8/1997	Huber
D368,542 S	4/1996	deBlois et al.	5,667,146 A	9/1997	Pimentel et al.
D369,204 S	4/1996	Andrus	D385,332 S	10/1997	Andrus
D369,205 S	4/1996	Andrus	D385,333 S	10/1997	Caroen et al.
5,507,436 A	4/1996	Ruttenberg	D385,334 S	10/1997	Caroen et al.
D369,873 S	5/1996	deBlois et al.	D385,616 S	10/1997	Dow et al.
D369,874 S	5/1996	Santarsiero	D385,947 S	11/1997	Dow et al.
D369,875 S	5/1996	Carbone	D387,230 S	12/1997	von Buelow et al.
D370,052 S	5/1996	Chan et al.	5,699,964 A	12/1997	Bergmann et al.
D370,250 S	5/1996	Fawcett et al.	5,702,057 A	12/1997	Huber
D370,277 S	5/1996	Kaiser	D389,558 S	1/1998	Andrus
D370,278 S	5/1996	Nolan	5,704,080 A	1/1998	Kuhne
D370,279 S	5/1996	deBlois	5,718,380 A	2/1998	Schorn et al.
D370,280 S	5/1996	Kaiser	D392,369 S	3/1998	Chan
D370,281 S	5/1996	Johnstone et al.	5,730,361 A	3/1998	Thonnes
5,517,392 A	5/1996	Rouso et al.	5,730,362 A	3/1998	Cordes
5,521,803 A	5/1996	Eckert et al.	5,730,363 A	3/1998	Kress
D370,542 S	6/1996	Santarsiero	5,742,961 A	4/1998	Casperson et al.
D370,735 S	6/1996	deBlois	D394,490 S	5/1998	Andrus et al.
D370,987 S	6/1996	Santarsiero	5,746,375 A	5/1998	Guo
D370,988 S	6/1996	Santarsiero	5,749,552 A	5/1998	Fan
D371,448 S	7/1996	Santarsiero	5,749,602 A	5/1998	Delaney et al.
D371,618 S	7/1996	Nolan	D394,899 S	6/1998	Caroen et al.
D371,619 S	7/1996	Szymanski	D395,074 S	6/1998	Neibrook
D371,856 S	7/1996	Carbone	D395,075 S	6/1998	Neibrook et al.
D372,318 S	7/1996	Szymanski	D395,142 S	6/1998	Neibrook
D372,319 S	7/1996	Carbone	5,765,760 A	6/1998	Kuo
5,531,625 A	7/1996	Zhong	5,769,802 A	6/1998	Wang
5,539,624 A	7/1996	Dougherty	5,772,120 A	6/1998	Huber
D372,548 S	8/1996	Carbone	5,778,939 A	7/1998	Hok-Yin
D372,998 S	8/1996	Carbone	5,788,157 A	8/1998	Kress
D373,210 S	8/1996	Santarsiero	D398,370 S	9/1998	Purdy
D373,434 S	9/1996	Nolan	5,806,771 A	9/1998	Loschelder et al.
D373,435 S	9/1996	Nolan	5,819,791 A	10/1998	Chronister et al.
D373,645 S	9/1996	Johnstone et al.	5,820,574 A	10/1998	Henkin et al.
D373,646 S	9/1996	Szymanski et al.	5,823,431 A	10/1998	Pierce
D373,647 S	9/1996	Kaiser	5,823,442 A	10/1998	Guo
D373,648 S	9/1996	Kaiser	5,839,666 A	11/1998	Heimann et al.
D373,649 S	9/1996	Carbone	D402,350 S	12/1998	Andrus
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

US D603,935 S

5,947,388 A	9/1999	Woodruff	D452,725 S	1/2002	Lindholm et al.
D415,247 S	10/1999	Haverstraw et al.	D452,897 S	1/2002	Gillette et al.
5,961,046 A	10/1999	Joubran	D453,370 S	2/2002	Lindholm et al.
5,979,776 A	11/1999	Williams	D453,551 S	2/2002	Lindholm et al.
5,992,762 A	11/1999	Wang	6,349,735 B2	2/2002	Gul
D418,200 S	12/1999	Ben-Tsur	D454,938 S	3/2002	Lord
5,997,047 A	12/1999	Pimentel et al.	6,375,342 B1	4/2002	Koren et al.
6,003,165 A	12/1999	Loyd	D457,937 S	5/2002	Lindholm et al.
D418,902 S	1/2000	Haverstraw et al.	D458,348 S	6/2002	Mullenmeister
D418,903 S	1/2000	Haverstraw et al.	D461,224 S	8/2002	Lobermeier
D418,904 S	1/2000	Milrud	D461,878 S	8/2002	Green et al.
D421,099 S	2/2000	Mullenmeister	6,450,425 B1	9/2002	Chen
6,021,960 A	2/2000	Kehat	6,454,186 B2	9/2002	Haverstraw et al.
D422,053 S	3/2000	Brenner et al.	6,464,265 B1	10/2002	Mikol
6,042,027 A	3/2000	Sandvik	D465,552 S	11/2002	Tse
6,042,155 A	3/2000	Lockwood	D465,553 S	11/2002	Singtoroj
D422,336 S	4/2000	Haverstraw et al.	6,484,952 B2	11/2002	Koren
D422,337 S	4/2000	Chan	D468,800 S	1/2003	Tse
D423,083 S	4/2000	Haug et al.	D469,165 S	1/2003	Lim
D423,110 S	4/2000	Cipkowski	6,502,796 B1	1/2003	Wales
D424,160 S	5/2000	Haug et al.	D470,219 S	2/2003	Schweitzer
D424,161 S	5/2000	Haug et al.	6,515,070 B2	2/2003	Macey
D424,162 S	5/2000	Haug et al.	D471,253 S	3/2003	Tse
D424,163 S	5/2000	Haug et al.	D471,953 S	3/2003	Colligan et al.
D427,661 S	7/2000	Haverstraw et al.	6,533,194 B2	3/2003	Marsh et al.
D428,110 S	7/2000	Haug et al.	6,550,697 B2	4/2003	Lai
D428,125 S	7/2000	Chan	6,595,439 B1	7/2003	Chen
6,085,780 A	7/2000	Morris	6,607,148 B1	8/2003	Marsh et al.
D430,267 S	8/2000	Milrud et al.	6,611,971 B1	9/2003	Antoniello et al.
6,095,801 A	8/2000	Spiewak	6,637,676 B2	10/2003	Zieger et al.
D430,643 S	9/2000	Tse	6,641,057 B2	11/2003	Thomas et al.
6,123,272 A	9/2000	Havican et al.	6,659,117 B2	12/2003	Gilmore
6,123,308 A	9/2000	Faisst	D485,887 S	1/2004	Luetzgen et al.
D432,624 S	10/2000	Chan	D486,888 S	2/2004	Lobermeier
D432,625 S	10/2000	Chan	6,691,338 B2	2/2004	Zieger
D433,096 S	10/2000	Tse	D487,301 S	3/2004	Haug et al.
D433,097 S	10/2000	Tse	D487,498 S	3/2004	Blomstrom
6,126,091 A	10/2000	Heitzman	6,701,953 B2	3/2004	Agosta
6,126,290 A	10/2000	Veigel	D490,498 S	5/2004	Golichowski
D434,109 S	11/2000	Ko	6,739,523 B2	5/2004	Haverstraw et al.
6,164,569 A	12/2000	Hollinshead et al.	D492,004 S	6/2004	Haug et al.
6,164,570 A	12/2000	Smeltzer	D492,007 S	6/2004	Kollmann et al.
D435,889 S	1/2001	Ben-Tsur et al.	6,742,725 B1	6/2004	Fan
6,199,580 B1	3/2001	Morris	D493,208 S	7/2004	Lin
6,202,679 B1	3/2001	Titus	D494,661 S	8/2004	Zieger et al.
D441,059 S	4/2001	Fleischmann	6,789,751 B1	9/2004	Fan
D443,025 S	5/2001	Kollmann et al.	D496,987 S	10/2004	Glunk
D443,027 S	5/2001	Kollmann et al.	D497,974 S	11/2004	Haug et al.
D443,029 S	5/2001	Kollmann et al.	D498,514 S	11/2004	Haug et al.
6,223,998 B1	5/2001	Heitzman	D500,121 S	12/2004	Blomstrom
6,230,984 B1	5/2001	Jager	D500,547 S	1/2005	Gray
6,230,988 B1	5/2001	Chao et al.	D500,549 S	1/2005	Blomstrom
6,230,989 B1	5/2001	Haverstraw et al.	D501,242 S	1/2005	Blomstrom
6,250,572 B1	6/2001	Chen	D502,760 S	3/2005	Zieger et al.
D445,871 S *	7/2001	Fan D23/223	D502,761 S	3/2005	Zieger et al.
6,254,014 B1	7/2001	Clearman et al.	D503,774 S	4/2005	Zieger
6,270,278 B1	8/2001	Mauro	D503,775 S	4/2005	Zieger
6,276,004 B1	8/2001	Bertrand et al.	D503,966 S	4/2005	Zieger
6,283,447 B1	9/2001	Fleet	D506,243 S *	6/2005	Wu D23/223
6,286,764 B1	9/2001	Garvey et al.	D507,037 S	7/2005	Wu
D450,370 S	11/2001	Wales et al.	D509,280 S *	9/2005	Bailey et al. D23/223
D450,805 S	11/2001	Lindholm et al.	D509,563 S *	9/2005	Bailey et al. D23/223
D450,806 S	11/2001	Lindholm et al.	D510,123 S	9/2005	Tsai
D450,807 S	11/2001	Lindholm et al.	D511,809 S	11/2005	Haug et al.
D451,169 S	11/2001	Lindholm et al.	6,981,661 B1	1/2006	Chen
D451,170 S	11/2001	Lindholm et al.	D516,169 S	2/2006	Wu
D451,171 S	11/2001	Lindholm et al.	D520,109 S	5/2006	Wu
D451,172 S	11/2001	Lindholm et al.	7,055,767 B1	6/2006	Ko
6,321,777 B1	11/2001	Wu	7,070,125 B2	7/2006	Williams et al.
6,322,006 B1	11/2001	Guo	D527,440 S	8/2006	Macan
D451,583 S	12/2001	Lindholm et al.	D528,631 S	9/2006	Gillette et al.
D451,980 S	12/2001	Lindholm et al.	7,100,845 B1	9/2006	Hsieh
D452,553 S	12/2001	Lindholm et al.	7,111,798 B2	9/2006	Thomas et al.

US D603,935 S

Page 7

D530,392 S	10/2006	Tse	EP	0617644	10/1994
7,114,666 B2	10/2006	Luetngen et al.	EP	0683354	11/1995
D533,253 S	12/2006	Luetngen et al.	EP	0687851	12/1995
D534,239 S *	12/2006	Dingler et al. D23/223	EP	0695907	2/1996
D535,354 S	1/2007	Wu	EP	0719588	7/1996
7,156,325 B1	1/2007	Chen	EP	0721082	7/1996
D540,426 S	4/2007	Cropelli	EP	0733747	9/1996
D556,295 S	11/2007	Genord et al.	EP	0808661	11/1997
D557,763 S	12/2007	Schonherr et al.	EP	0726811	1/1998
D557,764 S	12/2007	Schonherr et al.	FR	538538	6/1922
D557,765 S	12/2007	Schonherr et al.	FR	873808	7/1942
D560,269 S	1/2008	Tse	FR	1039750	10/1953
D562,941 S	2/2008	Pan	FR	1098836	8/1955
D565,699 S *	4/2008	Berberet D23/223	FR	2596492	10/1987
D565,703 S	4/2008	Lammel et al.	FR	2695452	3/1994
7,374,112 B1	5/2008	Bulan et al.	GB	3314	0/1914
7,384,007 B2	6/2008	Ho	GB	10086	0/1894
D581,013 S	11/2008	Citterio	GB	129812	7/1919
D590,048 S	4/2009	Leber et al.	GB	204600	10/1923
2005/0061896 A1	3/2005	Luetngen et al.	GB	634483	3/1950
2005/0082824 A1	4/2005	Luetngen et al.	GB	971866	10/1964
2006/0016913 A1	1/2006	Williams et al.	GB	1111126	4/1968
2006/0043214 A1	3/2006	Macan et al.	GB	2066074	1/1980
2007/0119980 A1	5/2007	Somerfield et al.	GB	2066704	7/1981
2007/0246577 A1	10/2007	Leber	GB	2068778	8/1981
2007/0272770 A1	11/2007	Leber et al.	GB	2121319	12/1983
2008/0083844 A1	4/2008	Leber et al.	GB	2155984	10/1985
2008/0223957 A1	9/2008	Schorn	GB	2156932 A	10/1985

FOREIGN PATENT DOCUMENTS

CH	234284	3/1963	IT	327400	7/1935
DE	352813	5/1922	IT	350359	7/1937
DE	848627	9/1952	IT	563459	5/1957
DE	854100	10/1952	JP	S63-181459	11/1988
DE	2360534	6/1974	JP	H2-78660	6/1990
DE	2806093	8/1979	JP	4062238	2/1992
DE	3107808	9/1982	JP	4146708	5/1992
DE	3246327	6/1984	NL	8902957	6/1991
DE	3440901	7/1985	WO	WO93/12894	7/1993
DE	3706320	3/1988	WO	WO93/25839	12/1993
DE	8804236	6/1988	WO	WO98/30336	7/1998
DE	4034695	5/1991			
DE	19608085	9/1996			
EP	0167063	6/1985			
EP	0478999	4/1992			
EP	0514753	11/1992			

OTHER PUBLICATIONS

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

* cited by examiner

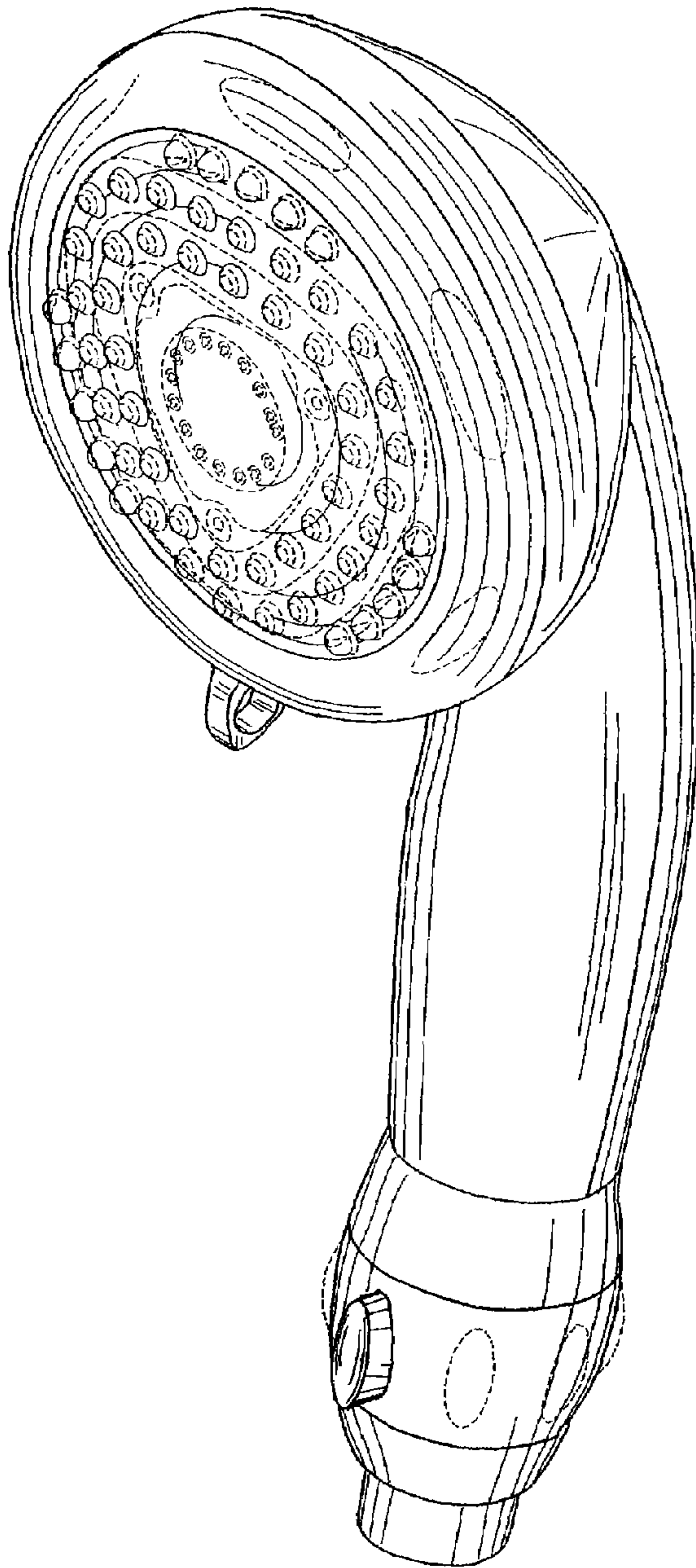


Fig. 1

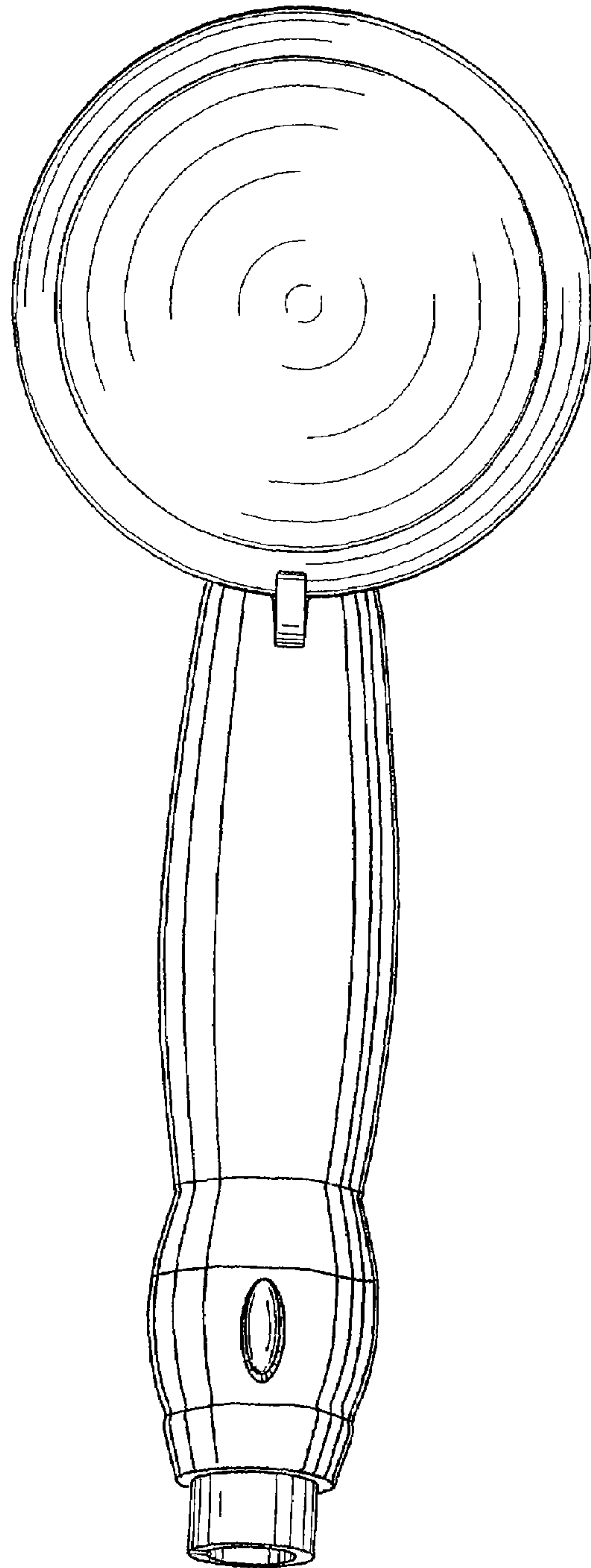


Fig. 2

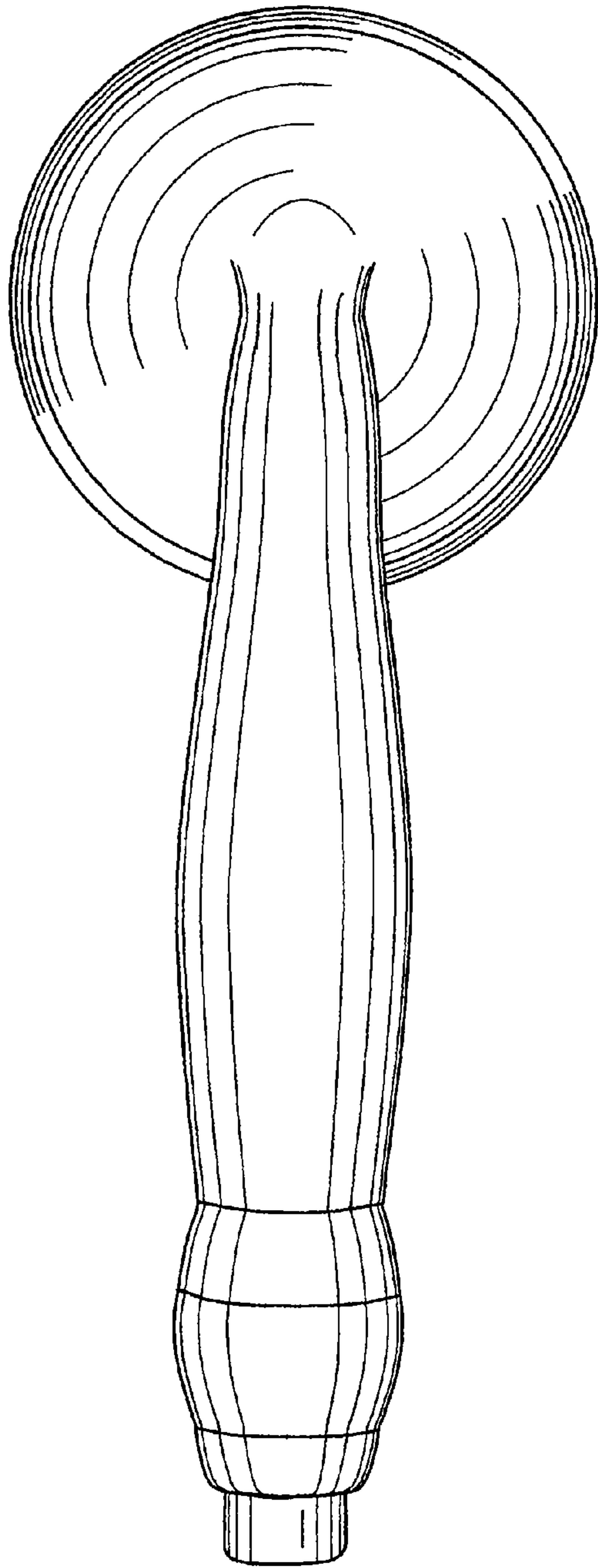


Fig. 3

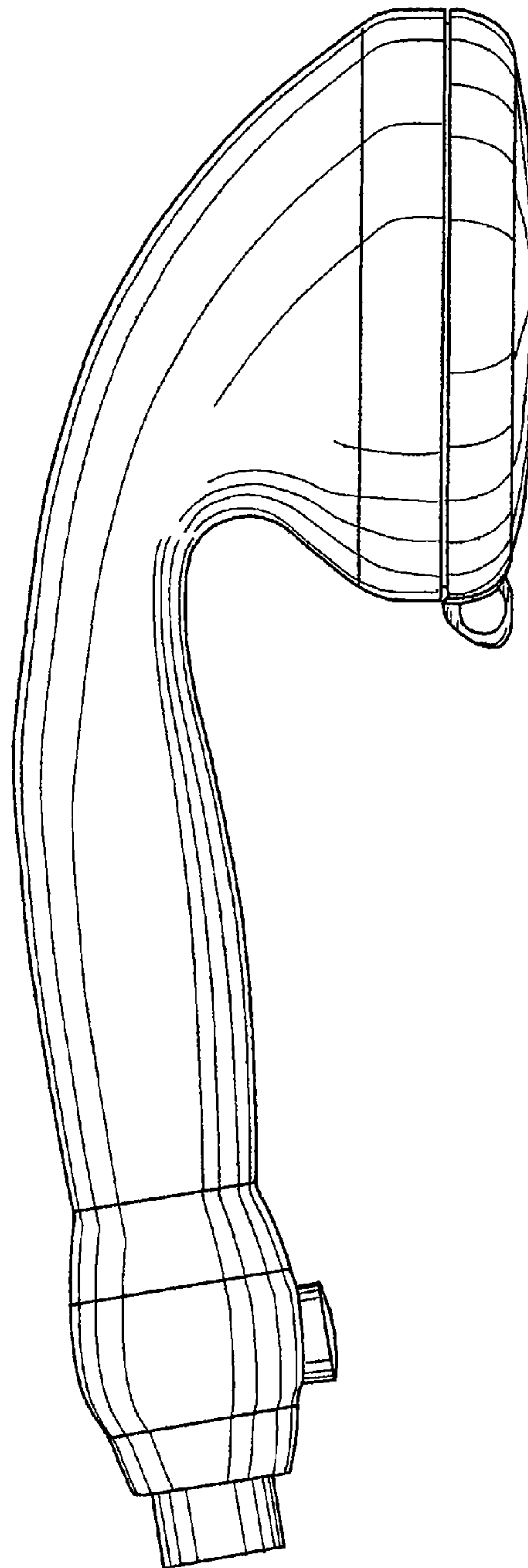


Fig. 4

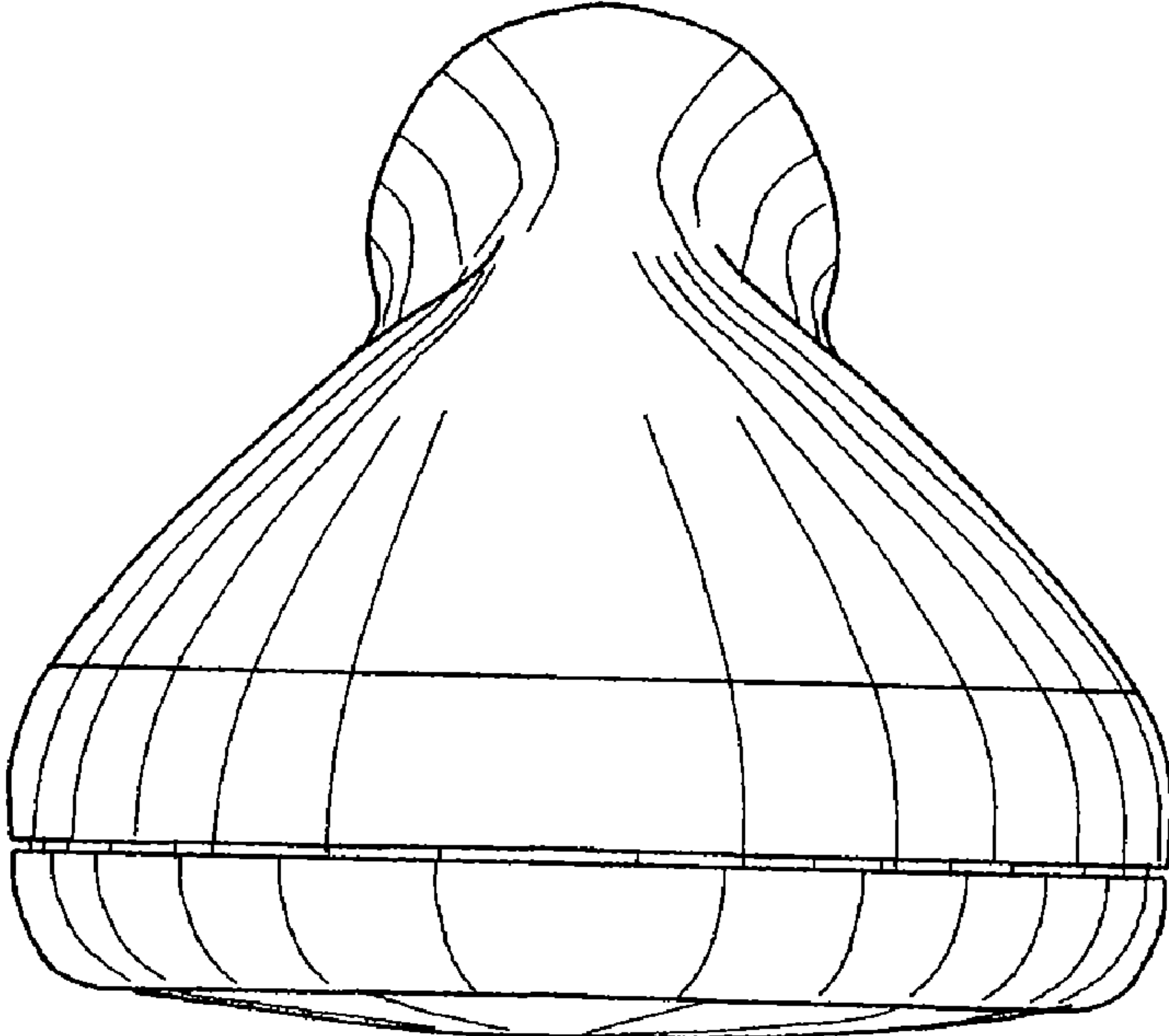


Fig. 5

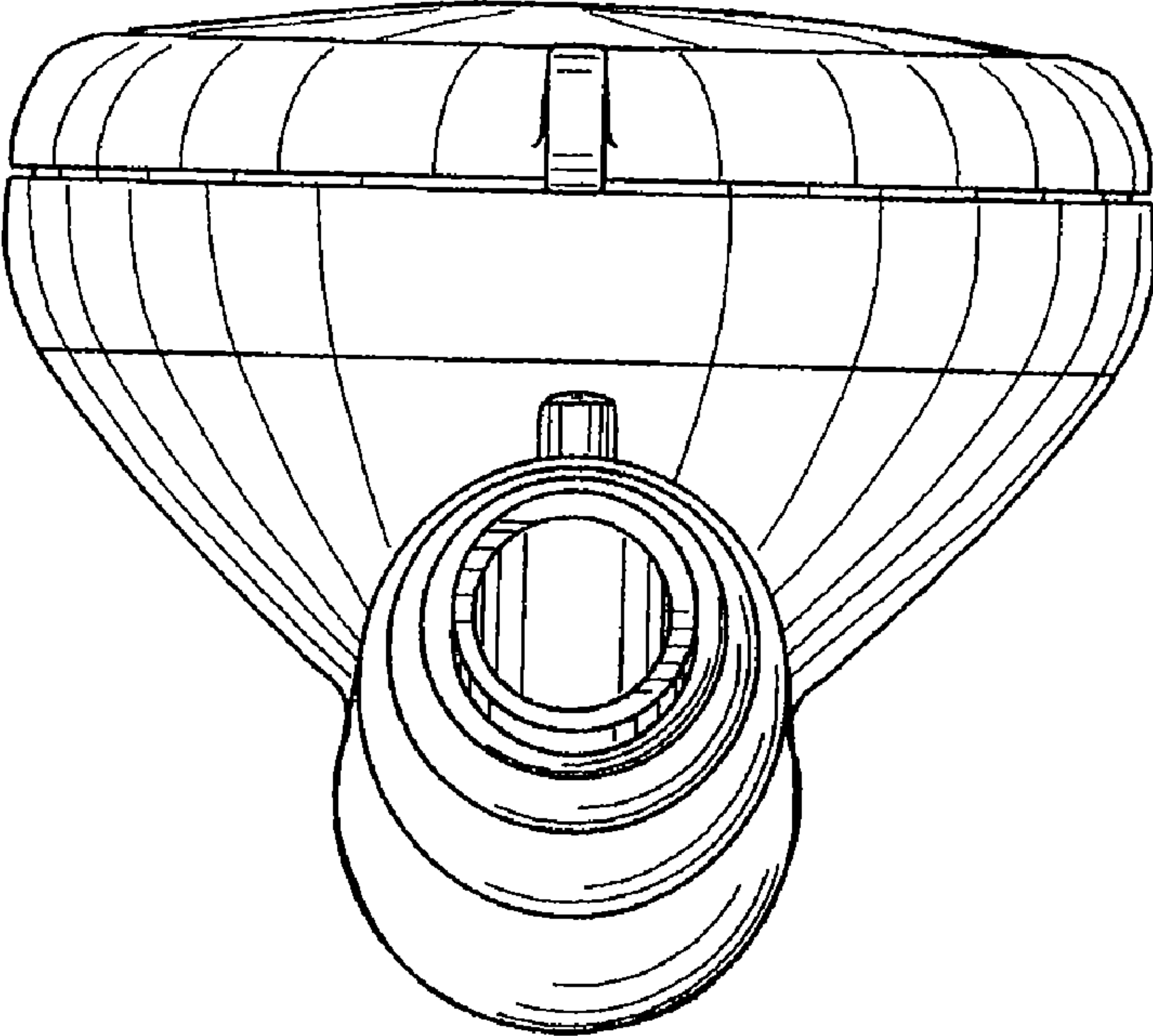


Fig. 6