



US00D618305S

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

(10) **Patent No.:** **US D618,305 S**  
(45) **Date of Patent:** **\*\* \*Jun. 22, 2010**

(54) **LOW FLOW IRRIGATION EMITTER**

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(73) Assignee: **Rain Bird Corporation**, Azusa, CA (US)

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

(21) Appl. No.: **29/337,906**

(22) Filed: **Jun. 1, 2009**

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

(52) **U.S. Cl.** ..... **D23/214**

(58) **Field of Classification Search** ..... D23/213, D23/214, 217, 218; 239/276, 200–206, 542, 239/DIG. 1

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

2,174,515 A	10/1939	Hughes
2,625,429 A	1/1953	Coles
2,639,194 A	5/1953	Wahlin
2,794,321 A	6/1957	Warner et al.
3,155,612 A	11/1964	Weber
3,182,916 A	5/1965	Schulz
3,323,550 A	6/1967	Lee
3,420,064 A	1/1969	Blass et al.
3,434,500 A	3/1969	Burrows
3,586,291 A	6/1971	Malec
3,697,002 A	10/1972	Parkison
3,729,142 A	4/1973	Rangel-Garza et al.
3,753,527 A	8/1973	Galbraith et al.
3,780,946 A	12/1973	Smith et al.
3,791,587 A	2/1974	Drori
3,804,334 A	4/1974	Curry
3,815,636 A	6/1974	Menzel
3,851,896 A	12/1974	Olson
3,863,845 A	2/1975	Bumpstead
3,882,892 A	5/1975	Menzel
3,998,244 A	12/1976	Bentley

4,037,791 A	7/1977	Mullett et al.
4,084,749 A	4/1978	Drori
4,105,162 A	8/1978	Drori
4,177,947 A	12/1979	Menzel
4,209,133 A	6/1980	Mehoudar

(Continued)

**OTHER PUBLICATIONS**

Office Action mailed Jul. 30, 1999 for U.S. Appl. No. 08/607,850 (6 pages).

(Continued)

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(57) **CLAIM**

We claim the ornamental design for a low flow irrigation emitter, as shown and described.

**DESCRIPTION**

This application is related to co-pending U.S. Utility Patent Application Ser. No. 12/347,266, filed Dec. 31, 2008.

FIG. 1 is a perspective view of an emitter;

FIG. 2 is a top view of the emitter of FIG. 1;

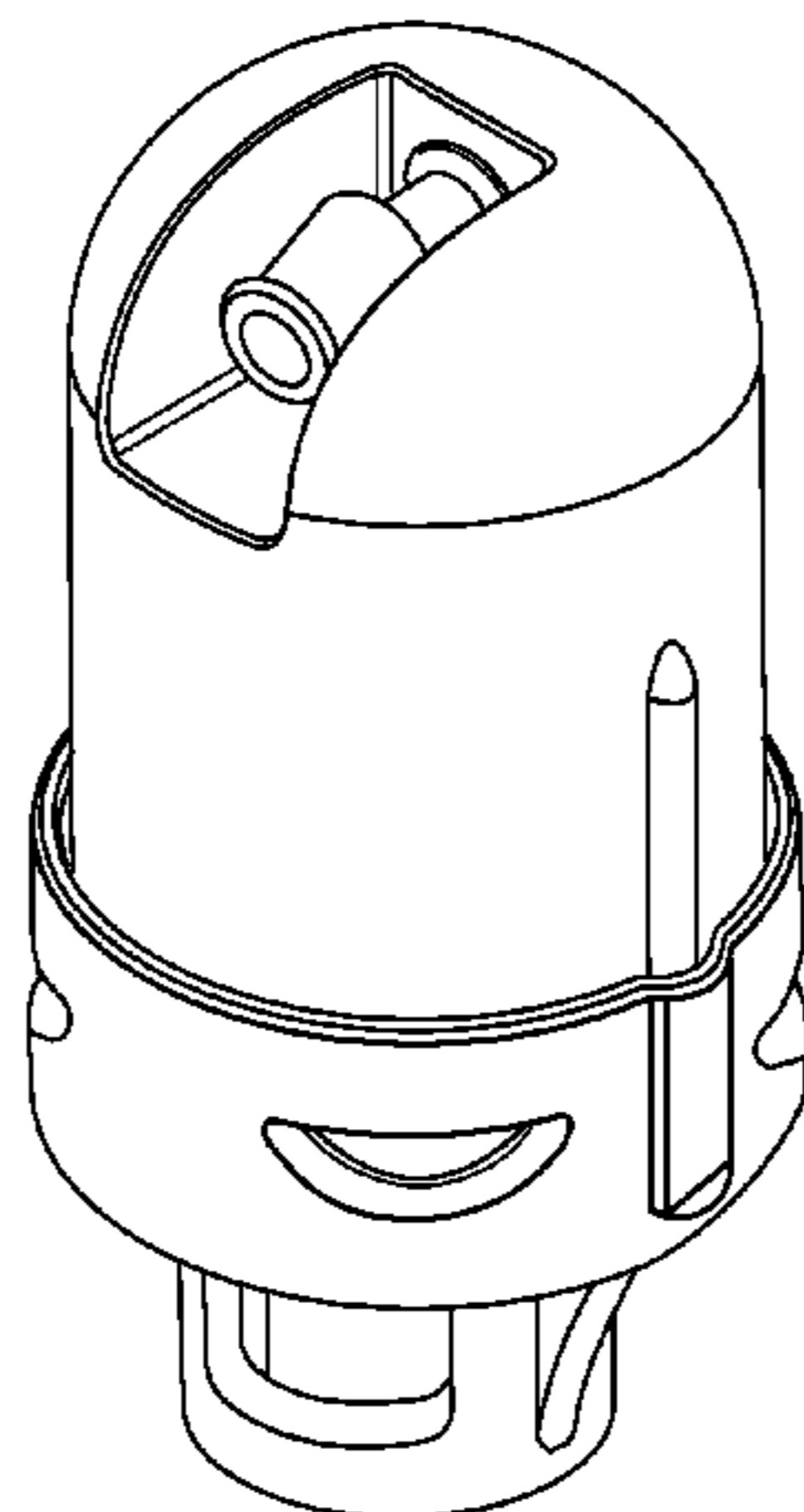
FIG. 3 is a left side elevational view of the emitter of FIG. 1 and is also a mirror image of a right side elevational view of the emitter of FIG. 1;

FIG. 4 is a front elevational view of the emitter of FIG. 1;

FIG. 5 is a rear elevational view of the emitter of FIG. 1; and,

FIG. 6 is a bottom view of the emitter of FIG. 1.

**1 Claim, 3 Drawing Sheets**



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## U.S. PATENT DOCUMENTS

4,223,838	A	9/1980	Vittorio-Torrisi	6,109,296	A	8/2000	Austin
4,226,368	A	10/1980	Hunter	6,213,408	B1	4/2001	Shekalim
4,250,915	A	2/1981	Rikuta	6,238,081	B1	5/2001	Sand
4,274,597	A	6/1981	Dobos et al.	6,464,152	B1	10/2002	Bolinis et al.
D264,491	S *	5/1982	Hunter ..... D23/218	D466,585	S *	12/2002	Alkalay ..... D23/214
4,331,293	A	5/1982	Rangel-Garza	6,499,872	B2	12/2002	Sand
4,369,923	A	1/1983	Bron	6,557,819	B2	5/2003	Austin
4,384,680	A	5/1983	Mehoudar	6,581,902	B2	6/2003	Michau et al.
4,508,140	A	4/1985	Harrison	6,622,946	B2	9/2003	Held et al.
4,513,777	A	4/1985	Wright	6,827,298	B2	12/2004	Sacks
4,653,695	A	3/1987	Eckstein	D508,973	S *	8/2005	Sener et al. .... D23/214
4,687,143	A	8/1987	Gorney et al.	6,945,476	B2	9/2005	Giuffre
4,718,608	A	1/1988	Mehoudar	7,300,004	B2	11/2007	Sinden et al.
4,796,660	A	1/1989	Bron	D562,939	S *	2/2008	Lo ..... D23/214
4,824,019	A	4/1989	Lew	7,363,938	B1	4/2008	Newton
4,856,552	A	8/1989	Hiemstra	2002/0070297	A1	6/2002	Bolinis et al.
5,031,837	A	7/1991	Hanish	2003/0089409	A1	5/2003	Morimoto
5,040,770	A	8/1991	Rajster et al.	2005/0224607	A1	10/2005	Dinur et al.
5,111,996	A	5/1992	Eckstein	2006/0144965	A1	7/2006	Keren
5,137,216	A	8/1992	Hanish	2007/0095950	A1	5/2007	Kim
5,183,208	A	2/1993	Cohen				
5,232,160	A	8/1993	Hendrickson et al.				
5,327,941	A	7/1994	Bitsakis et al.				
5,330,107	A	7/1994	Karathanos				
5,441,203	A	8/1995	Swan et al.				
5,443,212	A	8/1995	Dinur				
5,820,028	A	10/1998	Dinur				
5,875,815	A	3/1999	Ungerecht et al.				
5,944,260	A	8/1999	Wang				
6,015,102	A	1/2000	Daigle et al.				
6,026,850	A	2/2000	Newton et al.				
6,062,245	A	5/2000	Berglind et al.				

## OTHER PUBLICATIONS

Amendment dated Sep. 22, 1999 for U.S. Appl. No. 08/607,850 (6 pages).

Interview Summary dated Sep. 21, 1999 for U.S. Appl. No. 08/607,850 (1 page).

Request for Ex Parte Reexamination Transmittal Form dated Mar. 7, 2006 and Request for Reexamination of U.S. Patent No. 6,026,850 (13 pages).

Order Granting/Denying Request for Ex Parte Reexamination mailed Apr. 17, 2006 for U.S. Control No. 90/007,963 (13 pages).

\* cited by examiner

FIG. 1

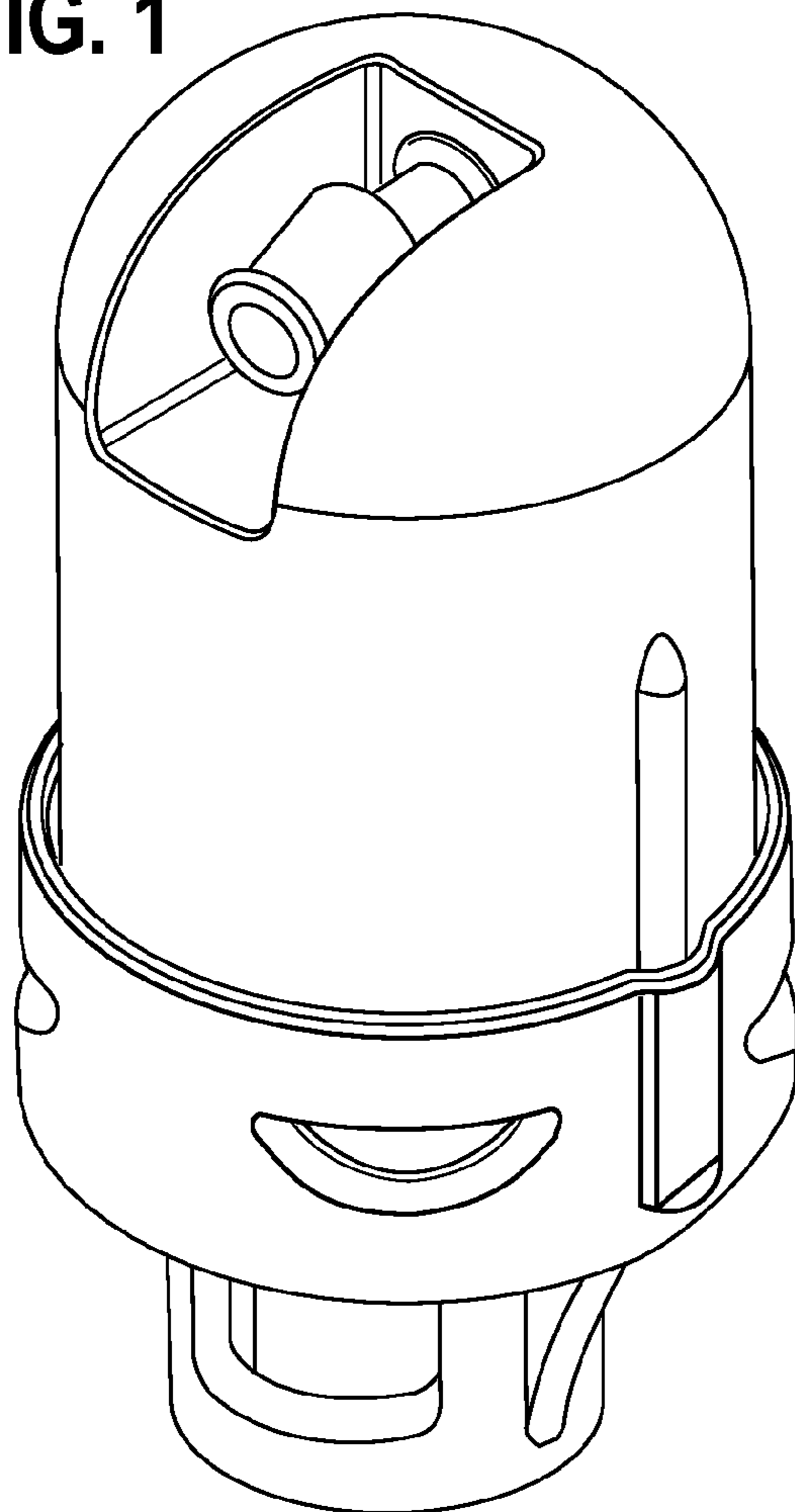
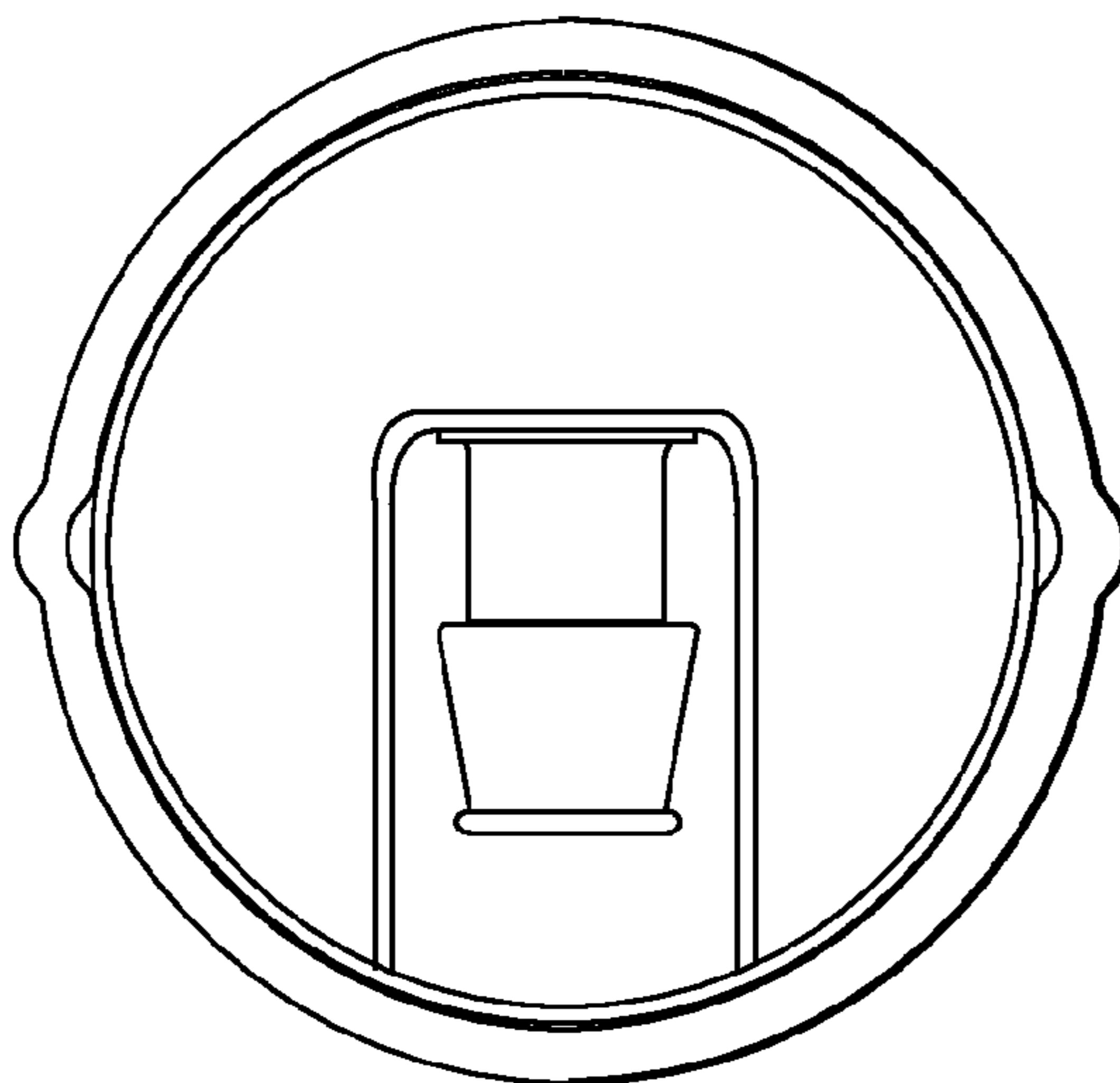
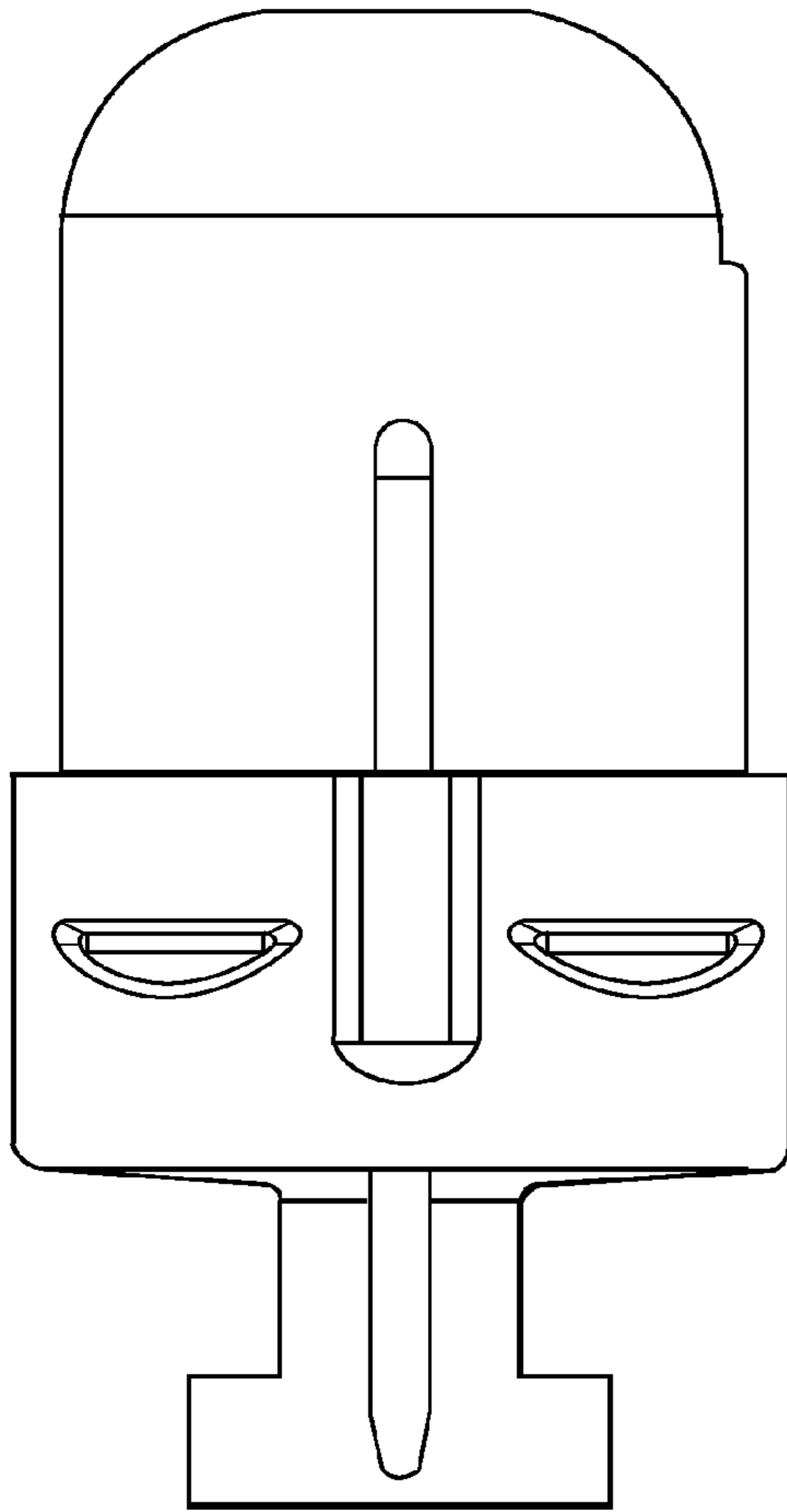


FIG. 2



**FIG. 3**



**FIG. 4**

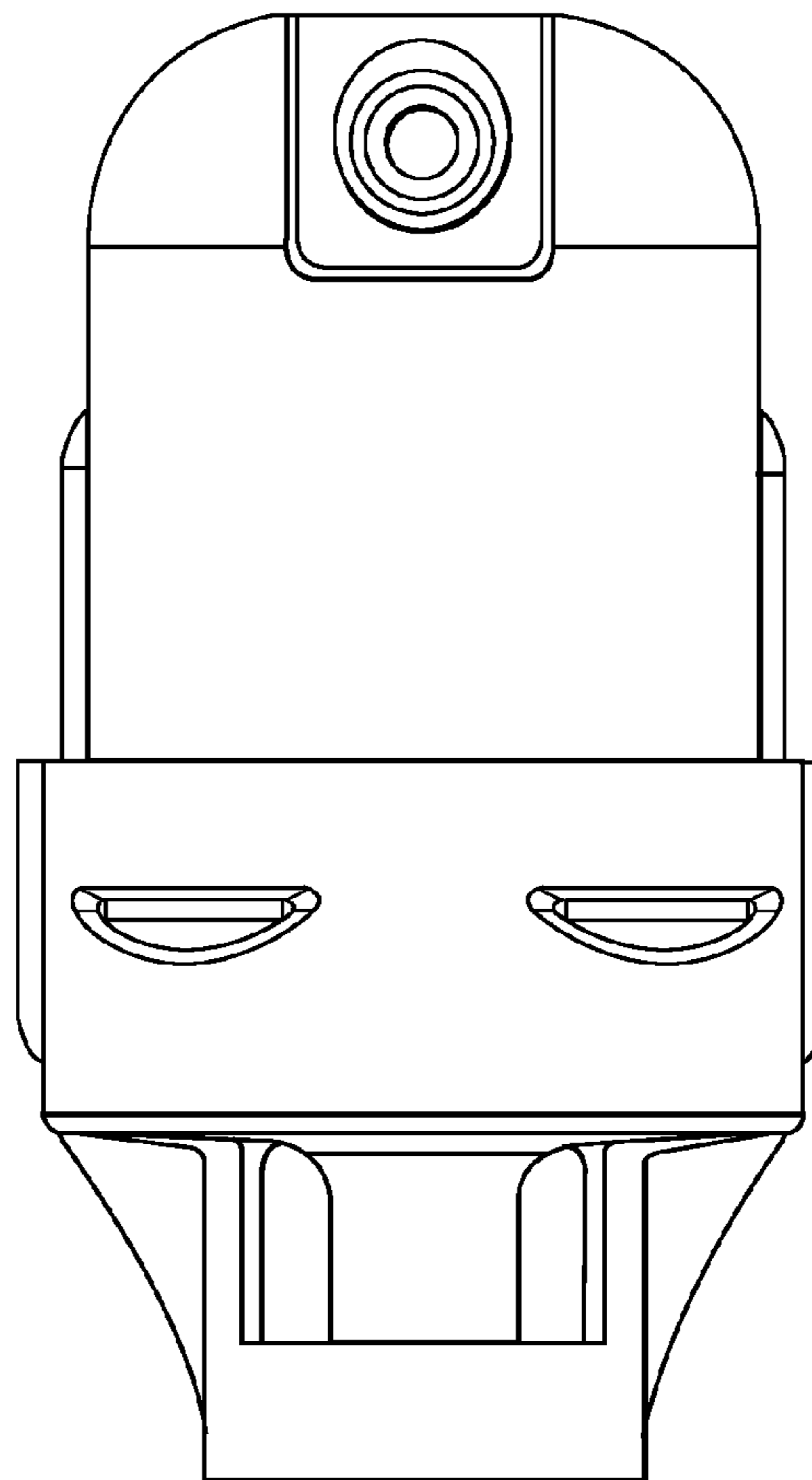


FIG. 5

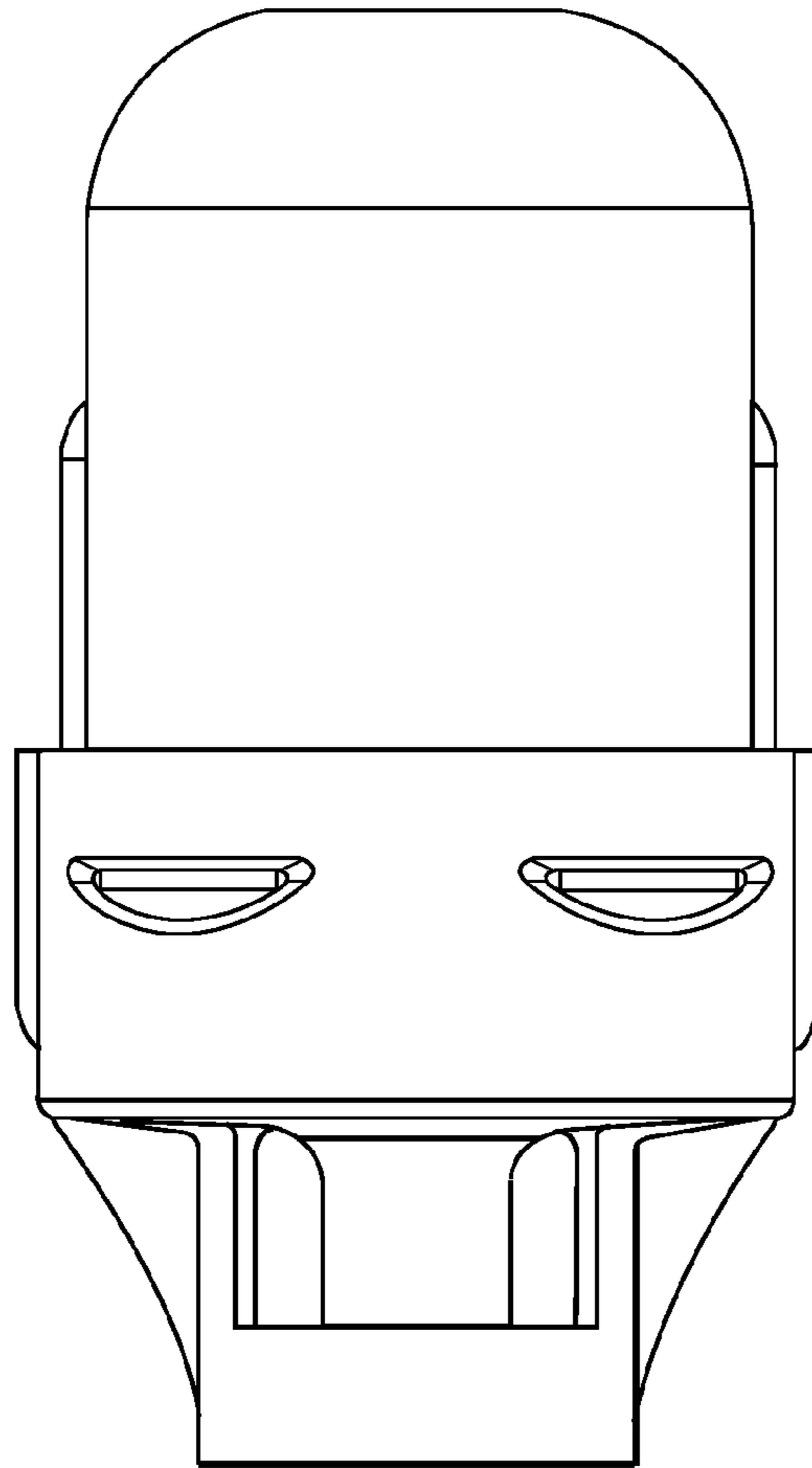
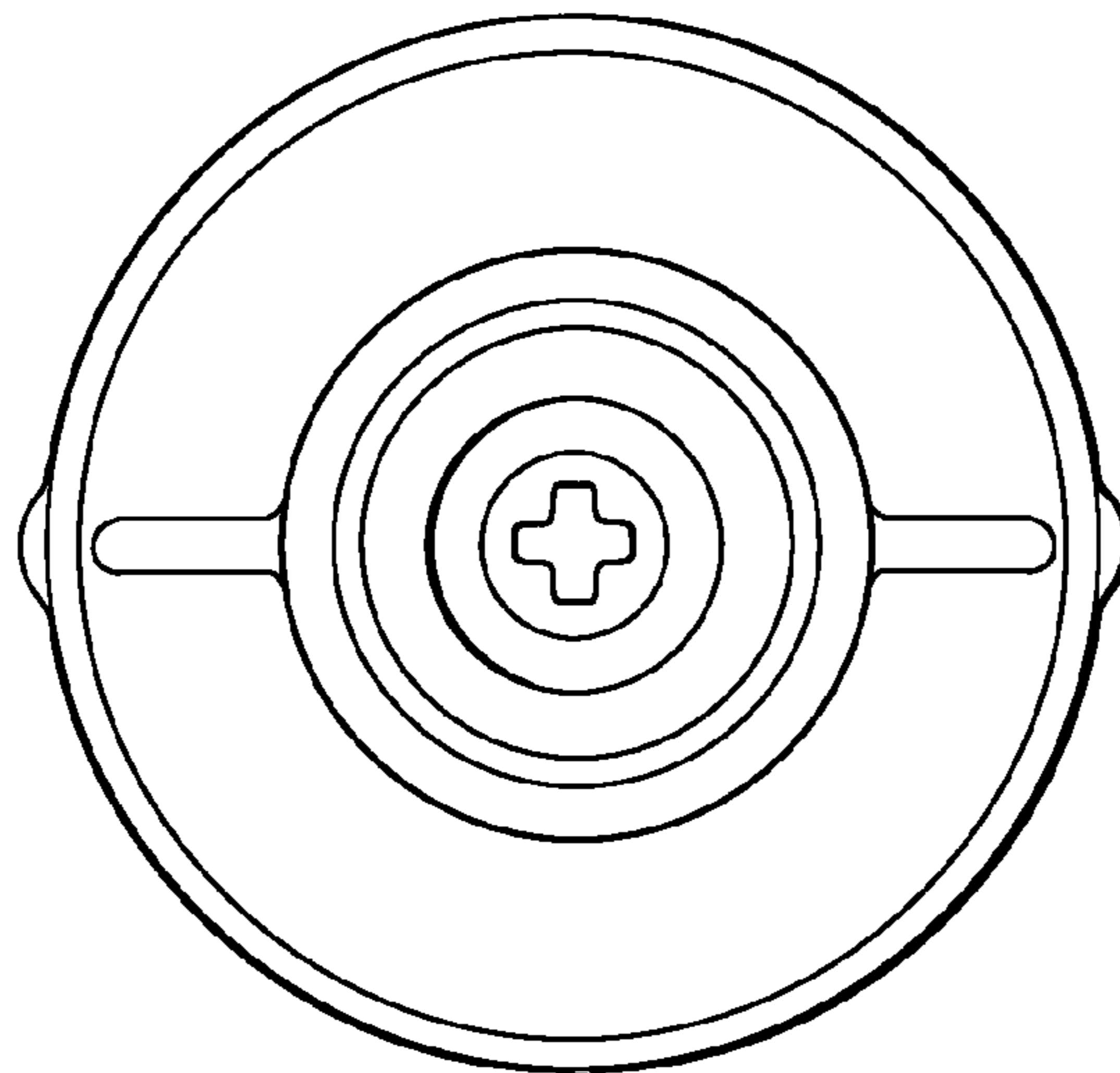


FIG. 6



UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : D618,305 S  
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INVENTOR(S) : Raymond P. Feith and Jeffrey Lee Mattlin

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title Page, Column 1, after “(22) Filed: Jun. 1, 2009”, please insert:

-- Related U.S. Application Data

(60) Continuation-in-part of Application No. 12/347,266,  
filed on December 31, 2008. --

Signed and Sealed this  
Second Day of September, 2014



Michelle K. Lee  
*Deputy Director of the United States Patent and Trademark Office*