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

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(54) **UPPER CAP FOR A LIQUID DISPENSING SYRINGE**

3,149,717 A 9/1964 Castelli
3,237,815 A 3/1966 Ogle
4,067,332 A 1/1978 O'Leary
D262,739 S 1/1982 Nitshke

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(Continued)

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FOREIGN PATENT DOCUMENTS

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GB 2020254 A 11/1979
JP 5208157 A 8/1993

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

(Continued)

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OTHER PUBLICATIONS

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European Patent Office, Invitation to Pay Additional Fees in PCT Application No. PCT/US2007/070971, Dec. 13, 2007.

(Continued)

Related U.S. Application Data

(62) Division of application No. 29/439,879, filed on Dec. 17, 2012, now Pat. No. Des. 717,948, which is a division of application No. 29/422,820, filed on May 24, 2012, now Pat. No. Des. 685,467, which is a

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(51) **LOC (10) Cl.** **24-02**

(57) **CLAIM**

(52) **U.S. Cl.**
USPC **D24/130**

The ornamental design for an upper cap for a liquid dispensing syringe, as shown and described.

(58) **Field of Classification Search**

DESCRIPTION

USPC D24/127-131, 112-114, 133, 186;
606/181, 185; 604/232, 187, 158,
604/164.08, 192, 263, 163, 181, 184, 198,
604/227, 411; 600/101, 139, 143;
128/200.24, 207.14, 207.15; D9/435,
D9/445, 453

FIG. 1 is a perspective view of an upper cap of the liquid dispensing syringe according to the invention.

FIG. 2 is a front elevation view thereof with the rear elevation view being a mirror image thereof.

FIG. 3 is a right side elevation view thereof with the left side elevation view being a mirror image thereof.

FIG. 4 is a top plan view thereof; and,

FIG. 5 is a bottom plan view thereof.

The broken lines in the figures are shown for the purpose of illustrating boundaries of the claimed design and the areas inside the broken line boundaries form no part of the claimed design.

CPC A61M 5/178; A61M 3/00; A61M 5/20;
A61M 5/31; A61M 5/3146; A61M 5/3129;
A61M 5/3148; A61M 5/315

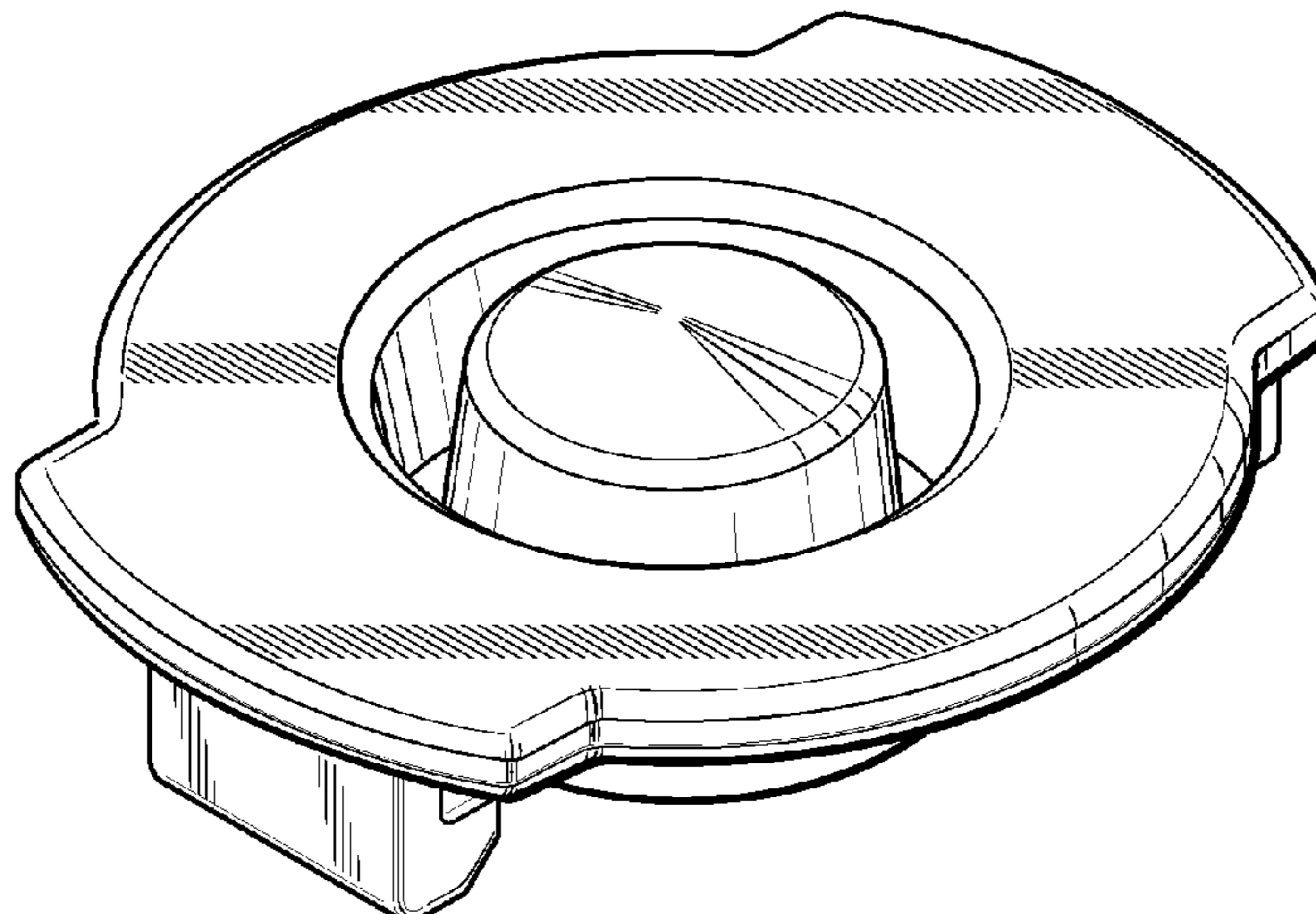
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,830,586 A 4/1958 Dann et al.
2,952,255 A 9/1960 Hein, Jr.

1 Claim, 2 Drawing Sheets



Related U.S. Application Data

division of application No. 29/367,355, filed on Aug. 6, 2010, now Pat. No. Des. 663,023, which is a division of application No. 29/326,873, filed on Oct. 27, 2008, now Pat. No. Des. 623,291, which is a division of application No. 29/280,974, filed on Jun. 12, 2007, now Pat. No. Des. 588,693.

(56)

References Cited

U.S. PATENT DOCUMENTS

4,588,403	A	5/1986	Weiss et al.	
4,708,270	A	11/1987	Ruesch	
D294,640	S	3/1988	Wicken et al.	
D302,206	S	7/1989	McAlister et al.	
D303,010	S	8/1989	Jabbusch	
D306,069	S	2/1990	Kelly et al.	
D310,123	S *	8/1990	Carlson	D24/162
D321,252	S	10/1991	Jepson et al.	
D321,759	S	11/1991	Buswell et al.	
5,098,416	A	3/1992	Imonti	
D338,957	S	8/1993	de Faire et al.	
5,238,003	A	8/1993	Baidwan et al.	
5,273,187	A	12/1993	Suzuki	
5,509,903	A	4/1996	Grendahl et al.	
5,531,710	A	7/1996	Dang et al.	
D401,324	S	11/1998	Hjertman et al.	
D425,198	S	5/2000	Porta	
D427,308	S	6/2000	Zinger	
D429,812	S	8/2000	Hjertman et al.	
D431,864	S	10/2000	Jansen	
D445,682	S *	7/2001	Michael et al.	D9/436
D447,797	S	9/2001	Odell et al.	
D447,799	S	9/2001	Jun	
6,296,625	B1	10/2001	Vetter et al.	
D472,316	S	3/2003	Douglas et al.	
D480,639	S *	10/2003	Ciavarella et al.	D9/434
D481,314	S *	10/2003	Noonan	D9/438
D495,416	S	8/2004	Dimeo et al.	
D496,101	S	9/2004	Davison	
6,984,222	B1	1/2006	Hitchins et al.	
D518,373	S	4/2006	Schulthess	
7,070,581	B2	7/2006	Manera et al.	
D534,796	S	1/2007	Falkenburg	

D540,466	S	4/2007	Homra et al.	
D543,278	S	5/2007	Numata et al.	
D558,340	S	12/2007	Hochman et al.	
D581,048	S	11/2008	Kawamura	
D583,938	S *	12/2008	Sudo	D24/130
D584,407	S	1/2009	Kawamura	
D588,693	S	3/2009	Strong et al.	
D596,487	S	7/2009	Batton et al.	
D608,000	S	1/2010	Kawamura	
D616,090	S	5/2010	Kawamura	
D629,895	S	12/2010	Demleitner et al.	
D630,318	S	1/2011	Goodwin	
D630,732	S	1/2011	Lev et al.	
D631,351	S *	1/2011	Coon	D9/453
D633,202	S *	2/2011	Maeda et al.	D24/130
D634,199	S *	3/2011	Taber et al.	D9/453
D649,242	S	11/2011	Kosinski et al.	
D657,462	S	4/2012	Siroky	
D665,498	S *	8/2012	Tamura et al.	D24/130
D668,760	S	10/2012	Kawamura	
D675,526	S *	2/2013	Obrist	D9/453
D677,161	S *	3/2013	Titherington	D9/453
D680,000	S *	4/2013	Miceli et al.	D9/453
D680,001	S *	4/2013	Miceli et al.	D9/453
2001/0021823	A1	9/2001	Nemoto	
2002/0123736	A1	9/2002	Fowles et al.	
2005/0029306	A1	2/2005	Brennan	
2006/0089594	A1	4/2006	Landau	
2007/0000951	A1	1/2007	Springhom	

FOREIGN PATENT DOCUMENTS

JP	7204557	A	8/1995
JP	8105197	A	4/1996
JP	8266624	A	10/1996
JP	10118556	A	5/1998

OTHER PUBLICATIONS

European Patent Office, International Search Report and Written Opinion in PCT Application Serial No. PCT/US2007/070971, Nov. 29, 2007.
 Japanese Patent Office, Notification of Reason for Refusal in JP Application No. 2009-515601, Nov. 6, 2012.

* cited by examiner

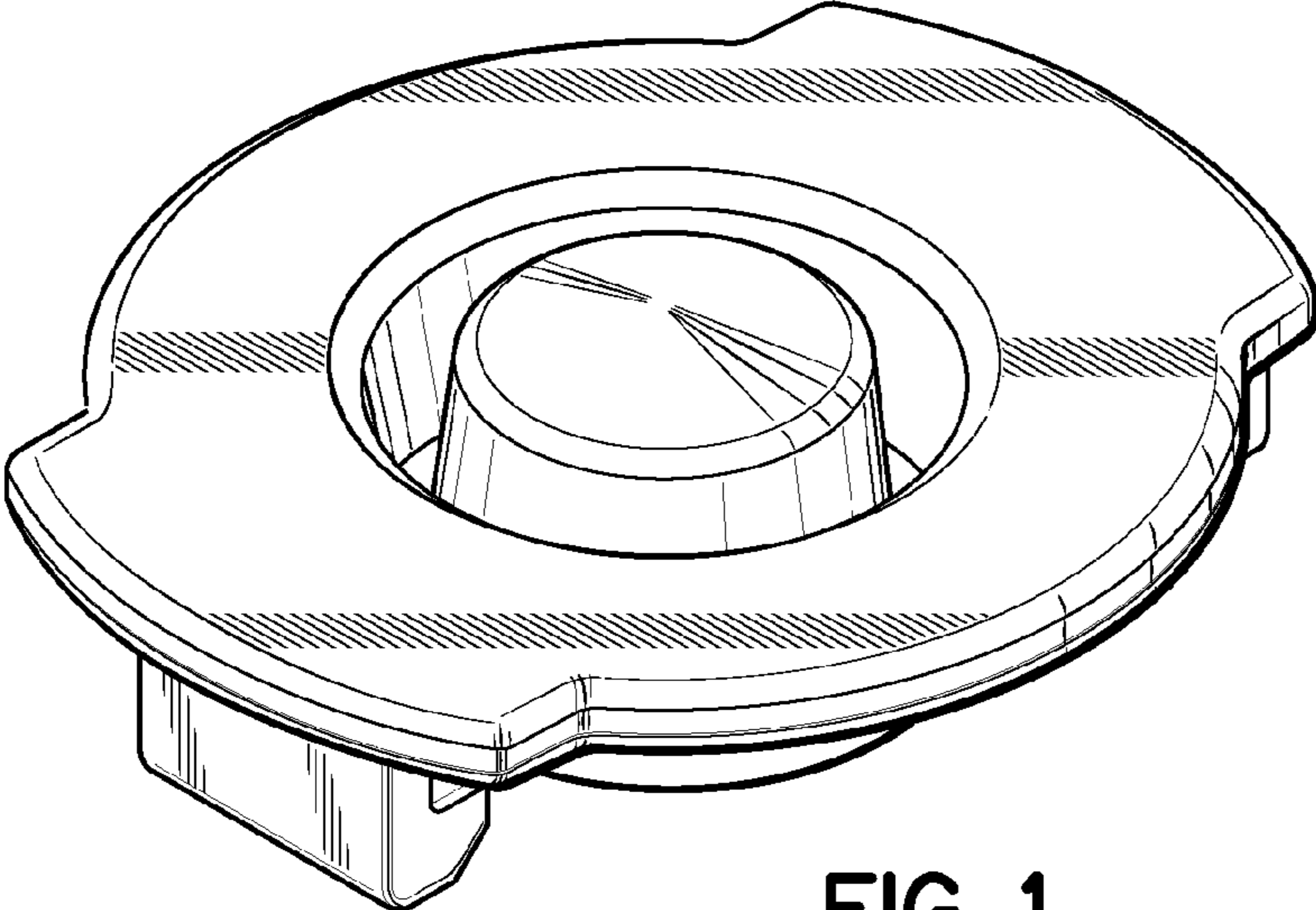


FIG. 1

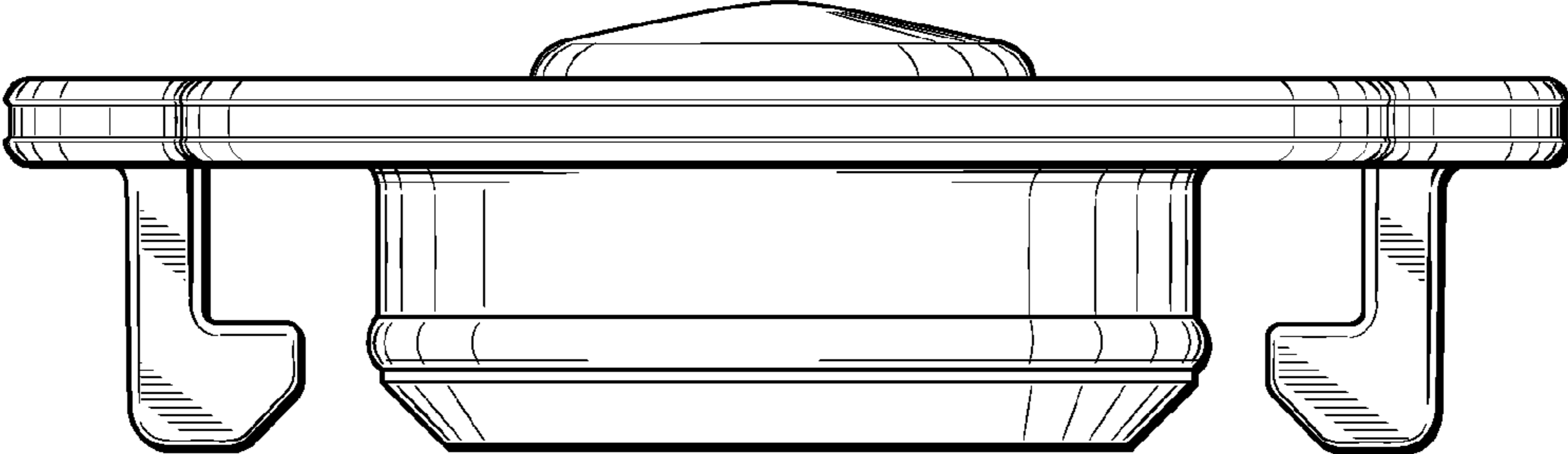


FIG. 2

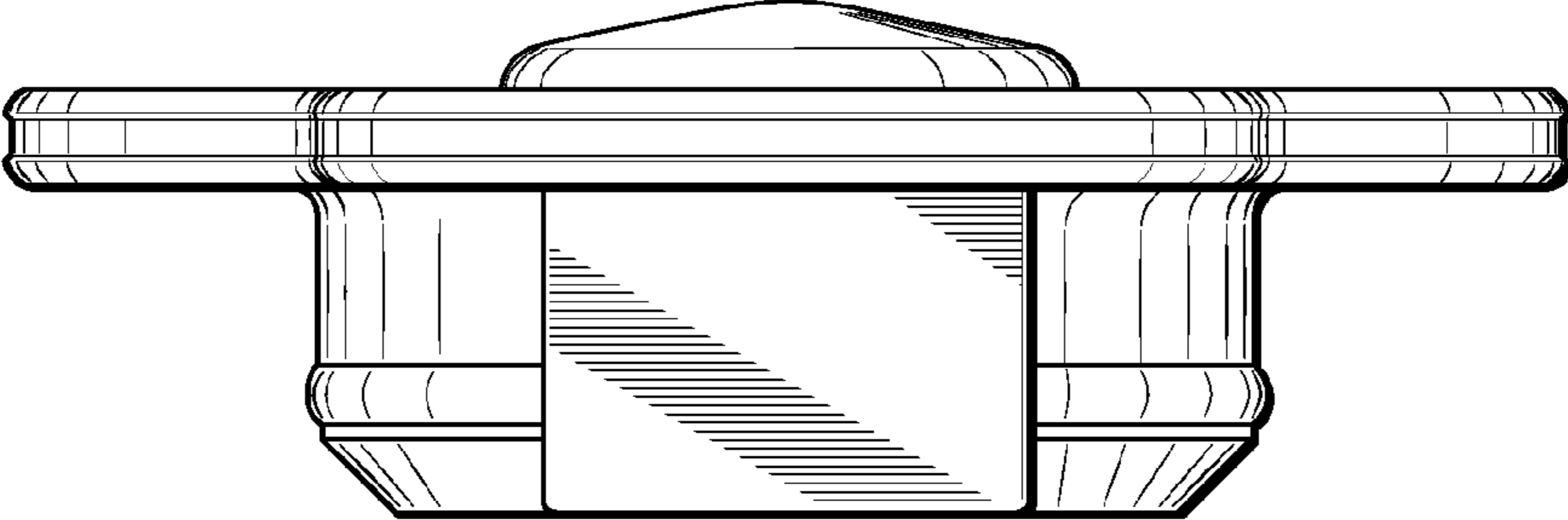


FIG. 3

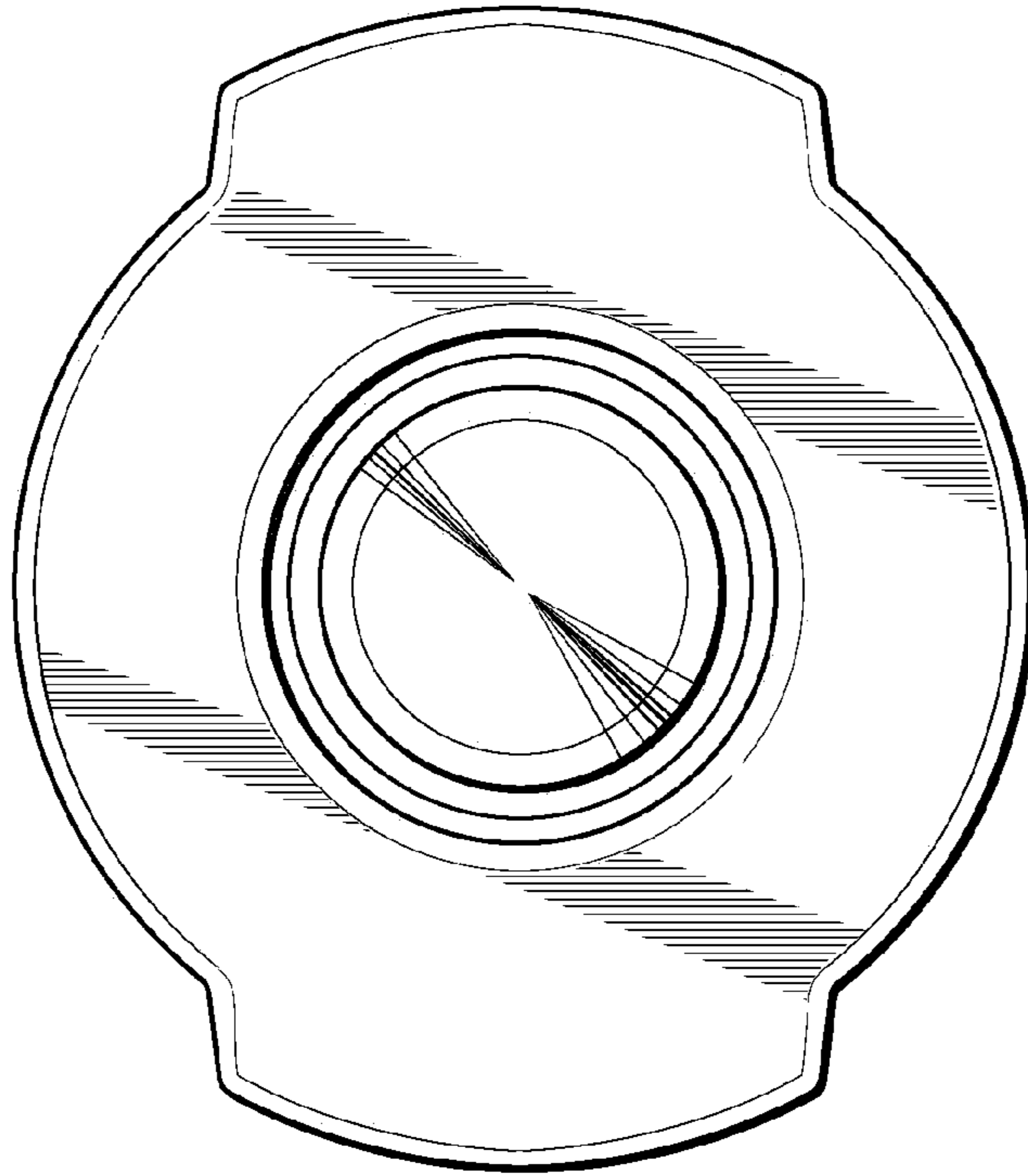


FIG. 4

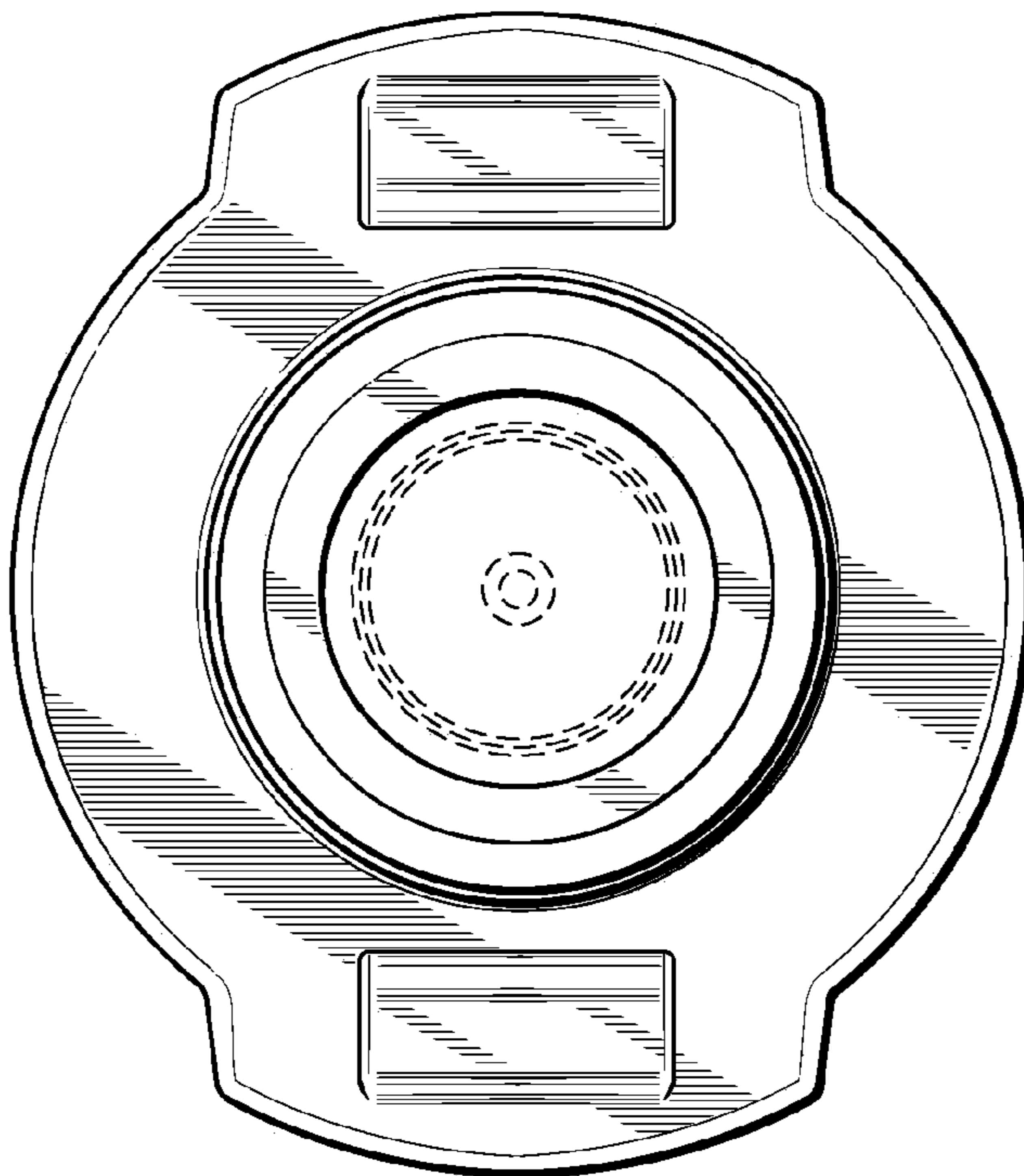


FIG. 5