



US00D736773S

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

(10) **Patent No.:** **US D736,773 S**

(45) **Date of Patent:** **\*\* Aug. 18, 2015**

(54) **OPTICAL SCANNER**

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

(21) Appl. No.: **29/515,398**

(22) Filed: **Jan. 22, 2015**

(30) **Foreign Application Priority Data**

Jul. 30, 2014 (JP) ..... 2014-016569

(51) **LOC (10) Cl.** ..... **14-02**

(52) **U.S. Cl.**  
USPC ..... **D14/422**

(58) **Field of Classification Search**  
USPC ..... D14/421-425; D18/40, 36-39, 41,  
D18/44-56; 235/462, 455, 470, 462.43,  
235/482, 483; 358/474, 486, 488, 496, 498,  
358/452, 449, 451, 453.1, 1.13; 318/685,  
318/696; 355/81, 75; 399/405, 367, 379,  
399/380; 382/217; 715/209, 222, 226, 274;  
400/613, 613.1-613.4, 690.1-690.4,  
400/691-694

CPC ..... H04N 1/00; H04N 1/12; H04N 1/00013;  
H04N 1/00015; H04N 1/00018; H04N  
1/00026; H04N 1/00557; H04N 1/00564;  
H04N 1/00567; H04N 1/0057; H04N 1/00572;  
H04N 1/00586; H04N 1/00588; H04N  
1/00591; H04N 1/00594; H04N 1/00596;  
H04N 1/00604; H04N 1/00519; H04N  
1/00559; H04N 1/1013; H04N 1/10; H04N  
1/00551; H04N 1/00278; H04N 2201/0456;  
H04N 2201/0446; H04N 2201/00; H04N  
2201/0094; G03G 15/0142; G03G 15/605;  
G03G 15/602; B65H 5/26; B65H 5/30;  
B65H 7/00; B65H 2402/515; B65H 2402/31;  
B65H 2511/20; B65H 2511/414; B65H

2301/00; B65H 2220/04; B65H 3/5261;  
B65H 2513/42; B65H 2801/39; B65H 2801/31  
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D244,759 S *	6/1977	Kindred .....	D15/146
D285,965 S *	9/1986	Nishibori et al. ....	D24/165
D286,437 S *	10/1986	Nishibori .....	D24/165
D297,051 S *	8/1988	Kawamura .....	D24/165
D304,722 S *	11/1989	Hashimoto et al. ....	D14/467
D315,361 S *	3/1991	Kojima et al. ....	D18/55

(Continued)

FOREIGN PATENT DOCUMENTS

JP	1053436	11/1999
JP	1076375	6/2000
JP	1076376	6/2000

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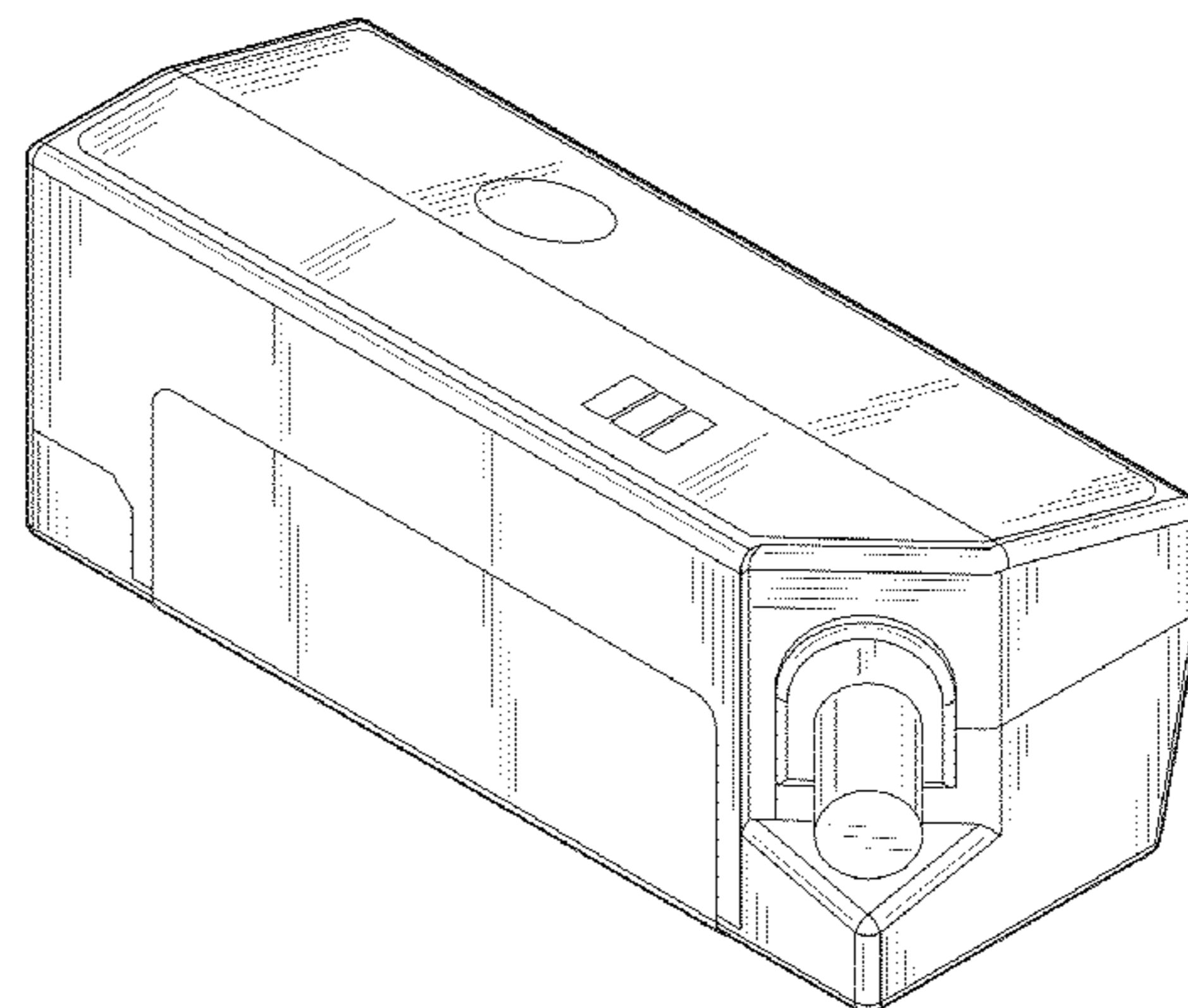
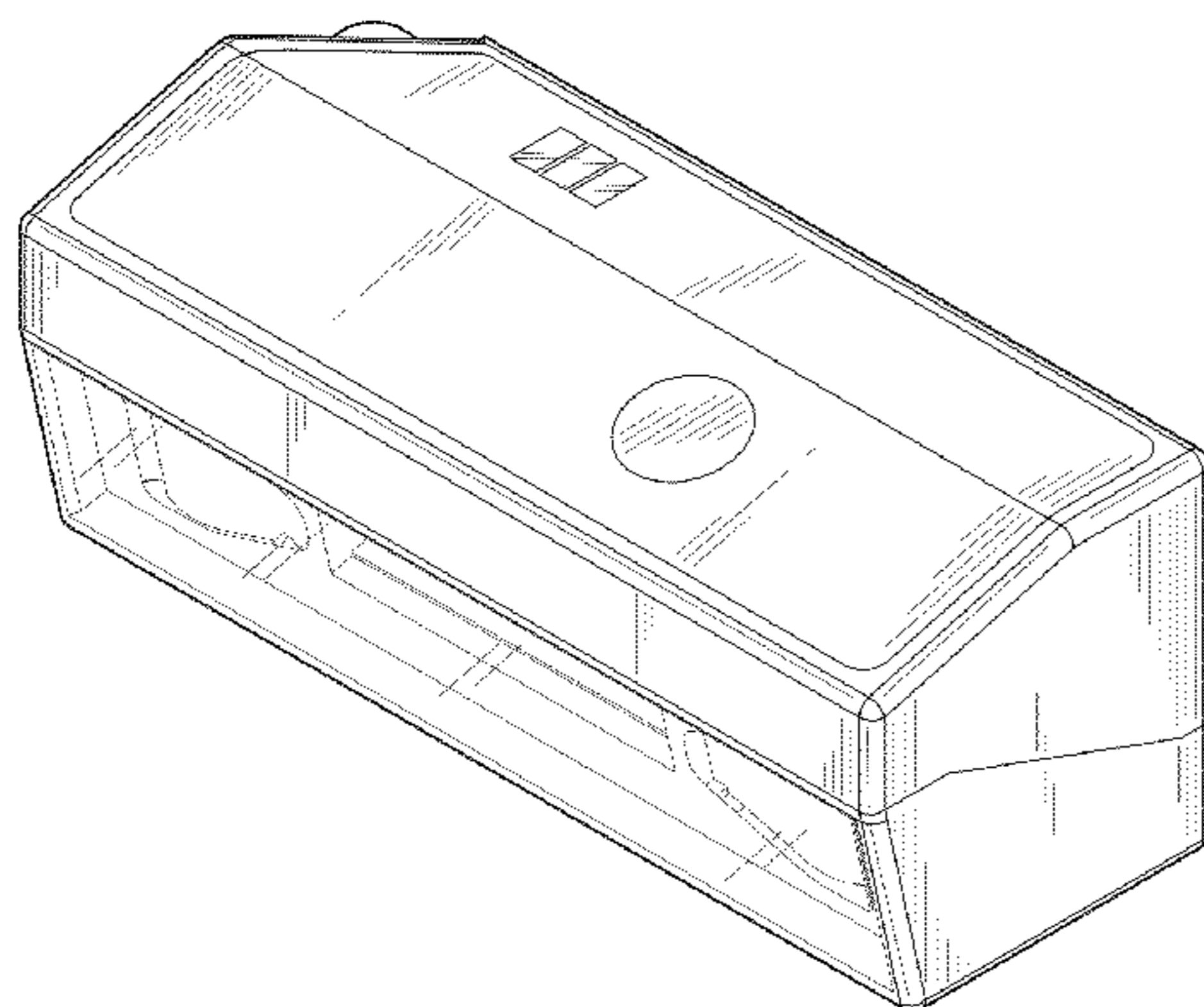
(57) **CLAIM**

I claim the ornamental design for an optical scanner, as shown and described.

**DESCRIPTION**

FIG. 1 is a front perspective view of an optical scanner of the present invention;  
FIG. 2 is a rear perspective view thereof;  
FIG. 3 is a front view thereof;  
FIG. 4 is a rear view thereof;  
FIG. 5 is a top view thereof;  
FIG. 6 is a bottom view thereof, wherein the circular areas located in the lower corners encompass a cylindrical voided space as seen in FIG. 9;  
FIG. 7 is a first side view thereof;  
FIG. 8 is a second side view thereof; and,  
FIG. 9 is a cross-section view taken along the line 9-9 of FIG. 5.

**1 Claim, 5 Drawing Sheets**



(56)

## References Cited

## U.S. PATENT DOCUMENTS

- D350,075 S \* 8/1994 Reeder ..... D10/94  
D350,364 S \* 9/1994 Kawashima et al. .... D18/50  
D352,731 S \* 11/1994 Sugimoto ..... D18/50  
D366,900 S \* 2/1996 Pangburn et al. .... D18/50  
D369,180 S \* 4/1996 Fukaya et al. .... D18/50  
D370,025 S \* 5/1996 Weng ..... D18/50  
D373,595 S \* 9/1996 Askren et al. .... D18/50  
D375,119 S \* 10/1996 Pangburn ..... D18/50  
D378,378 S \* 3/1997 Nakazawa et al. .... D18/54  
D390,258 S \* 2/1998 Kawahara et al. .... D18/55  
D392,311 S \* 3/1998 Takano ..... D18/50  
D397,096 S \* 8/1998 Chen et al. .... D14/422  
D407,712 S \* 4/1999 Hasegawa ..... D14/422  
5,893,822 A \* 4/1999 Deni et al. .... 53/512  
D411,228 S \* 6/1999 Kobayashi et al. .... D18/50  
D414,508 S \* 9/1999 Pangburn ..... D18/55  
D418,158 S \* 12/1999 Aihara et al. .... D18/50  
D422,570 S \* 4/2000 Kobayashi ..... D14/509  
D424,099 S \* 5/2000 Pangburn ..... D18/50  
D433,442 S \* 11/2000 Clark, III ..... D18/55  
D435,266 S \* 12/2000 Sekine et al. .... D18/55  
D435,588 S \* 12/2000 Kobayashi et al. .... D18/55  
D439,607 S \* 3/2001 Inoue et al. .... D18/54  
6,231,043 B1 \* 5/2001 James et al. .... 271/209  
D443,889 S \* 6/2001 Yamano et al. .... D18/50  
D444,813 S \* 7/2001 Quijano ..... D18/55  
D449,067 S \* 10/2001 Kobayashi et al. .... D18/55  
D451,130 S \* 11/2001 Clark et al. .... D18/55  
D453,171 S \* 1/2002 Cheng ..... D15/146  
D454,583 S \* 3/2002 Whitby et al. .... D18/50  
D459,389 S \* 6/2002 Kaseno ..... D18/50  
D463,485 S \* 9/2002 Yoshida et al. .... D18/50  
6,568,674 B2 \* 5/2003 Matsuda ..... 271/274  
D478,119 S \* 8/2003 Hwang et al. .... D18/55  
D483,059 S \* 12/2003 Goh et al. .... D18/50  
D486,514 S \* 2/2004 Oba ..... D18/50  
D489,401 S \* 5/2004 Senshiki et al. .... D18/54  
D489,755 S \* 5/2004 Wong et al. .... D18/55  
D497,940 S \* 11/2004 Hwang et al. .... D18/50  
D499,444 S \* 12/2004 Hwang ..... D18/50  
D501,859 S \* 2/2005 Presta ..... D15/146  
6,848,685 B2 \* 2/2005 Katsuyama ..... 271/162  
6,899,422 B2 \* 5/2005 Strowe et al. .... 347/108  
D506,214 S \* 6/2005 Zepter ..... D15/146  
D516,119 S \* 2/2006 Kimura et al. .... D18/50  
7,029,113 B2 \* 4/2006 Hwang ..... 347/108  
D523,469 S \* 6/2006 Hwang et al. .... D18/50  
D524,851 S \* 7/2006 Wong et al. .... D18/55  
D525,295 S \* 7/2006 Suzuki et al. .... D18/55  
D536,731 S \* 2/2007 Tate et al. .... D18/50  
D542,339 S \* 5/2007 Whittall et al. .... D18/50  
D543,583 S \* 5/2007 Workman et al. .... D18/34.3  
D544,508 S \* 6/2007 Beno et al. .... D15/146  
D545,893 S \* 7/2007 Ogawa et al. .... D18/50  
D554,603 S \* 11/2007 Murakami ..... D14/507  
7,392,641 B2 \* 7/2008 Abate ..... 53/512  
D598,951 S \* 8/2009 Kato et al. .... D18/55  
D602,966 S \* 10/2009 Kiple et al. .... D15/146  
D603,894 S \* 11/2009 Yamano et al. .... D18/55  
D609,711 S \* 2/2010 Kuroda et al. .... D14/453  
D610,146 S \* 2/2010 Kuroda et al. .... D14/422  
D610,147 S \* 2/2010 Kuroda et al. .... D14/422  
D610,148 S \* 2/2010 Kuroda et al. .... D14/422  
D610,149 S \* 2/2010 Kuroda et al. .... D14/422  
D610,152 S \* 2/2010 Kuroda et al. .... D14/453  
D610,153 S \* 2/2010 Kuroda et al. .... D14/453  
D610,154 S \* 2/2010 Kuroda et al. .... D14/453  
D610,155 S \* 2/2010 Kuroda et al. .... D14/453  
D614,214 S \* 4/2010 Vander Woude ..... D15/127  
D616,889 S \* 6/2010 Kuroda et al. .... D14/422  
D624,544 S \* 9/2010 Kuroda et al. .... D14/422  
D624,545 S \* 9/2010 Kuroda et al. .... D14/422  
D624,546 S \* 9/2010 Kuroda et al. .... D14/422  
D624,547 S \* 9/2010 Kuroda et al. .... D14/422  
D624,573 S \* 9/2010 Hall et al. .... D15/146  
D624,574 S \* 9/2010 Hall et al. .... D15/146  
7,922,170 B2 \* 4/2011 Ngai ..... 271/162  
D640,299 S \* 6/2011 Day et al. .... D15/146  
D642,179 S \* 7/2011 Kuroda et al. .... D14/422  
D652,445 S \* 1/2012 Burton et al. .... D18/50  
D663,331 S \* 7/2012 Day et al. .... D15/146  
D669,080 S \* 10/2012 Iwai et al. .... D14/422  
D669,081 S \* 10/2012 Iwai et al. .... D14/422  
D669,526 S \* 10/2012 Sakurai ..... D18/50  
D672,388 S \* 12/2012 Kim et al. .... D18/50  
D677,328 S \* 3/2013 Kim et al. .... D18/50  
D679,739 S \* 4/2013 Crutchley et al. .... D15/146  
D680,157 S \* 4/2013 Umezawa et al. .... D18/34.3  
D680,161 S \* 4/2013 Goh et al. .... D18/50  
D682,328 S \* 5/2013 Day et al. .... D15/146  
D682,329 S \* 5/2013 Day et al. .... D15/146  
D686,649 S \* 7/2013 Zhou et al. .... D15/146  
D687,079 S \* 7/2013 Mueller et al. .... D15/146  
D690,304 S \* 9/2013 Lim ..... D14/422  
D694,792 S \* 12/2013 Day et al. .... D15/146  
D696,339 S \* 12/2013 Hasui et al. .... D18/34.3  
D699,726 S \* 2/2014 Seki et al. .... D14/422  
D699,781 S \* 2/2014 Hasui et al. .... D18/34.9  
D700,908 S \* 3/2014 Taniho et al. .... D14/422  
D706,846 S \* 6/2014 Rim et al. .... D15/145  
D713,845 S \* 9/2014 Taniho et al. .... D14/422  
D716,305 S \* 10/2014 Tani ..... D14/422  
D720,001 S \* 12/2014 Martell et al. .... D18/50  
D723,562 S \* 3/2015 Inada et al. .... D14/422  
9,010,749 B2 \* 4/2015 Mizuno et al. .... 271/162  
2003/0030712 A1 \* 2/2003 Kawaguchi et al. .... 347/104  
2003/0110741 A1 \* 6/2003 Wang ..... 53/512  
2003/0206762 A1 \* 11/2003 Hwang et al. .... 400/693  
2004/0004642 A1 \* 1/2004 Koike et al. .... 347/5  
2005/0022480 A1 \* 2/2005 Brakes ..... 53/512  
2005/0094227 A1 \* 5/2005 Hwang et al. .... 358/498  
2005/0247405 A1 \* 11/2005 Murphy et al. .... 156/359  
2006/0207227 A1 \* 9/2006 Huang ..... 53/512  
2007/0012152 A1 \* 1/2007 Workman et al. .... 83/614  
2010/0053701 A1 \* 3/2010 Yoshida et al. .... 358/474  
2010/0060948 A1 \* 3/2010 Yoshida et al. .... 358/474

\* cited by examiner

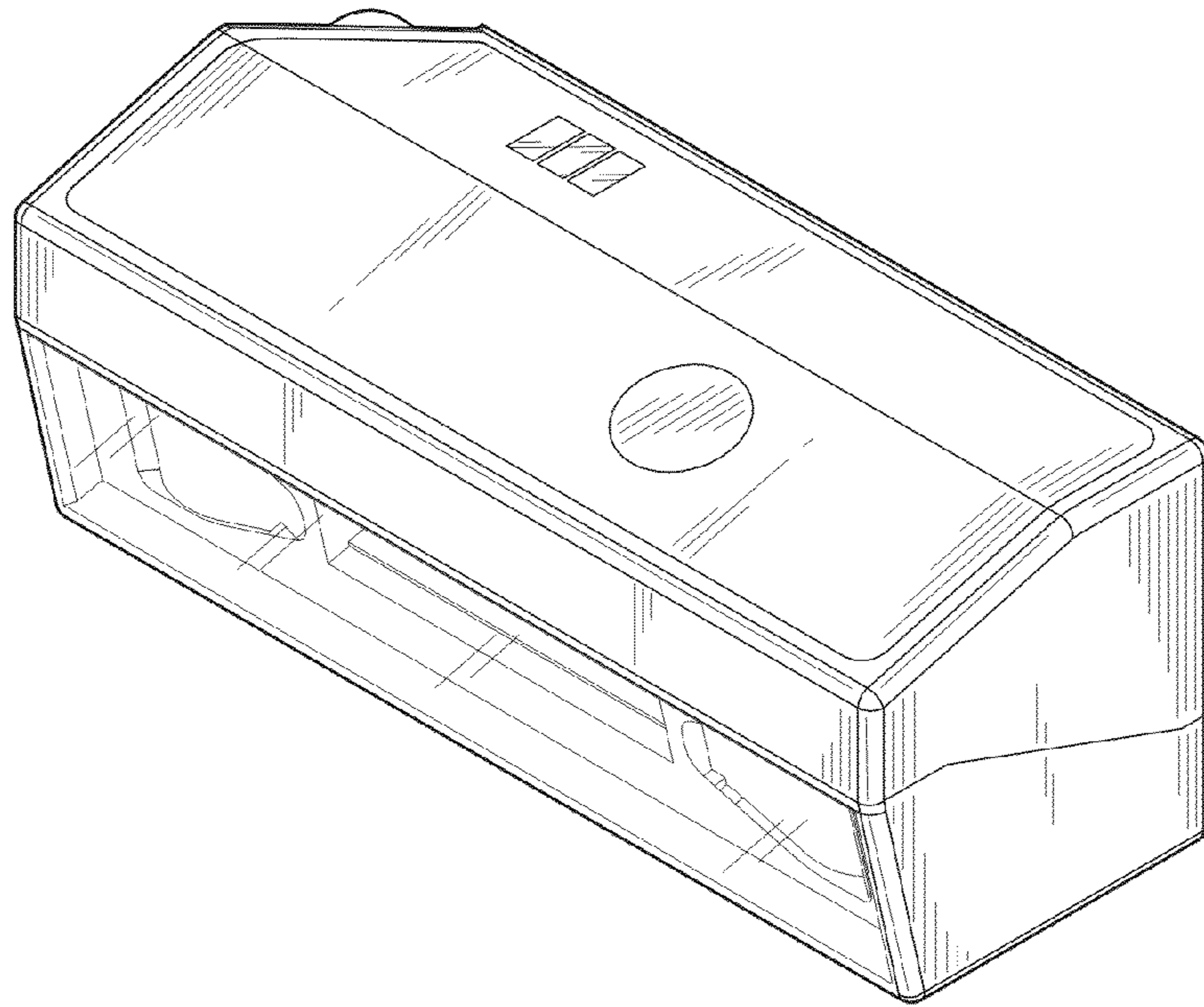


FIG. 1

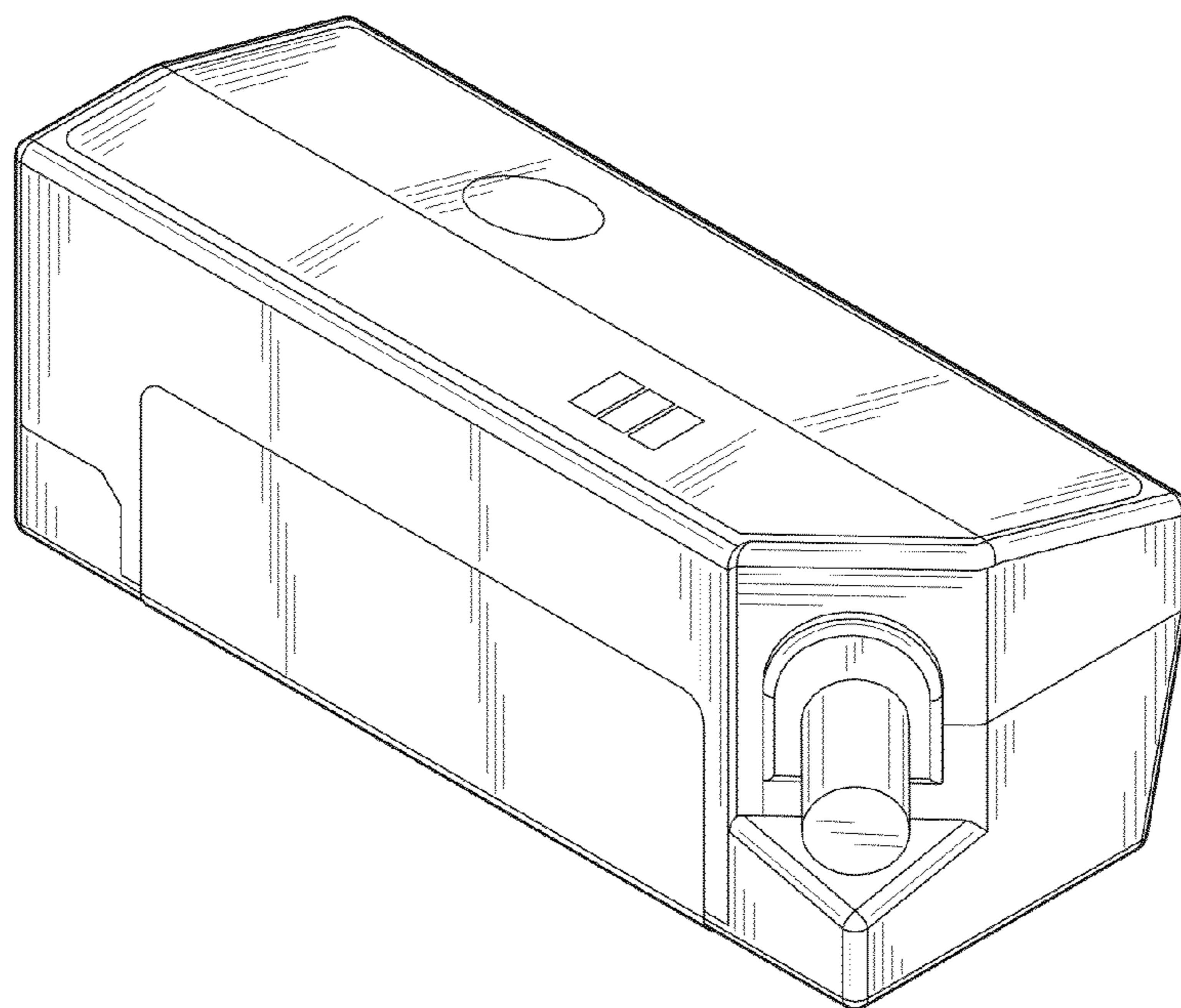


FIG. 2

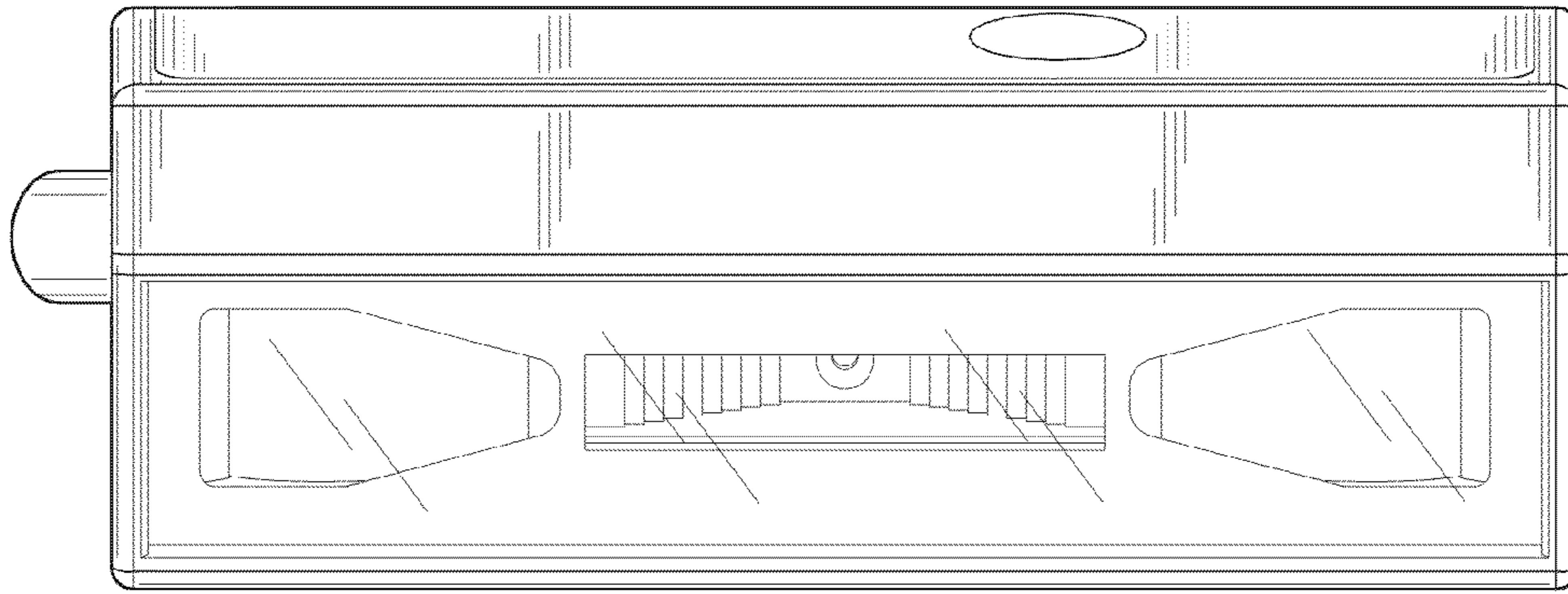


FIG. 3

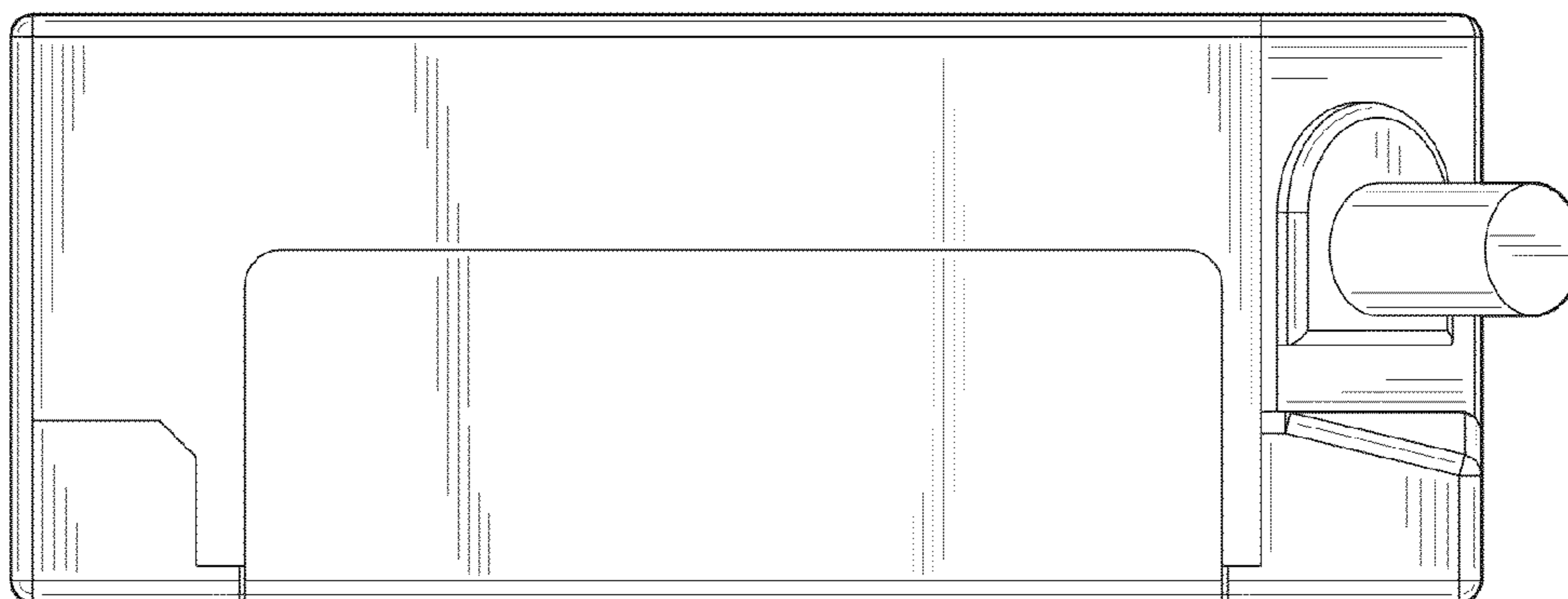


FIG. 4

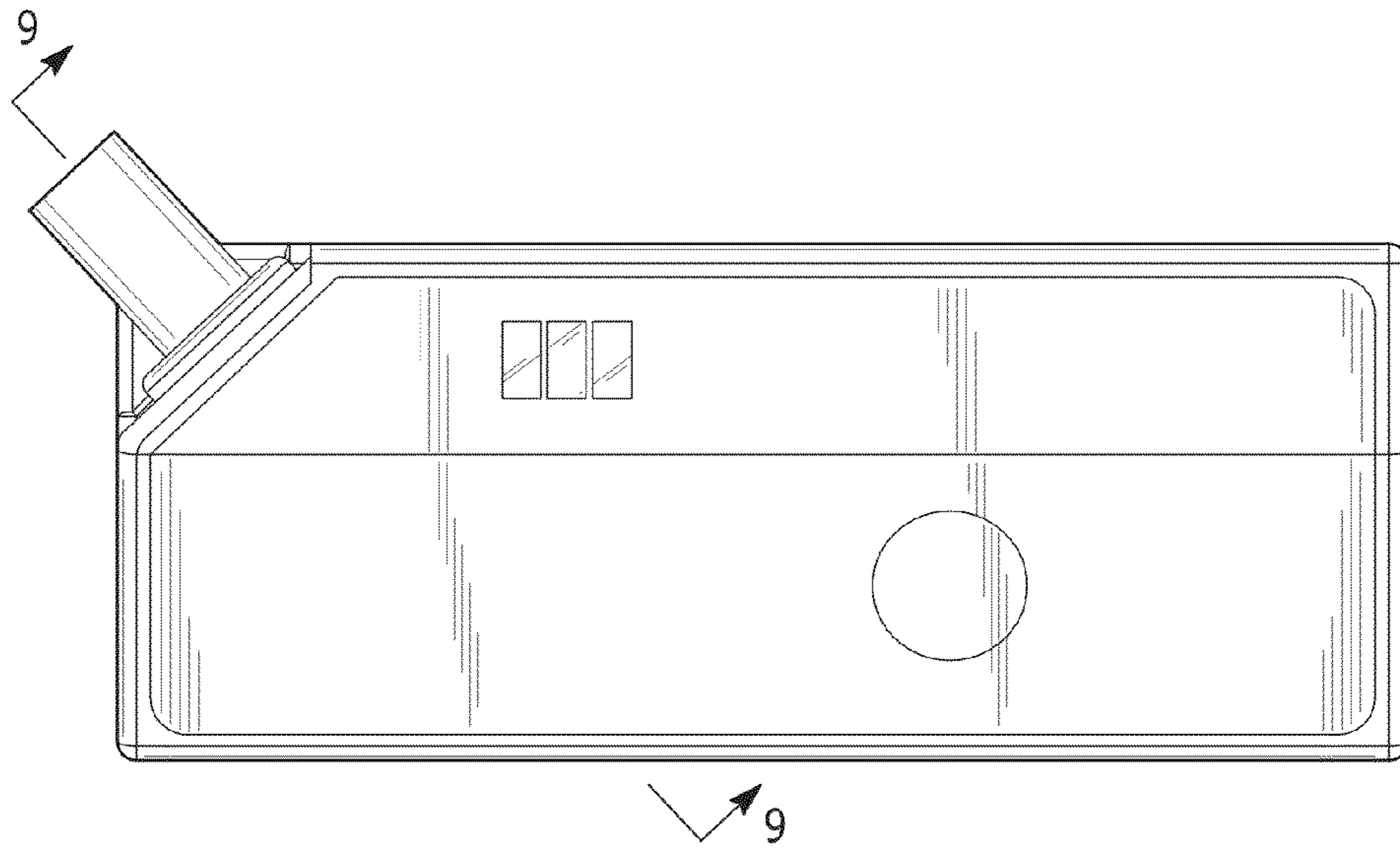


FIG. 5

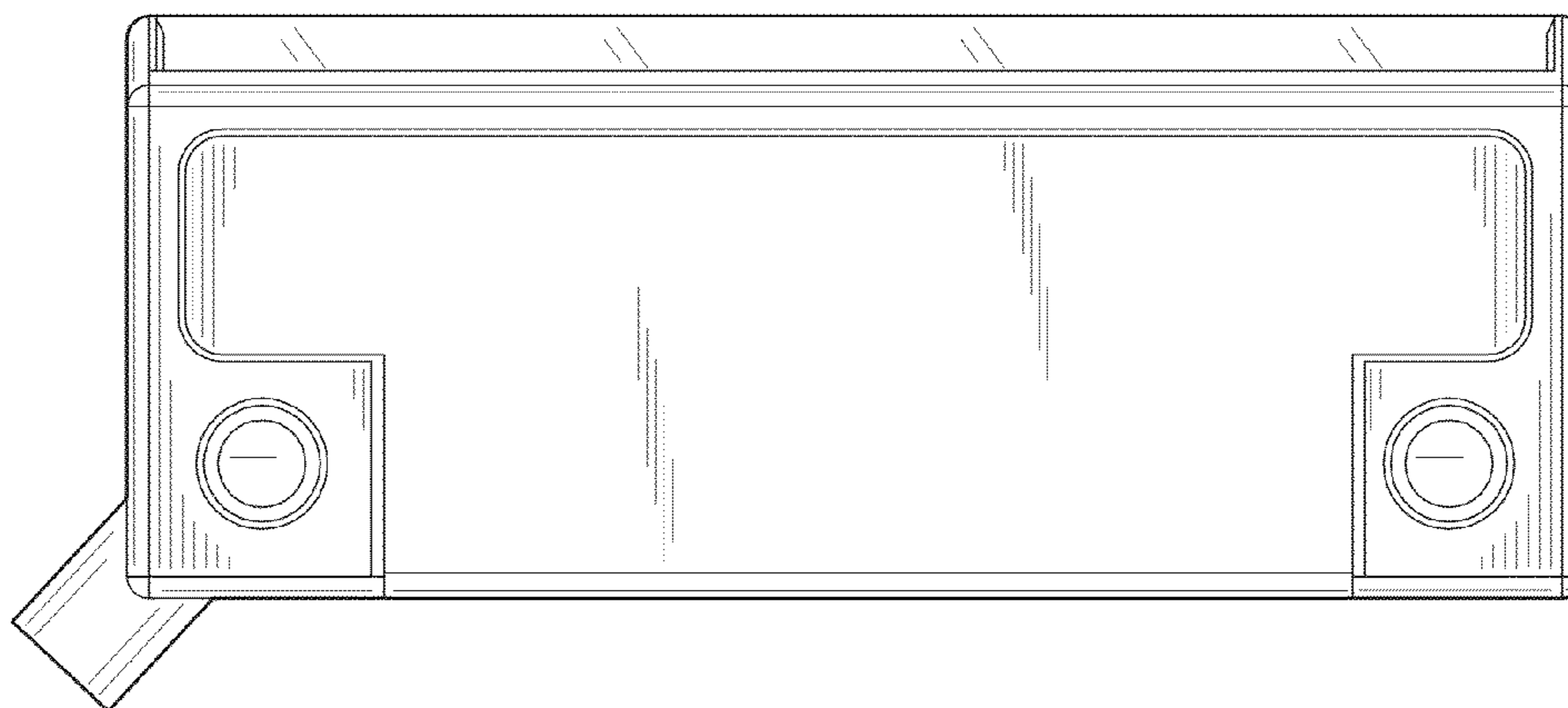


FIG. 6

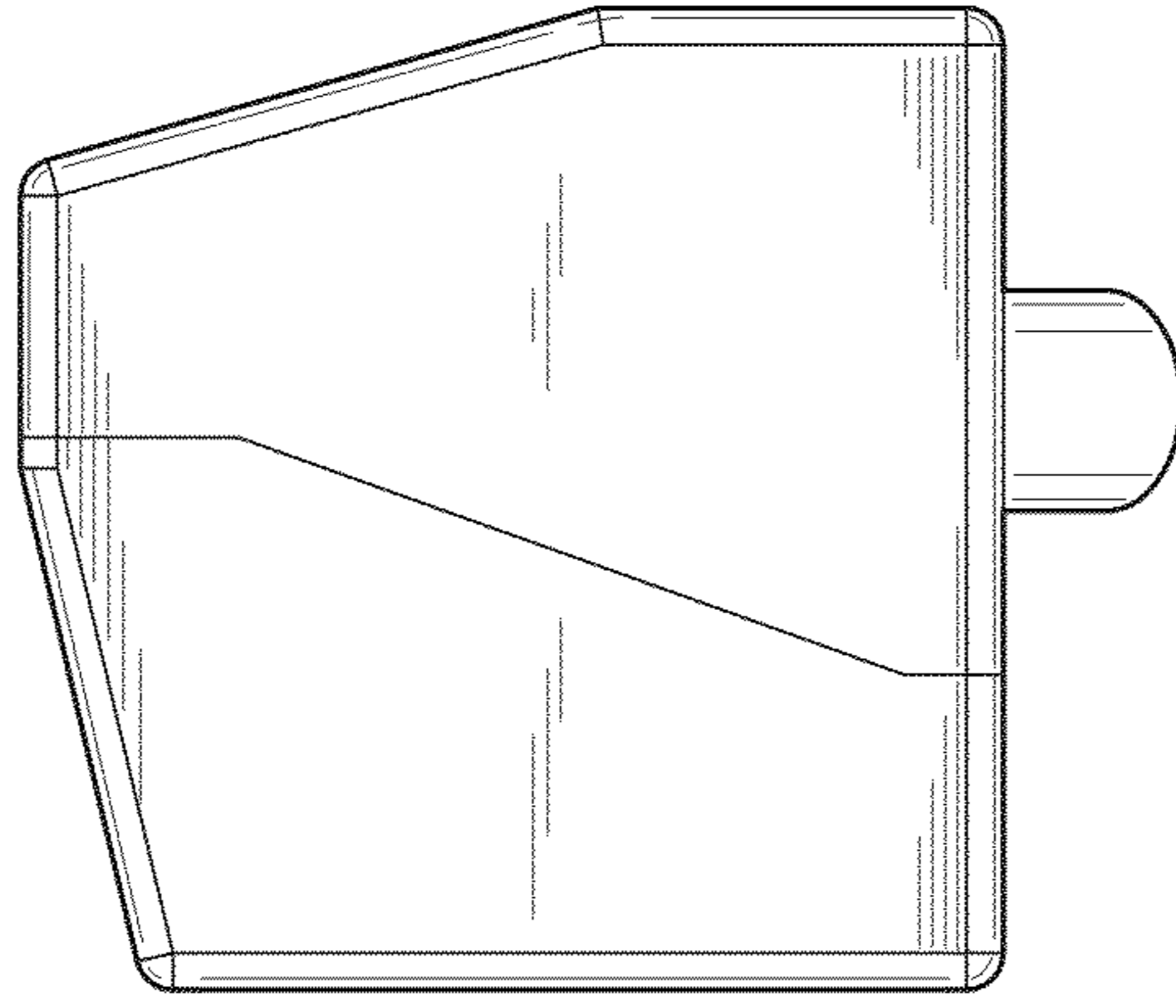


FIG. 7

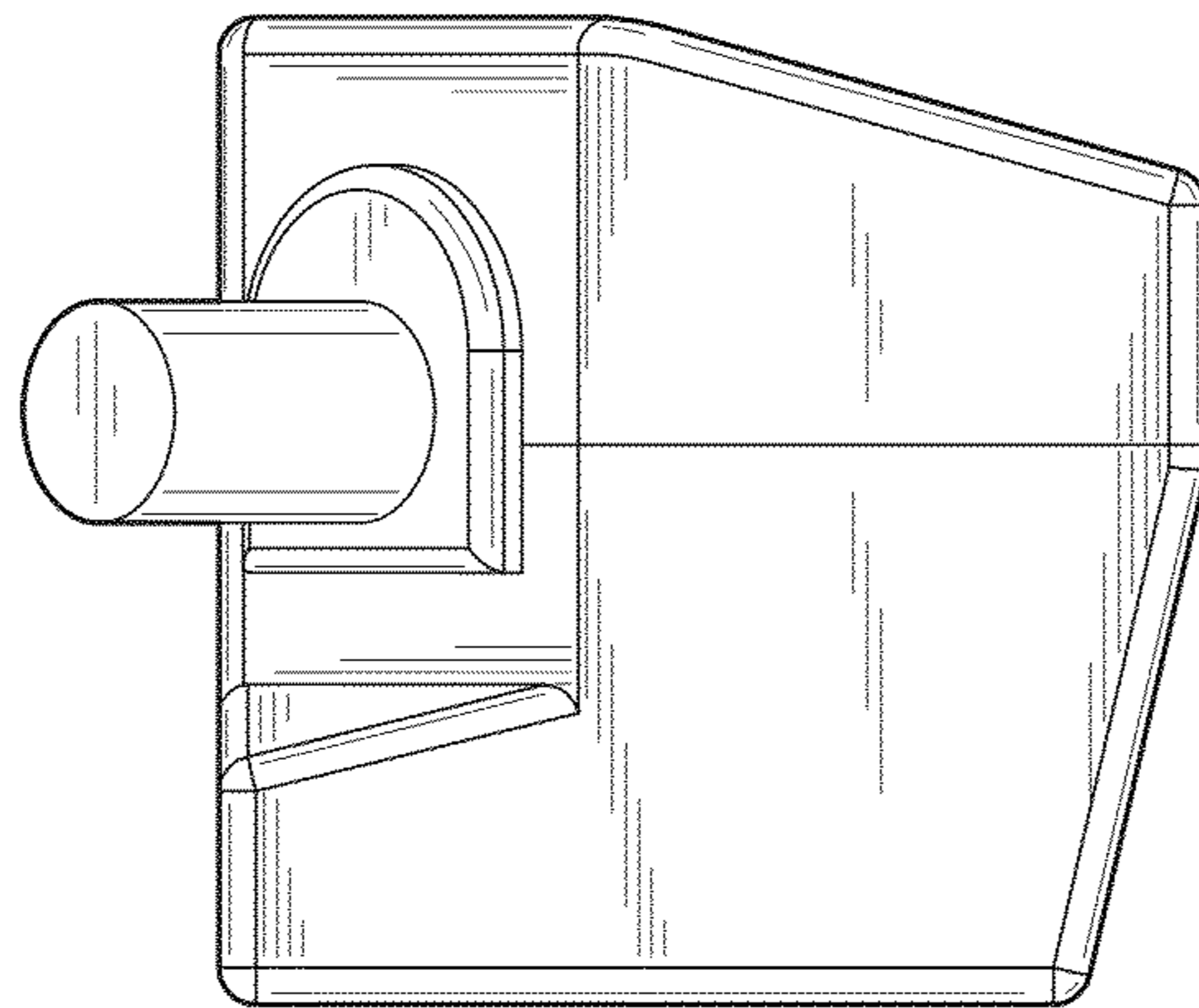


FIG. 8

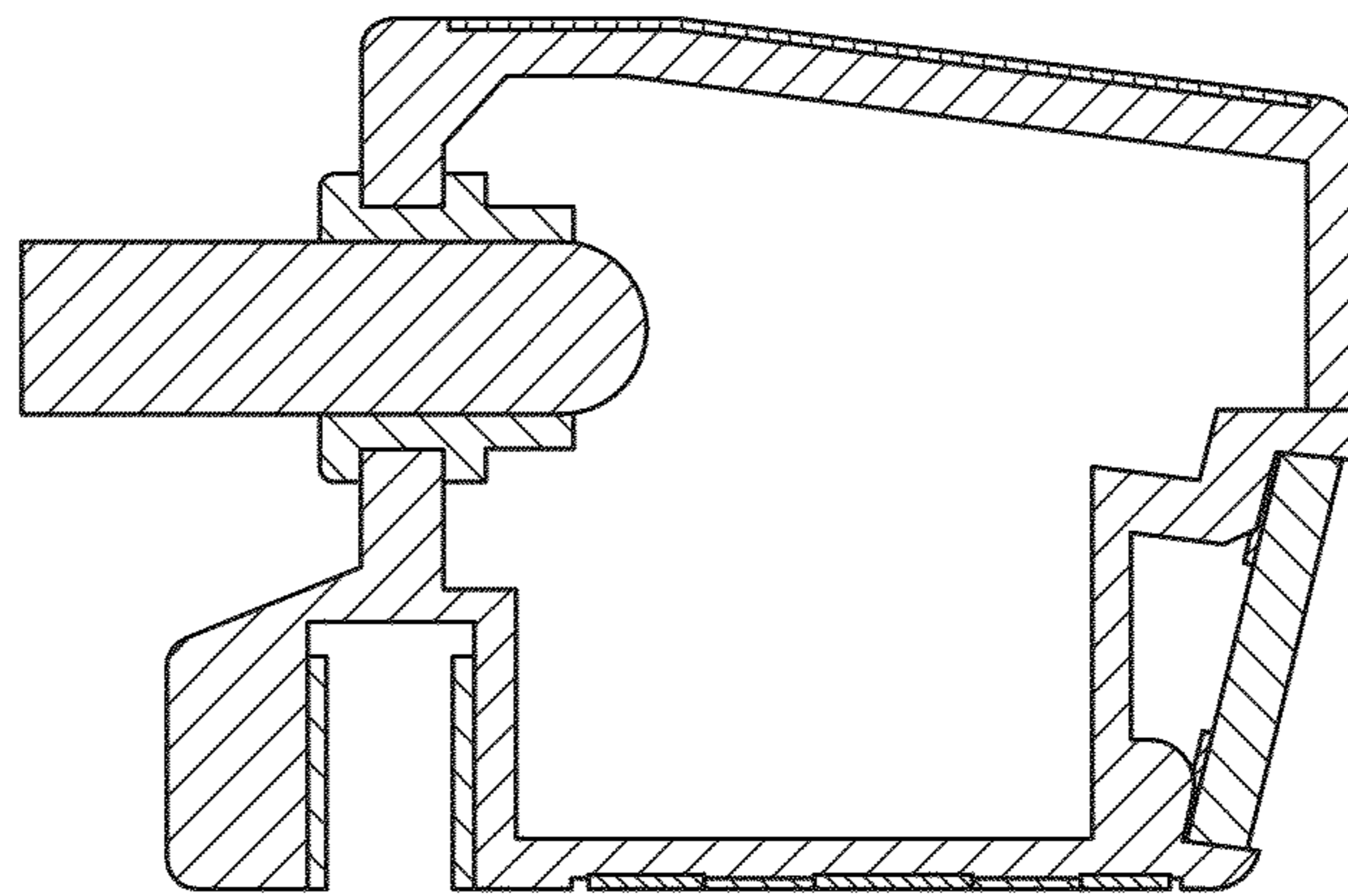


FIG. 9