US00D736773S

(12) United States Design Patent

Okamoto

(10) Patent No.: US D736,773 S
(45) Date of Patent: ** Aug. 18, 2015

(54) **OPTICAL SCANNER**

(71) Applicant: **IDEC CORPORATION**, Yodogawa-ku, Osaka (JP)

(72) Inventor: **Sohei Okamoto**, Osaka (JP)

(73) Assignee: **IDEC CORPORATION**, Osaka (JP)

(**) 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

Primary Examiner — Susan Moon Lee

(74) *Attorney, Agent, or Firm* — Brinks Gilson & Lione

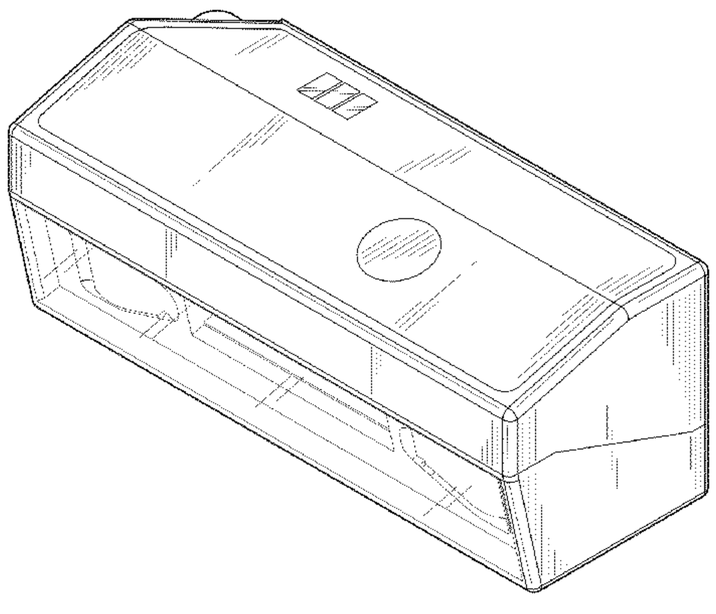
(57) **CLAIM**

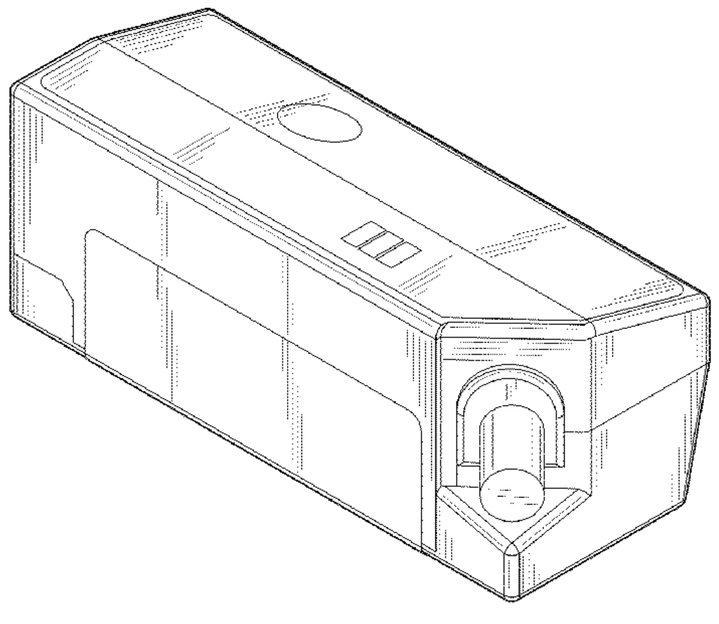
I claim the ornamental design for an optical scanner, as shown and described.

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

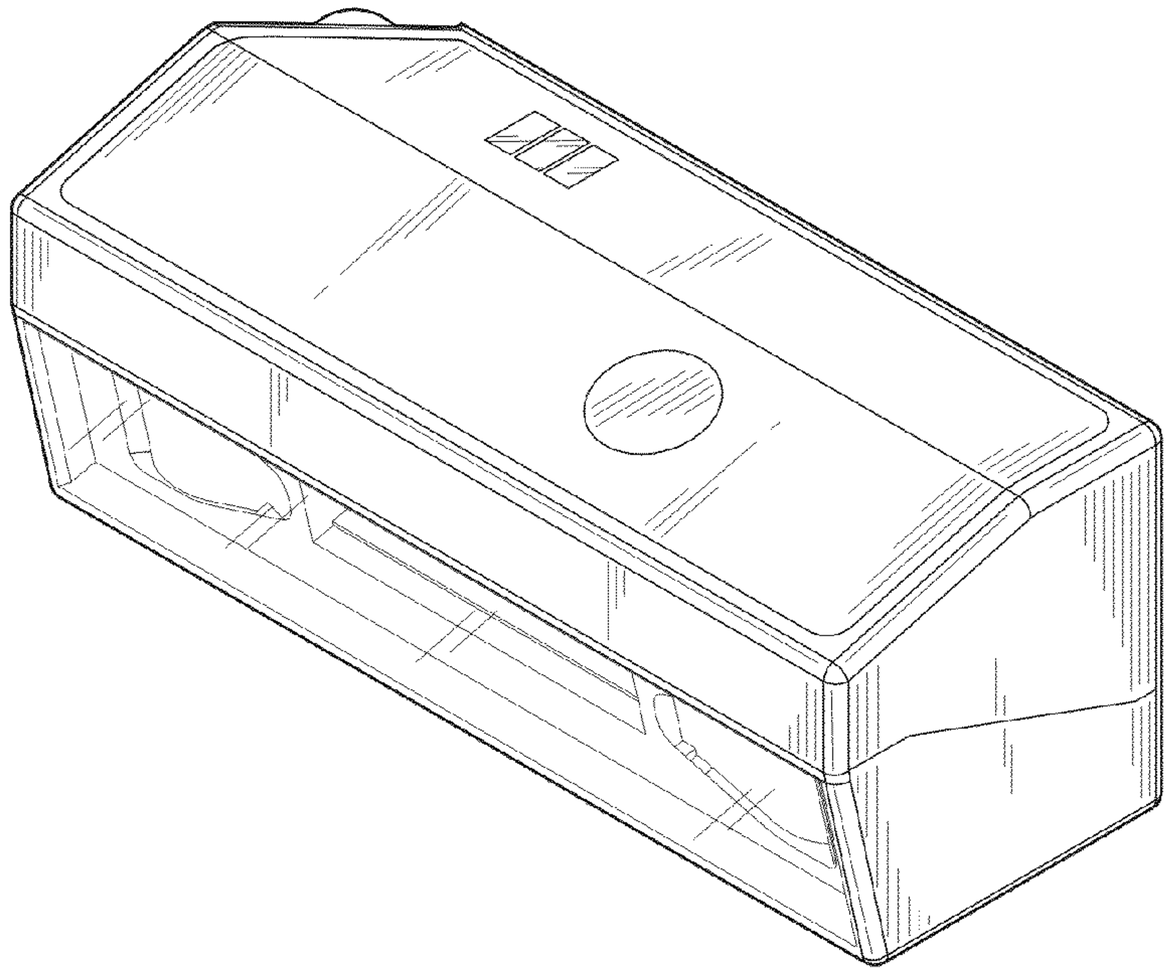


FIG. 1

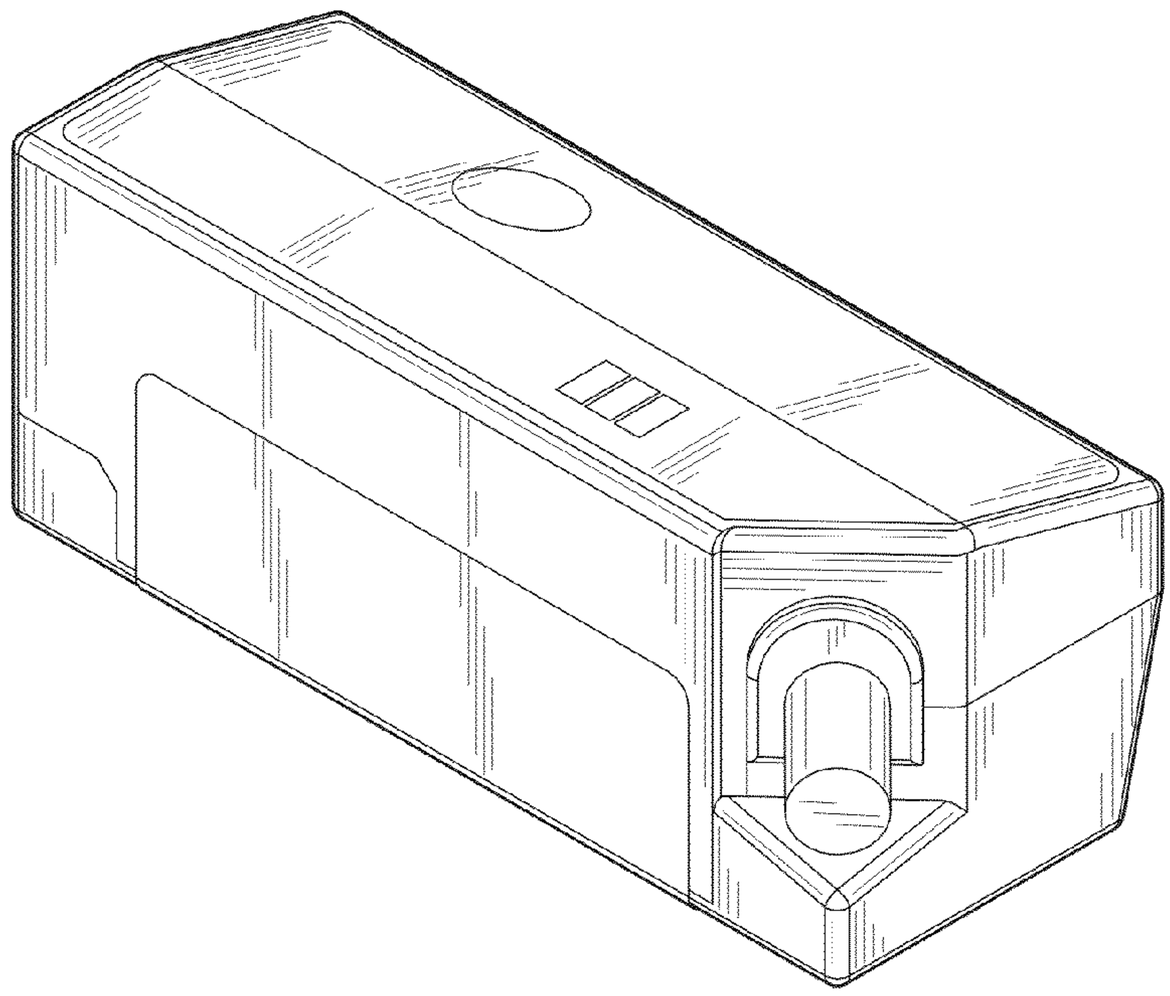


FIG. 2

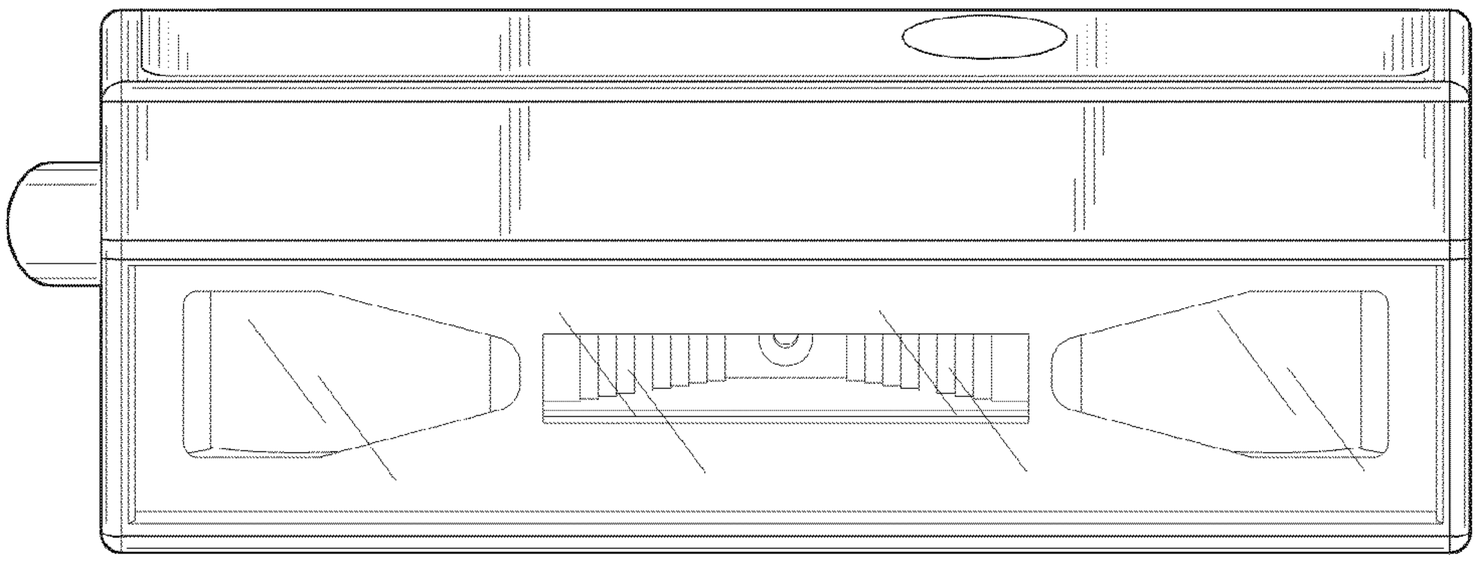


FIG. 3

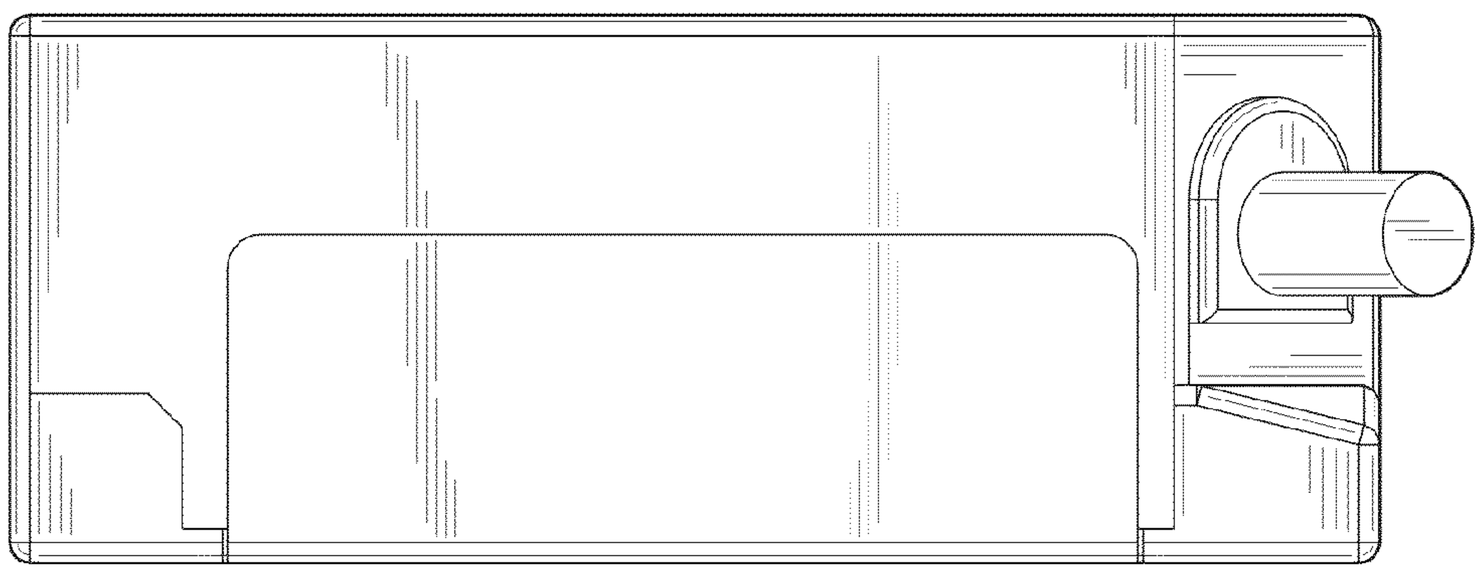


FIG. 4

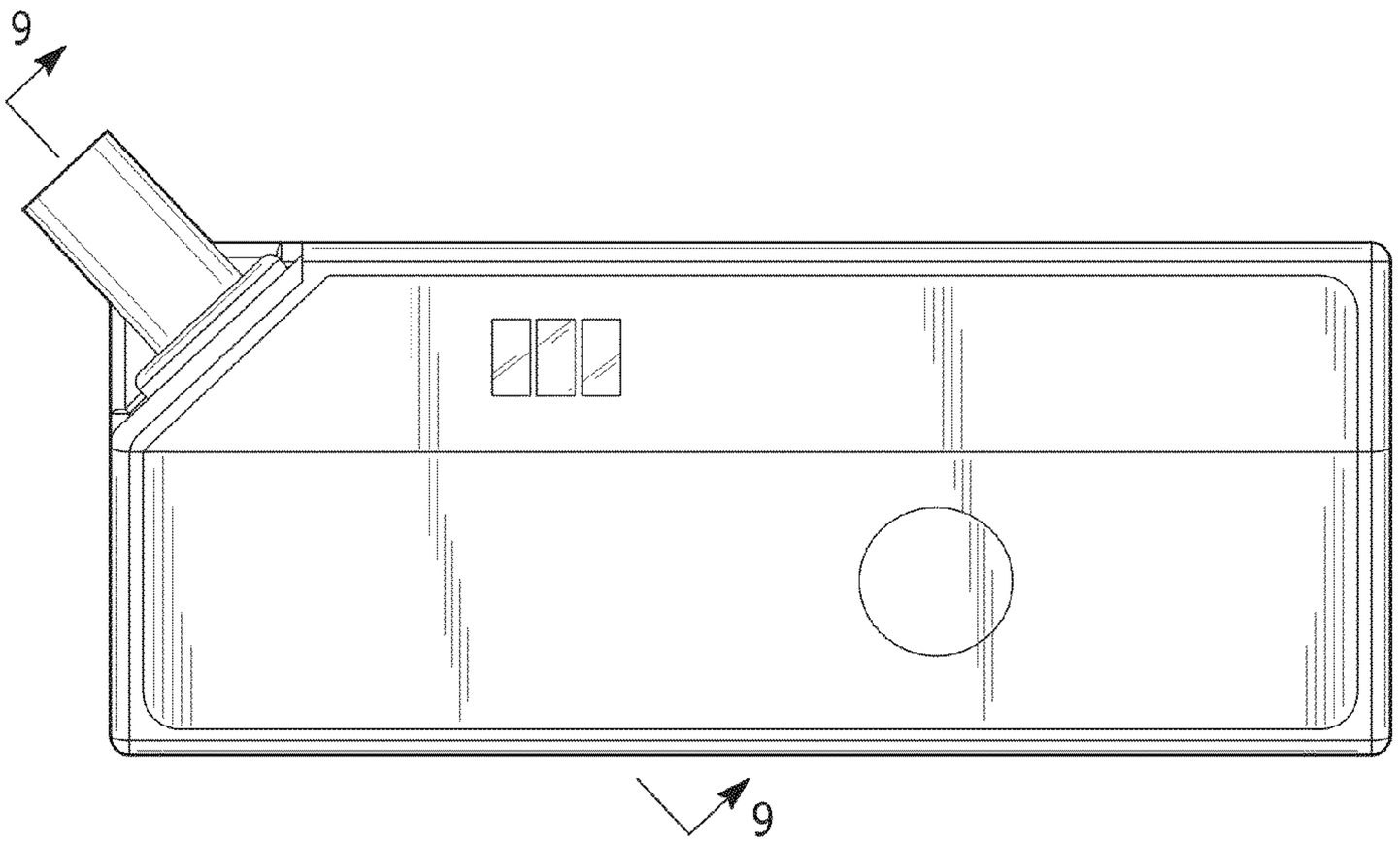


FIG. 5

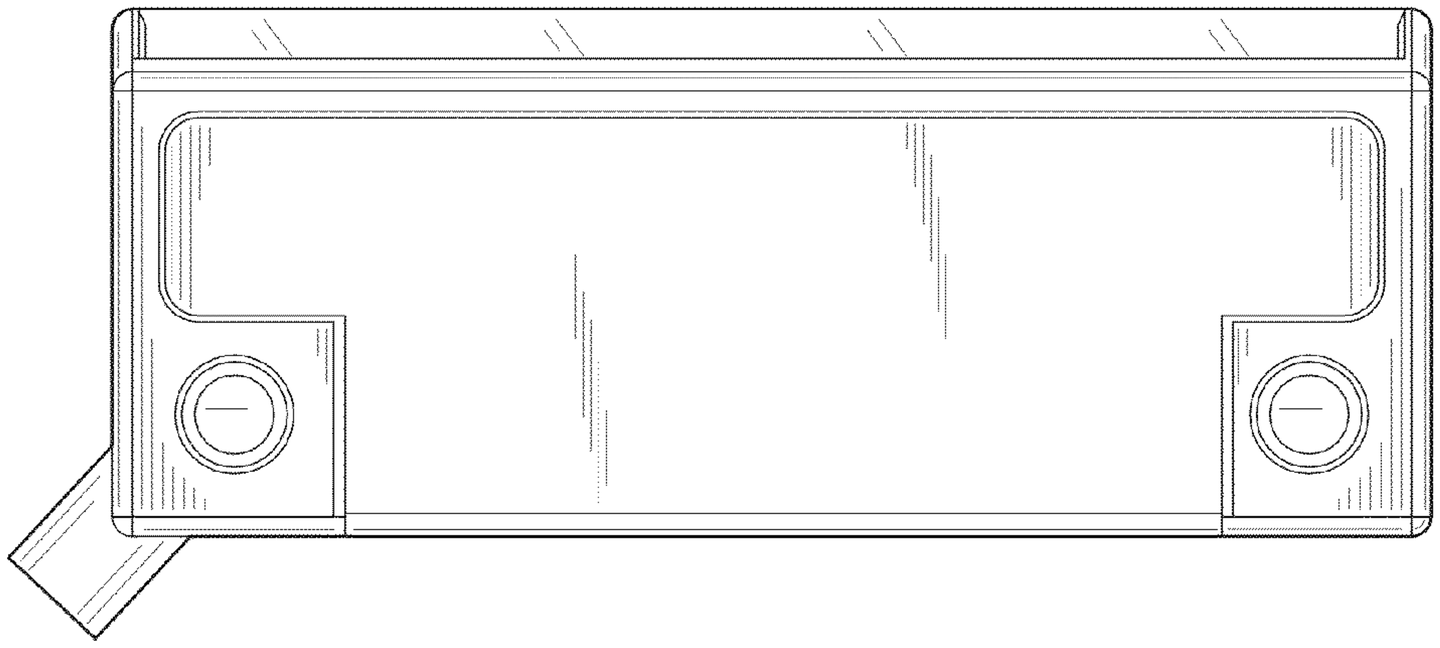


FIG. 6

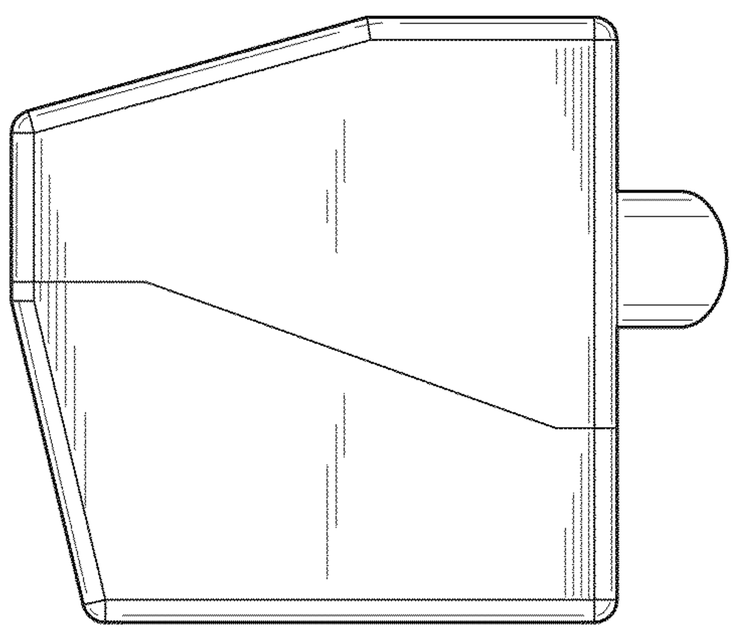


FIG. 7

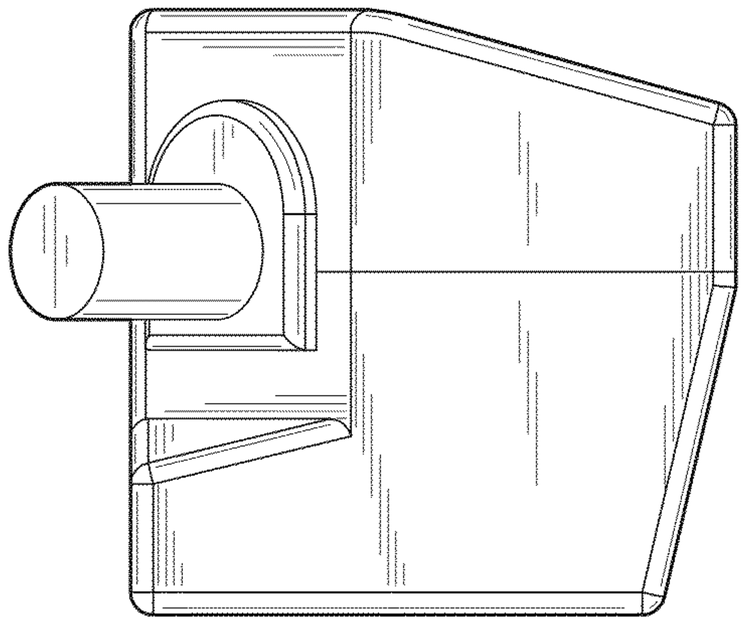


FIG. 8

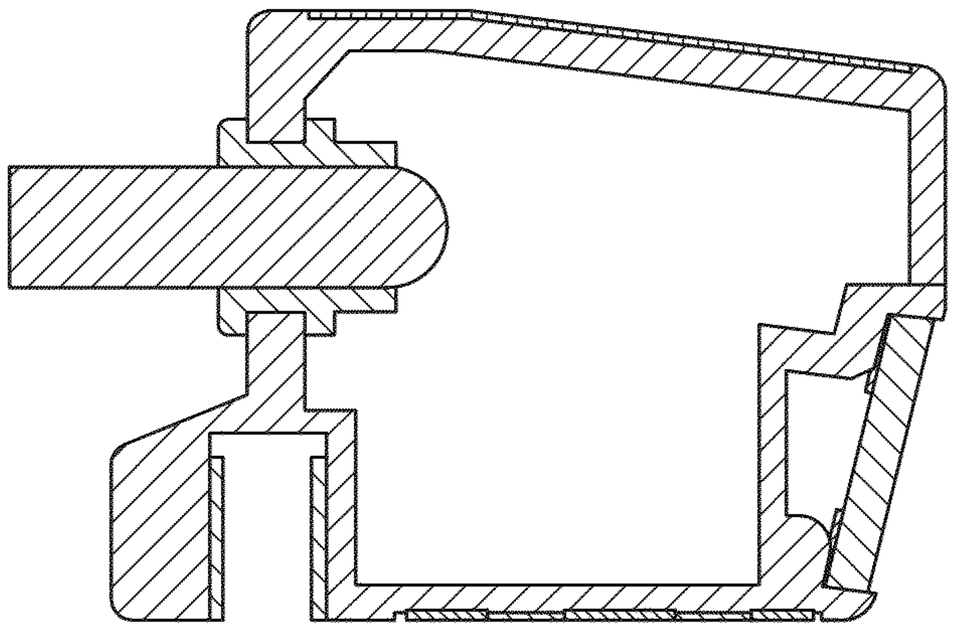


FIG. 9