



US00D892350S

(12) **United States Design Patent** (10) **Patent No.:** **US D892,350 S**
Luoma, II (45) **Date of Patent:** **** Aug. 4, 2020**

(54) **REAGENT KIT FRAME**

FOREIGN PATENT DOCUMENTS

(71) Applicant: **Abbott Laboratories**, Abbott Park, IL (US)

CA 2556772 9/2005
CN 1183057 5/1998

(Continued)

(72) Inventor: **Robert Paul Luoma, II**, Colleyville, TX (US)

OTHER PUBLICATIONS

(73) Assignee: **Abbott Laboratories**, Abbott Park, IL (US)

International Searching Authority, "Invitation to Pay Additional Fees and, Where Applicable, Protest Fee and Communication Relating to the Results of the Partial International Search," issued in connection with International Patent Application No. PCT/US2013/078036, dated Apr. 23, 2014, 7 pages.

(Continued)

(**) Term: **15 Years**

(21) Appl. No.: **29/721,476**

(22) Filed: **Jan. 21, 2020**

Primary Examiner — Susan Bennett Hattan

Assistant Examiner — Omeed Agilee

(74) *Attorney, Agent, or Firm* — Hanley, Flight & Zimmerman, LLC

Related U.S. Application Data

(60) Division of application No. 29/640,810, filed on Mar. 16, 2018, now Pat. No. Des. 875,269, which is a division of application No. 29/531,426, filed on Jun. 25, 2015, now Pat. No. Des. 815,299, which is a continuation of application No. 13/801,154, filed on Mar. 13, 2013, now Pat. No. 9,535,082.

(51) **LOC (12) Cl.** **24-02**

(52) **U.S. Cl.**
USPC **D24/224**

(58) **Field of Classification Search**
USPC D24/121, 216, 223–232; D9/423, 424, D9/455, 517; D7/300, 300.1, 316, 317, D7/598

CPC B01L 3/0234; B01L 3/50825; B01L 9/00; B01L 9/06; B01F 13/0016; B01F 13/002; G01N 35/04

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

423,362 A 3/1890 Wells
2,514,680 A 7/1950 Stafford

(Continued)

(57) **CLAIM**

The ornamental design for a "reagent kit frame," as shown and described.

DESCRIPTION

FIG. 1 is a front right perspective view of a reagent kit frame.

FIG. 2 is a front view of the reagent kit frame of FIG. 1.

FIG. 3 is a rear view of the reagent kit frame of FIG. 1.

FIG. 4 is a right side view of the reagent kit frame of FIG. 1.

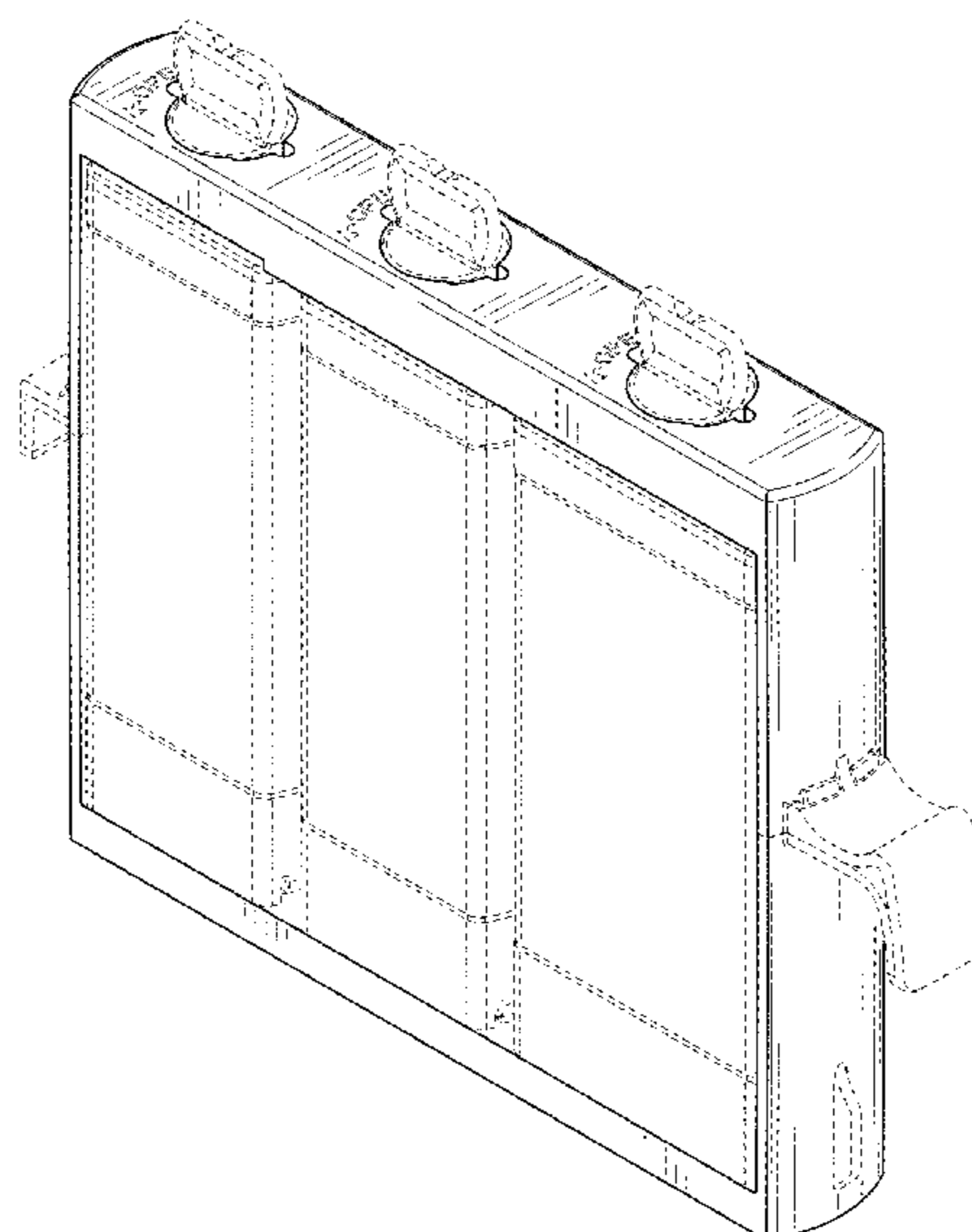
FIG. 5 is a left side view of the reagent kit frame of FIG. 1.

FIG. 6 is a top view of the reagent kit frame of FIG. 1; and,

FIG. 7 is a bottom view of the reagent kit frame of FIG. 1.

The features shown in broken lines form no part of the claimed design.

1 Claim, 4 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

3,777,652 A	12/1973	Engel	7,897,379 B2	3/2011	Kenney et al.
3,994,594 A	11/1976	Sandrock et al.	D637,731 S	5/2011	Sattler et al.
D273,987 S	5/1984	Holen et al.	7,951,344 B2	5/2011	Kikuchi et al.
4,515,753 A	5/1985	Smith et al.	7,964,140 B2	6/2011	Watari
4,557,600 A	12/1985	Klose et al.	D645,973 S	9/2011	Hoenes
4,684,614 A	8/1987	Krovak et al.	8,017,094 B2	9/2011	Meyer et al.
4,705,668 A	11/1987	Kaltenbach et al.	8,133,721 B2	3/2012	Yang et al.
4,720,374 A	1/1988	Ramachandran	8,187,558 B2	5/2012	Jacobs et al.
D297,166 S	8/1988	Hollar et al.	D665,095 S	8/2012	Wilson et al.
4,849,177 A	7/1989	Jordan	D666,736 S	9/2012	Kobayashi
4,883,763 A	11/1989	Holen et al.	D672,881 S	12/2012	Kraihanzel
4,913,309 A *	4/1990	Fink A61B 50/36 206/409	8,535,624 B2	9/2013	Luoma, II
5,005,721 A	4/1991	Jordan	D696,419 S	12/2013	Fusellier et al.
5,128,104 A	7/1992	Murphy et al.	9,149,979 B2	10/2015	Sattler et al.
D342,140 S *	12/1993	Sakagami D24/224	9,304,140 B2	4/2016	Wakamiya
5,324,481 A	6/1994	Dunn et al.	D769,456 S *	10/2016	Dulaff D24/224
D350,604 S *	9/1994	Weiss D24/121	D774,182 S *	12/2016	Davidian D24/121
D355,260 S	2/1995	Tomasso	9,535,082 B2	1/2017	Luoma, II
D358,468 S	5/1995	Howard	9,539,082 B2	1/2017	Olsen et al.
5,417,922 A	5/1995	Markin et al.	D782,060 S *	3/2017	Luoma, II D24/224
D365,153 S	12/1995	Robertson, Jr.	D782,061 S *	3/2017	Luoma, II D24/224
5,516,207 A	5/1996	Habicht	D782,062 S *	3/2017	Luoma, II D24/224
5,578,272 A	11/1996	Koch et al.	D782,063 S *	3/2017	Luoma, II D24/224
5,632,399 A	5/1997	Palmieri et al.	D815,299 S	4/2018	Luoma, II
D380,553 S *	7/1997	Riekkinen D24/224	D822,224 S	7/2018	Luoma, II et al.
5,758,786 A	6/1998	John	10,058,866 B2	8/2018	Luoma, II et al.
5,788,928 A	8/1998	Carey et al.	D848,636 S *	5/2019	Kraemer D24/224
5,811,296 A	9/1998	Chemelli et al.	D875,269 S *	2/2020	Luoma, II B01F 11/0008 D24/224
D400,263 S *	10/1998	Shugart D24/224	D875,270 S *	2/2020	Luoma, II B01L 3/5082 D24/224
5,830,411 A	11/1998	Martinell Gisper-Sauch	2002/0169518 A1	11/2002	Luoma, II et al.
D404,831 S	1/1999	Yamazaki et al.	2003/0044323 A1	3/2003	Diamond et al.
D407,826 S *	4/1999	Yamazaki D24/224	2003/0129766 A1	7/2003	Kawamura et al.
D411,014 S	6/1999	Berger et al.	2004/0005714 A1	1/2004	Safar et al.
5,908,242 A	6/1999	St. John et al.	2004/0134750 A1	7/2004	Luoma, II
5,968,453 A	10/1999	Shugart	2005/0026295 A1	2/2005	Harding et al.
6,066,300 A	5/2000	Carey et al.	2005/0106756 A1	5/2005	Blankenstein et al.
D433,149 S	10/2000	Fassbind et al.	2005/0175338 A1 *	8/2005	Ide G03D 3/06 396/647
6,149,872 A	11/2000	Mack et al.	2006/0087911 A1	4/2006	Herz et al.
6,190,617 B1	2/2001	Clark et al.	2006/0263248 A1	11/2006	Gomm et al.
6,190,619 B1	2/2001	Kilcoin et al.	2006/0286004 A1	12/2006	Jacobs et al.
6,299,567 B1	10/2001	Forrest et al.	2007/0010019 A1	1/2007	Luoma, II
6,319,719 B1	11/2001	Bhullar et al.	2007/0166193 A1	7/2007	Veen et al.
6,375,030 B1	4/2002	Spickelmire	2008/0056948 A1	3/2008	Dale et al.
6,386,749 B1	5/2002	Watts et al.	2008/0064090 A1	3/2008	Whittlinger
6,431,388 B1	8/2002	Spickelmire et al.	2008/0085222 A1	4/2008	Fukuda et al.
6,432,359 B1	8/2002	Carey et al.	2008/0226513 A1	9/2008	Morbidelli et al.
6,458,526 B1	10/2002	Schembri et al.	2008/0317632 A1	12/2008	Shimasaki et al.
6,509,193 B1	1/2003	Tajima	2009/0004058 A1	1/2009	Liang et al.
6,511,634 B1	1/2003	Bradshaw et al.	2009/0215159 A1	8/2009	Kirby
6,517,230 B1	2/2003	Afnan et al.	2009/0325309 A1	12/2009	Favuzzi et al.
6,517,783 B2	2/2003	Horner et al.	2010/0092343 A1	4/2010	Németh
6,537,505 B1	3/2003	LaBudde et al.	2010/0111765 A1	5/2010	Gomm et al.
D482,454 S	11/2003	Gebrian	2010/0190265 A1	7/2010	Dufva et al.
D502,268 S *	2/2005	Sakai D24/223	2010/0276445 A1	11/2010	Jacobs et al.
6,866,820 B1	3/2005	Otto et al.	2012/0087830 A1	4/2012	Wakamiya
D517,597 S *	3/2006	Andoh D18/56	2012/0141339 A1	6/2012	Sattler et al.
D531,736 S	11/2006	Gomm et al.	2012/0195808 A1	8/2012	Arras et al.
D532,524 S	11/2006	Gomm et al.	2012/0218854 A1	8/2012	Behringer et al.
D533,587 S *	12/2006	Andoh D18/56	2013/0059376 A1	3/2013	Justice et al.
D533,947 S	12/2006	Gomm et al.	2014/0038307 A1	2/2014	Daub et al.
D534,280 S	12/2006	Gomm et al.	2014/0269158 A1 *	9/2014	Luoma, II B01F 9/0021 366/214
7,182,912 B2	2/2007	Carey et al.	2014/0271411 A1 *	9/2014	Luoma, II B01F 9/002 422/559
7,238,521 B2	7/2007	Hahn et al.	2015/0010443 A1	1/2015	Hasegawa
7,458,483 B2	12/2008	Luoma, II	2015/0057638 A1 *	2/2015	Davidian A61M 5/31591 604/512
7,485,118 B2	2/2009	Blankenstein et al.	2015/0224500 A1	8/2015	Brueckner et al.
7,615,370 B2	11/2009	Streit et al.	2018/0252707 A1 *	9/2018	Zhang G01N 35/1002
7,628,954 B2	12/2009	Gomm et al.			
D611,821 S *	3/2010	Gabrielsson D9/517			
7,731,414 B2	6/2010	Vincent et al.			
7,736,907 B2	6/2010	Blankenstein et al.			
D620,603 S	7/2010	Talmer et al.			
7,794,656 B2	9/2010	Liang et al.			
D630,765 S	1/2011	Winkenbach et al.			
D632,402 S	2/2011	Sattler et al.			

(56)

References Cited

U.S. PATENT DOCUMENTS

2020/0072857 A1* 3/2020 Oda G01N 35/00732
 2020/0080993 A1* 3/2020 Zhang G01N 35/1002

FOREIGN PATENT DOCUMENTS

CN	1726288	1/2006
CN	101391197	3/2009
CN	101439274	5/2009
CN	101583877	11/2009
CN	102576030	12/2014
CN	201830193538	* 5/2018
CN	201830193538	5/2019
DE	202006017454	5/2007
EP	435481	7/1991
EP	831330	3/1998
EP	1855114	11/2007
EP	1687080	6/2008
EP	1733794	9/2010
EP	2255880	12/2010
GB	1307086	2/1973
JP	S527758	3/1977
JP	S56137072	10/1981
JP	S8134773	9/1983
JP	S63182040	7/1988
JP	H03102262	4/1991
JP	H06253815	9/1994
JP	H07198561	8/1995
JP	H10228689	8/1998
JP	H11515106	12/1999
JP	2000009726	1/2000
JP	2002196006	7/2002
JP	2003194828	7/2003
JP	2004061160	2/2004
JP	2005017176	1/2005
JP	2005502034	1/2005
JP	2005164509	6/2005
JP	2005181338	7/2005
JP	2006125897	5/2006
JP	2007524842	8/2007
JP	2007309740	11/2007
JP	2008026221	2/2008
JP	2008096195	4/2008
JP	4268212	5/2009
JP	2009276252	11/2009
JP	2009544959	12/2009
JP	2010509144	3/2010
JP	2011099769	5/2011
JP	2016516990	6/2016
WO	9634681	11/1996
WO	03020427	3/2003
WO	2006119361	11/2006
WO	2007125642	11/2007
WO	2008030961	3/2008
WO	2008058979	5/2008
WO	2009131705	10/2009
WO	2011091233	7/2011

OTHER PUBLICATIONS

International Searching Authority, "International Search Report and Written Opinion," issued in connection with International Patent Application No. PCT/US2013/078036, dated Jun. 25, 2014, 17 pages.
 International Searching Authority, "International Search Report and Written Opinion," issued in connection with International Patent Application No. PCT/US2013/078034, dated Sep. 12, 2014, 21 pages.
 International Searching Authority, "Invitation to Pay Additional Fees and, Where Applicable, Protest Fee and Communication Relating to the Results of the Partial International Search," issued in connection with International Patent Application No. PCT/US2013/078034, dated Jun. 3, 2014, 7 pages.

International Searching Authority, "International Preliminary Report on Patentability," issued in connection with International Patent Application No. PCT/US2013/078034, dated Sep. 24, 2015, 15 pages.
 Isaacson et al., "Hydrodynamic damping due to baffles in a rectangular tank," Canadian Journal of Civic Engineering, Jul. 21, 2001, 9 pages.
 European Patent Office, "Communication pursuant to Article 94(3) EPC," issued in connection with European Patent No. 13 821 411.9, dated Jun. 7, 2017, 8 pages.
 Japanese Patent Office, "Notice of Rejection," issued in connection with Japanese Patent Application No. 2016-500147, dated Oct. 4, 2016, 8 pages. (With Translation).
 Japanese Patent Office, "Notice of Rejection," issued in connection with Japanese Patent Application No. 2016-500148, dated Sep. 6, 2016, 11 pages. (With Translation).
 State Intellectual Property Office of the P.R. China, "Notification of Grant of Patent Right for a Design," issued in connection with Chinese Patent Application No. 201630099345.7, dated May 19, 2016, 5 pages.
 State Intellectual Property Office of the P.R. China, "Notification of Grant of Patent Right for a Design," issued in connection with Chinese Patent Application No. 201630099342.3, dated May 19, 2016, 5 pages. (With Translation).
 State Intellectual Property Office of the P.R. China, "First Office Action," issued in connection with Chinese Patent Application No. 201380076523.8, dated Oct. 18, 2016, 8 pages. (With Translation).
 State Intellectual Property Office of the P.R. China, "Second Office Action," issued in connection with Chinese Patent Application No. 201380076521.9, dated Feb. 3, 2017, 23 pages.
 State Intellectual Property Office of the P.R. China, "First Office Action and Search Report," issued in connection with Chinese Patent Application No. 201380076521.9, dated Jul. 13, 2016, 22 pages.
 United States Patent and Trademark Office, "Restriction and/or Election Requirement," issued in connection with U.S. Appl. No. 13/801,154, dated Jul. 14, 2015, 7 pages.
 United States Patent and Trademark Office, "Office Action," issued in connection with U.S. Appl. No. 13/801,154, dated Oct. 5, 2015, 6 pages.
 United States Patent and Trademark Office, "Restriction and/or Election Requirement," issued in connection with U.S. Appl. No. 13/801,451, dated Jul. 16, 2014, 6 pages.
 United States Patent and Trademark Office, "Office Action," issued in connection with U.S. Appl. No. 13/801,451, dated Feb. 18, 2015, 13 pages.
 United States Patent and Trademark Office, "Final Office Action," issued in connection with U.S. Appl. No. 13/801,451, dated Aug. 28, 2015, 16 pages.
 United States Patent and Trademark Office, "Advisory Action," issued in connection with U.S. Appl. No. 13/801,451, dated Dec. 7, 2015, 11 pages.
 United States Patent and Trademark Office, "Final Office Action," issued in connection with U.S. Appl. No. 13/801,451, dated Feb. 24, 2017, 44 pages.
 United States Patent and Trademark Office, "Non-Final Office Action," issued in connection with U.S. Appl. No. 13/801,451, dated Jun. 15, 2017, 27 pages.
 United States Patent and Trademark Office, "Office Action," issued in connection with U.S. Appl. No. 13/801,451, dated Aug. 12, 2016, 20 pages.
 United States Patent and Trademark Office, "Restriction and/or Election Requirement," issued in connection with U.S. Appl. No. 29/531,434, dated May 10, 2016, 8 pages.
 United States Patent and Trademark Office, "Ex Parte Quayle Action," issued in connection with U.S. Appl. No. 29/531,434, dated Jan. 26, 2017, 15 pages.
 United States Patent and Trademark Office, "Notice of Non-Complaint Amendment," issued in connection with U.S. Appl. No. 29/531,434, dated Jun. 29, 2017, 15 pages.
 United States Patent and Trademark Office, "Restriction and/or Election Requirement," issued in connection with U.S. Appl. No. 29/531,434, dated Sep. 6, 2016, 9 pages.

(56)

References Cited

OTHER PUBLICATIONS

United States Patent and Trademark Office, "Non-Final Office Action," issued in connection with U.S. Appl. No. 15/347,556, dated Mar. 7, 2017, 7 pages.

United States Patent and Trademark Office, "Notice of Allowance," issued in connection with U.S. Appl. No. 15/347,556, dated Jun. 14, 2017, 22 pages.

United States Patent and Trademark Office, "Restriction and/or Election Requirement," issued in connection with U.S. Appl. No. 29/531,426, dated May 16, 2016, 13 pages.

United States Patent and Trademark Office, "Restriction and/or Election Requirement," issued in connection with U.S. Appl. No. 29/531,426, dated Aug. 18, 2016, 9 pages.

United States Patent and Trademark Office, "Ex Parte Quayle Action," issued in connection with U.S. Appl. No. 29/531,426, dated Dec. 30, 2016, 11 pages.

United States Patent and Trademark Office, "Notice of Non-Complaint Amendment," issued in connection with U.S. Appl. No. 29/531,426, dated Jun. 29, 2017, 7 pages.

United States Patent and Trademark Office, "Notice of Allowance," issued in connection with U.S. Appl. No. 29/531,426, dated Dec. 14, 2017, 11 pages.

United States Patent and Trademark Office, "Notice of Allowance," issued in connection with U.S. Appl. No. 29/531,426, dated Jan. 11, 2018, 2 pages.

United States Patent and Trademark Office, "Notice of Allowance," issued in connection with U.S. Appl. No. 29/531,434, dated Jan. 3, 2018, 7 pages.

European Patent Office, "Communication pursuant to Rules 161(1) and 162 EPC," issued in connection with European Patent Application No. 13821412.7, dated Oct. 28, 2015, 2 pages.

State Intellectual Property Office of the P.R. China, "Second Office Action," issued in connection with Chinese Patent Application No. 201380076523.8, dated Jun. 12, 2017, 14 pages.

International Bureau, "International Preliminary Report on Patentability," issued in connection with PCT Application No. PCT/US2013/078036, dated Sep. 24, 2015, 12 pages.

European Patent Office, "Communication pursuant to Article 94(3) EPC," issued in connection with European Patent No. 13 821 411.9, dated Feb. 26, 2018, 5 pages.

State Intellectual Property Office of the P.R. China, "Third Office Action," issued in connection with Chinese Patent Application No. 201380076521.9, dated Jul. 28, 2017, 25 pages.

United States Patent and Trademark Office, "Notice of Allowance and Fee(s) Due," issued in connection with U.S. Appl. No. 13/801,154; dated Jul. 29, 2016, 5 pages.

United States Patent and Trademark Office, "Final Office Action," issued in connection with U.S. Appl. No. 13/801,451, dated Dec. 29, 2017, 34 pages.

Japanese Patent Office, "Notice of Rejection," issued in connection with Japanese Patent Application No. 2017-020086, dated Nov. 21, 2017, 4 pages.

Japanese Patent Office, "Notice of Rejection," issued in connection with Japanese Patent Application No. 2017-035886, dated Mar. 27, 2018, 17 pages.

European Patent Office, "Communication pursuant to Article 94(3) EPC," issued in connection with European Patent No. 13 821 412.7, dated Jun. 29, 2018, 5 pages.

European Patent Office, "Communication pursuant to Article 94(3) EPC," issued in connection with European Patent No. 13 821 412.7, dated Oct. 17, 2018, 4 pages.

European Patent Office, "Extended European Search Report," issued in connection with European Patent No. 19171575.4, dated Aug. 2, 2019, 8 pages.

United States Patent and Trademark Office, "Non-Final Office Action", issued in connection with U.S. Appl. No. 29/640,810 dated Jun. 14, 2019, 42 pages.

Japanese Patent Office, "Notice of Rejection," issued in connection with Japanese Patent Application No. 2018-121565, dated Jul. 23, 2019, 12 pages.

European Patent Office, "Extended European Search Report," issued in connection with European Patent No. 19177884.4, dated Sep. 27, 2019, 9 pages.

United States Patent and Trademark Office, "Non-Final Office Action", issued in connection with U.S. Appl. No. 29/640,815 dated Jun. 14, 2019, 6 pages.

United States Patent and Trademark Office, "Notice of Allowance and Fee(s) Due", issued in connection with U.S. Appl. No. 29/640,815 dated Oct. 4, 2019, 15 pages.

United States Patent and Trademark Office, "Notice of Allowance and Fee(s) Due", issued in connection with U.S. Appl. No. 29/640,810 dated Oct. 3, 2019, 14 pages.

United States Patent and Trademark Office, "Notice of Allowance and Fee(s) Due", issued in connection with U.S. Appl. No. 15/730,524 dated Jan. 2, 2020, 7 pages.

Japanese Patent Office, "Notice of Rejection", issued in connection with U.S. Appl. No. 2018244230 dated Feb. 4, 2020, translation included, 15 pages.

* cited by examiner

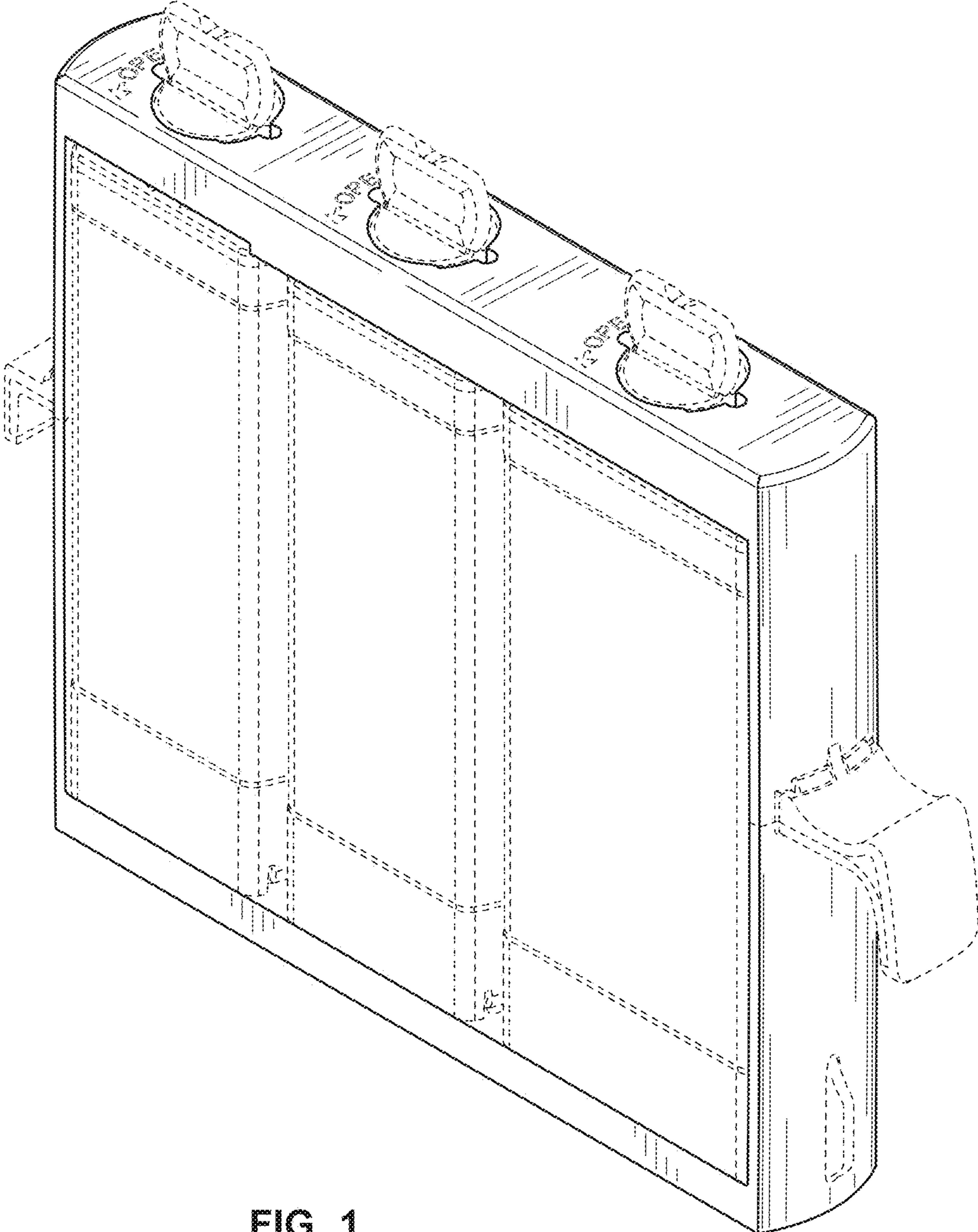


FIG. 1

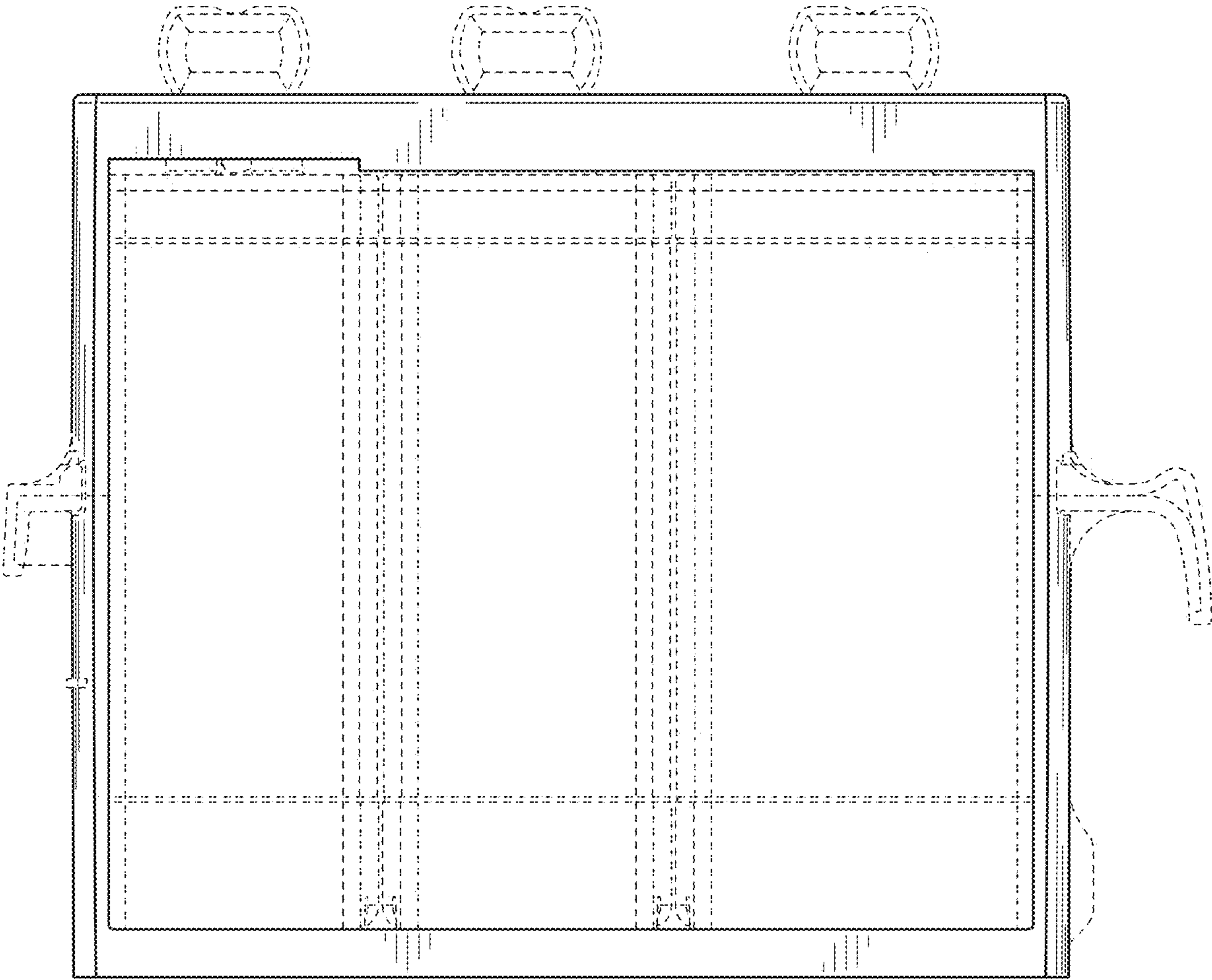


FIG. 2

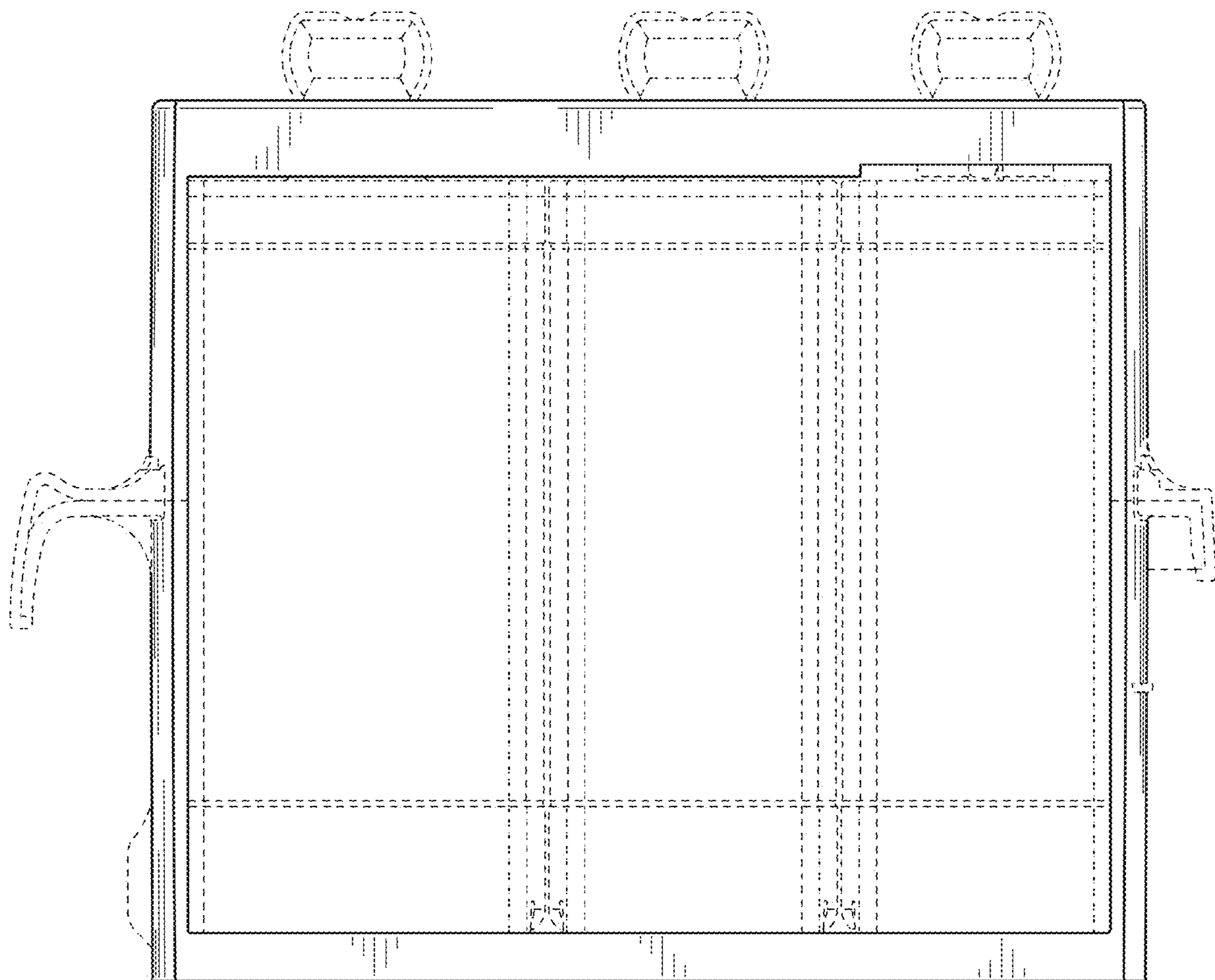


FIG. 3

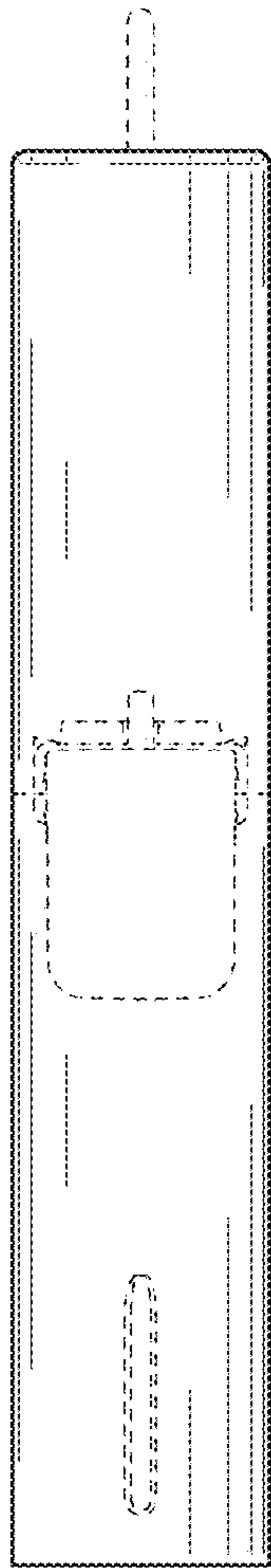


FIG. 4

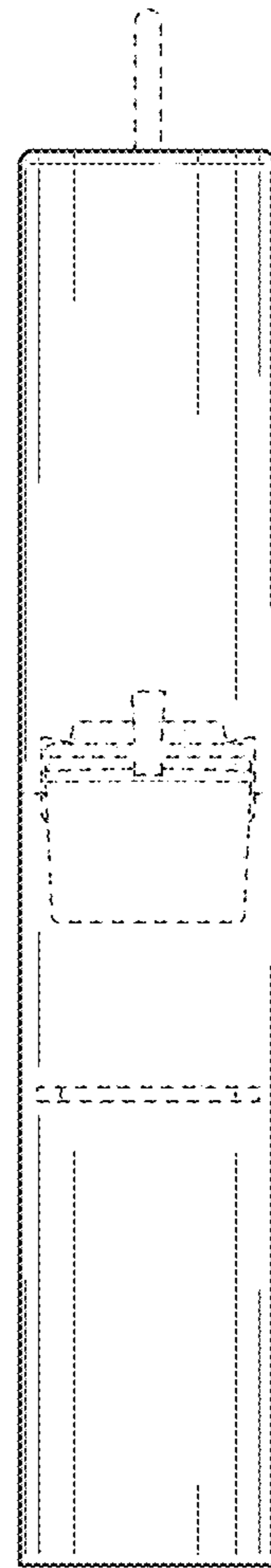


FIG. 5

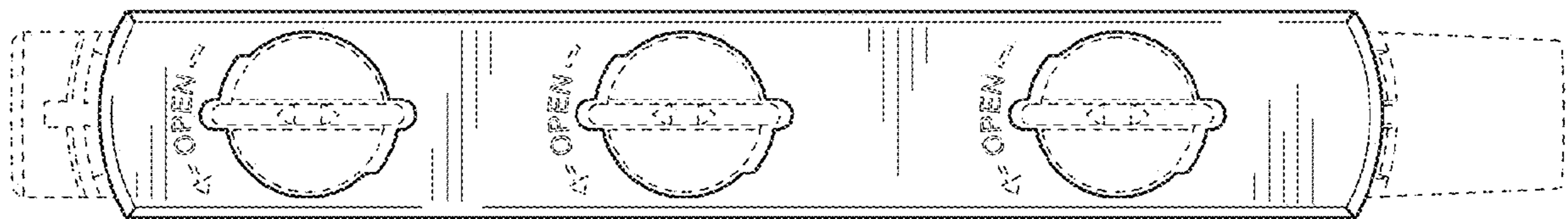


FIG. 6

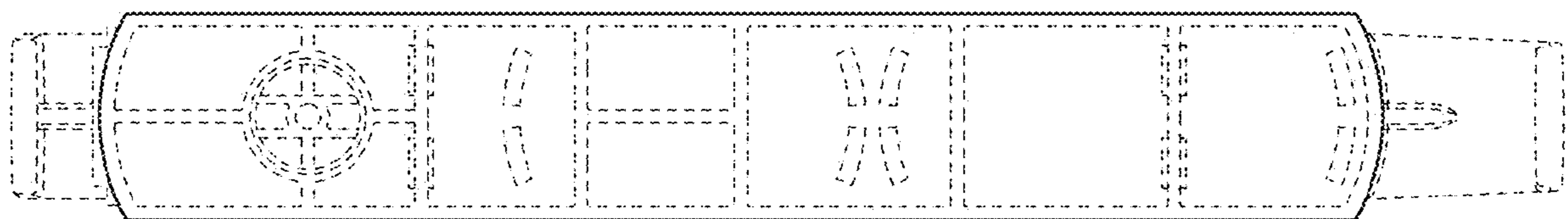


FIG. 7