US00D888836S

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

(10) **Patent No.: US D888,836 S**
(45) **Date of Patent: ** Jun. 30, 2020**

(54) **GAMING MACHINE**

(71) Applicant: **AGS LLC**, Las Vegas, NV (US)

(72) Inventors: **Sigmund Lee**, Atlanta, GA (US); **Karl Frederick Zedell, Jr.**, Alpharetta, GA (US); **Rachel Calhoun Lewis**, Atlanta, GA (US); **Wei Gu**, Daly City, CA (US); **Ariel David Turgel**, San Francisco, CA (US); **Daniel Kendall Harden**, Palo Alto, CA (US)

(73) Assignee: **AGS LLC**, Las Vegas, NV (US)

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

(21) Appl. No.: **29/673,702**

(22) Filed: **Dec. 17, 2018**

Related U.S. Application Data

(60) Continuation of application No. 29/631,063, filed on Dec. 27, 2017, now Pat. No. Des. 844,063, which is
(Continued)

(51) **LOC (12) Cl.** **21-03**
(52) **U.S. Cl.**
USPC **D21/369**
(58) **Field of Classification Search**
USPC D21/369, 370, 371, 385, 329, 325, 394; 463/28, 13, 11, 16, 20, 25, 31, 46, 23, 30,
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,440,457 A 4/1984 Fogelman et al.
D275,117 S 8/1984 Heywood
(Continued)

FOREIGN PATENT DOCUMENTS

AU 338369 9/2011
AU 201711655 4/2017
(Continued)

OTHER PUBLICATIONS

Bluebird Slant Widescreen literature from www.wms.com/technologyandinnovation_cabinets_widescrcen.php dated May 19, 2009, showing a giuning machine cabinet that was sold and/or publicly disclosed at least as early as Dec. 13, 2008.
(Continued)

Primary Examiner — Ryan Harvey
(74) *Attorney, Agent, or Firm* — Weide & Miller, Ltd.

(57) **CLAIM**

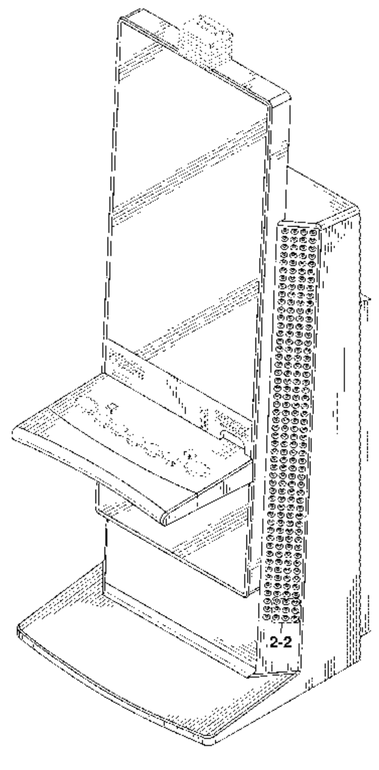
The ornamental design for a gaming machine, as shown and described.

DESCRIPTION

FIG. **1** is a front perspective view from above of the claimed design;
FIG. **2** is an enlarged view of the portion of FIG. **1** labeled **2-2**;
FIG. **3** is a front elevation view of the claimed design of FIG. **1**;
FIG. **4** is an enlarged view of the portion of FIG. **2** labeled **4-4**;
FIG. **5** is a rear elevation view of the claimed design of FIG. **1**;
FIG. **6** is a first side view of the claimed design of FIG. **1**;
FIG. **7** is a second side view of the claimed design of FIG. **1**;
FIG. **8** is a top plan view of the claimed design of FIG. **1**; and,
FIG. **9** is a bottom plan view of the claimed design of FIG. **1**.

The broken lines showing portions of the gaming machine depict the boundaries of the claimed design and form no part of the claimed design.

1 Claim, 6 Drawing Sheets



Related U.S. Application Data

a division of application No. 29/540,241, filed on Sep. 22, 2015, now Pat. No. Des. 820,915.

(58) **Field of Classification Search**

USPC .. 463/17, 36, 29, 42, 34, 32, 35, 19, 21, 22; 273/292, 203, 138.2, 143 R, 142 R, 138.1; D19/60; D16/226; D26/14

CPC G07F 17/32; G07F 17/34; G07F 17/3211; G07F 17/3244; G07F 17/3267

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,844,567	A	7/1989	Chalabian
4,918,579	A	4/1990	Bennett
D307,771	S	5/1990	Cesaroni et al.
5,057,827	A	10/1991	Nobile et al.
5,108,099	A	4/1992	Smyth
5,113,990	A	5/1992	Gabrius et al.
D333,164	S	2/1993	Kraft et al.
5,302,965	A	4/1994	Belcher et al.
D352,330	S	11/1994	Smith
5,381,502	A	1/1995	Veligdan
5,521,587	A	5/1996	Sawabe et al.
D373,809	S	9/1996	Hirato
5,561,346	A	10/1996	Byrne
D378,604	S	3/1997	Brettschneider
D380,014	S	6/1997	Yang
D381,697	S	7/1997	Brettschneider
D381,700	S	7/1997	Brettschneider
5,670,971	A	9/1997	Tokimoto et al.
D386,796	S	11/1997	Komori
D388,469	S	12/1997	Dickenson et al.
5,695,402	A	12/1997	Stupak
5,813,914	A	9/1998	McKay et al.
5,818,401	A	10/1998	Wang
5,826,882	A	10/1998	Ward
5,836,819	A	11/1998	Ugawa
D407,758	S	4/1999	Isetani et al.
D410,039	S	5/1999	McClellan
D413,635	S	9/1999	Taylor
D421,631	S	3/2000	Tsuda
D424,122	S	5/2000	Dickenson et al.
6,068,101	A	5/2000	Dickenson et al.
D428,062	S	7/2000	Hayashi
6,095,526	A	8/2000	Cook, II
6,135,884	A	10/2000	Hedrick et al.
6,164,645	A	12/2000	Weiss
D436,380	S	1/2001	Brettschneider
6,176,584	B1	1/2001	Best et al.
6,183,109	B1	2/2001	Nelson et al.
6,186,645	B1	2/2001	Camarota
6,201,703	B1	3/2001	Yamada et al.
D439,931	S	4/2001	Yamaguchi
D442,640	S	5/2001	Hayashi
6,265,984	B1	7/2001	Molinaroli
D446,252	S	8/2001	Yamaguchi
D447,052	S	8/2001	Goserud
6,278,419	B1	8/2001	Malkin
6,283,608	B1	9/2001	Straat
6,319,125	B1	11/2001	Acres
6,332,690	B1	12/2001	Murofushi
6,334,612	B1	1/2002	Wurz et al.
D456,750	S	5/2002	McWilliams et al.
D459,402	S	6/2002	Wurz et al.
D460,915	S	7/2002	Lynch
6,443,837	B1	9/2002	Jaffe et al.
D464,377	S	10/2002	Wurz et al.
D466,160	S	11/2002	Hirato et al.
6,475,087	B1	11/2002	Cole
D471,594	S	3/2003	Nojo
6,577,286	B1	6/2003	Jang
6,578,847	B1	6/2003	Hendrick et al.
6,579,174	B1	6/2003	Lane et al.
6,592,238	B2	7/2003	Cleaver et al.
D481,078	S	10/2003	Stephan
6,641,484	B2	11/2003	Oles et al.
6,682,418	B1	1/2004	Mendes et al.
6,702,409	B2	3/2004	Hedrick et al.
D489,417	S	5/2004	Munoz et al.
D492,676	S	7/2004	Monson et al.
6,776,504	B2	8/2004	Sloan et al.
D495,754	S	9/2004	Wurz et al.
D495,755	S	9/2004	Wurz et al.
D496,407	S	9/2004	Gadda et al.
D498,267	S	11/2004	Crouch
D499,019	S	11/2004	Sagmeister et al.
6,834,979	B1	12/2004	Cleaver et al.
6,860,814	B2	3/2005	Cole
6,897,624	B2	5/2005	Lys et al.
6,899,626	B1	5/2005	Luciano et al.
6,906,860	B2	6/2005	Starkweather
D508,268	S	8/2005	Hanchar et al.
D508,961	S	8/2005	Gatto et al.
6,948,829	B2	9/2005	Verdes et al.
D513,044	S	12/2005	Morrison
6,997,810	B2	2/2006	Cole
7,014,563	B2	3/2006	Stephan et al.
D523,092	S	6/2006	Karlsson
D525,664	S	7/2006	Cole
7,123,811	B1	10/2006	Chen et al.
D535,338	S	1/2007	Linard et al.
7,178,941	B2	2/2007	Roberge et al.
7,213,941	B2	5/2007	Sloan et al.
7,237,925	B2	7/2007	Mayer et al.
7,284,876	B2	10/2007	Ericson
D554,708	S	11/2007	Gutknecht et al.
D557,348	S	12/2007	Gutknecht et al.
D557,349	S	12/2007	Linard et al.
D559,917	S	1/2008	Cole
D560,724	S	1/2008	Johnson
D560,725	S	1/2008	Johnson
7,331,694	B2	2/2008	Lee et al.
D563,481	S	3/2008	Looks et al.
D564,601	S	3/2008	Strahinic et al.
7,339,782	B1	3/2008	Landes et al.
D566,197	S	4/2008	Greenberg et al.
7,355,573	B2	4/2008	Ogawa
7,364,505	B2	4/2008	Mattice et al.
7,367,145	B2	5/2008	Mou
7,367,685	B2	5/2008	Moll
7,390,257	B2	6/2008	Paulsen et al.
D573,200	S	7/2008	Hashimoto et al.
D573,201	S	7/2008	Hashimoto et al.
7,397,387	B2	7/2008	Suzuki et al.
7,423,864	B2	9/2008	Kim et al.
7,442,125	B2	10/2008	Paulsen et al.
7,476,154	B2	1/2009	Kogo et al.
D586,866	S	2/2009	Hsu
7,506,463	B2	3/2009	Hoist
7,506,997	B1	3/2009	Eriksson
7,513,830	B2	4/2009	Hajder et al.
D592,053	S	5/2009	Suzuki
D592,709	S	5/2009	McComb et al.
D599,859	S	9/2009	Lesley et al.
D602,772	S	10/2009	Suzuki et al.
D603,909	S	11/2009	De Viveiros Ortiz
D604,368	S	11/2009	Lesley et al.
D605,231	S	12/2009	Hashimoto et al.
7,641,554	B2	1/2010	Paulsen et al.
7,654,899	B2	2/2010	Durham et al.
7,667,891	B2	2/2010	Cok et al.
D613,802	S	4/2010	Meyers et al.
D615,598	S	5/2010	McComb et al.
D616,039	S	5/2010	Bruzzese et al.
7,708,640	B2	5/2010	Burak et al.
D619,177	S	7/2010	Lee
D619,660	S	7/2010	Cole et al.
D622,323	S	8/2010	De Viveiros Ortiz
7,803,053	B2	9/2010	Atkinson
D626,182	S	10/2010	Cole et al.
D626,183	S	10/2010	Cole et al.
D627,008	S	11/2010	Bruzzese et al.

(56) **References Cited**

U.S. PATENT DOCUMENTS

7,826,006	B2		11/2010	Koganezawa
7,828,461	B2		11/2010	Mayer et al.
7,833,102	B2		11/2010	Beadell et al.
D632,342	S		2/2011	Wen
D633,950	S		3/2011	Terpstra et al.
D636,822	S		4/2011	Levitan et al.
7,927,218	B2		4/2011	Kopera et al.
7,966,485	B2		6/2011	Chen et al.
D646,336	S		10/2011	Kelly et al.
D649,605	S		11/2011	Terpstra et al.
8,054,243	B2		11/2011	Sokolov et al.
8,075,385	B2		12/2011	Jackson
8,241,124	B2		8/2012	Kelly et al.
8,272,957	B2		9/2012	Crowder, Jr. et al.
D671,425	S		11/2012	Huljak et al.
D673,619	S		1/2013	Seelig
D673,620	S		1/2013	Johnson et al.
D673,621	S		1/2013	Johnson et al.
D677,736	S		3/2013	Dorn et al.
D678,761	S		3/2013	Cooper
8,430,756	B2		4/2013	McComb et al.
D684,216	S		6/2013	Terpstra et al.
D684,637	S		6/2013	Shelley et al.
D685,033	S		6/2013	Wudtke
D685,435	S		7/2013	Hohman et al.
8,550,913	B2		10/2013	Kelly et al.
D696,109	S		12/2013	Wilker
D697,558	S		1/2014	Myers et al.
8,651,963	B1		2/2014	Thompson
D701,114	S		3/2014	Baumwald et al.
D704,273	S		5/2014	Chudek
D705,872	S		5/2014	Ortiz
D706,741	S		6/2014	Myers
D707,646	S		6/2014	Kim et al.
D708,676	S		7/2014	Ballman et al.
8,814,707	B2		8/2014	Slattery
D712,975	S		9/2014	Lesley et al.
8,827,819	B2		9/2014	Thompson
D714,875	S		10/2014	Wudtke et al.
D715,364	S		10/2014	Wudtke et al.
8,851,989	B2		10/2014	Rosander et al.
D719,615	S		12/2014	Inoue et al.
D719,616	S		12/2014	Inoue et al.
D720,211	S		12/2014	Brown et al.
D721,766	S		1/2015	Ferrazoli
D721,767	S		1/2015	Ferrazoli
D723,022	S		2/2015	Miles
D723,626	S		3/2015	Vasquez et al.
8,974,297	B2		3/2015	Massing et al.
D727,431	S		4/2015	Themann
D730,993	S		6/2015	Castro et al.
D732,520	S		6/2015	Themann
D733,088	S		6/2015	Garneau et al.
9,064,372	B2		6/2015	Rasmussen et al.
D740,887	S		10/2015	Randazzo
D740,888	S		10/2015	DePalma et al.
D742,974	S		11/2015	Lesley
D742,975	S		11/2015	Myers et al.
D745,093	S		12/2015	Weiss et al.
D756,236	S		5/2016	DePaz et al.
D760,846	S		7/2016	Castro et al.
D762,613	S		8/2016	Garneau et al.
D763,361	S		8/2016	Rosander et al.
RE46,169	E		10/2016	Kelly et al.
D770,090	S		10/2016	Zahr et al.
9,478,097	B2		10/2016	Hennessy et al.
9,504,919	B2		11/2016	Taylor et al.
D776,801	S		1/2017	Tamura et al.
9,573,050	B2		2/2017	Thompson et al.
9,679,435	B2		6/2017	Schrementi et al.
9,711,001	B2		7/2017	Zedell, Jr. et al.
9,745,107	B2		8/2017	Zahr et al.
D798,389	S		9/2017	Weiss et al.
D801,437	S		10/2017	Hohman
D803,323	S		11/2017	Bussey et al.
D803,324	S		11/2017	Bussey et al.
D810,833	S		2/2018	Rosander et al.
D812,146	S		3/2018	Castro et al.
D812,147	S		3/2018	Castro et al.
D812,148	S		3/2018	Castro et al.
D812,149	S		3/2018	Castro et al.
D813,954	S		3/2018	Calhoun et al.
D818,048	S		5/2018	Calhoun et al.
D819,747	S		6/2018	Castro et al.
D820,915	S		6/2018	Lee et al.
D822,117	S		7/2018	Costa
D826,338	S	*	8/2018	Bussey D21/369
D832,355	S		10/2018	Castro et al.
D832,356	S		10/2018	Castro et al.
D833,534	S	*	11/2018	Lee D21/369
D834,652	S	*	11/2018	Lee D21/369
D835,841	S	*	12/2018	Xu D27/167
D836,164	S		12/2018	Castro et al.
D842,930	S		3/2019	Johnson et al.
D842,932	S		3/2019	Stair et al.
D842,933	S		3/2019	Castro et al.
D843,458	S		3/2019	Castro et al.
D843,459	S		3/2019	Castro et al.
D843,460	S		3/2019	Castro et al.
D843,461	S		3/2019	Castro et al.
D843,467	S		3/2019	Johnson et al.
D843,468	S		3/2019	Johnson et al.
D843,473	S	*	3/2019	Zedell, Jr. D21/369
D843,474	S		3/2019	Lesley et al.
D843,475	S		3/2019	Lesley et al.
D843,476	S		3/2019	Lesley et al.
D843,477	S		3/2019	Lesley et al.
D843,478	S		3/2019	Lesley et al.
D843,479	S		3/2019	Castro et al.
D843,480	S		3/2019	Castro et al.
D843,482	S	*	3/2019	Holland D21/396
D844,062	S		3/2019	Lesley et al.
D844,063	S	*	3/2019	Lee D21/369
2003/0064814	A1		4/2003	Stephan et al.
2004/0001335	A1		1/2004	Wu
2004/0053663	A1		3/2004	Paulsen et al.
2004/0053699	A1		3/2004	Rasmussen et al.
2004/0224776	A1		11/2004	Nagano
2004/0229698	A1		11/2004	Lind et al.
2005/0059486	A1		3/2005	Kaminkow
2005/0130746	A1		6/2005	Stephenson, III et al.
2005/0215325	A1		9/2005	Nguyen et al.
2005/0261057	A1		11/2005	Bleich et al.
2006/0030412	A1		2/2006	Cole
2006/0073900	A1		4/2006	Cole
2006/0094511	A1		5/2006	Roireau
2006/0100013	A1		5/2006	Enzminger
2006/0131810	A1		6/2006	Nicely
2006/0183552	A1		8/2006	DiMichele
2006/0193124	A1		8/2006	Moll
2006/0205498	A1		9/2006	Kogo et al.
2007/0010318	A1		1/2007	Rigsby et al.
2007/0035965	A1		2/2007	Holst
2007/0060387	A1		3/2007	Enzminger et al.
2007/0149291	A1		6/2007	Mitchell
2007/0159820	A1		7/2007	Crandell et al.
2007/0171640	A1		7/2007	Sloan et al.
2007/0197301	A1		8/2007	Cole
2007/0225079	A1		9/2007	Cole
2007/0287527	A1		12/2007	Tanabe et al.
2007/0287528	A1		12/2007	Hirato et al.
2007/0287544	A1		12/2007	Hirato et al.
2008/0020838	A1		1/2008	Slattery
2008/0076553	A1		3/2008	Paulsen et al.
2008/0113794	A1	*	5/2008	Cole G07F 17/32 463/31
2008/0119288	A1		5/2008	Rasmussen
2008/0186415	A1		8/2008	Boud et al.
2008/0194313	A1		8/2008	Walker
2008/0227522	A1		9/2008	Toyoda
2008/0248852	A1		10/2008	Rasmussen
2008/0268949	A1		10/2008	Dell
2008/0311987	A1		12/2008	Hirato
2009/0011839	A1		1/2009	Cole

(56) **References Cited**

U.S. PATENT DOCUMENTS

2009/0036208	A1	2/2009	Pennington et al.	
2009/0045723	A1	2/2009	Ishikawa	
2009/0179597	A1	7/2009	Salmon	
2009/0247261	A1	10/2009	Koami	
2009/0275389	A1	11/2009	Englman et al.	
2010/0016084	A1	1/2010	Bleich et al.	
2010/0020546	A1	1/2010	Kukita	
2010/0120518	A1	5/2010	Borissov et al.	
2010/0120541	A1	5/2010	Lesley	
2010/0137060	A1	6/2010	Cole	
2011/0118034	A1	5/2011	Jaffe	
2011/0136573	A1	6/2011	McComb et al.	
2011/0195775	A1	8/2011	Wells	
2011/0319152	A1	12/2011	Ross et al.	
2012/0178523	A1	7/2012	Greenberg	
2013/0084948	A1*	4/2013	Watkins	G07F 17/3276 463/23
2014/0087887	A1	3/2014	Chudek	
2014/0132891	A1	5/2014	Tohyama	
2014/0206432	A1*	7/2014	Radek	G07F 17/3223 463/25
2014/0250409	A1	9/2014	Shah et al.	
2014/0256409	A1	9/2014	Wood et al.	
2014/0268876	A1	9/2014	Lee et al.	
2014/0323212	A1	10/2014	Thompson et al.	
2015/0087403	A1	3/2015	Castro et al.	
2015/0141113	A1	5/2015	Melnick et al.	
2015/0269810	A1	9/2015	Wolf	
2015/0336005	A1	11/2015	Melnick et al.	
2017/0178443	A1	6/2017	Calhoun et al.	
2017/0178444	A1	6/2017	Lee et al.	
2018/0075689	A1	3/2018	Castro et al.	
2018/0078854	A1	3/2018	Achmueller et al.	
2018/0082523	A1*	3/2018	Palermo	G07F 17/3216
2018/0165913	A1*	6/2018	Ito	G07F 17/32
2019/0012874	A1	1/2019	Goldstein et al.	
2019/0073879	A1	3/2019	Marks	
2019/0096161	A1	3/2019	Barbour et al.	
2019/0096166	A1	3/2019	Shimizu et al.	
2019/0096169	A1*	3/2019	Tovar	G07F 17/3216
2019/0096170	A1*	3/2019	Lewis	G07F 17/3216
2019/0096173	A1*	3/2019	Brandau	G07F 17/3223
2019/0096174	A1*	3/2019	Ambrecht	G07F 17/3223
2019/0102974	A1*	4/2019	Bussey	G07F 17/3211
2019/0102983	A1	4/2019	Gallagher et al.	
2019/0102984	A1*	4/2019	Gallagher	G07F 17/3216

FOREIGN PATENT DOCUMENTS

AU	201713995	7/2017
AU	201713998	7/2017
CL	201000683	12/2011
CL	201302246	2/2014
CL	201702159	10/2017
CN	1449298	10/2003
CN	302535459	8/2013
CN	302781022	4/2014
CN	303133978	3/2015
CN	105308656	2/2016
CN	303617588	3/2016
CN	303932486	11/2016
CN	304030396	2/2017
CN	304030398	2/2017
CN	304081281	3/2017
CN	304104111	4/2017
CN	304201004	7/2017
CN	304284046	9/2017
CN	304284113	9/2017
CN	304287919	9/2017
DE	49812561-0001	7/1999
DE	49812561-0002	7/1999
DE	49812561-0003	7/1999
DE	49812561-0004	7/1999
DE	40108464-0001	5/2002
DE	40202624-0001	5/2002
DE	102014016643	5/2016
EM	000227822-0005	9/2004
EM	000776687-0003	8/2007
EM	000857347-0009	1/2008
EM	000972724-0001	7/2008
EM	000975727-0001	7/2008
EM	001598418-0004	8/2009
EM	001688540-0002	3/2010
EM	001724873-0005	6/2010
EM	002081661-0005	7/2012
JP	D1135500	1/2002
JP	D1137636	2/2002
JP	D1144223	4/2002
JP	3443415	9/2003
JP	2006-37425	2/2006
JP	4264361	5/2009
JP	4792318	10/2011
JP	2013-78625	5/2013
JP	5294616	9/2013
JP	5317478	10/2013
JP	D1502479	6/2014
JP	D1502928	6/2014
JP	D1512277	10/2014
JP	D1525593	5/2015
JP	D1529194	6/2015
JP	D1536549	10/2015
JP	D1536665	10/2015
JP	6018136	11/2016
JP	2017-06582	1/2017
JP	D1589479	10/2017
JP	D1589480	10/2017
KR	300710844	9/2013
KR	300755913	8/2014
KR	20150105999	9/2015
KR	101677267	11/2016
TW	D169011	7/2015
TW	D177195	7/2016
WO	D093245-0001	11/2016

OTHER PUBLICATIONS

Spec International, Inc., GEN-311 gaming machine cabinet, publicly disclosed at least as early as Dec. 13, 2008.

International Search Report and Written Opinion for PCT/US16/66904 dated Apr. 25, 2017, 12 pages.

Icon by AGS, http://www.playags.com/portfolio/icon/, 3 pages, Feb. 23, 2016.

Orion by AGS, http://www.playags.com/portfolio/orion/, 3 pages, Sep. 15, 2016.

Non-Published U.S. Appl. No. 12/947,695, filed Nov. 16, 2010, titled Edge Lighted Gaming Panels for Electronic Gaming Device.

Genesis DV1 Cabinets by Cadillac Jack circa 2010, 4 pages.

Infinity Super Skybox by Incredible Technologies, https://gaming.itsgames.com/cabinets/infinity-super-skybox, Aug. 11, 2016.

Super Sky Wheel Slot Makes World Premiere at Borgata—Borgata Blog, http://blog.theborgata.com/2016/06/16/super-sky-wheel-slot-makes-world-premiere-at-borgata/, Jun. 16, 2016.

Aristocrat Brings the Game Forward With Advanced New Helix Slant Cabinet, Market Wired, http://www.marketwired.com/press-release/aristocrat-brings-the-game-forward-with-advanced-new-helix-slant-cabinet-asx-a11-1904223.htm, Apr. 29, 2014.

Helix+ by Aristocrat, 2016.

Helix Upright by Aristocrat, 2014.

b.POD by Bluberi, https://www.bluberi.com/bluberi-bpod/, Accessed Feb. 27, 2018.

Bluberi Set to Reveal Dramatic New Product Line-Up at G2E 2017, Press Release, Soloazar, http://www.soloazar.com/international/noticia/19870-Bluberi-Set-to-Reveal-Dramatic-New-Product-Line-Up-at-G2E-2017, Sep. 15, 2017.

AGS LLC; Exhibit 22 to Response to Office Action filed Jul. 27, 2018 with the U.S. Patent and Trademark Office in U.S. Trademark Application Serial No. 87/620,830; 24 pages.

* cited by examiner

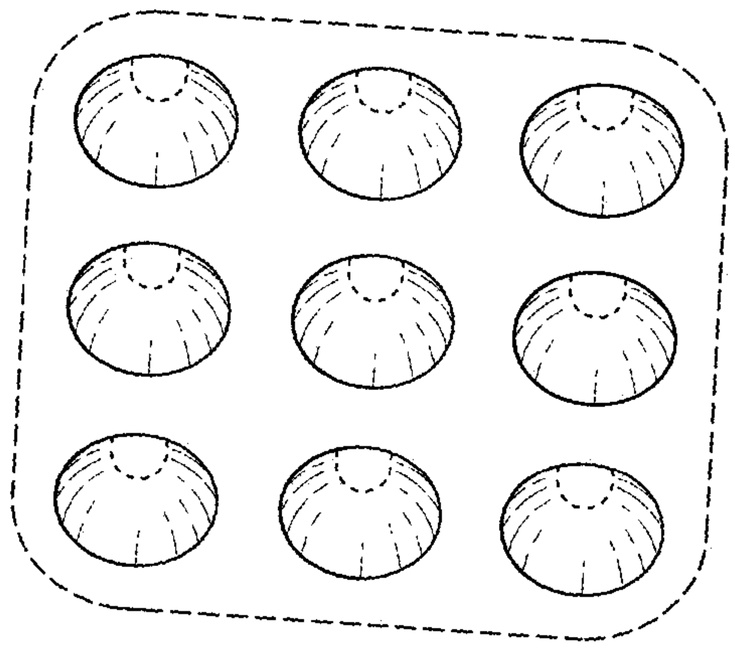


FIG. 2

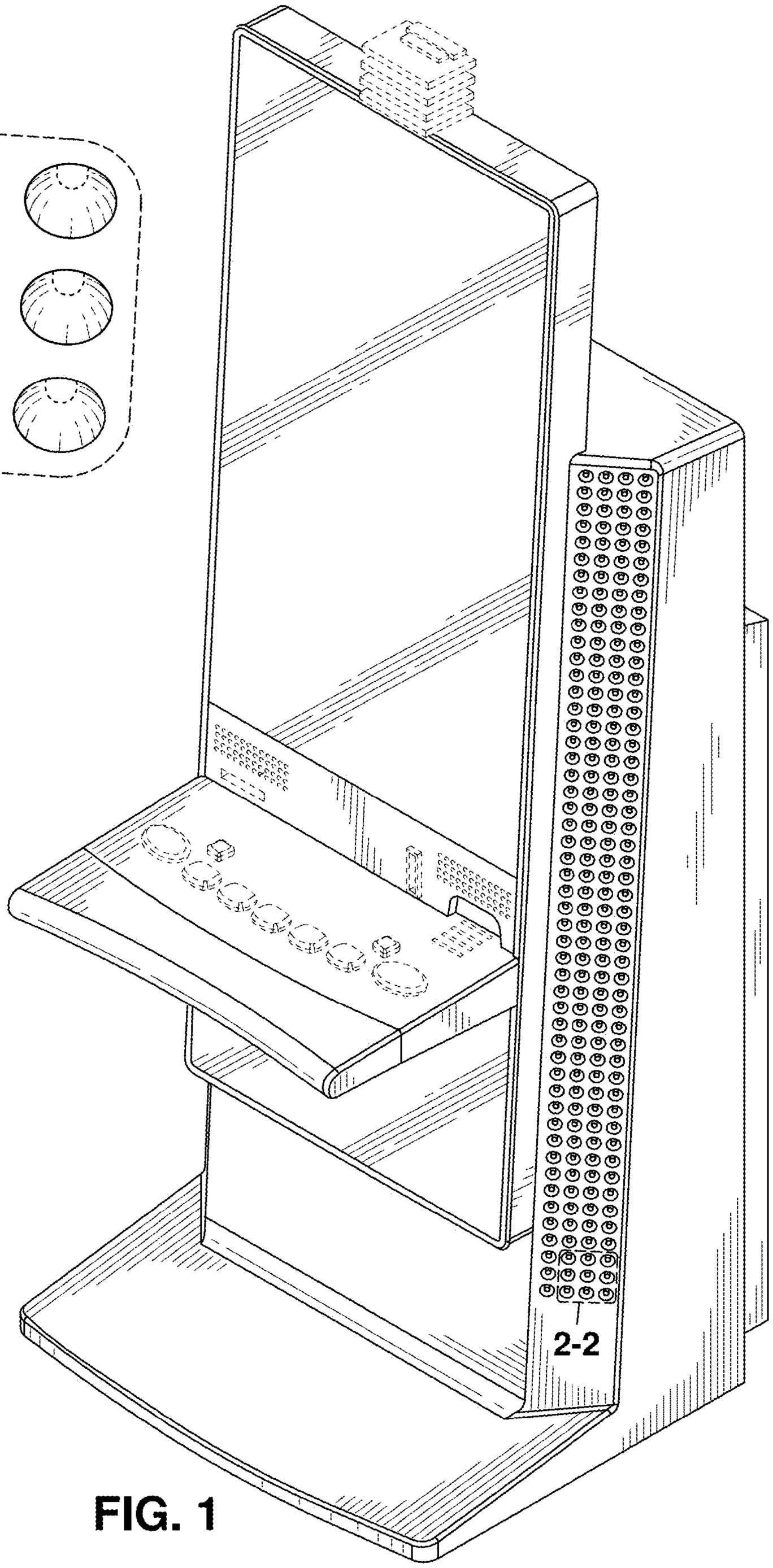


FIG. 1

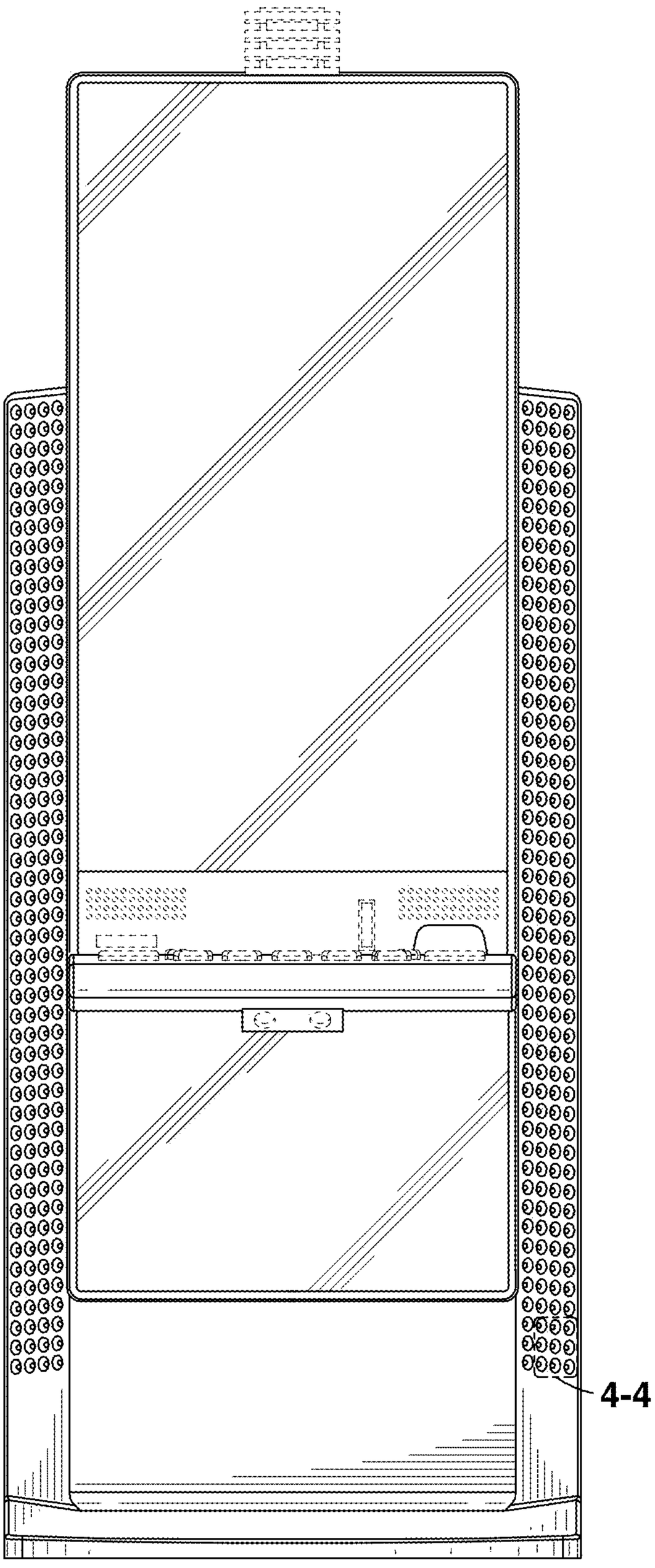


FIG. 3

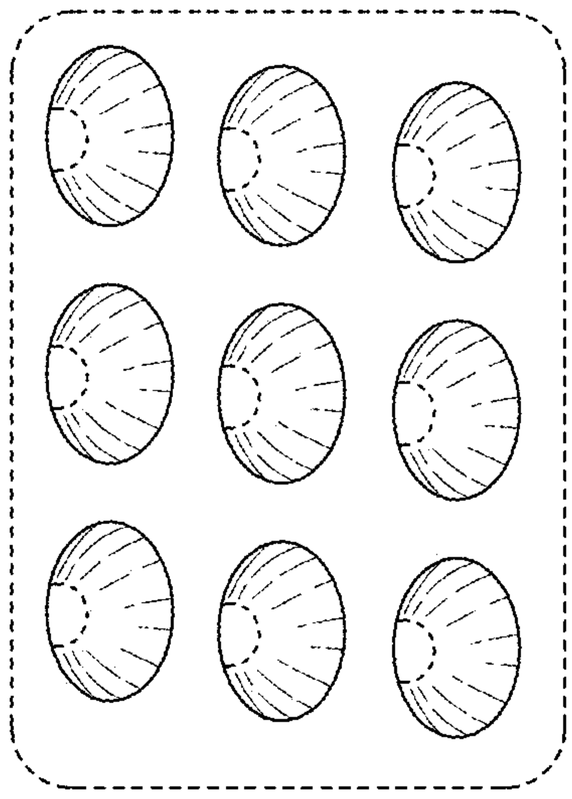


FIG. 4

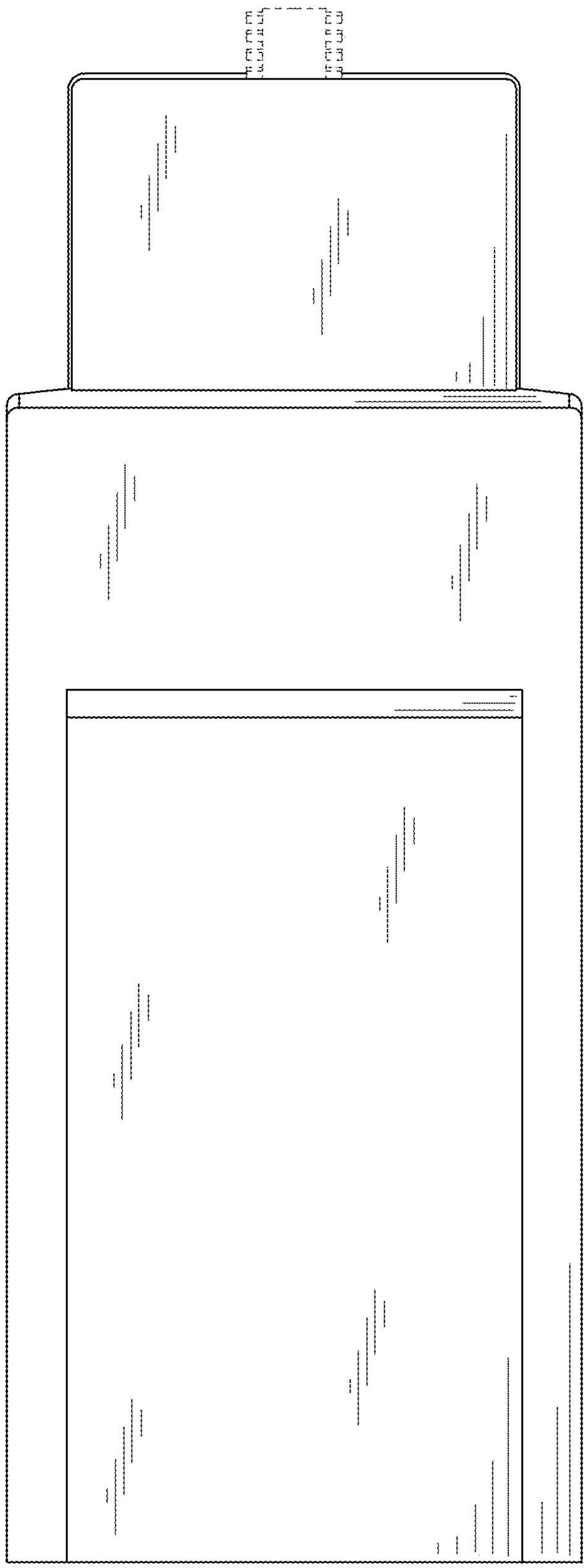


FIG. 5

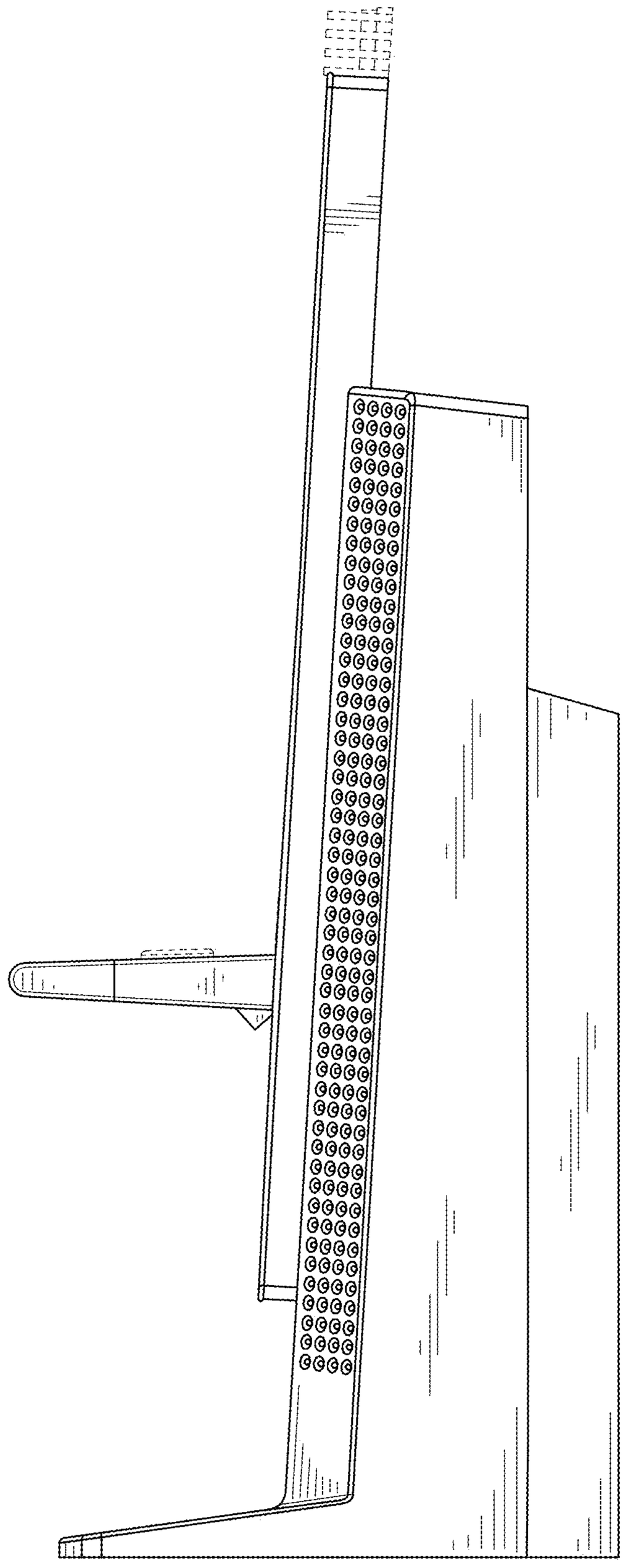


FIG. 6

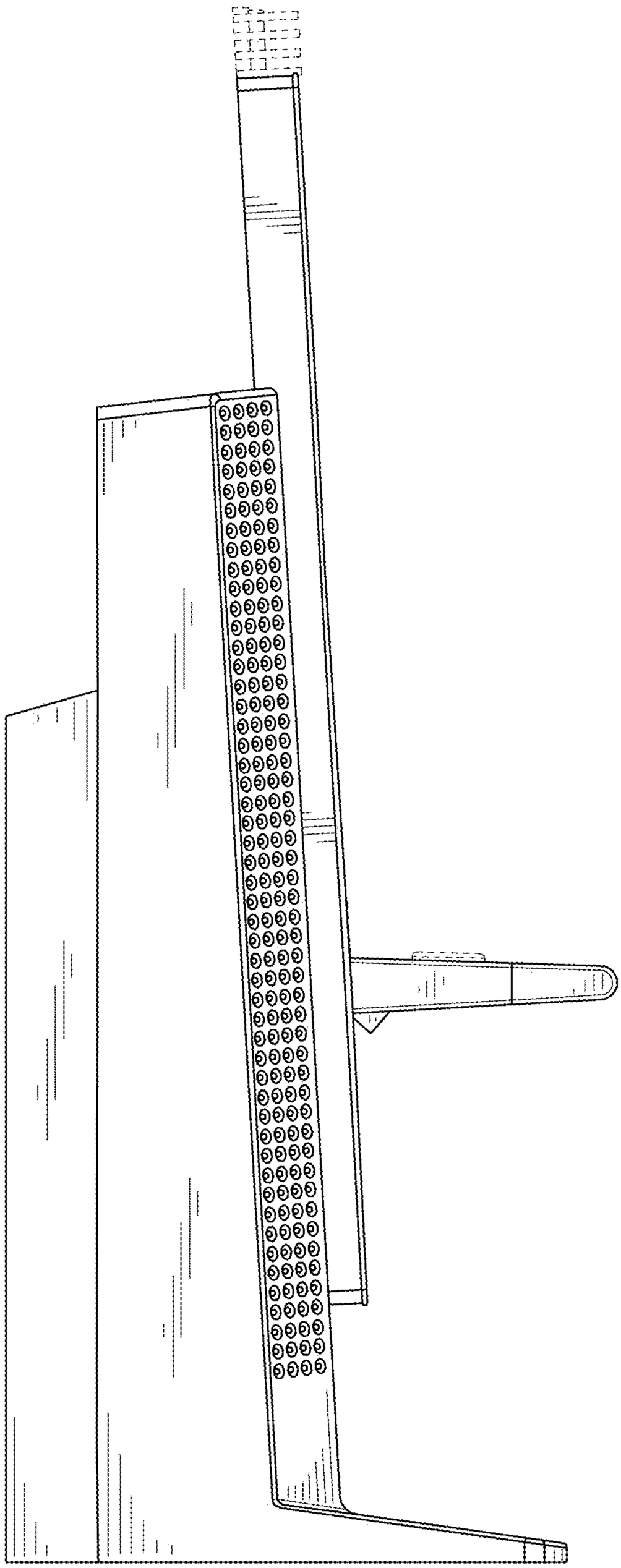


FIG. 7

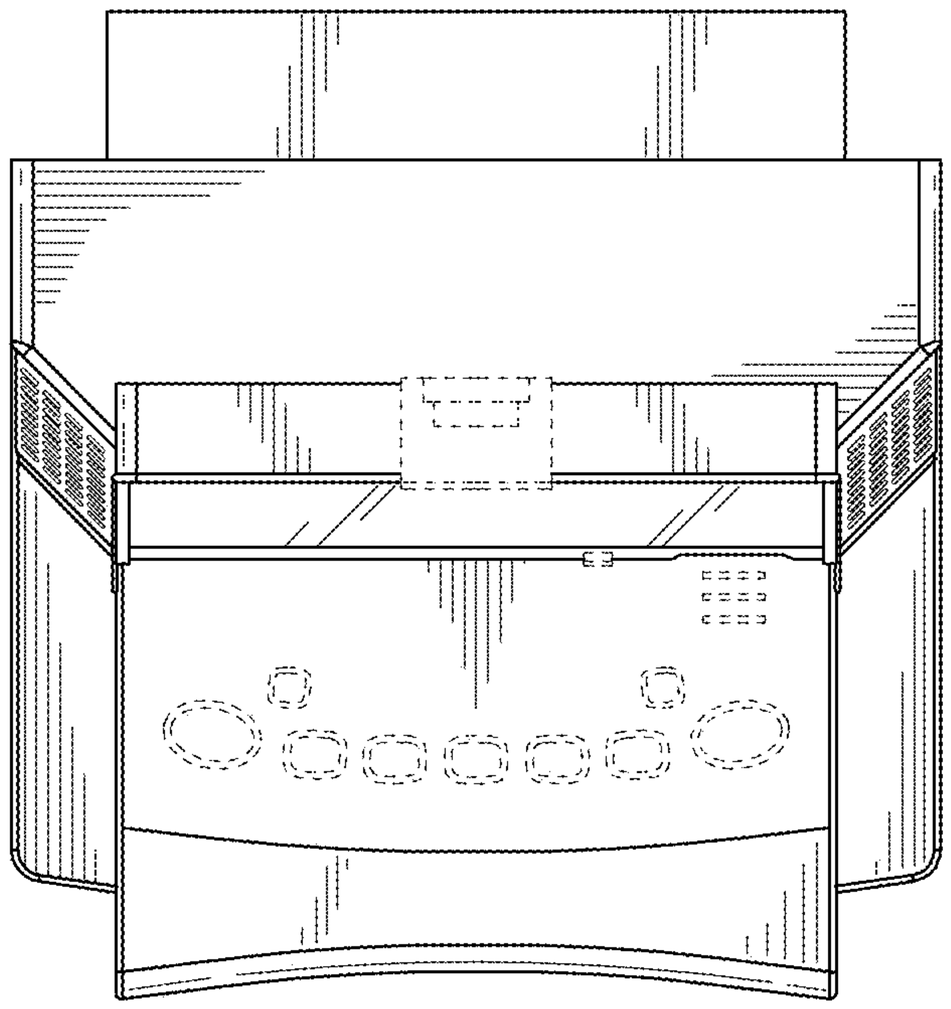


FIG. 8

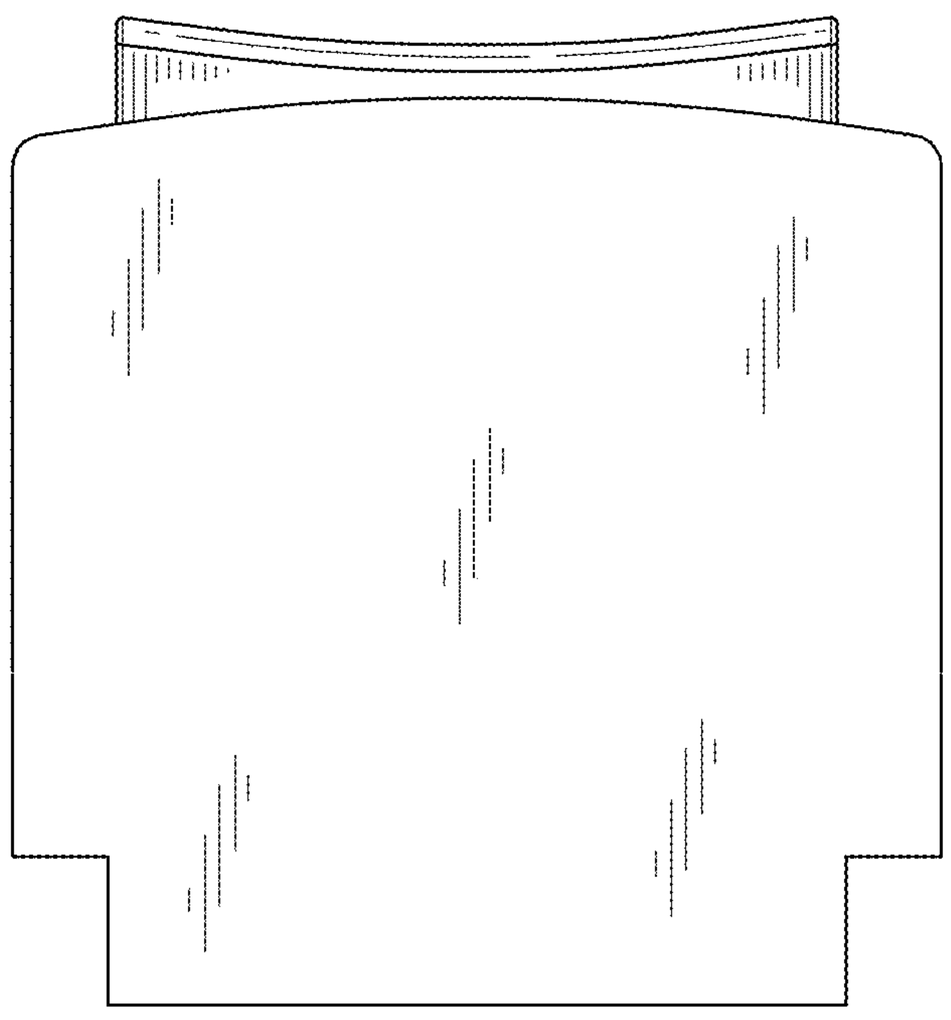


FIG. 9