



US00D794813S

(12) **United States Design Patent** (10) **Patent No.:** **US D794,813 S**
Zsolcsak et al. (45) **Date of Patent:** **** Aug. 15, 2017**

(54) **HEAT PACK**

FOREIGN PATENT DOCUMENTS

(71) Applicant: **Schawbel Technologies LLC**,
Burlington, MA (US)

CN 2281677 5/1998
CN 2515992 Y 10/2002

(Continued)

(72) Inventors: **Veronica M. Zsolcsak**, Newburyport,
MA (US); **Micha Eizen**, Lake Forest,
CA (US); **Thomas John William**
Bayes, Rothwell (GB); **Ian Nicholson**
Whitehead, Concord, MA (US)

OTHER PUBLICATIONS

"Introducing the New Thermacell Heat Packs", <www.petersenshunting.com/shot-show-2015/introducing-new-thermacell-heat-packs/>, Published Feb. 9, 2015, Retrieved on Sep. 25, 2015.

(Continued)

(73) Assignee: **Schawbel Technologies LLC**,
Burlington, MA (US)

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

Primary Examiner — Elizabeth J Oswecki

(21) Appl. No.: **29/533,210**

(74) *Attorney, Agent, or Firm* — Brown Rudnick LLP

(22) Filed: **Jul. 15, 2015**

(51) **LOC (10) Cl.** **24-04**

(52) **U.S. Cl.**
USPC **D24/206**

(58) **Field of Classification Search**

USPC D6/601, 595, 596, 604; D7/500, 550.1,
D7/554.3; D24/200, 206, 207
CPC A61F 7/00; A61F 7/02; A61F 7/03; A61F
7/0097; A61F 7/08; A61F 7/007; A61F
7/0241; A61F 2007/0001; A61F
2007/022; A61F 2007/023; A61F
2007/0024; A61F 2007/0238; A61F
2007/0025; A61F 2007/0026; A61F
2007/0027

See application file for complete search history.

(57) **CLAIM**

The ornamental design for a heat pack, as shown and described.

DESCRIPTION

FIG. 1 is a front perspective view of a heat pack employing an ornamental design in accordance with the present invention;

FIG. 2 illustrates a front view thereof;

FIG. 3 illustrates a back view thereof;

FIG. 4 illustrates a bottom view thereof;

FIG. 5 illustrates a top view thereof;

FIG. 6 illustrates a left view of thereof;

FIG. 7 illustrates a right view thereof; and,

FIG. 8 illustrates a back perspective view thereof.

The broken line portions of FIGS. 1-8 are included to show unclaimed subject matter only and form no part of the claimed heat pack design.

The drawings are dotted to show features of the heat pack having a contrasting material, surface texture, color, or any combination thereof as compared to other features of the heat pack.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,211,636 A * 8/1940 Bates A61F 7/10
62/530

2,680,918 A 6/1952 Behner

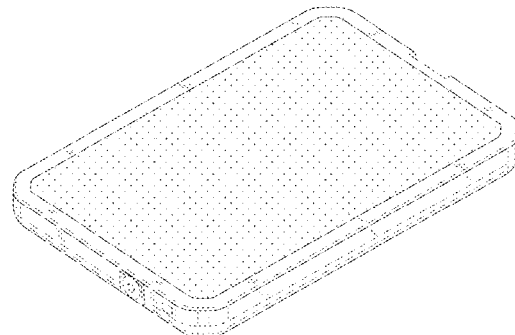
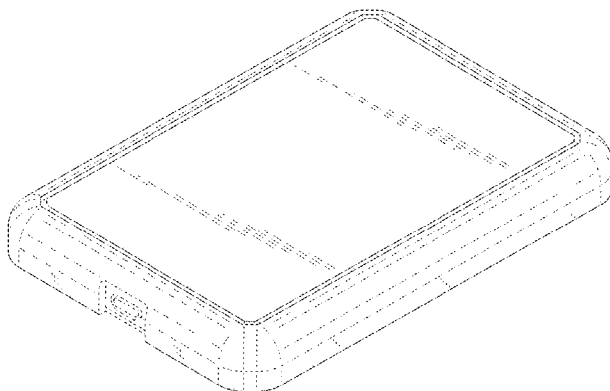
3,202,801 A * 8/1965 Saluri H05B 3/342
219/528

3,360,633 A 12/1967 Weisberger

3,585,736 A 6/1971 Polichena

(Continued)

1 Claim, 8 Drawing Sheets



US D794,813 S

Page 2

(56)

References Cited

U.S. PATENT DOCUMENTS

3,621,191	A	11/1971	Cornwell	7,716,856	B2	5/2010	Seipel
3,800,133	A	3/1974	Duval	7,726,046	B2	6/2010	Portnell
4,470,263	A	9/1984	Lehovec et al.	7,823,302	B2	11/2010	Mann et al.
4,507,877	A	4/1985	Vaccari et al.	7,879,501	B2	2/2011	Schaevitz et al.
4,640,284	A *	2/1987	Ruderian A61F 7/007	D637,552	S	5/2011	Inman et al.
			126/204	7,985,502	B2	7/2011	Abe et al.
4,665,301	A	5/1987	Bondy	D642,517	S	8/2011	Inman et al.
4,699,123	A	10/1987	Zaborowski	D651,343	S	12/2011	Robson
D300,606	S	4/1989	Schwabel et al.	8,074,373	B2	12/2011	Macher et al.
4,823,482	A	4/1989	Lakic	8,084,722	B2	12/2011	Haas et al.
D303,524	S	9/1989	Siegner et al.	D654,429	S	2/2012	Li et al.
4,894,931	A	1/1990	Senee et al.	D658,330	S	4/2012	Yue
4,910,881	A	3/1990	Baggio et al.	D660,798	S	5/2012	Tseng
5,041,717	A	8/1991	Shay, III et al.	8,273,485	B2	9/2012	Schaevitz et al.
D320,212	S	9/1991	Someya	D672,500	S	12/2012	Kim
5,230,170	A	7/1993	Dahle	D672,501	S	12/2012	Kim
D351,337	S	10/1994	Bonnema et al.	8,384,551	B2	2/2013	Ross et al.
5,483,759	A	1/1996	Silverman	8,389,909	B2	3/2013	Wang et al.
5,495,682	A	3/1996	Chen	8,397,518	B1	3/2013	Vistakula
5,522,722	A	6/1996	Diederich	D682,195	S	5/2013	Aglassinger
5,565,124	A	10/1996	Balzano	D685,729	S	7/2013	Lyman
5,592,759	A	1/1997	Cox	D686,157	S	7/2013	Kawase et al.
5,623,772	A	4/1997	Sunderland et al.	D687,558	S *	8/2013	Sonoda D24/206
D389,953	S	1/1998	Seifert	8,510,969	B2	8/2013	Luo
D391,019	S	2/1998	Seifert	D689,019	S	9/2013	Sato et al.
5,800,490	A	9/1998	Patz et al.	D690,022	S *	9/2013	Sonoda D24/206
5,802,865	A	9/1998	Strauss	D694,176	S	11/2013	Buetow et al.
5,830,208	A	11/1998	Muller	D696,549	S *	12/2013	Pennington D7/363
5,857,262	A	1/1999	Bonnema et al.	D698,313	S	1/2014	Buetow et al.
5,875,571	A	3/1999	Huang	D698,489	S	1/2014	Byun
5,882,106	A	3/1999	Galli	8,638,958	B2	1/2014	Wells
5,944,508	A	8/1999	Bonnema	D698,931	S *	2/2014	Wang D24/206
5,956,866	A	9/1999	Spears	D699,178	S	2/2014	Ashida et al.
5,970,718	A	10/1999	Arnold	D699,179	S	2/2014	Alexander
6,033,212	A	3/2000	Bonnema et al.	D700,135	S	2/2014	Sato et al.
6,074,414	A	6/2000	Haas et al.	8,658,943	B1	2/2014	Larsen et al.
6,094,844	A	8/2000	Potts	8,715,329	B2	5/2014	Robinson et al.
D432,493	S	10/2000	Killebrew et al.	8,777,441	B2	7/2014	Vazquez
6,125,636	A	10/2000	Taylor et al.	8,850,716	B2	10/2014	Whitehead et al.
6,176,596	B1	1/2001	Shukla et al.	8,869,428	B1	10/2014	Zsolcsak et al.
6,189,327	B1	2/2001	Strauss et al.	8,869,429	B1	10/2014	Zsolcsak et al.
D440,201	S	4/2001	Huynh et al.	9,101,177	B2	8/2015	Whitehead et al.
D442,285	S *	5/2001	Perry D24/206	9,179,734	B2	11/2015	Zsolcsak et al.
D442,426	S *	5/2001	Garber D7/354	D746,097	S *	12/2015	Davenport D7/352
6,235,983	B1	5/2001	Becker et al.	9,215,905	B2	12/2015	Tseng
6,320,161	B1	11/2001	Hansen, Jr.	D757,280	S *	5/2016	Ogaki D24/200
6,523,836	B1	2/2003	Chang et al.	D762,308	S *	7/2016	Wang D24/206
6,649,873	B1	11/2003	Cintrón, Jr. et al.	D773,681	S *	12/2016	Elam D24/206
6,657,164	B1	12/2003	Koch	2003/0114902	A1	6/2003	Prescott
D486,789	S	2/2004	Santiago	2003/0145494	A1	8/2003	Hsu
6,701,639	B2	3/2004	Treptow et al.	2004/0210214	A1	10/2004	Knowlton
6,733,282	B2	5/2004	Long	2004/0211189	A1	10/2004	Arnold
6,770,848	B2	8/2004	Haas et al.	2004/0244810	A1	12/2004	Henninger et al.
6,840,955	B2	1/2005	Ein	2005/0028401	A1	2/2005	Johnson
6,841,757	B2	1/2005	Marega et al.	2005/0126049	A1	6/2005	Koenig
6,865,825	B2	3/2005	Bailey, Sr. et al.	2005/0193742	A1	9/2005	Arnold
7,022,093	B2	4/2006	Smith et al.	2005/0245852	A1 *	11/2005	Ellefson A61K 9/703
D528,075	S	9/2006	Sugeno et al.				602/2
D533,832	S	12/2006	Hock	2006/0174521	A1	8/2006	Lee
D534,307	S	12/2006	Vu	2006/0201025	A1	9/2006	Chou
D534,308	S	12/2006	Vu	2006/0230641	A1	10/2006	Vick et al.
7,152,345	B2	12/2006	Koenig	2006/0235346	A1	10/2006	Prescott
D538,225	S	3/2007	Lyman et al.	2006/0283050	A1	12/2006	Carnes et al.
D538,226	S	3/2007	Lyman et al.	2007/0039201	A1	2/2007	Axinte
D546,277	S	7/2007	Andre et al.	2007/0053212	A1	3/2007	Formenti
7,244,253	B2	7/2007	Neev	2008/0016715	A1	1/2008	Vickroy
D552,081	S	10/2007	Yano	2008/0069524	A1	3/2008	Yamauchi et al.
7,497,037	B2	3/2009	Vick et al.	2008/0077211	A1	3/2008	Levinson et al.
7,565,754	B1	7/2009	Acheson et al.	2008/0083720	A1	4/2008	Gentile et al.
D598,163	S	8/2009	Overend et al.	2008/0135537	A1	6/2008	Suber et al.
D598,164	S	8/2009	Overend et al.	2008/0197126	A1	8/2008	Bourke et al.
D602,432	S	10/2009	Moussa	2009/0013554	A1	1/2009	Macher et al.
D602,597	S *	10/2009	Nomi D24/206	2010/0192406	A1	8/2010	Au
D609,180	S	2/2010	Suzuki et al.	2010/0198322	A1	8/2010	Joseph et al.
7,714,709	B1	5/2010	Daniel	2011/0083339	A1	4/2011	Luo
				2011/0107771	A1	5/2011	Crist et al.
				2011/0259356	A1	10/2011	Barton et al.
				2011/0296714	A1	12/2011	Holzer
				2011/0306299	A1	12/2011	Wells

(56)

References Cited**U.S. PATENT DOCUMENTS**

2012/0005919	A1	1/2012	Chen
2012/0240955	A1	9/2012	Kennedy et al.
2013/0019503	A1	1/2013	Vogt
2013/0085421	A1	4/2013	Gillespie et al.
2013/0116759	A1	5/2013	Levinson et al.
2013/0139605	A1	6/2013	Burke et al.
2013/0174451	A1	7/2013	Kremer et al.
2013/0181662	A1	7/2013	Shapiro
2013/0213147	A1	8/2013	Rice et al.
2013/0244074	A1	9/2013	Kremer et al.
2013/0247410	A1	9/2013	Tseng
2014/0059894	A1	3/2014	Lupinek et al.
2014/0076349	A1	3/2014	Deng
2014/0182162	A1	7/2014	Hakkala
2014/0182163	A1	7/2014	Krupenkin et al.
2014/0222173	A1	8/2014	Giedwoyn et al.
2014/0277632	A1	9/2014	Walker
2015/0335121	A1	11/2015	Floessholzer et al.

FOREIGN PATENT DOCUMENTS

CN	101641027	A	2/2010
CN	201806017		4/2011
CN	201976877	U	9/2011
DE	3904603	A1	8/1990
DE	20317143	U1	4/2004
DE	10352050	A1	12/2004
DE	102008029727	A1	12/2009
EP	0251084	A2	1/1988
EP	0854696	B1	7/1998
EP	1820247		8/2007
EP	2215918	A2	8/2010
KR	20-0273770		4/2002
KR	100539710	B1	12/2005
KR	2009-0117205	A	11/2009
WO	2006054080	A2	5/2006
WO	20061111823	A1	10/2006
WO	20081006731	A1	1/2008
WO	20081069254	A1	6/2008
WO	20081069524	A1	6/2008
WO	2011057142	A2	5/2011
WO	2013/101920	A1	7/2013
WO	2014064518	A2	5/2014

OTHER PUBLICATIONS

"New for 2015—ThermaCELL Heat Packs for Rechargeable Warmth Wherever You Need It", <<http://www.ammoland.com/2015/03/new-for-2015-thermacell-heat-packs-for-rechargeable->

warmth-wherever-needed/#axzz3gRpAQHtU>, Published Mar. 12, 2015, Retrieved on Sep. 25, 2015.

"ThermaCELL Announces new Rechargeable Heat Packs" <<http://www.americanhunter.org/articles/2015/4/22/thermacell-announces-new-rechargeable-heat-packs/>>, Published Apr. 22, 2015, Retrieved on Sep. 25, 2015.

"ThermaCELL Heat Packs for Rechargeable Warmth Wherever Needed", <<http://huntinglife.com/thermacell-heat-packs-for-rechargeable-warmth-wherever-needed/>>, Published Mar. 16, 2015, Retrieved on Sep. 25, 2015.

"Thermacell HeatPacks—New Rechargeable Warmers" <www.bowhunting.com/news/2015/03/12/thermacell-heatpacks-new-rechargeable-warmers/>, Published Mar. 12, 2015, Retrieved on Sep. 25, 2015.

"Thermacell HeatPacks—New Rechargeable Warmers", <<http://www.huntingnetwork.com/publisher/Hunting-News/2015/3/12/Thermacell-HeatPacks--New-Rechargeable-Warmers/>>, Published Mar. 12, 2015, Retrieved on Sep. 25, 2015.

International Search Report and Written Opinion of the International Search Authority mailed Feb. 25, 2016 for International Application No. PCT/US2015/062458 (12 Pages).

International Search Report and Written Opinion of the International Searching Authority Mailed Oct. 4, 2016 for International Application No. PCT/US2016/032891 (17 Pages).

Invitation and Partial International Search Report mailed Aug. 8, 2016 for International Application No. PCT/US2016/032891 (6 Pages).

International Search Report and Written Opinion for International application No. PCT/US12/23986 filed Feb. 2, 2012 and mailed on May 23, 2012, (7 pages).

International Search Report and Written Opinion for International application No. PCT/US2014/072718 filed Dec. 30, 2014 and mailed on Apr. 28, 2015, (10 pages).

International Search Report and Written Opinion mailed on Apr. 22, 2013, for International Patent Application No. PCT/US2012/071797, filed Dec. 27, 2012, (9 pages).

International Search Report and Written Opinion mailed on Sep. 3, 2014, for International Patent Application No. PCT/US2014/033499, filed Apr. 9, 2014, (10 pages).

Kenisarin et al., 2007, Solar energy storage using phase change materials, Renewable and Sustainable Energy Reviews, 11(9):1913-1965.

Sharma et al., 2009, Review on thermal energy storage with phase change materials and applications, Renewable and Sustainable Energy Reviews, 13(2):318-345.

International Preliminary Report on Patentability Mailed Mar. 9, 2017 for International Application No. PCT/S2015/38801 (7 Pages).

International Search Report and Written Opinion for International Application No. PCT/US2012/038801 Mailed Oct. 6, 2015 (11 Pages).

* cited by examiner

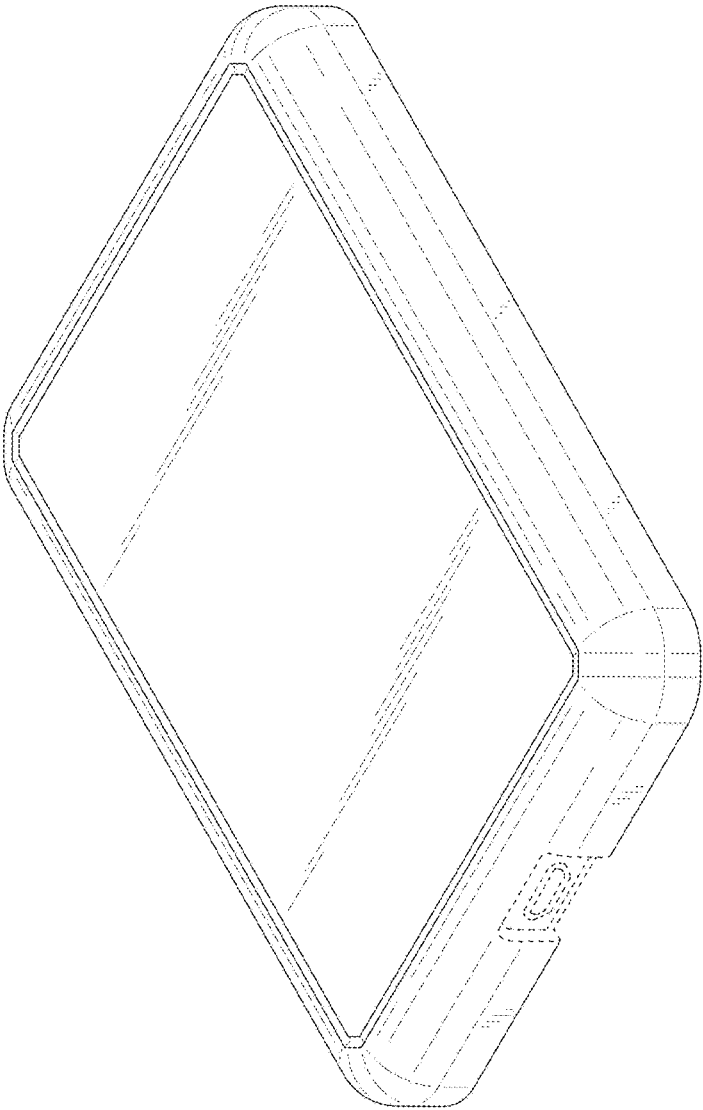


FIG. 1

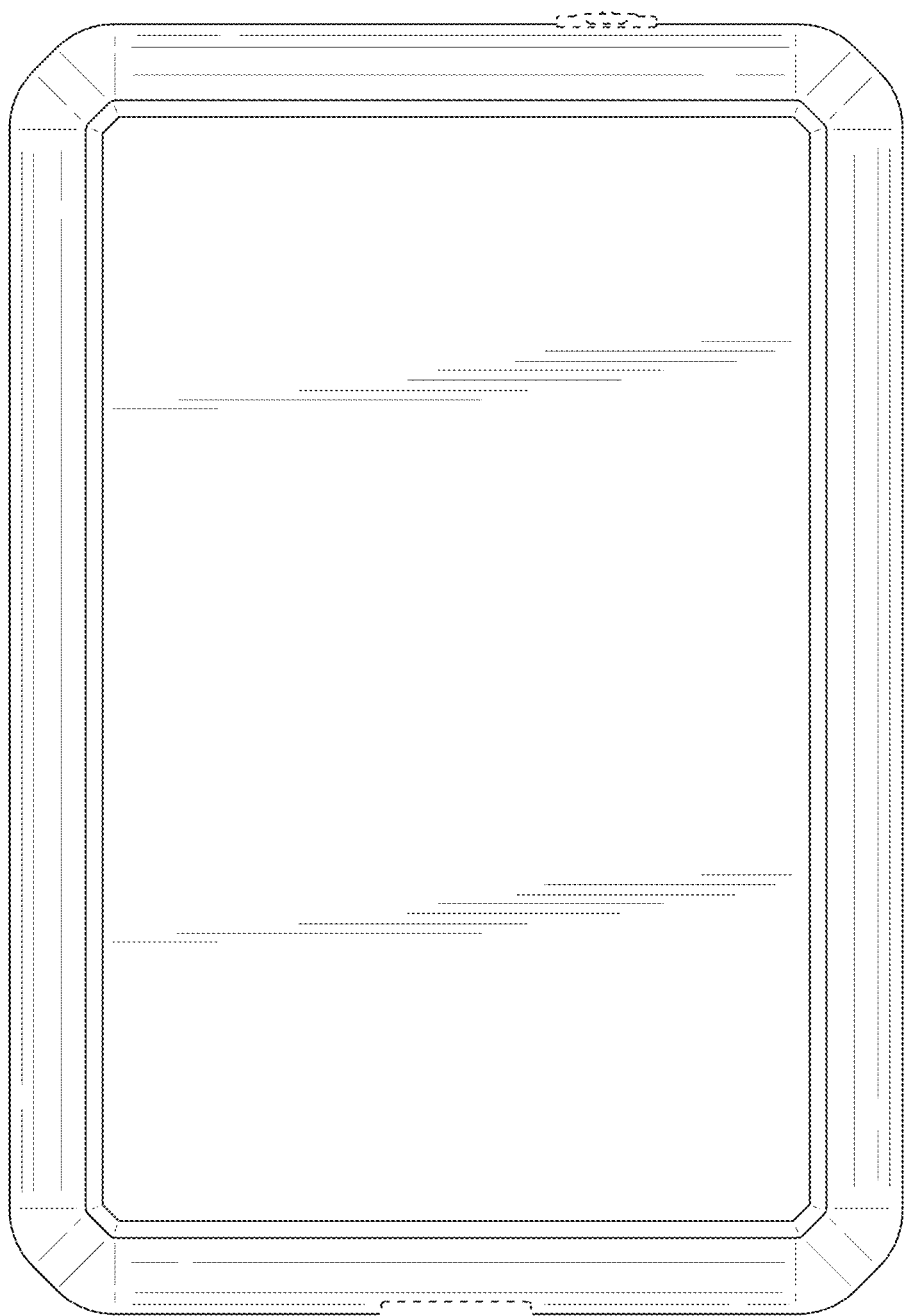


FIG. 2

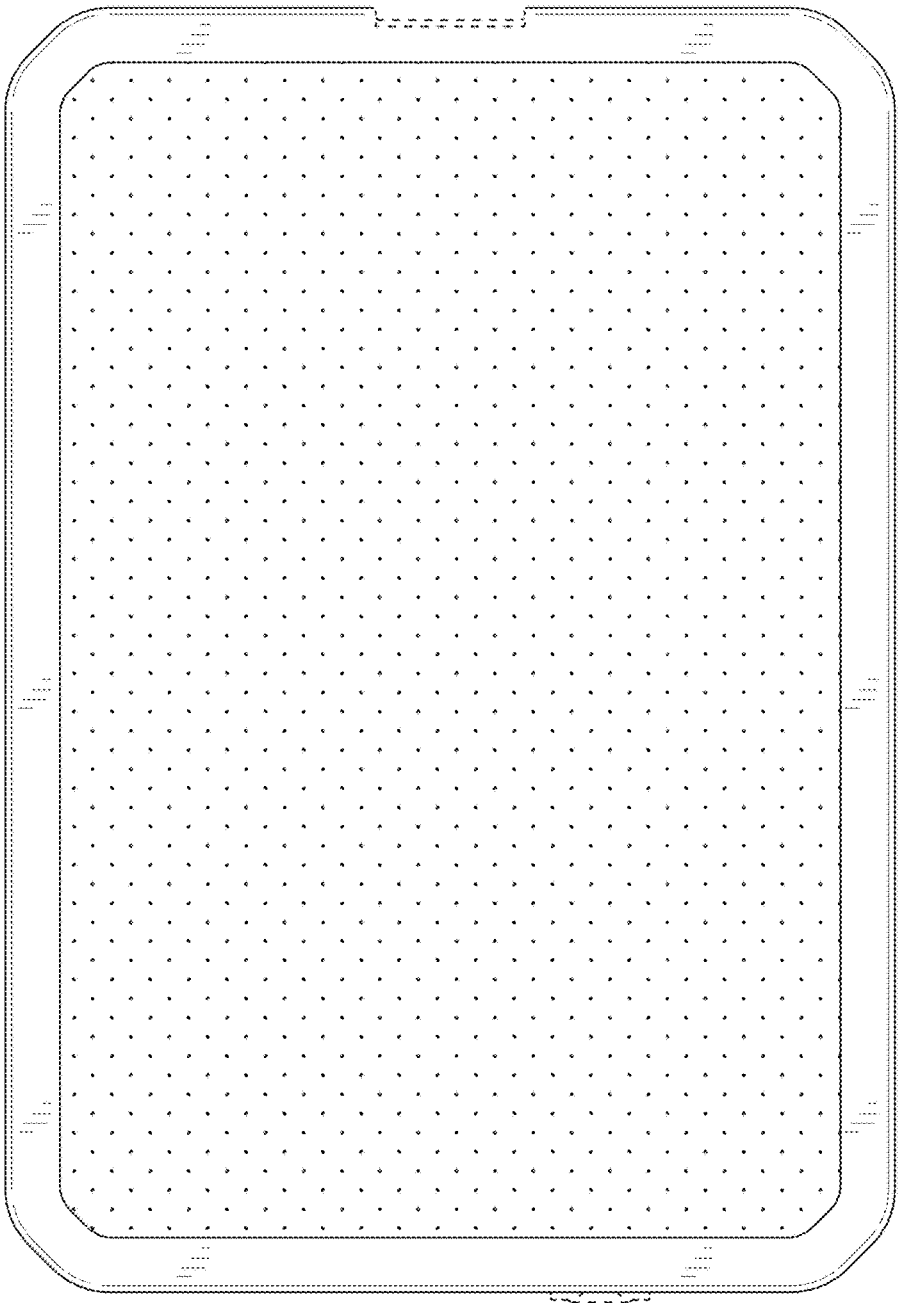


FIG. 3



FIG. 4

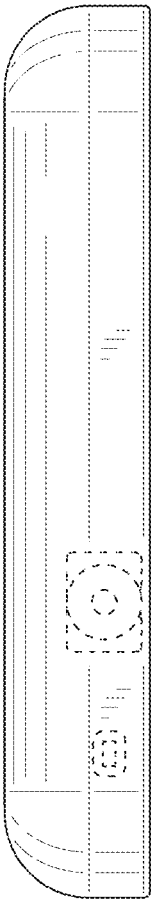


FIG. 5

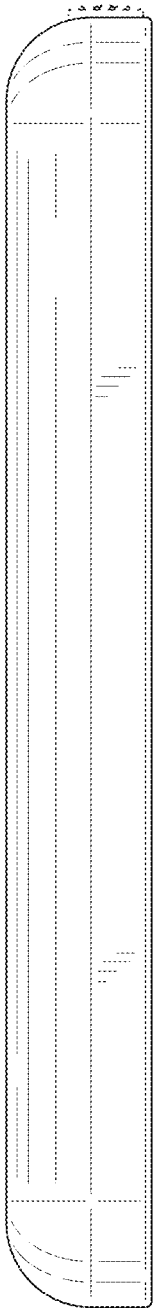


FIG. 6

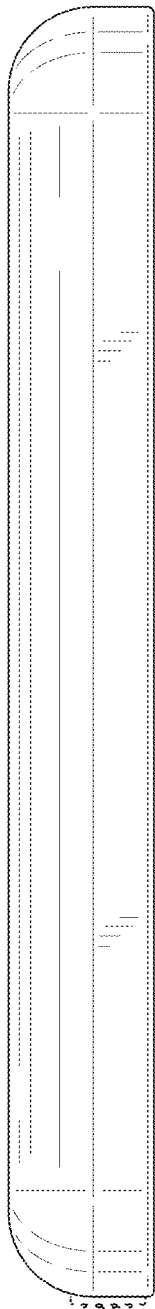


FIG. 7

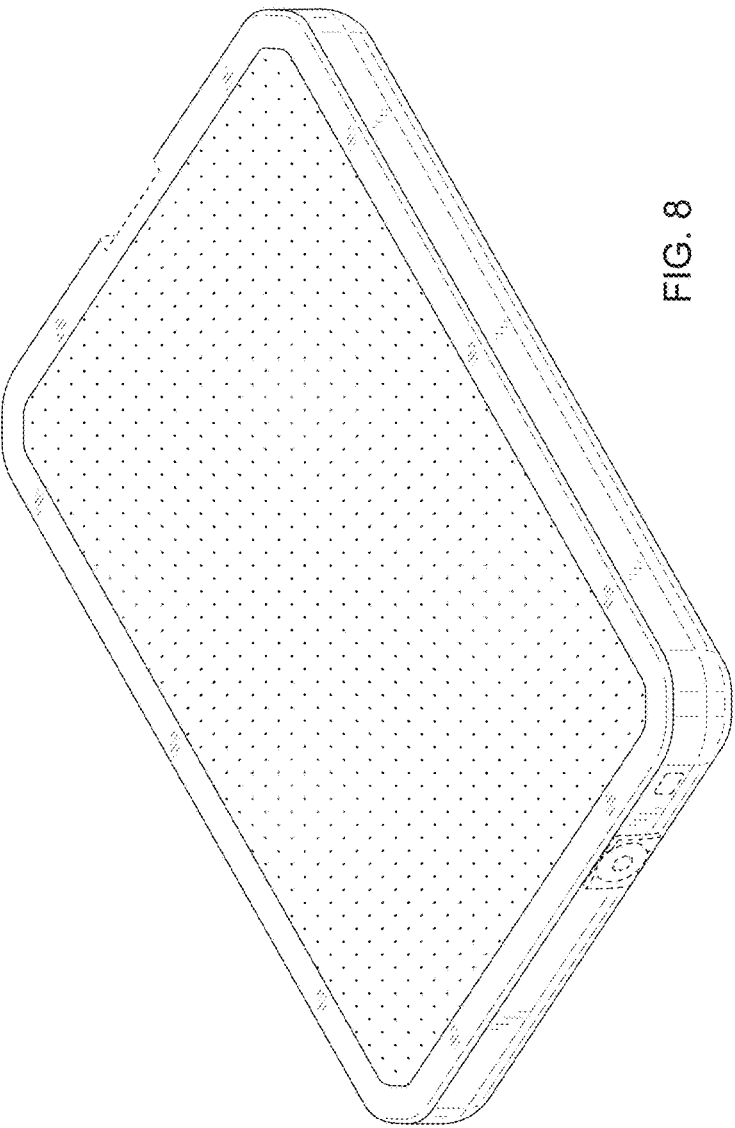


FIG. 8