



US00D977633S

(12) **United States Design Patent** (10) **Patent No.:** **US D977,633 S**  
**Kim et al.** (45) **Date of Patent:** **\*\* Feb. 7, 2023**

(54) **CRADLE FOR A MEDICAL COOLING DEVICE**

FOREIGN PATENT DOCUMENTS

(71) Applicant: **RECENSMEDICAL, INC.**, Ulsan (KR)

CA 133289 \* 8/2010  
CN 2660834 Y 12/2004  
(Continued)

(72) Inventors: **Gun Ho Kim**, Ulsan (KR); **Dae Hyun Kim**, Hwaseong-si (KR); **Ho Young Joo**, Goyang-si (KR); **Eun Ho Kim**, Seoul (KR)

OTHER PUBLICATIONS

Foam Corners, 4 7/8"x4"x3 1/4", White, 320/Case, Zoro, [Post date: unknown], [Site seen May 23, 2022], Seen at URL: <https://www.zoro.com/partners-brand-foam-corners-4-78-x-4-x-3-14-white-320case-pf202/i/G5726990/?recommended=true> (Year: 2022).\*

(73) Assignees: **RECENSMEDICAL, INC.**, Ulsan (KR); **UNIST (ULSAN NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY)**, Ulsan (KR)

(Continued)

*Primary Examiner* — Natasha Vujcic  
*Assistant Examiner* — Gilbert B Ford

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

(74) *Attorney, Agent, or Firm* — Knobbe, Martens, Olson & Bear, LLP

(21) Appl. No.: **29/760,751**

(57) **CLAIM**

We claim, the ornamental design for a cradle for a medical cooling device, as shown and described.

(22) Filed: **Dec. 3, 2020**

**DESCRIPTION**

(30) **Foreign Application Priority Data**

Aug. 7, 2020 (KR) ..... 30-2020-0036855

(51) **LOC (14) Cl.** ..... **24-02**

(52) **U.S. Cl.**  
USPC ..... **D24/128**

(58) **Field of Classification Search**  
USPC ..... D24/189–192, 127–129; D9/758–762, D9/424, 456

FIG. 1 is a perspective view of a cradle for a medical cooling device according to the new design.

FIG. 2 is a front view of the cradle for the medical cooling device of FIG. 1.

FIG. 3 is a rear view of the cradle for the medical cooling device of FIG. 1.

FIG. 4 is a left side view of the cradle for the medical cooling device of FIG. 1.

FIG. 5 is a right side view of the cradle for the medical cooling device of FIG. 1.

FIG. 6 is a top plan view of the cradle for the medical cooling device of FIG. 1; and,

FIG. 7 is a bottom plan view of the cradle for the medical cooling device of FIG. 1.

The broken lines shown in FIG. 6 illustrate portions of the cradle for the medical cooling device that form no part of the claimed design.

(Continued)

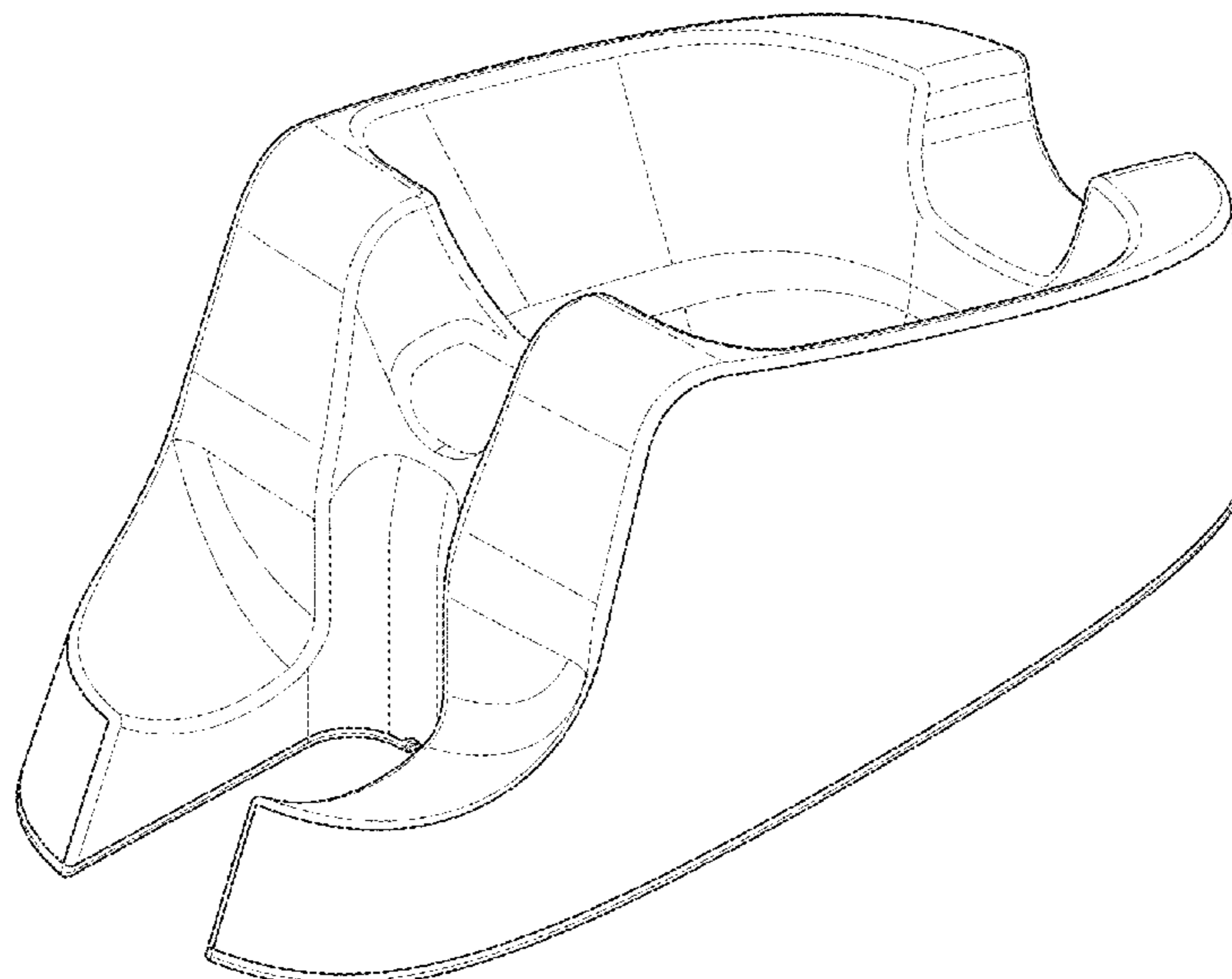
(56) **References Cited**

U.S. PATENT DOCUMENTS

2,044,823 A 6/1936 Whiteside  
4,646,735 A 3/1987 Seney

(Continued)

**1 Claim, 7 Drawing Sheets**



(58) **Field of Classification Search**

CPC ..... A61B 18/0218; A61B 2018/00714; A61B  
2018/0231; A61B 2018/00952; A61B  
2090/3937

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D359,190 S \* 6/1995 Hargest ..... D6/601  
D399,968 S \* 10/1998 Petersen ..... D6/601  
D413,981 S \* 9/1999 Swedberg ..... D24/190  
D413,982 S \* 9/1999 Swedberg ..... D24/190  
D415,281 S \* 10/1999 Swedberg ..... D24/190  
D424,698 S \* 5/2000 Ames ..... D6/601  
D426,307 S \* 6/2000 Swedberg ..... D6/601  
6,099,521 A 8/2000 Shaddock  
6,141,985 A 11/2000 Cluzeau et al.  
6,632,219 B1 10/2003 Baranov et al.  
6,669,688 B2 12/2003 Svaasand et al.  
7,037,328 B2 5/2006 Lee  
7,780,656 B2 8/2010 Tankovich  
7,963,959 B2 6/2011 Silva et al.  
8,083,734 B2 12/2011 Steinfatt et al.  
D658,775 S 5/2012 Jiangminhui  
8,177,827 B2 5/2012 Shapiro  
8,256,233 B2 9/2012 Boyden et al.  
8,409,184 B2 4/2013 Baust et al.  
D697,628 S \* 1/2014 Drey ..... D24/192  
D698,448 S \* 1/2014 Heck ..... D24/191  
8,652,131 B2 2/2014 Muller et al.  
8,672,879 B2 3/2014 Grant et al.  
8,747,397 B2 6/2014 Baust et al.  
8,788,060 B2 7/2014 Nebrigic et al.  
8,858,583 B2 10/2014 Shtram et al.  
9,017,318 B2 4/2015 Fourkas et al.  
9,039,688 B2 5/2015 Palmer, III et al.  
9,066,712 B2 6/2015 Fourkas et al.  
9,113,855 B2 8/2015 Burger et al.  
9,155,584 B2 10/2015 Fourkas et al.  
9,398,975 B2 7/2016 Müller et al.  
9,522,031 B2 12/2016 Anderson et al.  
9,549,773 B2 1/2017 Anderson et al.  
D787,078 S \* 5/2017 Daniels ..... D24/192  
9,642,741 B2 5/2017 Feng et al.  
D800,911 S \* 10/2017 Diemer ..... D24/192  
9,801,677 B2 10/2017 Anderson et al.  
9,855,166 B2 1/2018 Anderson et al.  
9,956,355 B2 5/2018 Besirli et al.  
9,974,684 B2 5/2018 Anderson et al.  
D822,841 S 7/2018 Cheng  
10,085,881 B2 10/2018 Karnik et al.  
10,154,870 B2 12/2018 Ottanelli  
10,188,444 B2 1/2019 Fourkas et al.  
10,213,244 B2 2/2019 Fourkas et al.  
10,322,248 B2 6/2019 Besirli et al.  
10,349,997 B1 7/2019 O'Reilly  
10,363,080 B2 7/2019 Elkins et al.  
10,543,032 B2 1/2020 Babkin et al.  
D943,752 S \* 2/2022 Watters, III ..... D24/190  
11,278,341 B2 \* 3/2022 Kim ..... A61B 18/0218  
2004/0102768 A1 5/2004 Cluzeau et al.  
2004/0111087 A1 6/2004 Stern et al.  
2005/0005626 A1 1/2005 McMahon  
2005/0059940 A1 3/2005 Weber et al.  
2005/0261753 A1 11/2005 Littrup et al.  
2006/0200117 A1 9/2006 Hermaris  
2006/0213509 A1 9/2006 Marin et al.  
2007/0005048 A1 1/2007 Niedbala et al.  
2008/0164296 A1 7/2008 Shelton et al.  
2008/0221561 A1 9/2008 Geiger et al.  
2009/0036846 A1 2/2009 Dacquay et al.  
2009/0062751 A1 3/2009 Newman, Jr.  
2009/0124972 A1 5/2009 Fischer et al.  
2009/0149930 A1 6/2009 Schenck  
2009/0163902 A1 6/2009 DeLonzor et al.  
2010/0010480 A1 1/2010 Mehta et al.

2010/0087805 A1 4/2010 Citterio et al.  
2010/0196343 A1 8/2010 O'Neil et al.  
2010/0198207 A1 8/2010 Elkins et al.  
2011/0072834 A1 3/2011 Ishikura et al.  
2011/0098791 A1 4/2011 Kim  
2011/0137268 A1 6/2011 Thomason et al.  
2011/0152850 A1 6/2011 Niedbala et al.  
2011/0177474 A1 7/2011 Jamnia et al.  
2011/0224761 A1 9/2011 Manstein  
2012/0130458 A1 5/2012 Ryba  
2012/0191166 A1 7/2012 Callister  
2012/0232549 A1 9/2012 Willyard et al.  
2012/0265278 A1 10/2012 Fourkas et al.  
2013/0116719 A1 5/2013 Shtram et al.  
2013/0184694 A1 7/2013 Fourkas et al.  
2013/0296811 A1 11/2013 Bangerla et al.  
2013/0315924 A1 11/2013 Hsu et al.  
2014/0012226 A1 1/2014 Hochman  
2014/0200511 A1 7/2014 Boyden et al.  
2014/0277023 A1 9/2014 Sekino et al.  
2014/0303608 A1 10/2014 Taghizadeh  
2015/0051545 A1 2/2015 Henderson et al.  
2016/0058488 A1 3/2016 Fourkas et al.  
2016/0135864 A1 5/2016 Babkin  
2016/0143802 A1 5/2016 Tranfaglia et al.  
2016/0183996 A1 6/2016 Burger et al.  
2016/0242956 A1 8/2016 Pilby Gomez  
2016/0262820 A1 9/2016 Allison et al.  
2016/0279350 A1 9/2016 Besirli et al.  
2017/0014174 A1 1/2017 Levine et al.  
2017/0062793 A1 3/2017 Zakharyan et al.  
2017/0231816 A1 8/2017 Ryan  
2017/0232243 A1 8/2017 Herweijer  
2017/0304558 A1 10/2017 Besirli et al.  
2017/0354451 A1 12/2017 Marin et al.  
2018/0118705 A1 5/2018 Lee et al.  
2018/0235805 A1 8/2018 Burger et al.  
2018/0310979 A1 11/2018 Peled et al.  
2019/0000524 A1 1/2019 Rosen et al.  
2019/0015146 A1 1/2019 DuBois et al.  
2019/0038459 A1 2/2019 Karnik et al.  
2019/0175394 A1 6/2019 Kim  
2019/0175395 A1 6/2019 Kim  
2019/0175396 A1 6/2019 Kim  
2019/0239938 A1 8/2019 Kazic et al.  
2019/0254866 A1 8/2019 Whiteley et al.  
2019/0290881 A1 9/2019 Kim  
2020/0007882 A1 1/2020 Abe et al.  
2020/0007883 A1 1/2020 Toresson  
2020/0054483 A1 2/2020 Kim  
2020/0100934 A1 4/2020 Ariano et al.  
2020/0309436 A1 10/2020 Kim  
2021/0007882 A1 1/2021 Kim  
2022/0015817 A1 \* 1/2022 Kim ..... A61B 18/0218

FOREIGN PATENT DOCUMENTS

EM 001481279-0001 \* 6/2021  
EP 1 030 611 B1 9/2004  
EP 1 401 347 B1 8/2011  
EP 2 010 087 B1 11/2014  
EP 2 910 276 A1 8/2015  
EP 2 759 272 B1 11/2018  
JP 04-092663 A 3/1992  
JP 06-086818 A 3/1994  
JP 10-230435 A 9/1998  
JP 2002-505155 A 2/2002  
JP 4049358 B2 2/2002  
JP 2004-515270 A 5/2004  
JP 2005-080832 A 3/2005  
JP 2008-212638 A 9/2008  
JP 2008-545462 A 12/2008  
JP 2009-034273 A 2/2009  
JP 2009-056320 A 3/2009  
JP 2011-077314 A 4/2011  
JP 2012-143279 A 8/2012  
JP 2013-142410 A 7/2013  
JP 2014-198238 A 10/2014  
JP 2015-510802 A 4/2015



(56)

## References Cited

## FOREIGN PATENT DOCUMENTS

JP	2017-113635	A	6/2017
KR	20-1998-0005117	U	3/1998
KR	2019-980005117	U	3/1998
KR	10-0200669	B1	3/1999
KR	10-2003-0068633	A	8/2003
KR	10-2004-0093706	A	11/2004
KR	10-0786539	B1	12/2007
KR	10-0790758	B1	12/2007
KR	10-2008-0045022	A	5/2008
KR	10-0851274	B1	8/2008
KR	10-2010-0041207	A	4/2010
KR	10-2010-0060222	A	6/2010
KR	10-2010-0135863	A	12/2010
KR	10-1053835	B1	8/2011
KR	10-2011-0119640	A	11/2011
KR	10-2012-0115703	A	10/2012
KR	10-2013-0087770	A	8/2013
KR	10-1366126	B1	2/2014
KR	10-1386137	B1	4/2014
KR	10-2014-0052667	A	5/2014
KR	10-2014-0069431	A	6/2014
KR	10-2015-0030264	A	3/2015
KR	10-2015-0062492	A	6/2015
KR	10-2016-0048425	A	5/2016
KR	10-2016-0146337	A	12/2016
KR	10-1707659	B1	2/2017
KR	10-1719459	B1	3/2017
KR	10-2017-0041776	A	4/2017
KR	10-2017-0083399	A	7/2017
KR	10-2017-0089842	A	8/2017
KR	10-1813652	B1	8/2017
KR	10-2017-0130470	A	11/2017
KR	10-1819204	B1	1/2018
KR	10-2018-0054247	A	5/2018
KR	10-1840346	B1	5/2018
KR	10-1862127	B1	5/2018
KR	10-2018-0109828	A	10/2018
KR	10-1938890	B1	1/2019
KR	10-2019-0074150	A	6/2019
WO	WO 2016/154399	A1	9/2018
WO	WO 2018/231868	A1	12/2018

## OTHER PUBLICATIONS

TargetCool-6. Disassembly/Disposal, RecensMedical, Inc. Youtube, [Post date: May 18, 2022], [Site Seen May 23, 2022], Seen at URL: <https://www.youtube.com/watch?v=KzfyNBihlYU> (Year: 2022).\*

Maglite Mag Charger LED Charging Cradle for Flashlights, Maglite, BNH, [Post date unknown], [Site seen May 23, 2022], Seen at URL: [https://www.bhphotovideo.com/c/product/1240685-REG/maglite\\_ahxx025\\_magcharger\\_led\\_charging\\_cradle.html](https://www.bhphotovideo.com/c/product/1240685-REG/maglite_ahxx025_magcharger_led_charging_cradle.html) (Year: 2022).\*

Chinese First Office Action dated Dec. 22, 2020 for CN 201780083128.0.

European (EUIPO) Examination Report dated Jan. 11, 2021 for 008309504-003.

European (EUIPO) Examination Report dated Feb. 5, 2021 for 008309504-003.

International Search Report dated Mar. 4, 2021, for PCT/KR2020/012886.

International Written Opinion dated Mar. 4, 2021, for PCT/KR2020/012886.

Office Action dated Dec. 24, 2020 for U.S. Appl. No. 17/036,269.

Notice of Allowance dated Feb. 22, 2021 for U.S. Appl. No. 17/036,311.

Notice of Allowance dated Feb. 3, 2021 for U.S. Appl. No. 29/701,630.

Notice of Allowance dated Feb. 3, 2021 for U.S. Appl. No. 29/701,631.

International Search Report dated June 4, 2018 for PCT/KR2017/012935.

International Search Report dated Jul. 6, 2018 for PCT/KR2018/003773.

International Search Report dated Aug. 8, 2018 for PCT/KR2017/013901.

International Search Report dated May 30, 2019 for PCT/KR2018/016491.

International Search Report and Written Opinion dated Aug. 14, 2019 for PCT/KR2019/005105.

International Search Report and Written Opinion dated Nov. 15, 2019 for PCT/KR2019/009411.

International Search Report dated Mar. 27, 2020, for PCT/KR2019/017328.

Korean Notice of Allowance dated Jun. 30, 2018 for KR 10-2016-0151947.

Korean Office Action dated Oct. 22, 2018 for KR 10-2017-0162715.

Korean Notice of Allowance dated Aug. 29, 2019 for KR 10-2017-0162715.

Korean Office Action dated Oct. 22, 2018 for KR 10-2017-0162716.

Korean Notice of Allowance dated Jul. 29, 2019 for KR 10-2017-0162716.

Korean Office Action dated Jul. 29, 2019 for KR 10-2017-0162717.

Korean Final Office Action dated Jan. 17, 2020 for KR 10-2017-0162717 with Translation.

Korean Office Action dated Nov. 26, 2019 for KR 10-2018-0049108—w/ Trans.

Korean Final Office Action dated May 10, 2020, for KR 10-2018-0049109 with Translation.

Korean Office Action dated Nov. 27, 2019 for KR 10-2018-0049109—w/ Trans.

Korean Notice of Allowance dated Jun. 24, 2020 for KR 10-2018-0049109—w/ Trans.

Korean Office Action dated Dec. 6, 2019 for KR 10-2018-0049110—w/ Trans.

Korean Final Office Action dated May 10, 2020 for KR 10-2018-0049110—w/ Trans.

Korean Notice of Allowance dated Jun. 22, 2020 for KR 10-2018-0049110—w/ Trans.

Korean Office Action dated Dec. 9, 2019 for KR 10-2018-0049115—w/ Trans.

Korean Office Action dated May 10, 2020 for KR 10-2018-0049115, with Eng. Translation.

Korean Notice of Allowance dated Jul. 21, 2020 for KR 10-2018-0049115—w/ Trans.

Korean Office Action dated Dec. 10, 2019 for KR 10-2018-0049117—w/ Trans.

Korean Notice of Allowance dated May 10, 2020 for KR 10-2018-0049117.

Korean Office Action dated Oct. 8, 2019 for KR 10-2018-0052601.

Korean Second Office Action, with translation, dated Oct. 28, 2019 for KR 10-2018-0052601.

Korean Notice of Allowance dated Apr. 2, 2020 for KR 10-2018-0052601 with Eng. Translation.

Korean Office Action dated Oct. 22, 2018, for KR 10-2018-0117138.

Office Action dated Oct. 2, 2019 for U.S. Appl. No. 15/828,449.

Office Action dated May 15, 2020 for U.S. Appl. No. 15/828,449.

Office Action dated Sep. 13, 2019 for U.S. Appl. No. 16/412,296.

Final Office Action dated Jan. 31, 2020 for U.S. Appl. No. 16/412,296.

Office Action dated Jun. 26, 2020 for U.S. Appl. No. 16/412,296.

Final Office Action dated Oct. 28, 2020 for U.S. Appl. No. 16/412,296.

Office Action dated Dec. 8, 2020 for U.S. Appl. No. 17/036,311.

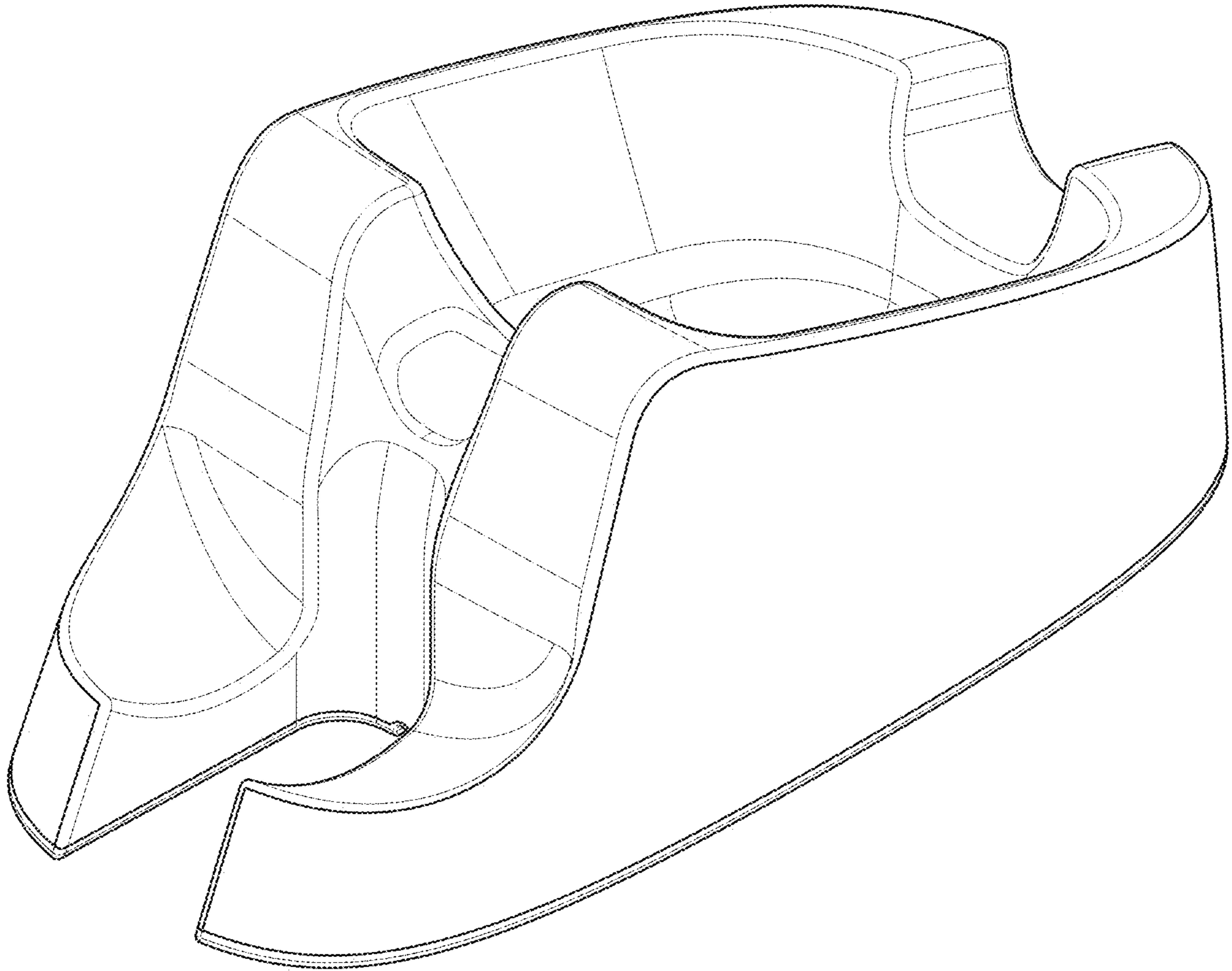
Office Action dated Nov. 5, 2020 for U.S. Appl. No. 29/701,630.

Office Action dated Nov. 5, 2020 for U.S. Appl. No. 29/701,631.

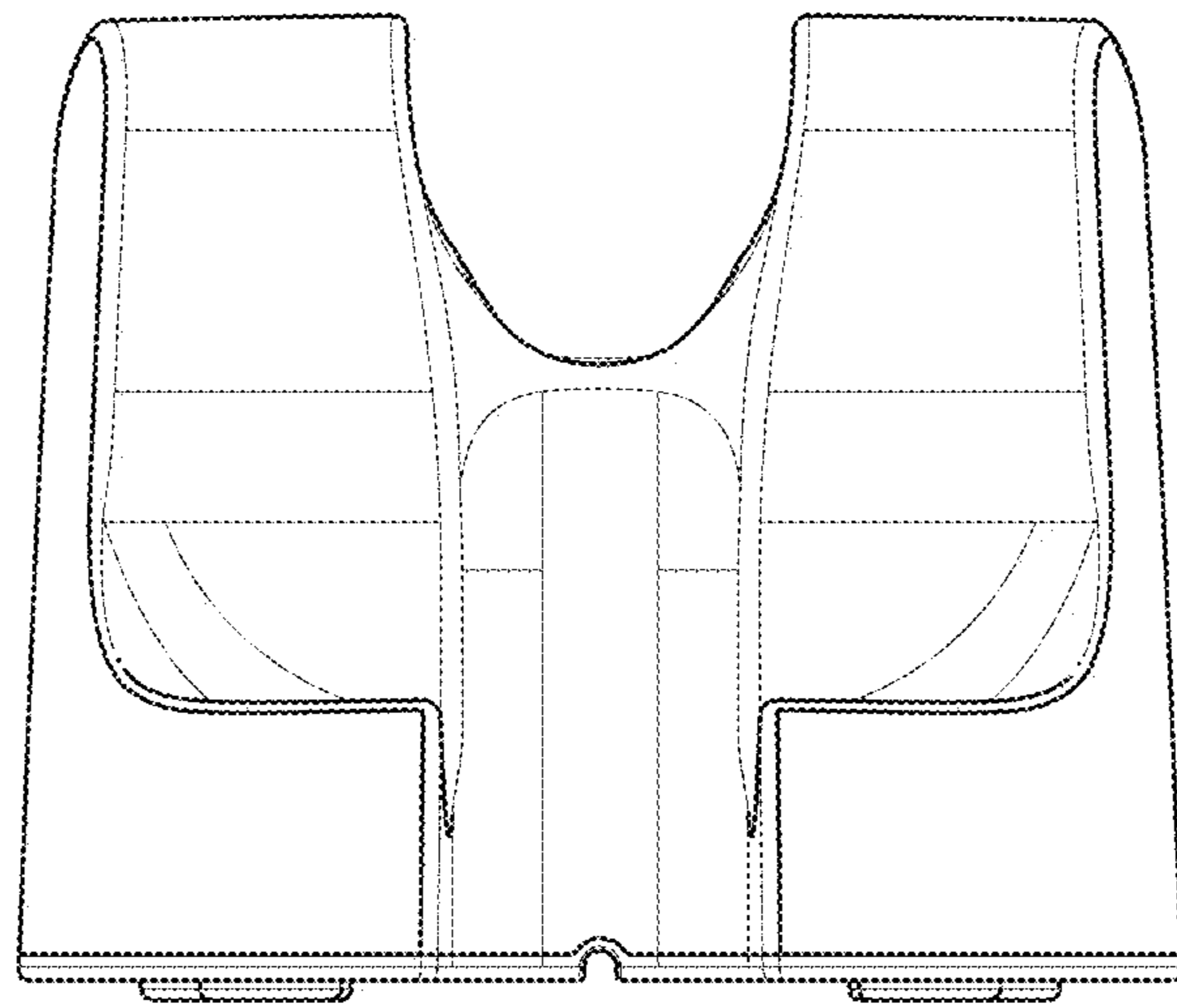
Smith et al., "Ice Anesthesia for Injection of Dermal Fillers," The American Society for Dermatologic Surgery Inc., Dermatol. Surg 2010;36:812-814, 2010.

Sarifakioglu, et al., "Evaluating the Effects of Ice Application on the Pain Felt During Botulinum Toxin Type-A Injections," Annals of Plastic Surgery, vol. 53, No. 6, Dec. 2004.

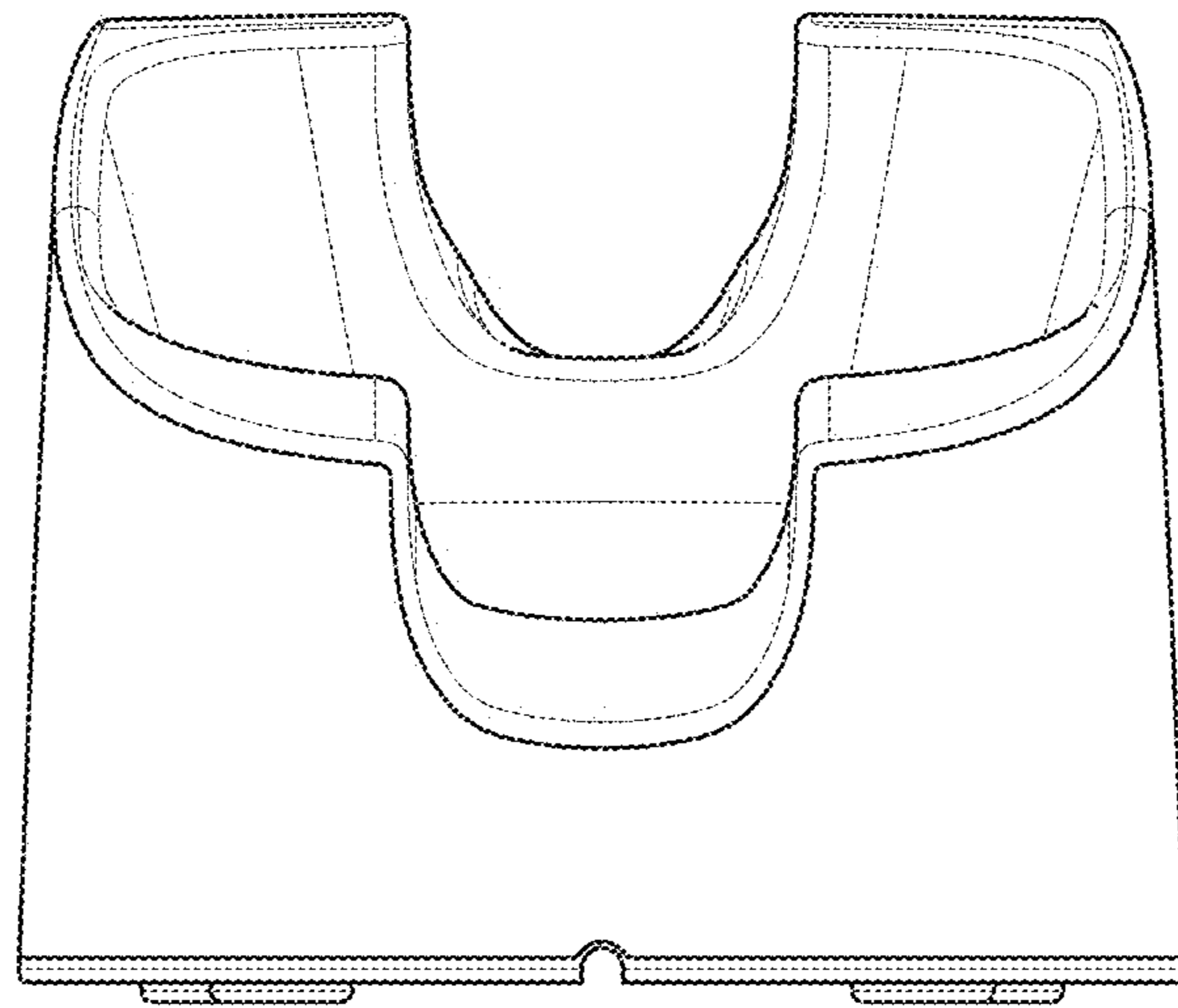
\* cited by examiner



*FIG. 1*

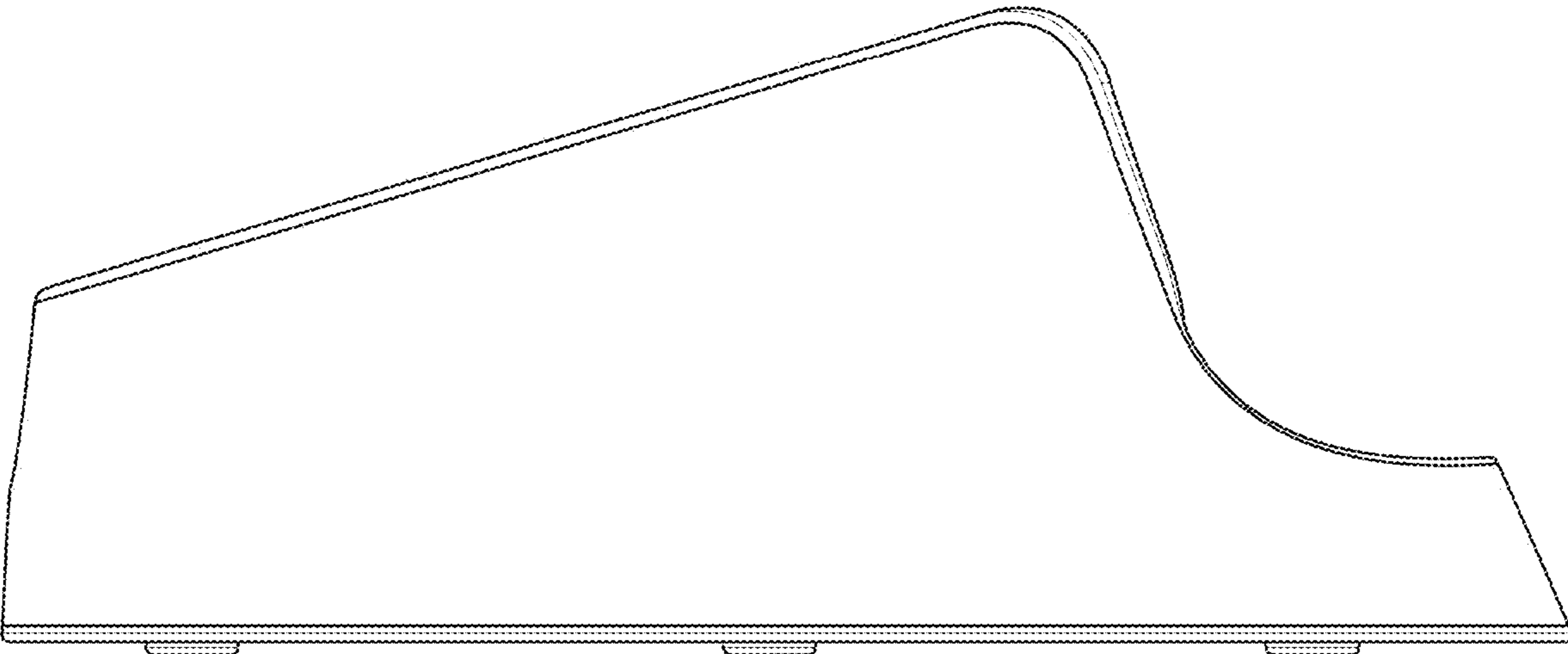


*FIG. 2*

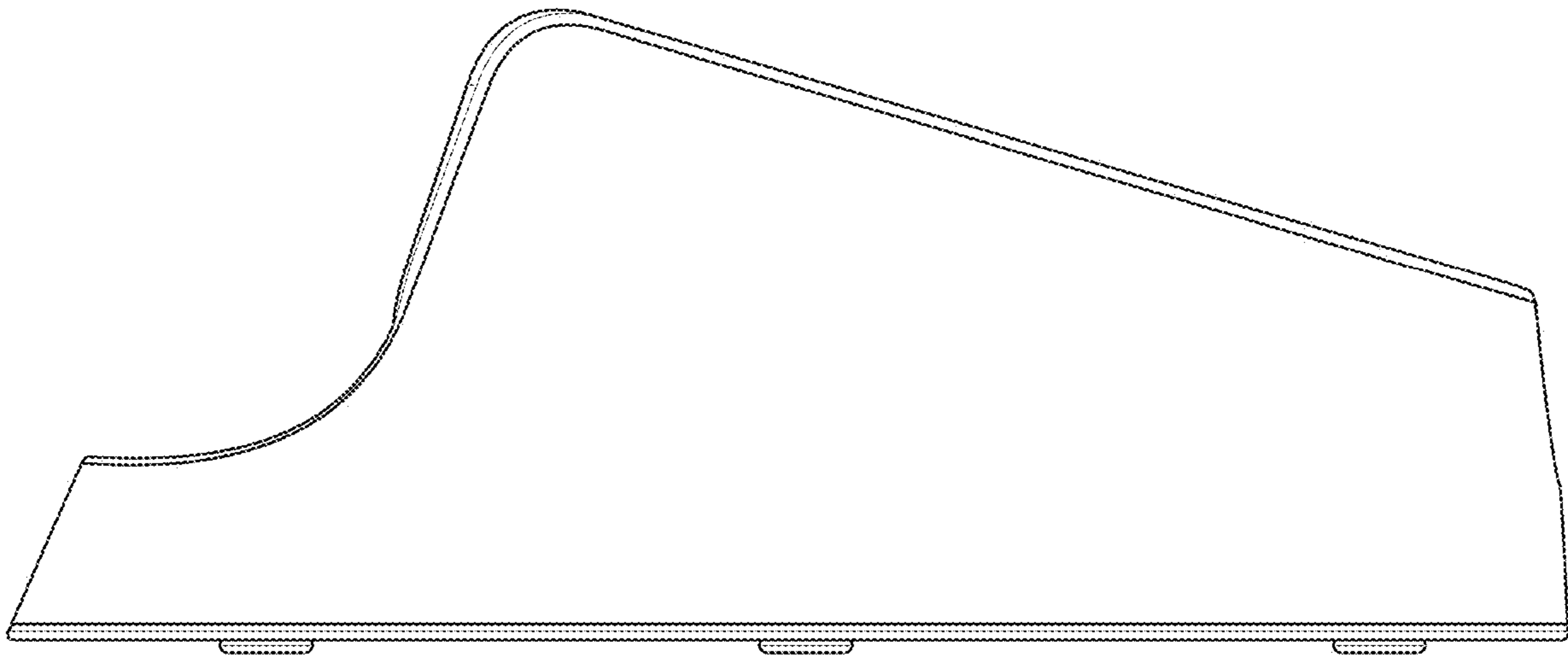


*FIG. 3*



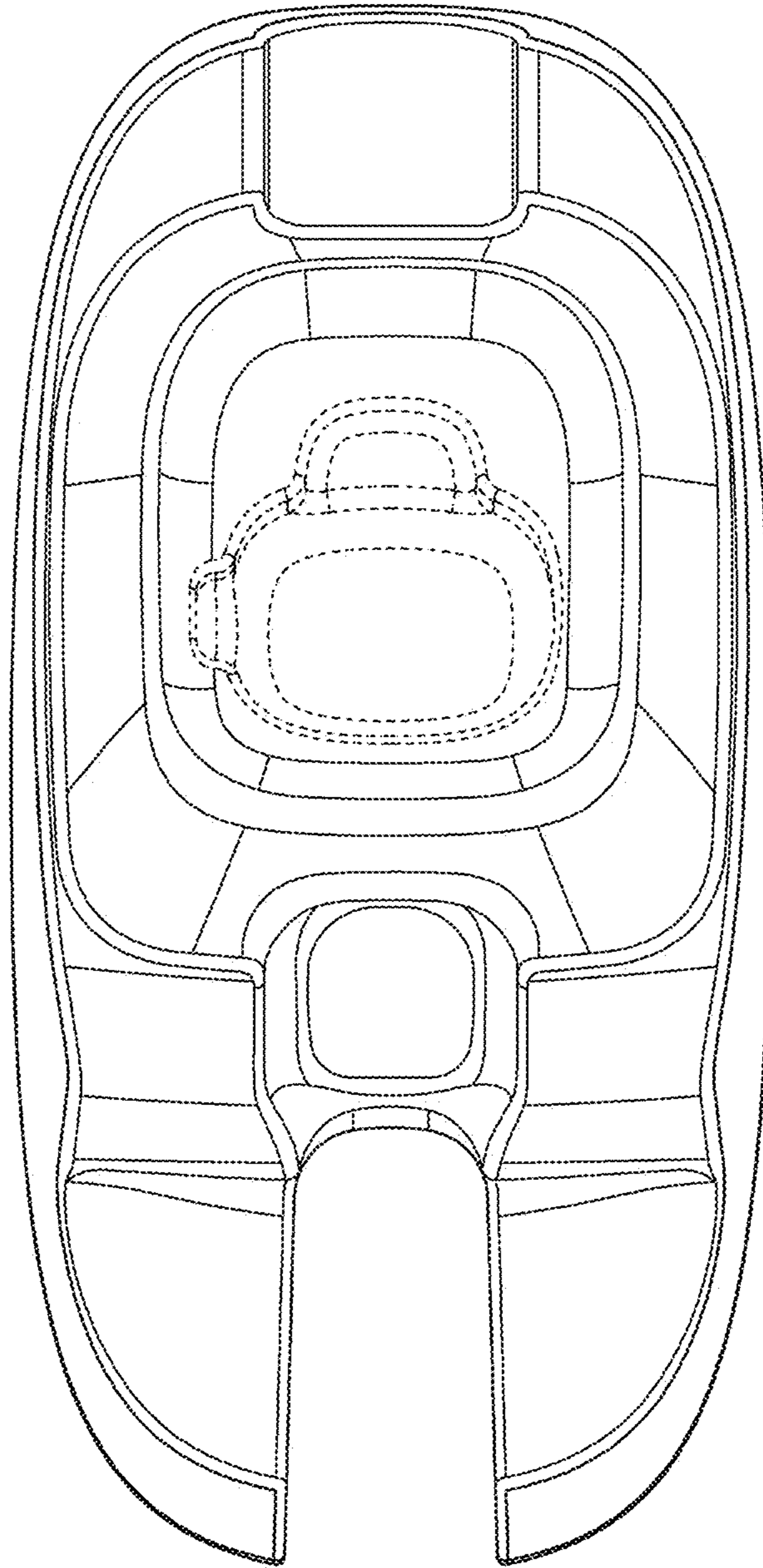


*FIG. 4*

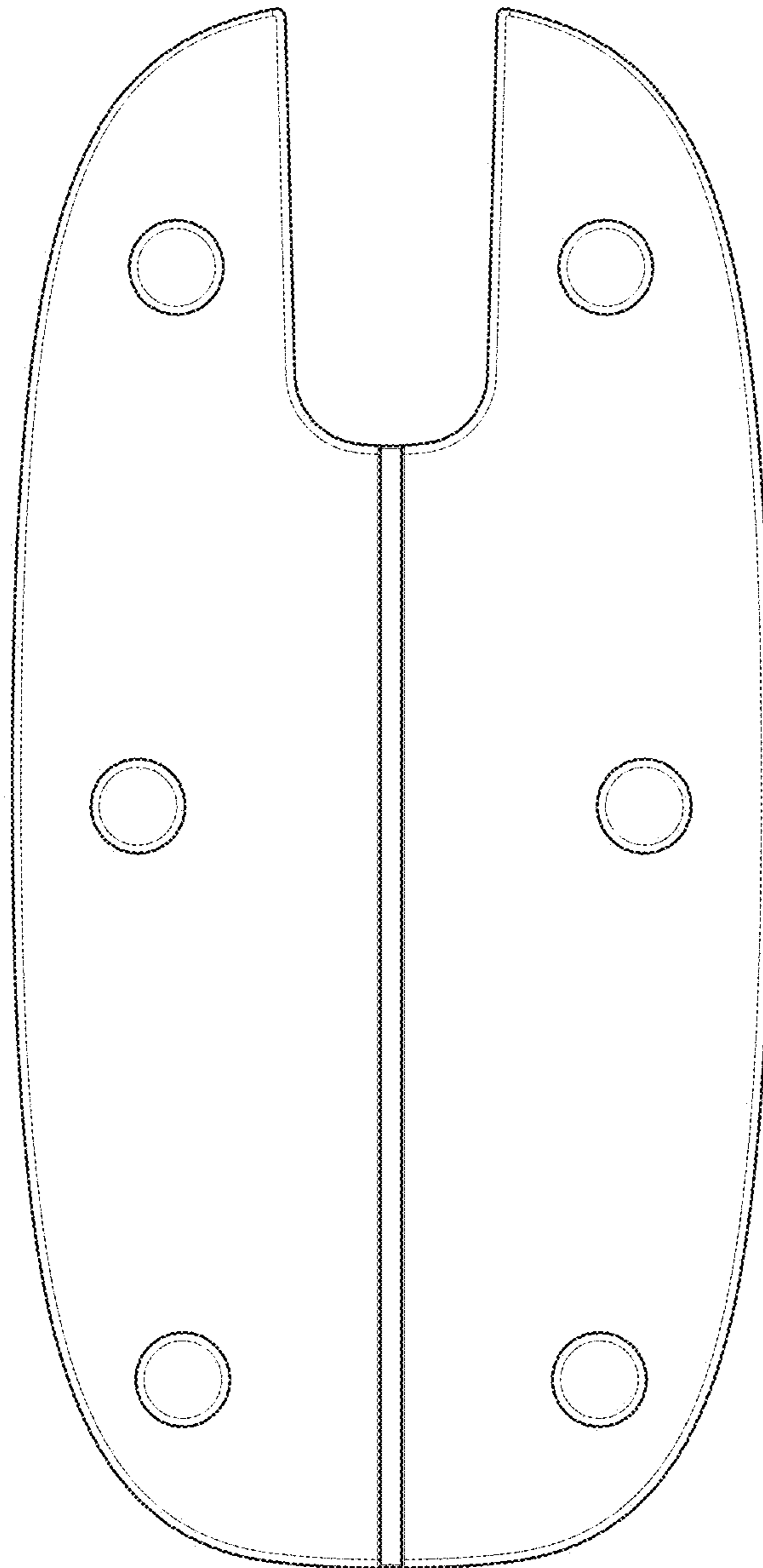


*FIG. 5*





*FIG. 6*



*FIG. 7*