



US00D929005S

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

(10) **Patent No.:** **US D929,005 S**

(45) **Date of Patent:** **** Aug. 24, 2021**

(54) **MULTI-FUNCTIONAL LED HEADLAMP**

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

(21) Appl. No.: **29/692,376**

(22) Filed: **May 24, 2019**

(30) **Foreign Application Priority Data**

Feb. 11, 2019 (EM) 006221545

(51) **LOC (13) Cl.** **26-02**

(52) **U.S. Cl.**
USPC **D26/39**

(58) **Field of Classification Search**
USPC D26/37-51
CPC F21L 2003/00; F21L 4/00; F21L 4/005;
F21L 4/02; F21L 4/025; F21L 4/027;
F21L 4/04; F21L 4/08; F21L 13/00; F21L
13/04; F21L 13/08; F21L 14/02; F21L
17/00; F21L 19/00

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

7,568,812 B1 * 8/2009 Kumthampinij F21L 4/04
362/105
D658,323 S * 4/2012 Freschi D26/39
8,449,132 B2 * 5/2013 Lau F21L 4/00
362/105
D743,597 S * 11/2015 Abernethy D26/39

D747,021 S * 1/2016 Hunnewell D26/39
D752,257 S * 3/2016 Hine D26/39
D752,260 S * 3/2016 Hine D26/39
D752,261 S * 3/2016 Ma D26/39
D754,378 S * 4/2016 Feustel D26/39
D758,630 S * 6/2016 Li D26/39
9,593,834 B2 * 3/2017 Lee F21V 23/0492
D814,083 S * 3/2018 Green D26/39
D814,676 S * 4/2018 Windom D26/39
D821,006 S * 6/2018 Chen D26/39
D830,601 S * 10/2018 Petzl D26/39
D830,602 S * 10/2018 Melchior D26/39
D843,622 S * 3/2019 Karl, IV D26/39
D844,868 S * 4/2019 DeBrunner D26/39
D844,869 S * 4/2019 Green D26/39
D845,526 S * 4/2019 Windom D26/39
D853,002 S * 7/2019 Petzl D26/39
D857,958 S * 8/2019 Willows D26/38

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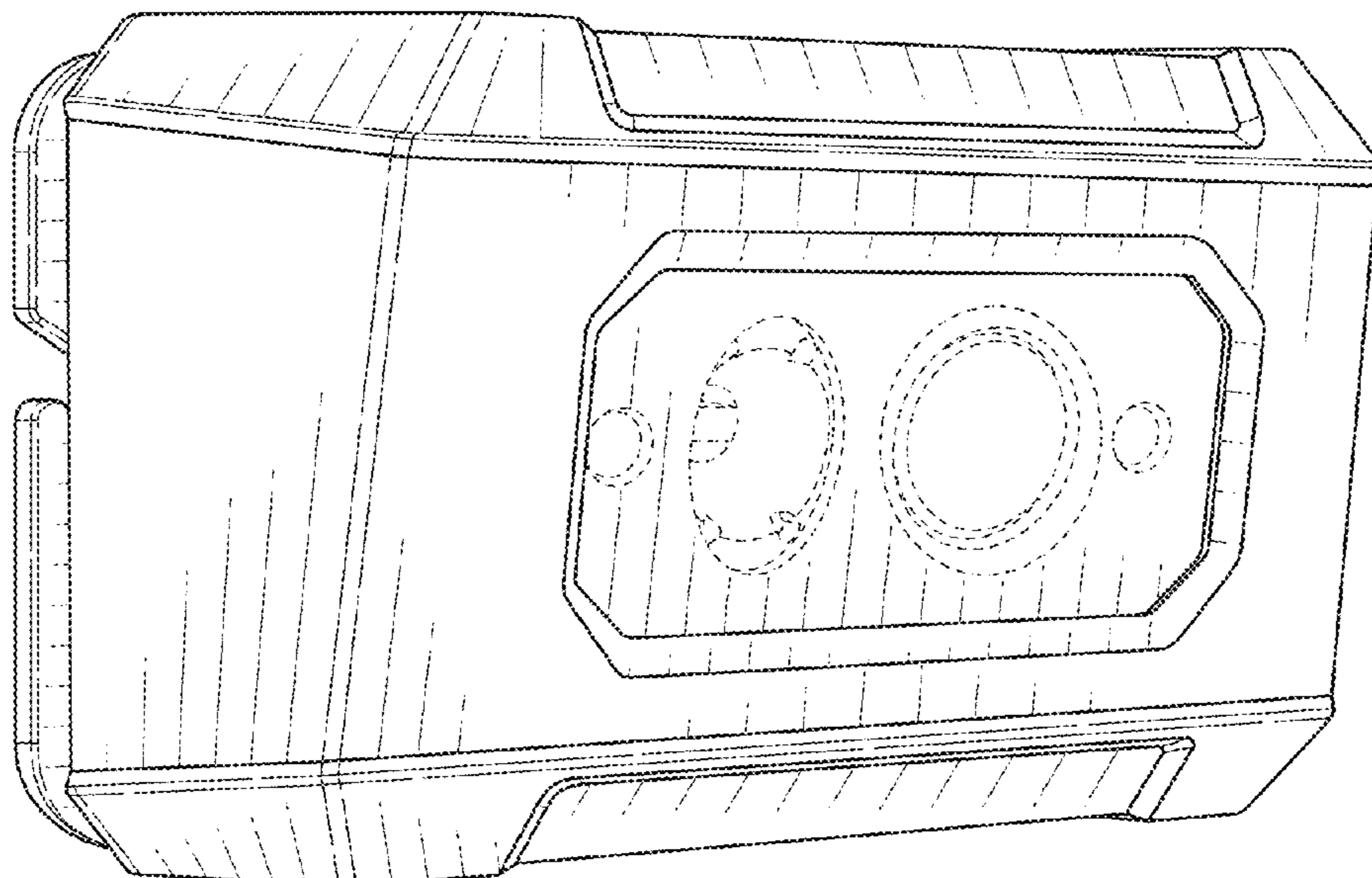
(57) **CLAIM**

The ornamental design for a multi-functional LED headlamp, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of the multi-functional LED headlamp showing our new design;
FIG. 2 is a front elevation view thereof;
FIG. 3 is a rear elevation view thereof;
FIG. 4 is a left side elevation view thereof;
FIG. 5 is a right side elevation view thereof
FIG. 6 is a top plan view thereof; and,
FIG. 7 is a bottom plan view thereof.
Throughout the drawings the broken lines depict portions of the multi-functional LED headlamp that form no part of the claimed design.

1 Claim, 4 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D861,212	S	*	9/2019	Windom	.....	D26/39
D863,633	S	*	10/2019	Rajasekaran	.....	D26/39
D864,449	S	*	10/2019	Eichelberger	.....	D26/39
D865,249	S	*	10/2019	Wu	.....	D26/39
D867,640	S	*	11/2019	Windom	.....	D26/39
D869,034	S	*	12/2019	Eichelberger	.....	D26/39
D872,330	S	*	1/2020	Smith	.....	D26/39
D872,331	S	*	1/2020	Smith	.....	D26/39
D872,918	S	*	1/2020	Smith	.....	D26/39
D875,978	S	*	2/2020	Willows	.....	D26/39
D876,694	S	*	2/2020	Inskeep	.....	D26/39
D877,950	S	*	3/2020	Yau	.....	D26/39
D882,136	S	*	4/2020	Huang	.....	D26/39
D884,234	S	*	5/2020	Bao	.....	D26/39
D884,944	S	*	5/2020	Fitch	.....	D26/39
D885,623	S	*	5/2020	Qiu	.....	D26/39
D887,602	S	*	6/2020	Kunzendorf	.....	D26/39
D888,305	S	*	6/2020	Yu	.....	D26/39
2008/0205036	A1	*	8/2008	Tarter	.....	F21L 4/04 362/105

* cited by examiner

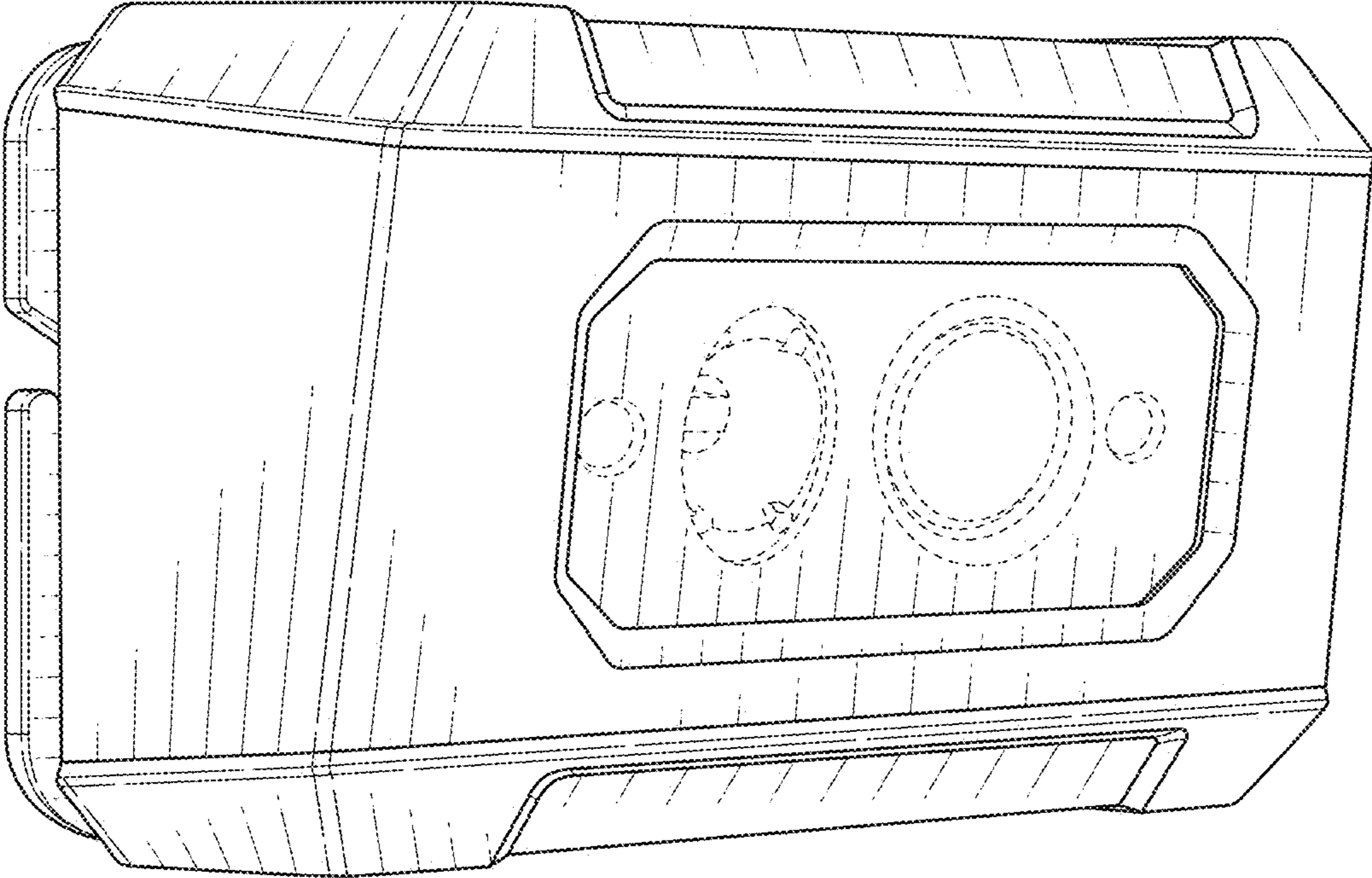


FIG. 1

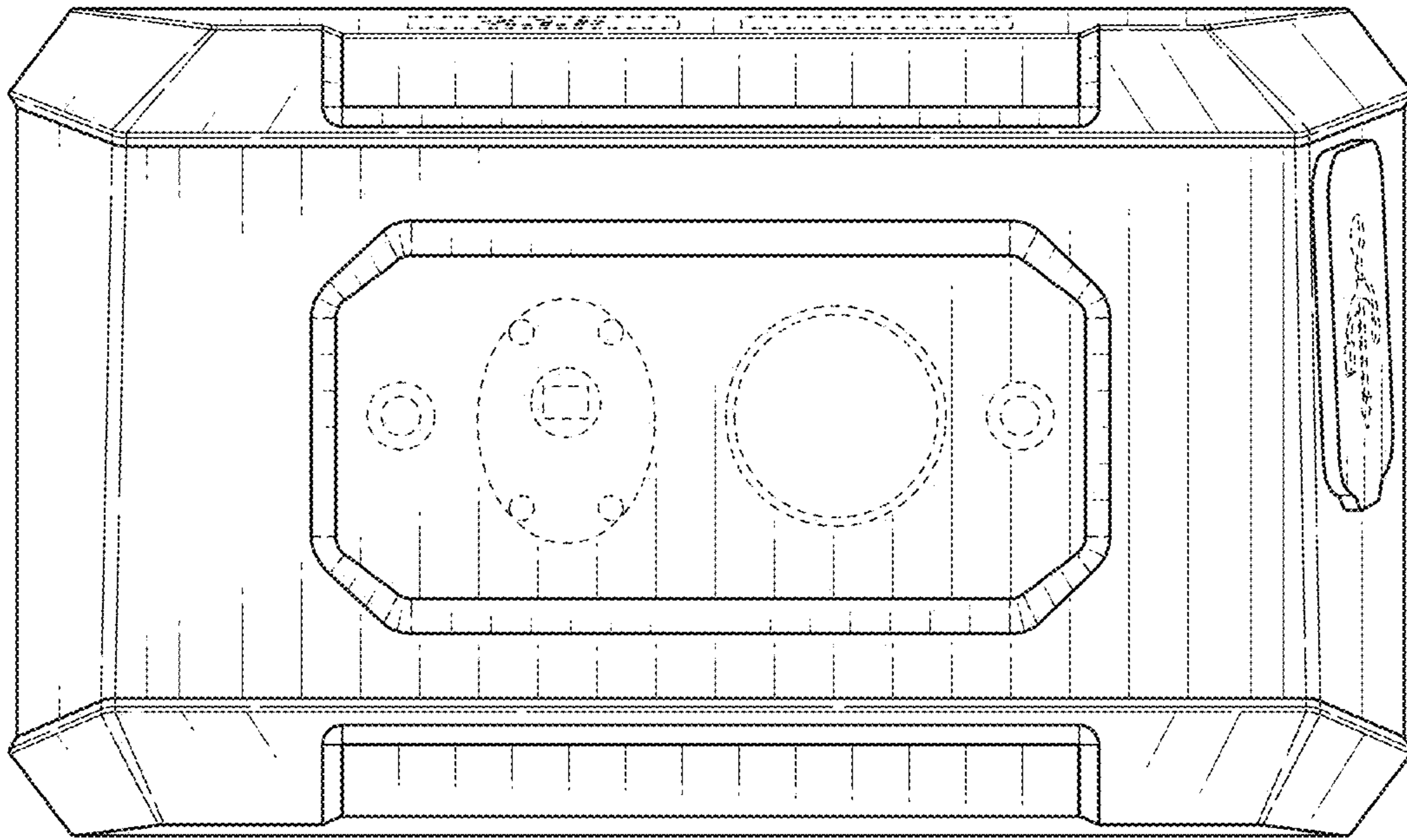


FIG. 2

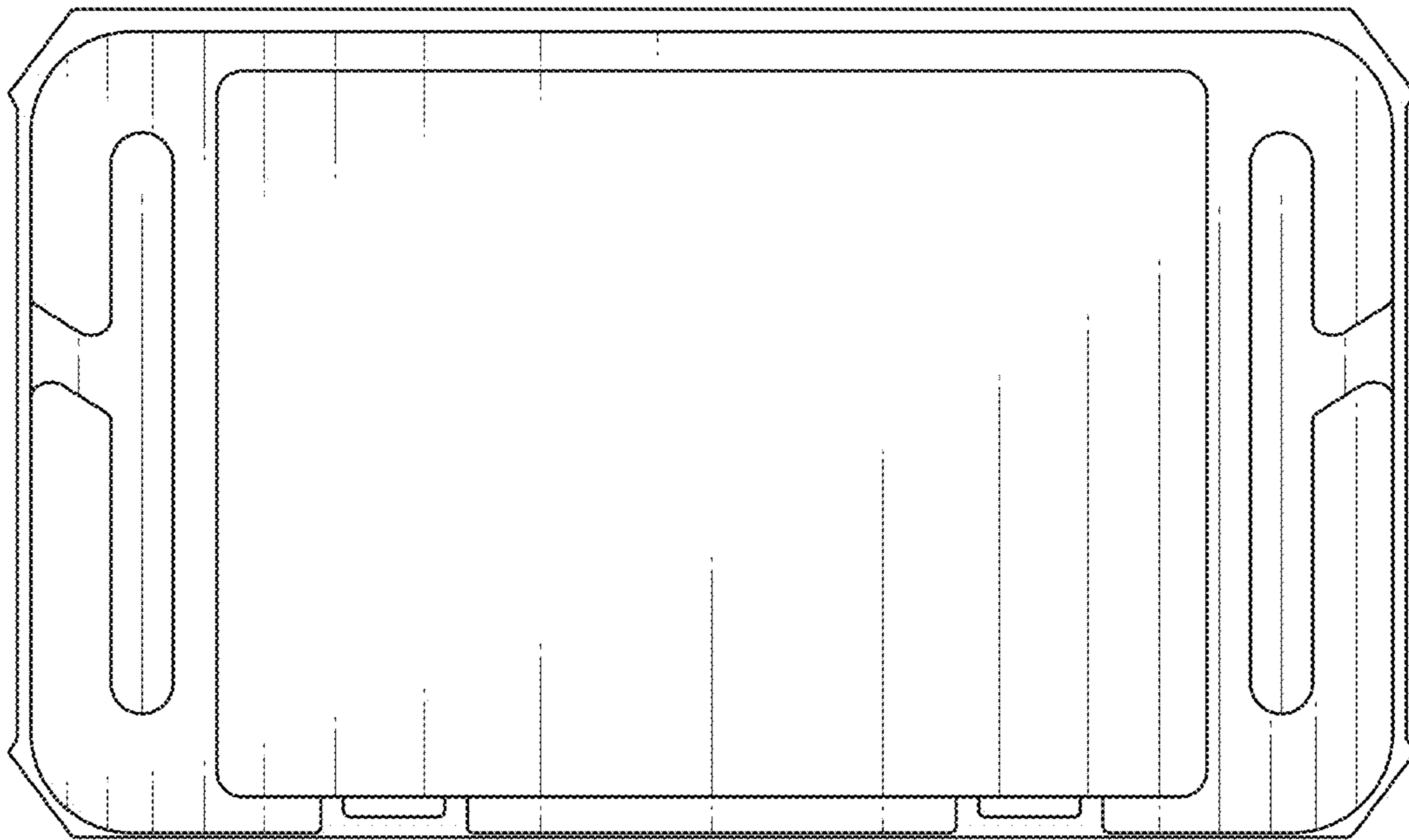


FIG. 3

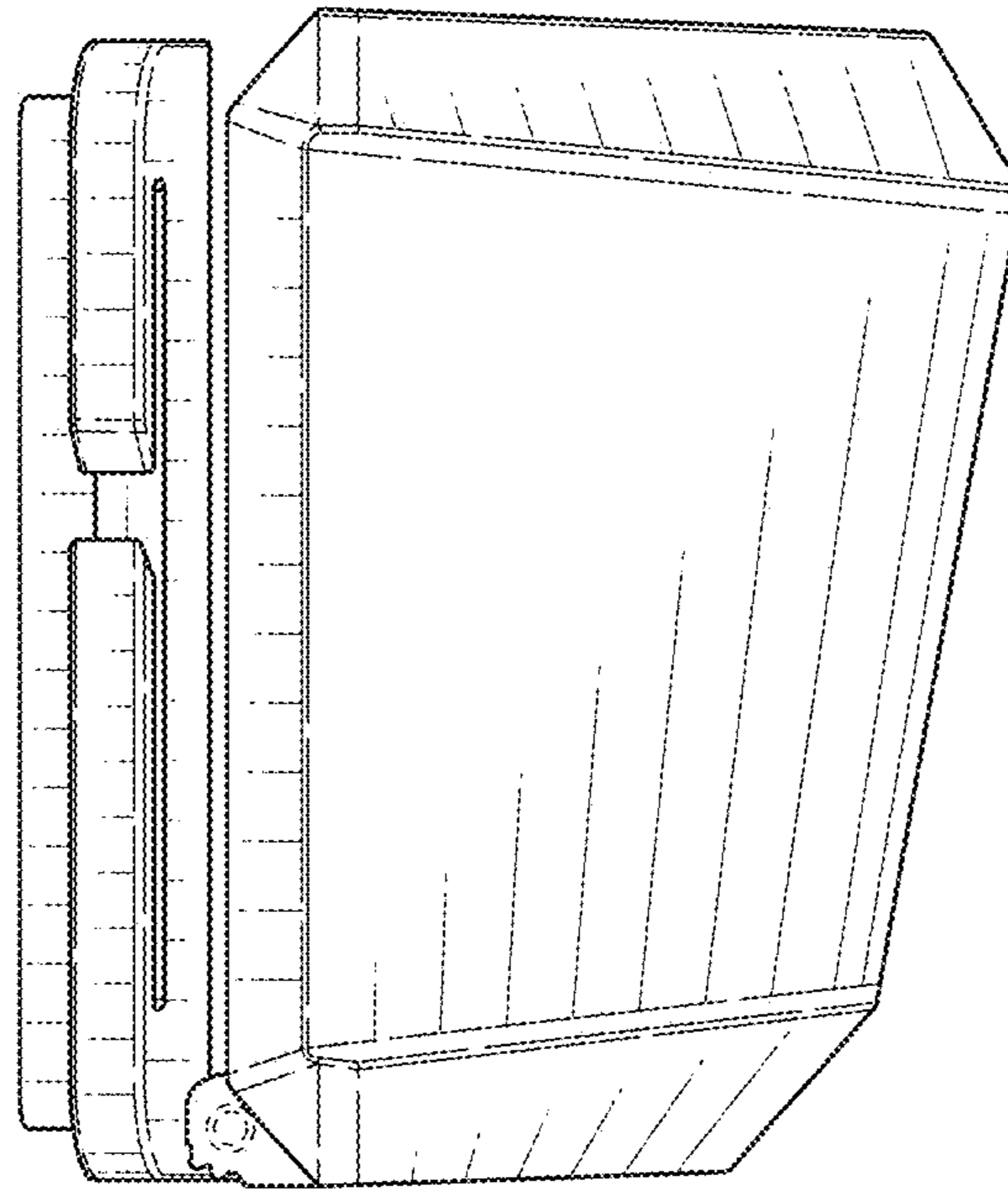


FIG. 4

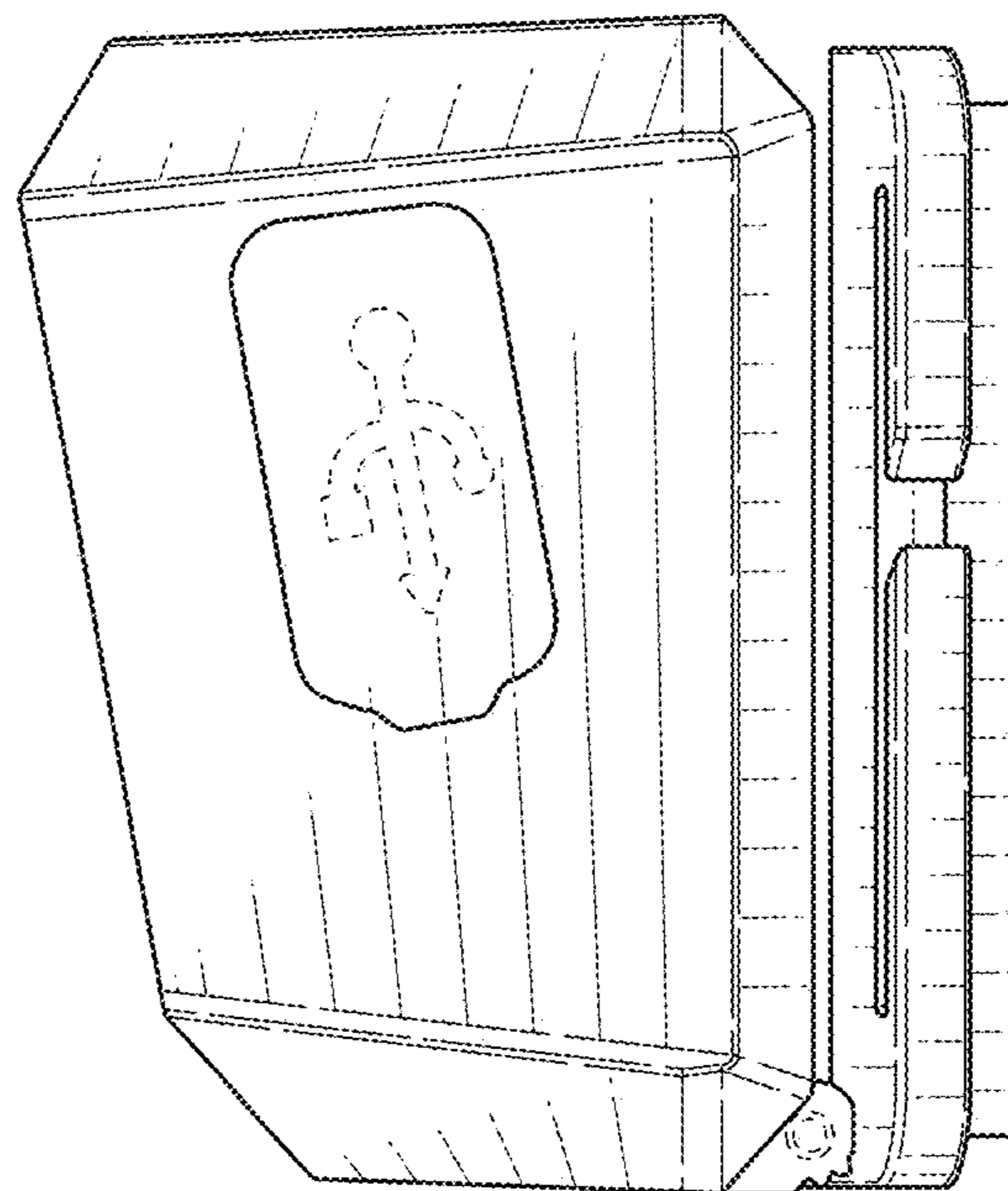


FIG. 5

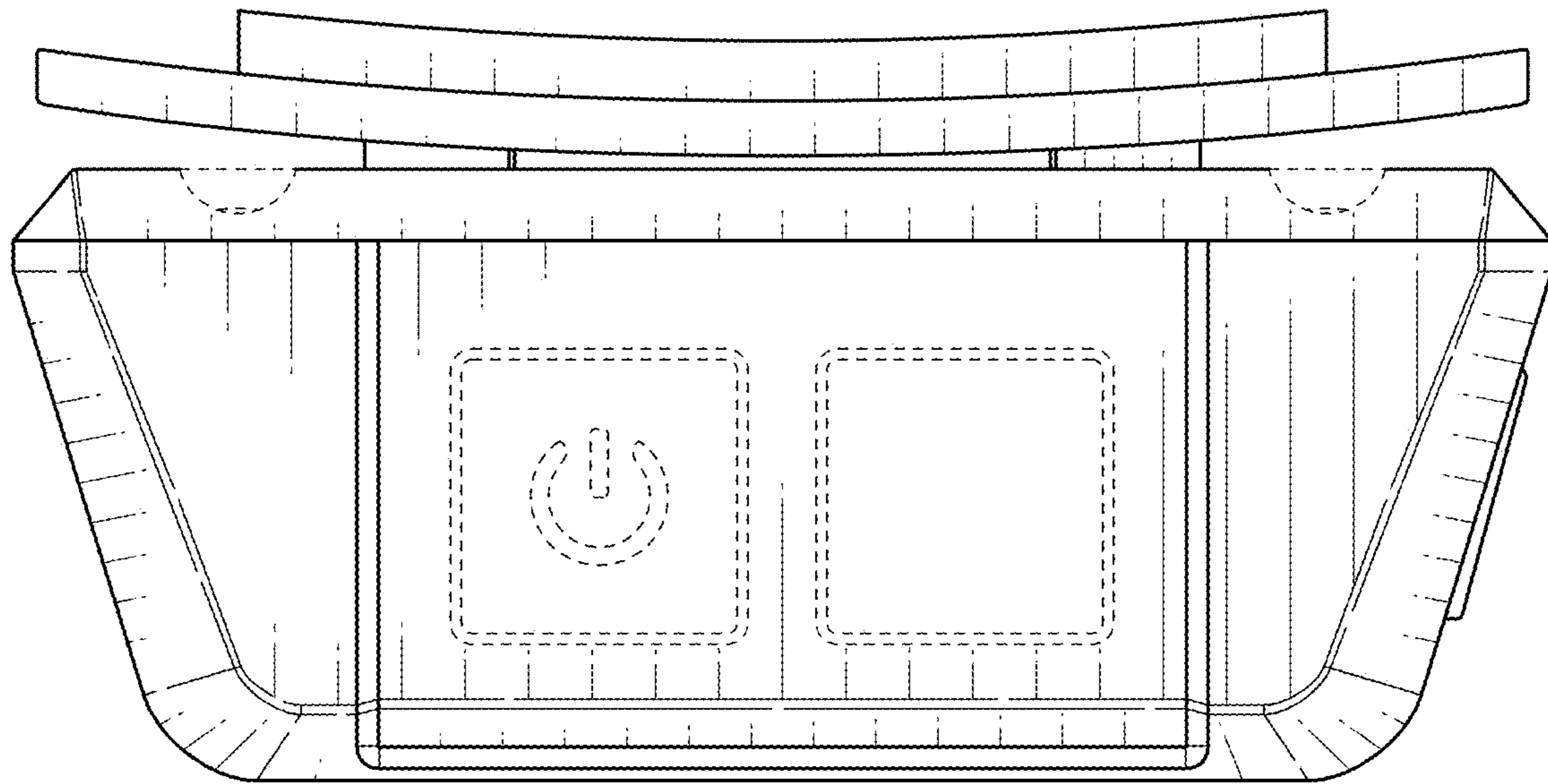


FIG. 6

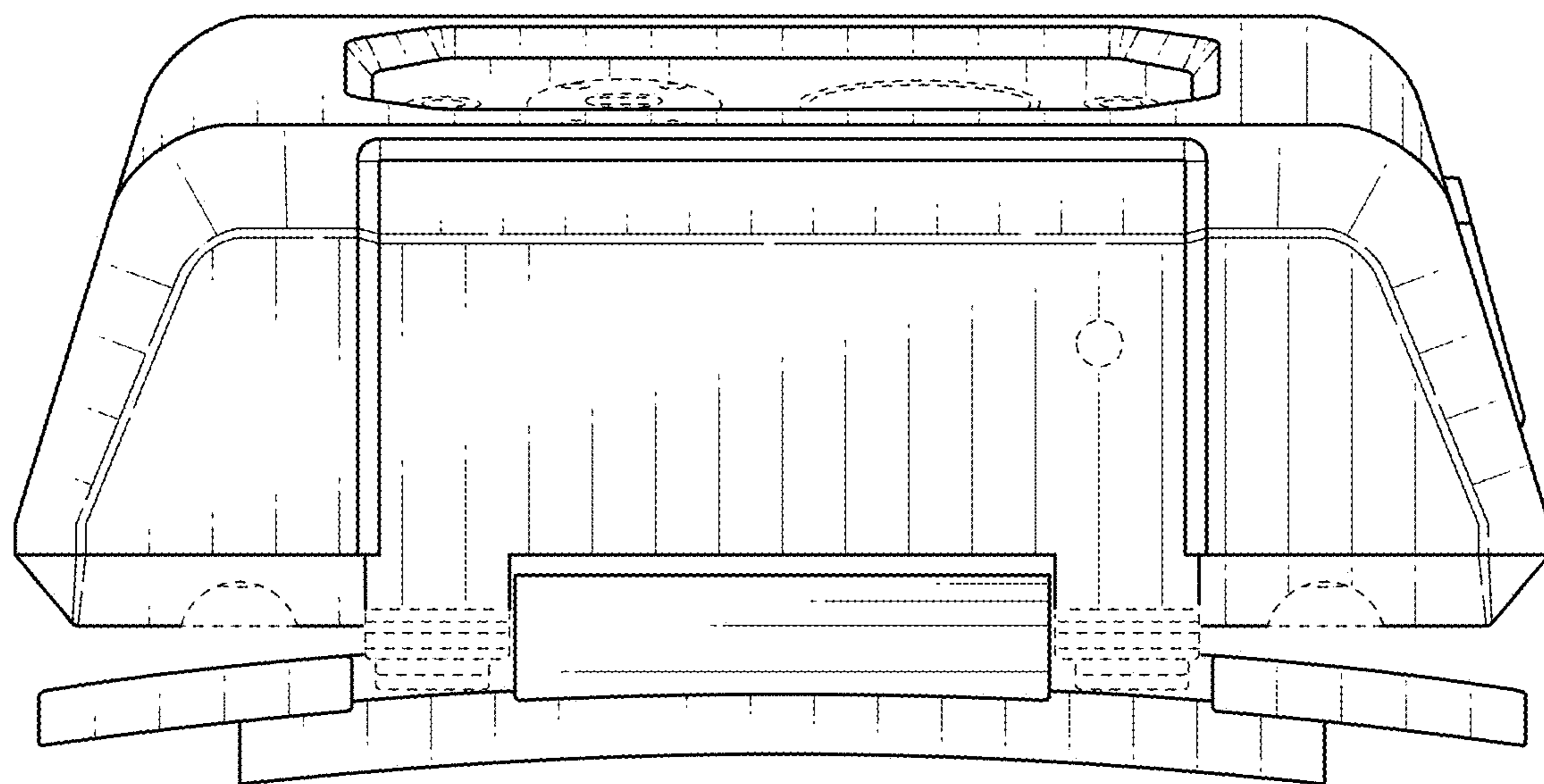


FIG. 7