

US00D975023S

(12) United States Design Patent (10) Patent No.:

Rosson et al. (45) Date of Patent: ** *Jan. 10, 2023

(56)

(54) MULTIPORT TERMINAL FOR MAKING OPTICAL CONNECTIONS

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US D975,023 S

(71)	Applicant:	Corning Research & Development
		Corporation, Corning, NY (US)

- (72) Inventors: Joel Christopher Rosson, Hickory, NC (US); Monique Lise Cote, Fort Worth, TX (US); Dayne Wilcox, El Cerrito, CA (US); Lee Alexander Webb, Huntersville, NC (US); Cameron Meyer, Lewisville, TX (US)
- (73) Assignee: Corning Research & Development
- Corporation, Corning, NY (US)
- (*) Notice: This patent is subject to a terminal disclaimer.
- (**) Term: **15 Years**
- (21) Appl. No.: 29/770,223
- (22) Filed: Feb. 10, 2021

Related U.S. Application Data

- (62) Division of application No. 29/695,707, filed on Jun. 21, 2019, now Pat. No. Des. 913,246.
- (52) **U.S. Cl.**

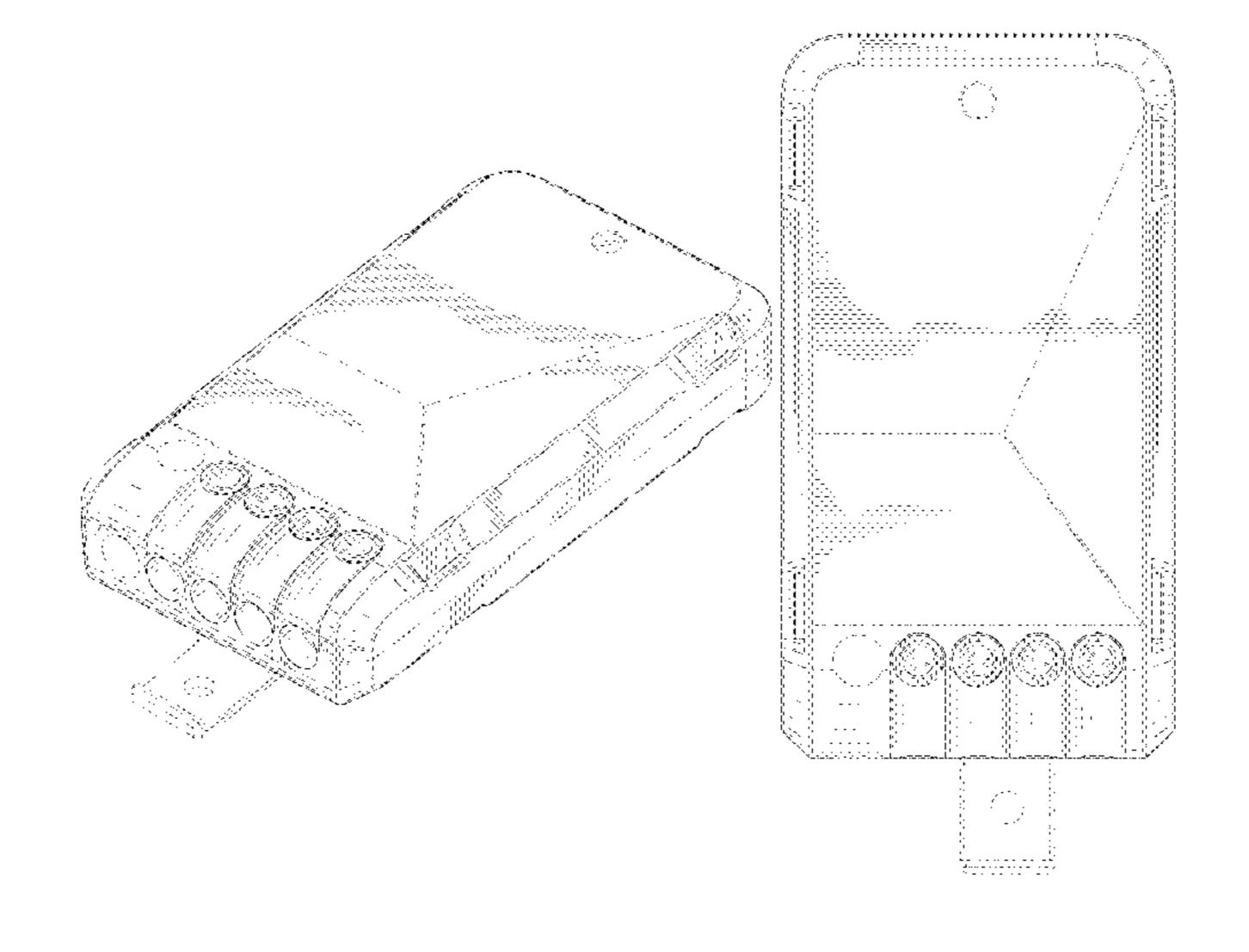
- (58) Field of Classification Search

G02B 6/4466; G02B 6/00; G02B 6/4439; G02B 6/4472; G02B 6/3885; G02B 6/44; G02B 6/3831; G02B 6/3825; G02B 6/3869; G02B 6/3893

See application file for complete search history.

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020/0233168		7/2020		FIG. 1 is a	top perspective view	w of a first embodiment of a
021/0026084			Dannoux G02B 6/3831		* * *	optical connections showing
021/00233811			Dannoux et al.	our new de	~	- F John Dirowing
021/0033611			Dannoux et al. Dannoux			wiom thought of EIC 1.
021/0070333		3/2021				view thereof of FIG. 1;
021/00/24/9			Ripumaree et al.		front view thereof	
	$\Gamma \mathbf{X} 1$		Elkins, II G02B 6/4469	FIG. 4 is a	rear view thereof o	of FIG. 1;
())]/())Z:/***	A1 *	10/33//.	LIMIN, II UVZD U/77U7			C CDIC 4
021/0247583 021/0278607				FIG. 5 is a	right side view the	reot of FIG. 1;
021/0278607	A1*	9/2021	Cote G02B 6/3825		right side view the	•
021/0278607 021/0318499	A1* A1*	9/2021 10/2021	Cote	FIG. 6 is a	left side view there	eof of FIG. 1;
021/0278607 021/0318499 022/0010923	A1* A1* A1*	9/2021 10/2021 1/2022	Cote	FIG. 6 is a FIG. 7 is a	left side view there top view thereof of	eof of FIG. 1; f FIG. 1; and
021/0278607 021/0318499 022/0010923	A1* A1* A1*	9/2021 10/2021 1/2022	Cote	FIG. 6 is a FIG. 7 is a	left side view there	eof of FIG. 1; f FIG. 1; and

FIG. 9 is a top perspective view of a second embodiment of a multiport terminal for making optical connections showing our new design;

FIG. 10 is a bottom perspective view thereof of FIG. 9;

FIG. 11 is a front view thereof of FIG. 9;

FIG. 12 is a rear view thereof of FIG. 9;

FIG. 13 is a right side view thereof of FIG. 9;

FIG. 14 is a left side view thereof of FIG. 9;

FIG. 15 is a top view thereof of FIG. 9; and

FIG. 16 is a bottom view thereof of FIG. 9.

FIG. 17 is a top perspective view of a third embodiment of a multiport terminal for making optical connections showing our new design;

FIG. 18 is a bottom perspective view thereof of FIG. 17;

FIG. 19 is a front view thereof of FIG. 17;

FIG. 20 is a rear view thereof of FIG. 17;

FIG. 21 is a right side view thereof of FIG. 17;

FIG. 22 is a left side view thereof of FIG. 17;

FIG. 23 is a top view thereof of FIG. 17; and

FIG. 24 is a bottom view thereof of FIG. 17.

FIG. 25 is a top perspective view of a fourth embodiment of a multiport terminal for making optical connections showing our new design;

FIG. 26 is a bottom perspective view thereof of FIG. 25;

FIG. 27 is a front view thereof of FIG. 25;

FIG. 28 is a rear view thereof of FIG. 25;

FIG. 29 is a right side view thereof of FIG. 25;

FIG. 30 is a left side view thereof of FIG. 25;

FIG. 31 is a top view thereof of FIG. 25; and

FIG. 32 is a bottom view thereof of FIG. 25.

FIG. 33 is a top perspective view of a fifth embodiment of a multiport terminal for making optical connections showing our new design;

FIG. 34 is a bottom perspective view thereof of FIG. 33;

FIG. 35 is a front view thereof of FIG. 33;

FIG. 36 is a rear view thereof of FIG. 33;

FIG. 37 is a right side view thereof of FIG. 33;

FIG. 38 is a left side view thereof of FIG. 33;

FIG. 39 is a top view thereof of FIG. 33; and

FIG. 40 is a bottom view thereof of FIG. 33.

FIG. 41 is a top perspective view of a sixth embodiment of a multiport terminal for making optical connections showing our new design;

FIG. 42 is a bottom perspective view thereof of FIG. 41;

FIG. 43 is a front view thereof of FIG. 41;

FIG. 44 is a rear view thereof of FIG. 41;

FIG. 45 is a right side view thereof of FIG. 41;

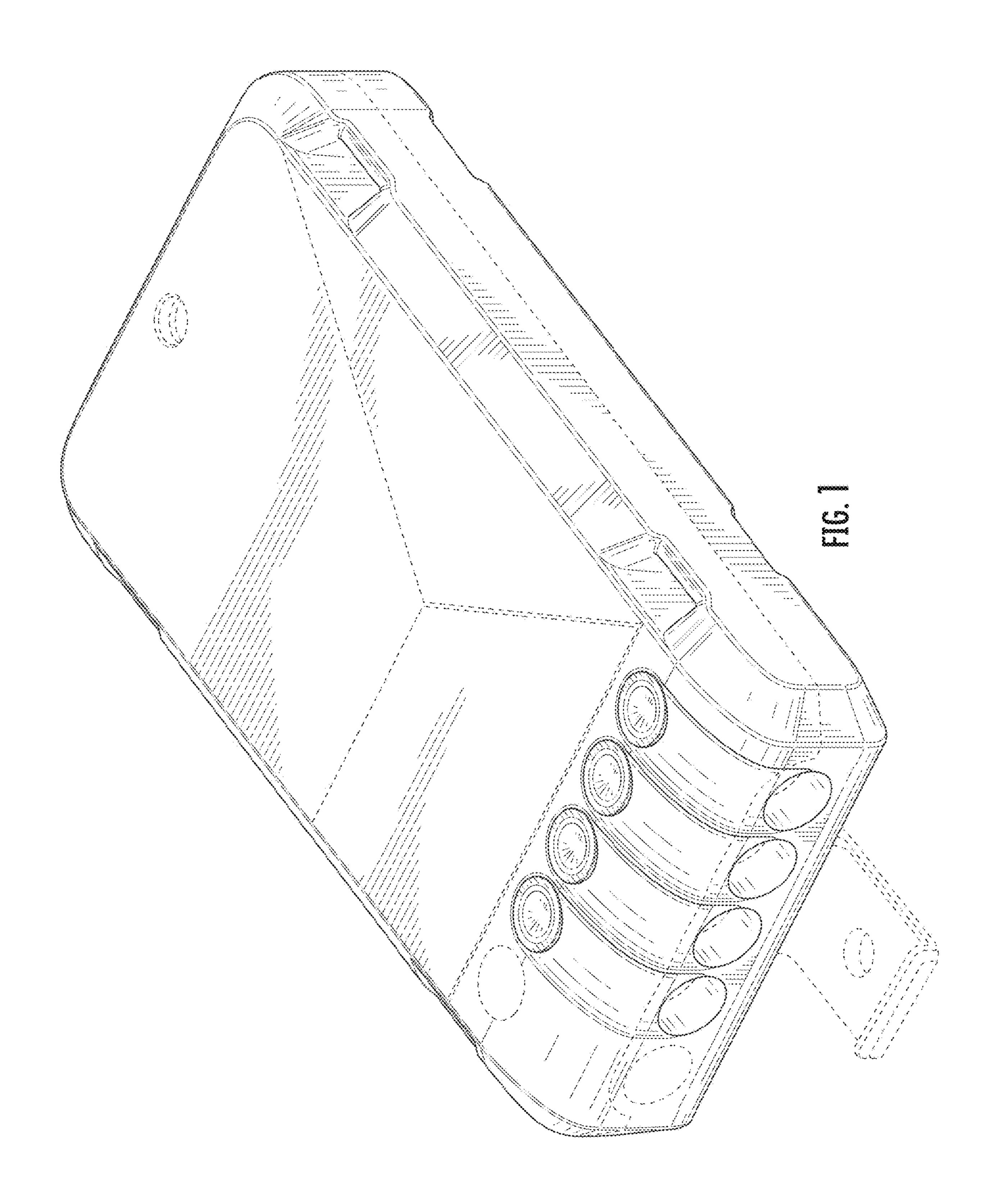
FIG. 46 is a left side view thereof of FIG. 41;

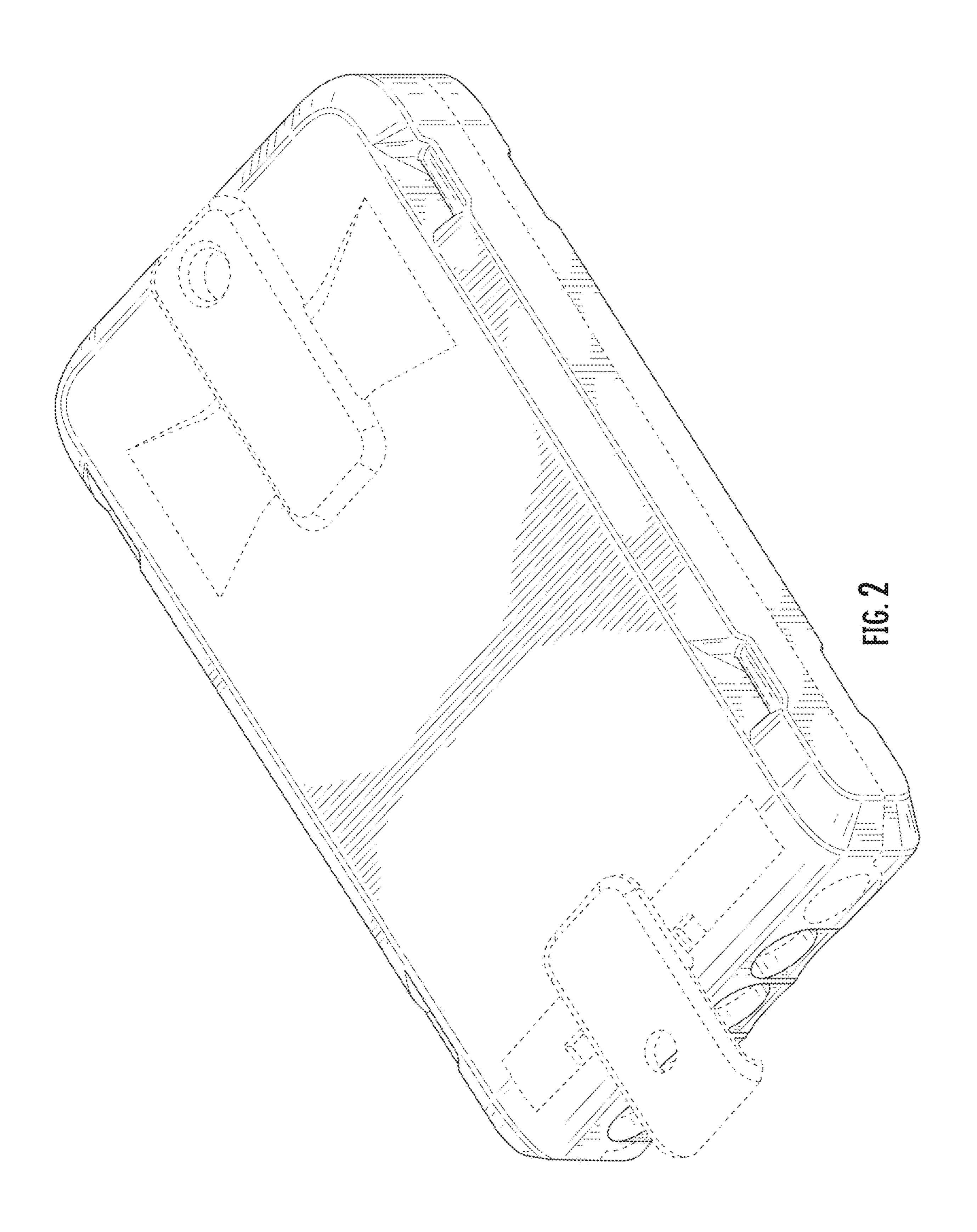
FIG. 47 is a top view thereof of FIG. 41; and,

FIG. 48 is a bottom view thereof of FIG. 41.

In FIGS. 1-48, the evenly-spaced broken lines are included for the purpose of illustrating environmental structure and form no part of the claimed design.

1 Claim, 36 Drawing Sheets





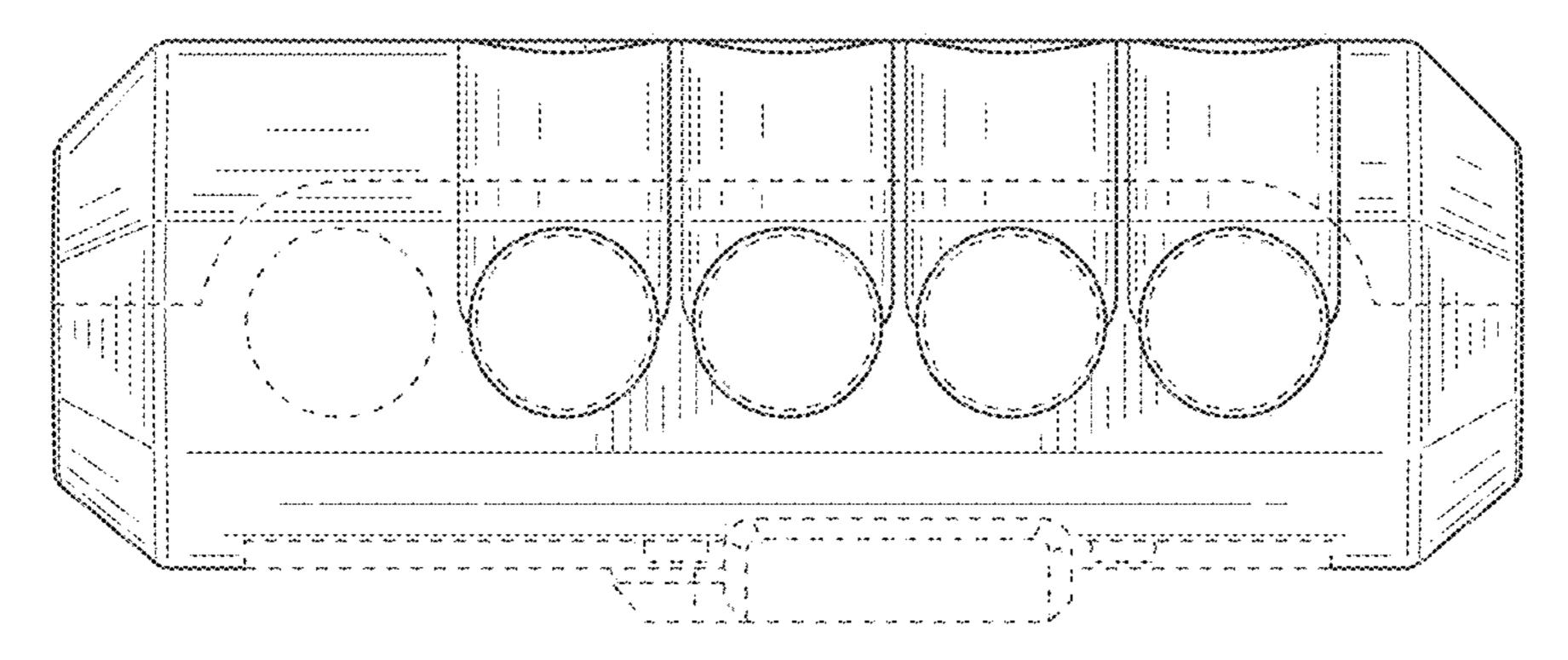


FIG. 3

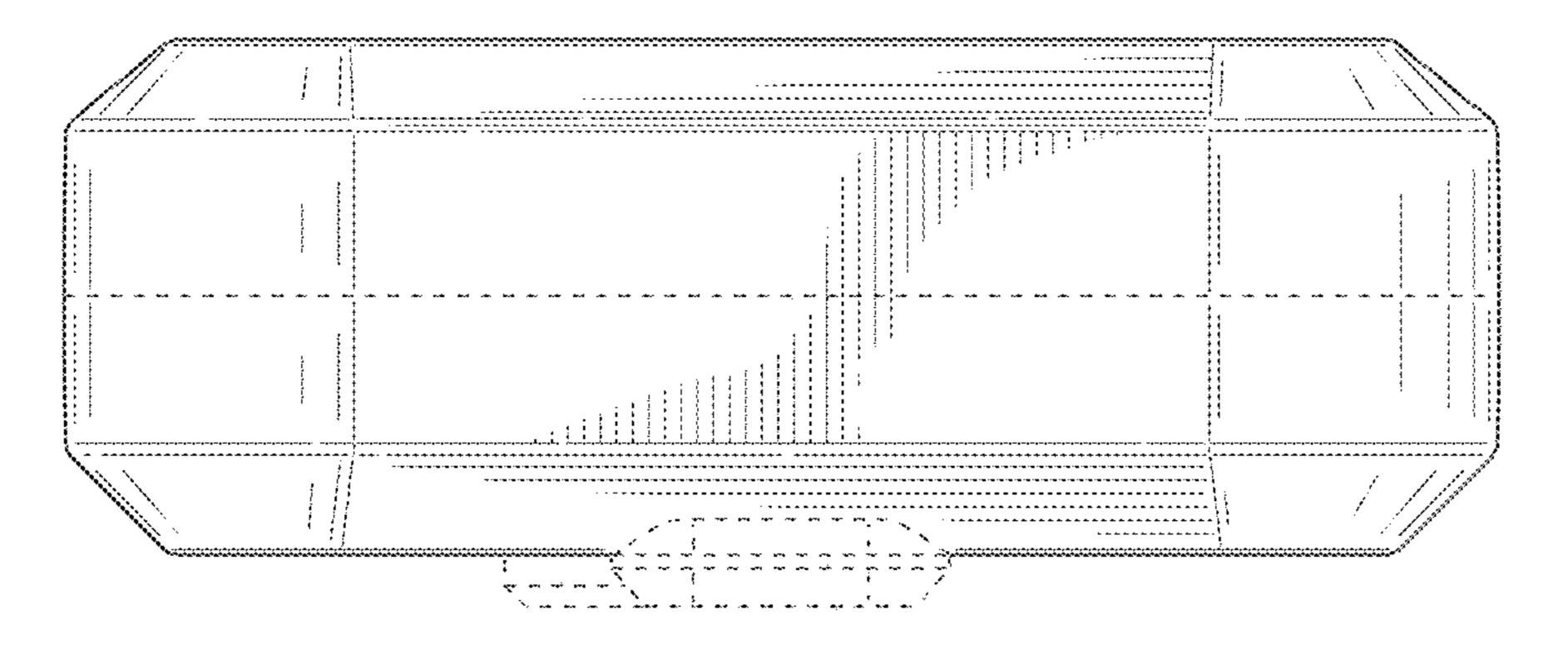
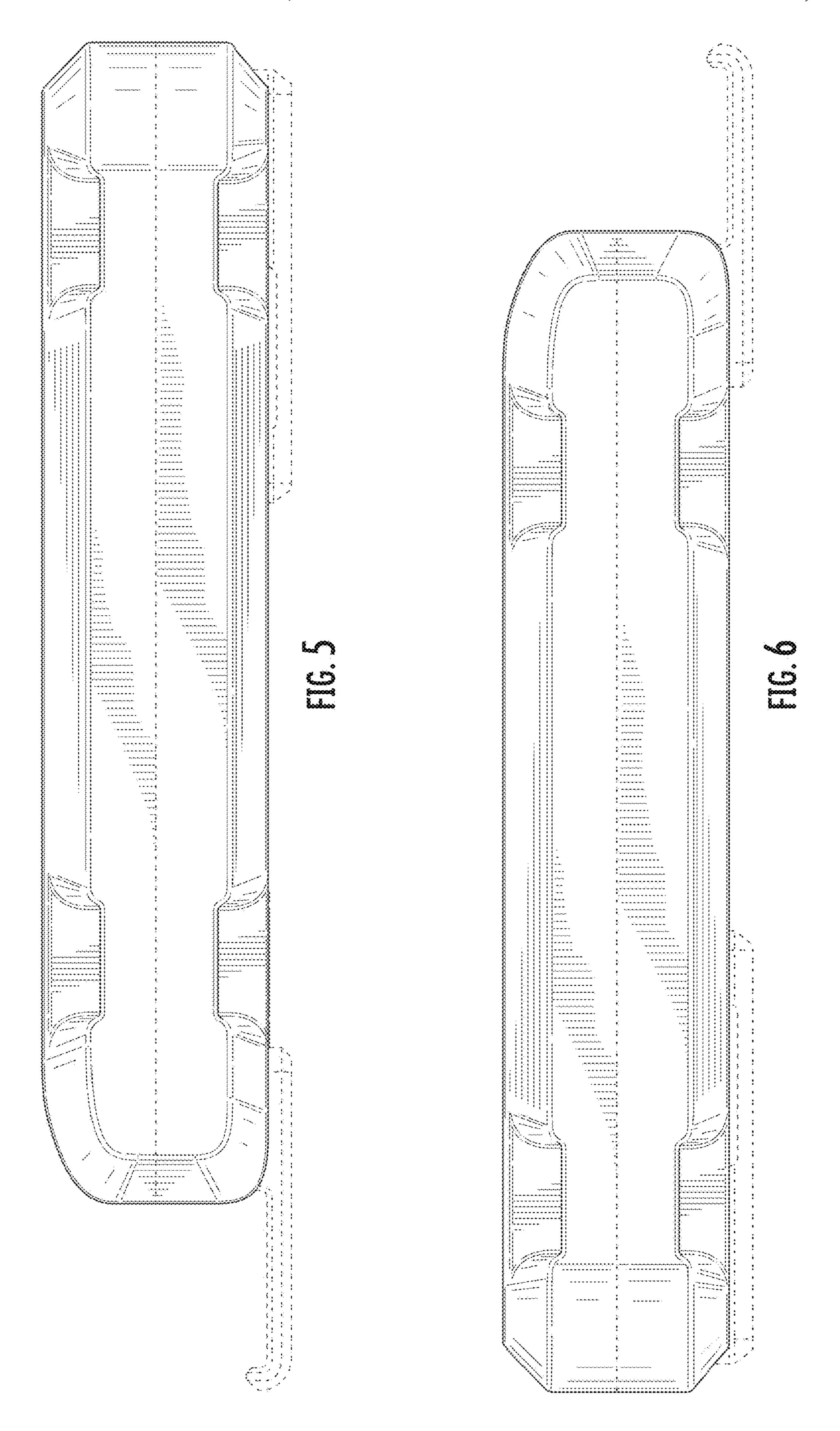
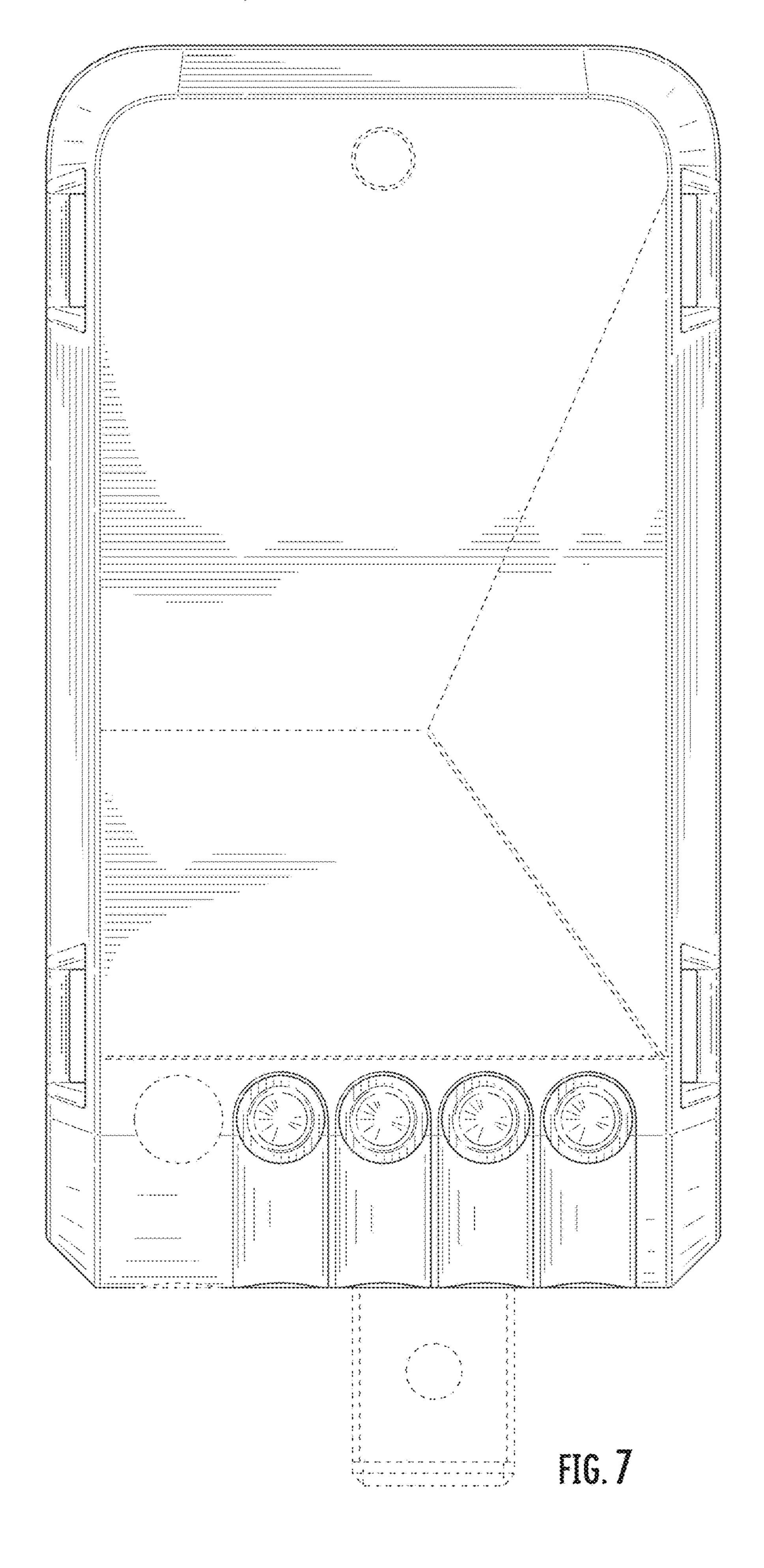


FIG. 4





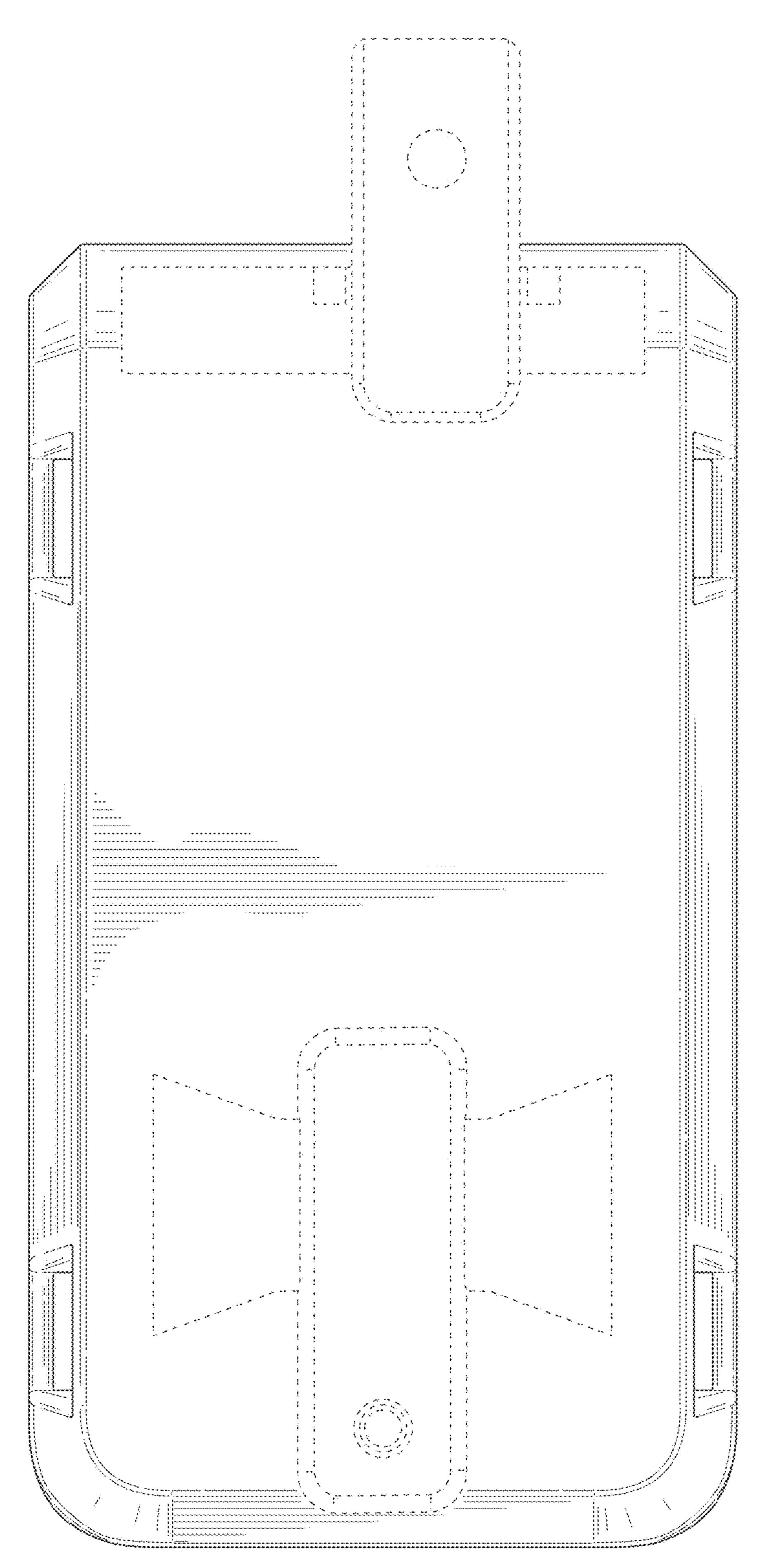
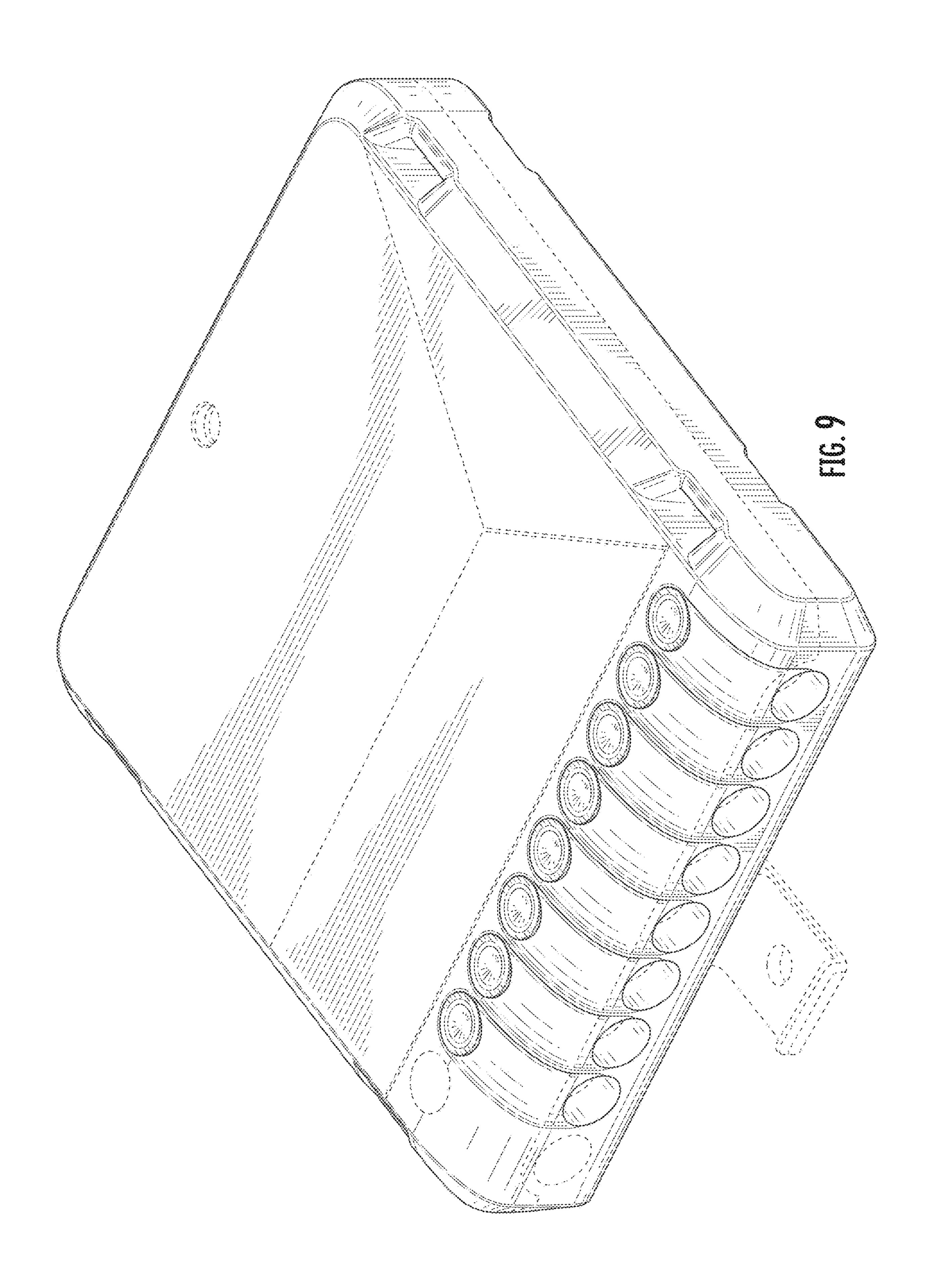
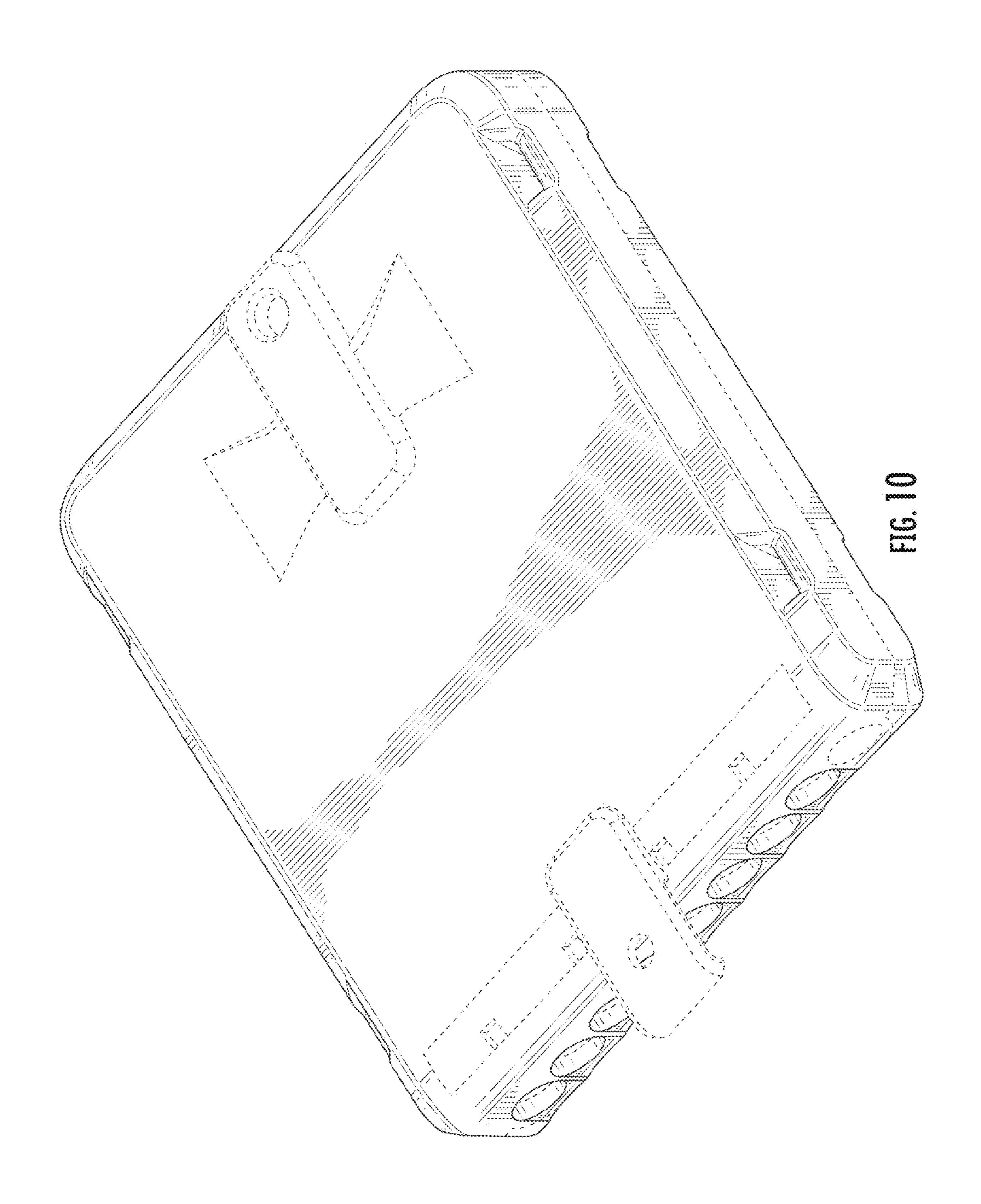


FIG. 8





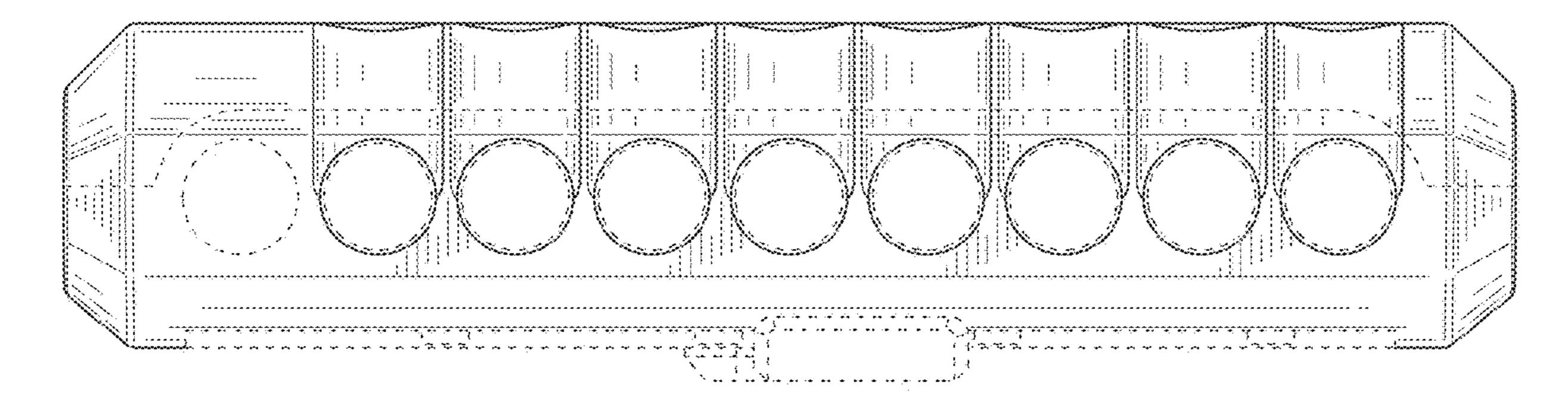


FIG. 11

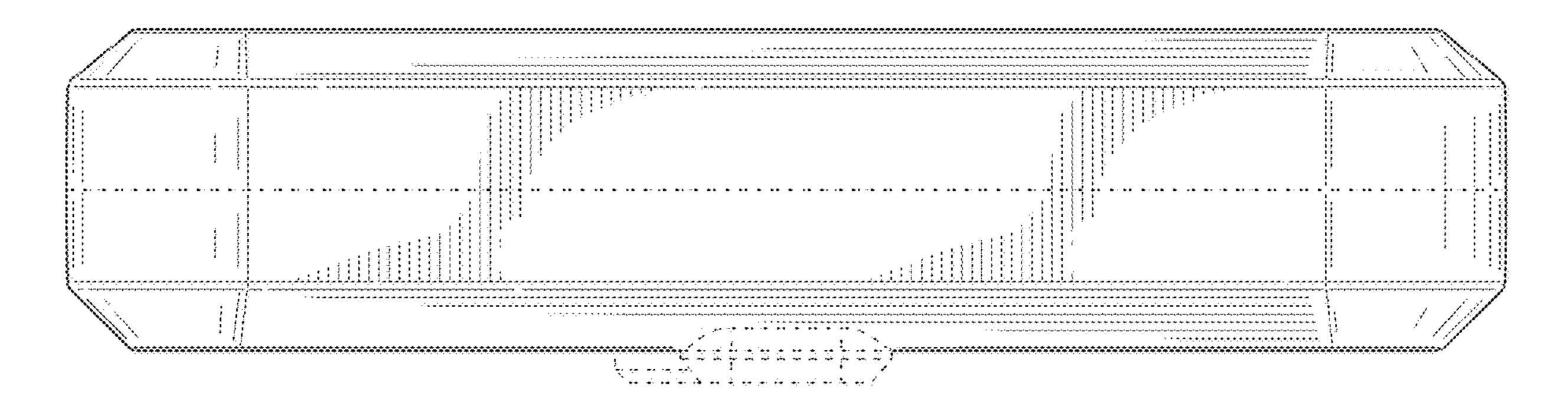
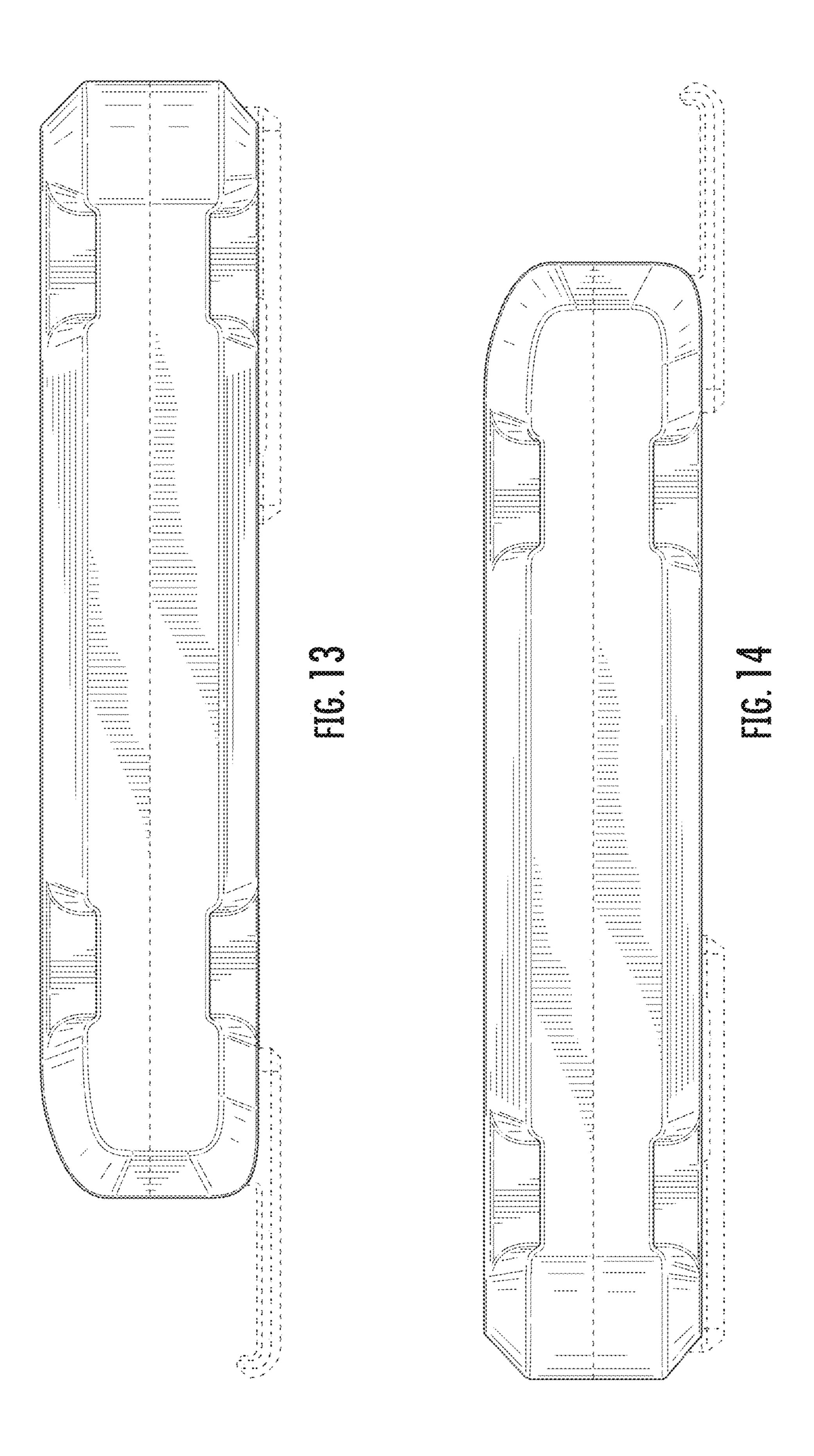
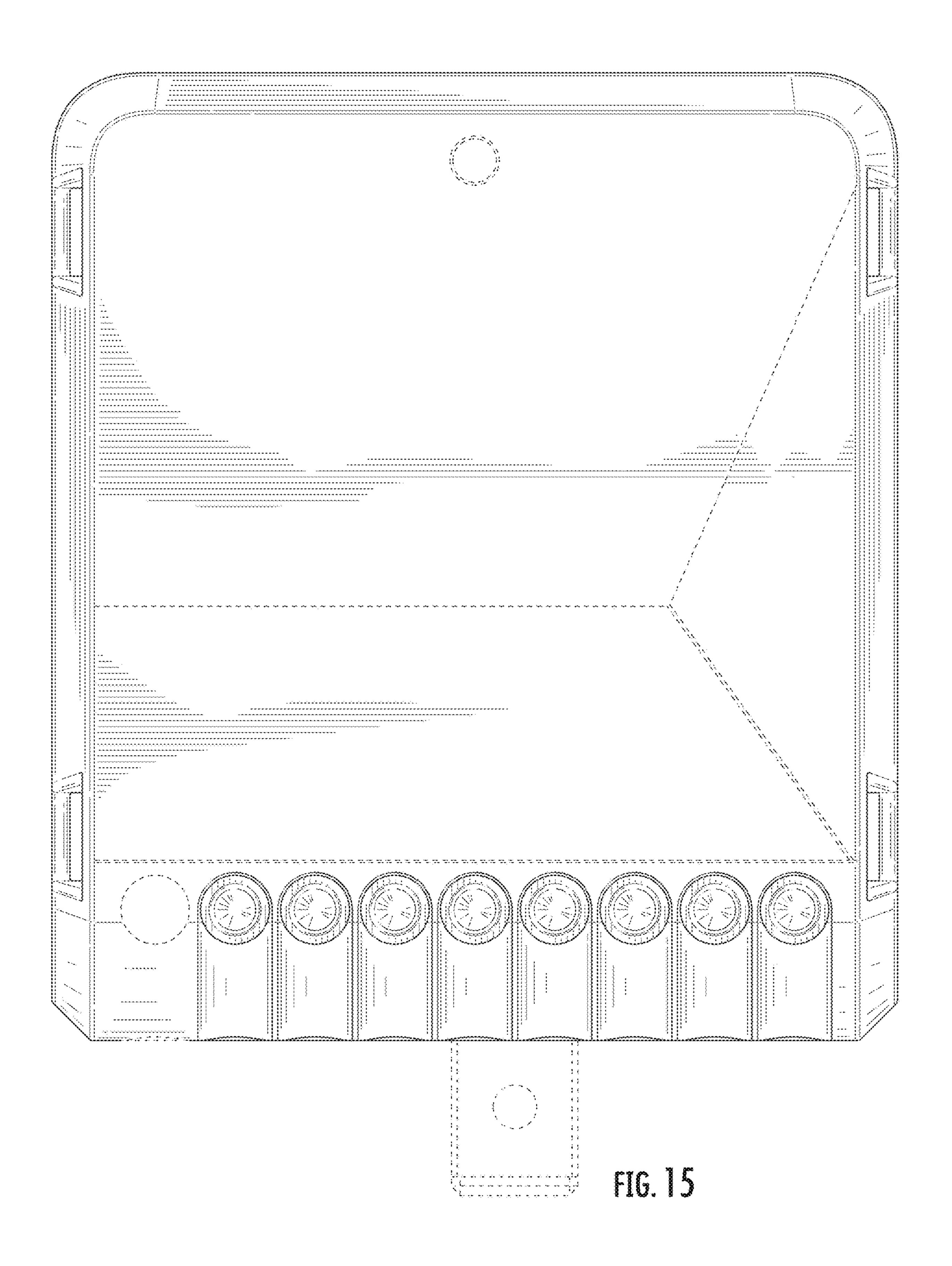


FIG. 12





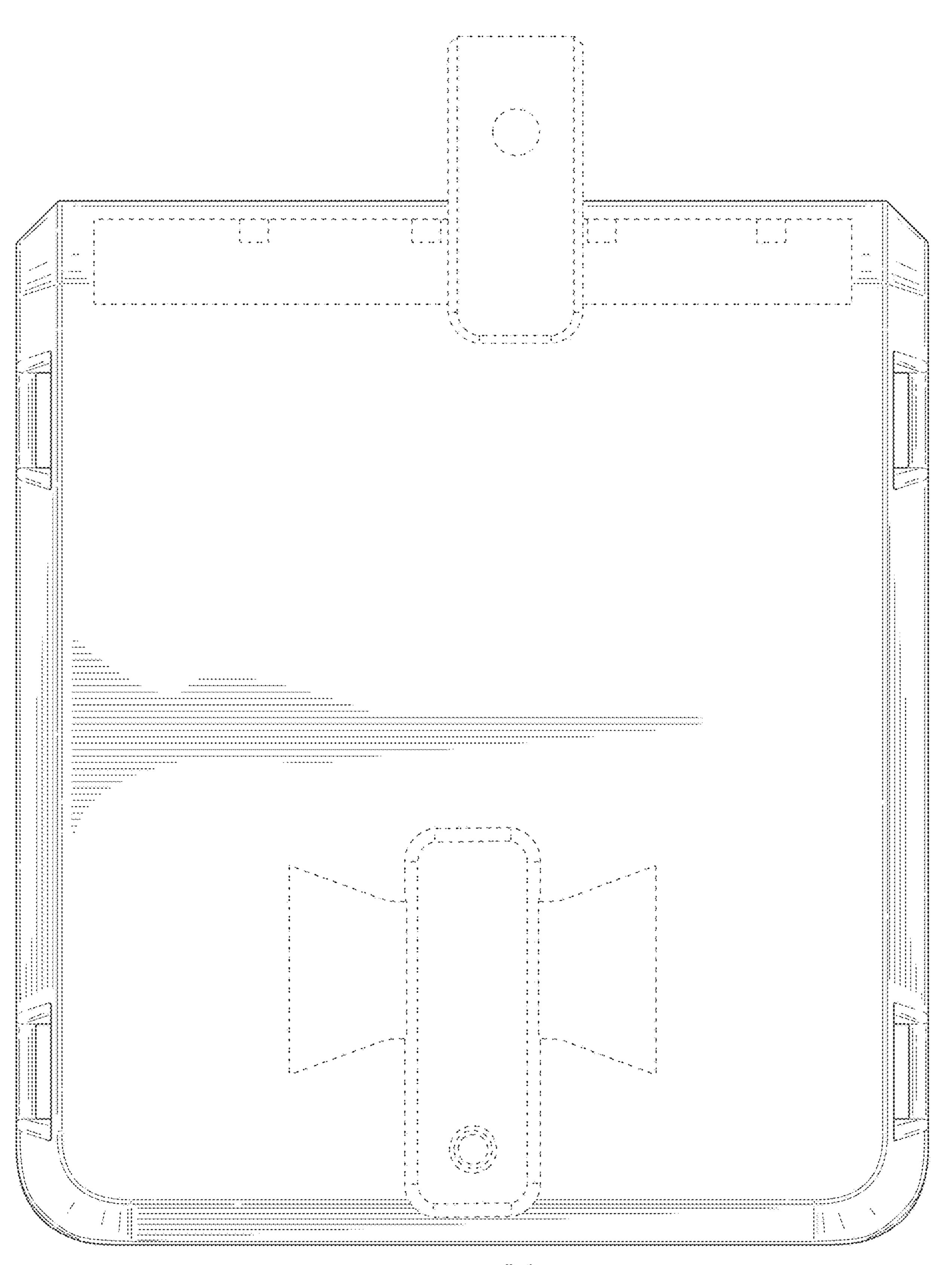
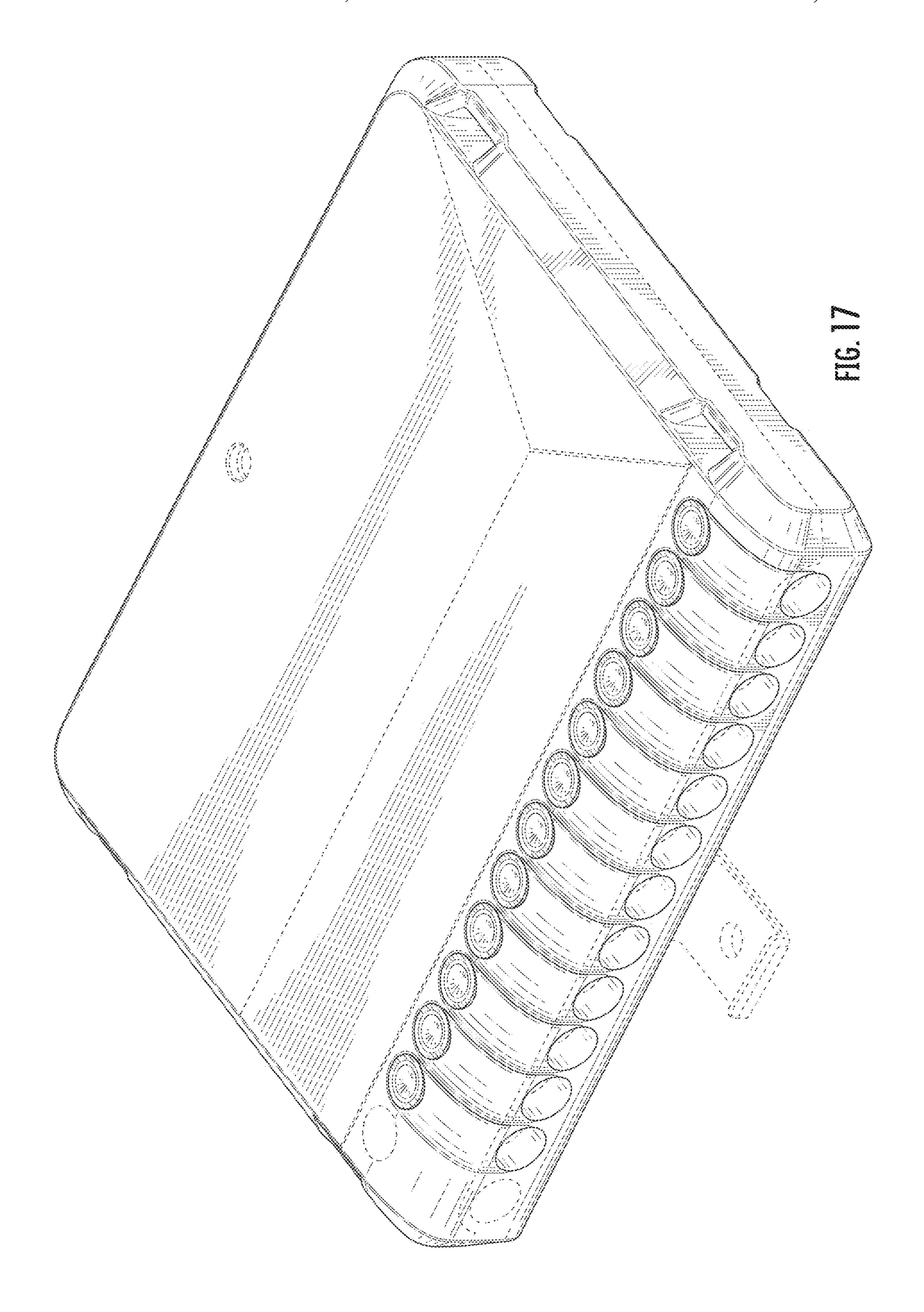
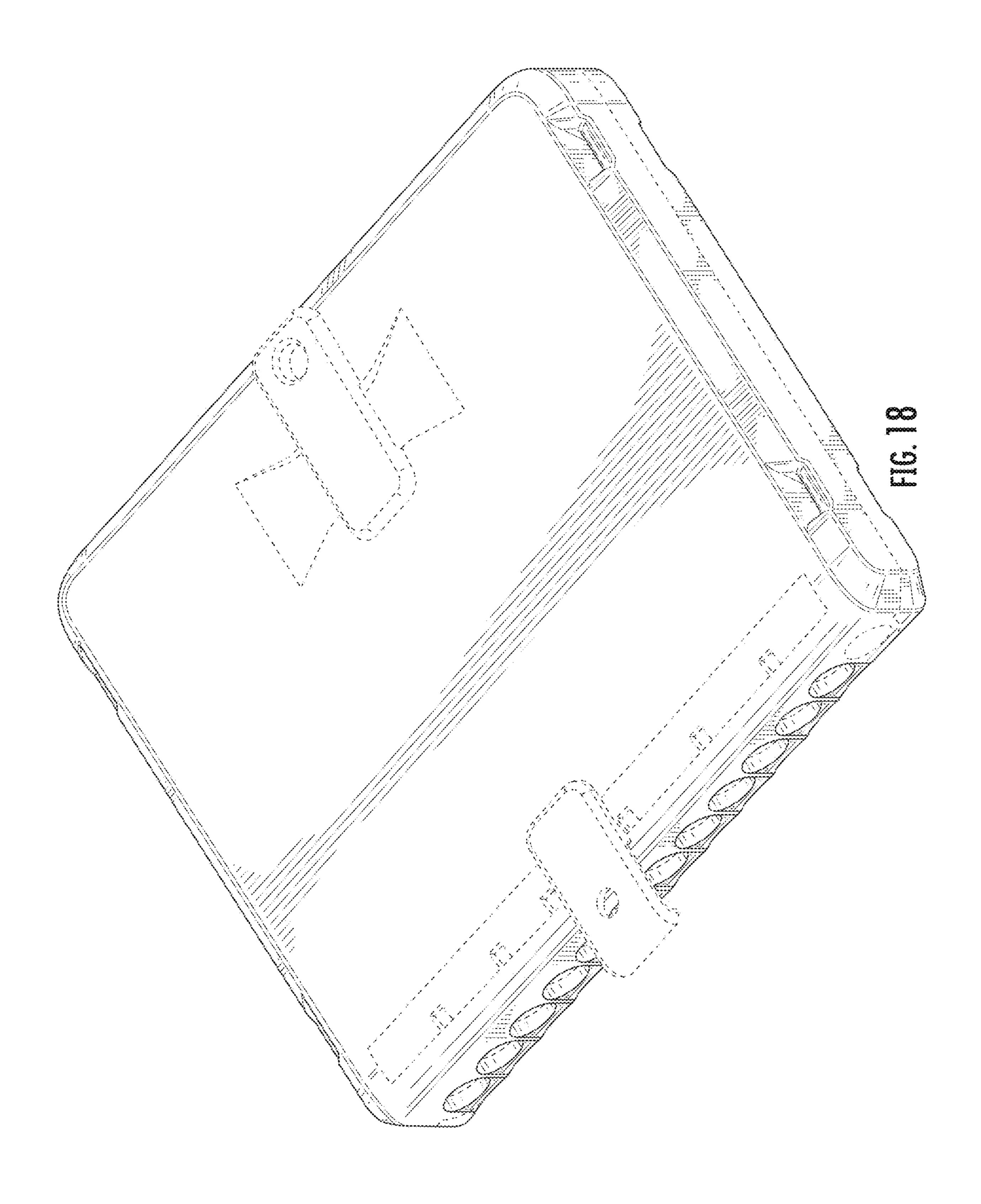


FIG. 16





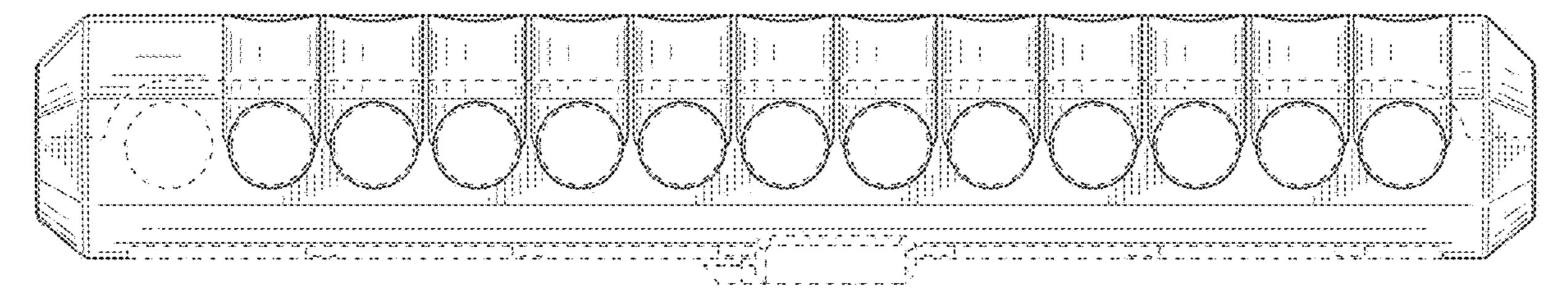


FIG. 19

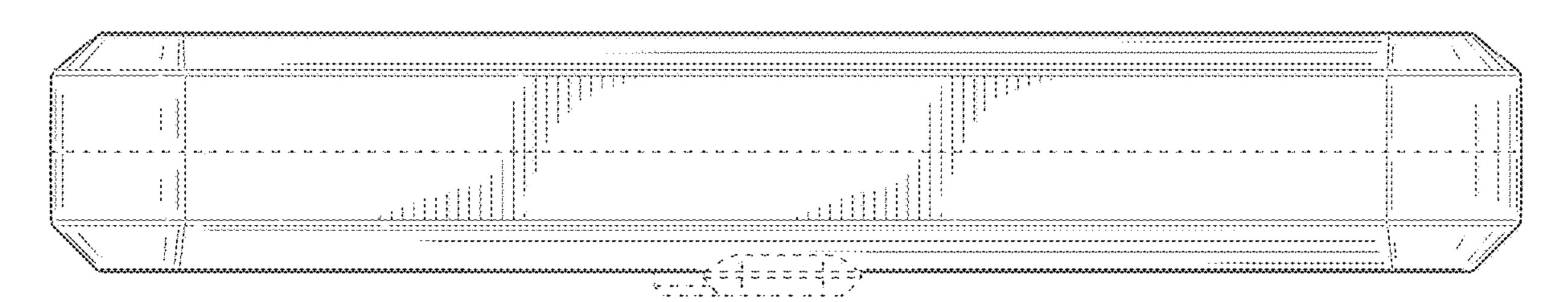
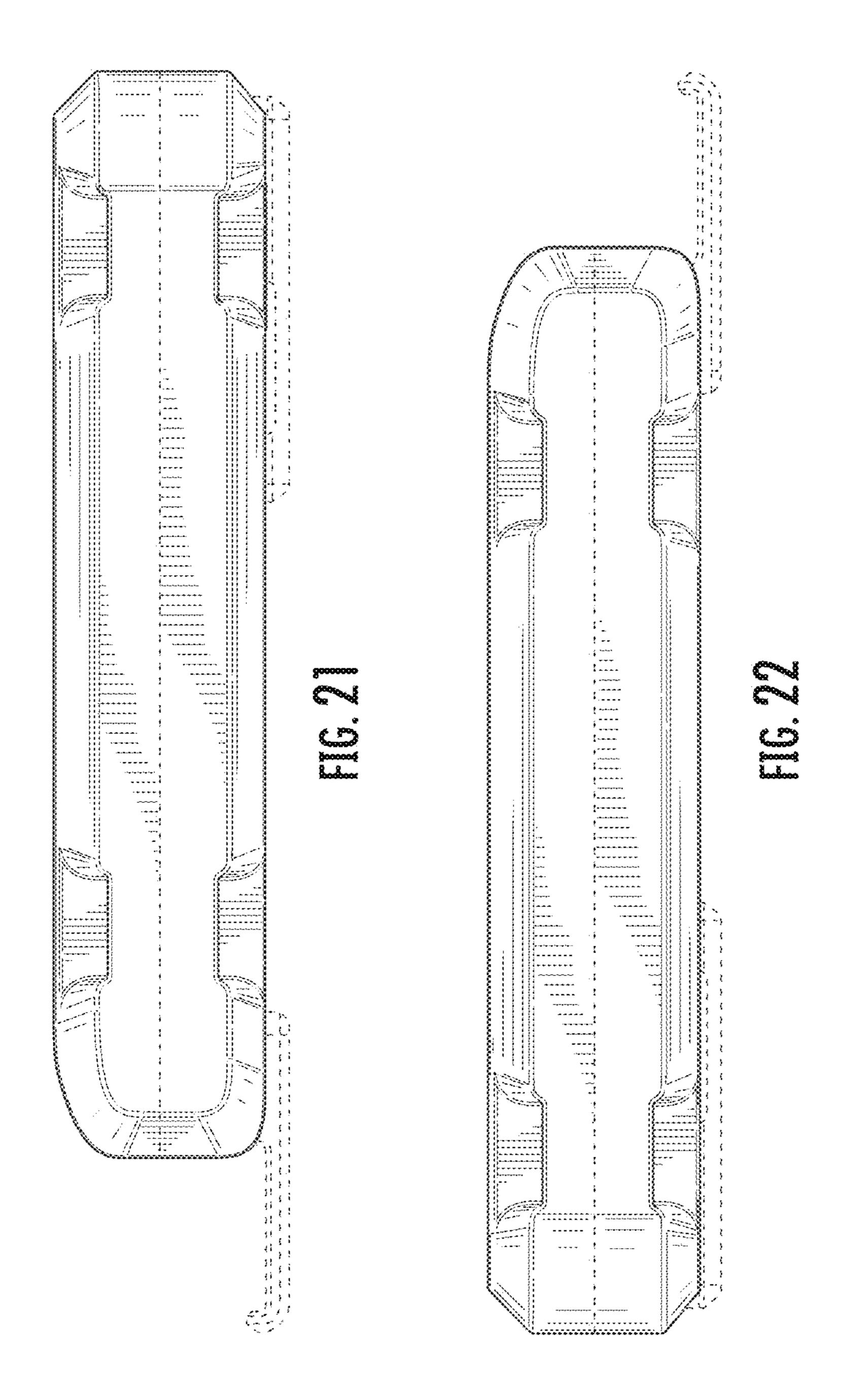
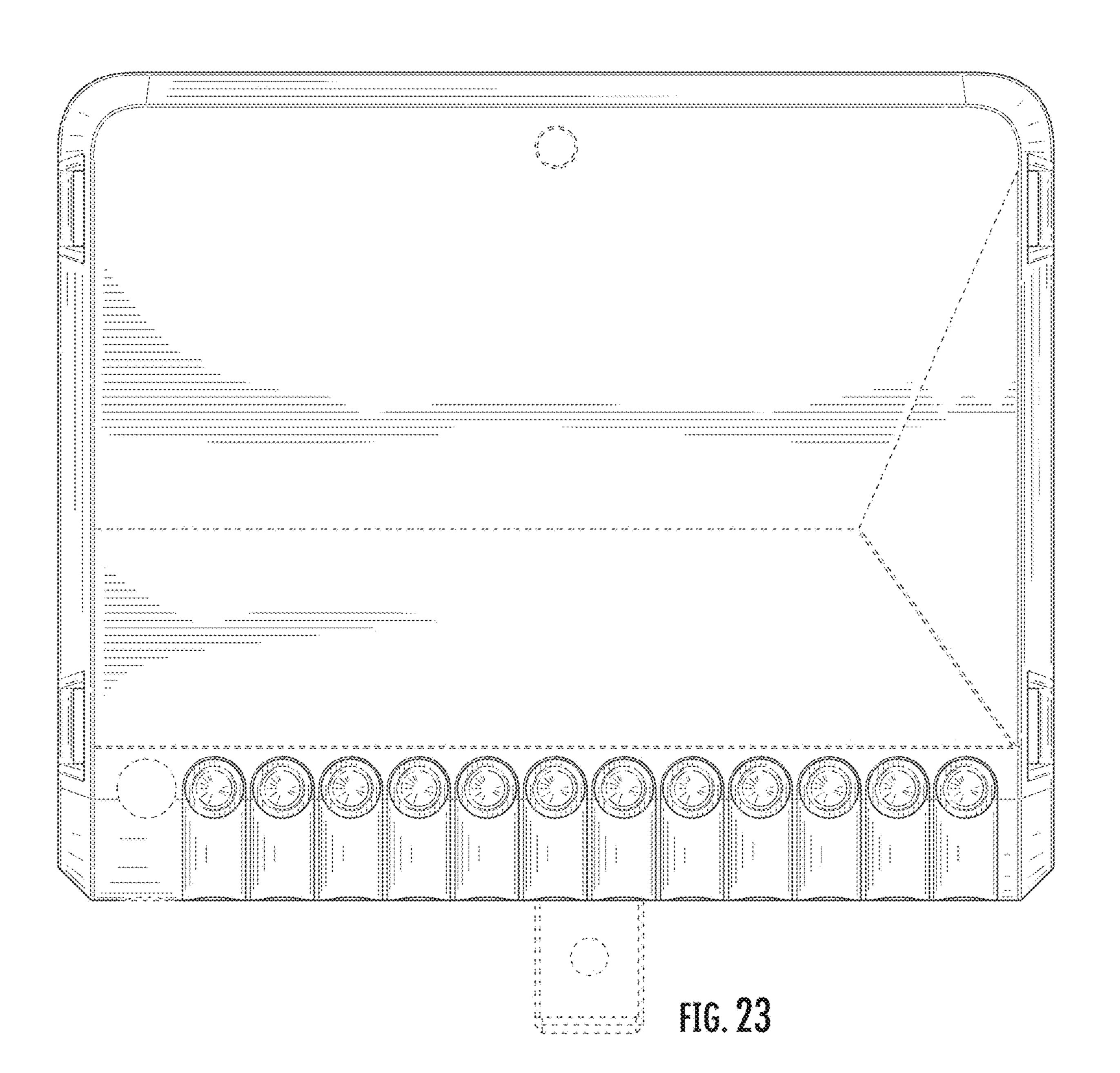


FIG. 20





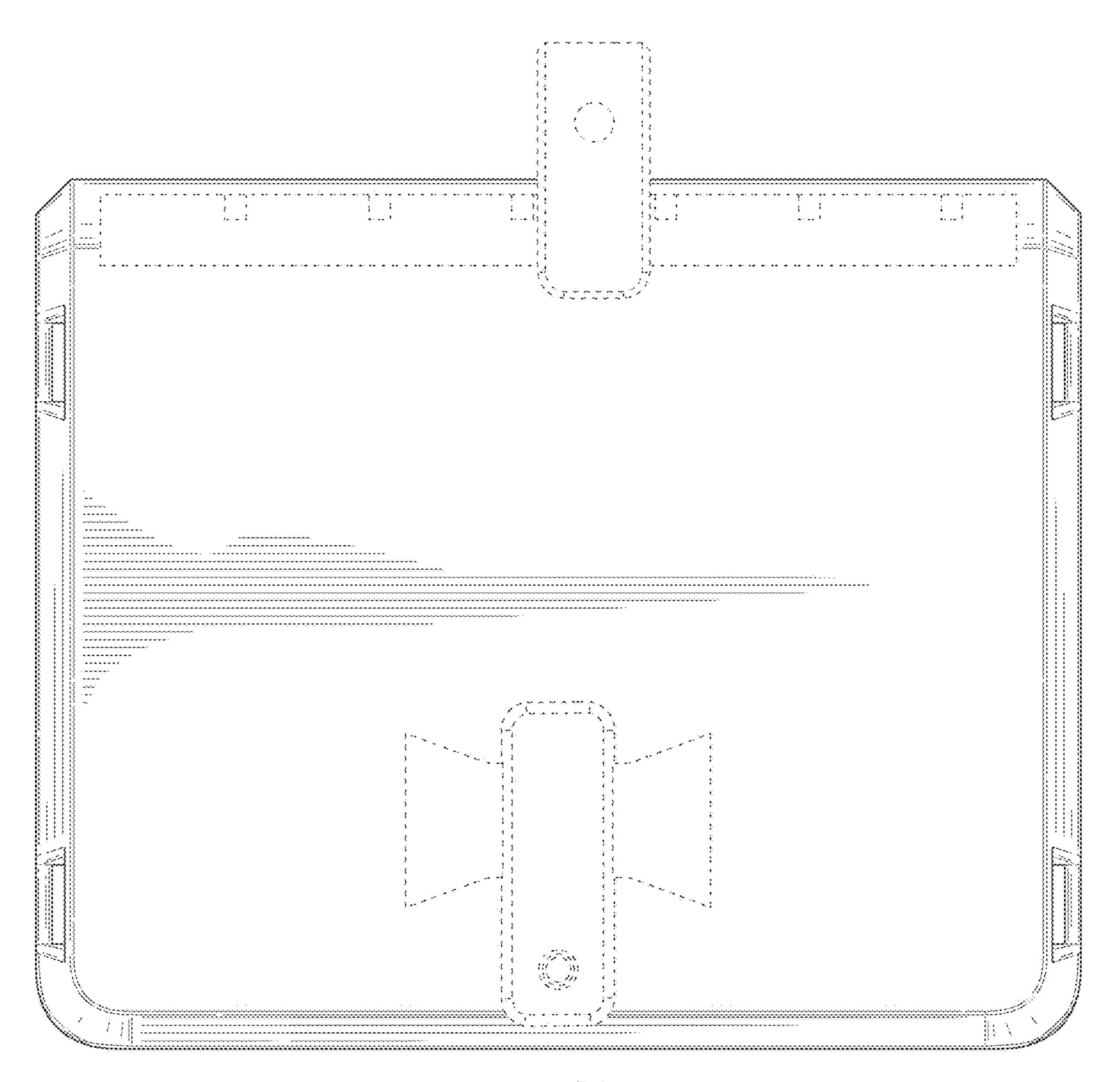
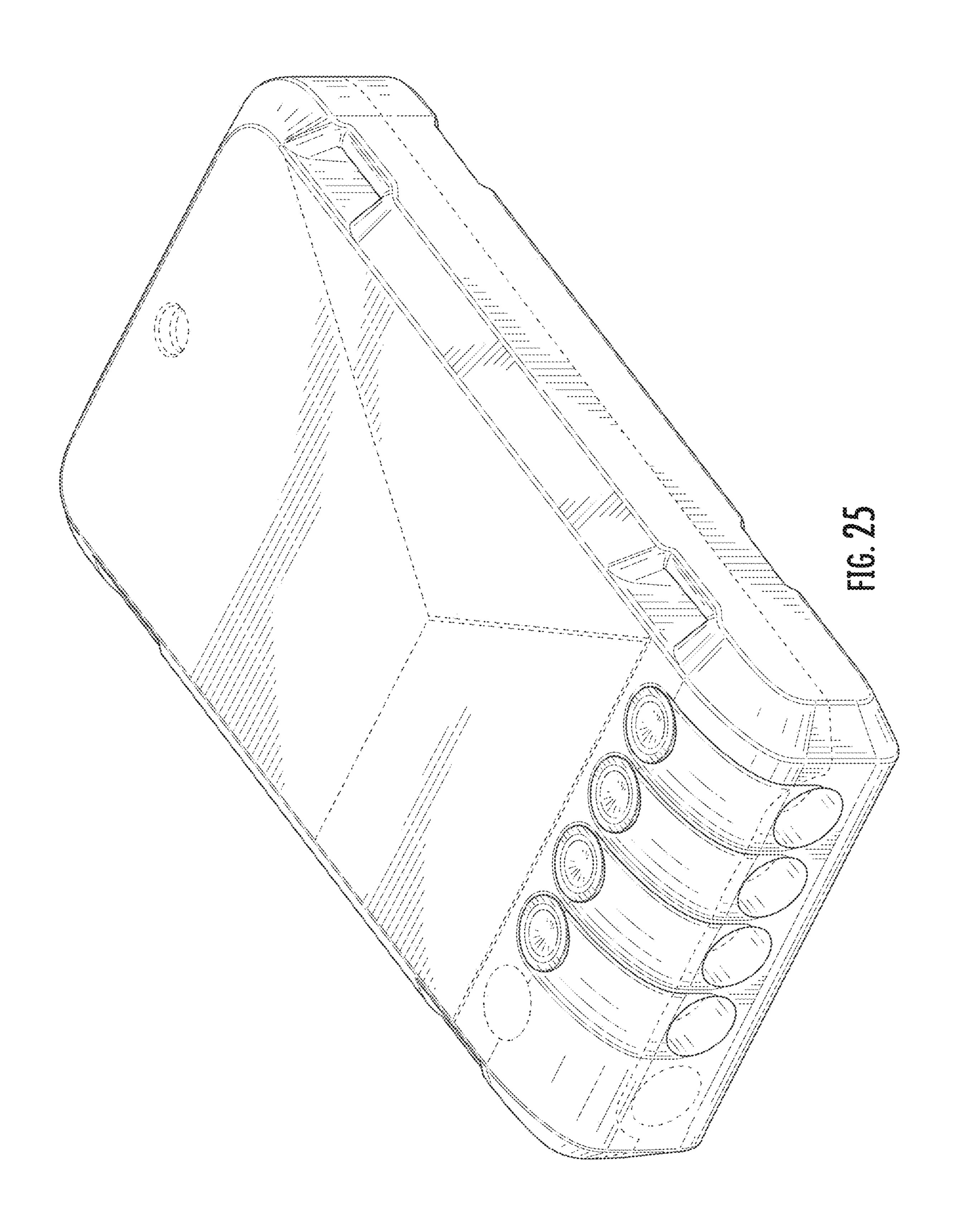
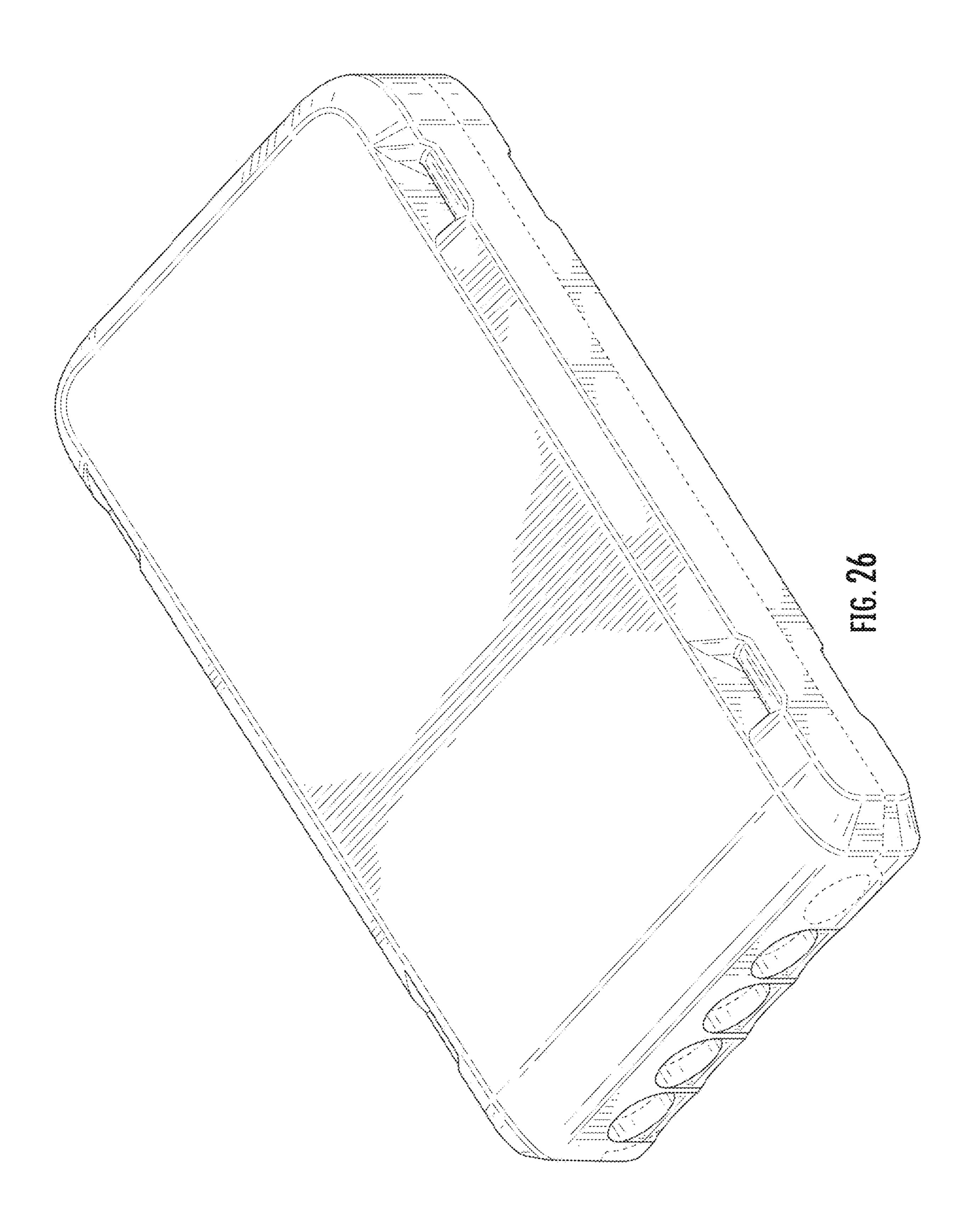


FIG. 24





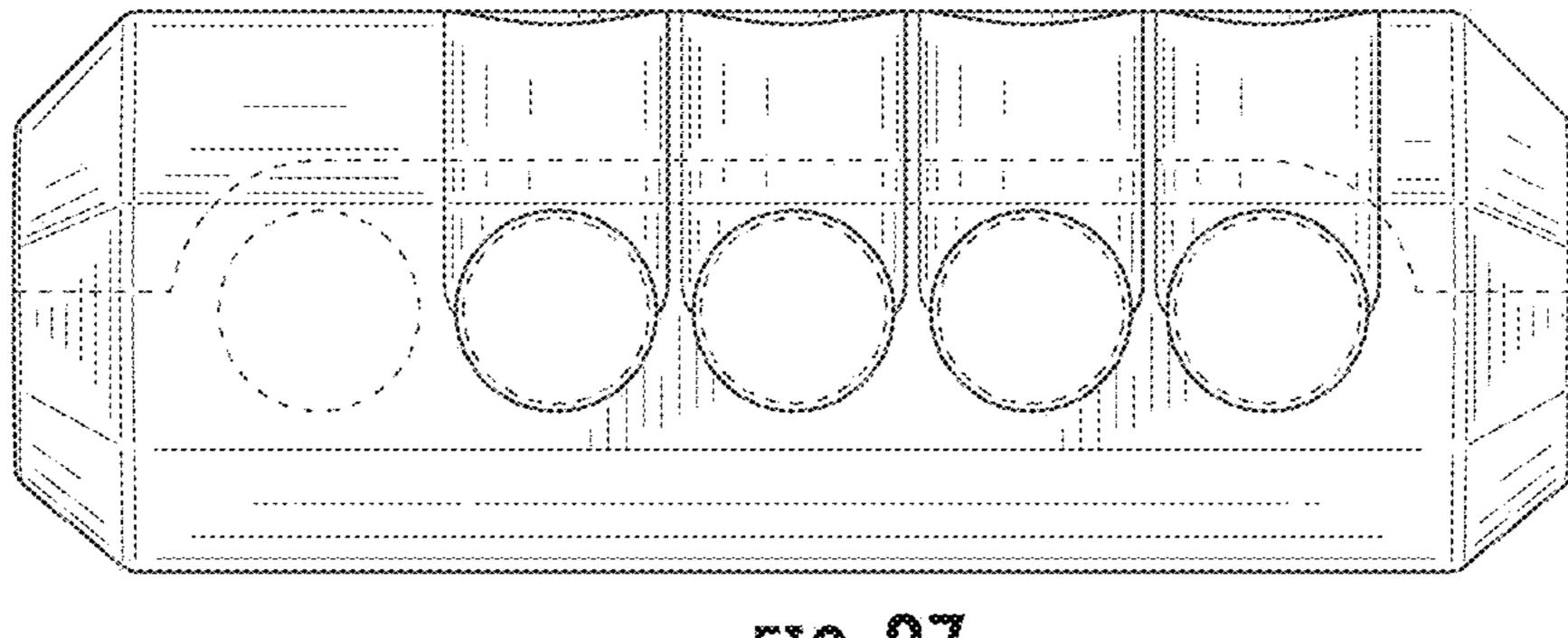


FIG. 27

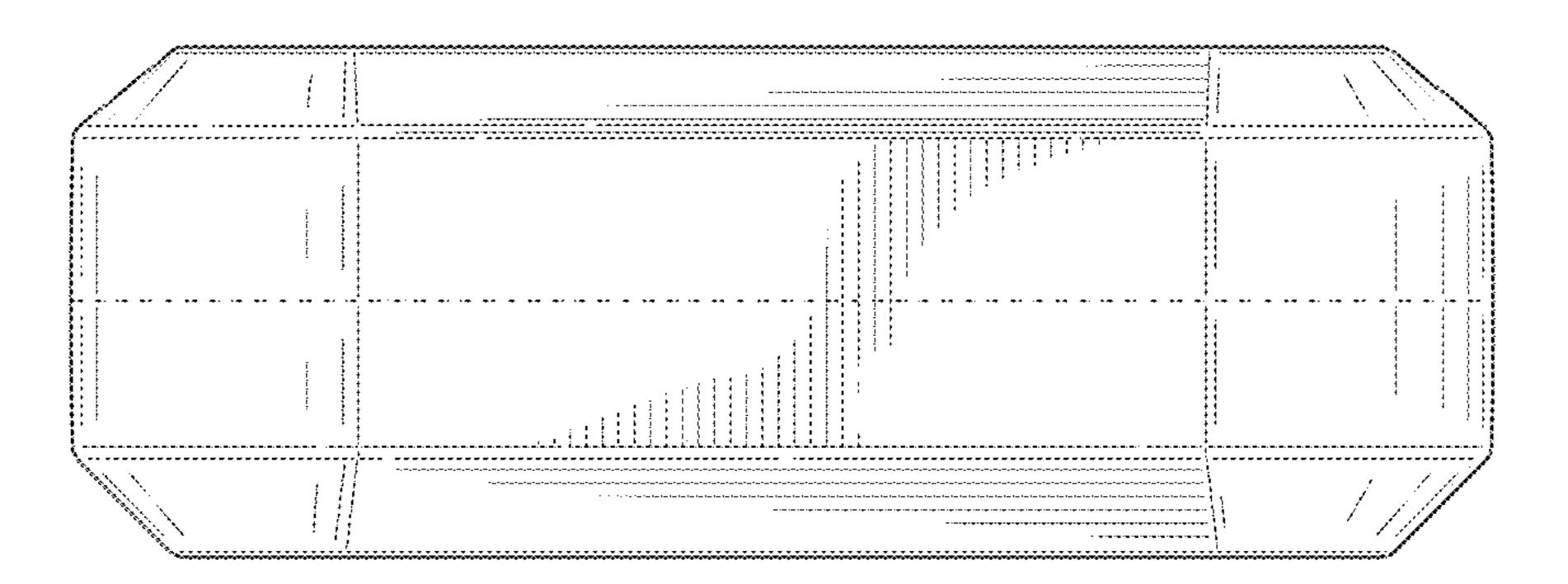
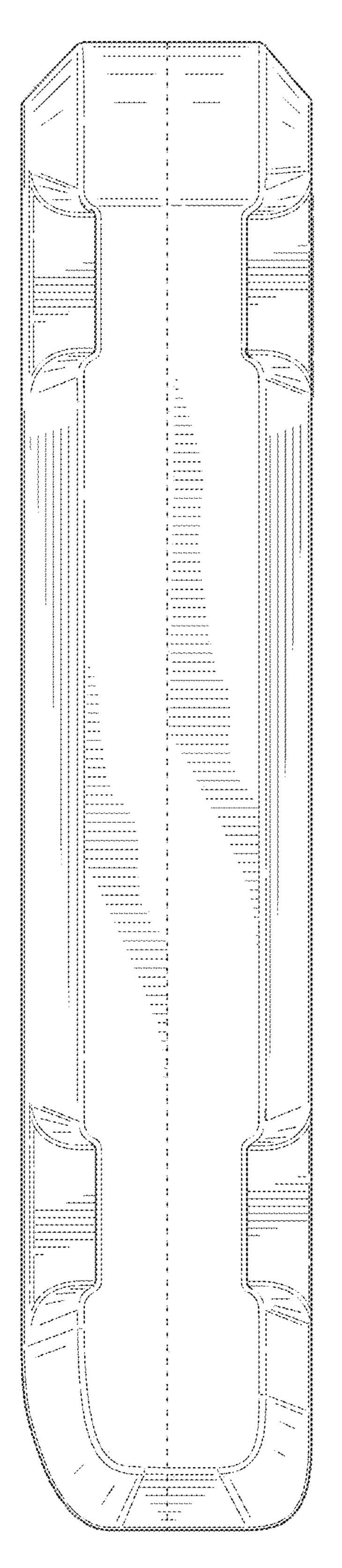
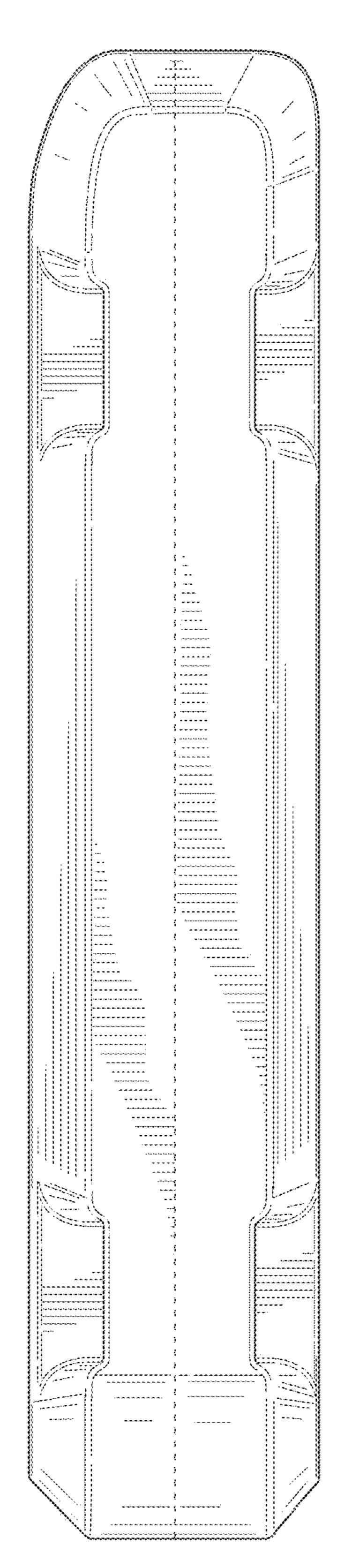


FIG. 28







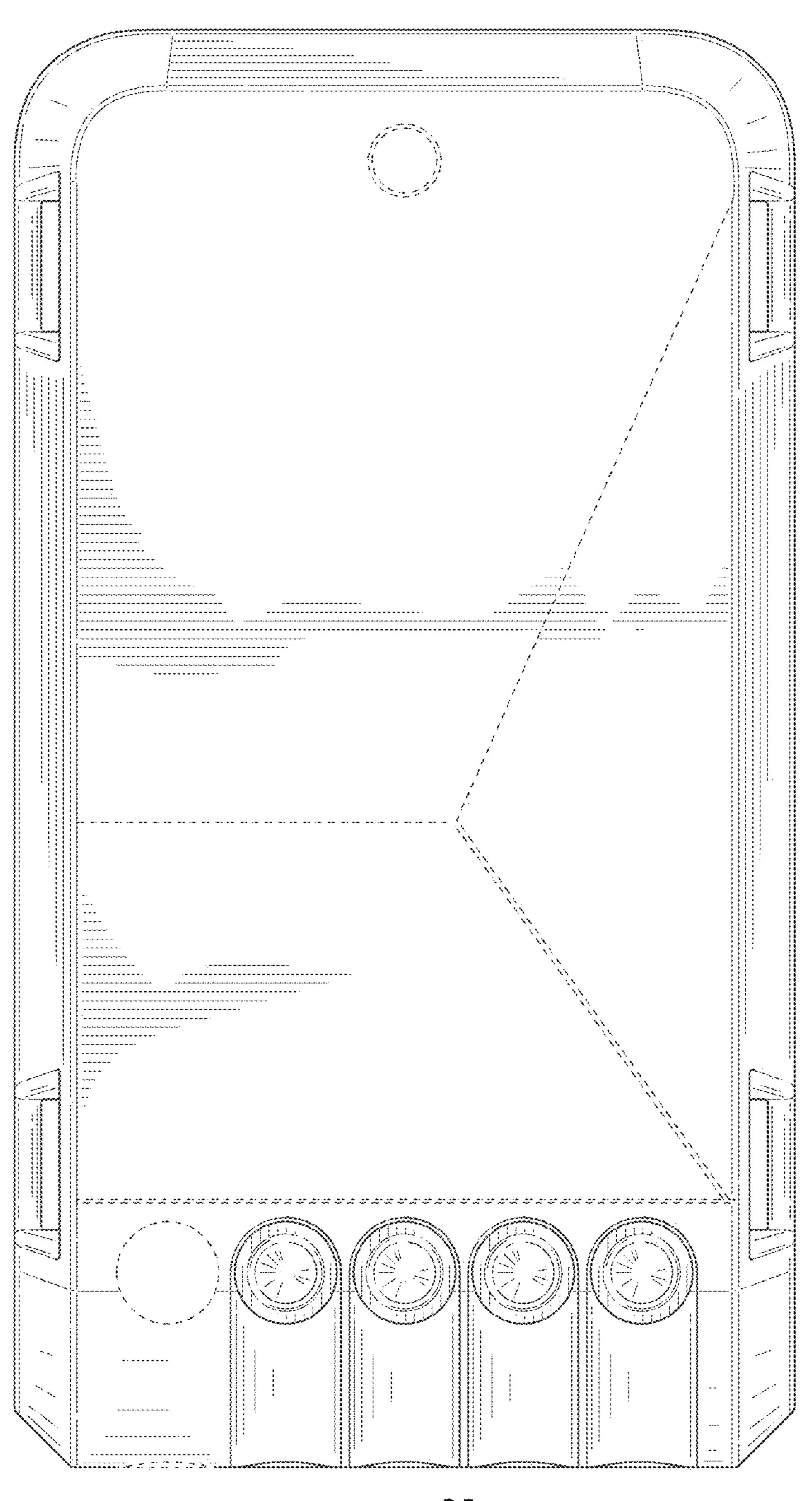


FIG. 31

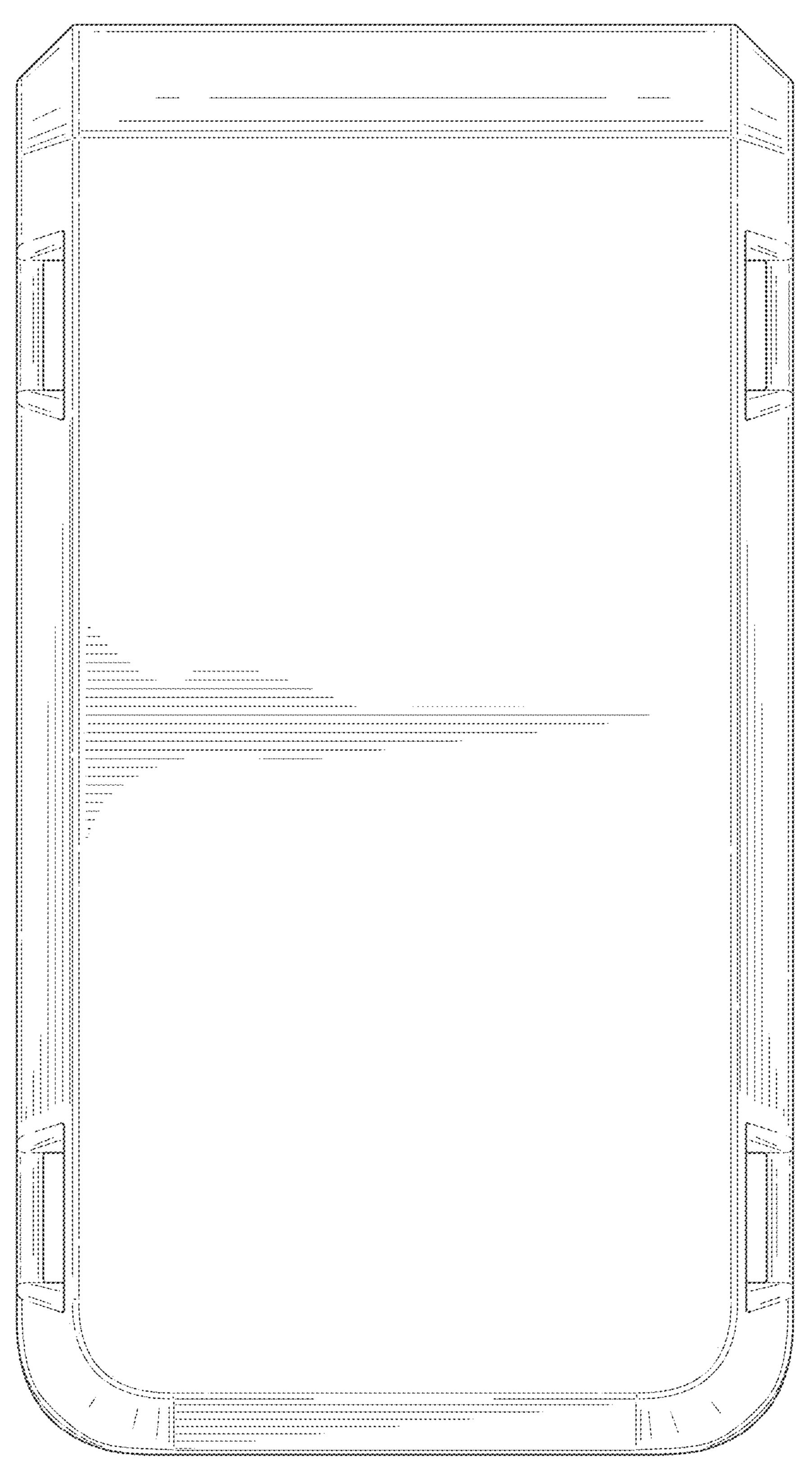
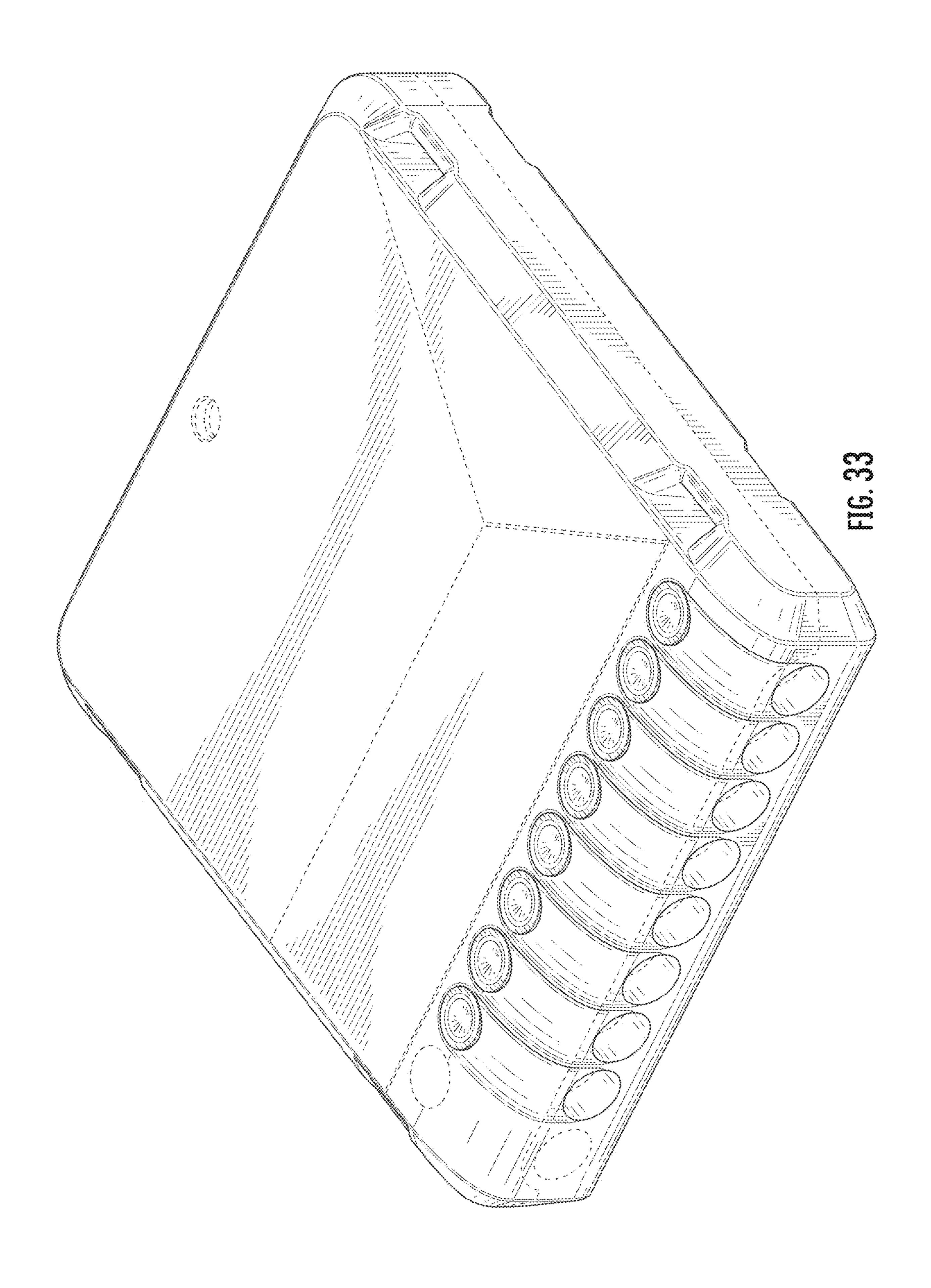
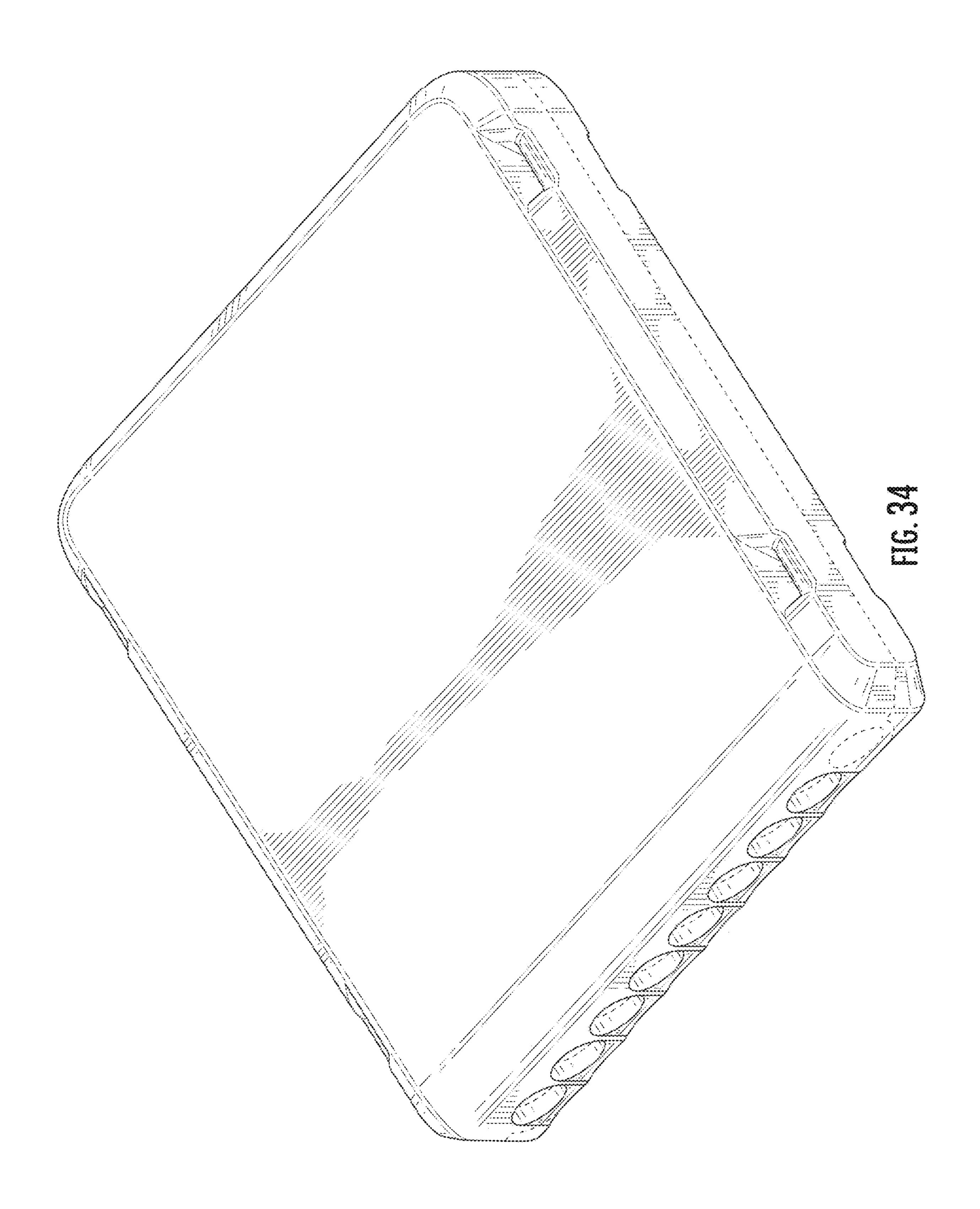


FIG. 32





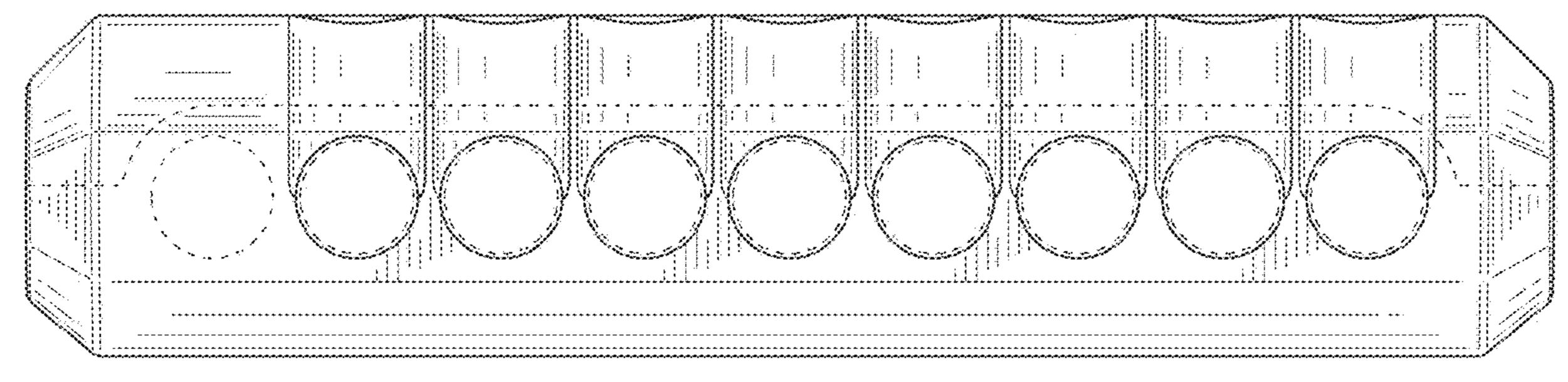


FIG. 35

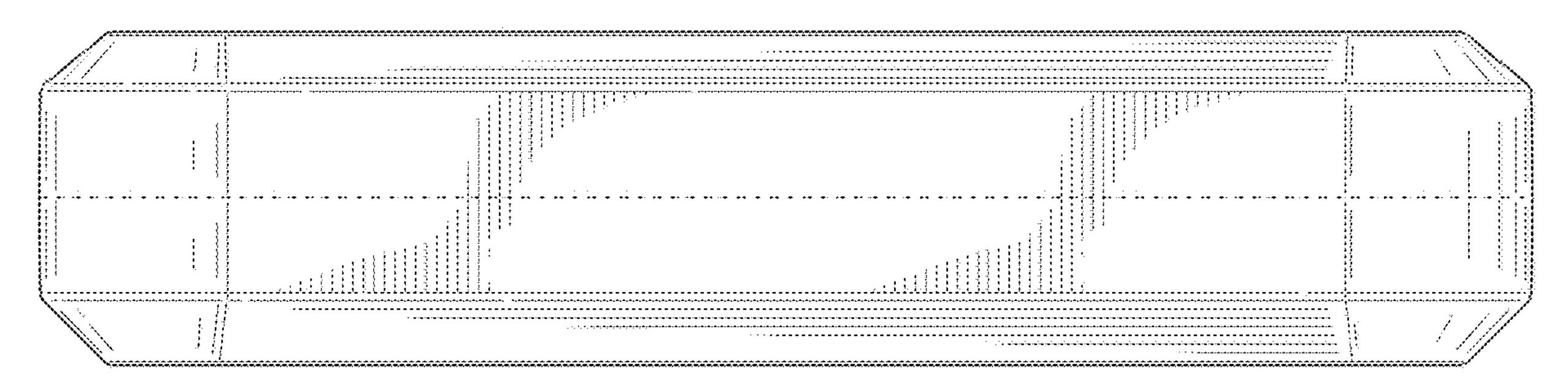
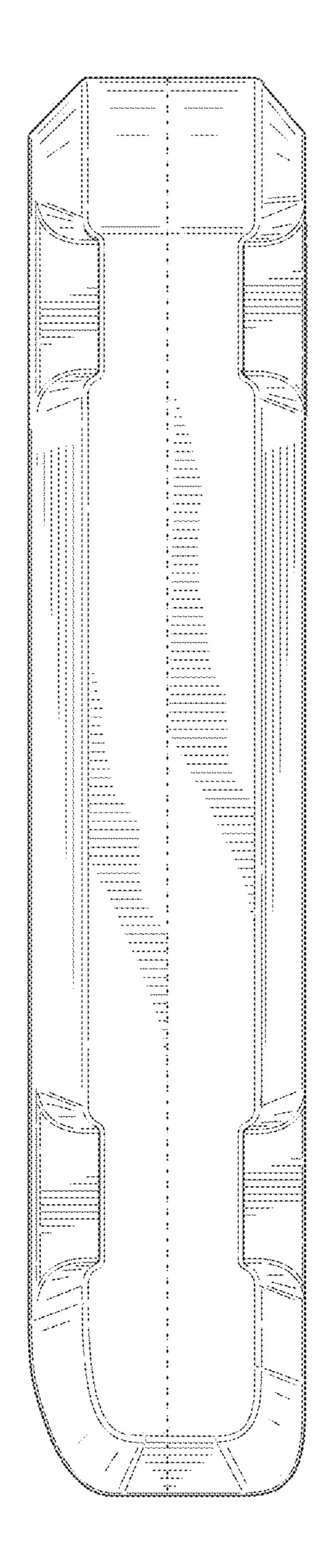
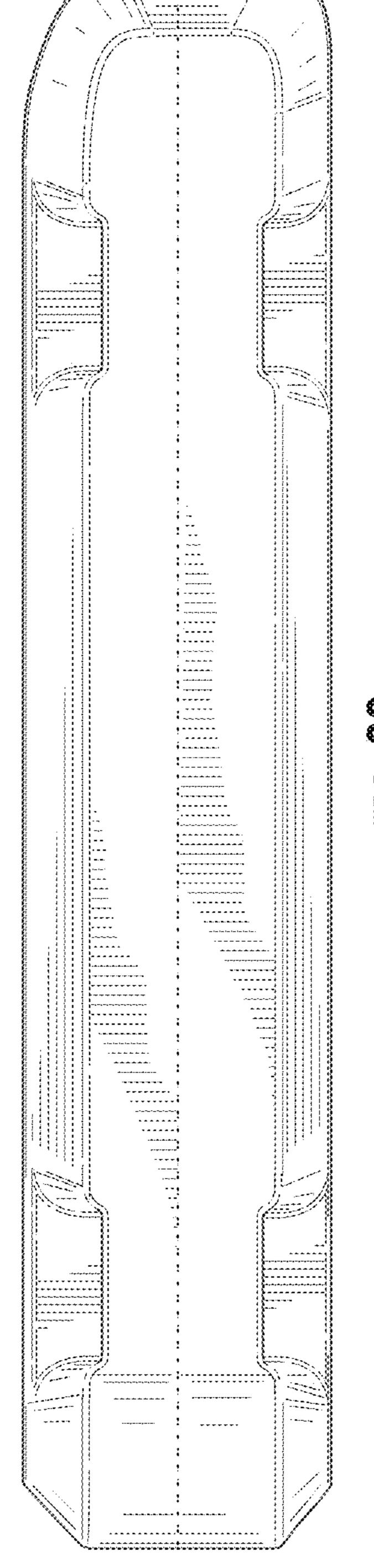


FIG. 36





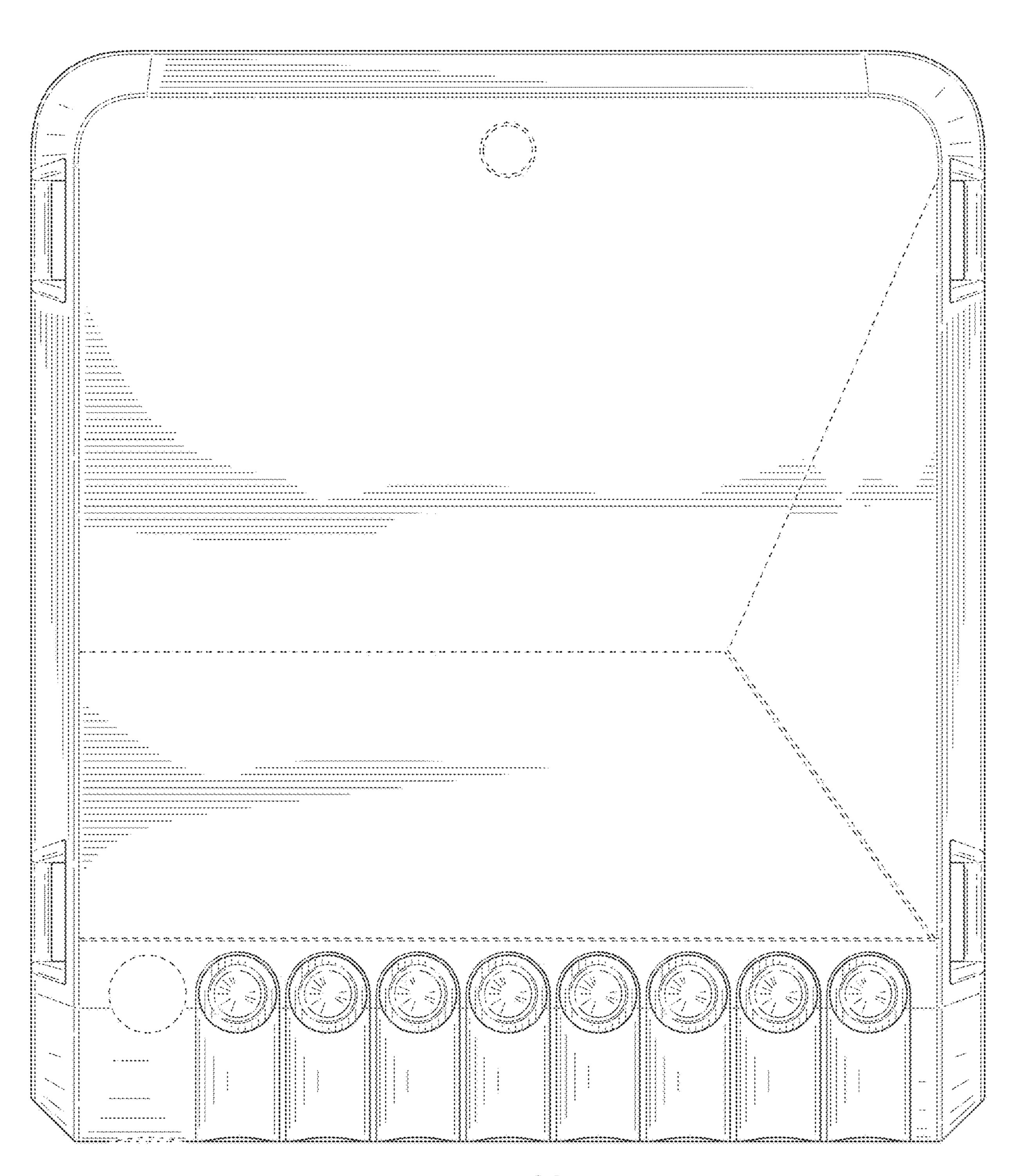


FIG. 39

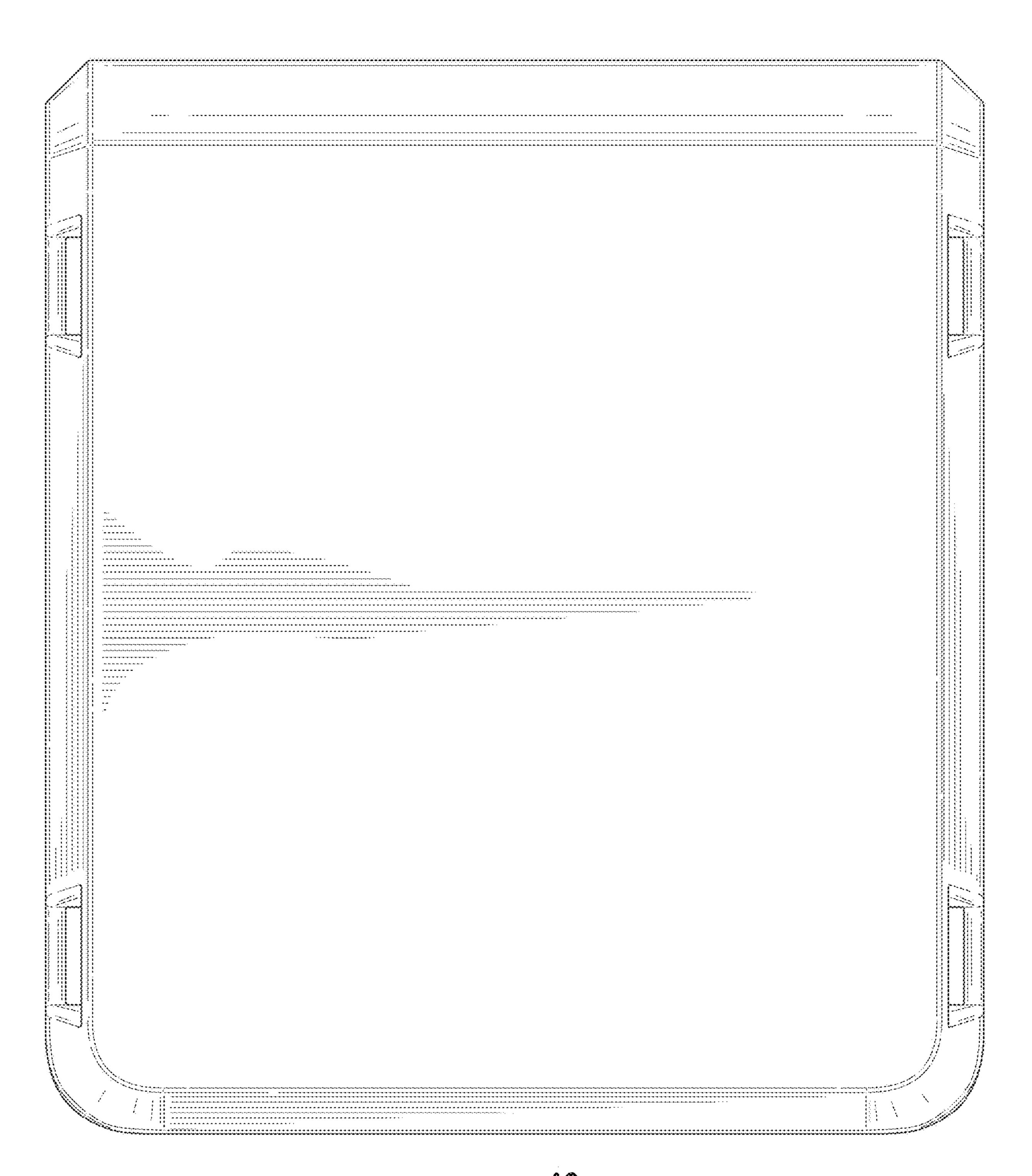
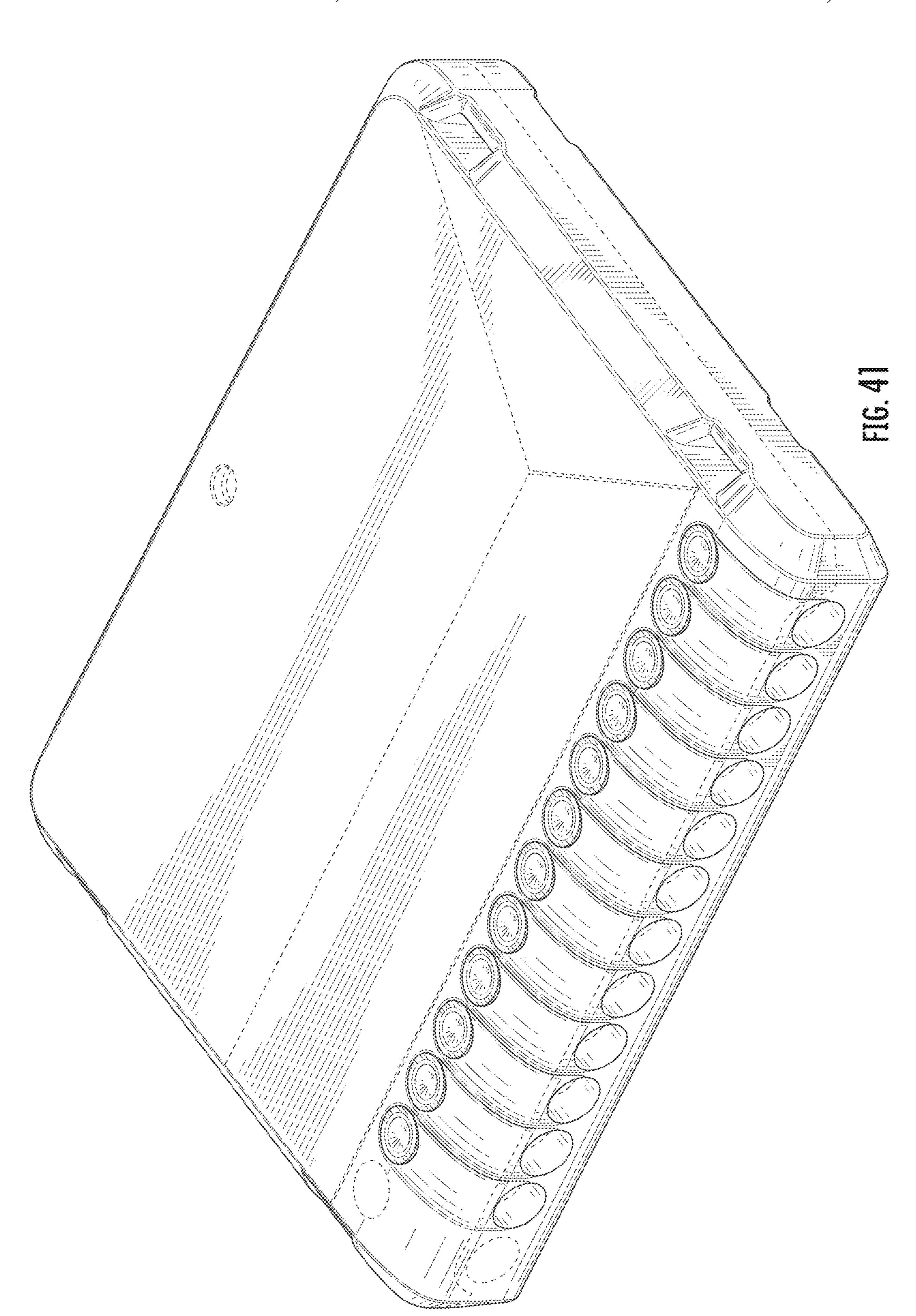
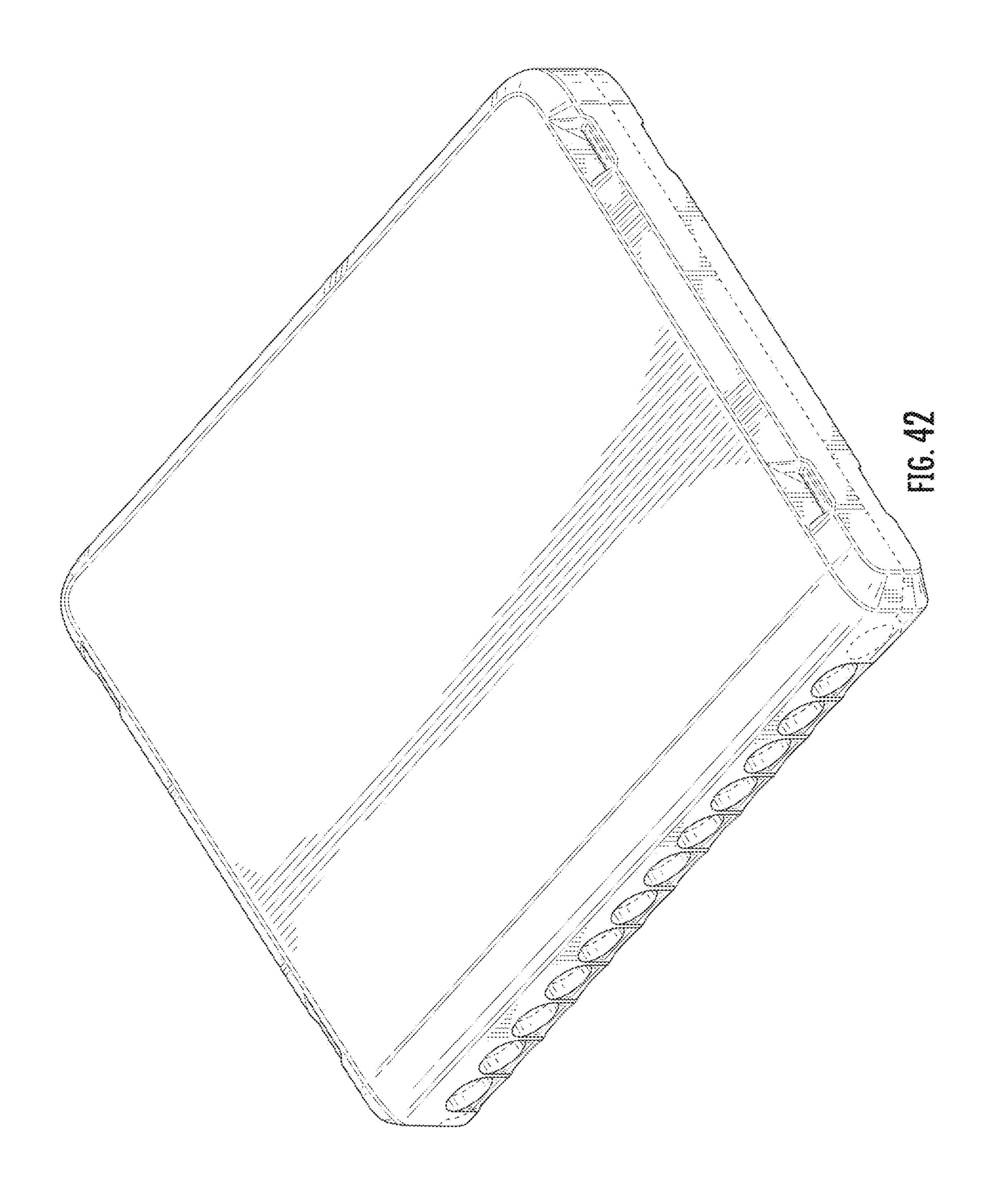


FIG. 40





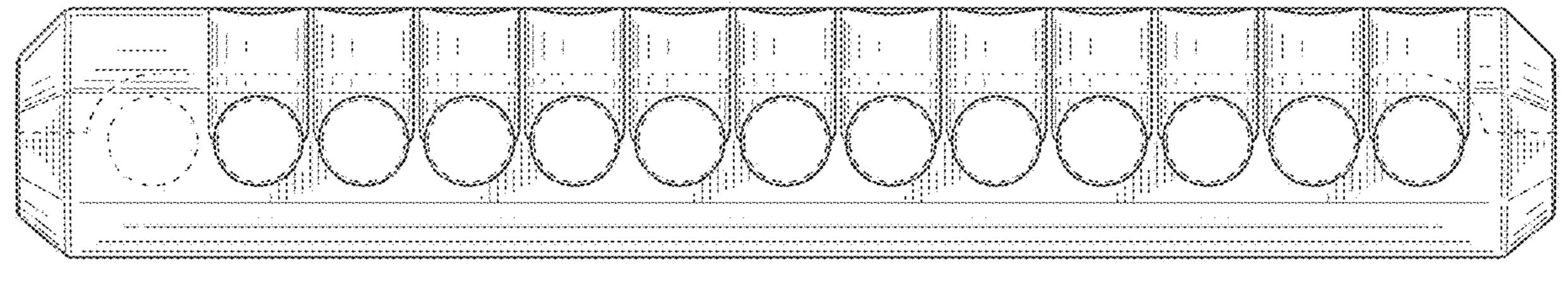


FIG. 43

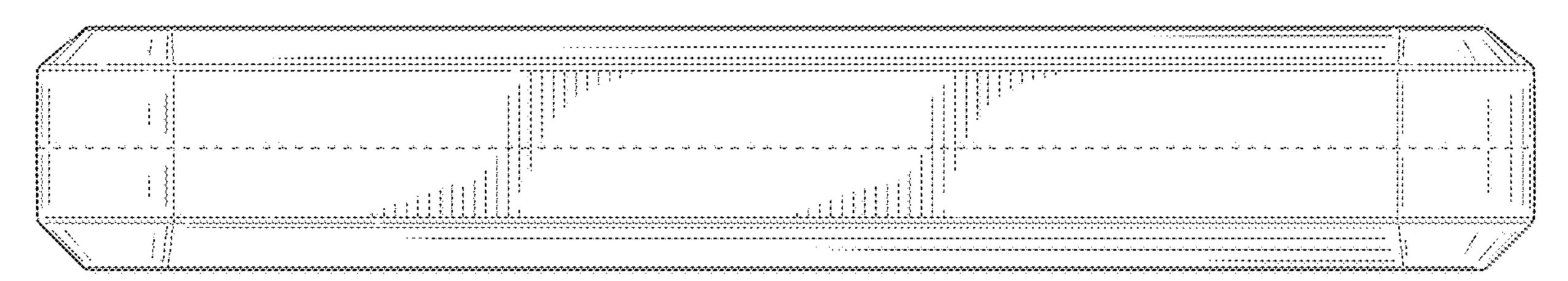
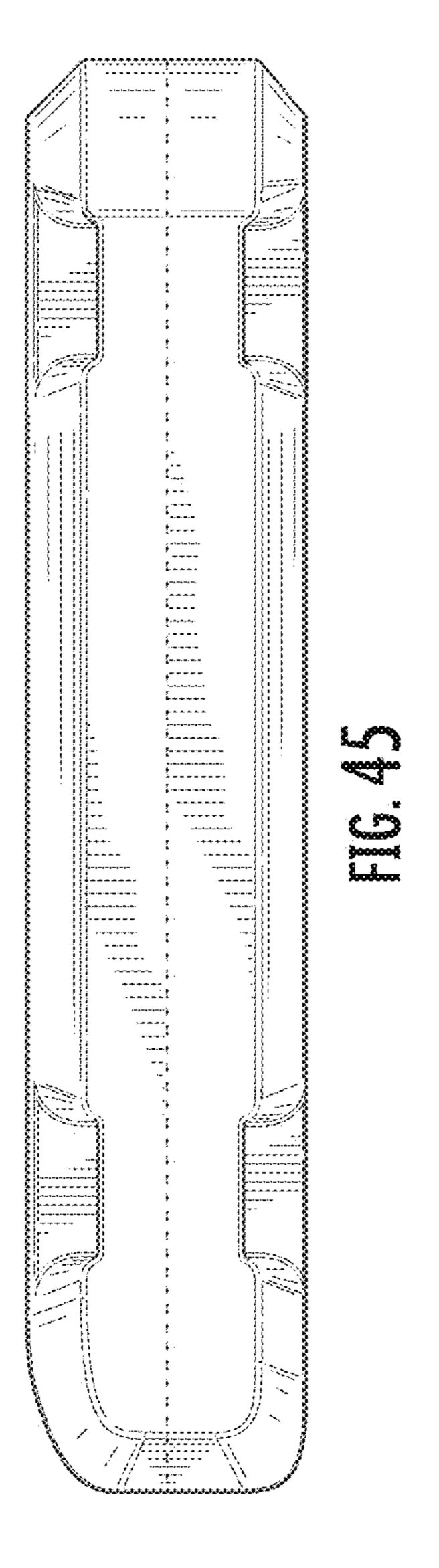
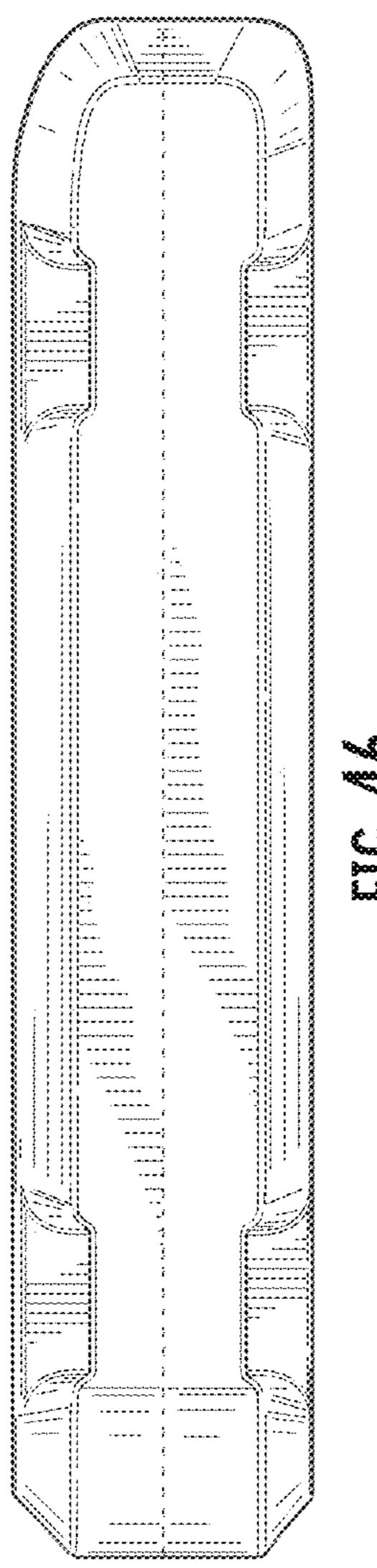


FIG. 44





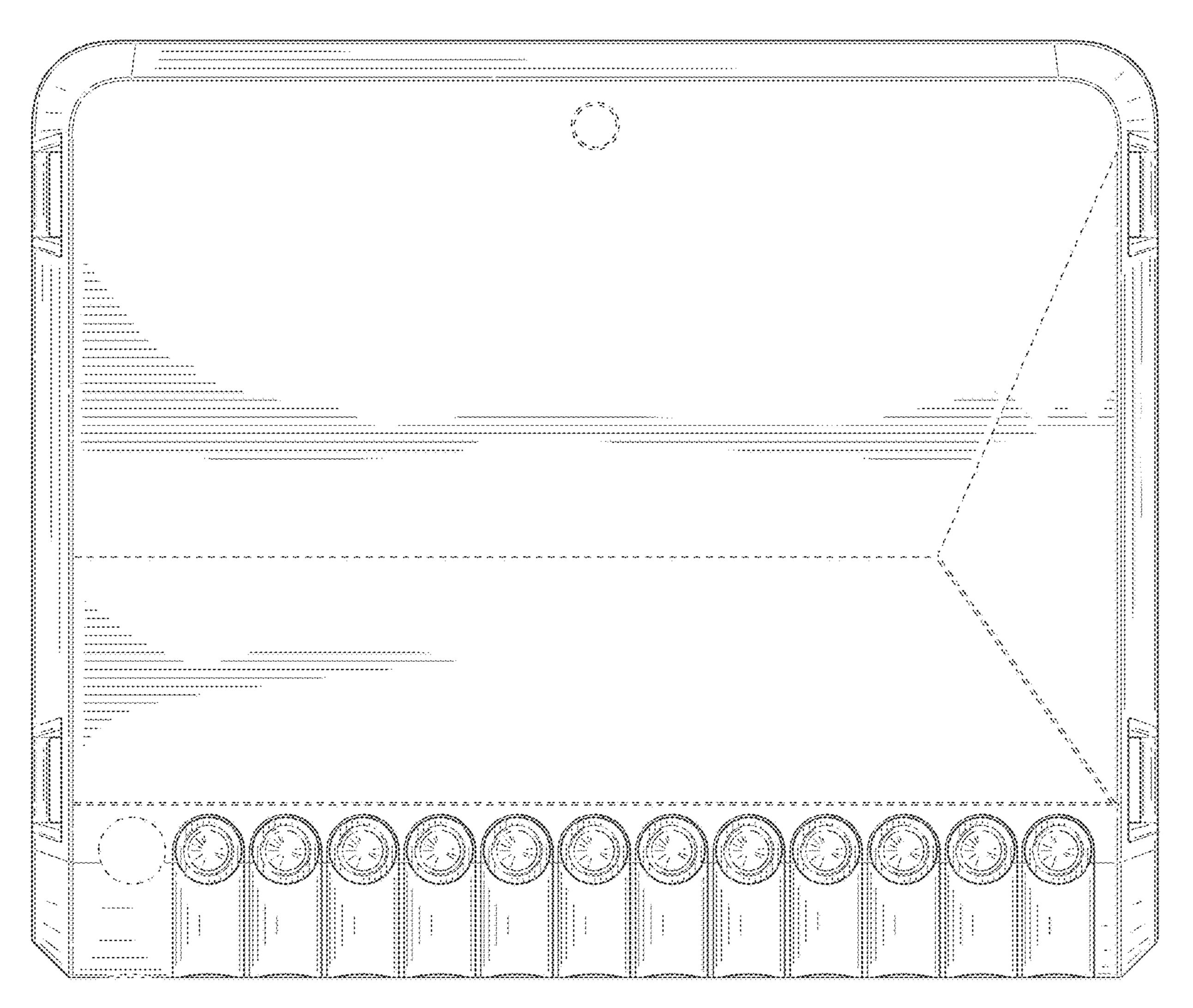


FIG. 47

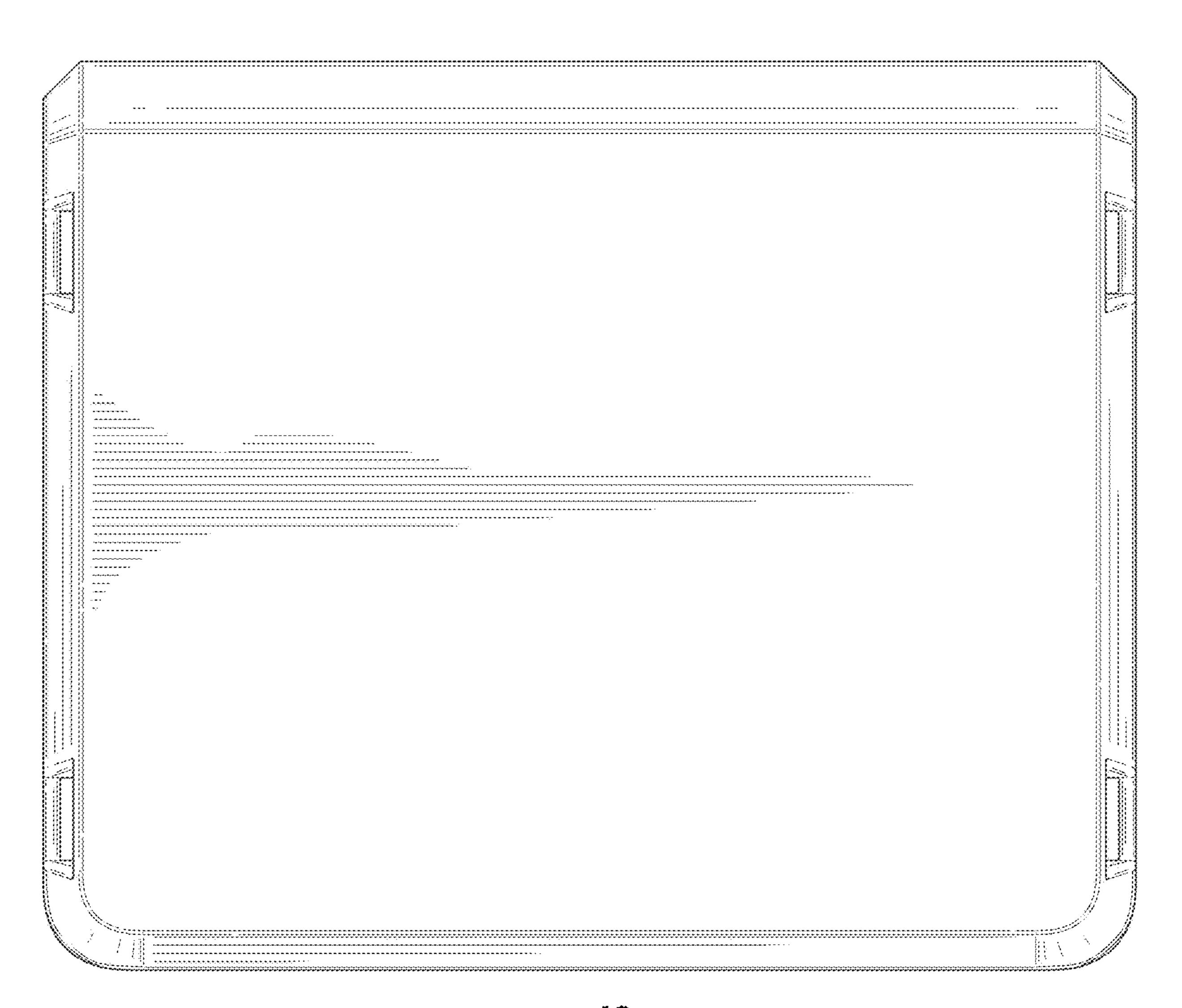


FIG. 48

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : D975,023 S
Page 1 of 1

APPLICATION NO. : 29/770223 DATED : January 10, 2023

INVENTOR(S) : Joel Christopher Rosson et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the Title Page

On the page 2, in Column 2, under item (56) "Other Publications", Line 14, delete "dumber" and insert -- jumber --.

Signed and Sealed this
Eighteenth Day of April, 2023

Activity Lelly Vidal

Katherine Kelly Vidal

Director of the United States Patent and Trademark Office