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

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(54) **IONIZER**

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(**) Term: **14 Years**

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(30) **Foreign Application Priority Data**

Dec. 16, 2014 (JP) 2014-028042

(51) **LOC (10) Cl.** **28-99**

(52) **U.S. Cl.**
USPC **D23/366**

(58) **Field of Classification Search**
USPC D23/355–369; D28/5, 6; 261/DIG. 17,
261/DIG. 42, DIG. 65, DIG. 88, DIG. 89;
392/386, 390, 394, 395, 397; 239/34,
239/44, 53, 55, 56, 326
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D279,815 S *	7/1985	Yuen	.....	D23/356
D460,542 S *	7/2002	Li	.....	D23/328
D543,614 S *	5/2007	Chen	.....	D23/382
D594,950 S *	6/2009	Orihara et al.	.....	D23/366
D594,951 S *	6/2009	Orihara et al.	.....	D23/366
D594,959 S *	6/2009	Orihara et al.	.....	D23/381
D594,960 S *	6/2009	Orihara et al.	.....	D23/381
D595,398 S *	6/2009	Orihara et al.	.....	D23/366
D605,278 S *	12/2009	Orihara et al.	.....	D23/366
D606,645 S *	12/2009	Orihara et al.	.....	D23/366

7,664,379 B2 *	2/2010	Eisenhauer	.....	392/360
D626,206 S *	10/2010	Orihara et al.	.....	D23/366
D652,132 S *	1/2012	Orihara et al.	.....	D23/366
8,116,060 B2 *	2/2012	Orihara et al.	.....	361/231
D707,339 S *	6/2014	Garbusi et al.		D23/366
D710,487 S *	8/2014	Lin		D23/355

* cited by examiner

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(57) **CLAIM**

The ornamental design for an ionizer, as shown and described.

DESCRIPTION

FIG. 1 shows a front view of an ionizer showing our new design;

FIG. 2 shows a rear view thereof;

FIG. 3 shows a right side view thereof;

FIG. 4 shows a left side view thereof;

FIG. 5 shows a top view thereof;

FIG. 6 shows a bottom view thereof;

FIG. 7 shows a bottom, front and left side perspective view thereof; and,

FIG. 8 shows a top, rear and right side perspective view thereof.

The portions of the design shown in broken lines in FIGS. 1 to 8 are for the purpose of illustrating the environment only and form no part of the claimed design.

The present article is comprised of a body portion and a discharge needle unit.

The body portion includes a fan at a ventilation hole. The discharge needle unit includes a metal grille and a discharge needle. The discharge needle unit is formed in a plate shape. The discharge needle unit is detachably mounted on the body portion. By blowing an air containing an ion generated at the discharge needle, electricity charged on a work can be eliminated.

1 Claim, 7 Drawing Sheets

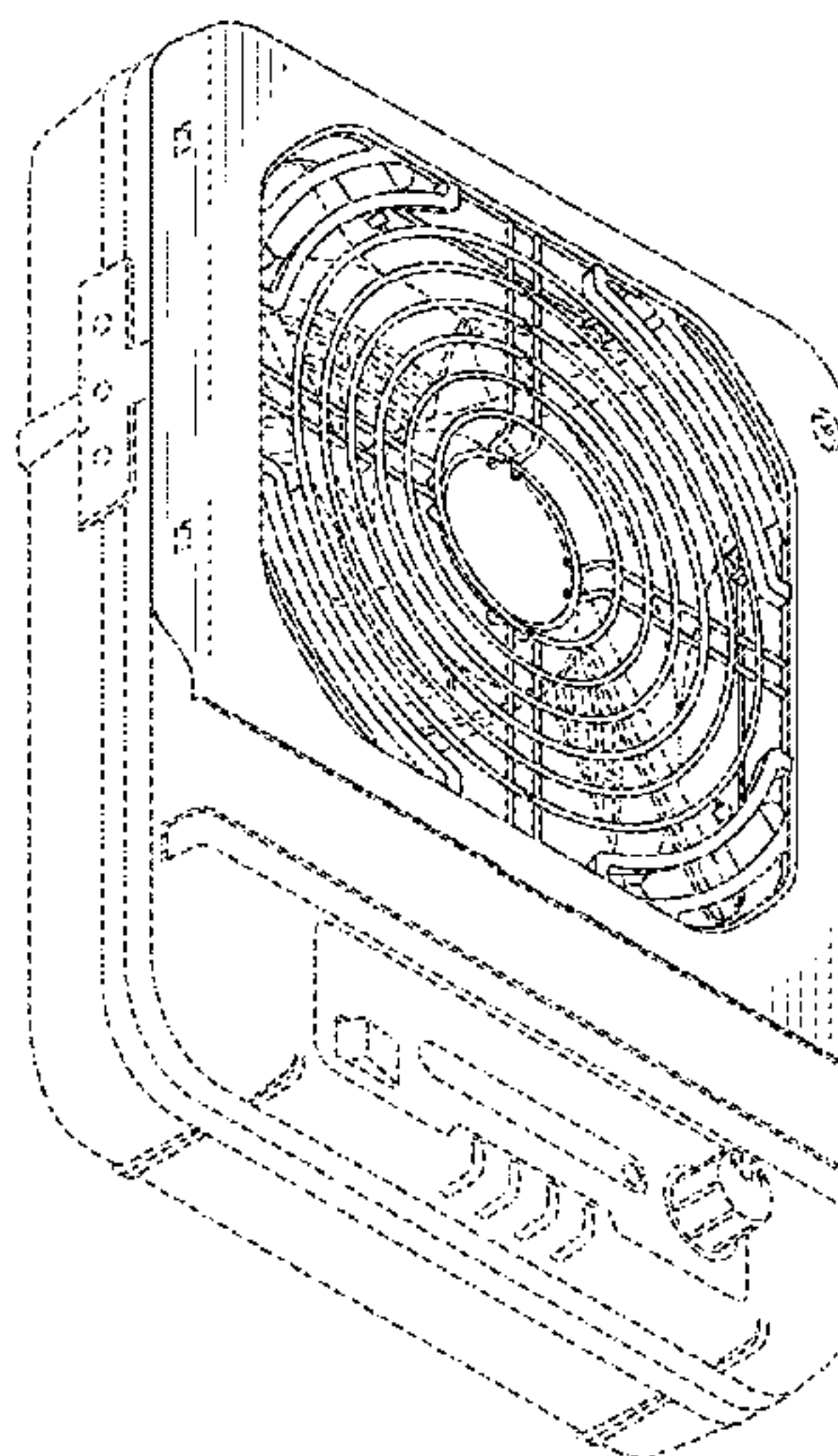


FIG. 1

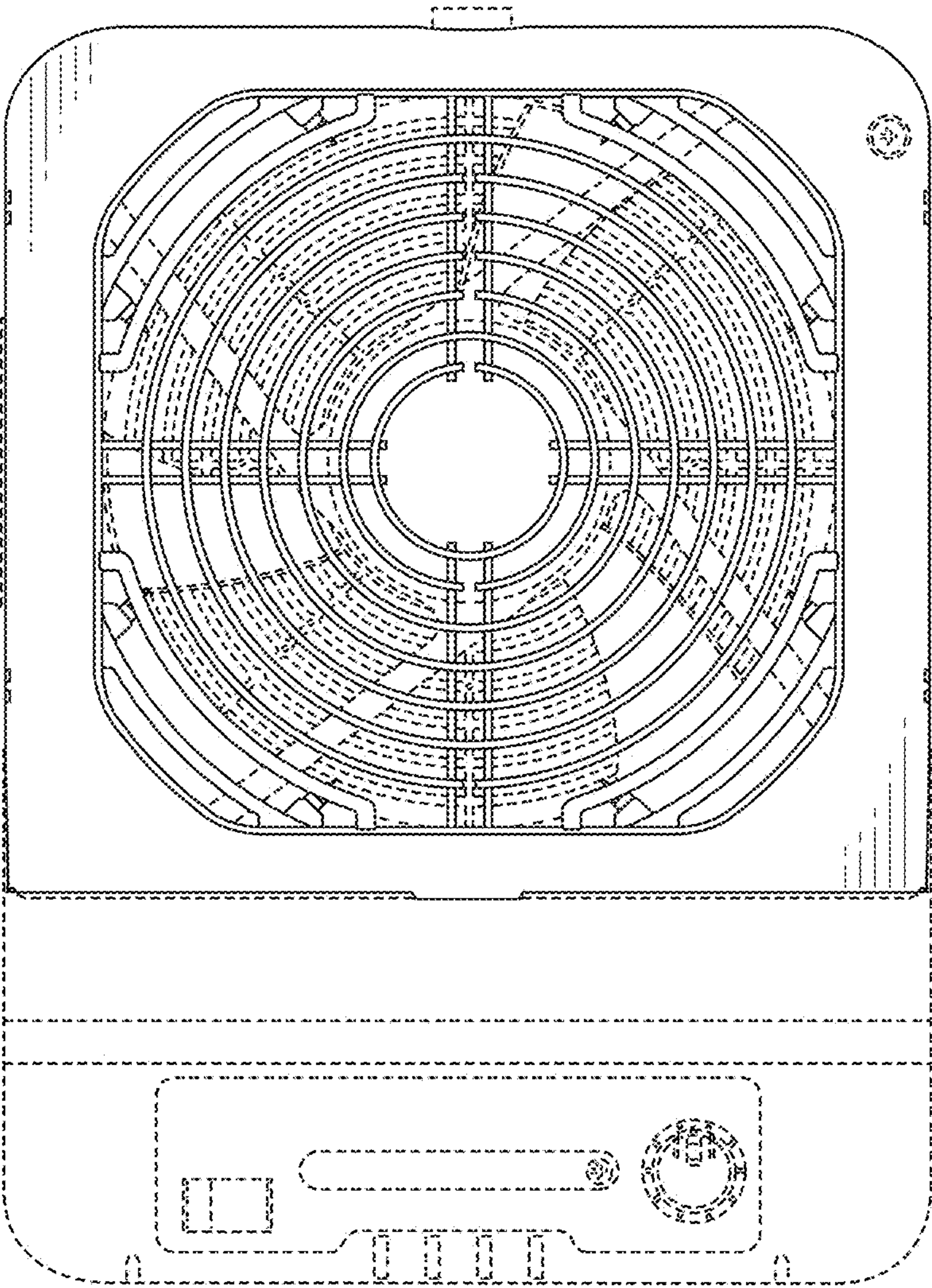


FIG. 2

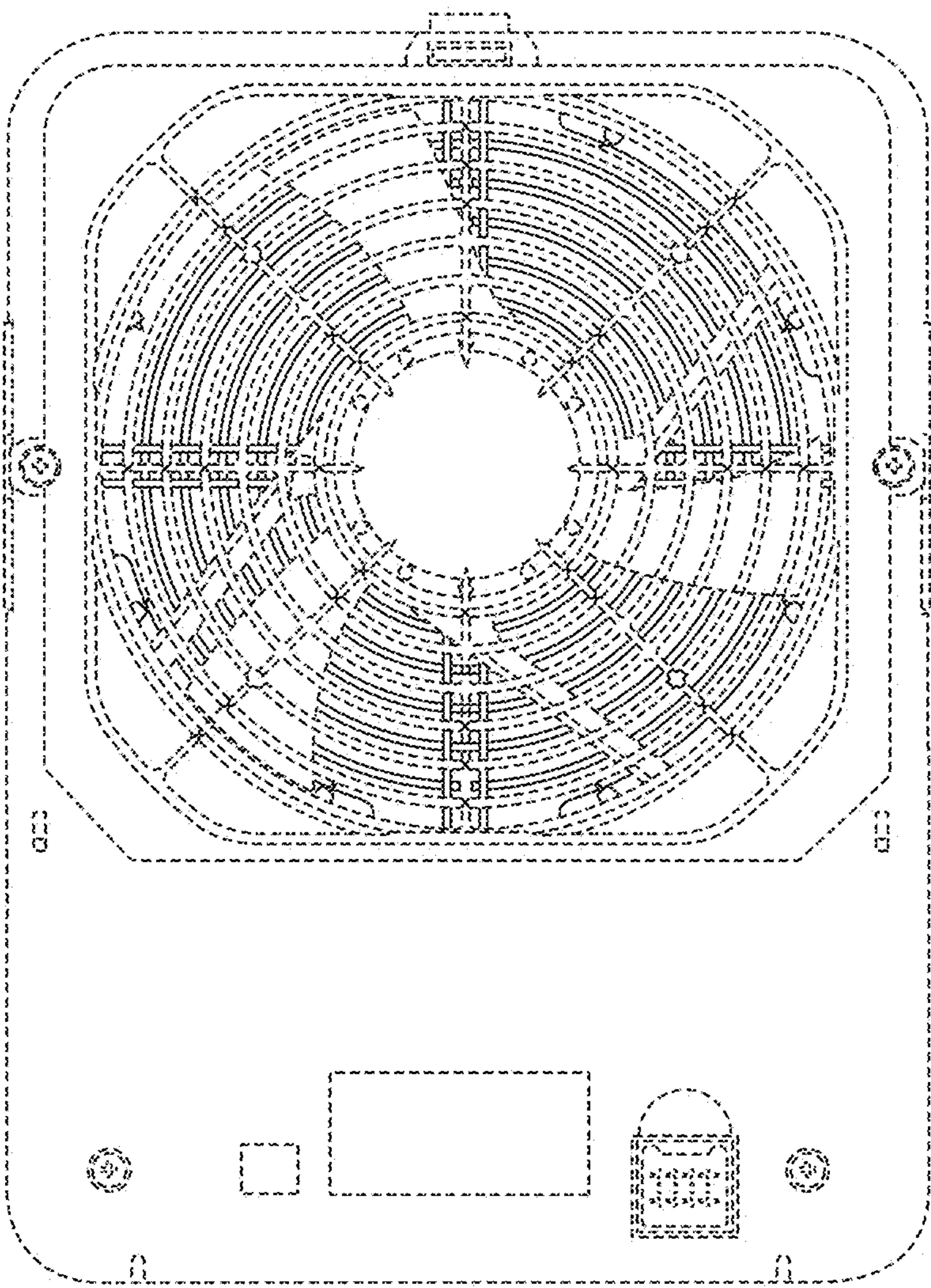


FIG. 3

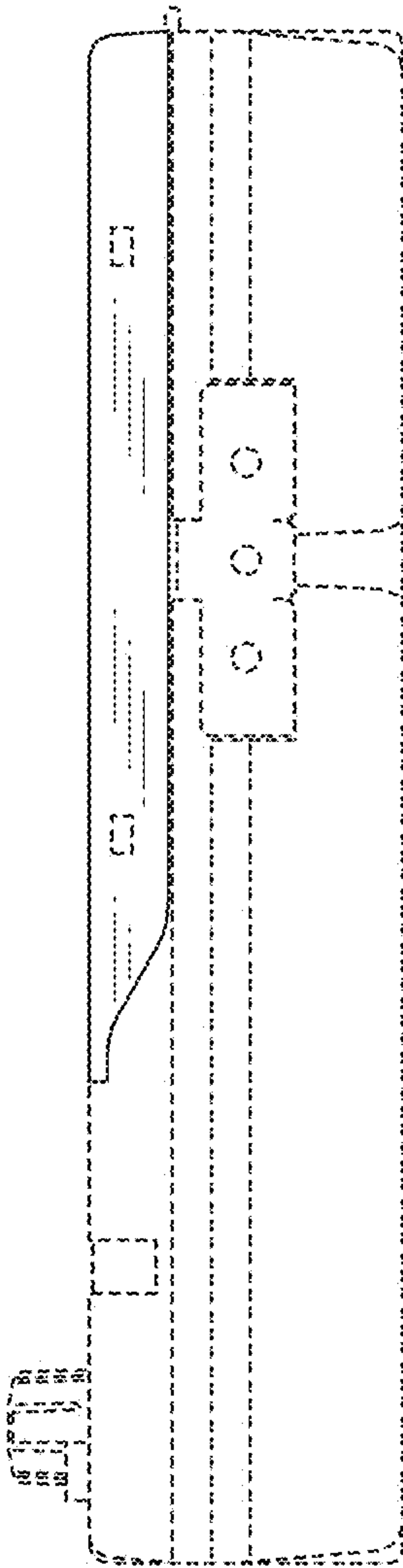


FIG. 4

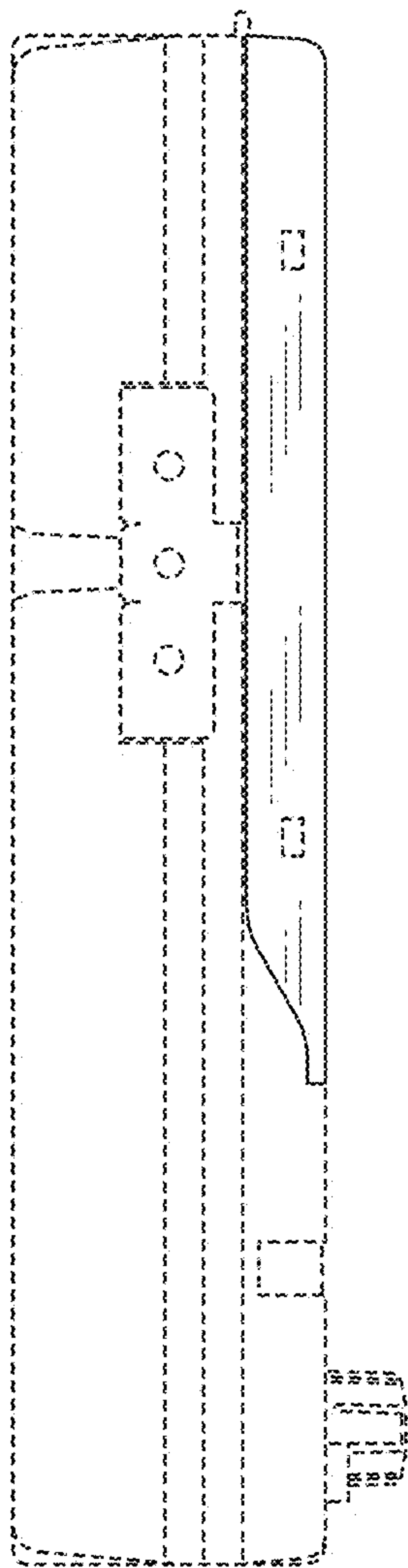


FIG. 5

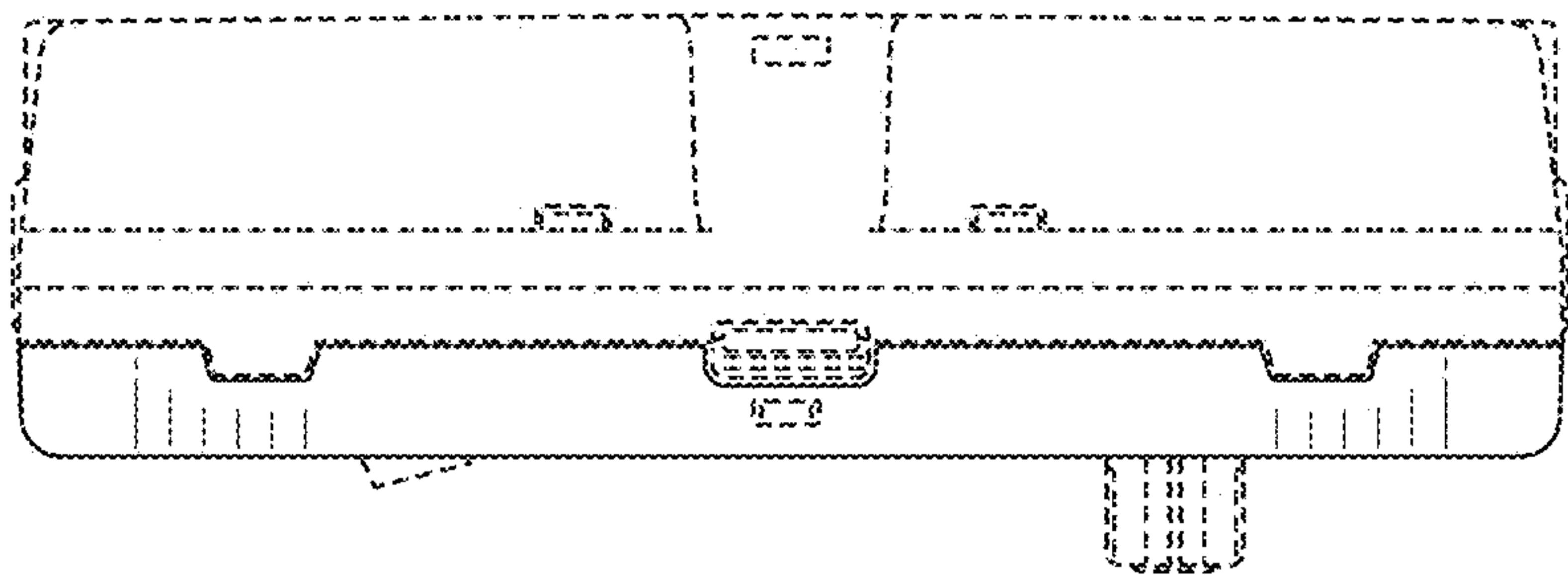


FIG. 6

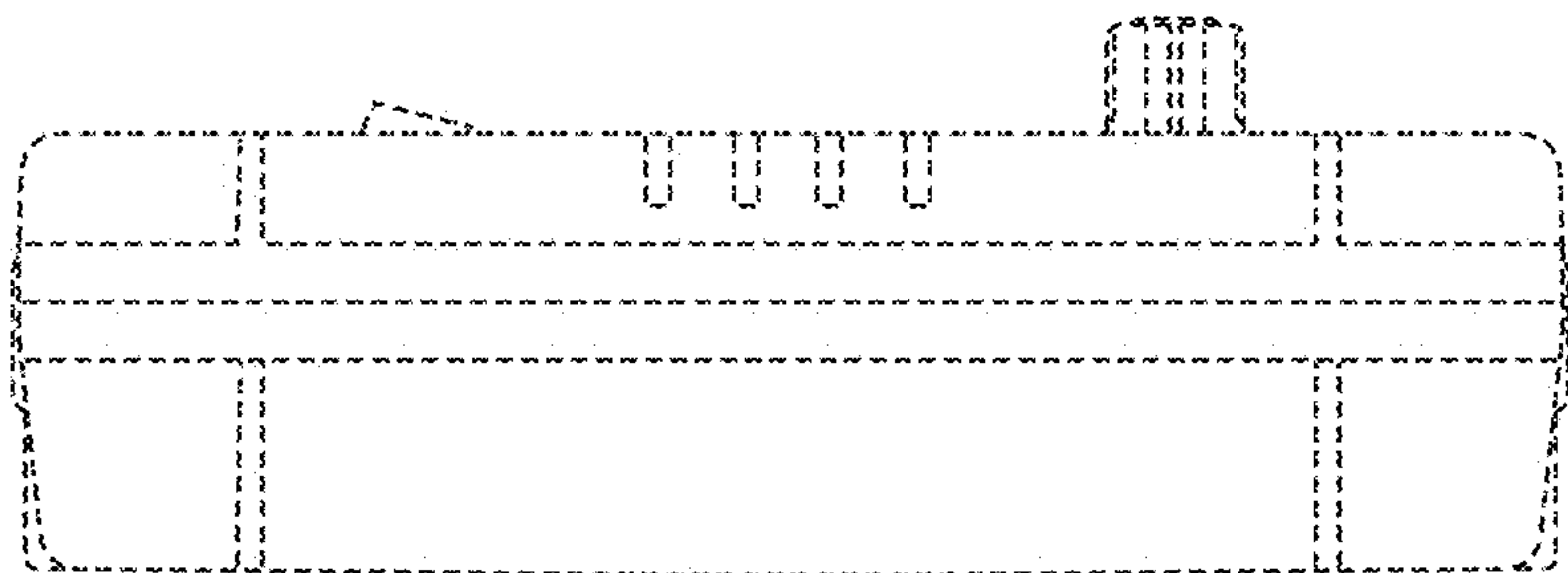


FIG. 7

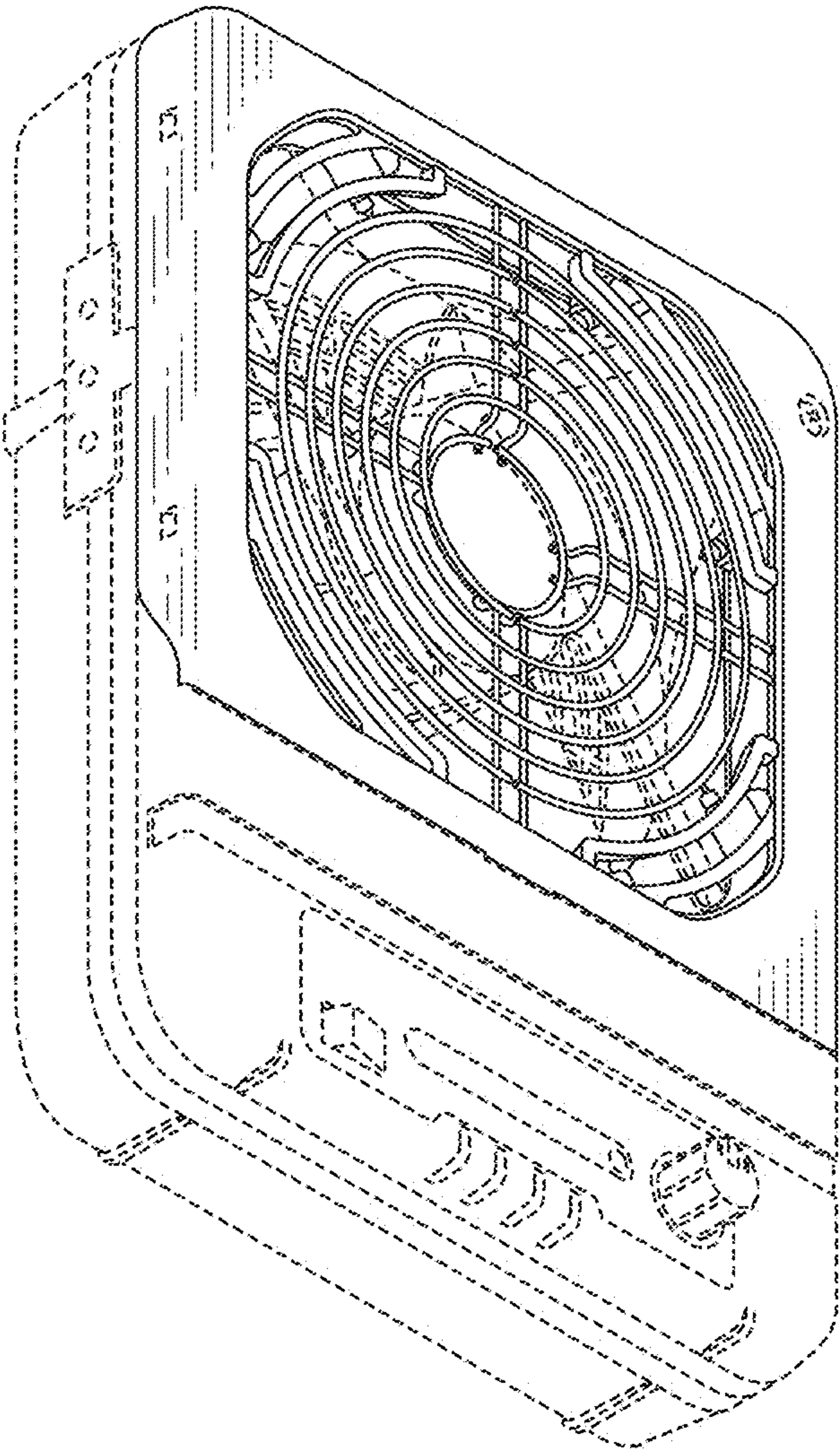


FIG. 8

