



US00D674760S

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

(10) **Patent No.:** **US D674,760 S**
(45) **Date of Patent:** **** Jan. 22, 2013**

(54) **SEMICONDUCTOR DEVICE**
(75) Inventors: **Eiji Mochizuki**, Kanagawa (JP); **Toshio Denta**, Kanagawa (JP); **Tadanori Yamada**, Kanagawa (JP)

(73) Assignee: **Fuji Electric Co., Ltd.**, Kanagawa (JP)

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

(21) Appl. No.: **29/399,979**

(22) Filed: **Aug. 22, 2011**

(30) **Foreign Application Priority Data**

Apr. 1, 2011 (JP) D2011-007641

(51) **LOC (9) Cl.** **13-03**

(52) **U.S. Cl.** **D13/182**

(58) **Field of Classification Search** D13/110,
D13/182; 257/668, 678, 690; 361/713, 728,
361/736, 752, 775

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,994,902	A *	2/1991	Okahashi et al.	257/665
5,444,297	A *	8/1995	Oshima et al.	257/691
D389,808	S *	1/1998	Yamada et al.	D13/182
6,521,983	B1 *	2/2003	Yoshimatsu et al.	257/678
6,995,461	B2 *	2/2006	Soyano et al.	257/678
7,425,757	B2 *	9/2008	Takubo	257/678
D589,012	S *	3/2009	Soyano et al.	D13/182
D606,951	S *	12/2009	Soyano et al.	D13/182
7,706,146	B2 *	4/2010	Lee et al.	361/752
7,868,451	B2 *	1/2011	Muramatsu et al.	257/723
8,093,692	B2 *	1/2012	Obara	257/668

8,102,655	B2 *	1/2012	Sakamoto et al.	361/723
8,107,255	B2 *	1/2012	Sakamoto et al.	361/792
D653,633	S *	2/2012	Soyano	D13/182
D653,634	S *	2/2012	Soyano	D13/182
2001/0038143	A1 *	11/2001	Sonobe et al.	257/690
2010/0149774	A1 *	6/2010	Matsumoto et al.	361/783
2011/0044012	A1 *	2/2011	Matsumoto	361/728

OTHER PUBLICATIONS

Starpower ID—IPM Application Note, Power Modules., May 17, 2010, Application Note AN Rev.02, Starpower Semiconductor Ltd. pp. 1-71.

* cited by examiner

Primary Examiner — Selina Sikder

(74) *Attorney, Agent, or Firm* — Young & Thompson

(57) **CLAIM**

The ornamental design for a semiconductor device, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of front, top plan and right side of a semiconductor device showing our new design;

FIG. 2 is a front view thereof;

FIG. 3 is a rear view thereof;

FIG. 4 is a left side view thereof;

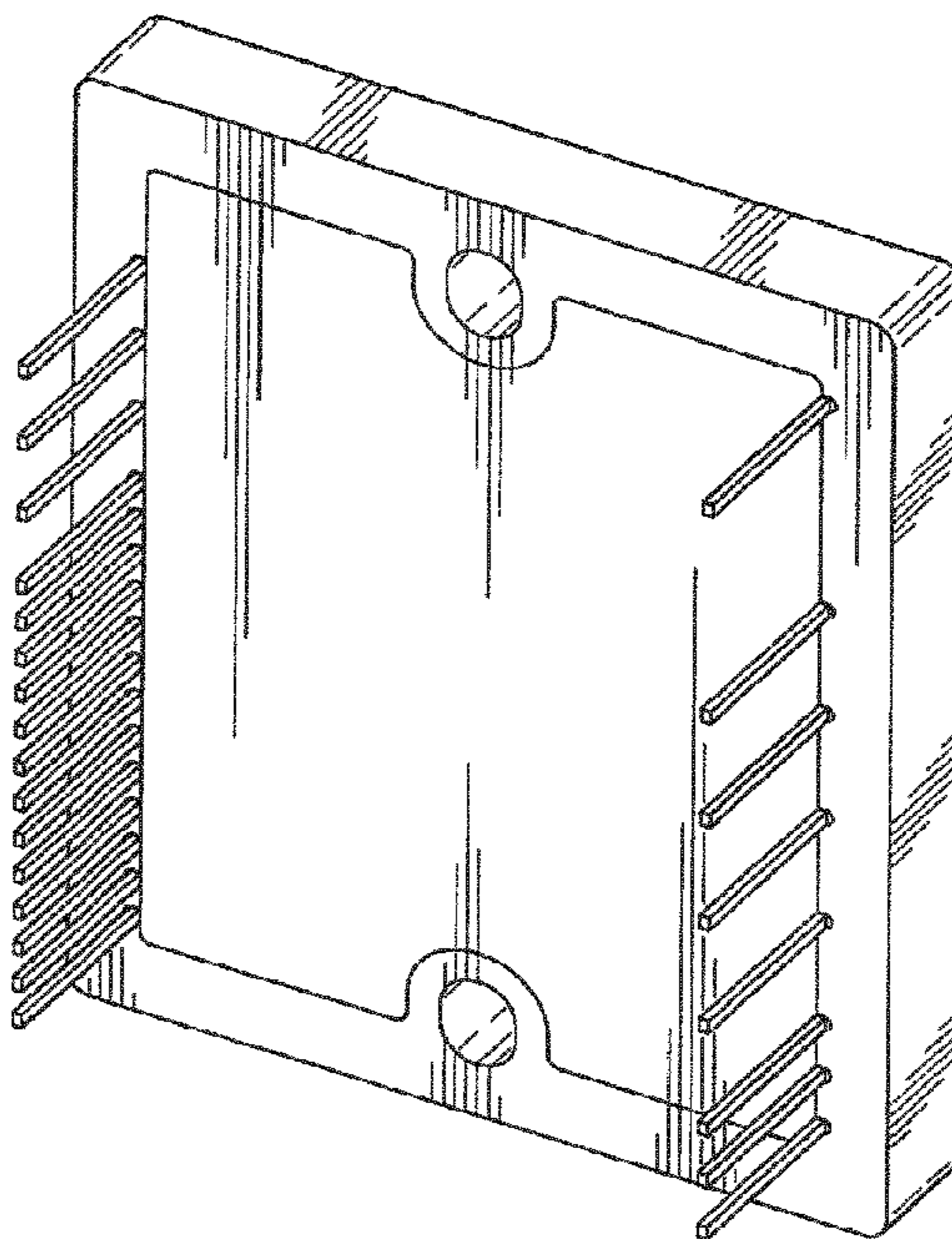
FIG. 5 is a right side view thereof.

FIG. 6 is a top plan view thereof;

FIG. 7 is a bottom view thereof; and,

FIG. 8 is a cross-sectional view taken along line 8-8 in FIG. 2 view omitting interior mechanism thereof.

1 Claim, 3 Drawing Sheets



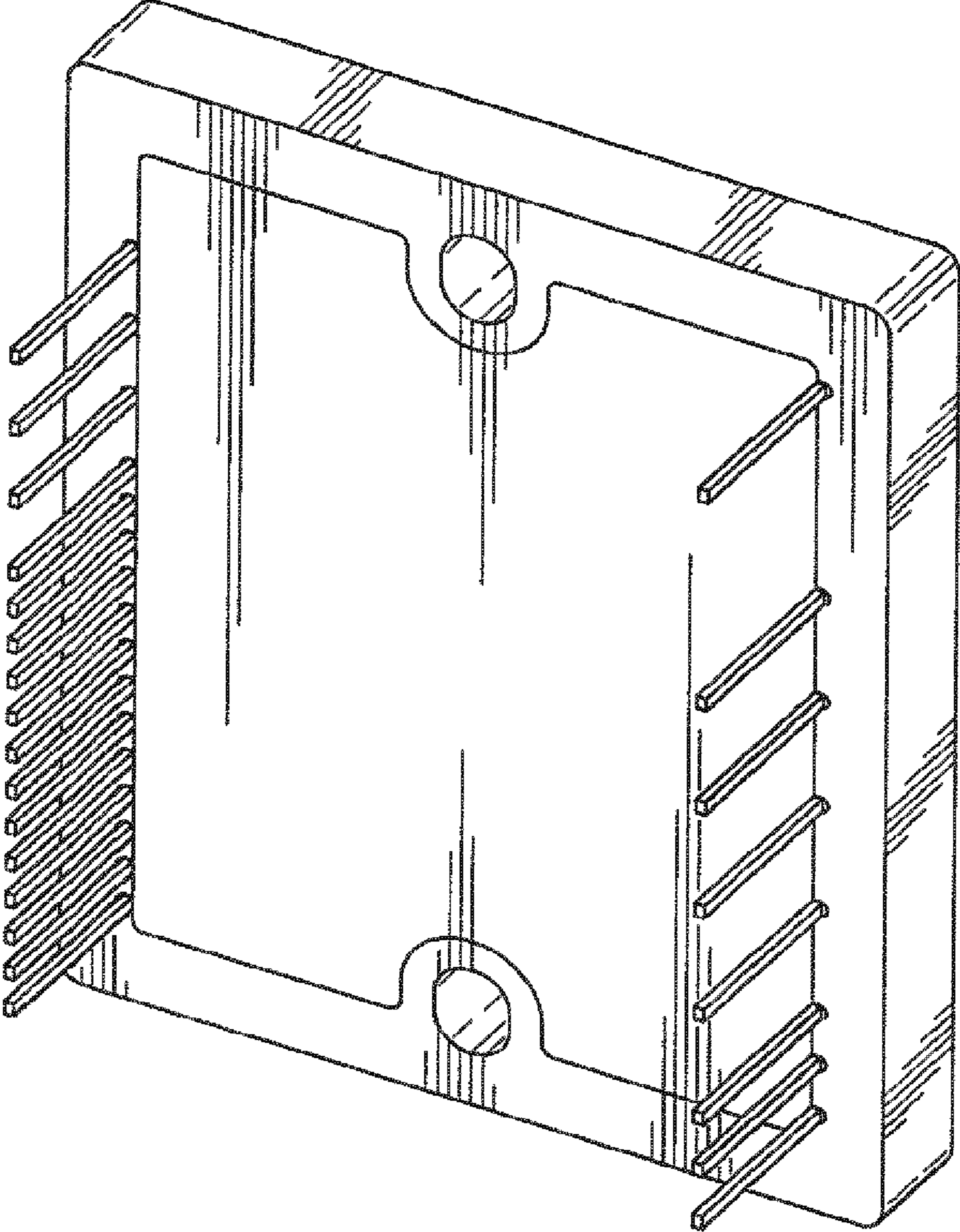


FIG. 1

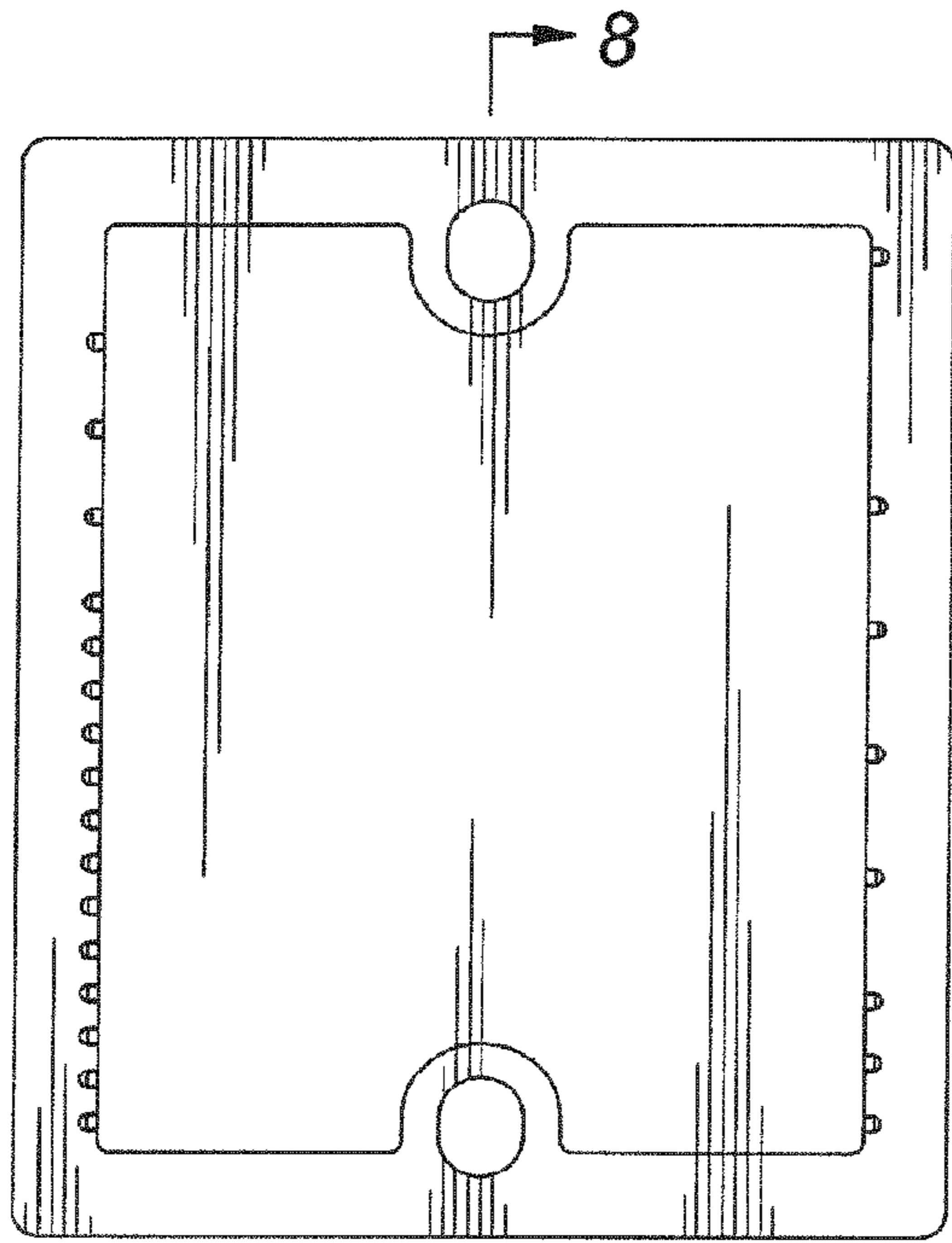


FIG. 2

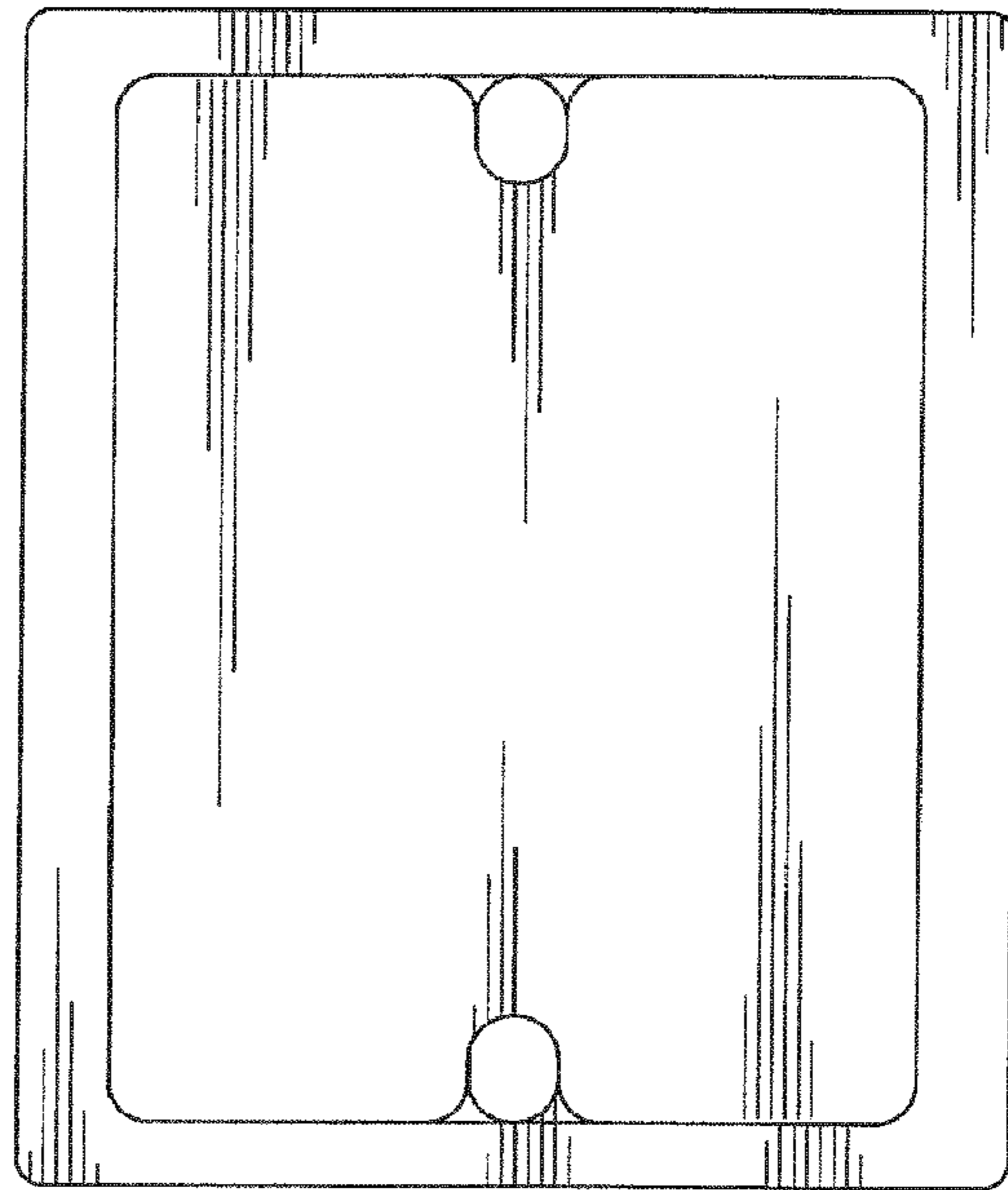


FIG. 3

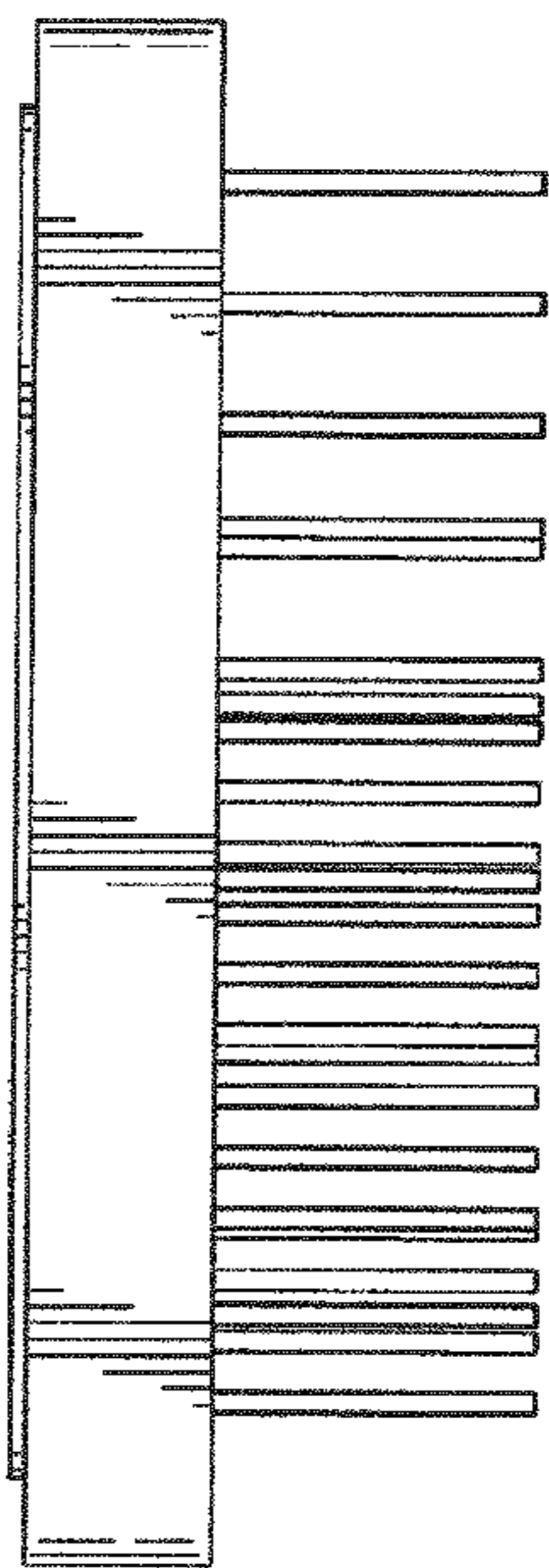


FIG. 4

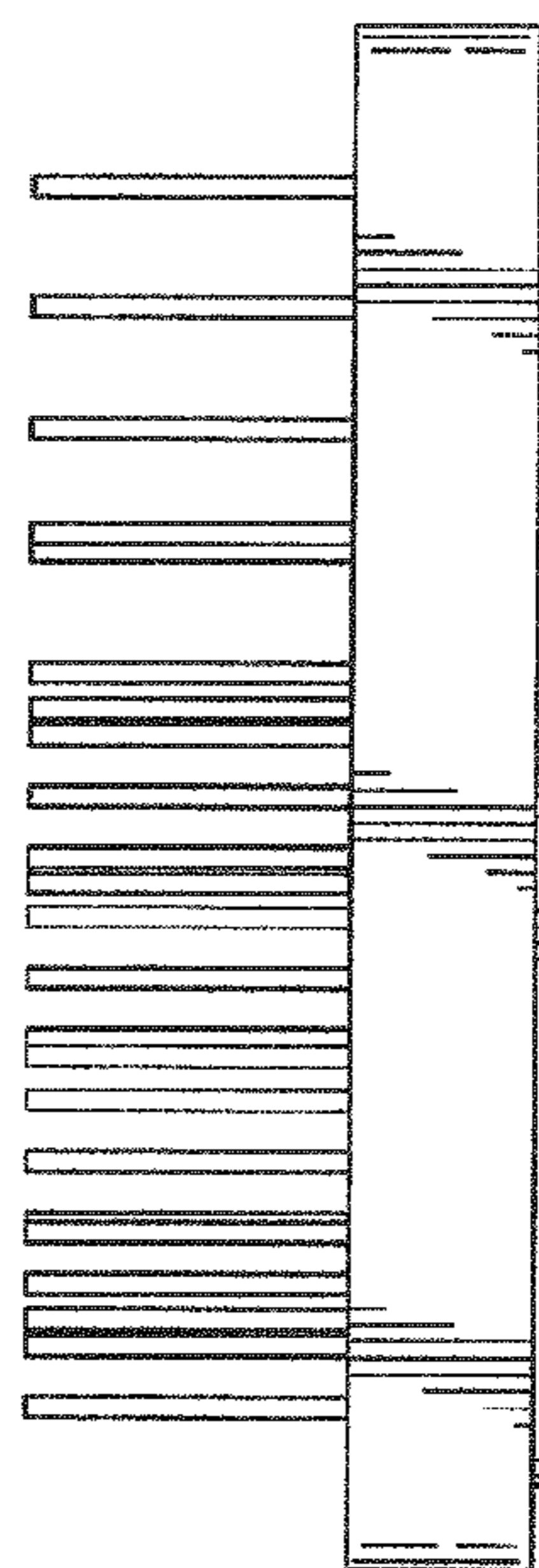


FIG. 5

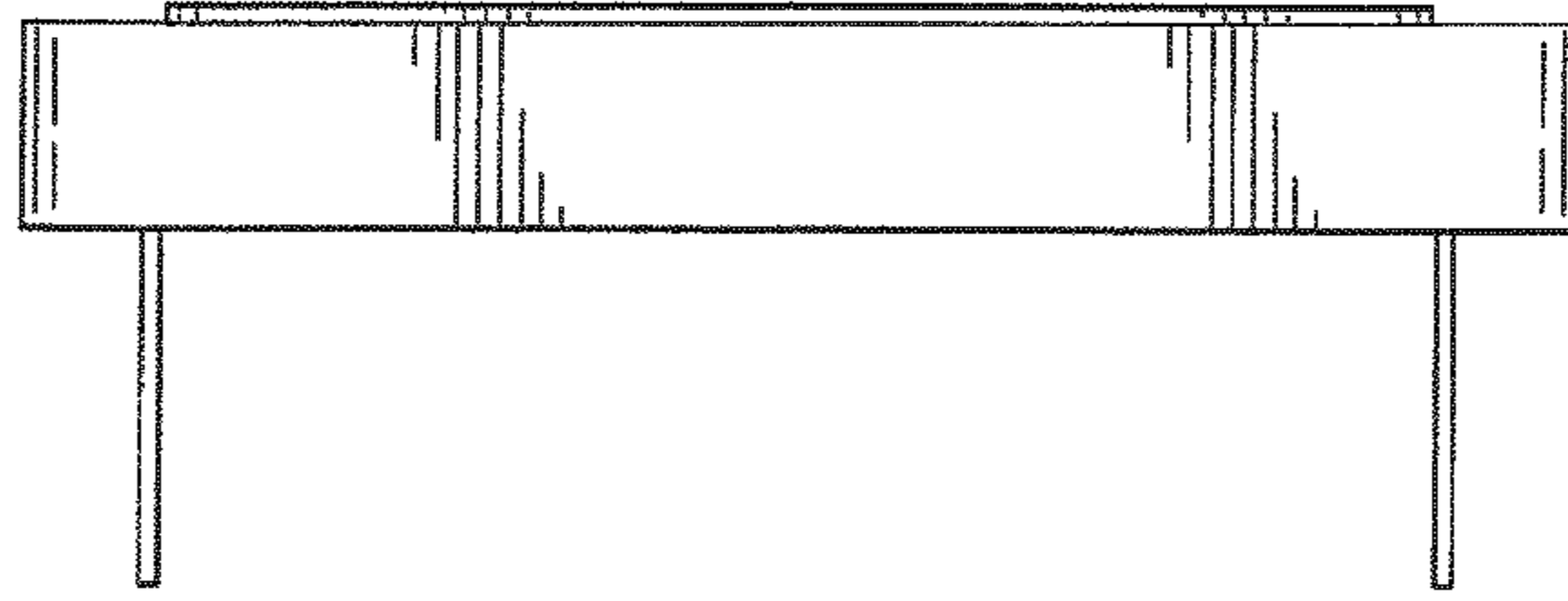


FIG. 6

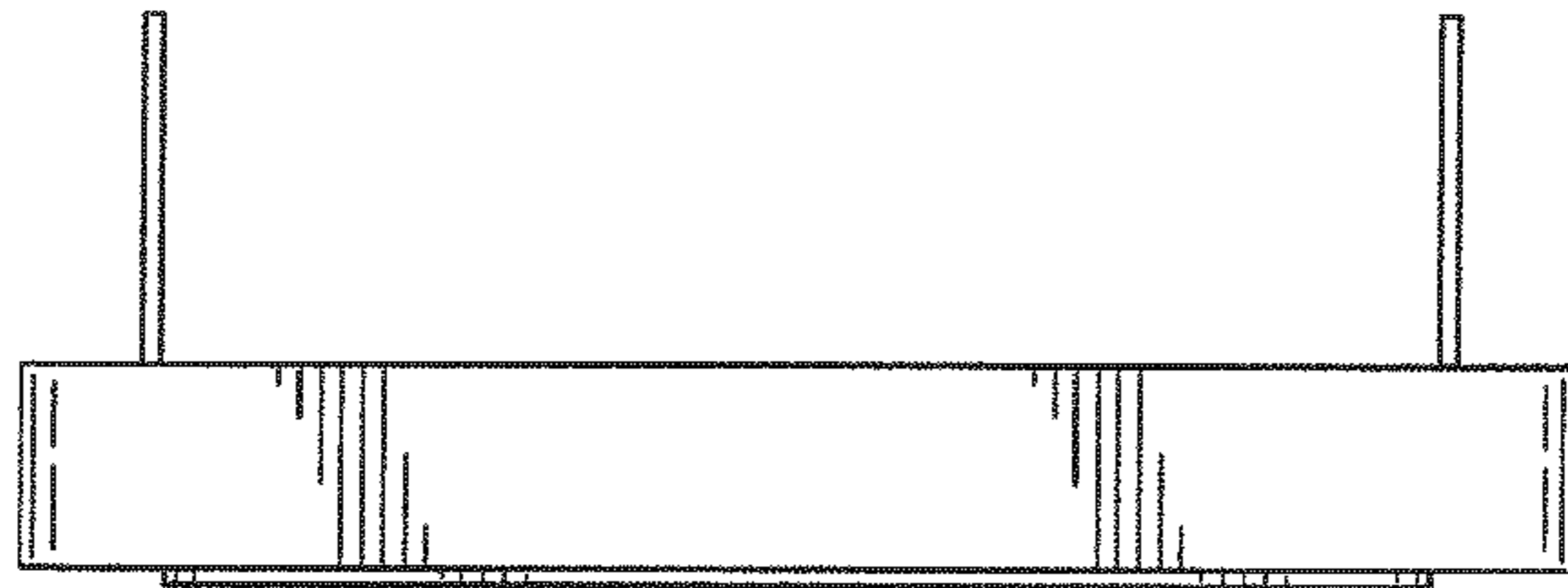


FIG. 7

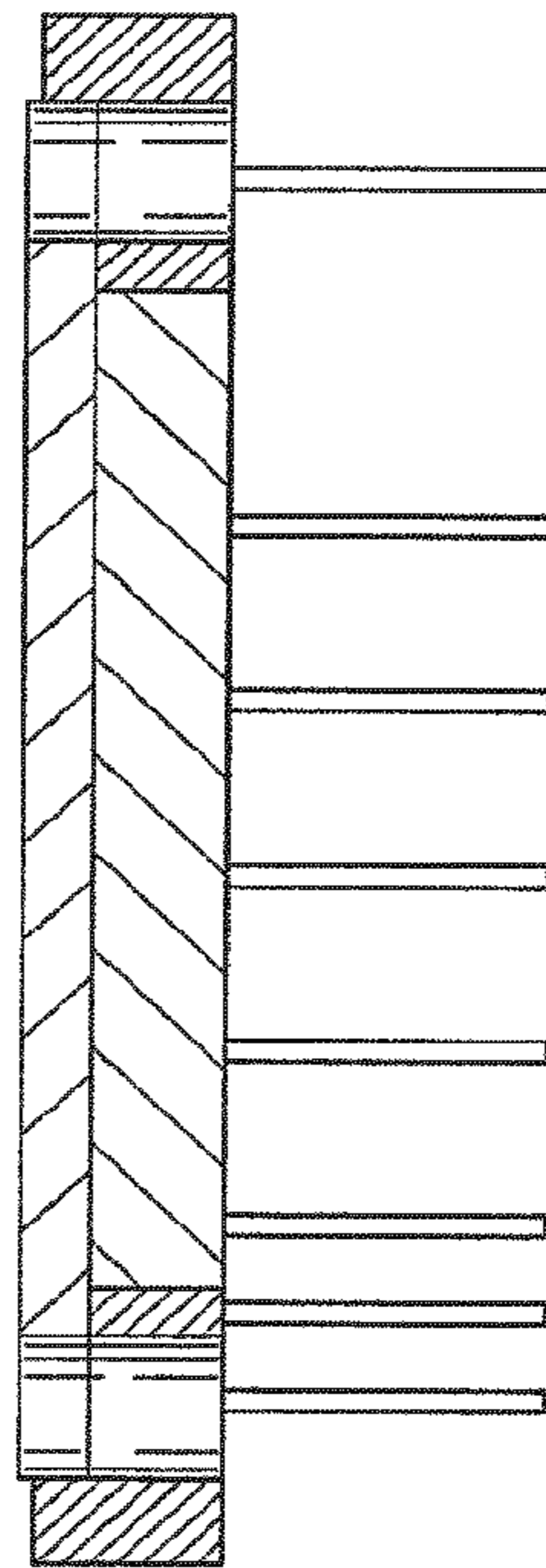


FIG. 8