



US0D1071556S

(12)

United States Design Patent

Zhang et al.

(10)

Patent No.:

US D1,071,556 S

(45)

Date of Patent:

** Apr. 22, 2025

(54) BIN

(71) Applicant: HAI ROBOTICS CO., LTD.,
Guangdong (CN)

(72) Inventors: Qiong Zhang, Guangdong (CN);
Yongjian Wang, Guangdong (CN);
Jinrui Duan, Guangdong (CN)

(73) Assignee: HAI ROBOTICS CO., LTD.,
Guangdong (CN)

(**) Term: 15 Years

(21) Appl. No.: 29/878,160

(22) Filed: Jun. 16, 2023

(30) Foreign Application Priority Data

Dec. 19, 2022 (CN) 202230877703.8

(51) LOC (15) Cl. 09-04

(52) U.S. Cl.

USPC D3/304

(58) Field of Classification Search

USPC D3/271.9, 272, 273, 304, 305, 306, 307,
D3/308, 309, 310, 311, 312

CPC B65D 1/22; B65D 1/225; B65D 11/1826;
B65D 11/1833; B65D 11/184; B65D
11/1846; B65D 11/1853; B65D 19/18;
B65D 19/0212; B65D 19/0213; B65D
25/005

See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

D213,673 S * 4/1969 Rehrig D3/312

D223,810 S * 6/1972 McIlvain D3/312

5,180,064 A * 1/1993 Elvin-Jensen B65D 19/04
220/675

D661,901 S * 6/2012 Orgeldinger D3/305

D797,453 S * 9/2017 Shamp D3/314

D810,439 S * 2/2018 Martin Tellez D3/314

D844,988 S * 4/2019 Reinhart D3/305

D949,566 S * 4/2022 Ritzberger D9/425

D1,004,970 S * 11/2023 Schmid D3/304

(Continued)

OTHER PUBLICATIONS

“HaiPick System 3”, [Posted Online on hairobotics.com], [Wayback Machine Date Sep. 7, 2024], [Retrieved Online on Dec. 27, 2024], <https://web.archive.org/web/20240907212237/https://www.hairobotics.com/solutions/haipick-system-3> (Year: 2024).*

(Continued)

Primary Examiner — Bao-Yen T Nguyen
Assistant Examiner — Christopher John Suarez La Rosa
(74) Attorney, Agent, or Firm — Frank Gao, Esq.

(57)

CLAIM

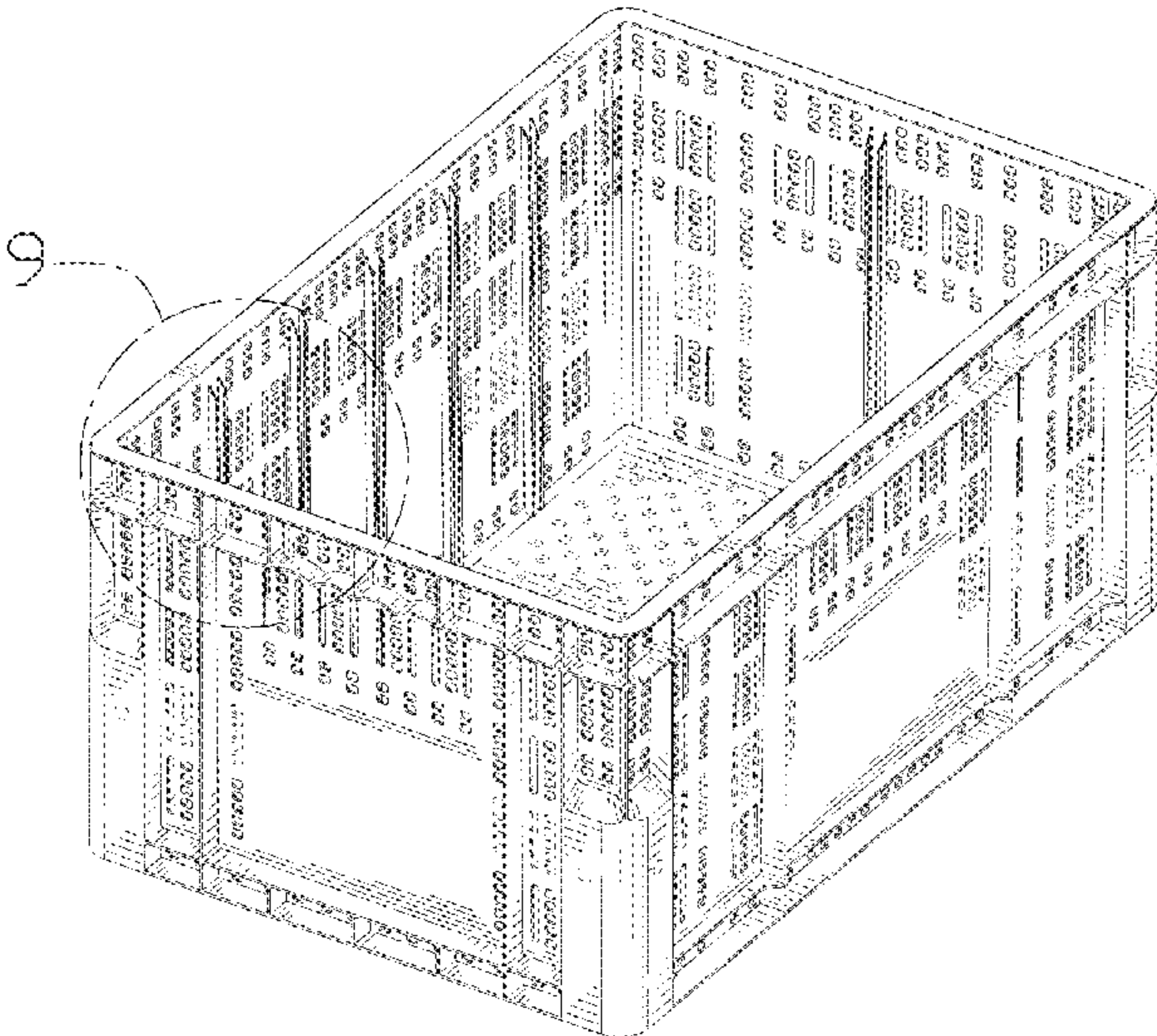
The ornamental design for a bin as shown and described.

DESCRIPTION

FIG. 1 is a first perspective view of a bin;
FIG. 2 is a second perspective view thereof;
FIG. 3 is a front view thereof;
FIG. 4 is a rear view thereof;
FIG. 5 is a left view thereof;
FIG. 6 is a right view thereof;
FIG. 7 is a top view thereof;
FIG. 8 is a bottom view thereof;
FIG. 9 is an enlargement view of the indicated portion shown in FIG. 1; and,
FIG. 10 is an enlargement view of the indicated portion shown in FIG. 2.

The dash-dash broken lines depict portions of the bin that form no part of the claimed design. The remaining long dash-dash broken lines in FIGS. 1-2 and 9-10 depict enlargement boundary limits that form no part of the claimed design.

1 Claim, 10 Drawing Sheets



References Cited

D1,020,253	S *	4/2024	Schmid	D3/307
D1,035,279	S *	7/2024	Beckerman	D3/307
12,054,313	B2 *	8/2024	Frankenberg	B65D 25/38
2023/0174288	A1 *	6/2023	Beckerman	B65D 25/2885
				220/646

“HaiPick System 1”, [Posted Online on amazon.com], [Wayback Machine Date Nov. 21, 2024], [Retrieved Online on Dec. 27, 2024], <https://web.archive.org/web/20241121185638/https://www.hairobotics.com/solutions/haipick-system-1> (Year: 2024).*

“Exotec”, [Posted Online on exotec.com], [Wayback Machine Date Dec. 13, 2024], [Retrieved Online on Dec. 27, 2024], <https://web.archive.org/web/20241213141119/https://www.exotec.com/en-gb/> (Year: 2024).*

“Monoflo Straight Wall Handled Storage Container Tote”, [Posted Online on amazon.ca], [First Available Date Jan. 28, 2018], [Retrieved Online on Dec. 27, 2024], <https://www.amazon.ca/Stackable-Straight-Wall-Container-Solid/dp/B078YJ6SMC> (Year: 2018).*

* cited by examiner

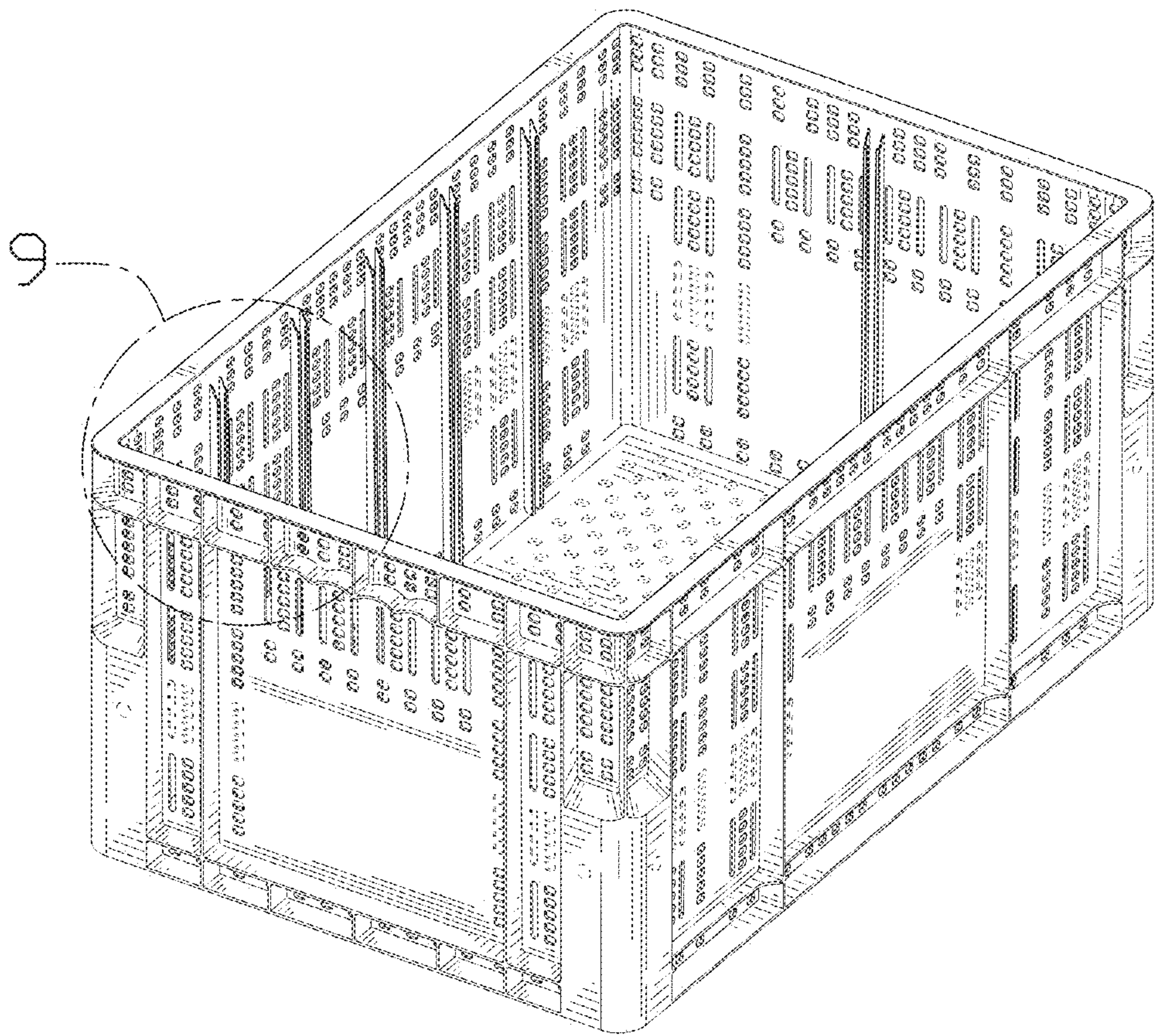


FIG. 1

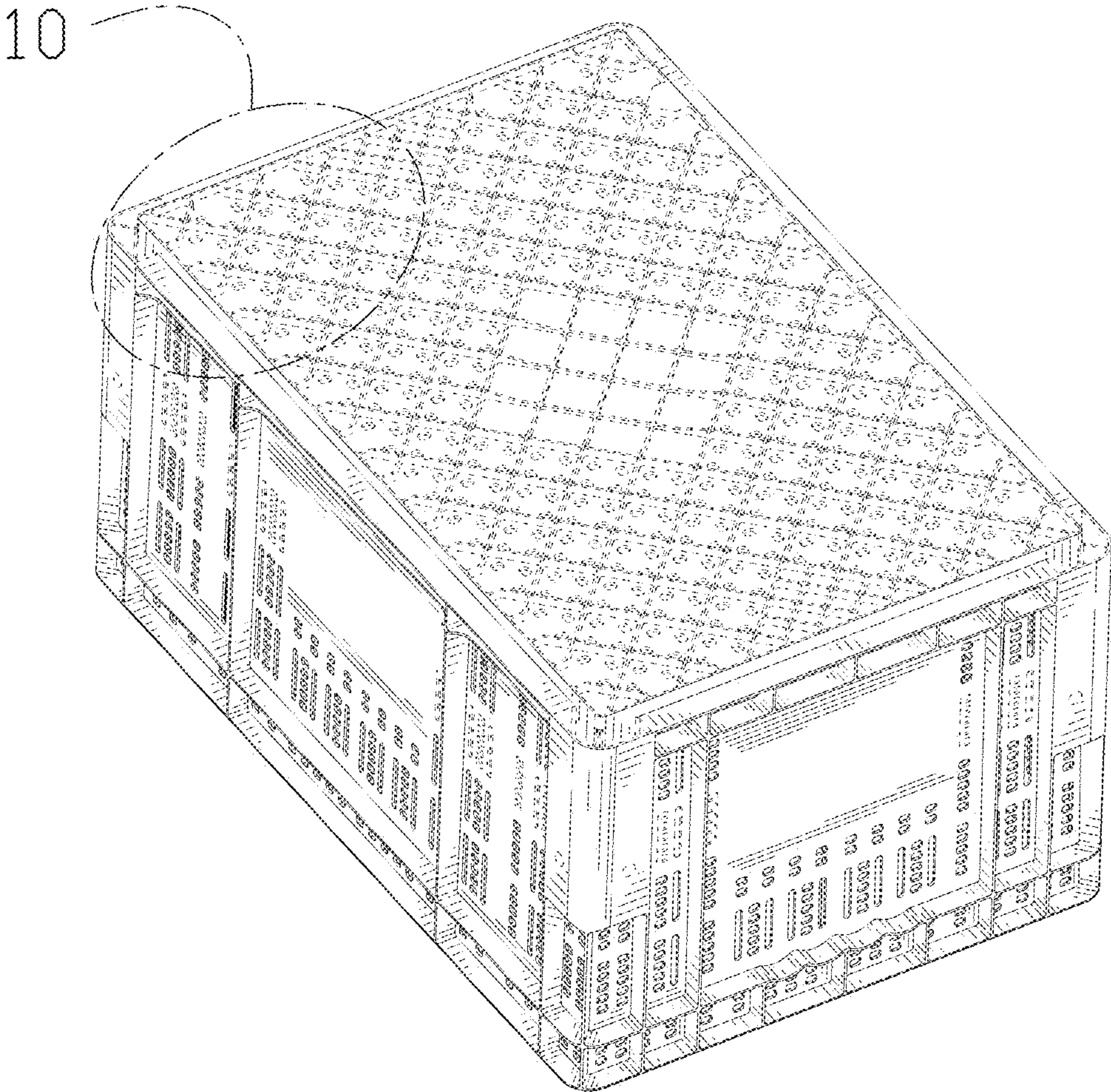


FIG. 2

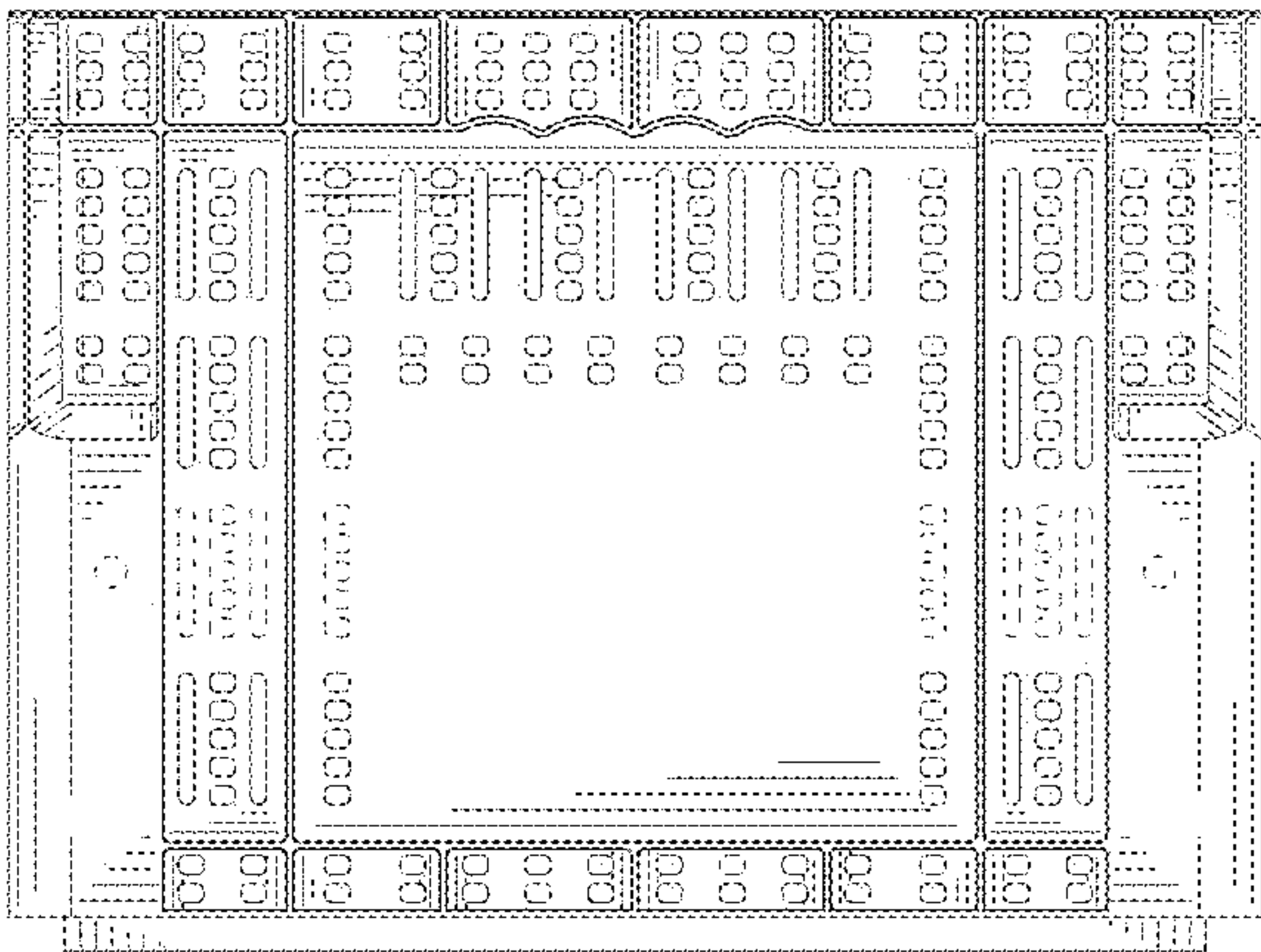


FIG. 3

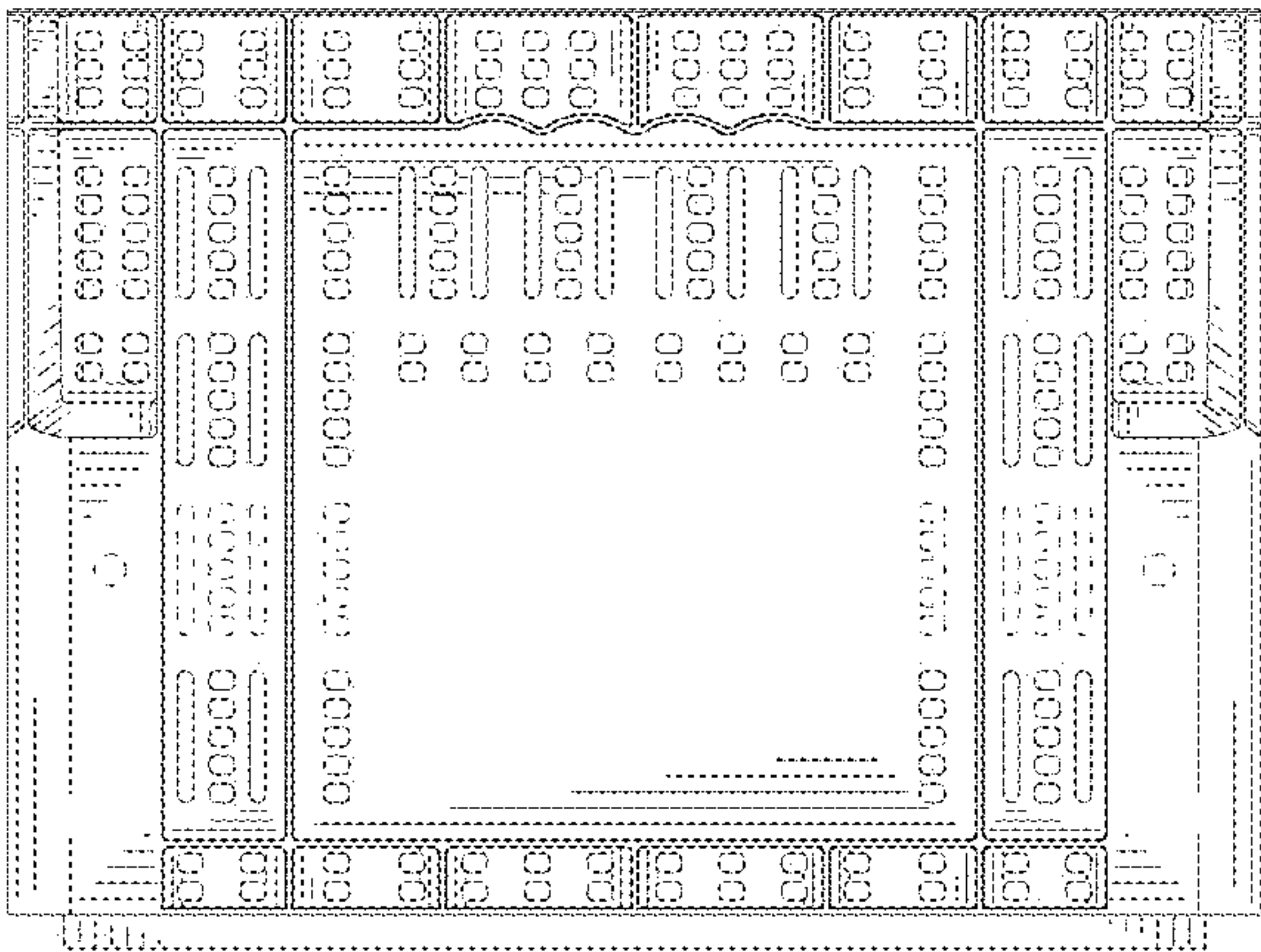


FIG. 4

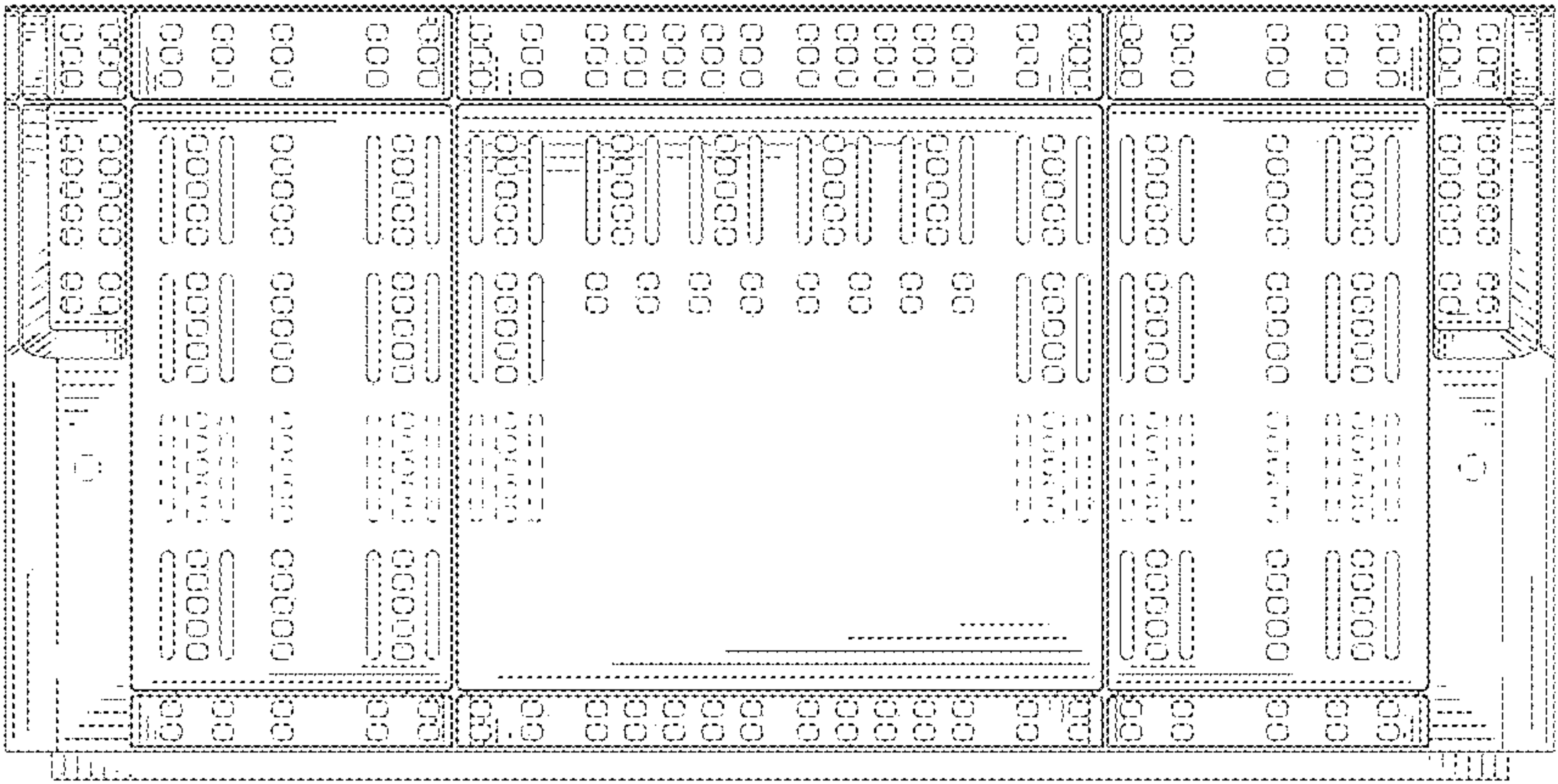


FIG. 5

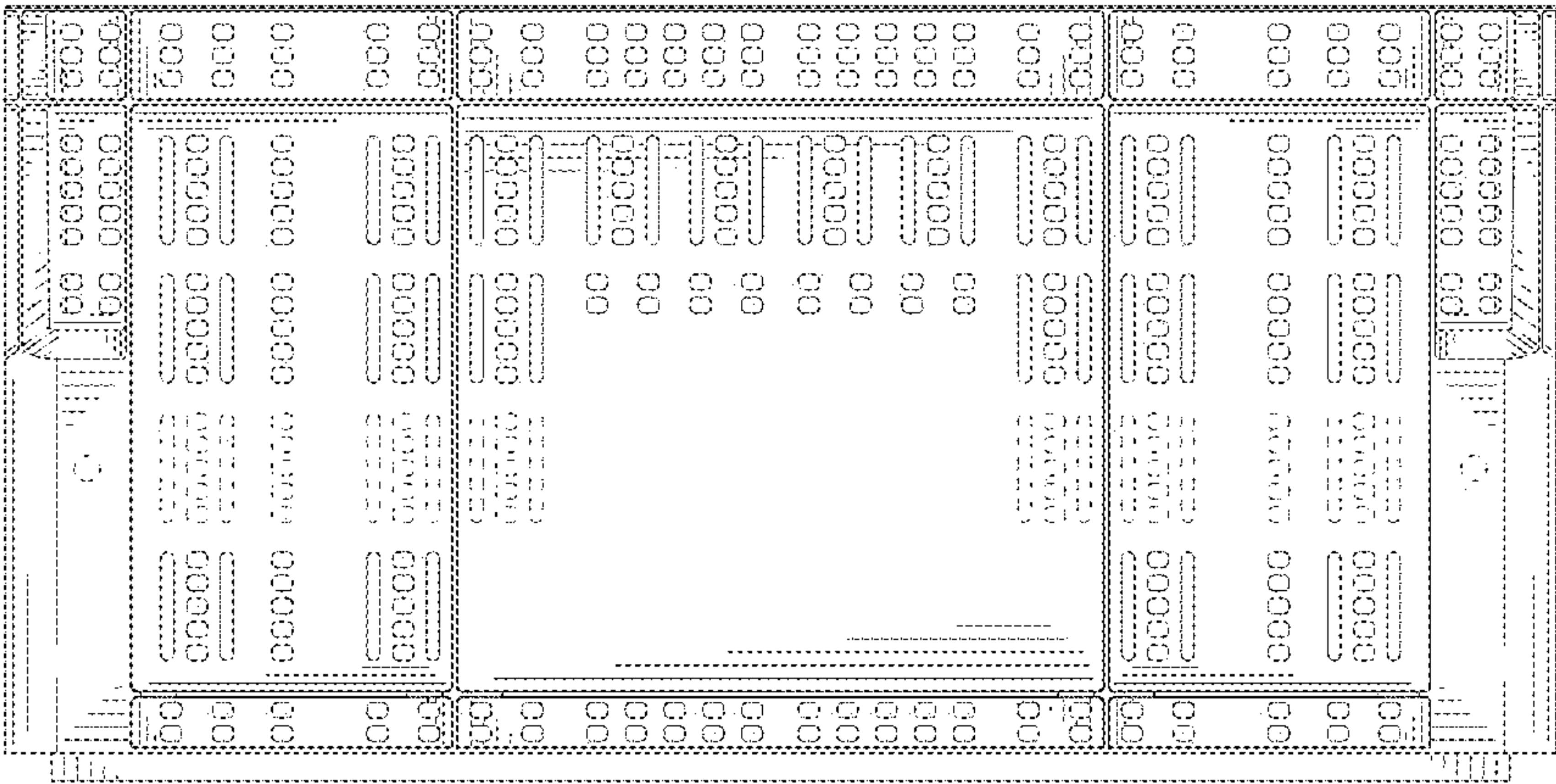


FIG. 6

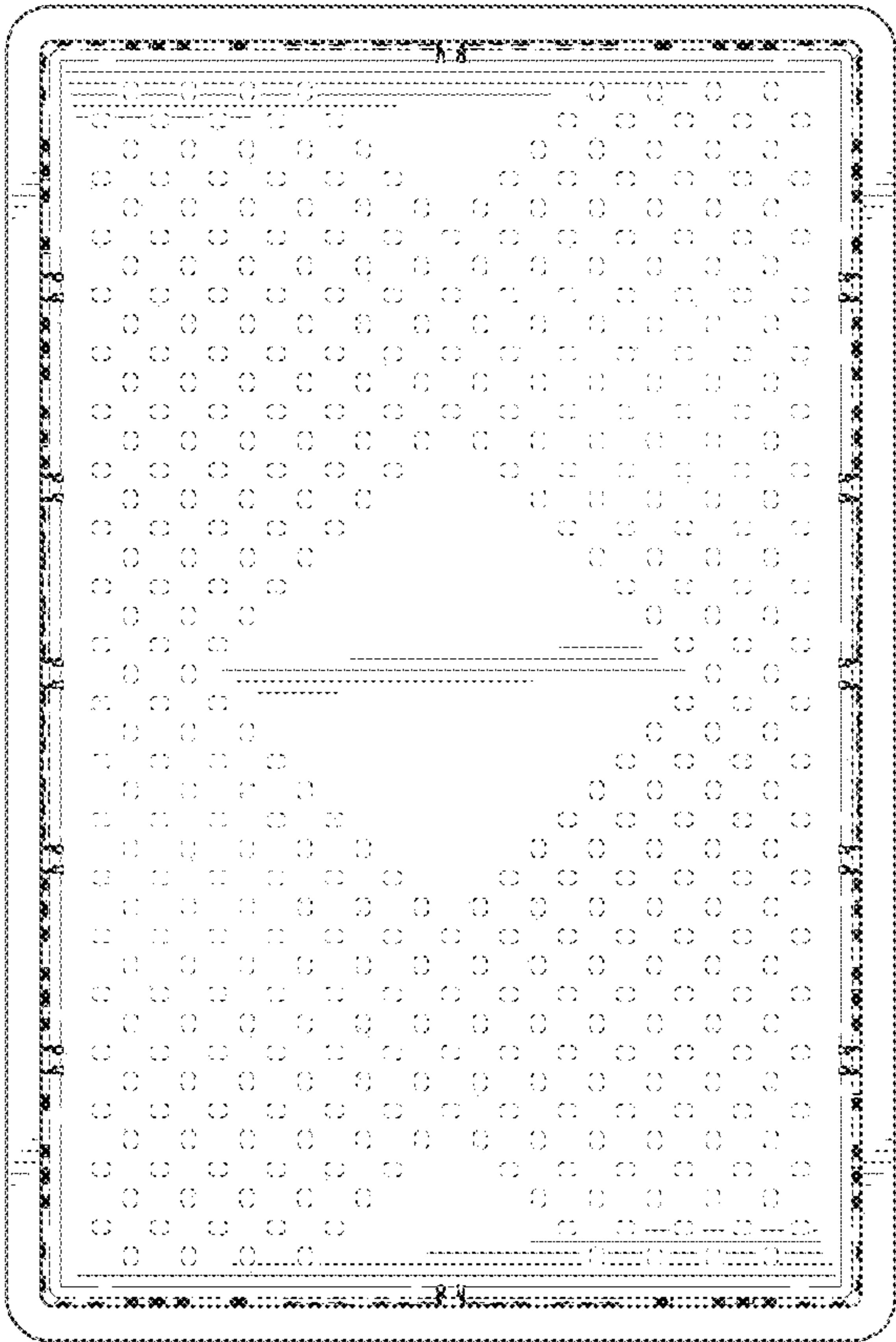


FIG. 7

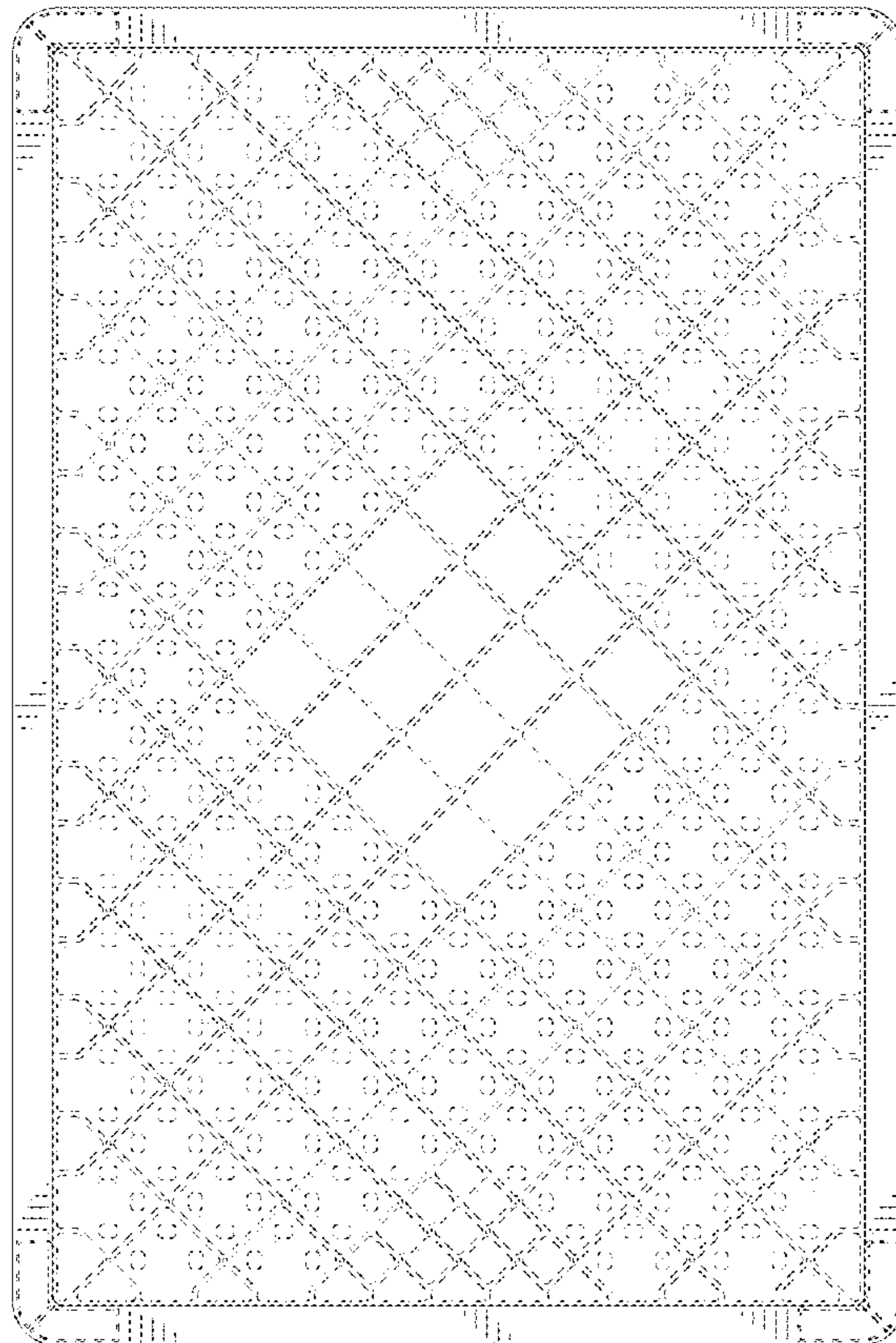


FIG. 8

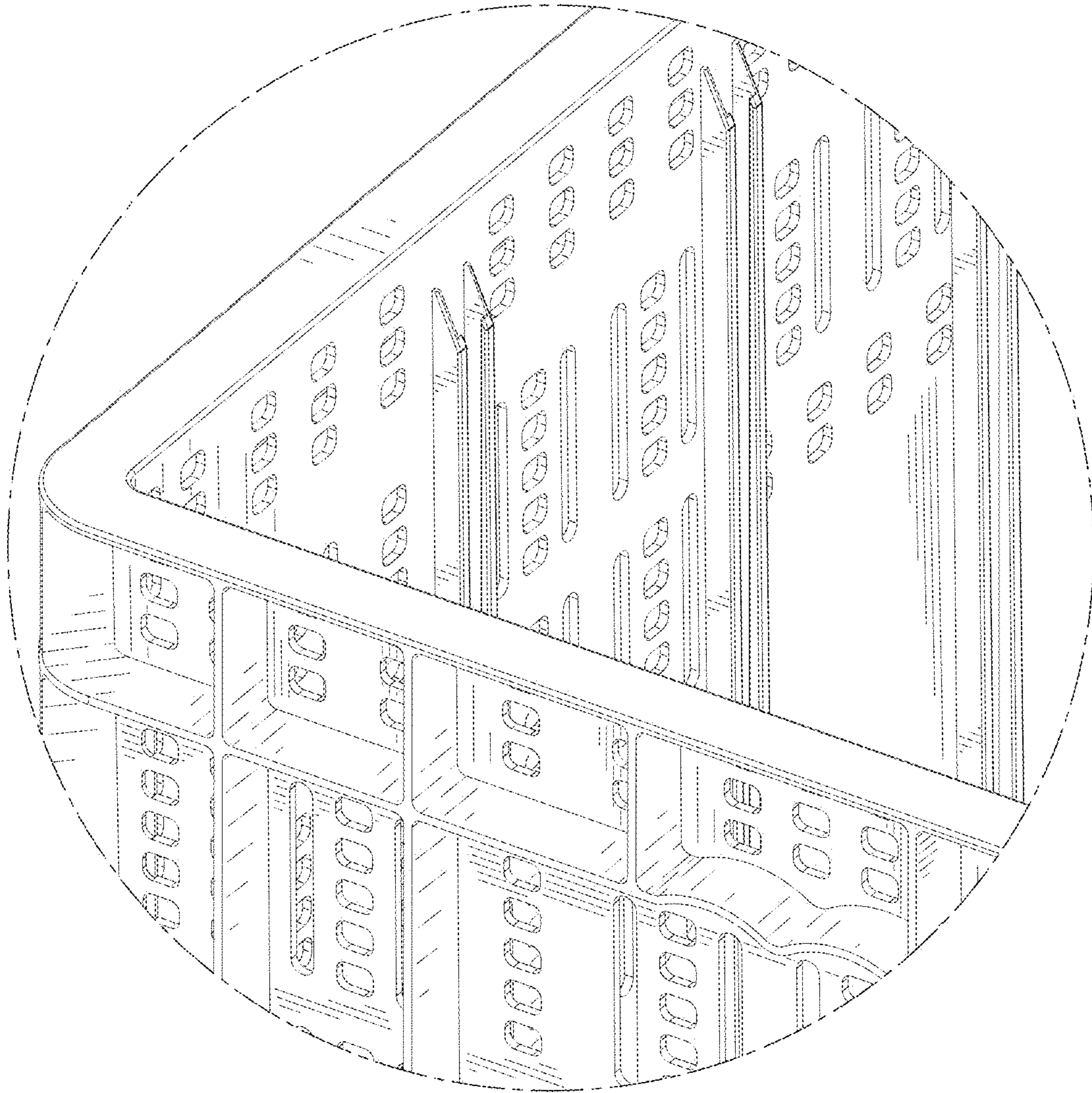


FIG. 9

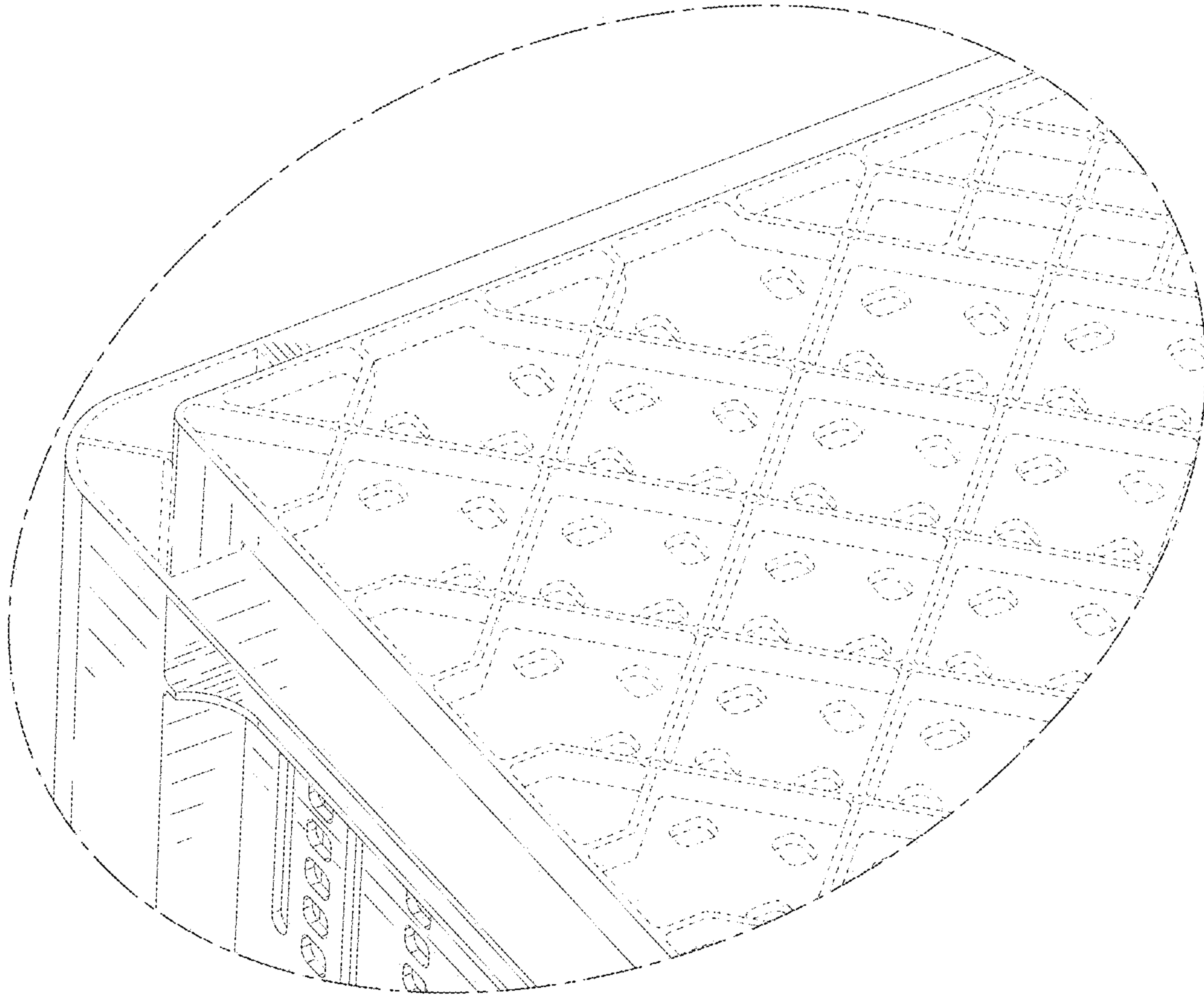


FIG. 10