

US0D1004756S

(12) **United States Design Patent** (10) **Patent No.:** **US D1,004,756 S**
Hyon et al. (45) **Date of Patent:** **** Nov. 14, 2023**

(54) **MODULAR AIR CONDITIONER**

(71) Applicant: **LG ELECTRONICS INC.**, Seoul (KR)

(72) Inventors: **Chinsoo Hyon**, Seoul (KR); **Heejae Kwon**, Seoul (KR); **Jeeyoung Yeon**, Seoul (KR); **Sehwan Bae**, Seoul (KR)

(73) Assignee: **LG ELECTRONICS INC.**, Seoul (KR)

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

(21) Appl. No.: **29/796,230**

(22) Filed: **Jun. 23, 2021**

(30) **Foreign Application Priority Data**

Dec. 24, 2020 (KR) 30-2020-0064956

(51) **LOC (14) Cl.** **23-04**

(52) **U.S. Cl.**
USPC **D23/351; D23/333**

(58) **Field of Classification Search**
USPC D14/188, 204, 228, 348, 358; D7/300.1;
D24/110, 129, 162, 209, 210, 217;
D23/207–210, 213, 223, 259, 262,
D23/332–336, 341, 351–354, 355–366,
D23/370, 375, 378, 380, 386–393, 397,
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

D297,563 S * 9/1988 Takasuna D23/351
D763,420 S * 8/2016 Nakai D23/351
D770,024 S * 10/2016 Nakai D23/351
(Continued)

Primary Examiner — Gino Colan
Assistant Examiner — David Obrien

(74) *Attorney, Agent, or Firm* — Birch, Stewart, Kolasch & Birch, LLP

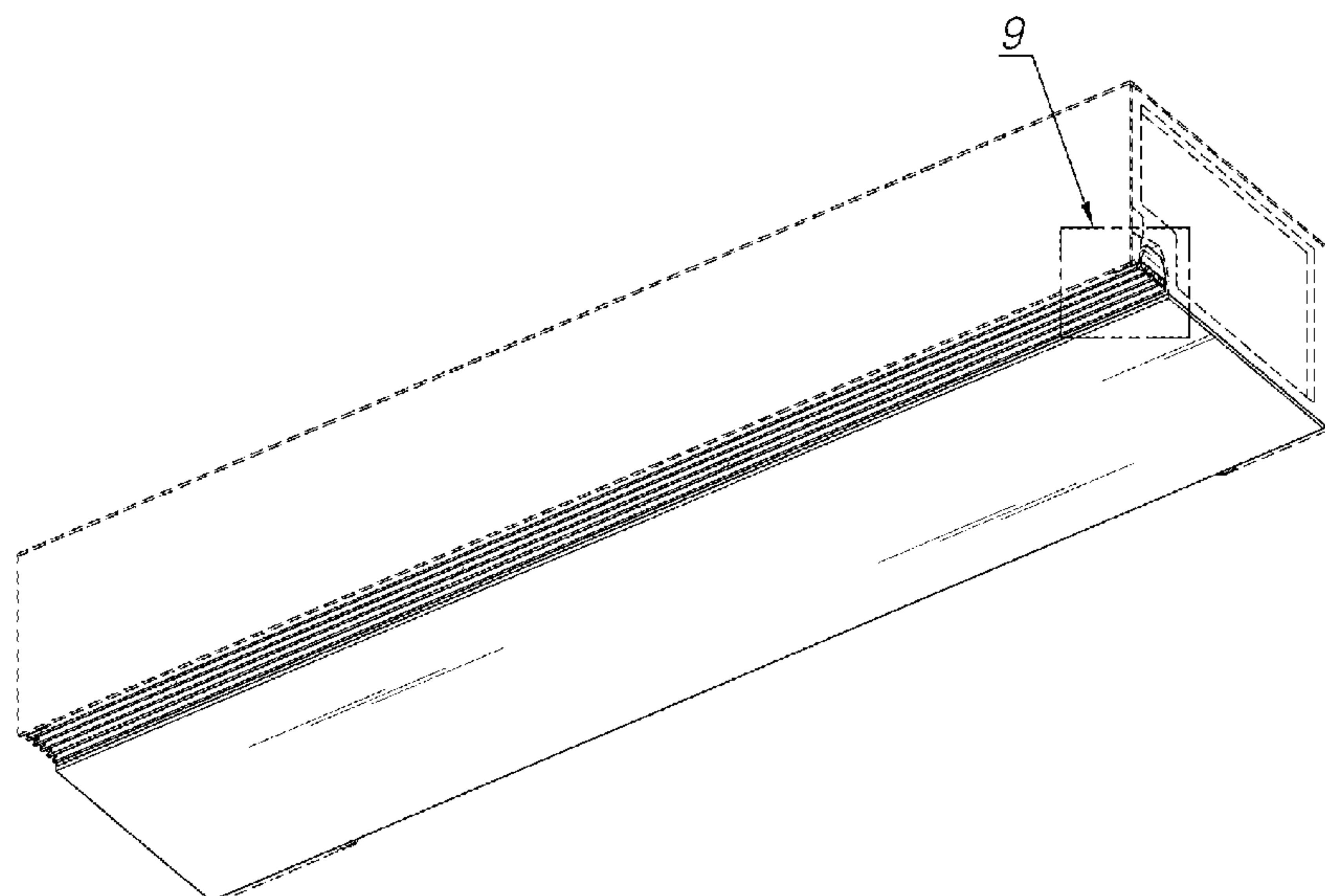
(57) **CLAIM**

We claim the ornamental design for a modular air conditioner, as shown and described.

DESCRIPTION

FIG. 1 is a front perspective view of a modular air conditioner showing a new design;
FIG. 2 is a rear perspective view thereof;
FIG. 3 is a front view thereof;
FIG. 4 is a rear view thereof;
FIG. 5 is a left-side elevation view thereof;
FIG. 6 is a right-side elevation view thereof;
FIG. 7 is a top plan view thereof;
FIG. 8 is a bottom plan view thereof;
FIG. 9 is a partial enlarged view of the portion 9 in FIG. 1;
FIG. 10 is a perspective view showing a state of the air outlet thereof being opened;
FIG. 11 is a perspective view showing a state of use being installed on a ceiling;
FIG. 12 is a partial enlarged view of the portion 12 in FIG. 10;
FIG. 13 is a perspective view showing a state of use being connected in plurality; and,
FIG. 14 is another perspective view showing a state of use being connected in plurality.
The dot-dot-dash lines encircling portions of the claimed design in FIGS. 1, 9, 10 and 12 illustrate enlargement views and form no part thereof. The dot-dot-dash lines encircling portions of the claimed design in FIG. 11 are illustrated in a perspective view of a use state and form no part thereof. The broken lines in FIG. 11 are for the purpose of illustrating portions of environmental structure and form no part of the claimed design. The broken lines represent portions of the modular air conditioner that form no part of the claimed design.

1 Claim, 14 Drawing Sheets



(58) Field of Classification Search

USPC D23/399, 423, 411–413; D15/5, 7, 8,
D15/9.1, 79, 89; D12/194
CPC ... A61L 9/00; A61L 9/03; A61L 9/032; A61L
9/03504; A61L 9/05; A61L 9/12; A61L
9/14; A61L 9/20; A61L 9/22; A61L
9/012; A61L 9/015; A61L 9/048; A61L
9/122; A61L 9/127; A61L 9/205; A61L
2209/11; A61L 2209/14; A61L 2209/133;
A61L 2/00; A61L 2/0005; A61L 2/0047;
A61L 2/0052; A61L 2/084; A61L 2/085;
A61L 2/087; A61L 2/10; F24F 1/00;
F24F 1/02; F24F 1/022; F24F 1/027;
F24F 1/0007; F24F 1/0014; F24F 1/0018;
F24F 1/0022; F24F 1/0047; F24F 1/0057;
F24F 1/0071; F24F 1/008; F24F 5/00;
F24F 6/00; F24F 6/02; F24F 6/06; F24F
8/00; F24F 8/10; F24F 8/22; F24F 8/24;
F24F 8/30; F24F 13/00; F24F 13/02;
F24F 13/0209; F24F 13/0254; F24F
13/06; F24F 13/20; F24F 2221/14; F24F
2221/17; F24F 11/30; H01T 23/00; Y10S
261/03; Y10S 261/04; Y10S 261/17;
Y10S 261/31; Y10S 261/42; Y10S
261/43; Y10S 261/65; Y10S 261/88;
Y10S 261/89; A61M 11/02; C02F 1/42;
C02F 1/002; C02F 1/003; B01D 46/00;
B01D 46/001; B01D 46/0001; B01D
46/0002; B01D 46/0004; B01D 46/0005;
B01D 46/0013; B01D 46/0015; B01D
46/10; B01D 46/12; B01D 46/24; B01D
46/2411; B01D 46/2422; B01D 46/52;
B01D 46/521; B01D 46/522; B01D
46/523; B01D 46/58; B01D 2267/60;

B01D 2267/70; B01D 35/30; B01D
35/303; B01D 36/00; B01D 36/001;
B01D 27/00; B01D 27/04; B01D 27/06;
B01D 27/08; F17C 1/00; F02M 35/02;
F02M 35/0201; F02M 35/0204; F02M
35/02416; F02M 35/02433; F02M
35/046; F02M 35/06; F02M 35/09; F02M
35/10; F02M 35/14; F02M 35/16; F02M
35/10006; F02M 35/10031; F02M
35/10032; F02M 35/10052; F02M
35/10078; F02M 35/10091; F02M
35/10144; F02M 35/10196; F02M
35/10262; F02M 35/10281; F02M
35/10288; F02M 35/1288; F02M
35/1266; F02M 37/00; F02M 37/32;
F02M 37/54; F02M 35/04; F02M 35/104;
F16L 37/113; F01N 3/00; F01N 3/20;
F01N 3/021; F01N 3/05; F01N 3/046;
F01N 3/18; F01N 2270/08; F01N
2470/00; F01N 2470/02; F01N 13/18;
F01N 13/185

See application file for complete search history.

(56)

References Cited

U.S. PATENT DOCUMENTS

D782,637	S	*	3/2017	Woo		D23/333
D901,654	S	*	11/2020	Lee		F24F 11/30
						D23/333
D910,156	S	*	2/2021	Lee		D23/333
2010/0199700	A1	*	8/2010	Yasuo		F24F 1/0014
						62/426
2018/0172312	A1	*	6/2018	Ishikawa		F24F 13/20
2022/0096672	A1	*	3/2022	Yang		A61L 2/10

* cited by examiner

FIG. 1

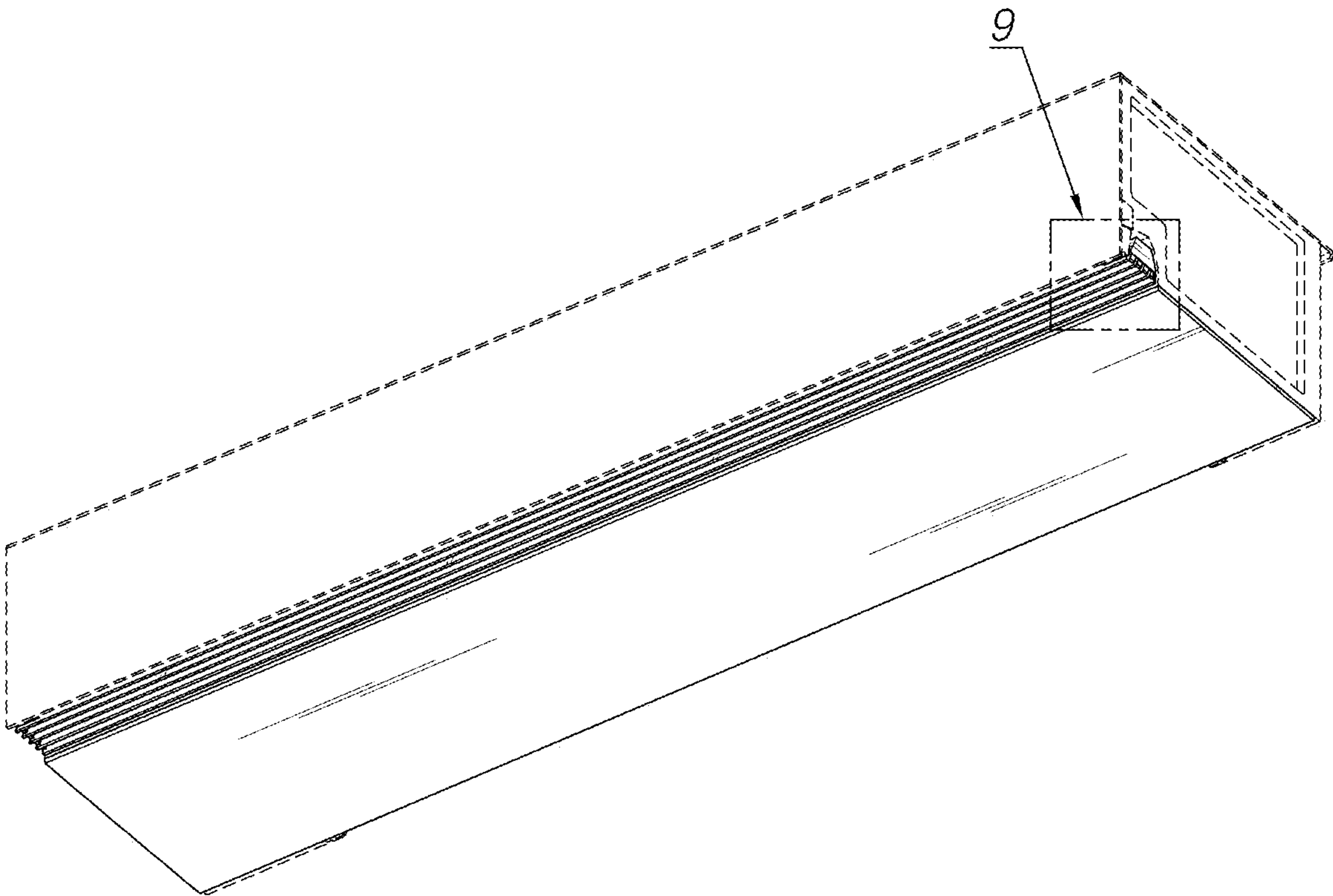


FIG. 2

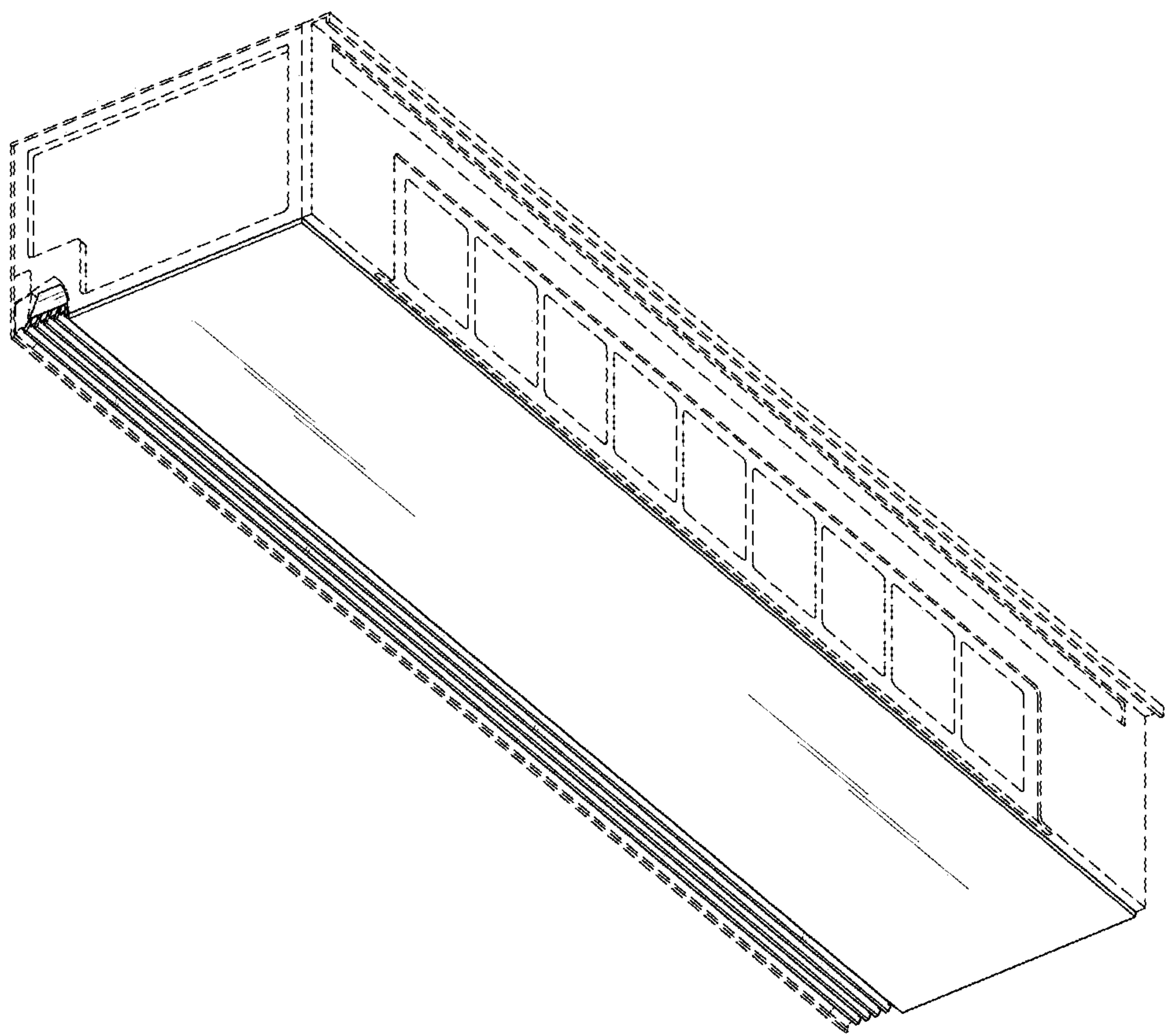


FIG. 3

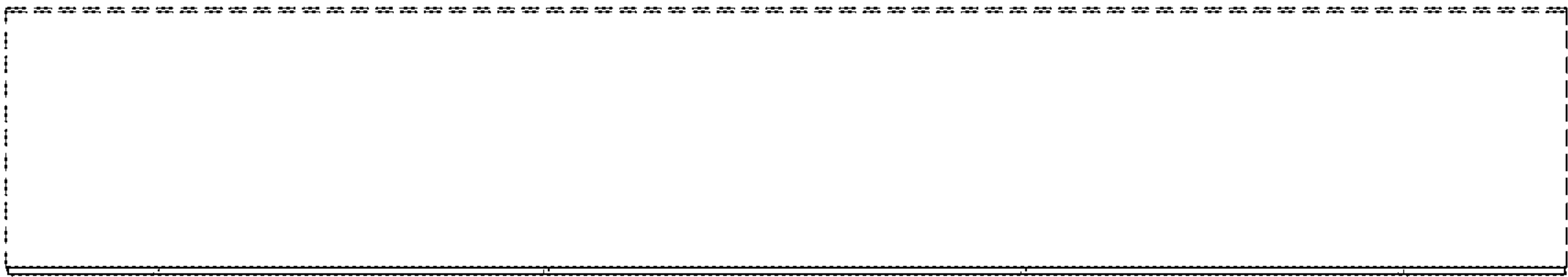


FIG. 4

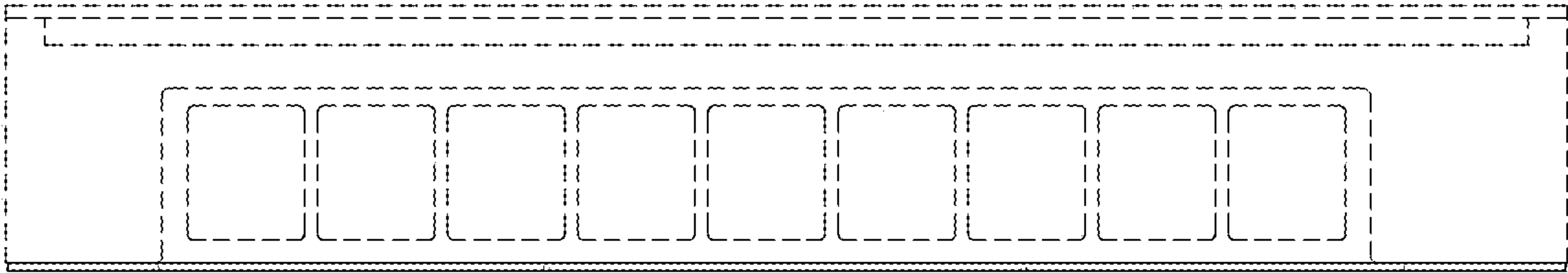


FIG. 5

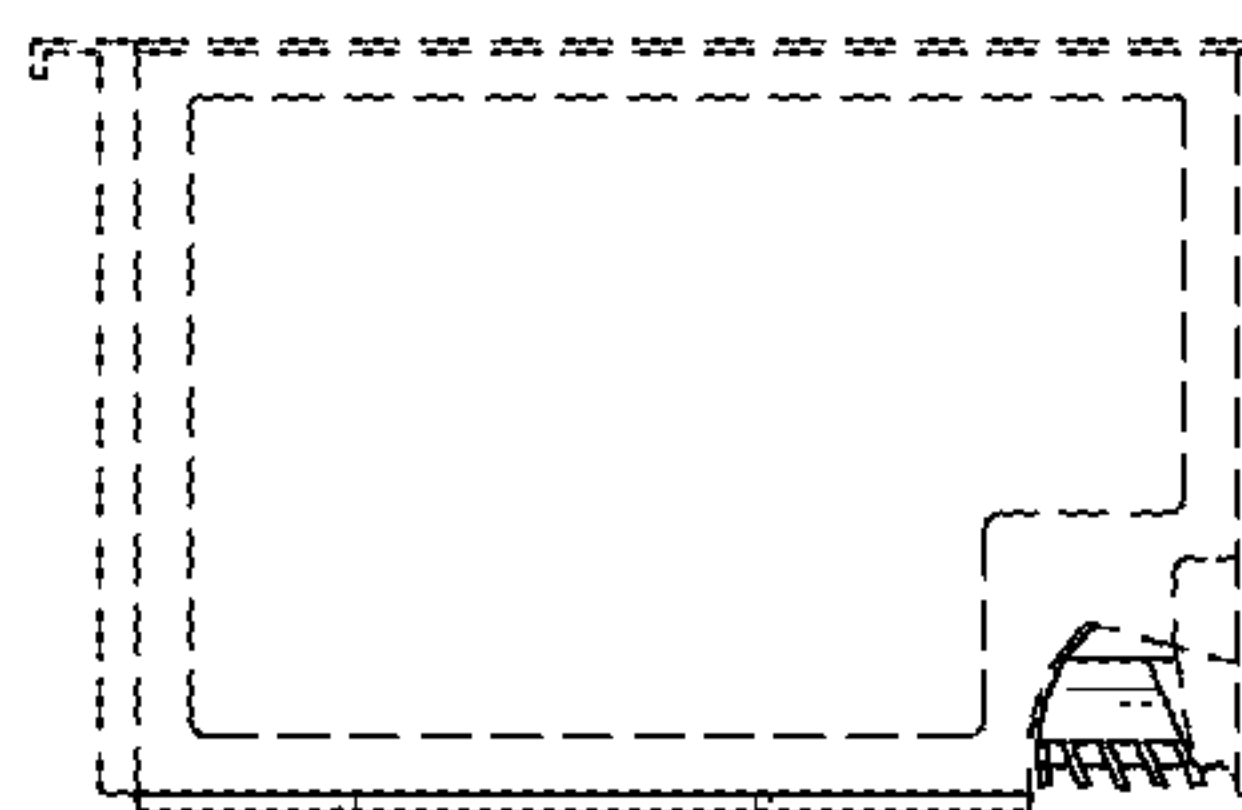


FIG. 6

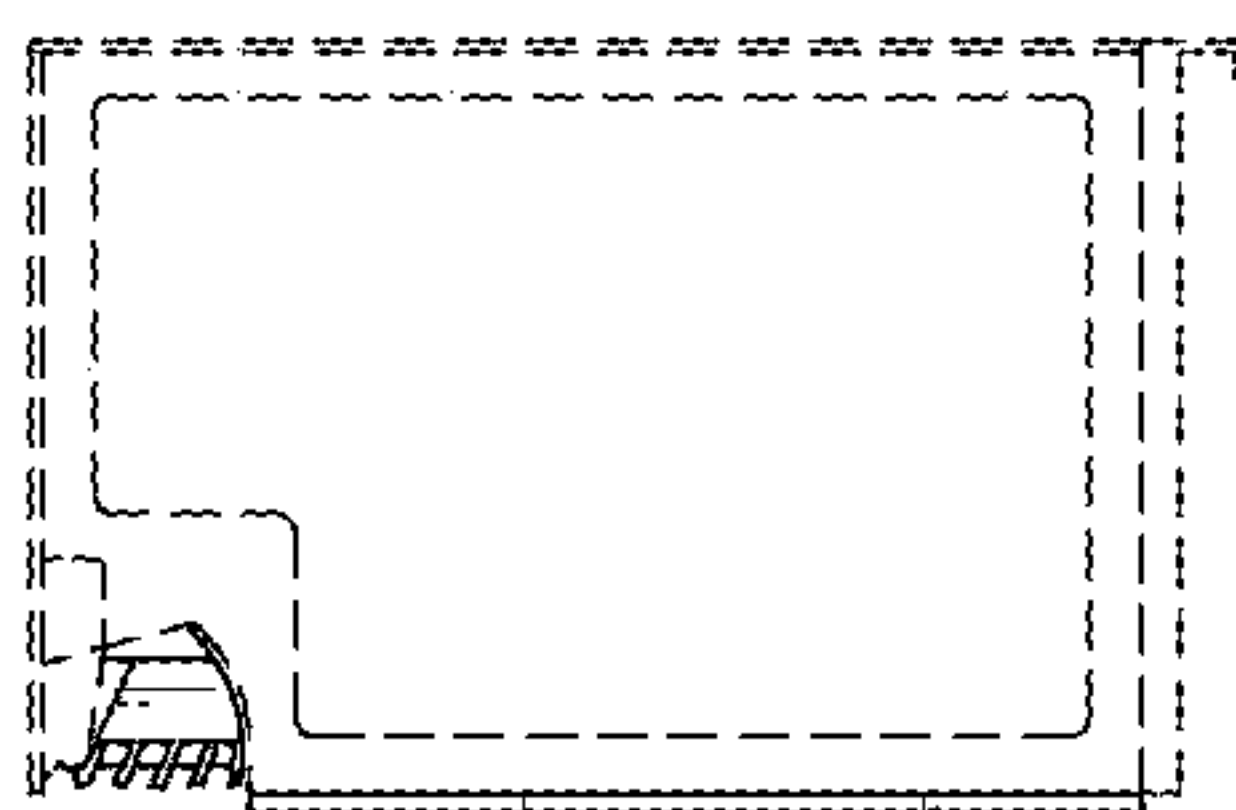


FIG. 7

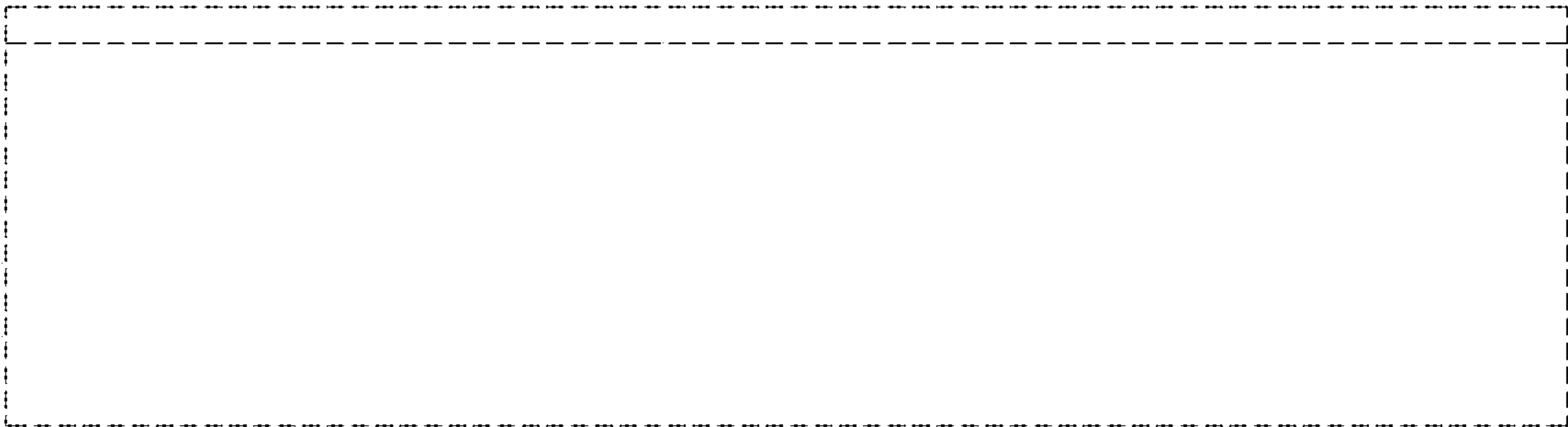


FIG. 8



FIG. 9

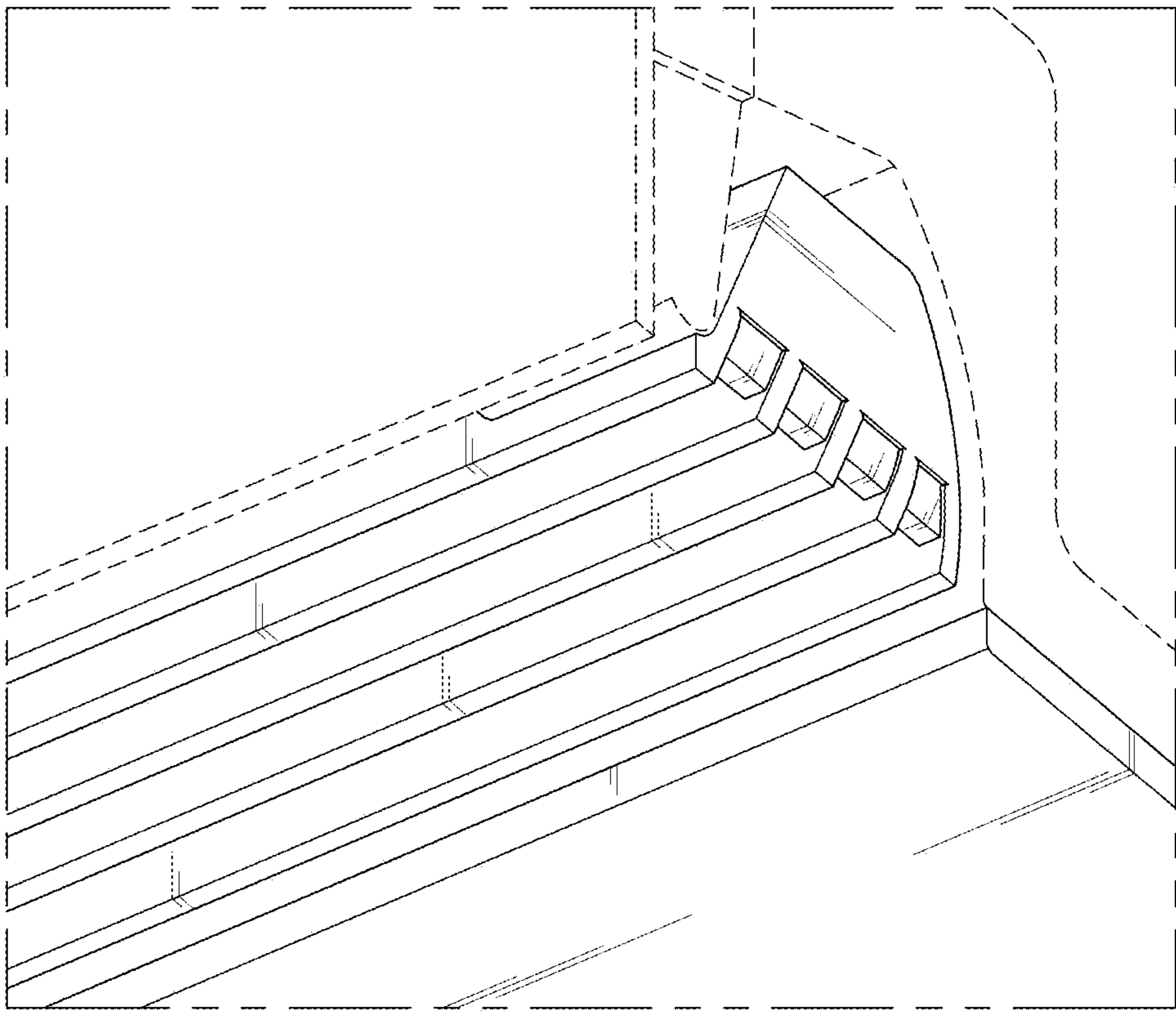


FIG. 10

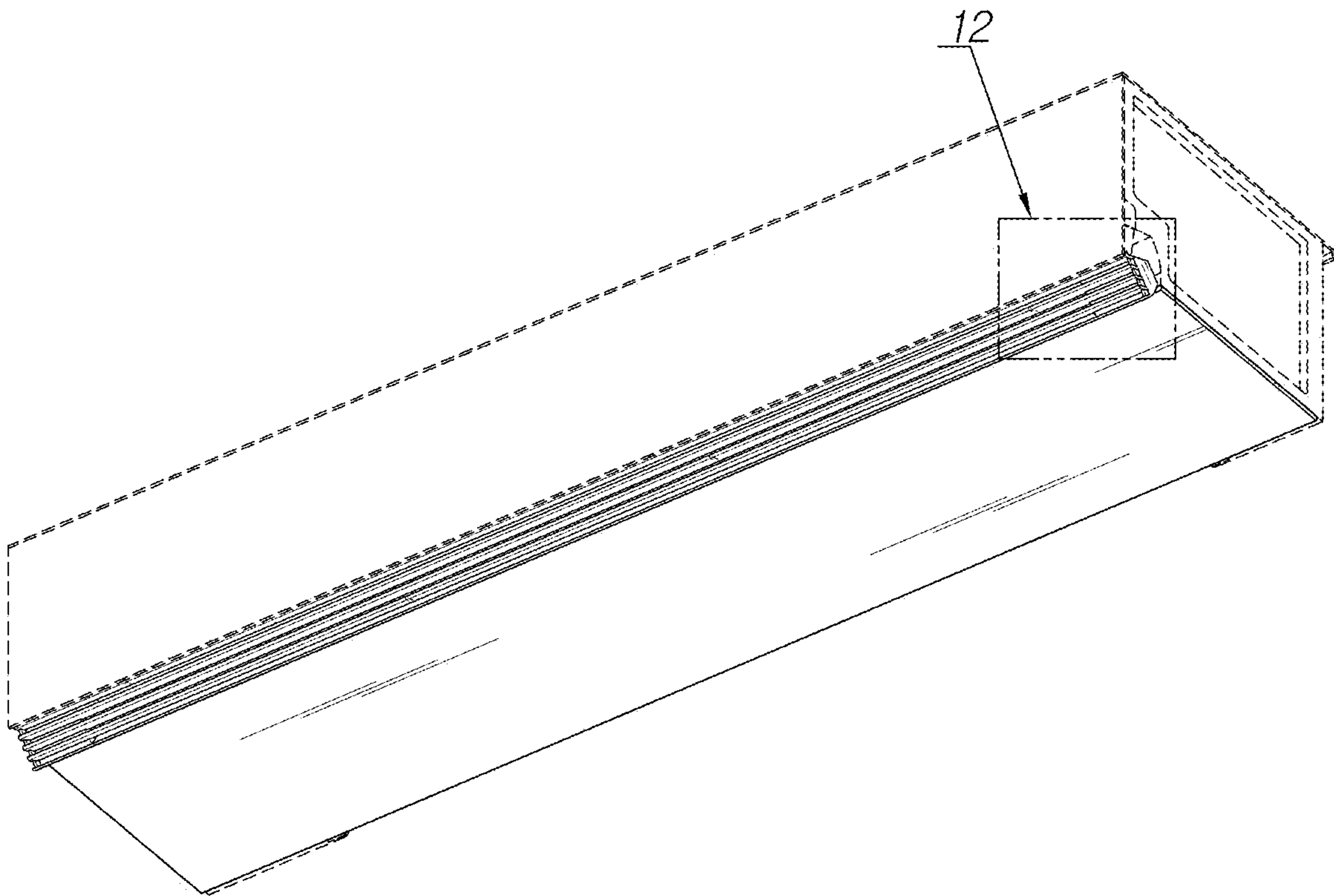


FIG. 11

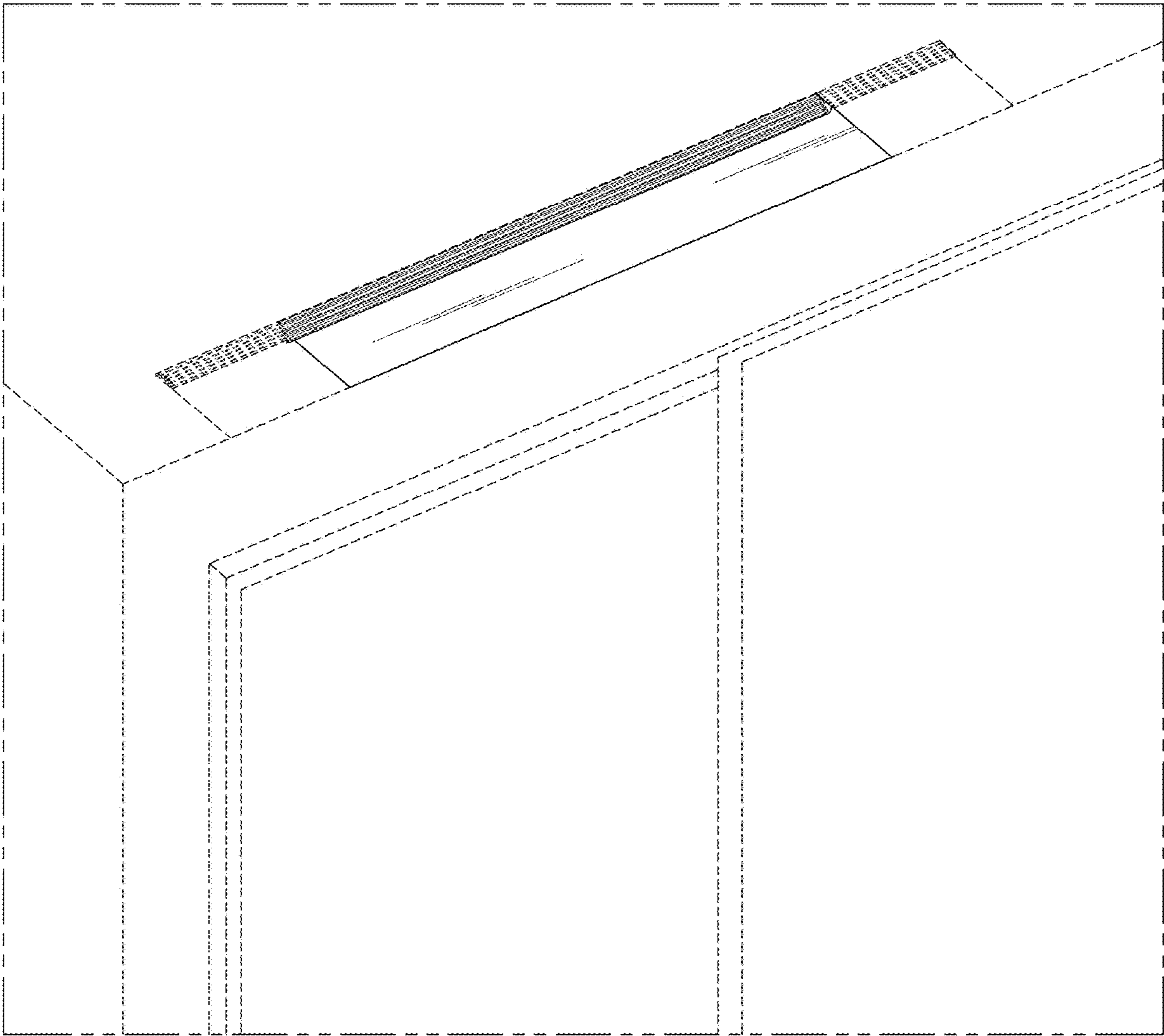


FIG. 12

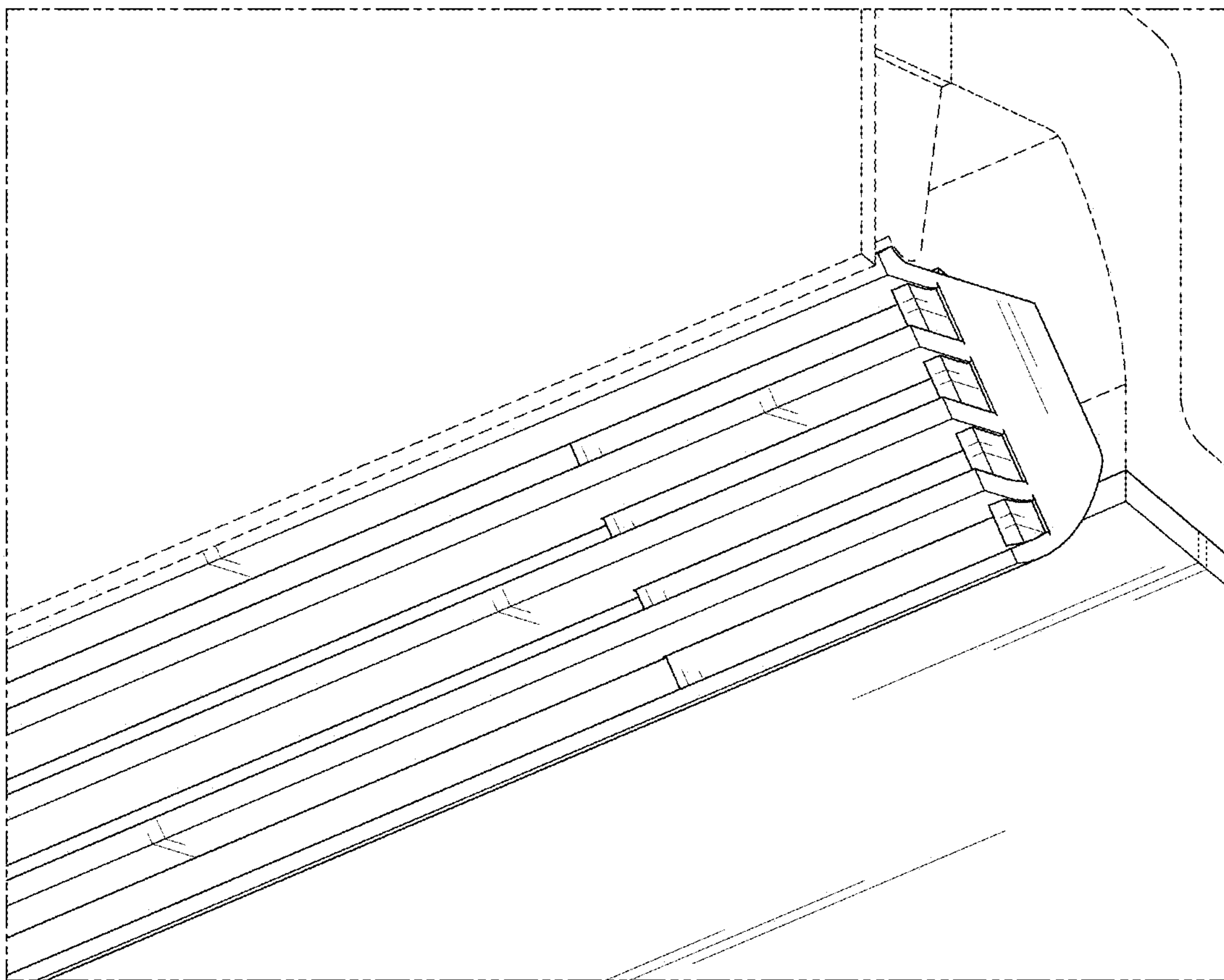


FIG. 13

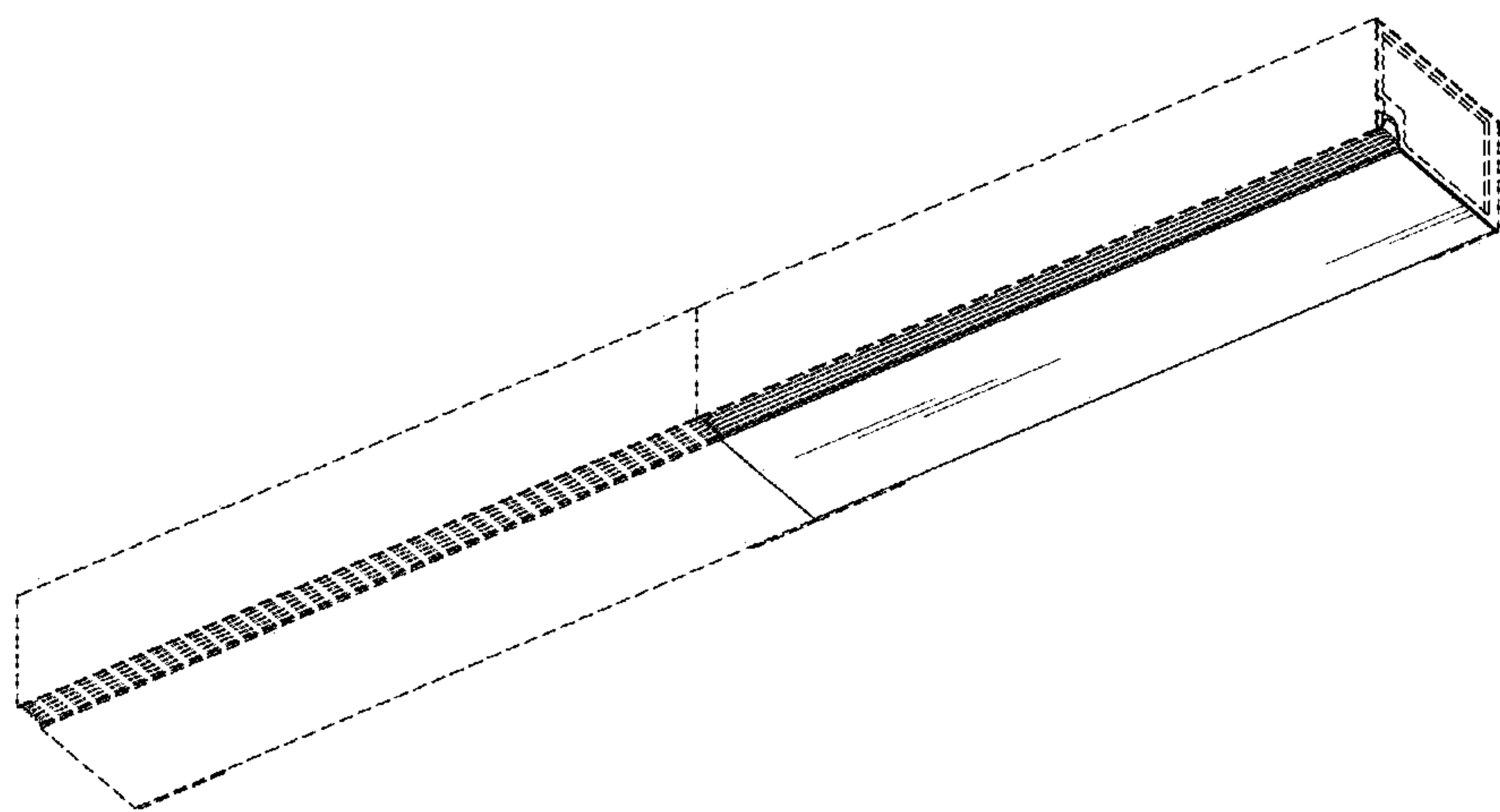


FIG. 14

