



US0D1027153S

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

(10) **Patent No.:** **US D1,027,153 S**

(45) **Date of Patent:** **** May 14, 2024**

(54) **FRAME FOR AIR CLEANER FILTER ELEMENT**

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(71) Applicant: **YIMAO ENVIRONMENTAL TECHNOLOGY CO., LTD.**, Suqian (CN)

(57) **CLAIM**

The ornamental design for a frame for air cleaner filter element, as shown and described.

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DESCRIPTION

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FIG. 1 is a perspective view of a frame for air cleaner filter element in accordance with our design 1;
FIG. 2 is a front side view thereof;
FIG. 3 is a rear side view thereof;
FIG. 4 is a top view thereof;
FIG. 5 is a bottom view thereof;
FIG. 6 is a left side view thereof;
FIG. 7 is a right side view thereof;
FIG. 8 is a perspective exploded view showing that a cover and a base of the frame for air cleaner filter element are separated in design 1;
FIG. 9 is an internal side view of the cover of the frame for air cleaner filter element in design 1;
FIG. 10 is an internal side view of the base of the frame for air cleaner filter element in design 1;
FIG. 11 is an enlarged perspective view of a circle portion 11 of FIG. 1;
FIG. 12 is an enlarged perspective view of a circle portion 12 of FIG. 8;
FIG. 13 is an enlarged perspective view of a circle portion 13 of FIG. 8;
FIG. 14 is a perspective view of a frame for air cleaner filter element in accordance with our design 2;
FIG. 15 is a front side view thereof;
FIG. 16 is a rear side view thereof;
FIG. 17 is a top view thereof;
FIG. 18 is a bottom view thereof;
FIG. 19 is a right side view thereof;
FIG. 20 is a left side view thereof;
FIG. 21 is a perspective exploded view showing that a cover and a base of the frame for air cleaner filter element are separated in design 2;
FIG. 22 is an internal side view of the cover of the frame for air cleaner filter element in design 2;

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

(21) Appl. No.: **29/826,651**

(22) Filed: **Feb. 14, 2022**

(30) **Foreign Application Priority Data**

Dec. 20, 2021 (CN) 202130843214.6
Dec. 20, 2021 (CN) 202130843259.3

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

(52) **U.S. Cl.**
USPC **D23/365**

(58) **Field of Classification Search**
USPC D23/332–336, 341, 351–366, 370, 385,
D23/386, 387, 388, 390, 393, 397, 411,
(Continued)

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Primary Examiner — Gino Colan
Assistant Examiner — David Obrien

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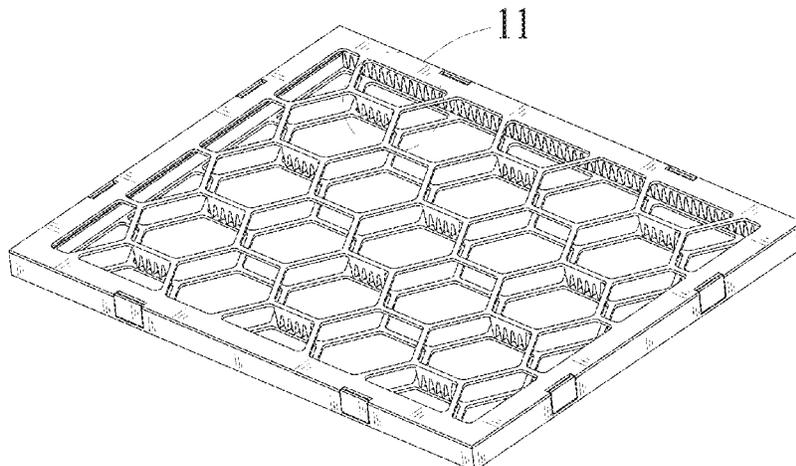


FIG. 23 is an internal side view of the base of the frame for air cleaner filter element in design 2;
 FIG. 24 is an enlarged perspective view of a circle portion 24 of FIG. 21;
 FIG. 25 is an enlarged perspective view of a circle portion 25 of FIG. 21;
 FIG. 26 is a perspective view of a frame for air cleaner filter element in accordance with our design 3;
 FIG. 27 is a front side view thereof;
 FIG. 28 is a rear side view thereof;
 FIG. 29 is a bottom view thereof;
 FIG. 30 is a top view thereof;
 FIG. 31 is a left side view thereof;
 FIG. 32 is a right side view thereof;
 FIG. 33 is a perspective exploded view showing that a cover and a base of the frame for air cleaner filter element are separated in design 3;
 FIG. 34 is an internal side view of the cover of the frame for air cleaner filter element in design 3;
 FIG. 35 is an internal side view of the base of the frame for air cleaner filter element in design 3;
 FIG. 36 is an enlarged perspective view of a circle portion 36 of FIG. 26;
 FIG. 37 is an enlarged side view of a circle portion 37 of FIG. 29;
 FIG. 38 is an enlarged perspective view of a circle portion 38 of FIG. 33;
 FIG. 39 is an enlarged perspective view of a circle portion 39 of FIG. 33;
 FIG. 40 is an enlarged perspective view of a circle portion 40 of FIG. 33;
 FIG. 41 is a perspective view of a frame for air cleaner filter element in accordance with our design 4;
 FIG. 42 is a front side view thereof;
 FIG. 43 is a rear side view thereof;
 FIG. 44 is a top view thereof;
 FIG. 45 is a bottom view thereof;
 FIG. 46 is a left side view thereof;
 FIG. 47 is a right side view thereof;
 FIG. 48 is a perspective exploded view showing that a cover and a base of the frame for air cleaner filter element are separated in design 4;
 FIG. 49 is an internal side view of the cover of the frame for air cleaner filter element in design 4;
 FIG. 50 is an internal side view of the base of the frame for air cleaner filter element in design 4;

FIG. 51 is an enlarged perspective view of a circle portion 51 of FIG. 41;
 FIG. 52 is an enlarged perspective view of a circle portion 52 of FIG. 48; and,
 FIG. 53 is an enlarged perspective view of a circle portion 53 of FIG. 48.

1 Claim, 53 Drawing Sheets

(58) **Field of Classification Search**

USPC D23/412; D14/125, 188, 194, 195, 204, D14/221, 228, 240, 253, 348, 350, 358, D14/496; D21/332; D26/26, 40, 46, 49, D26/97, 110, 123, 124; D11/143, 146, D11/152, 153
 CPC A61L 2209/11; A61L 2209/14; A61L 2209/133; F24F 13/18; F24F 13/20; F24F 13/28; F24F 2221/14; F24F 2221/17; B01D 46/00; B01D 46/001; B01D 46/0002; B01D 46/0004; B01D 46/0005; B01D 46/0012; B01D 46/0015; B01D 46/0016; B01D 46/02; B01D 46/10; B01D 46/026; B01D 46/18; B01D 46/30; B01D 46/24; B01D 46/2411; B01D 46/2418; B01D 46/2422; B01D 46/2425; B01D 46/2429; B01D 46/2451; B01D 46/2455; B01D 46/247; B01D 46/2478; B01D 46/2486; B01D 46/2488; B01D 46/249; B01D 46/2492; B01D 46/2494; B01D 46/52; B01D 46/521; B01D 46/522; B01D 46/523; B01D 46/54; B01D 46/58; B01D 46/645; B01D 35/30; B01D 35/303; B01D 27/00; B01D 27/04; B01D 27/06; B01D 27/08; B01J 35/004
 See application file for complete search history.

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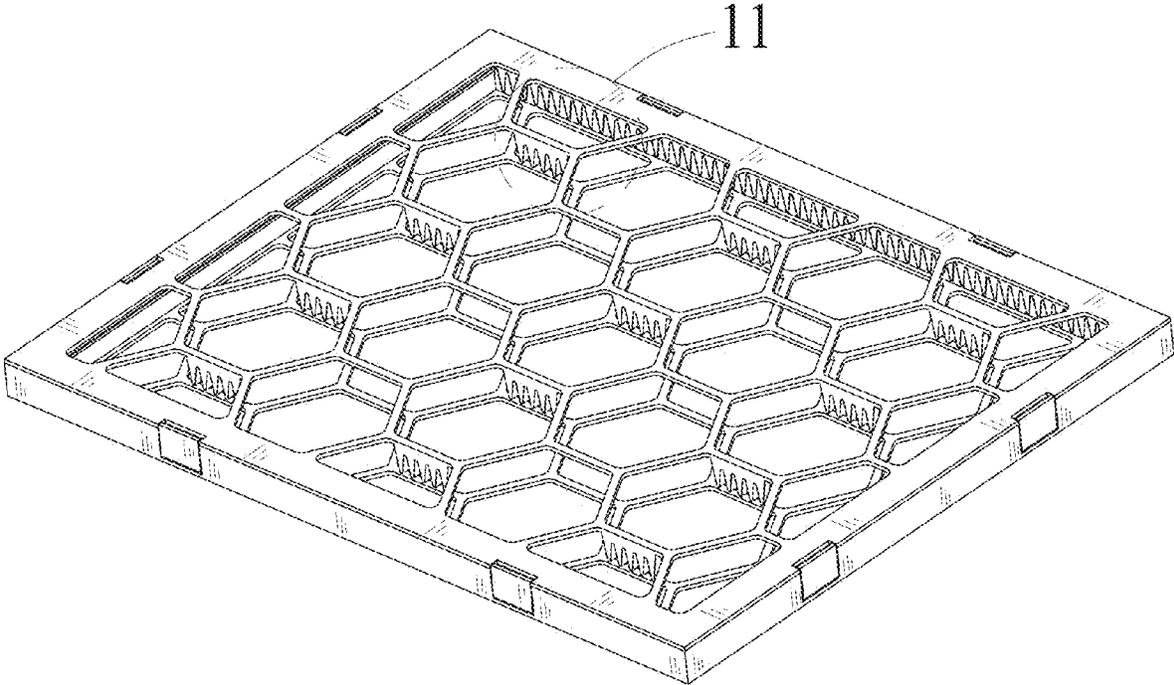


FIG. 1

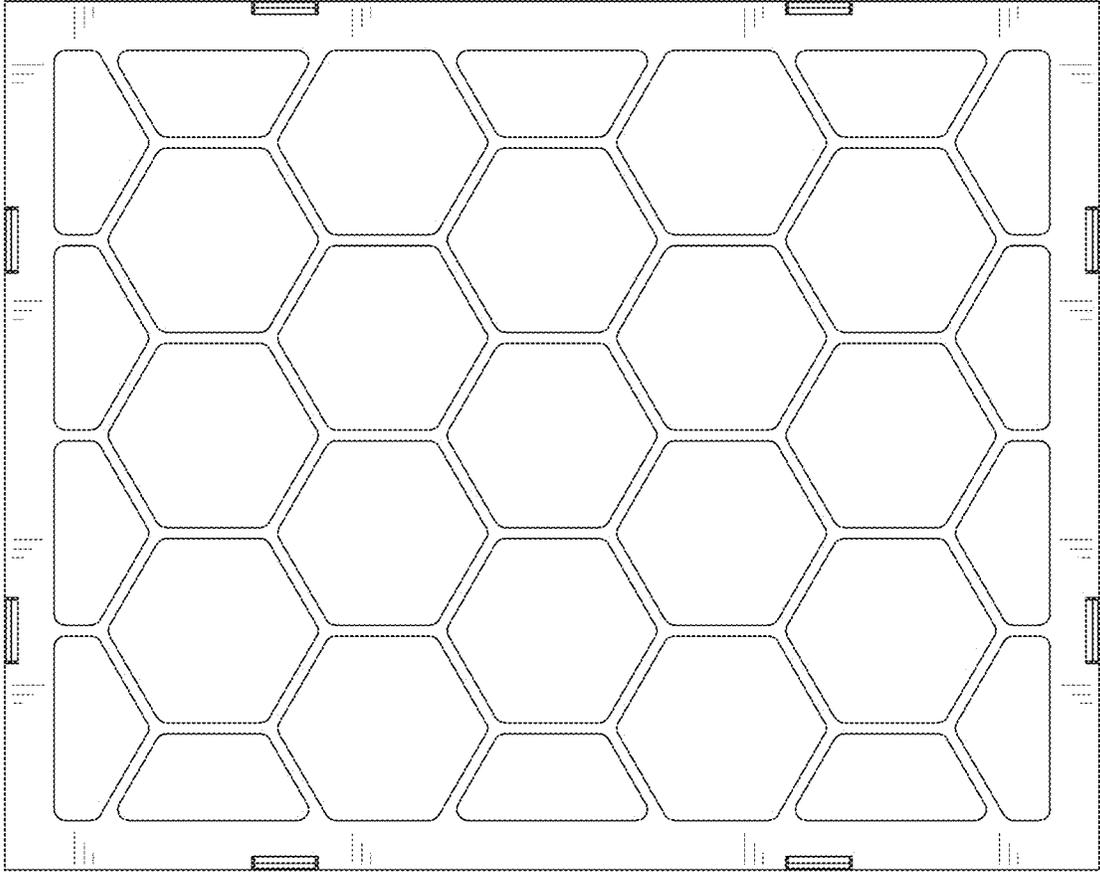


FIG. 2

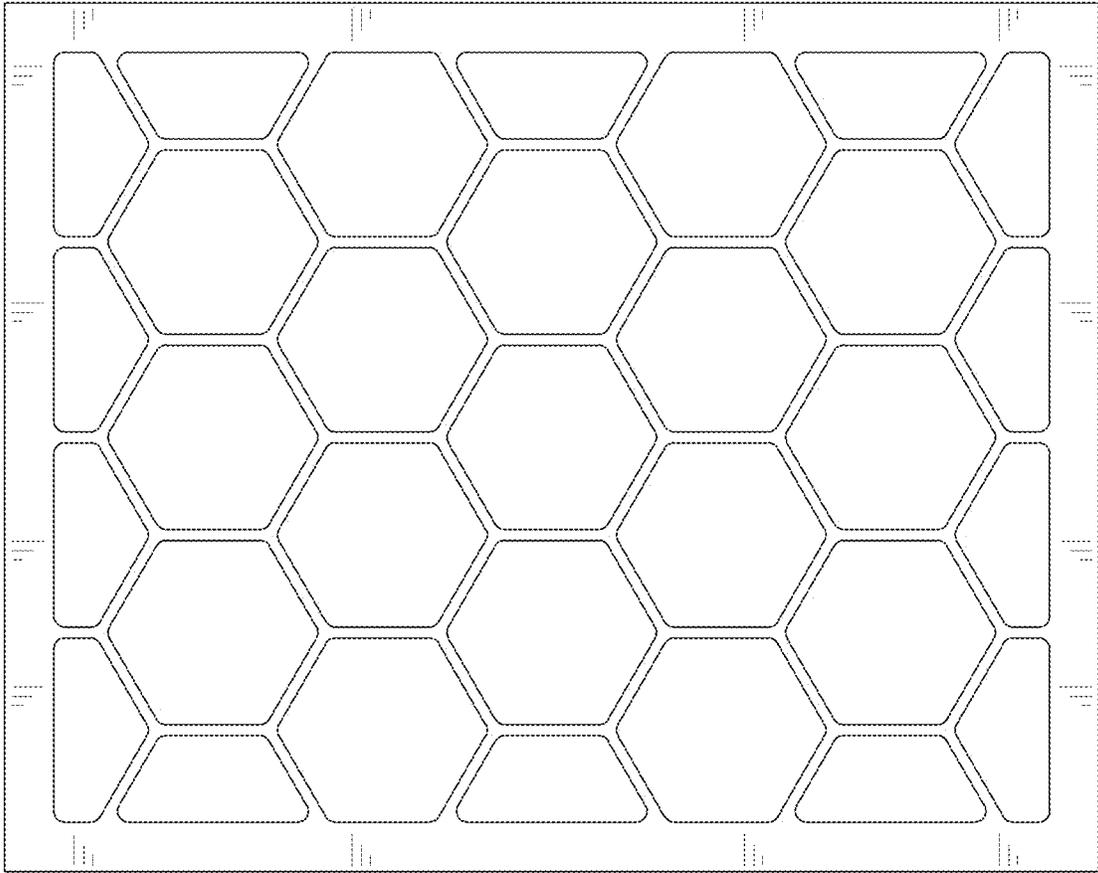


FIG. 3



FIG. 4



FIG. 5

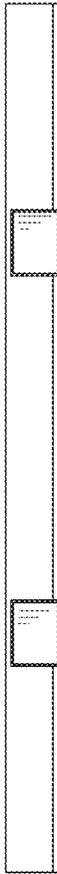


FIG. 6



FIG. 7

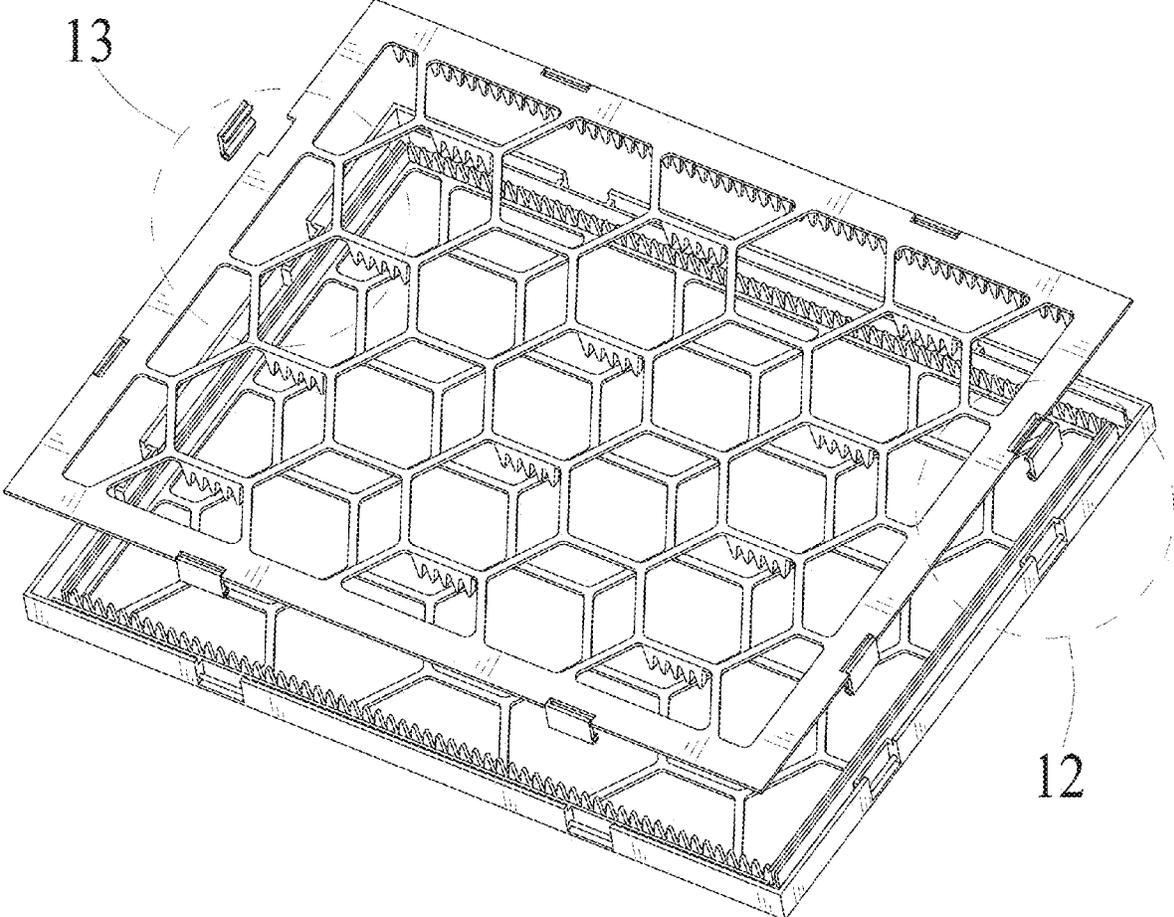


FIG. 8

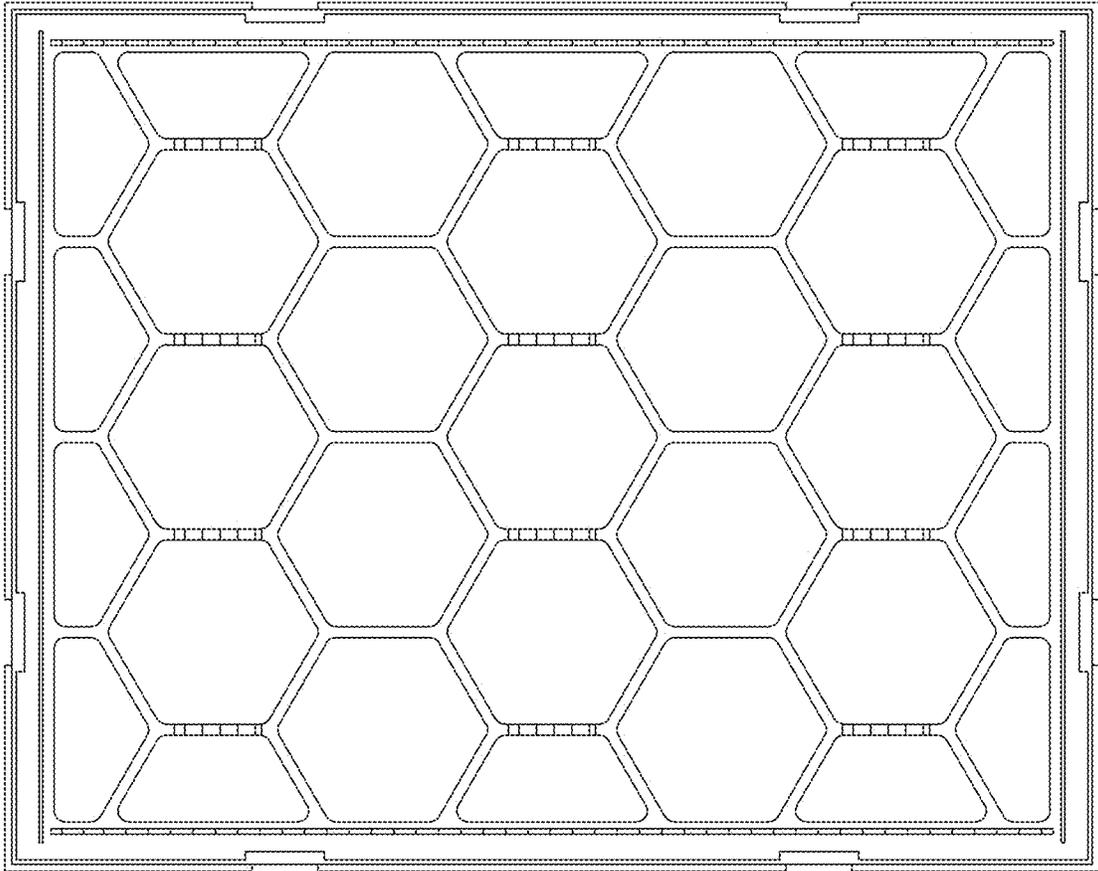


FIG. 9

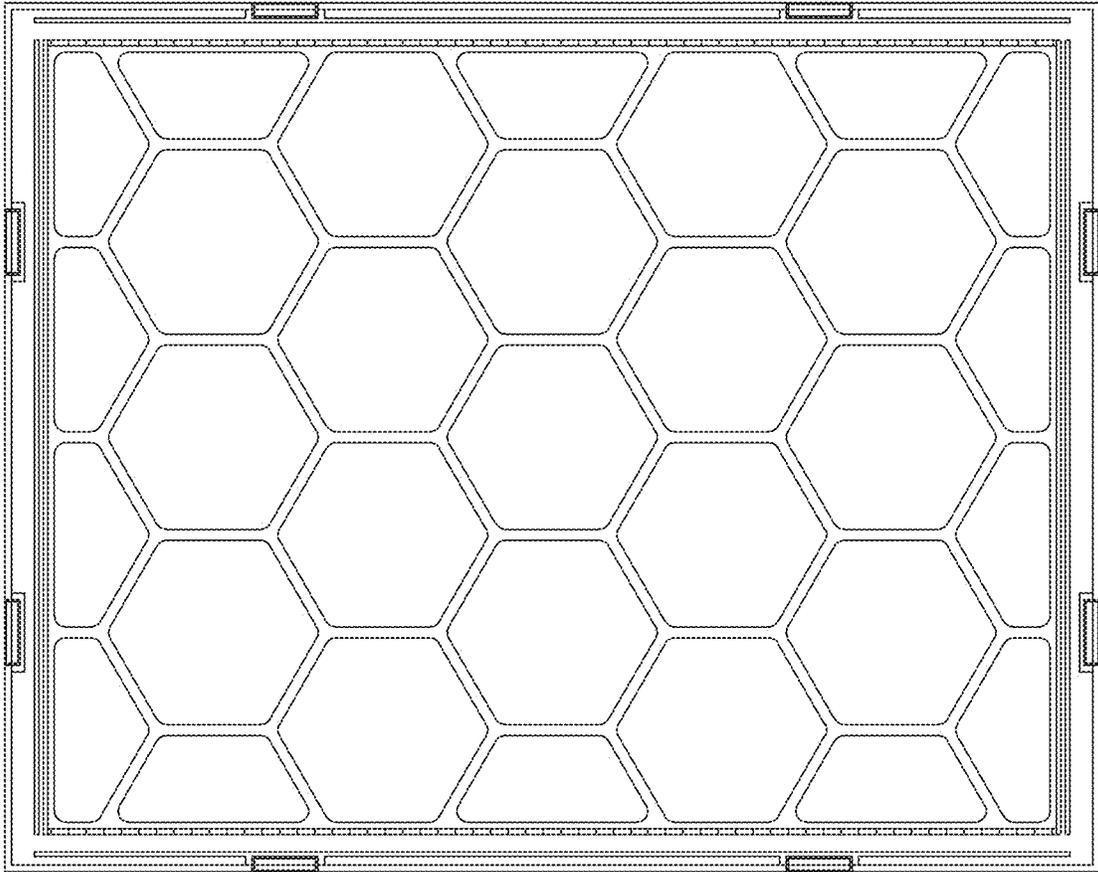


FIG. 10

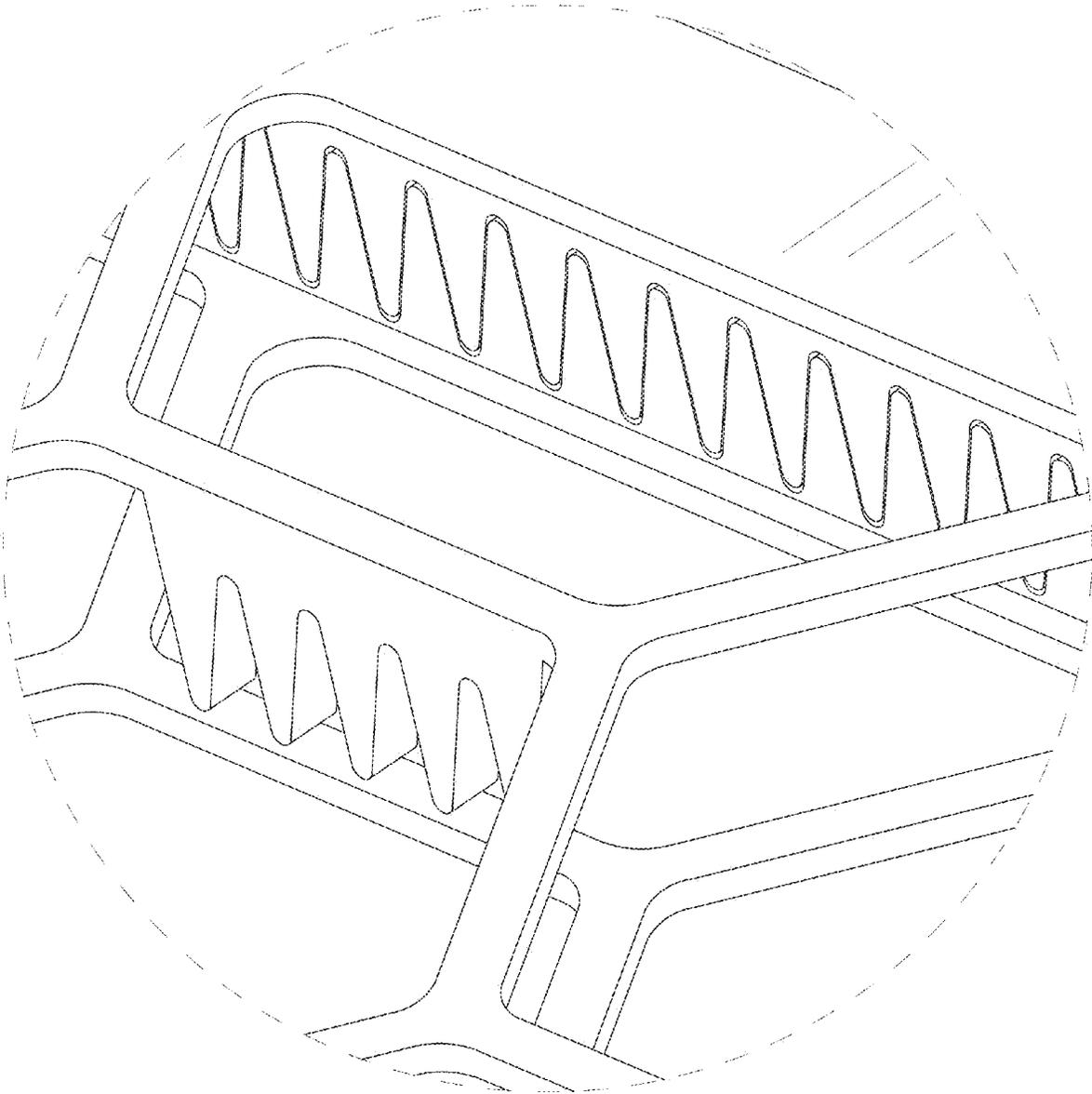


FIG. 11

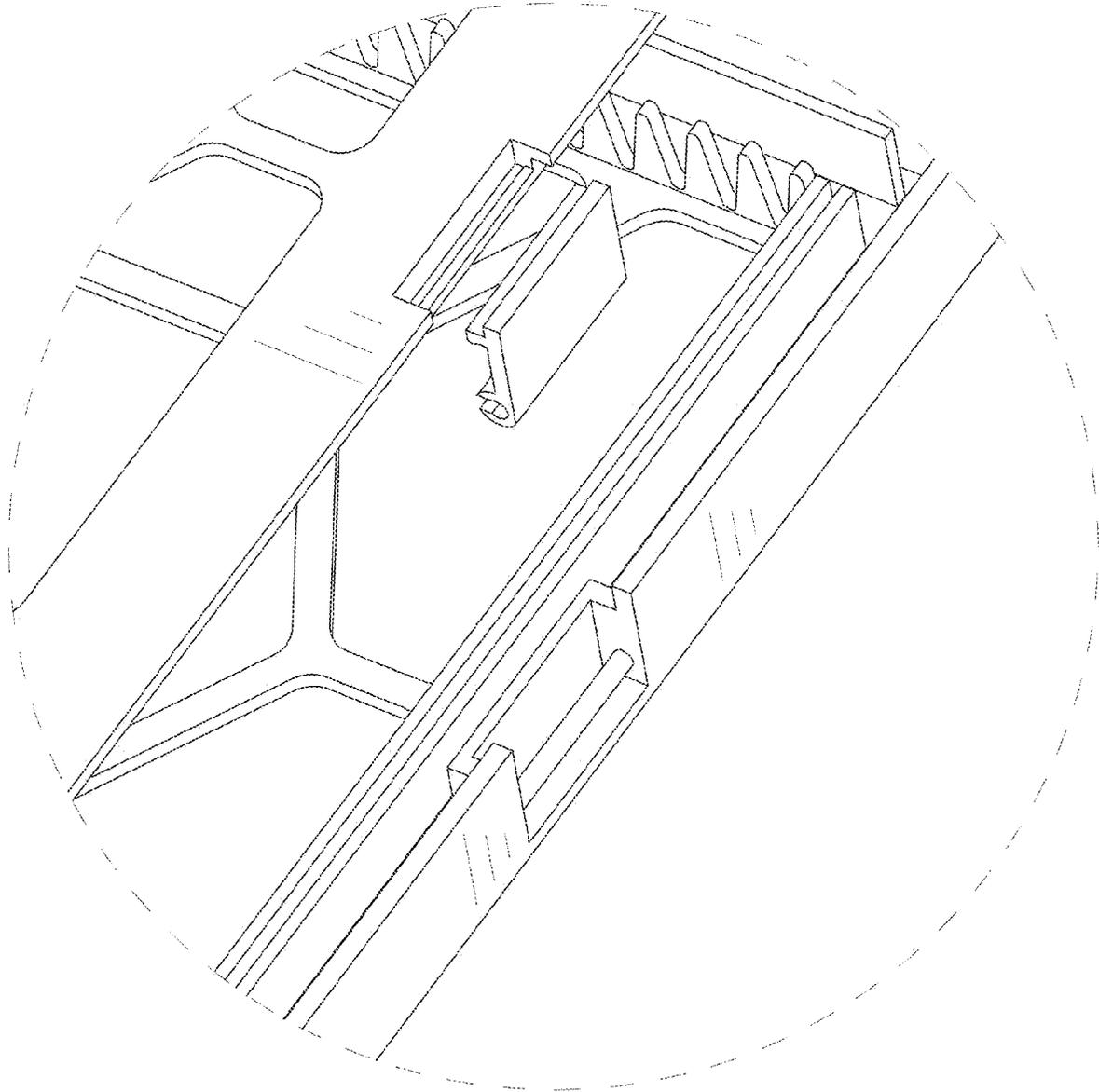


FIG. 12

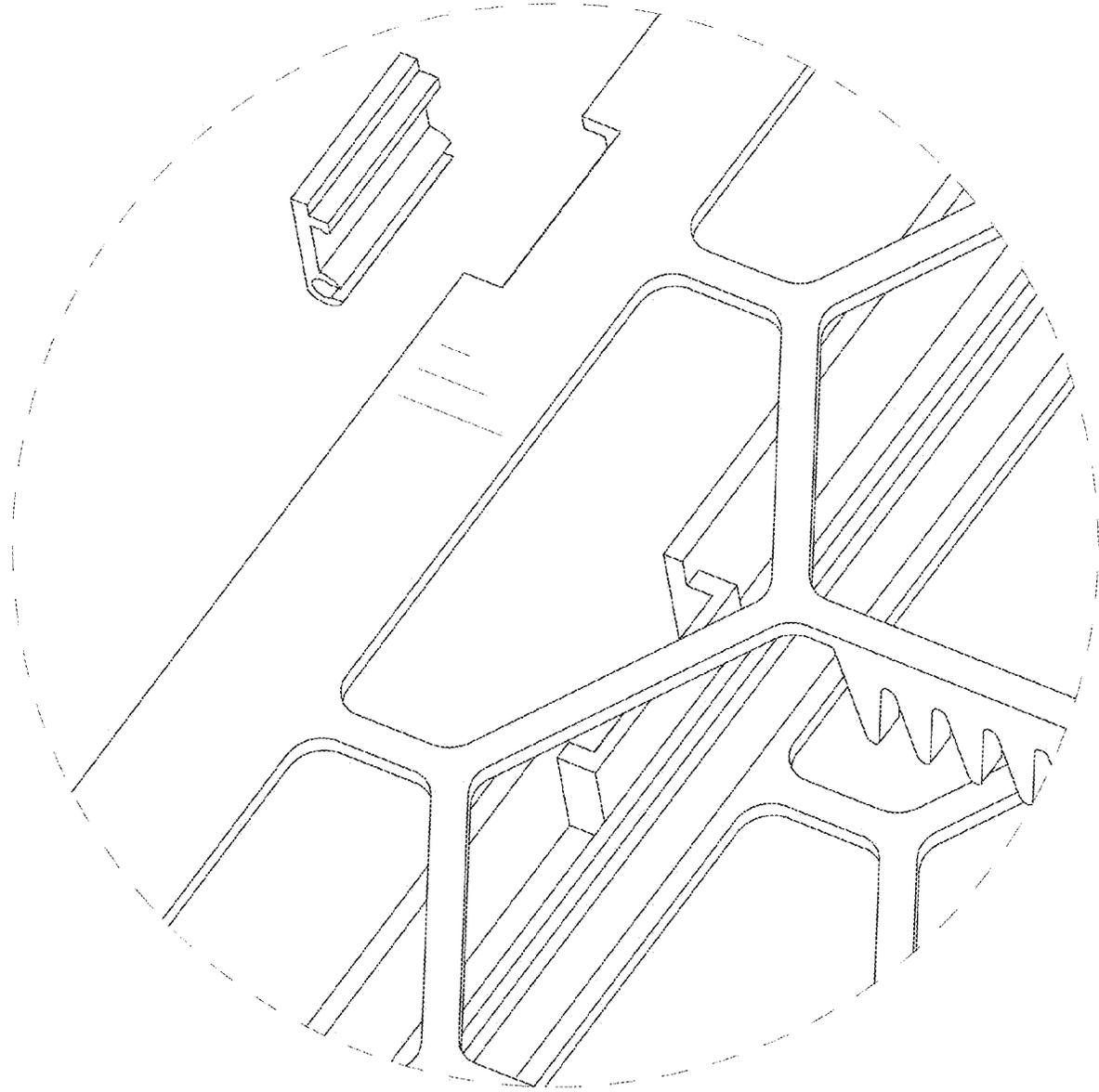


FIG. 13

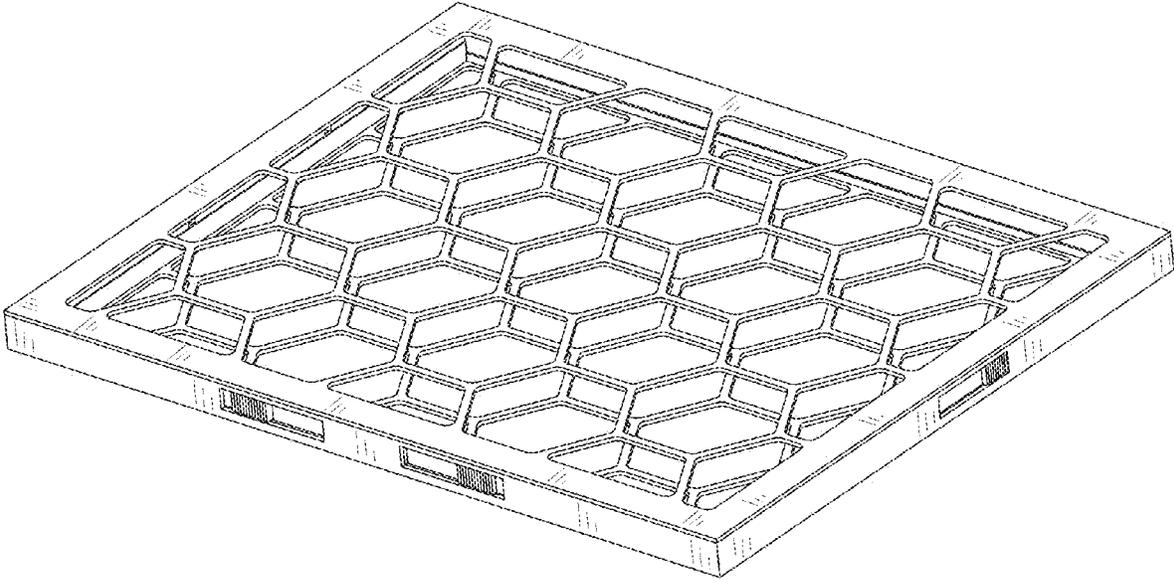


FIG. 14

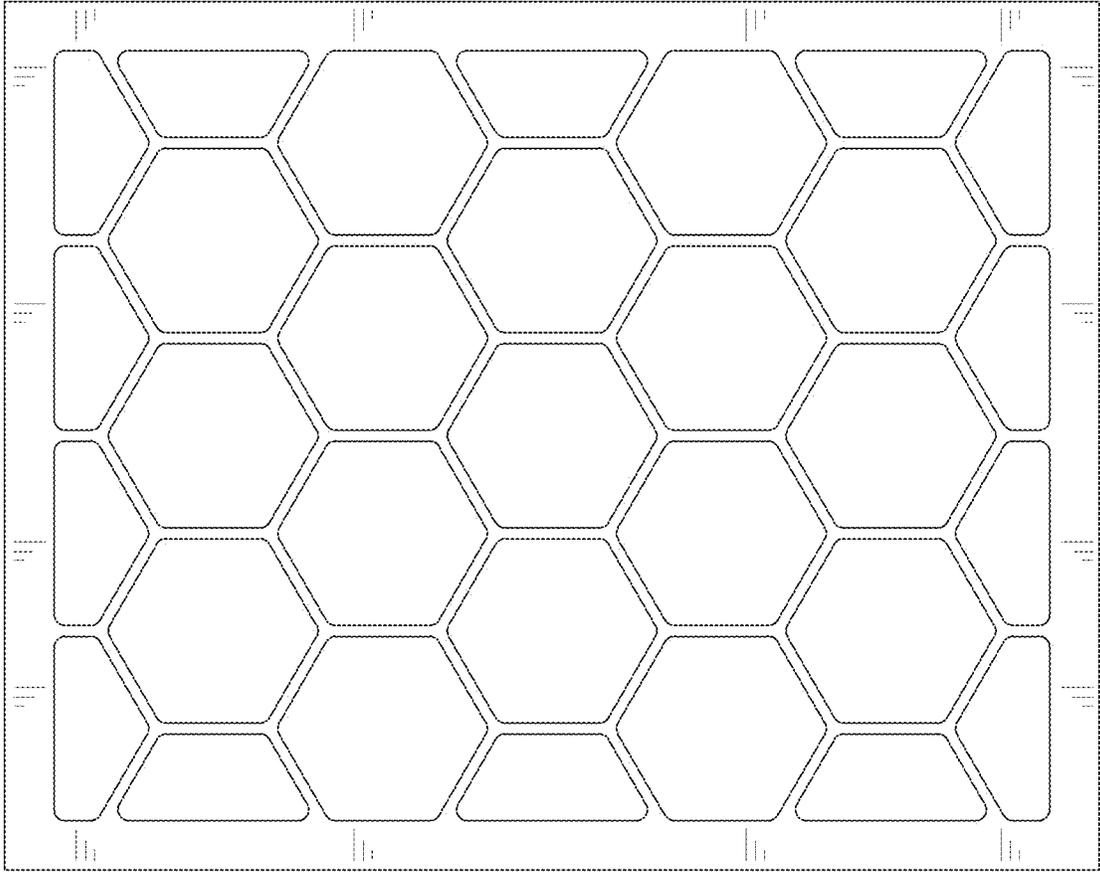


FIG. 15

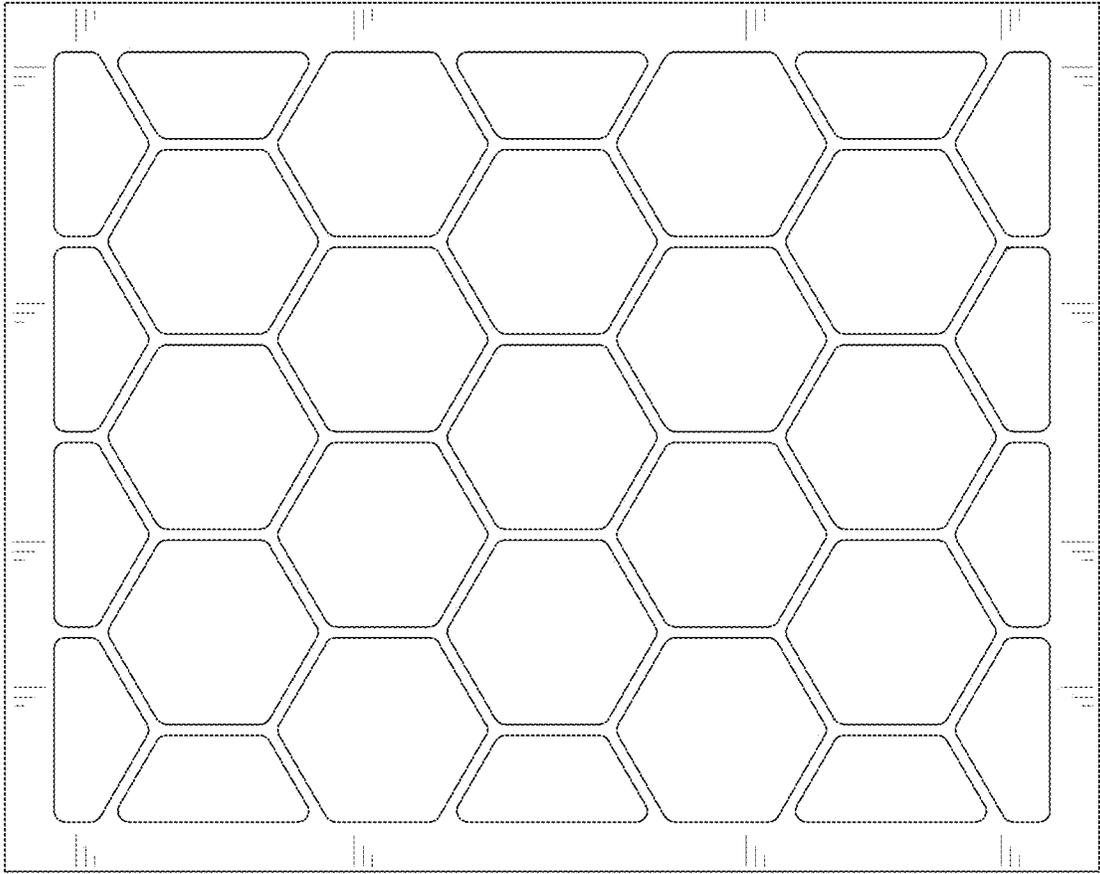


FIG. 16



FIG. 17



FIG. 18

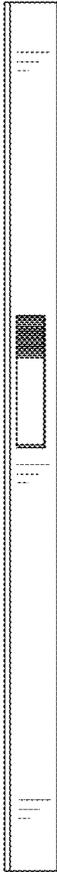


FIG. 19

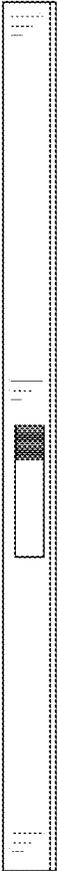


FIG. 20

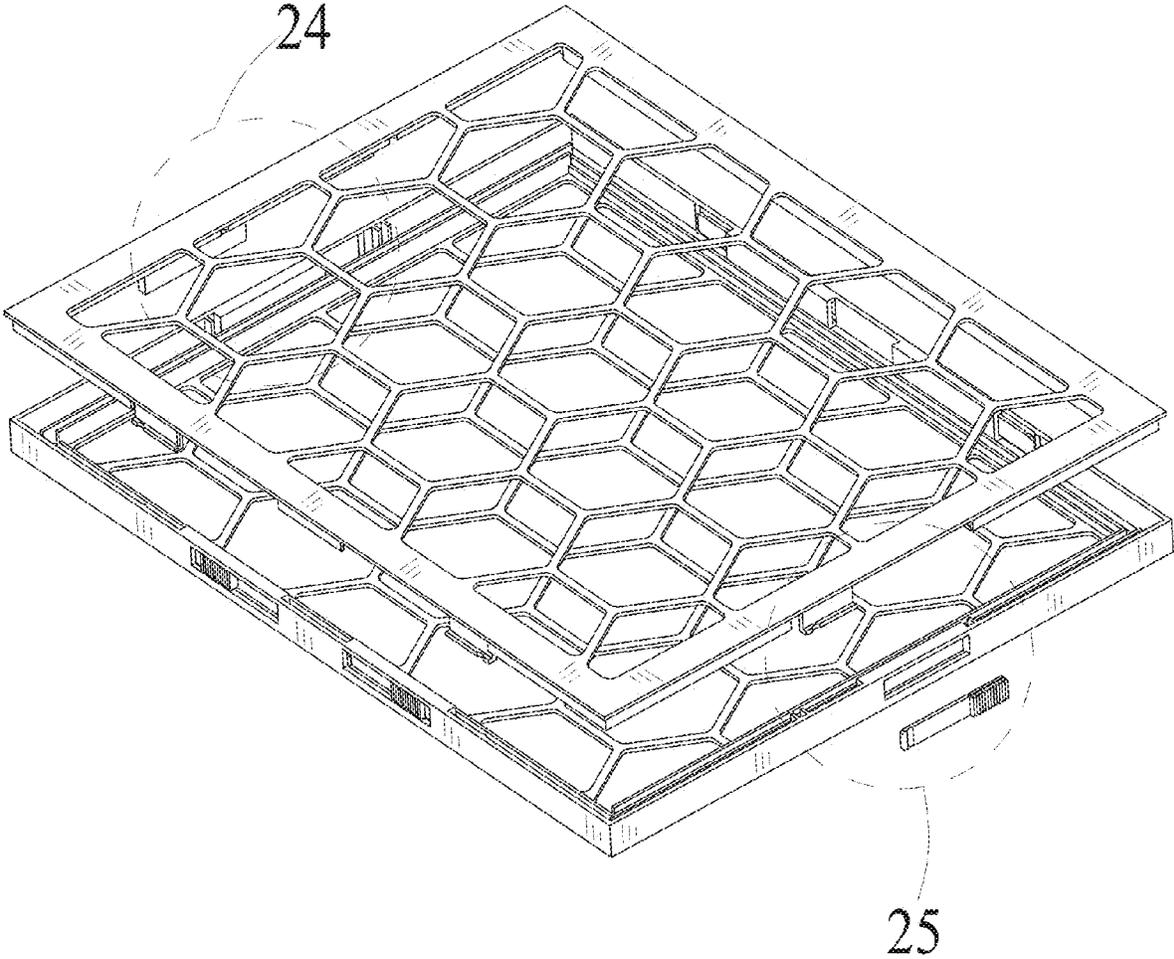


FIG. 21

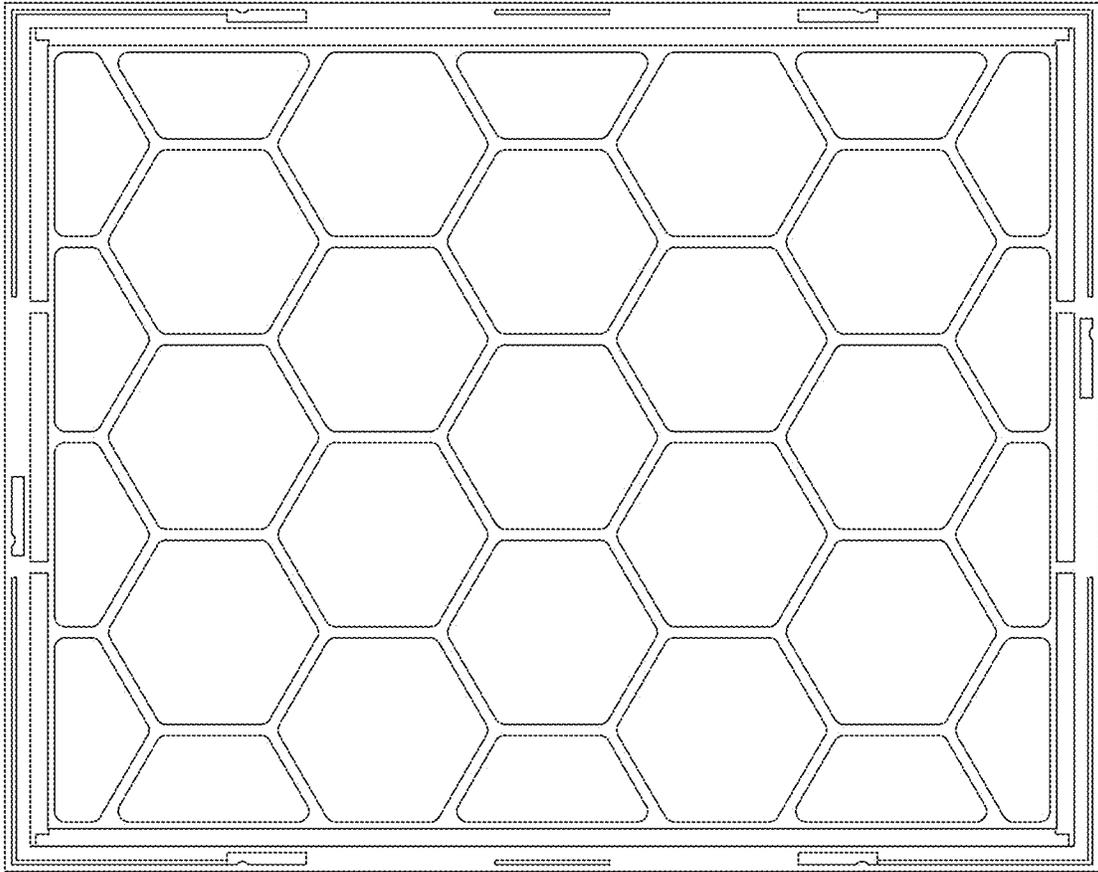


FIG. 22

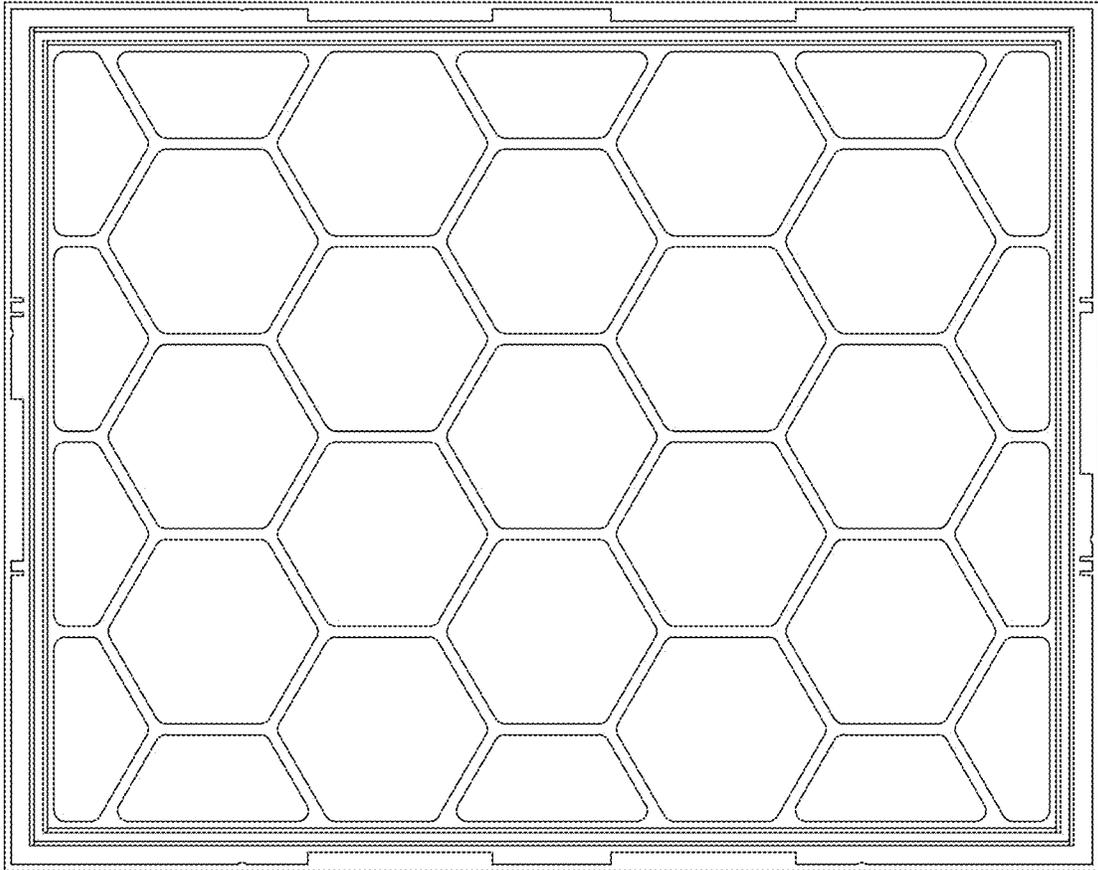


FIG. 23

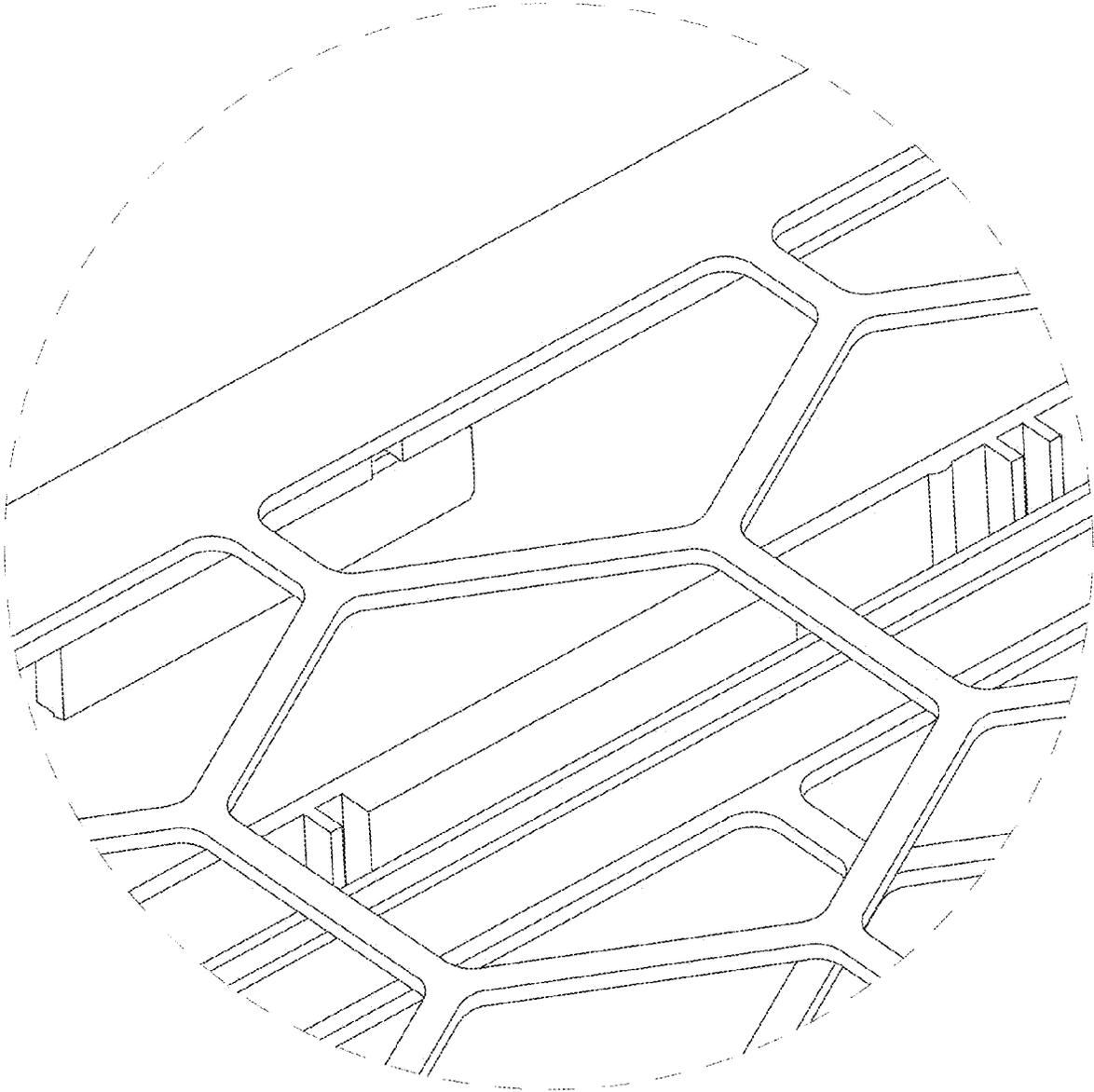


FIG. 24

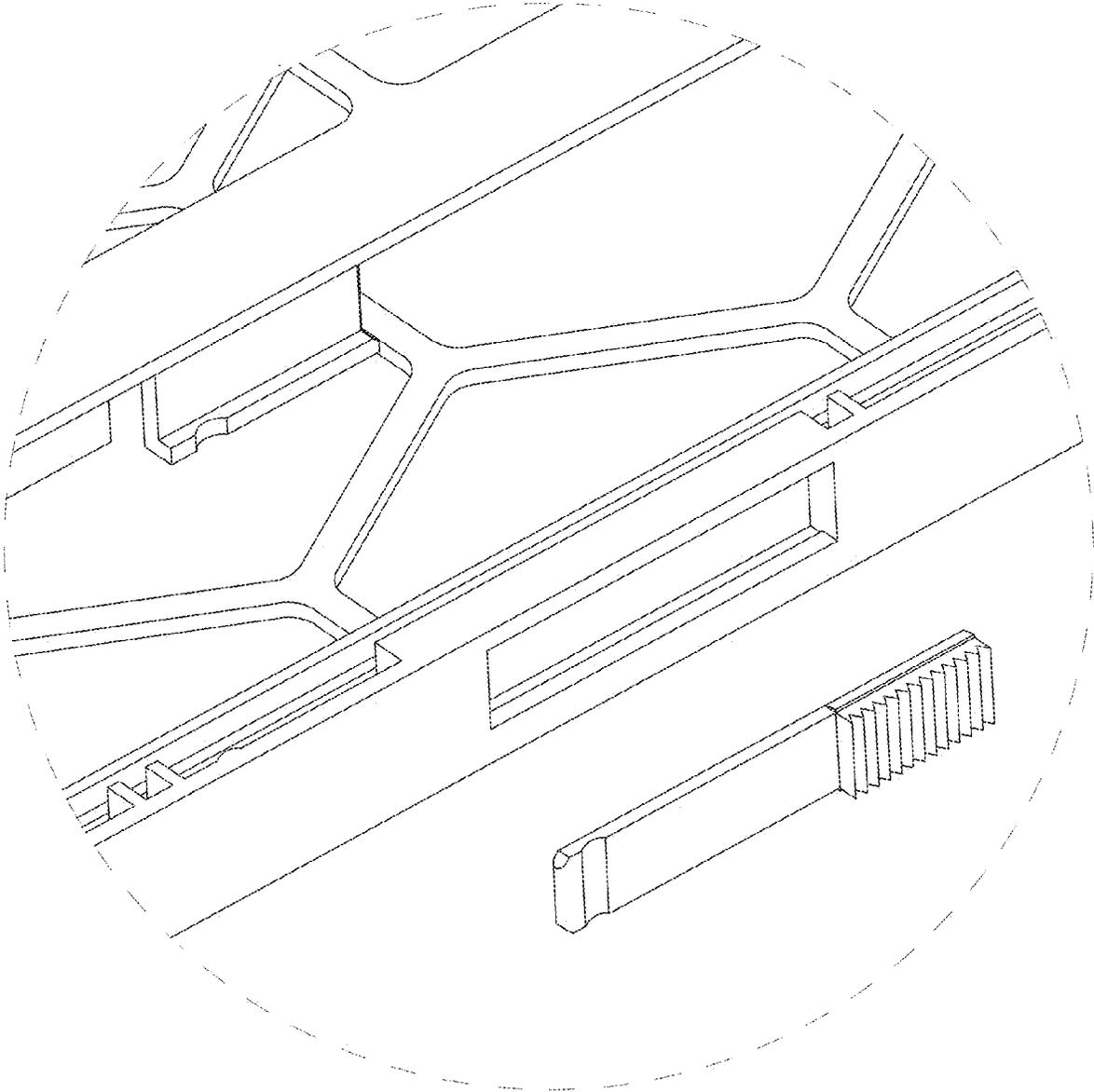


FIG. 25

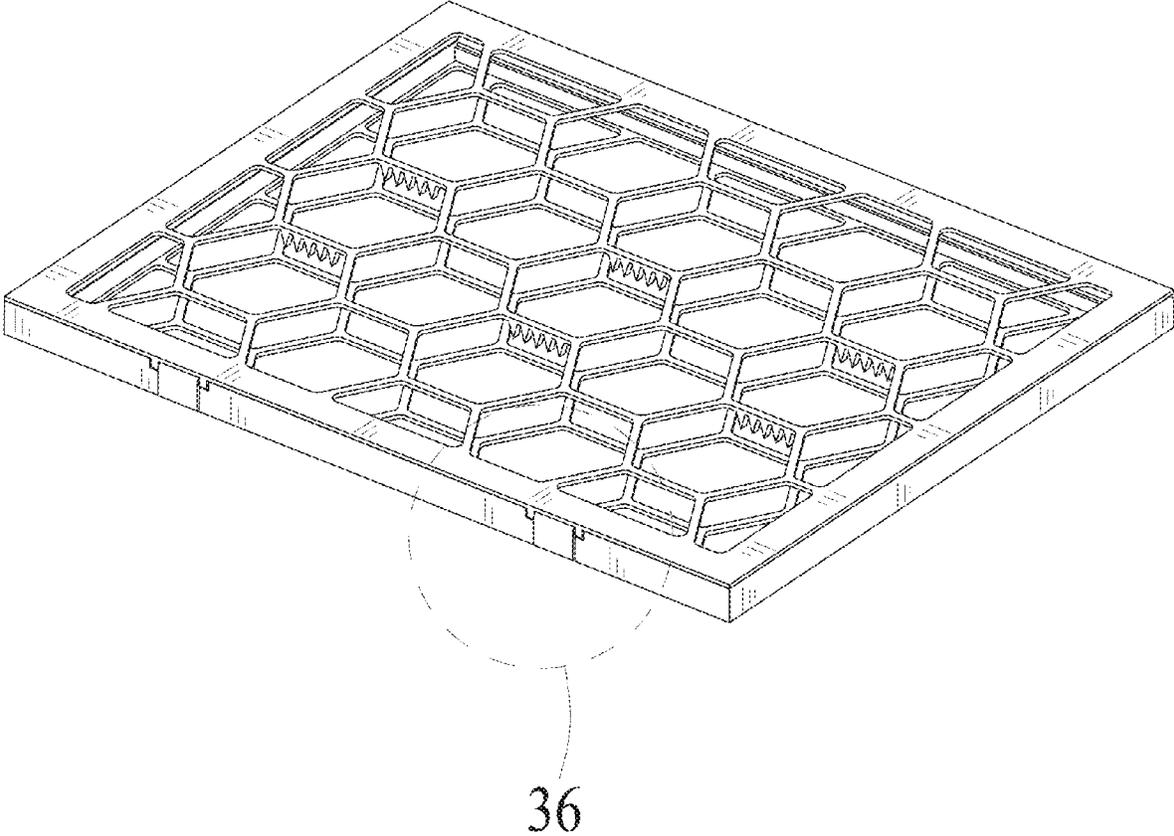


FIG. 26

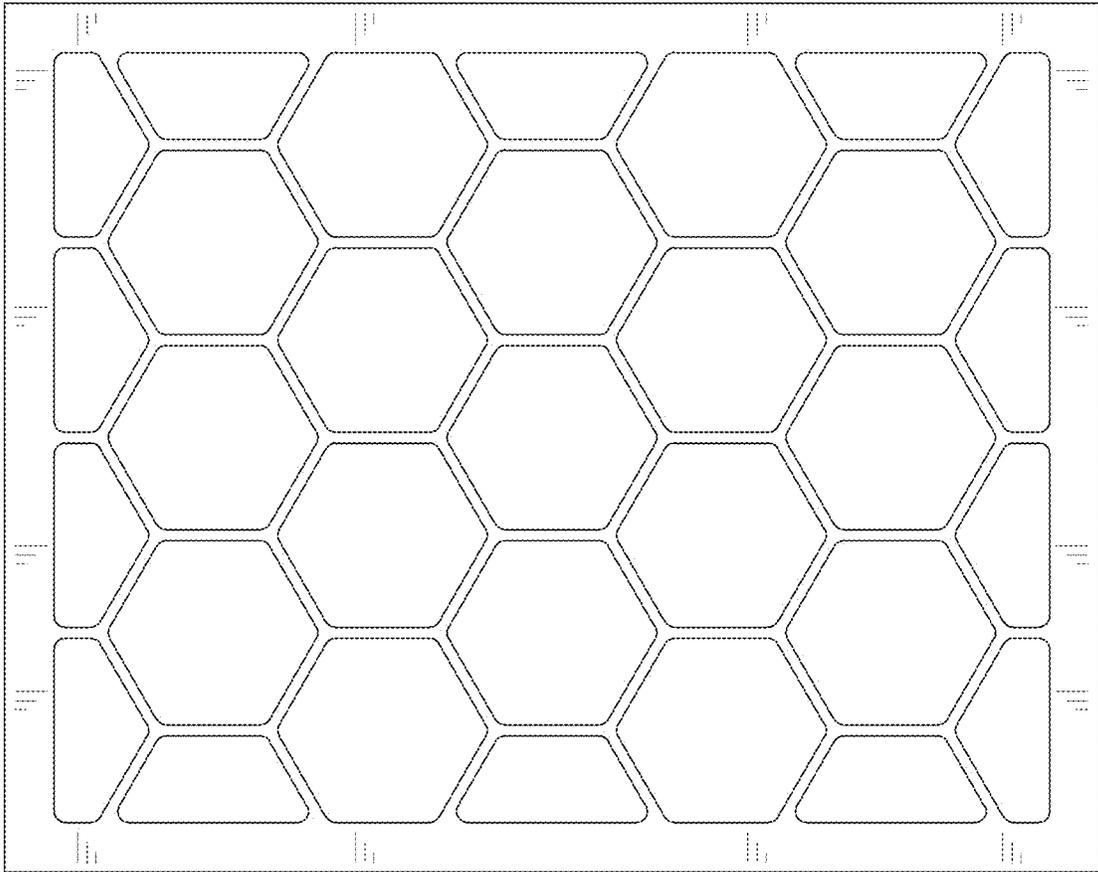


FIG. 27

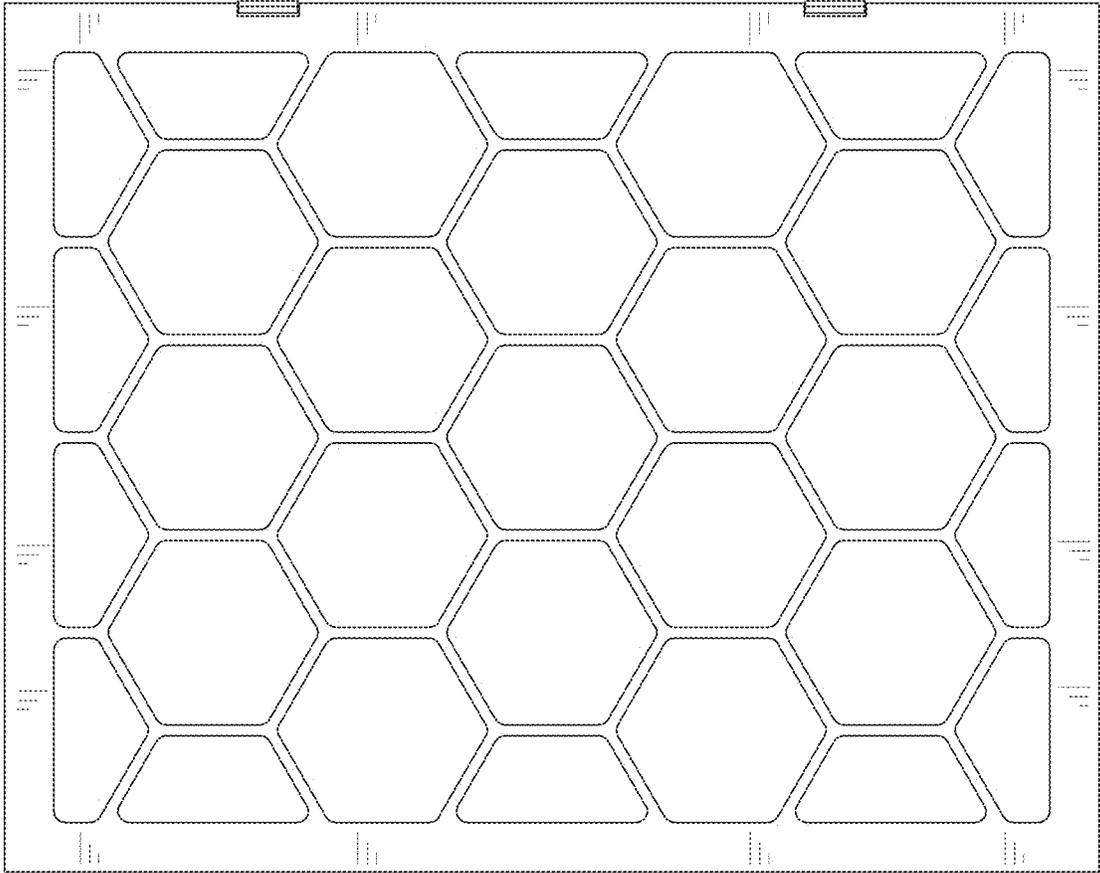


FIG. 28

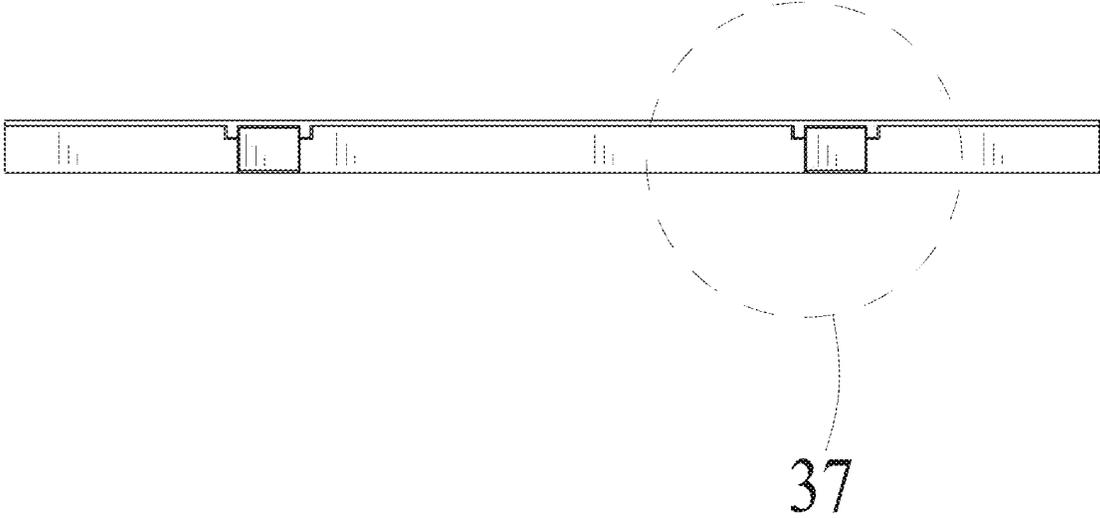


FIG. 29

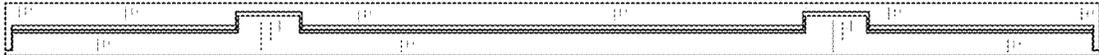


FIG. 30



FIG. 31



FIG. 32

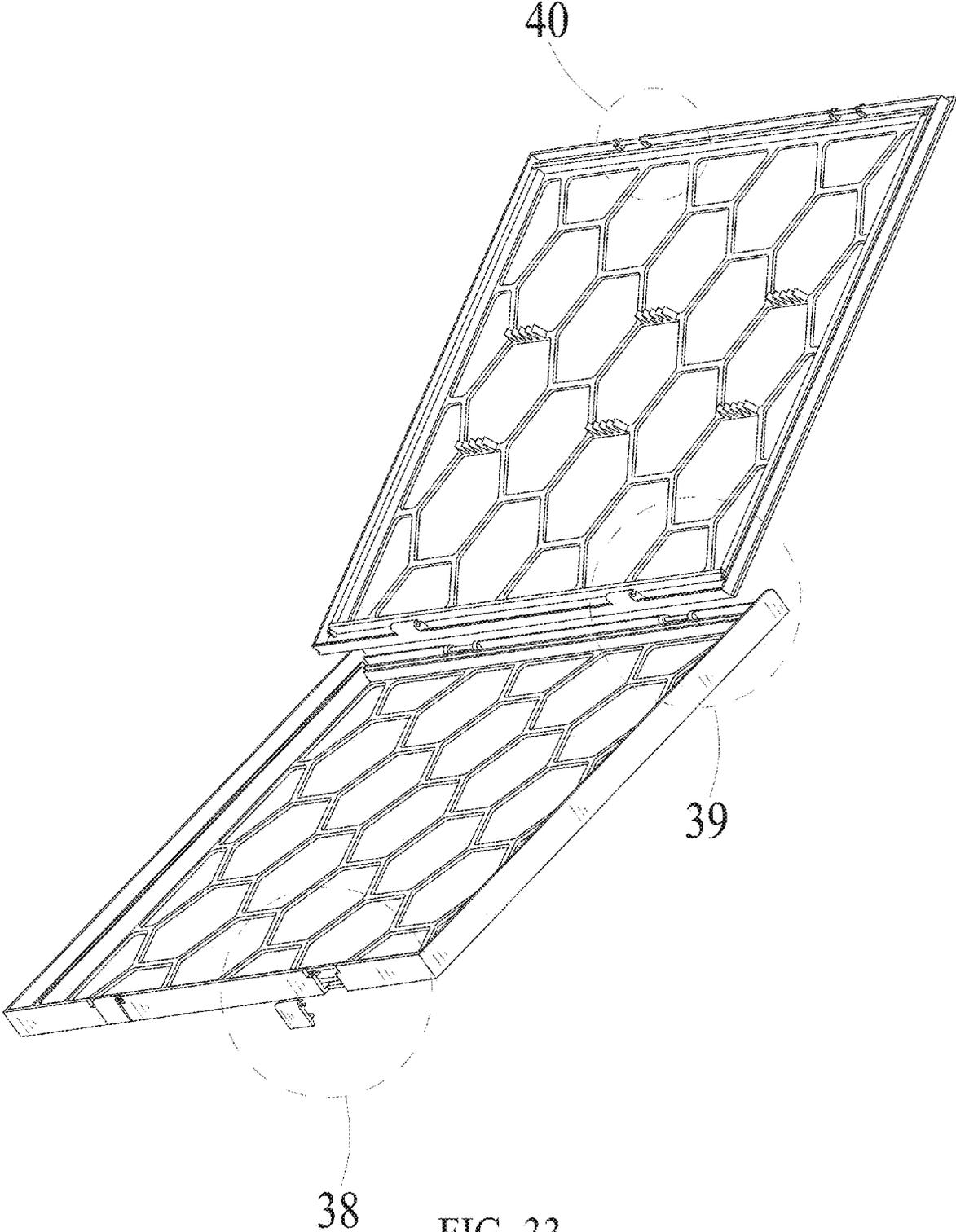


FIG. 33

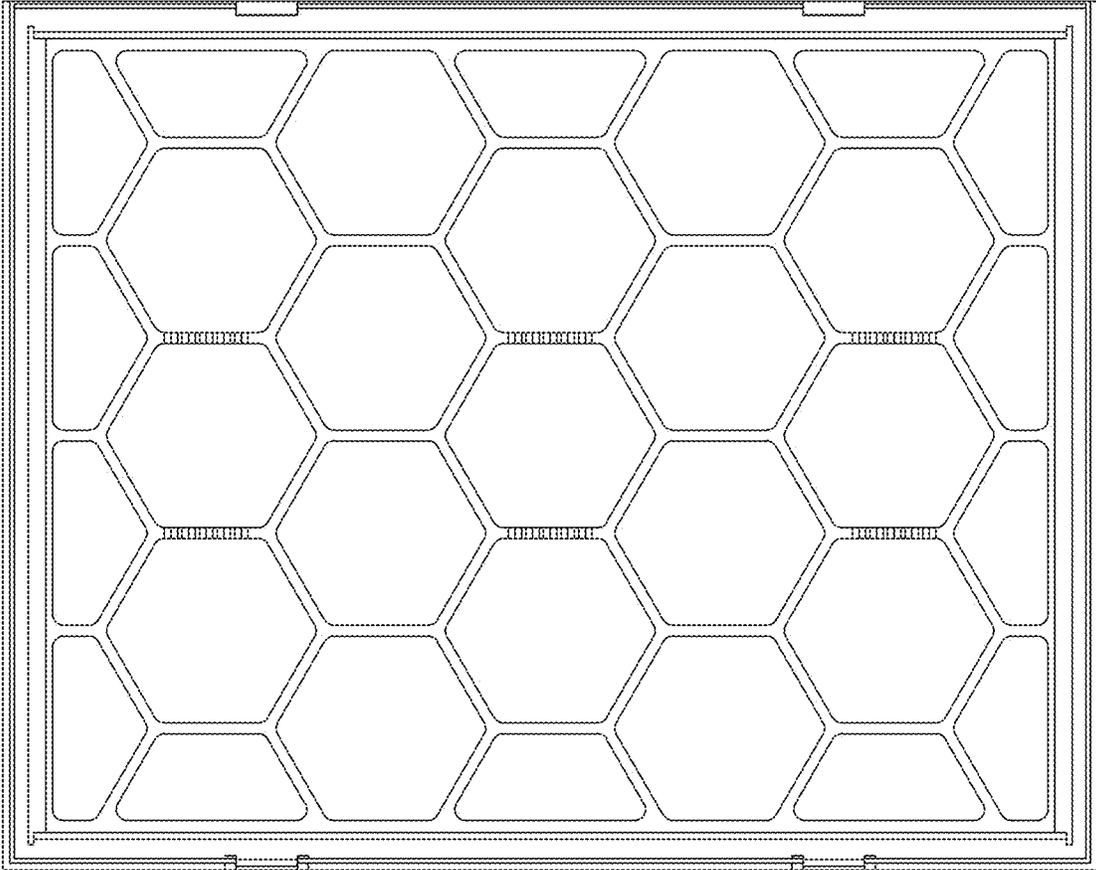


FIG. 34

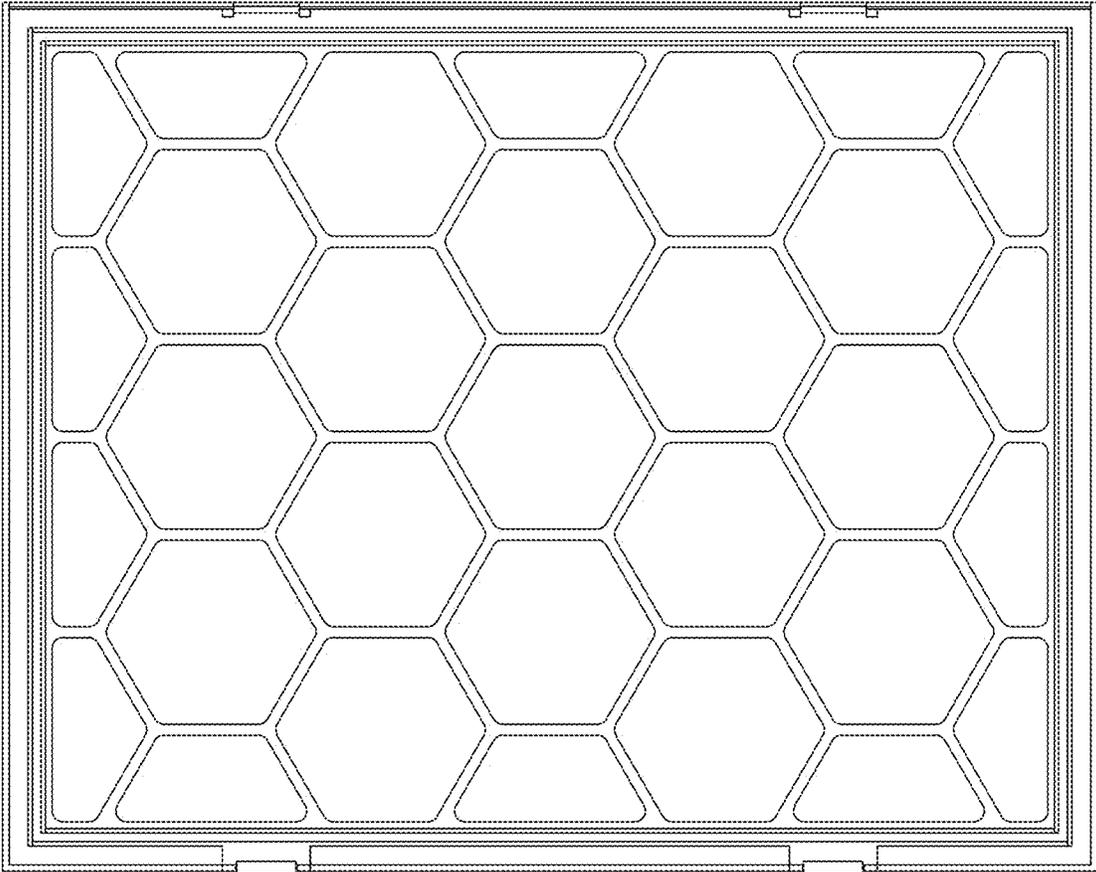


FIG. 35

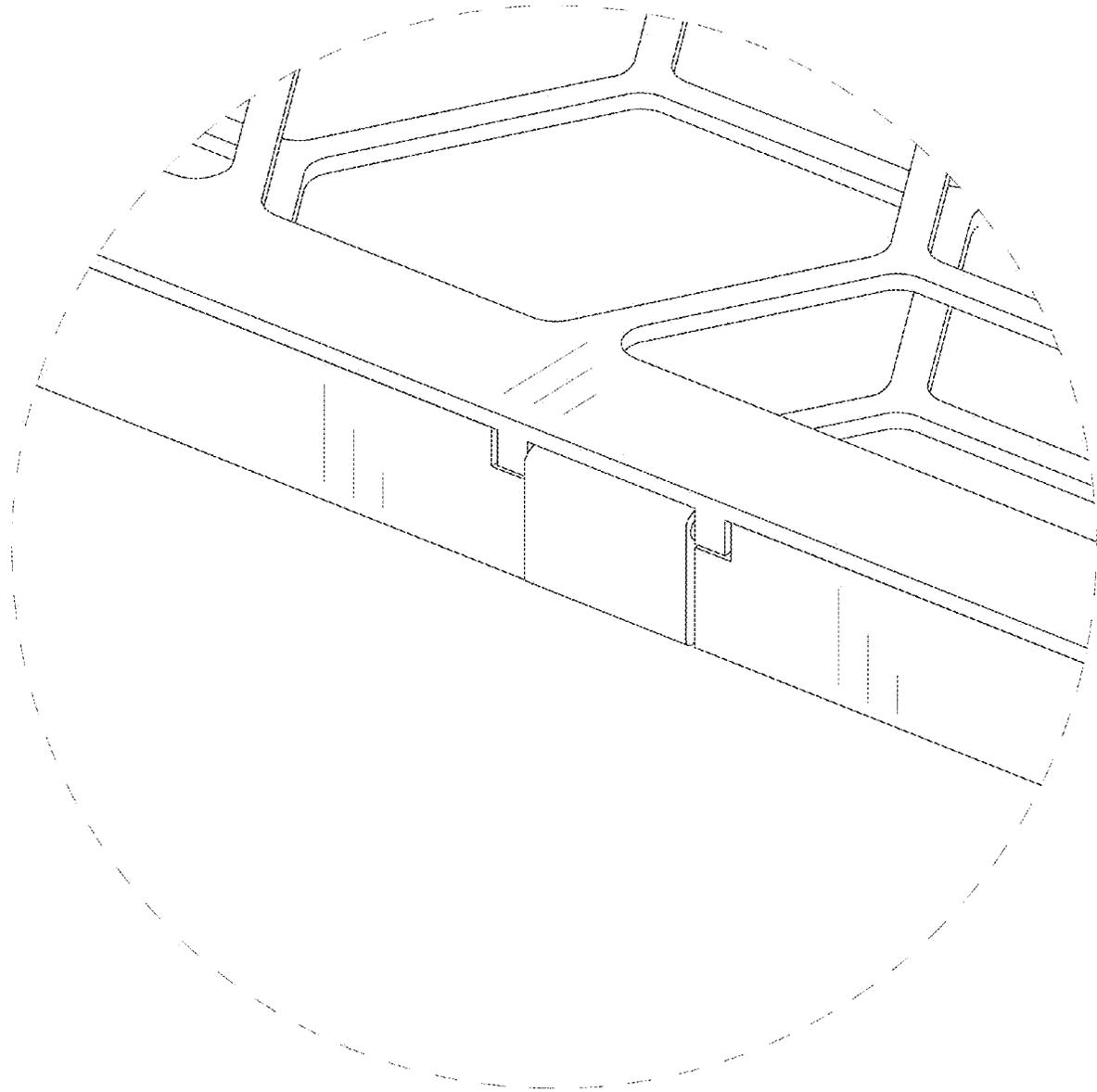


FIG. 36

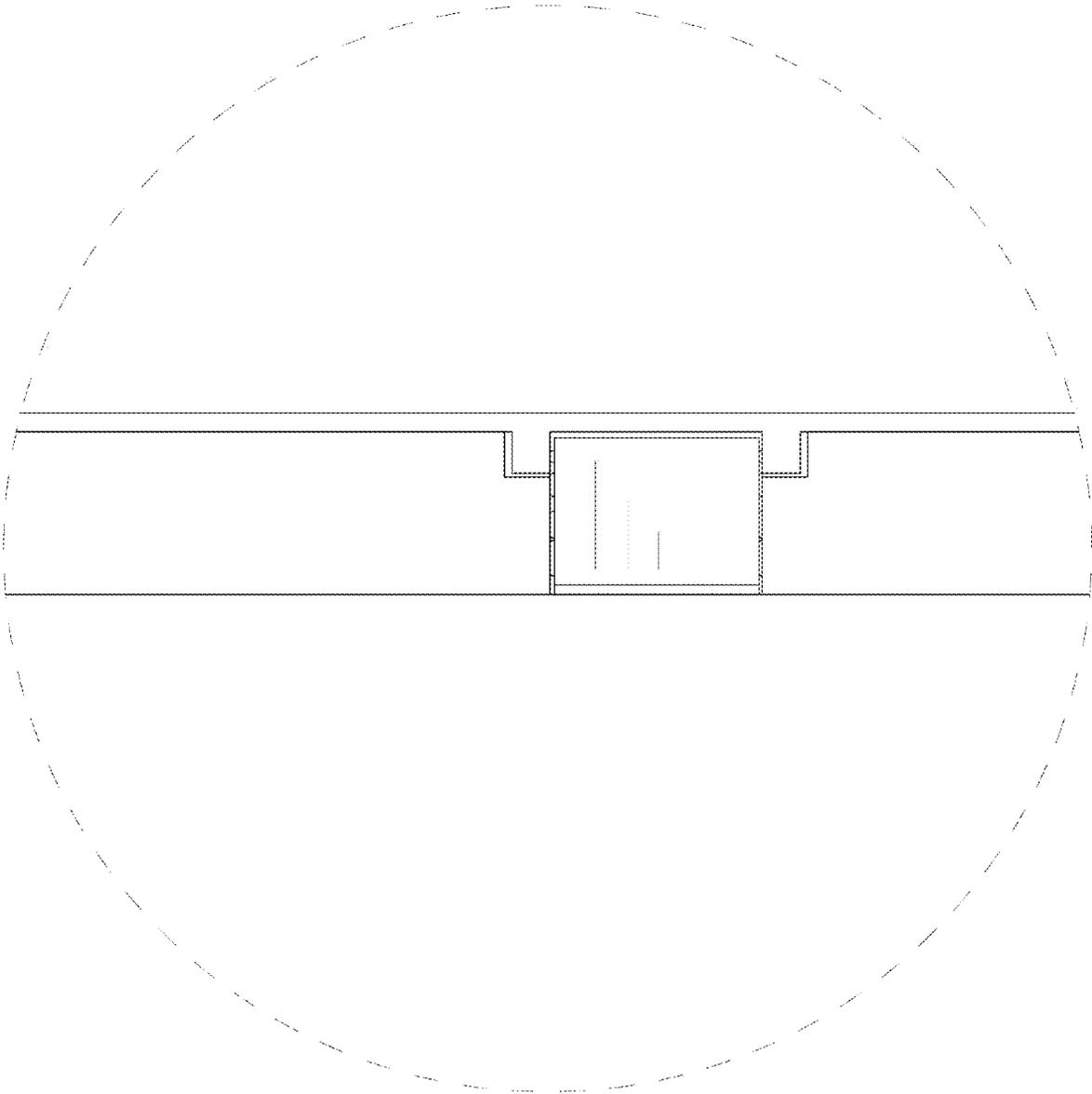


FIG. 37

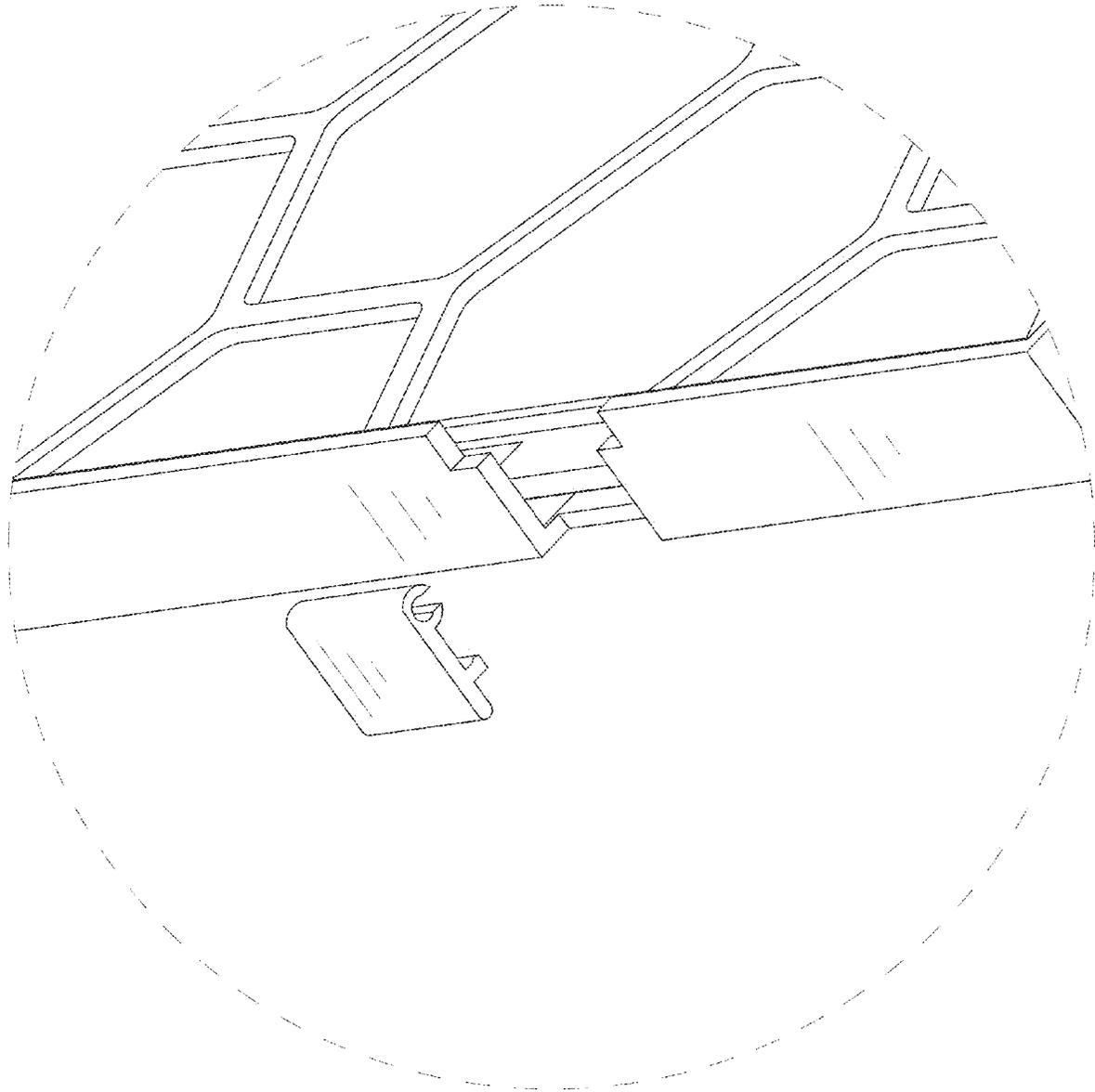


FIG. 38

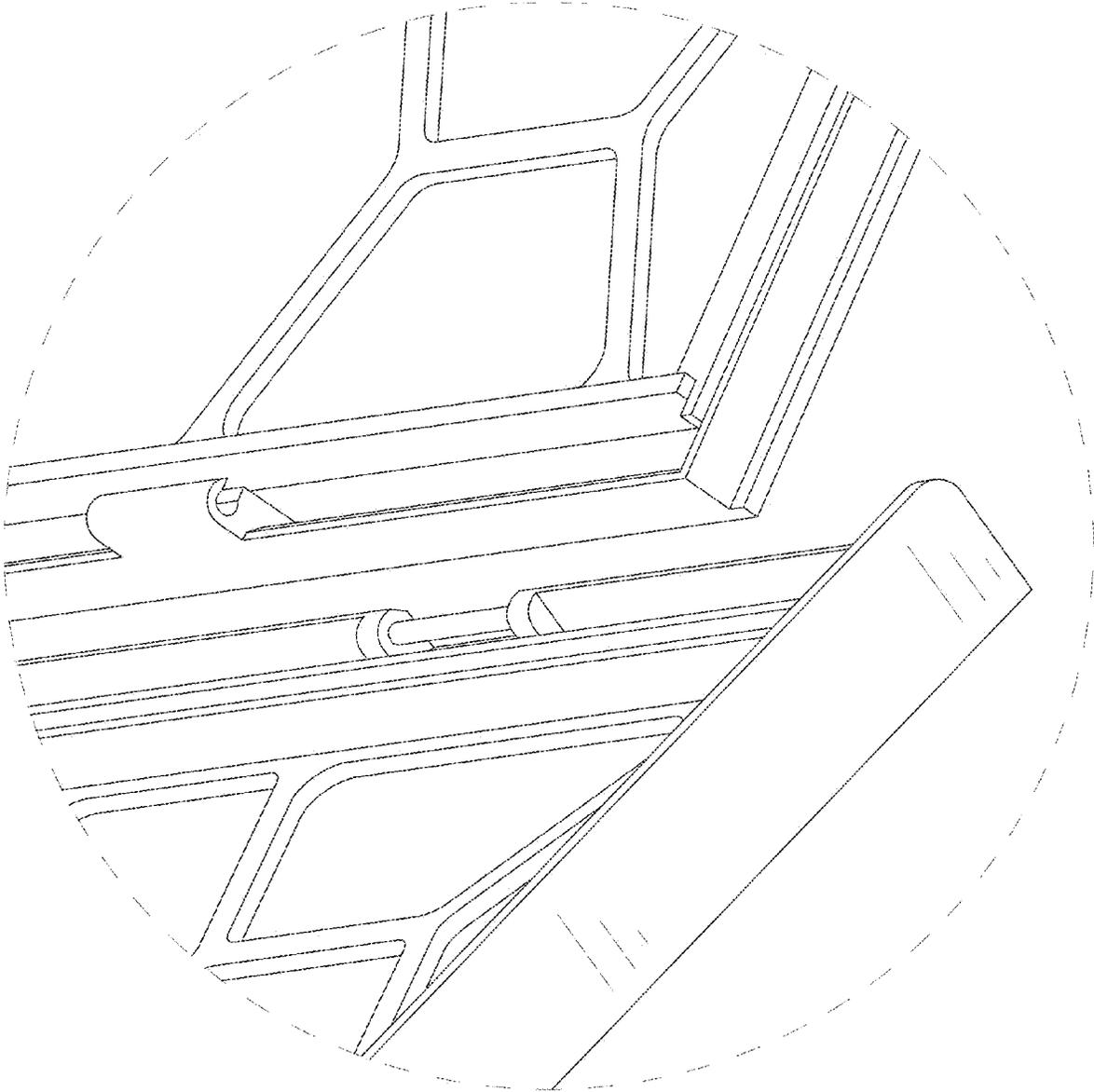


FIG. 39

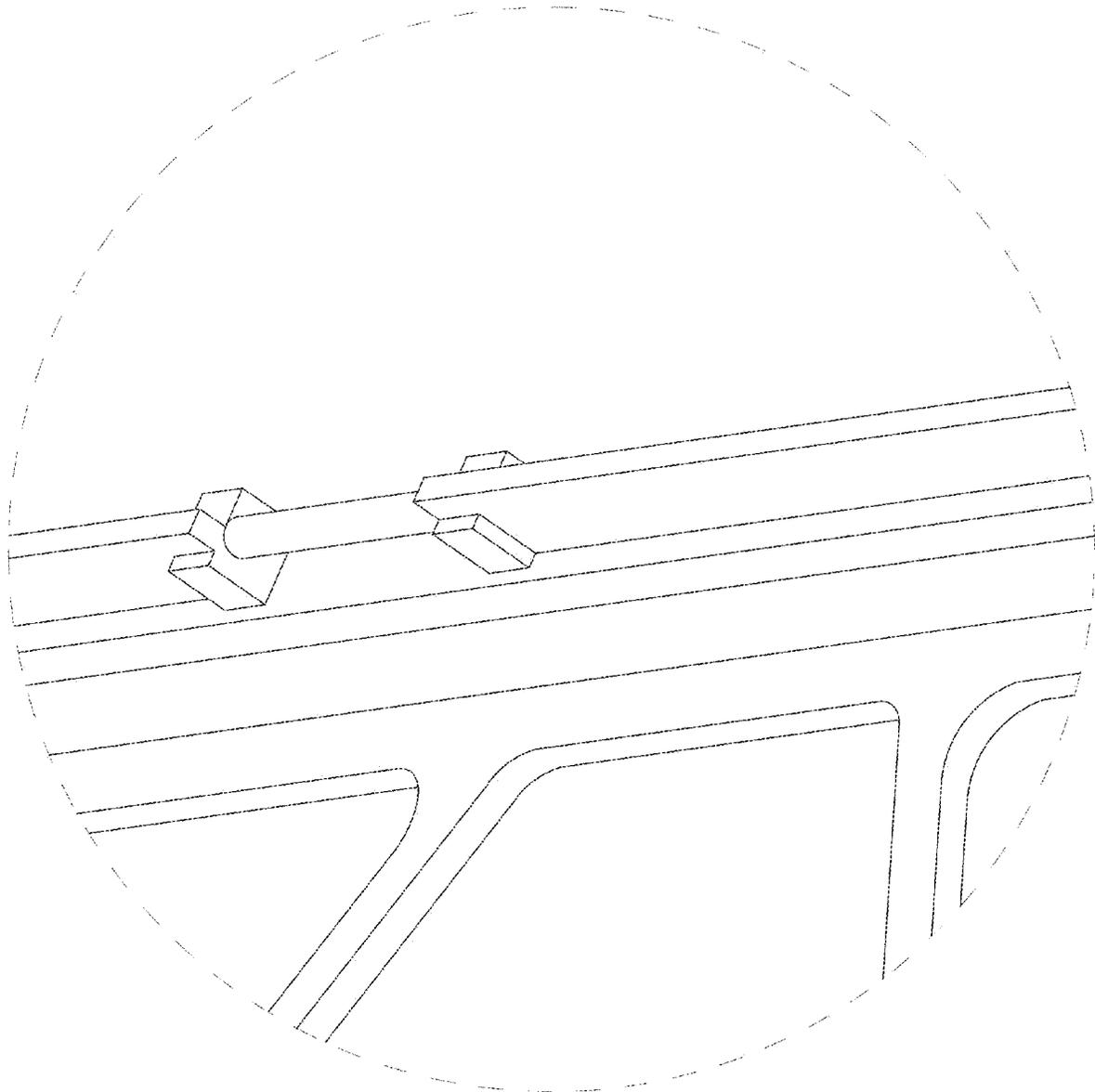


FIG. 40

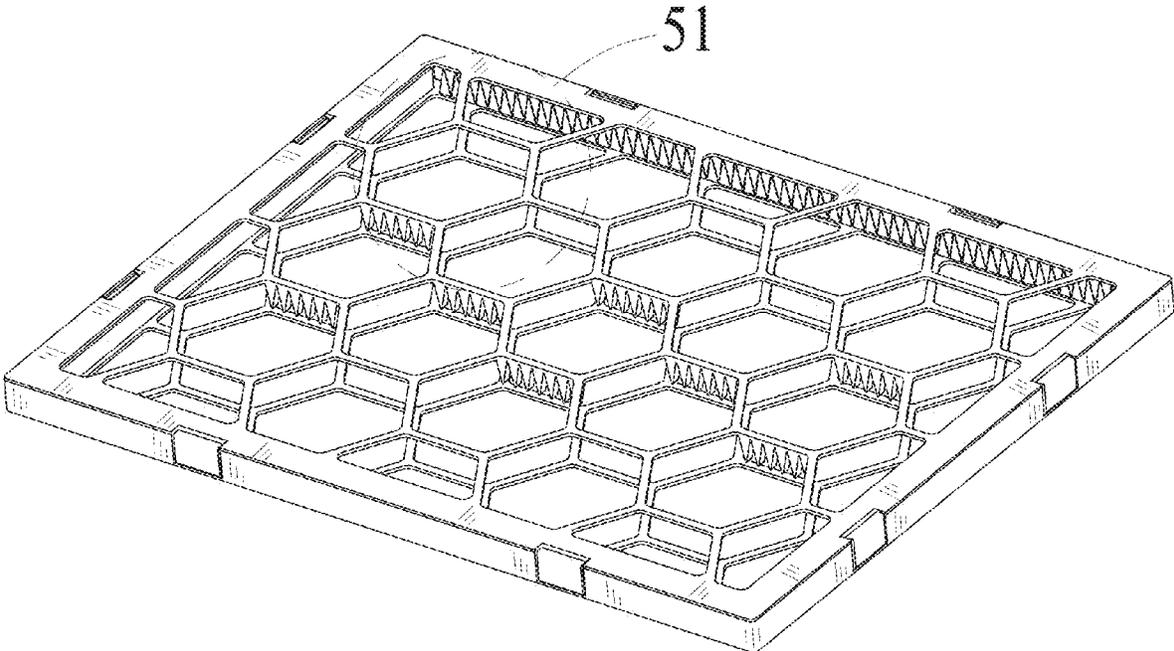


FIG. 41

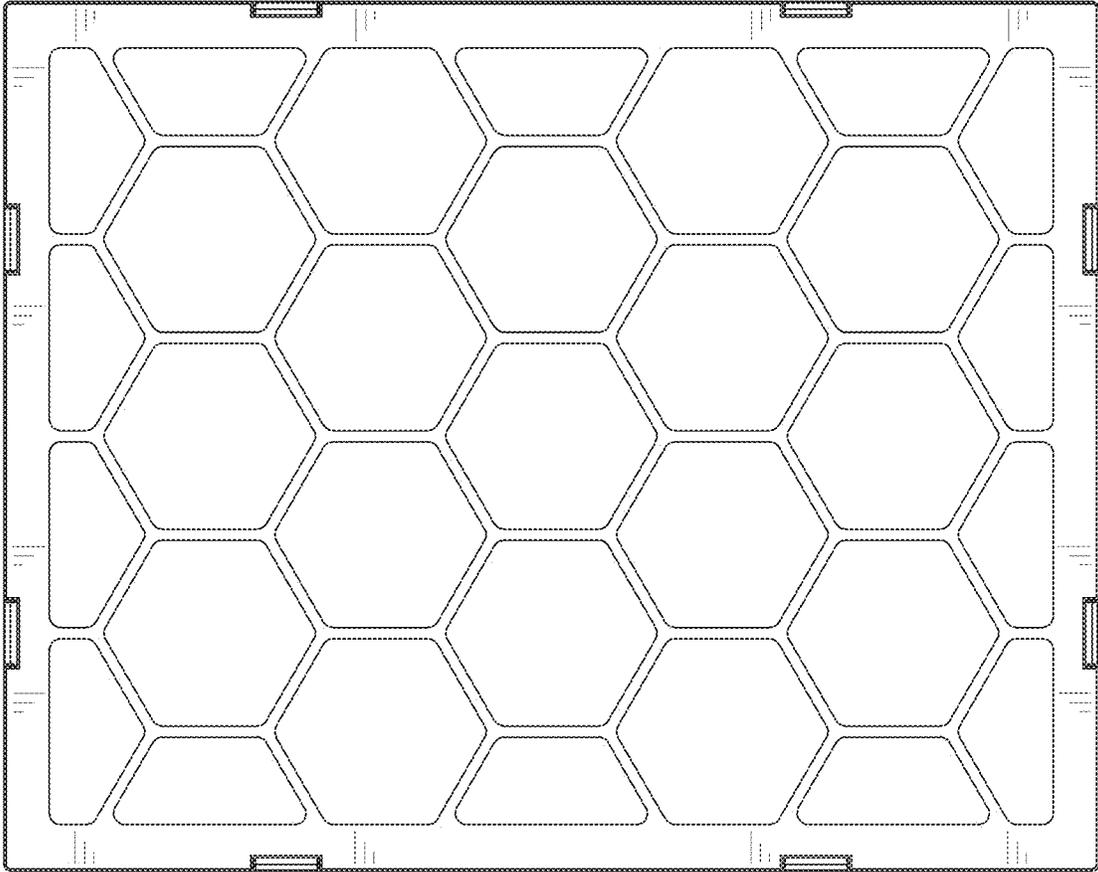


FIG. 42

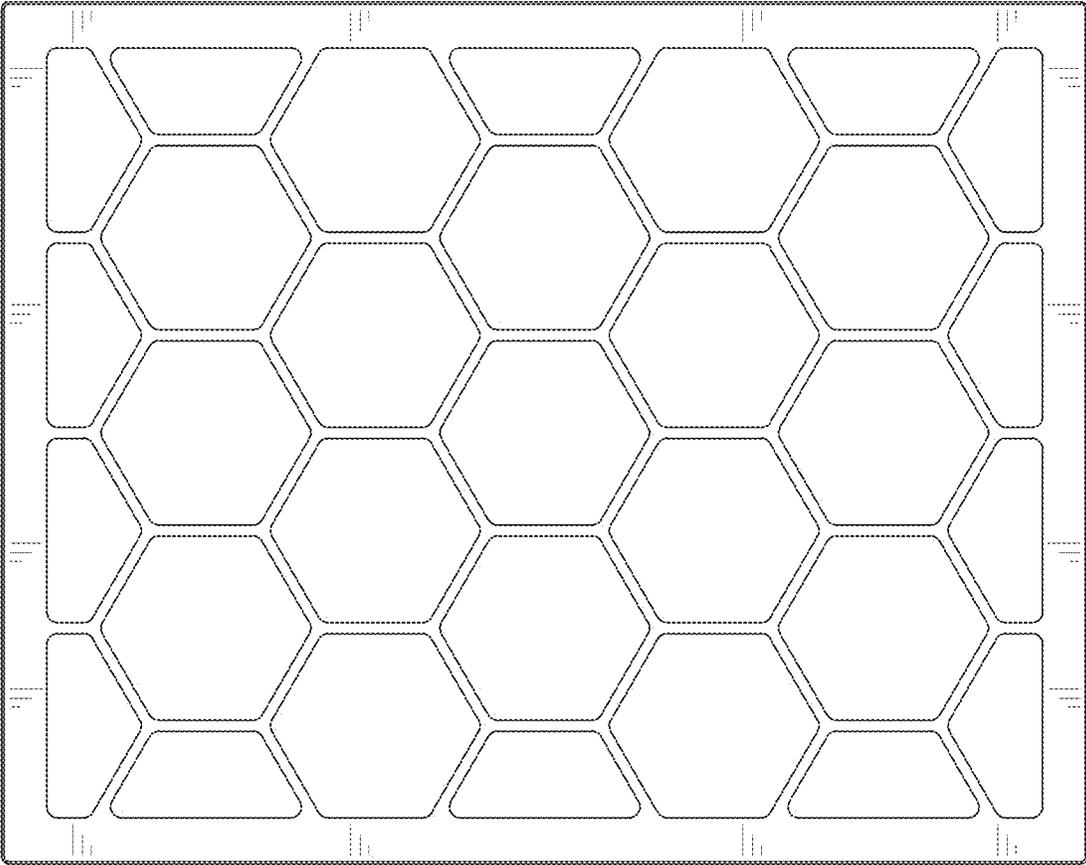


FIG. 43



FIG. 44



FIG. 45



FIG. 46



FIG. 47

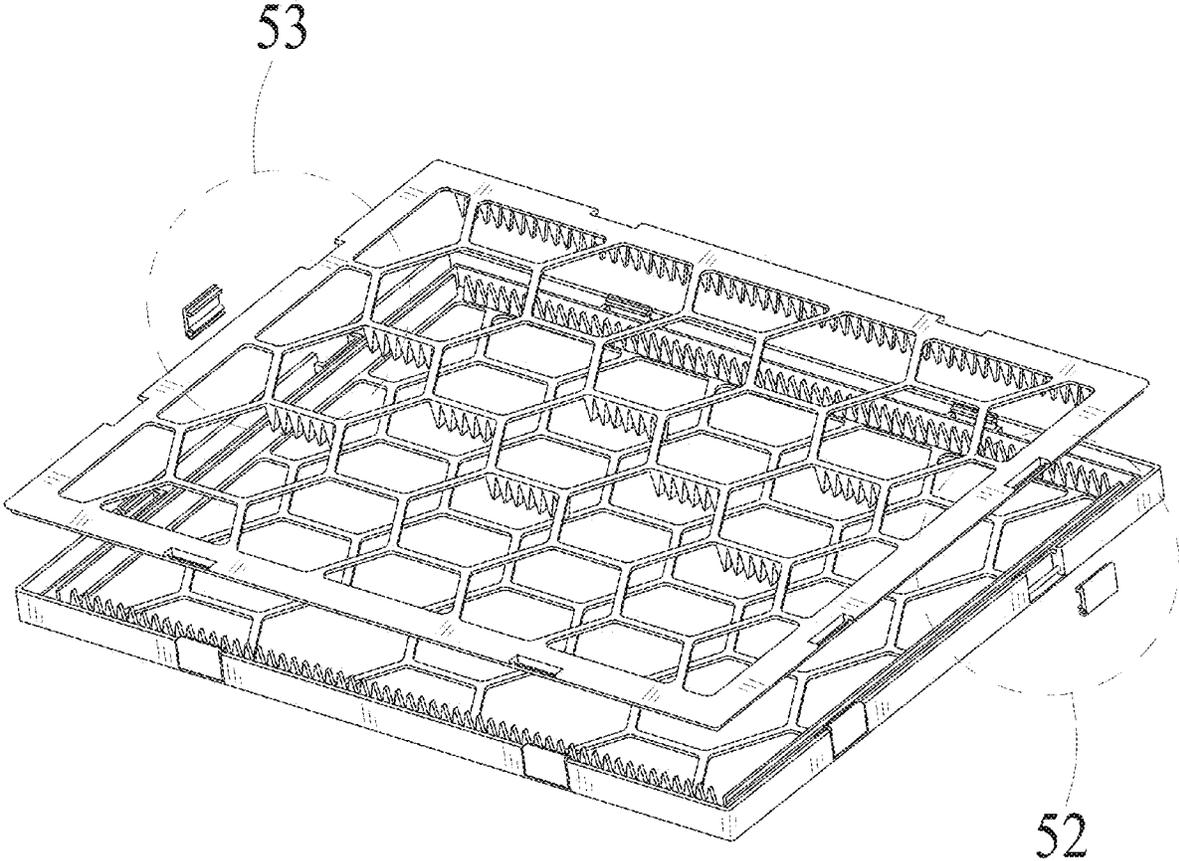


FIG. 48

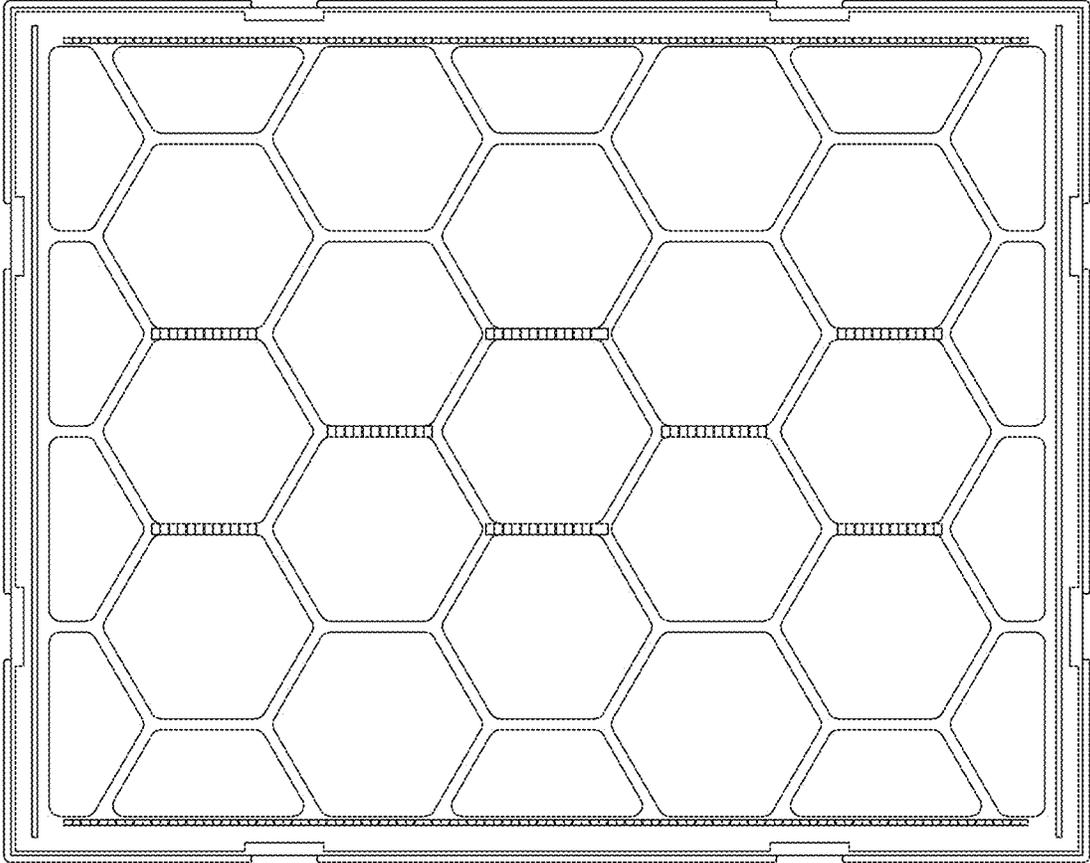


FIG. 49

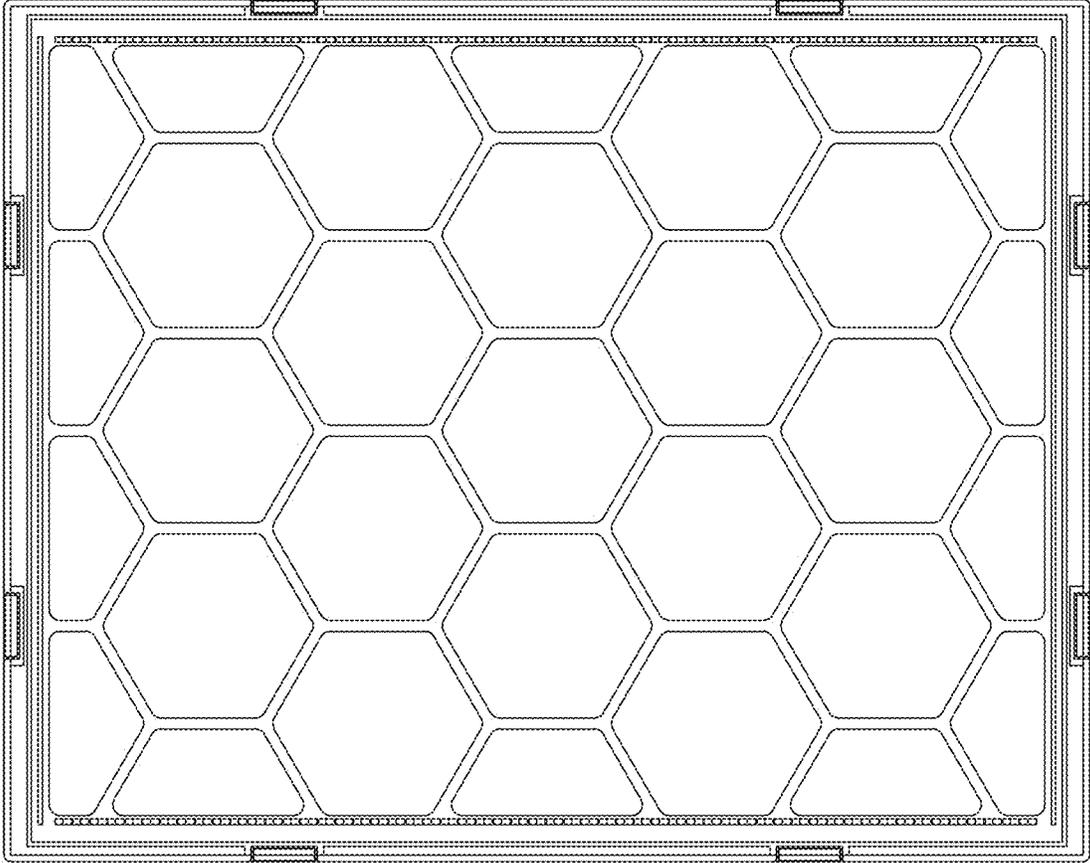


FIG. 50

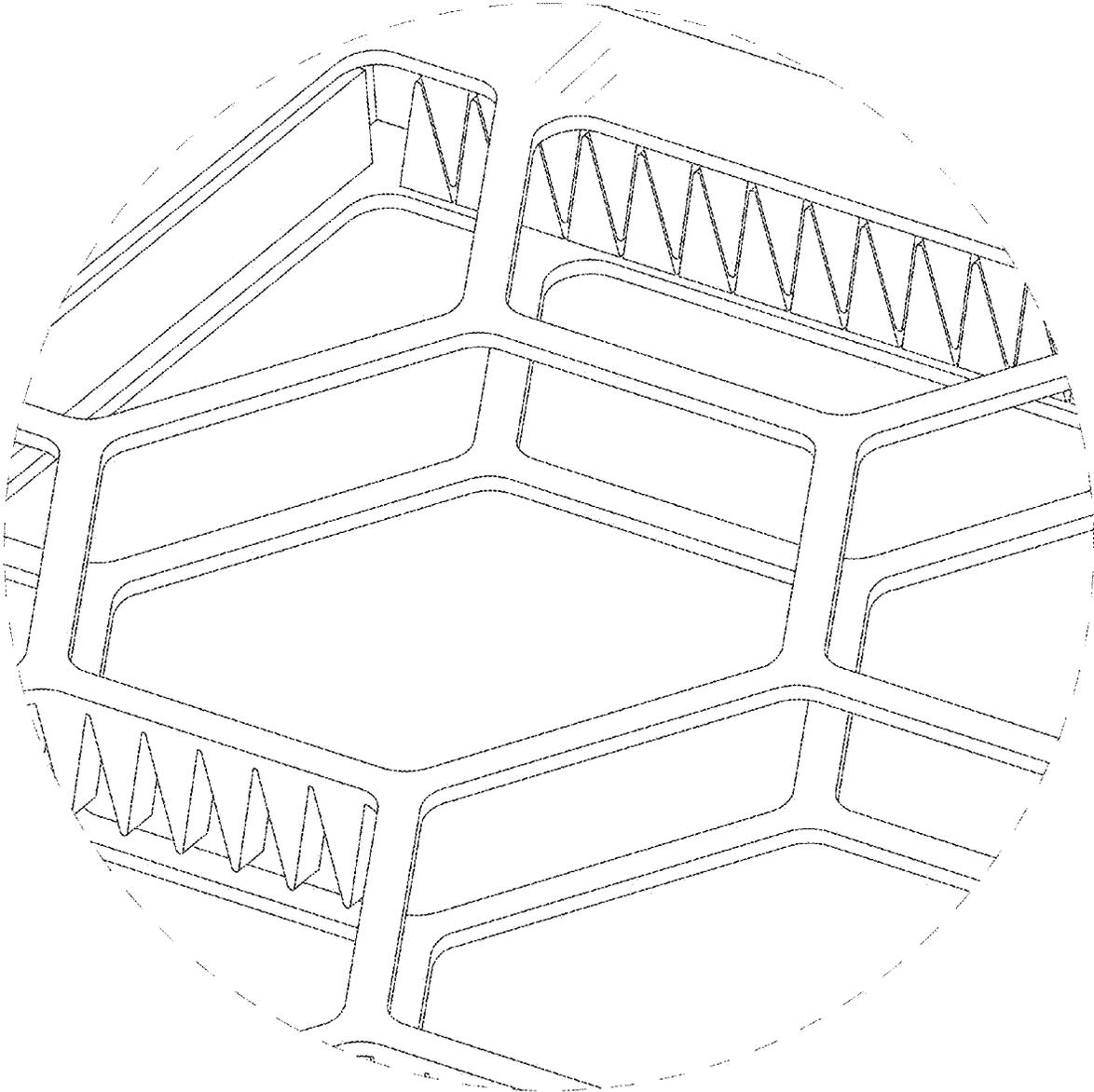


FIG. 51

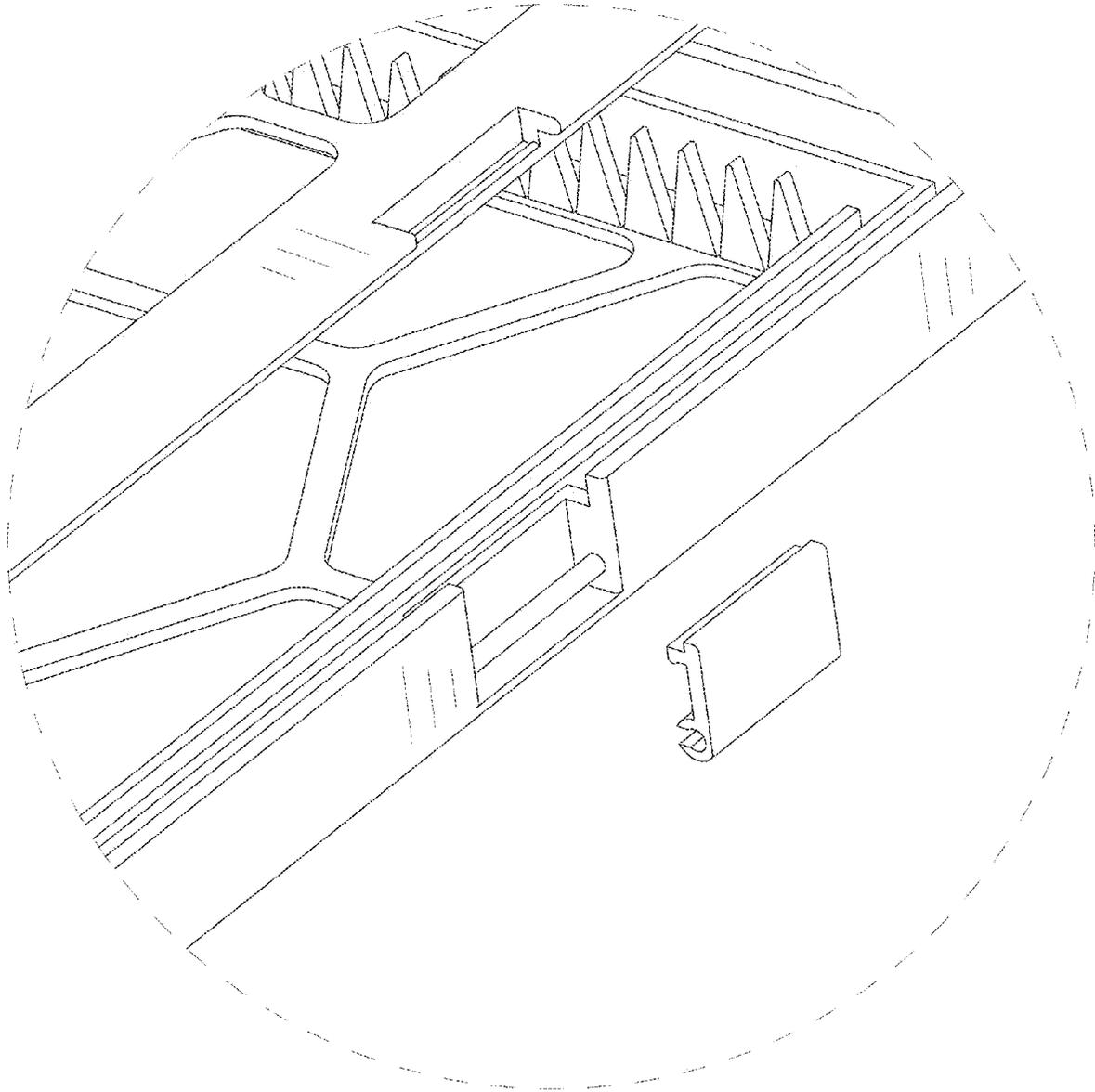


FIG. 52

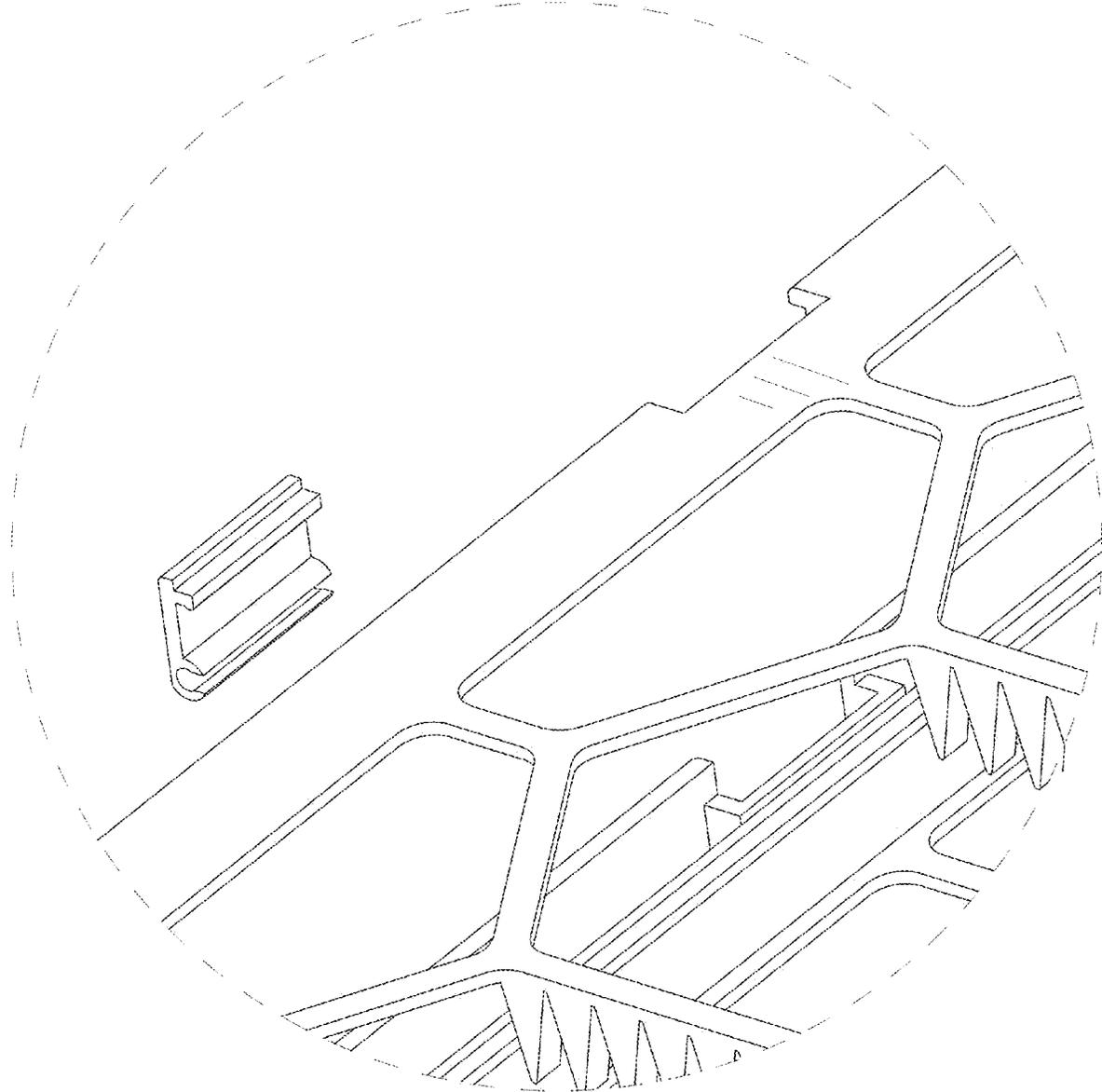


FIG. 53