



US00D864411S

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

(10) **Patent No.:** **US D864,411 S**
(45) **Date of Patent:** **** Oct. 22, 2019**

(54) **MULTI-HOLE WASH CARTRIDGE**

(71) Applicants: **Illumina, Inc.**, San Diego, CA (US);
Illumina Singapore Pte Ltd, Singapore (SG)

(72) Inventors: **Michael Thomas Dangelo**, San Diego, CA (US); **James Michael Osmus**, San Diego, CA (US); **Bashkaran Subramanian**, Singapore (SG); **Lea Sandra Kobeli**, San Francisco, CA (US); **Edward Wilson Licitra**, San Francisco, CA (US)

(73) Assignees: **Illumina, Singapore Pte. Ltd.**, Singapore (SG); **Illumina, Inc.**, San Diego, CA (US)

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

(21) Appl. No.: **29/589,642**

(22) Filed: **Jan. 3, 2017**

(51) **LOC (12) Cl.** **24-02**

(52) **U.S. Cl.**
USPC **D24/224**

(58) **Field of Classification Search**
USPC D24/216, 217, 219, 220, 223, 224, 225, D24/226, 227, 232, 233; D9/424, 425,
(Continued)

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(Continued)

Primary Examiner — Vy N Koenig
(74) *Attorney, Agent, or Firm* — Weaver Austin Villeneuve & Sampson LLP

(57) **CLAIM**

We claim the ornamental design for a multi-hole wash cartridge, as shown and described.

DESCRIPTION

FIG. 1 is an isometric view of a multi-hole wash cartridge. FIG. 2 is a right side view of the multi-hole wash cartridge of FIG. 1.

FIG. 3 is a left side view of the multi-hole wash cartridge of FIG. 1.

FIG. 4 is a top view of the multi-hole wash cartridge of FIG. 1.

FIG. 5 is a bottom view of the multi-hole wash cartridge of FIG. 1.

FIG. 6 is a rear view of the multi-hole wash cartridge of FIG. 1.

FIG. 7 is a front view of the multi-hole wash cartridge of FIG. 1.

FIG. 8 is an off-angle view of the underside of the multi-hole wash cartridge of FIG. 1.

FIG. 9 is another off-angle view of the underside of the multi-hole wash cartridge of FIG. 1.

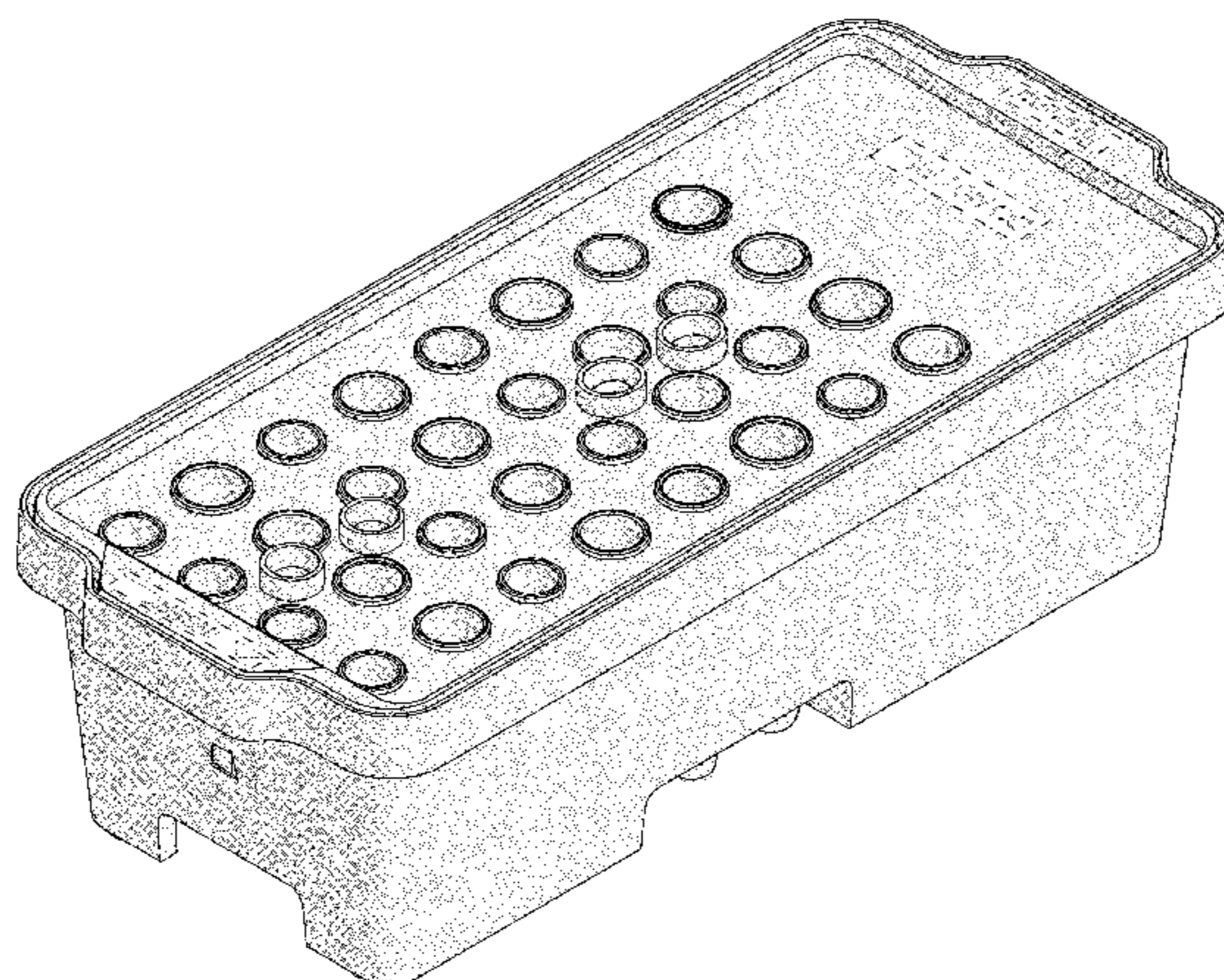
FIG. 10 is yet another off-angle view of the underside of the multi-hole wash cartridge of FIG. 1; and,

FIG. 11 is another off-angle view of the underside of the multi-hole wash cartridge of FIG. 1.

Stipple shading is used in the accompanying FIGS. 1-11 to convey surface contouring and is not indicative of any particular texture or coloring.

Dash-dot-dash boundary lines are used herein to indicate a transition from claimed subject matter to unclaimed environmental structure, as evidenced by the absence of shading within the boundary shape and the presence of shading outside of the boundary shape. See, for example, the dash-dot-dash boundaries around the “illumina” logo, “Insert” text, and “Do Not Fill” text, which form no part of the

(Continued)



claimed design in FIGS. 1 and 4, and the “>PC<” and “S1” text, which form no part of the claimed design in FIG. 5.

1 Claim, 11 Drawing Sheets

(58) Field of Classification Search

USPC D9/432, 732, 735, 749, 755, 758, 760;
 D7/550.1, 553.1–553.5, 554.3, 554.4;
 D18/43, 44; D3/294–295
 CPC A47G 23/06; A61B 50/20; A61B 50/30;
 A61J 1/00; B01L 3/50; B01L 3/52; B01L
 7/00; B01L 7/02; C07K 1/26; C12Q 1/00
 See application file for complete search history.

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D566,291	S *	4/2008	Parunak	D24/224

D578,758	S *	10/2008	Stevens	D3/272
D604,604	S *	11/2009	Strange	D9/424
D624,194	S *	9/2010	Pack	D24/224
D632,803	S *	2/2011	Motadel	D24/229
D657,473	S *	4/2012	Miyashita	D24/224
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D724,236	S *	3/2015	Motadel	D24/227
D732,186	S *	6/2015	Burroughs	D24/226
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D825,774	S *	8/2018	Self	D24/224
D827,149	S *	8/2018	Self	D24/224
10,071,381	B2 *	9/2018	Welch	A61B 5/15
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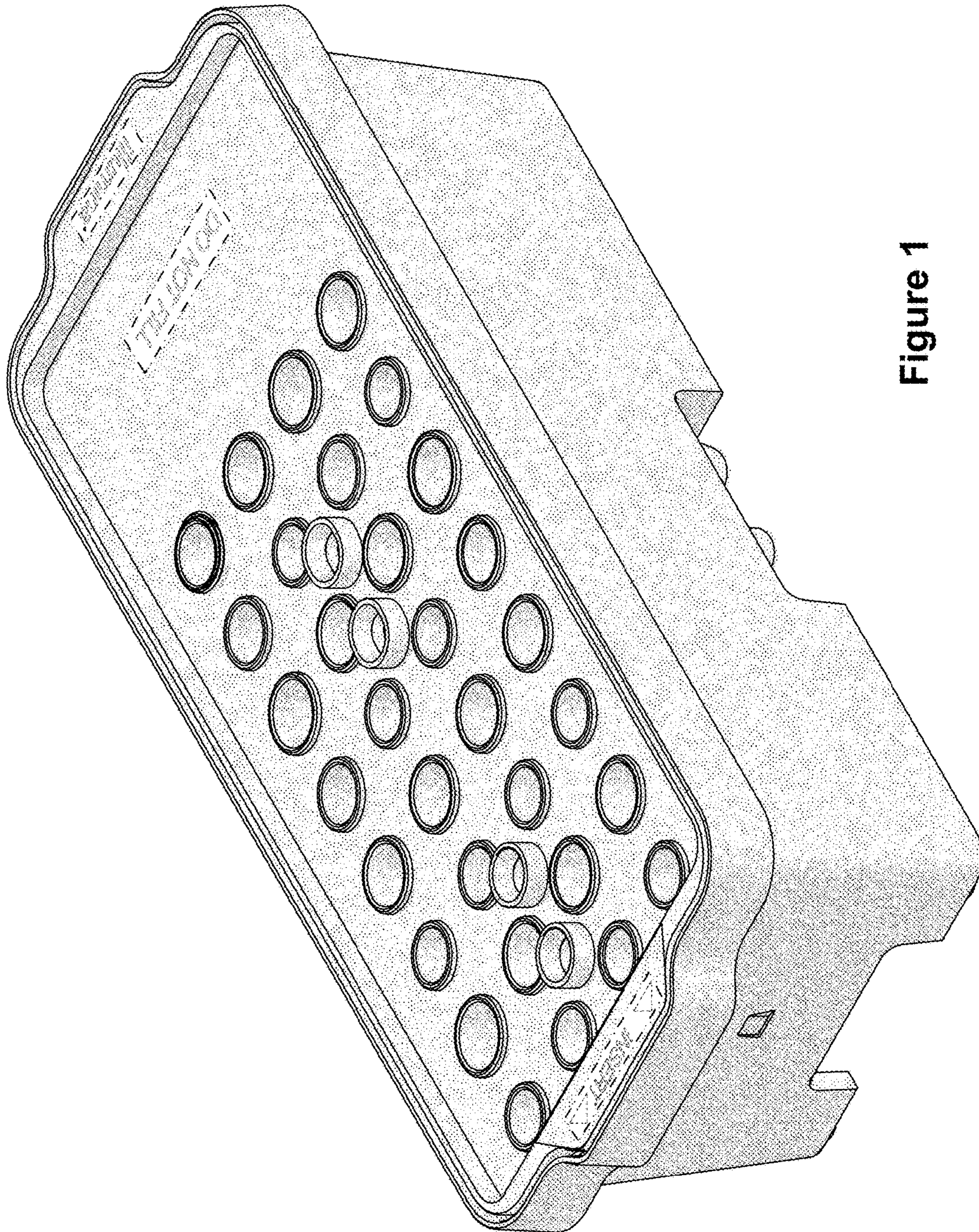


Figure 1

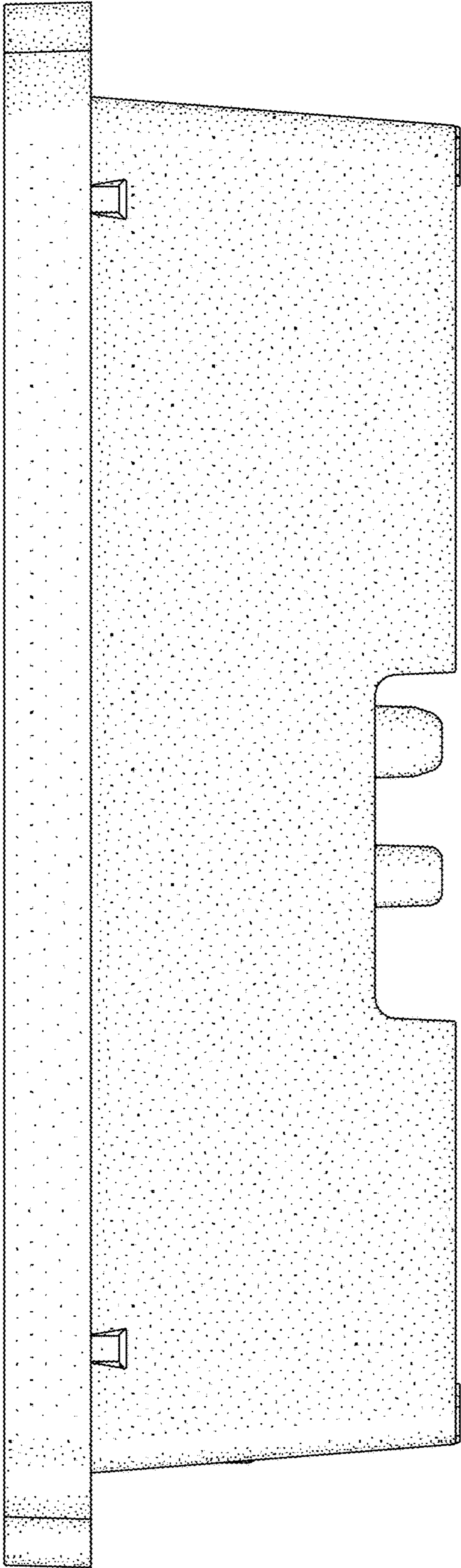


Figure 2

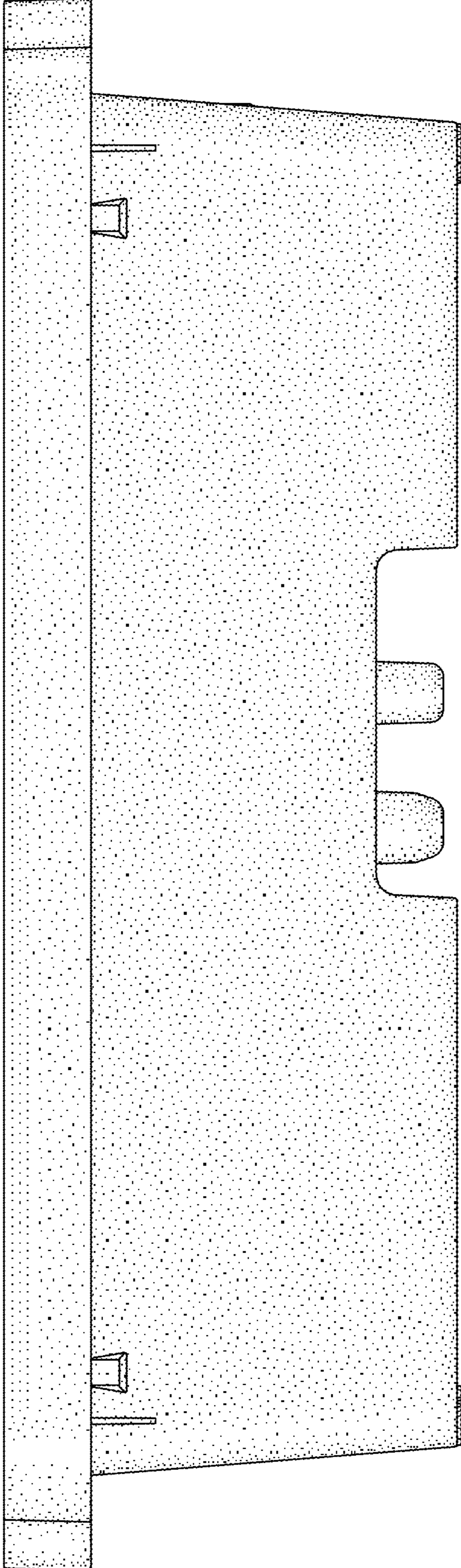


Figure 3

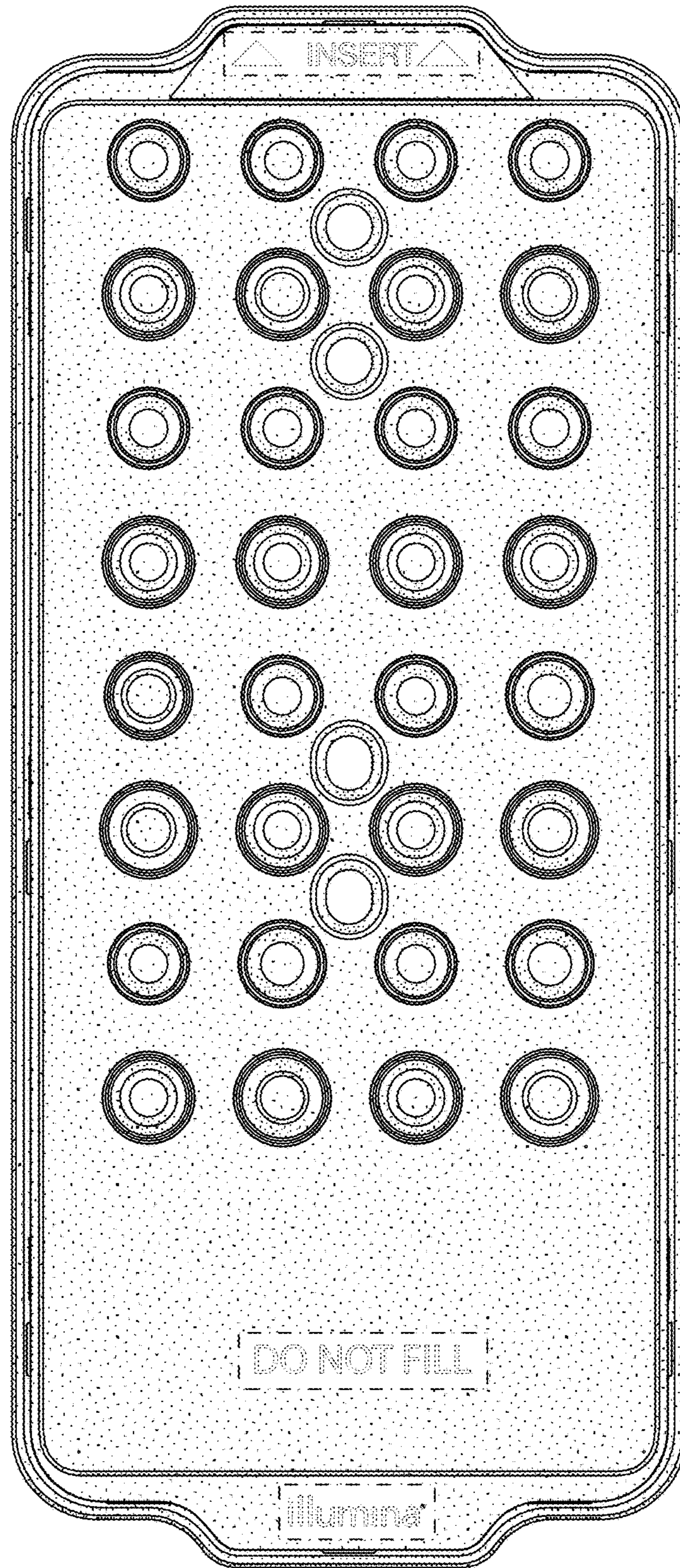


Figure 4

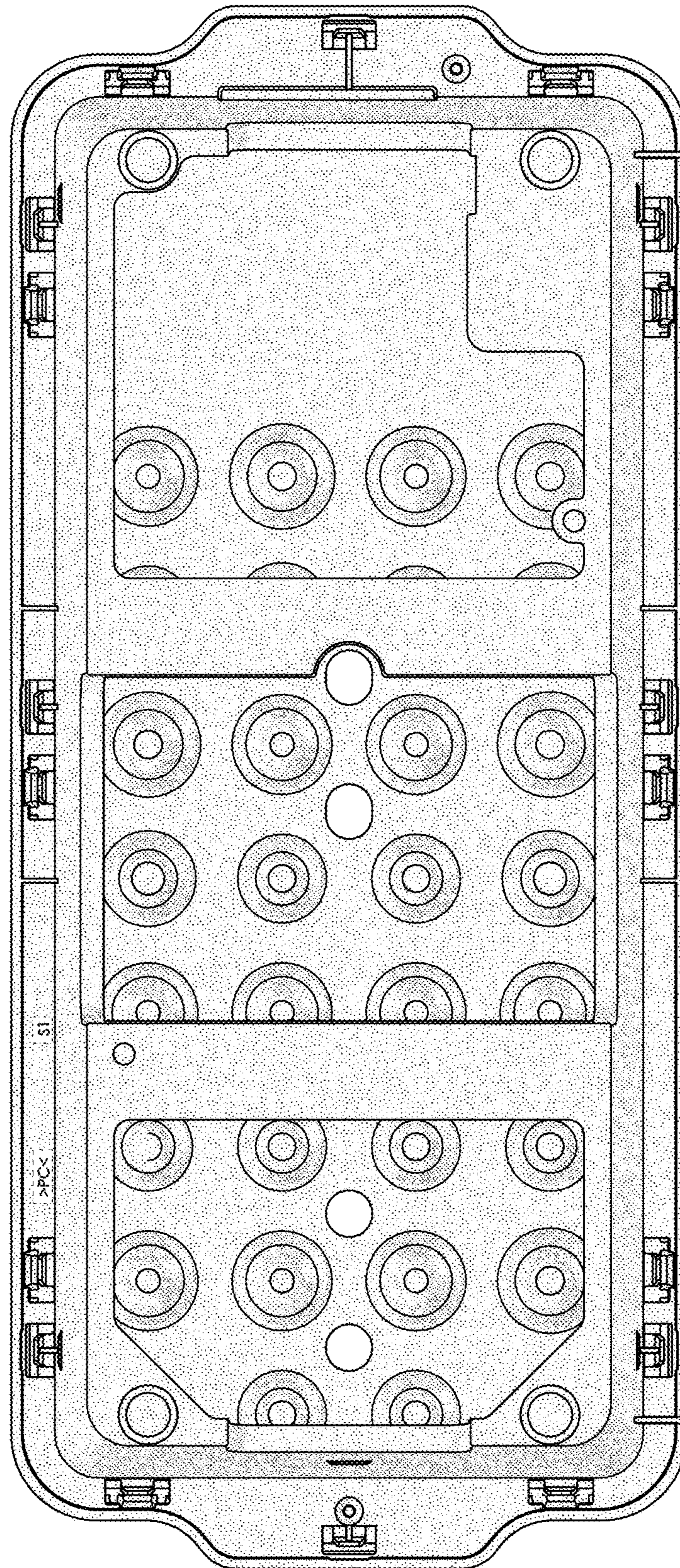


Figure 5

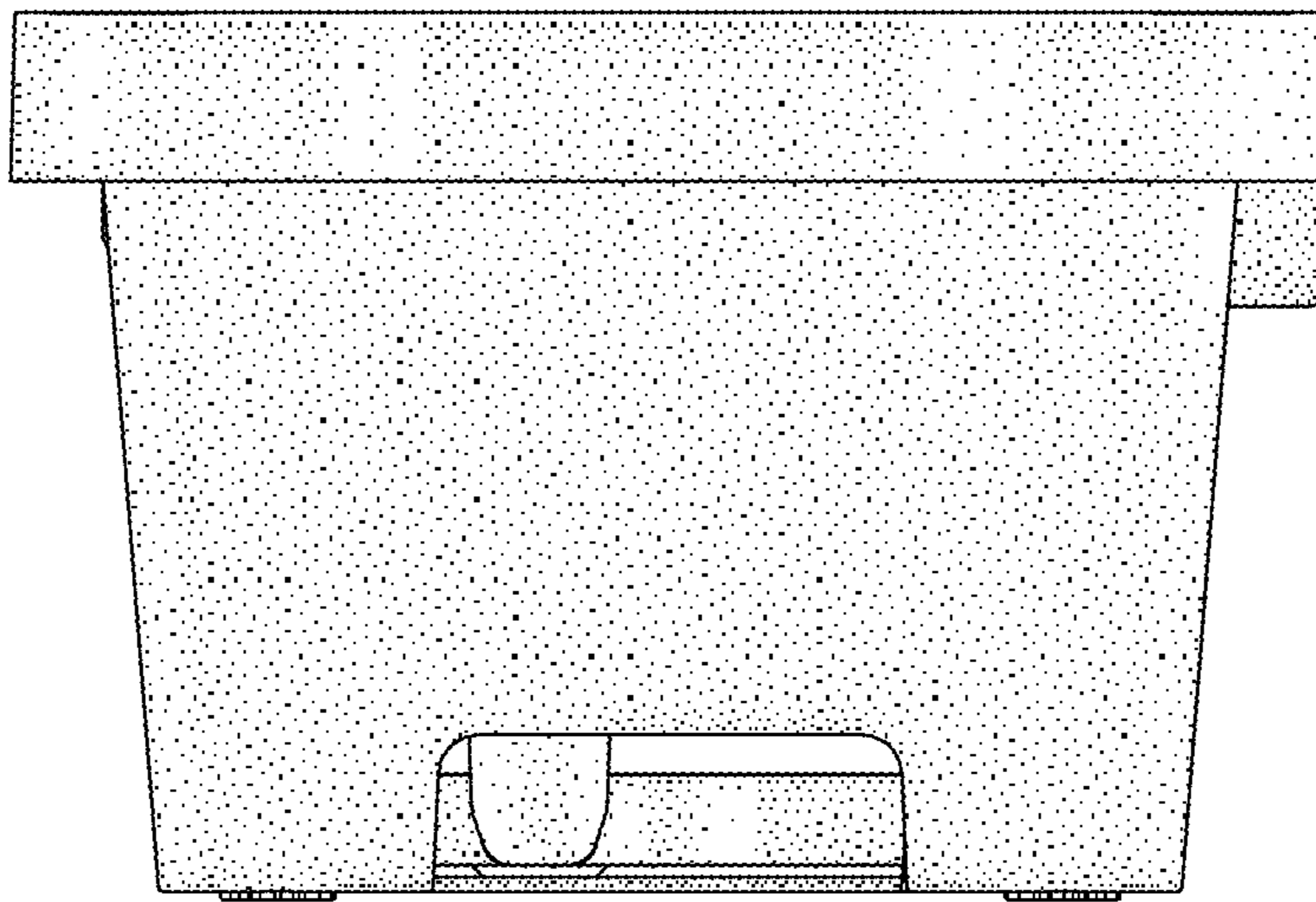


Figure 6

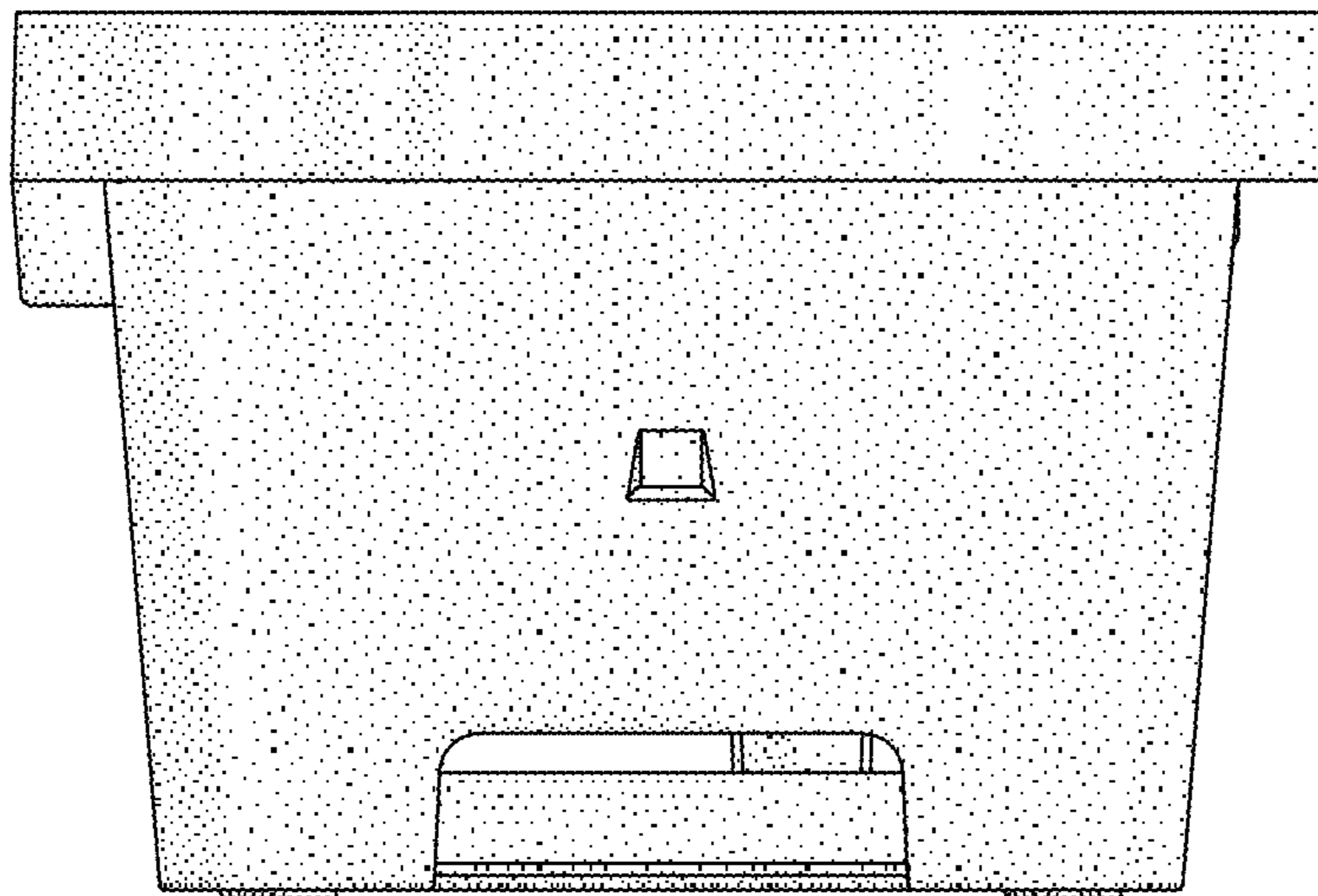


Figure 7

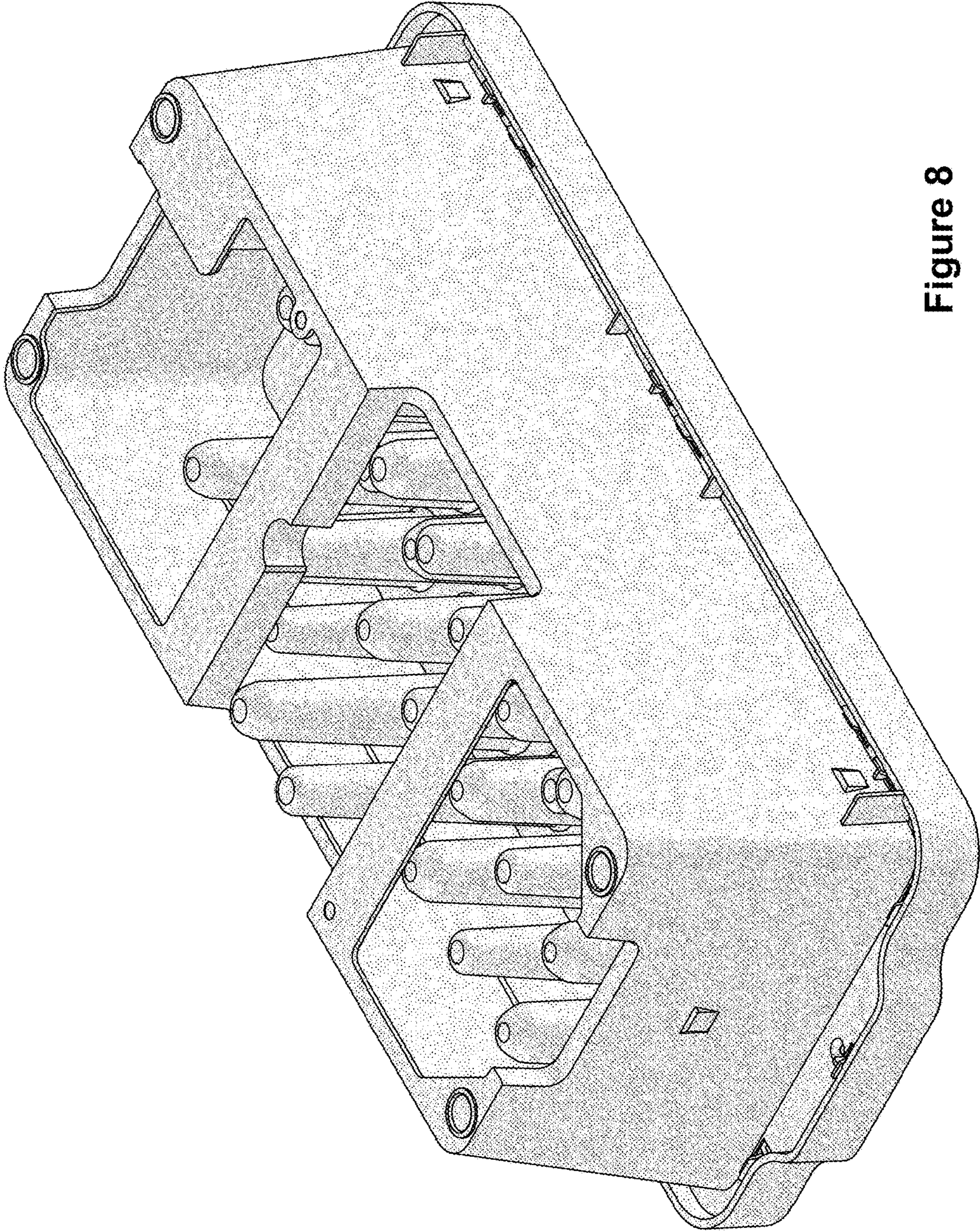


Figure 8

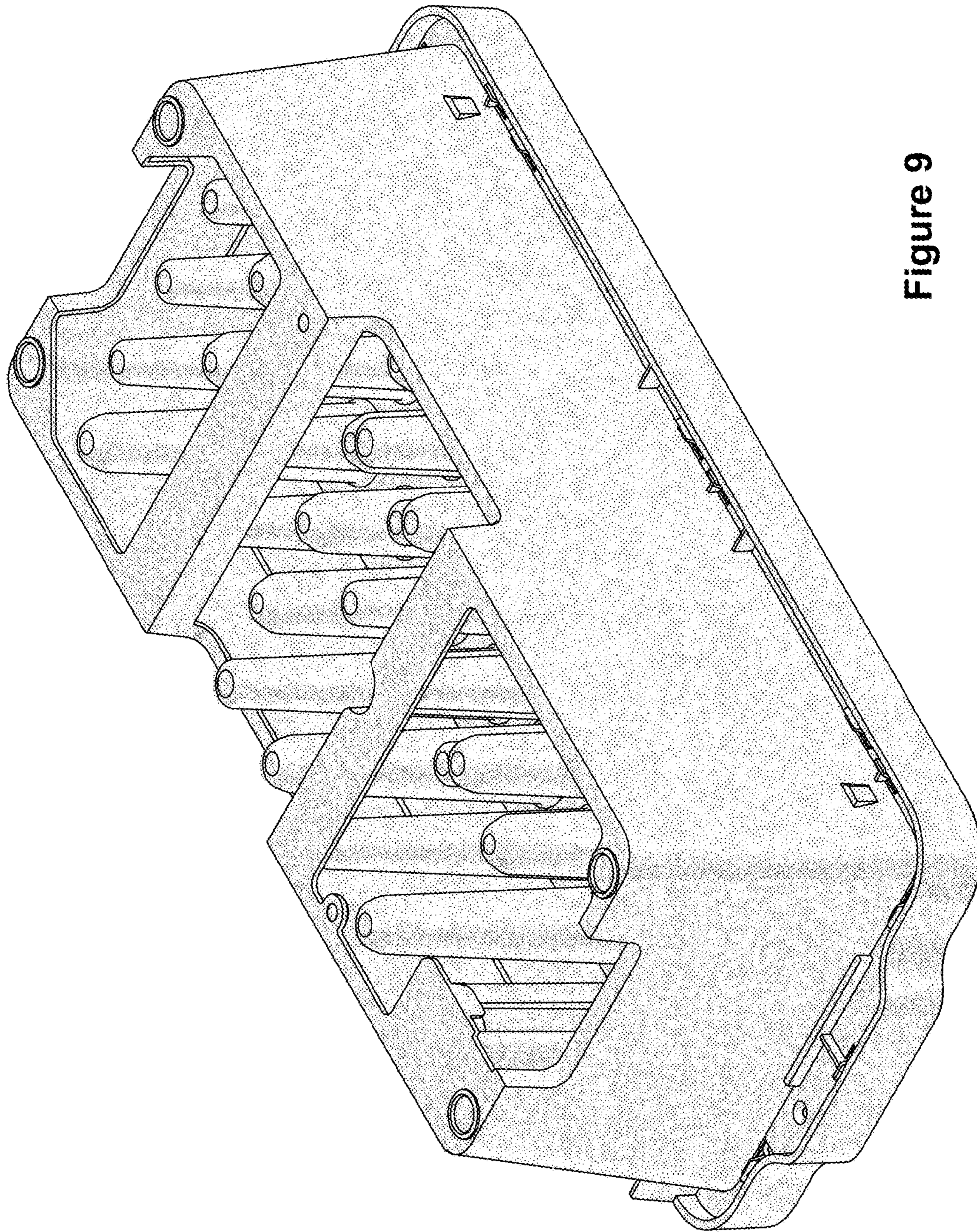


Figure 9

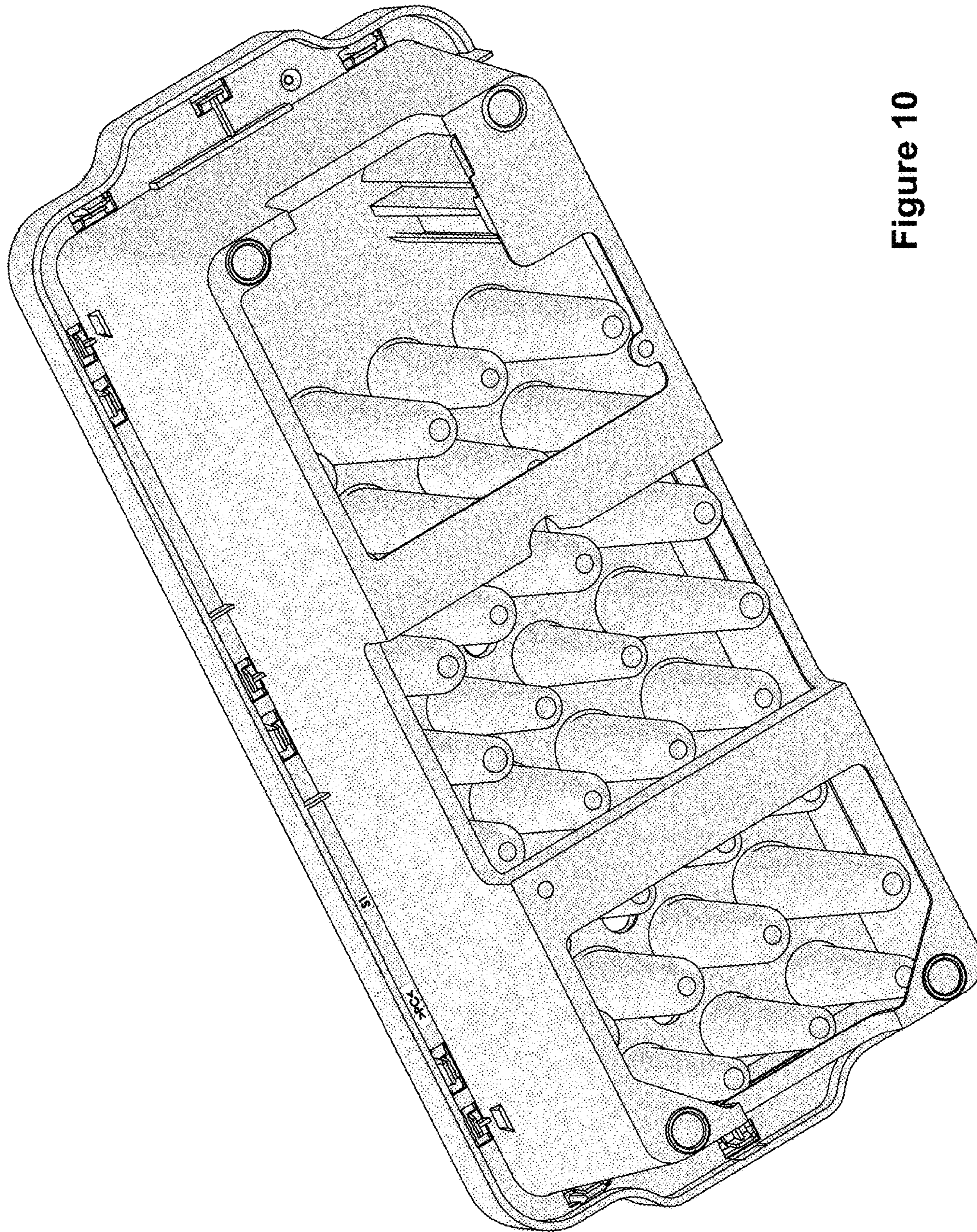


Figure 10

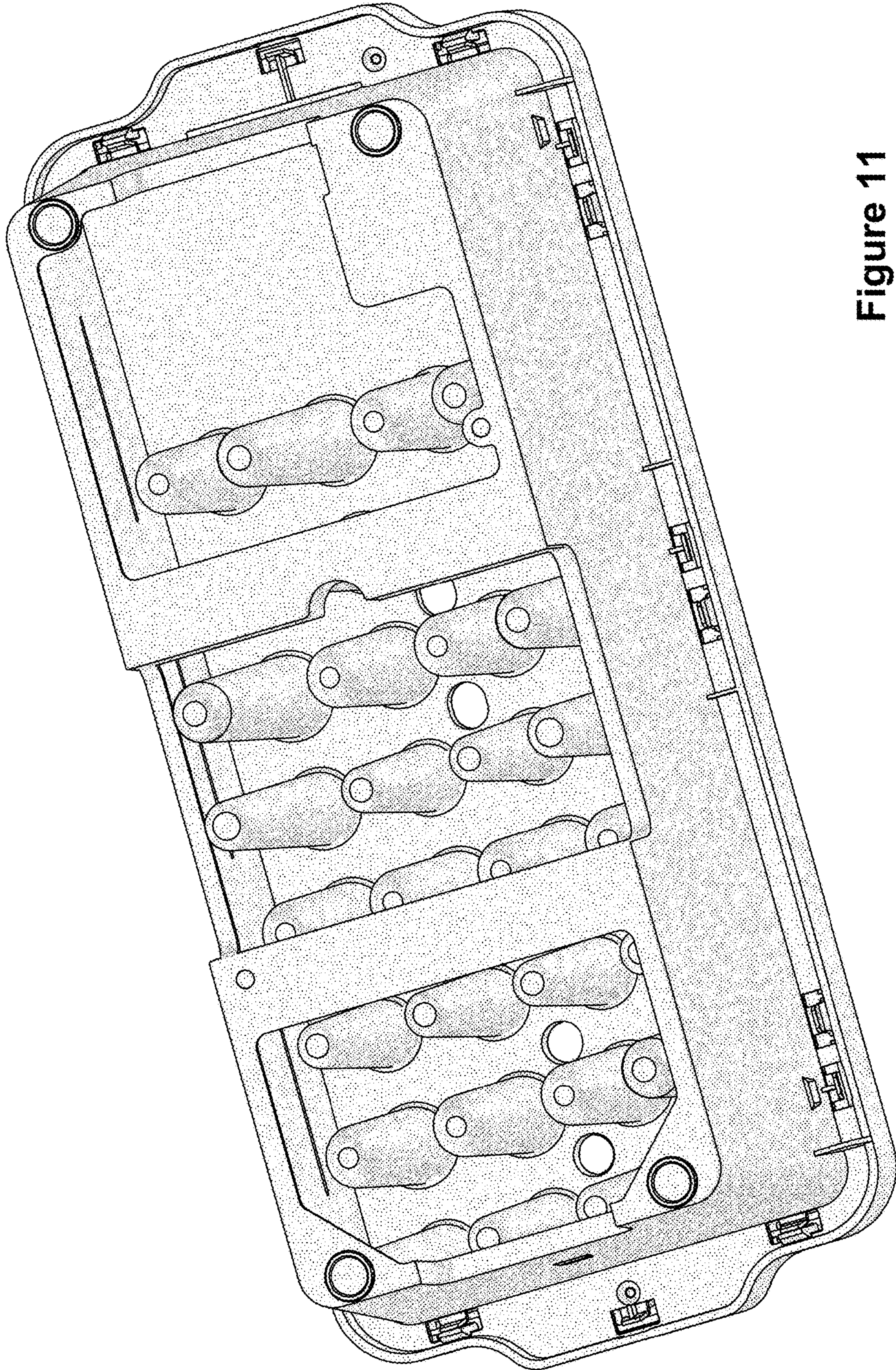


Figure 11

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

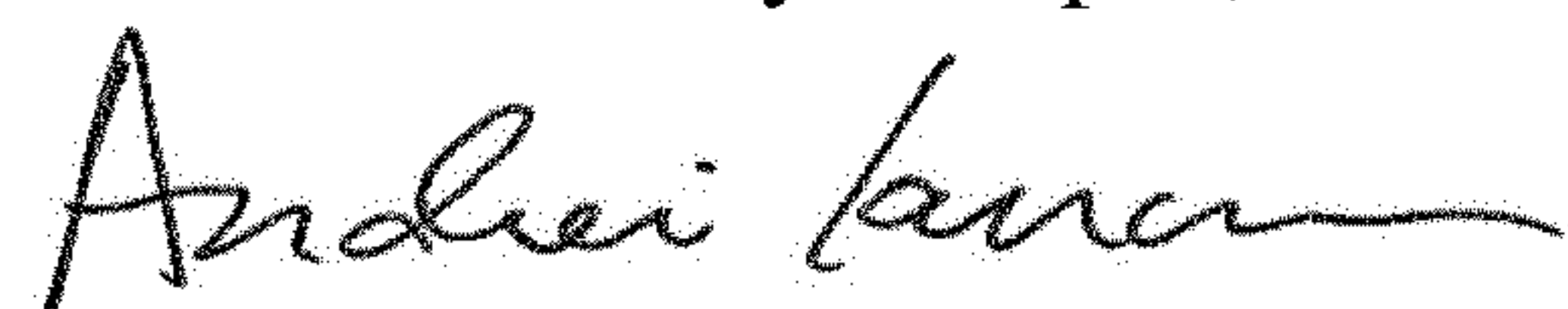
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APPLICATION NO. : 29/589642
DATED : October 22, 2019
INVENTOR(S) : Dangelo et al.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Please replace Patent No. D864,411 S in its entirety with Patent No. D864,411 S in its entirety as shown on the attached pages.

Signed and Sealed this
Fourteenth Day of April, 2020



Andrei Iancu
Director of the United States Patent and Trademark Office

(12) **United States Design Patent** (10) Patent No.: **US D864,411 S**
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(58) Field of Classification Search
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 D24/226, 227, 232, 233; D9/424, 425,
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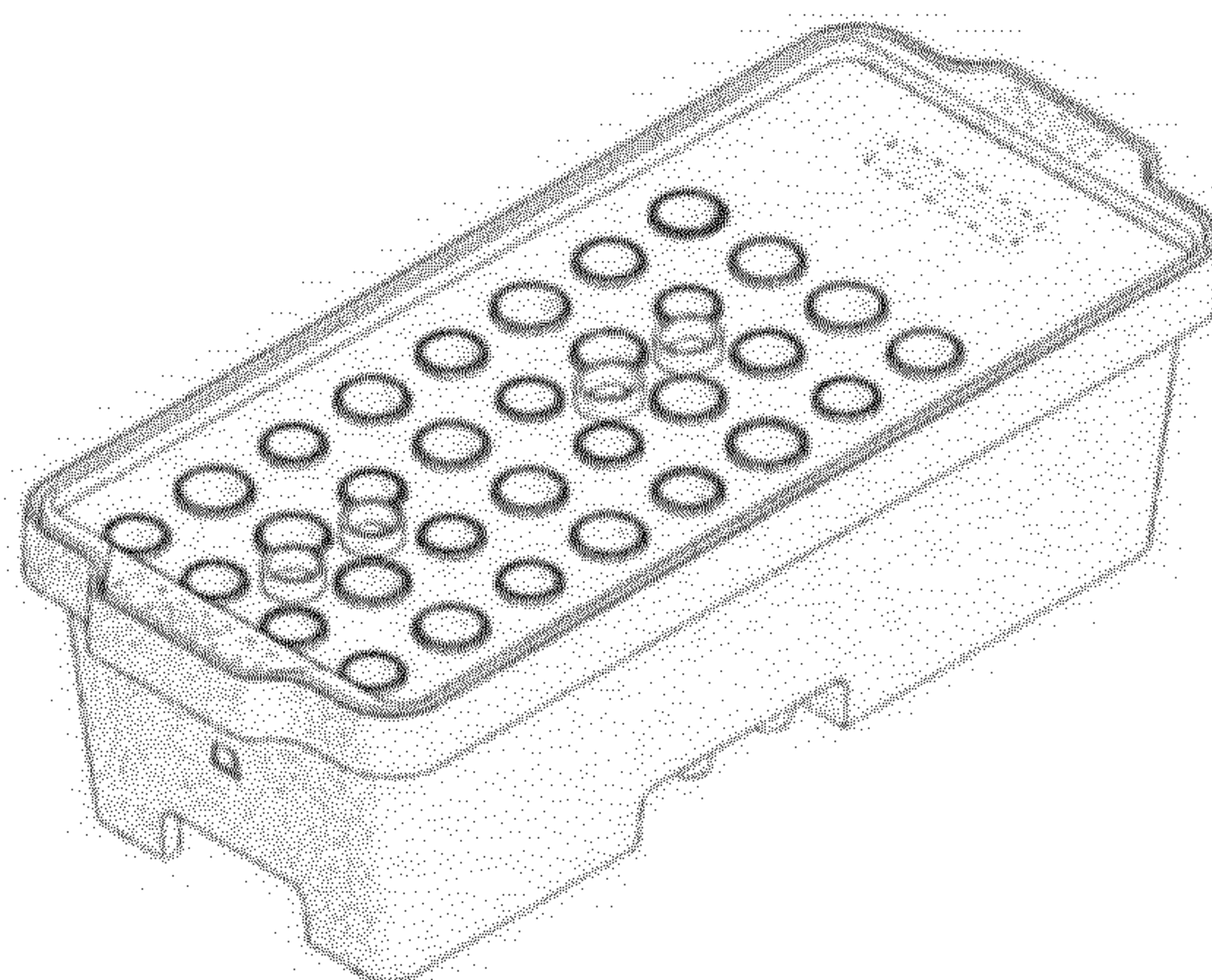
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(Continued)



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Page 2

claimed design in FIGS. 1 and 4, and the ">PC<" and "SI" text, which form no part of the claimed design in FIG. 5.

1 Claim, 11 Drawing Sheets

(58) **Field of Classification Search**

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D7/550.1, 553.1-553.5, 554.3, 554.4;
D18/43, 44; D3/294-295

CPC A47G 23/06; A61B 50/20; A61B 50/30;
A61J 1/00; B01L 3/50; B01L 3/52; B01L
7/00; B01L 7/02; C07K 1/26; C12Q 1/00

See application file for complete search history.

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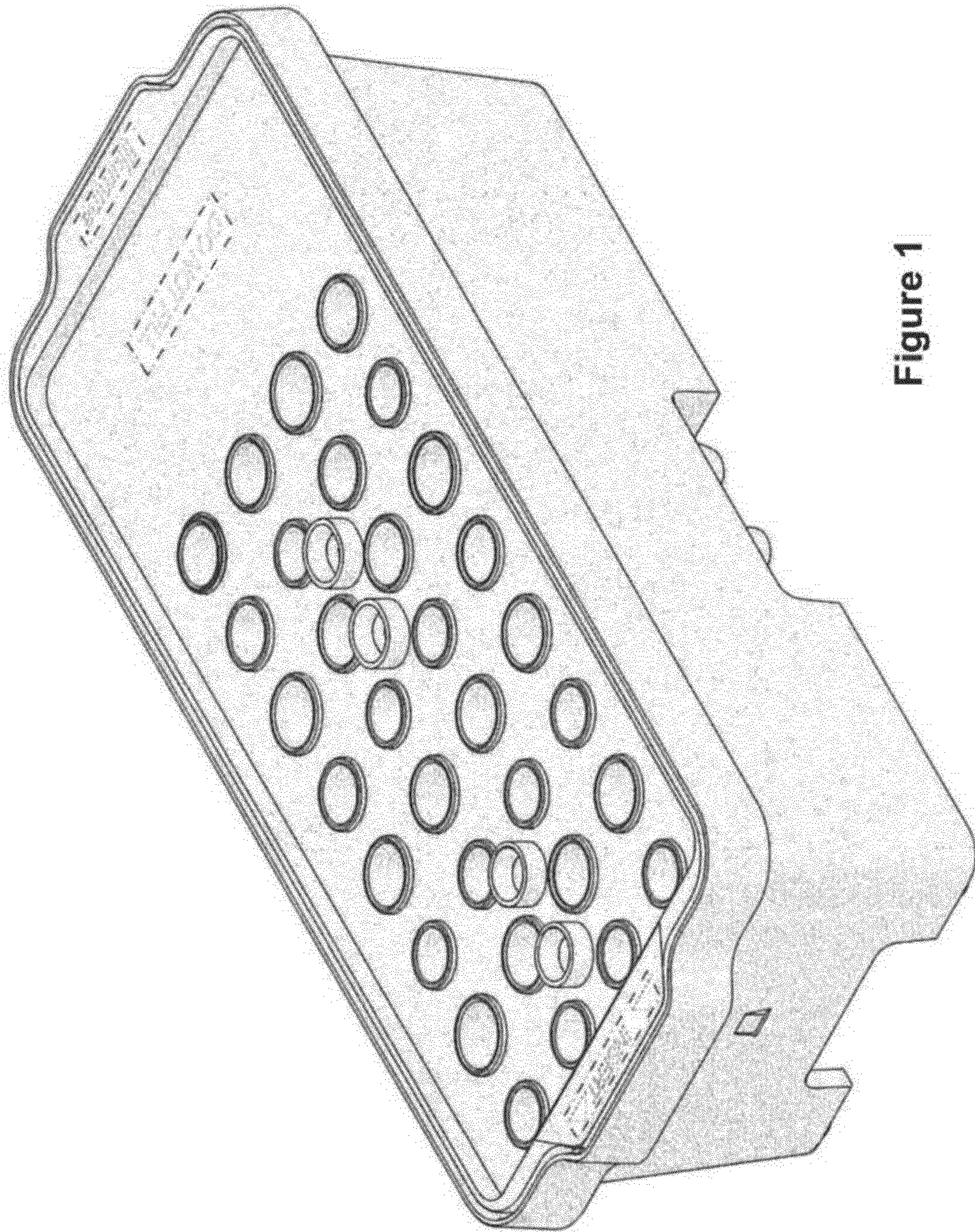


Figure 1

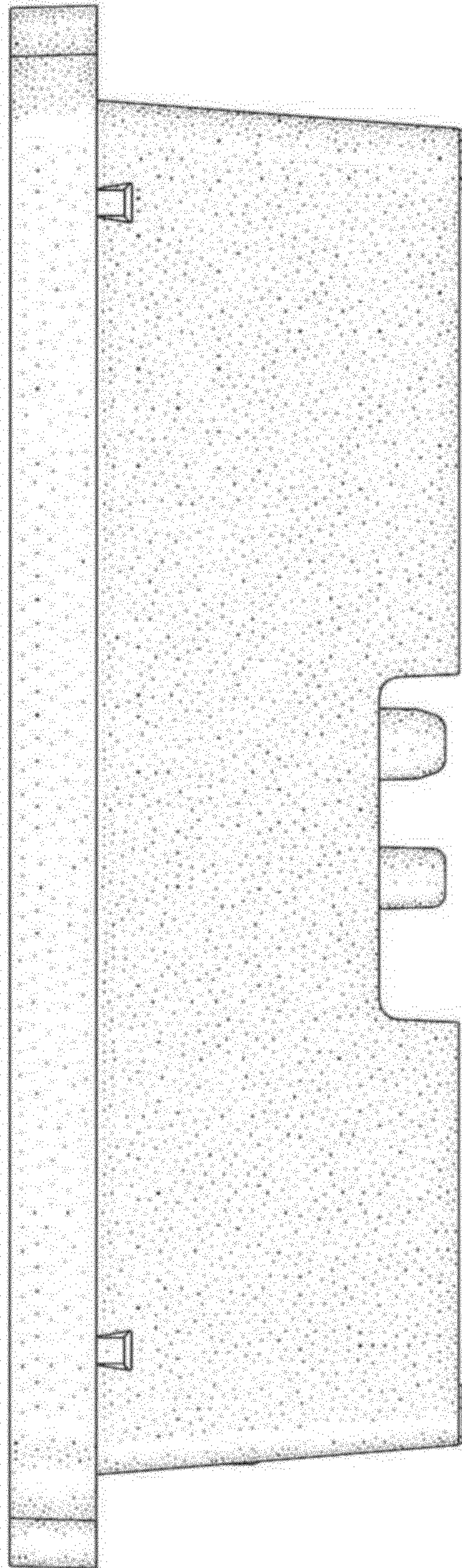


Figure 2

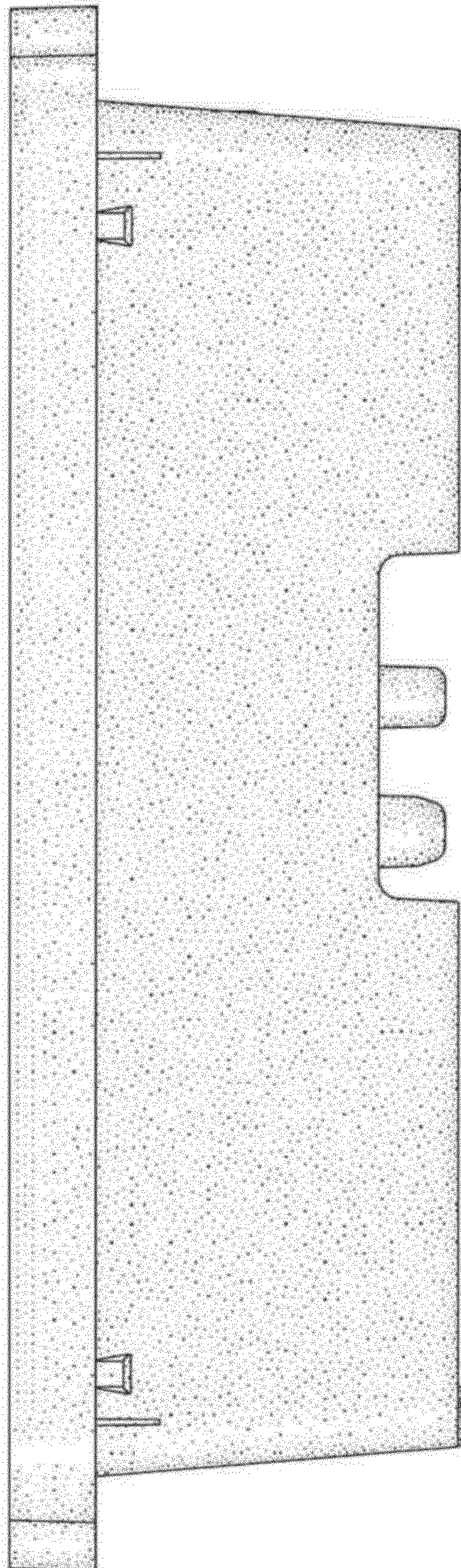


Figure 3

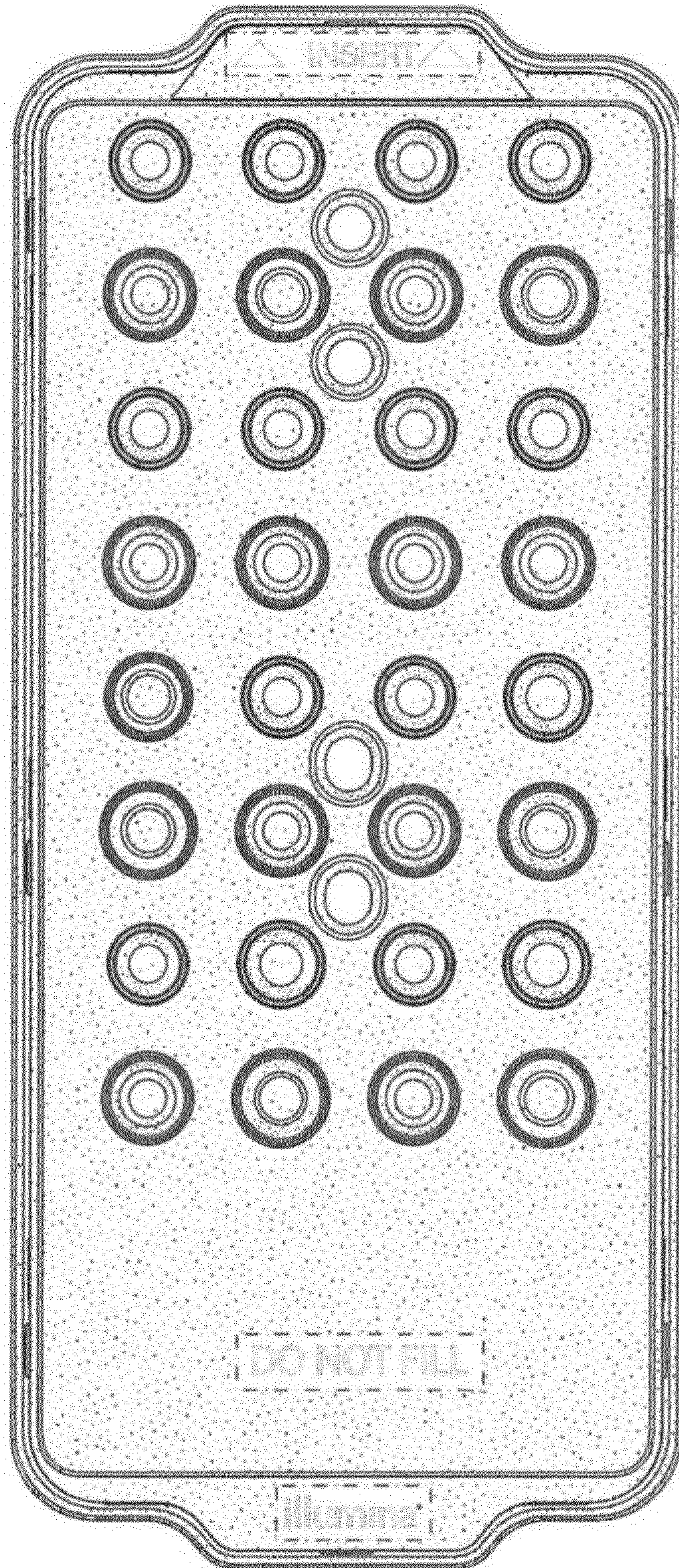


Figure 4

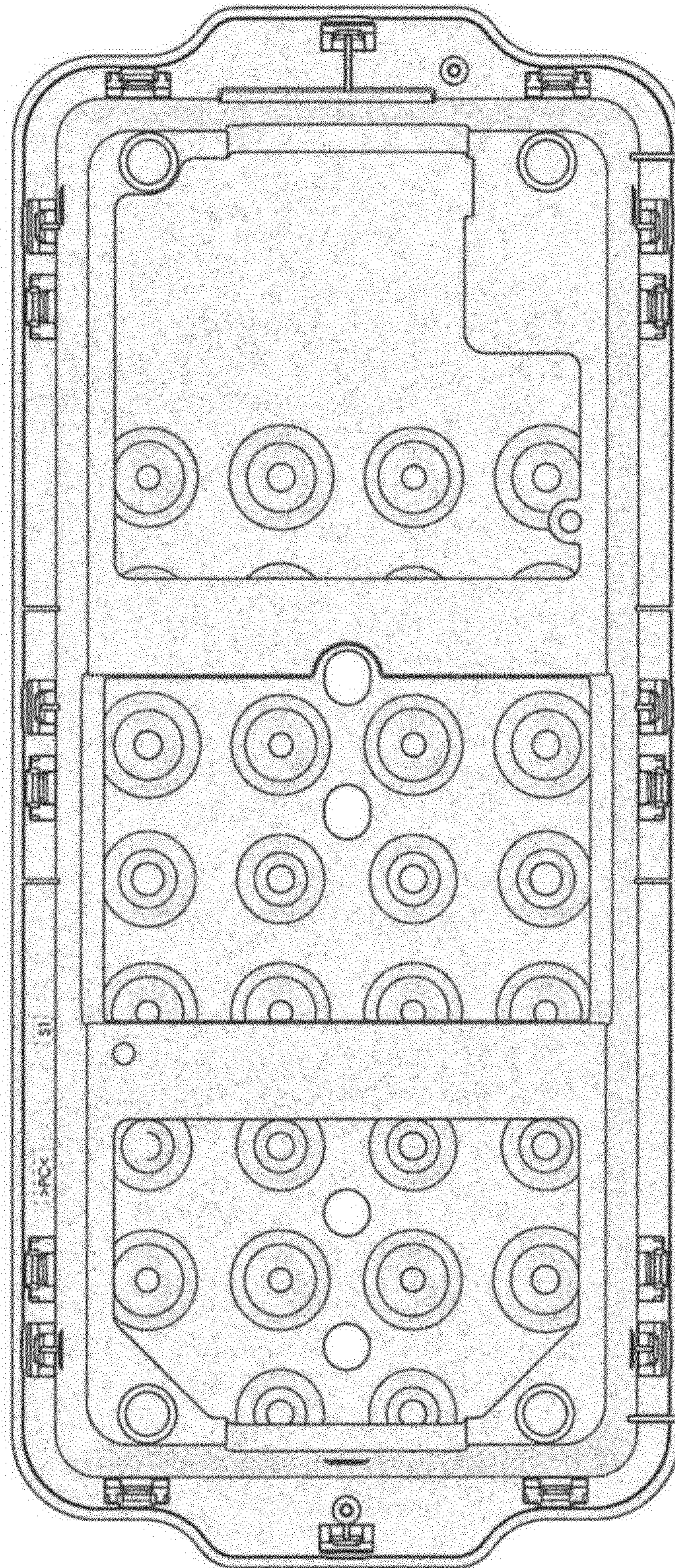


Figure 5

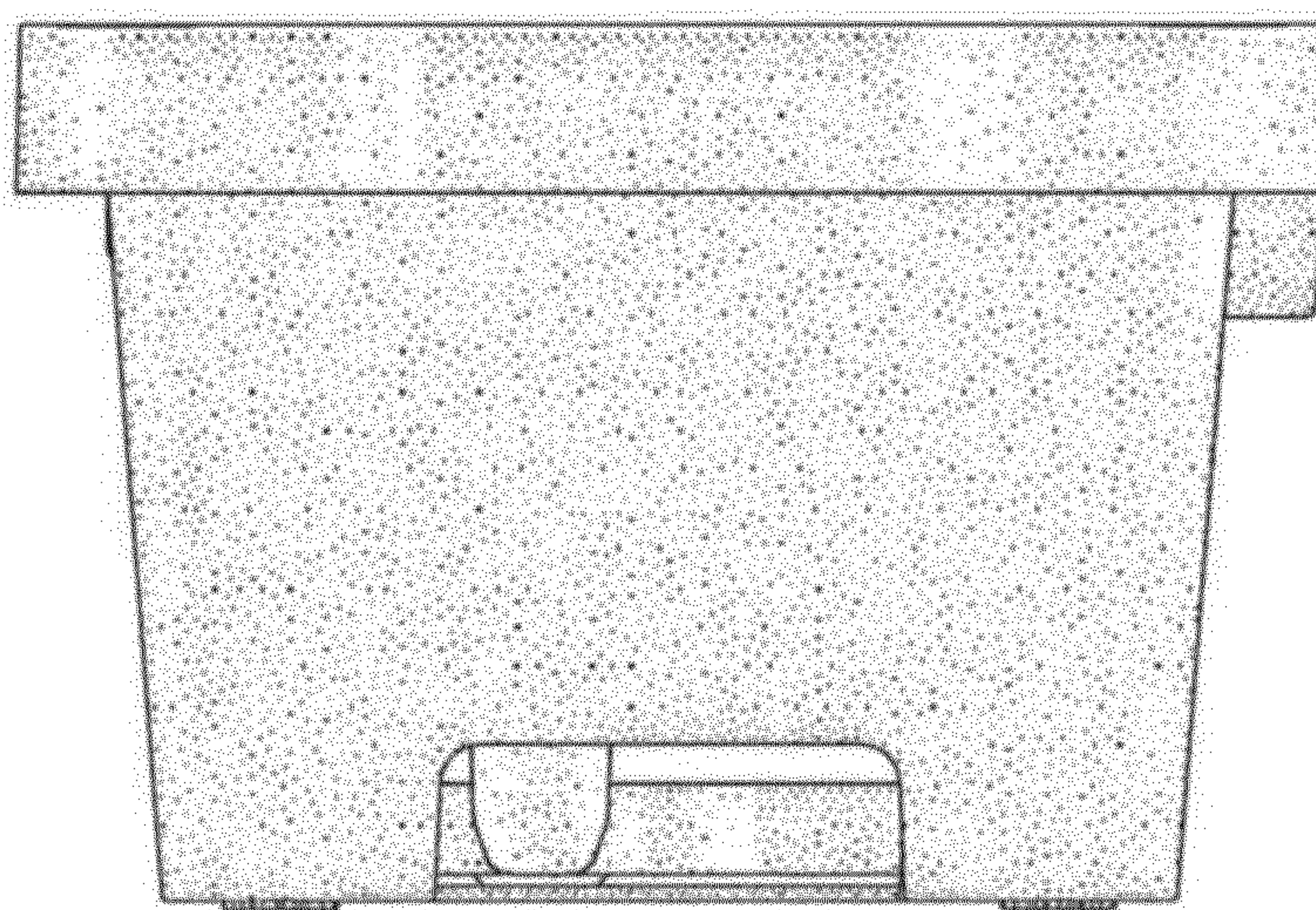


Figure 6

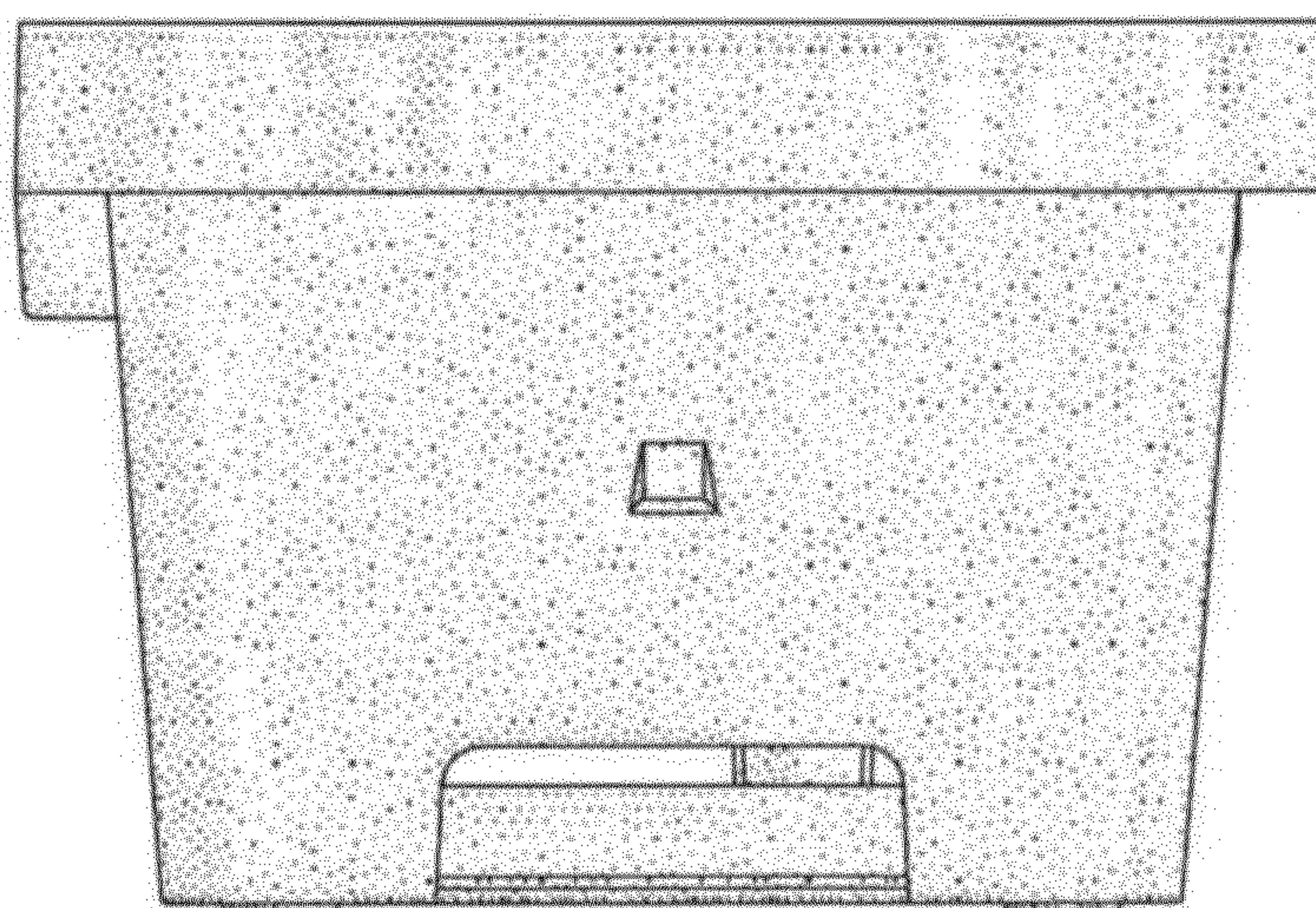


Figure 7

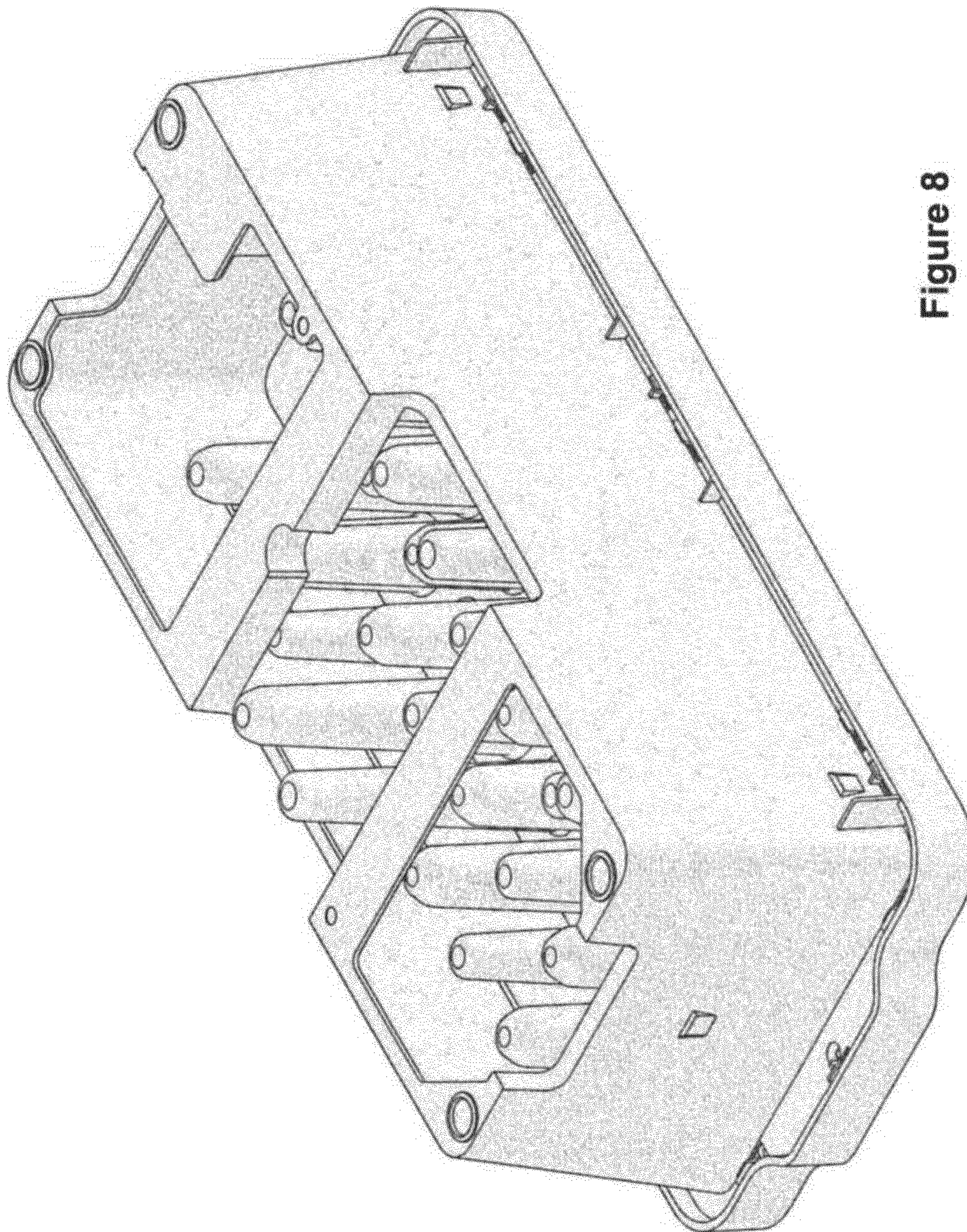


Figure 8

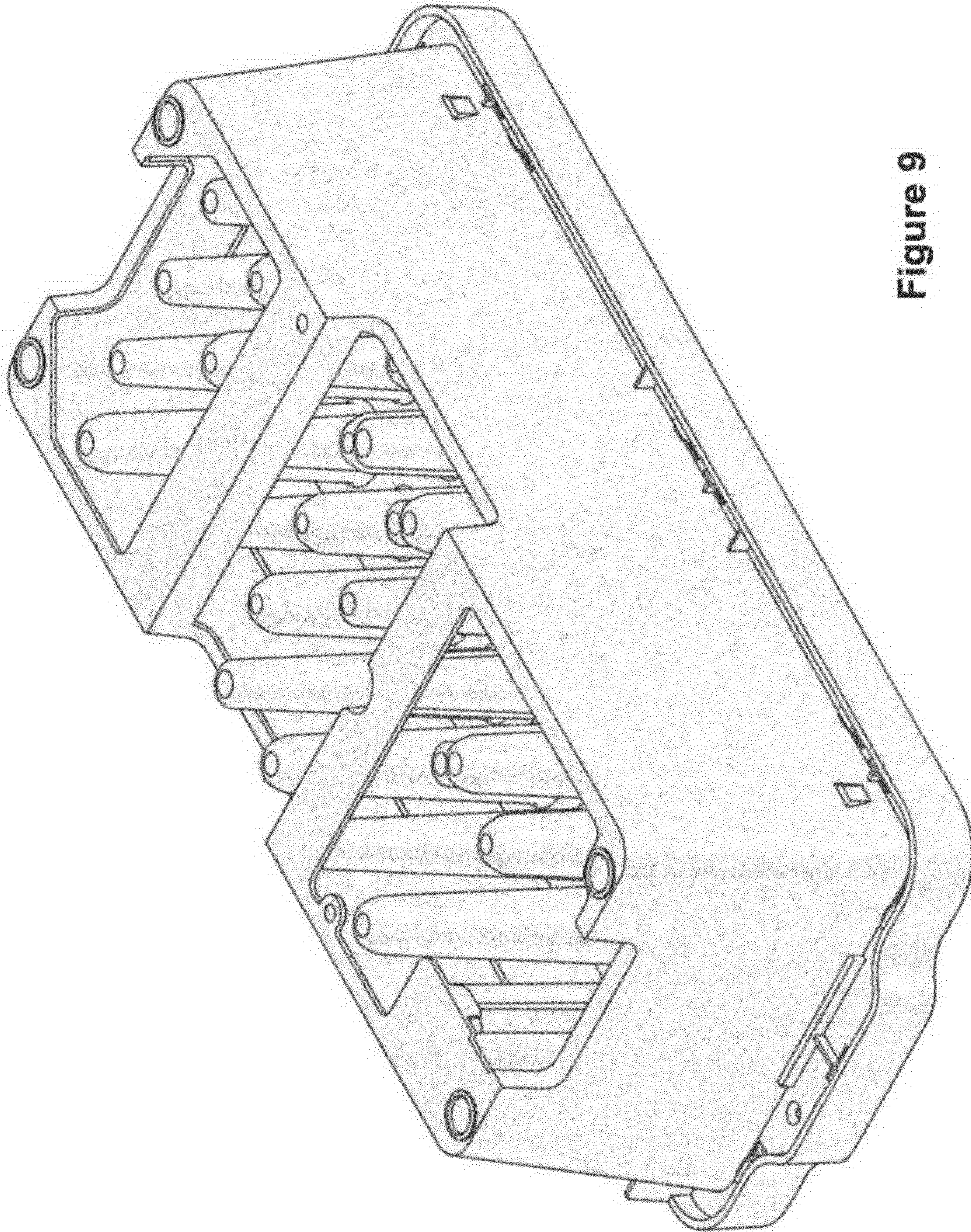


Figure 9

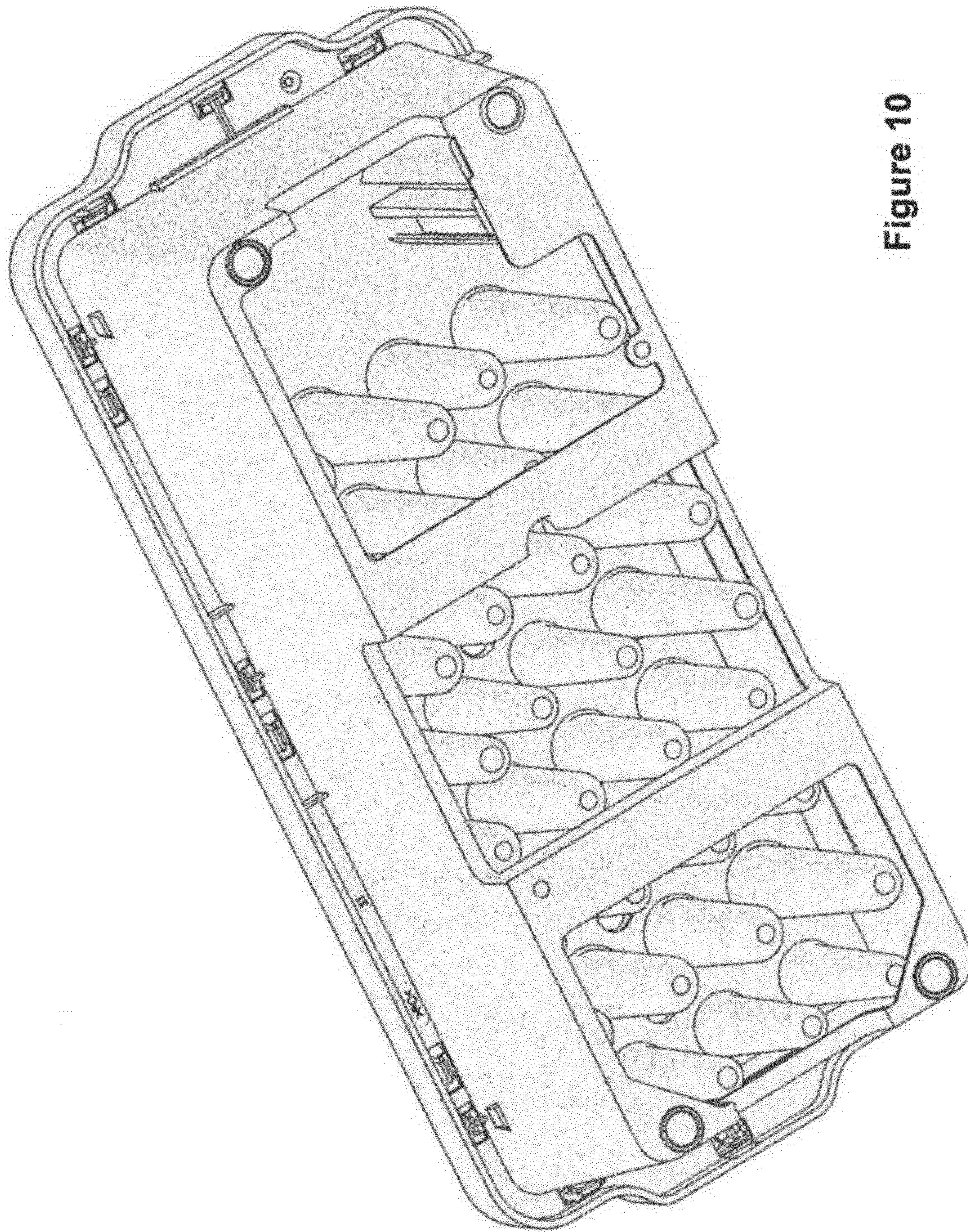


Figure 10

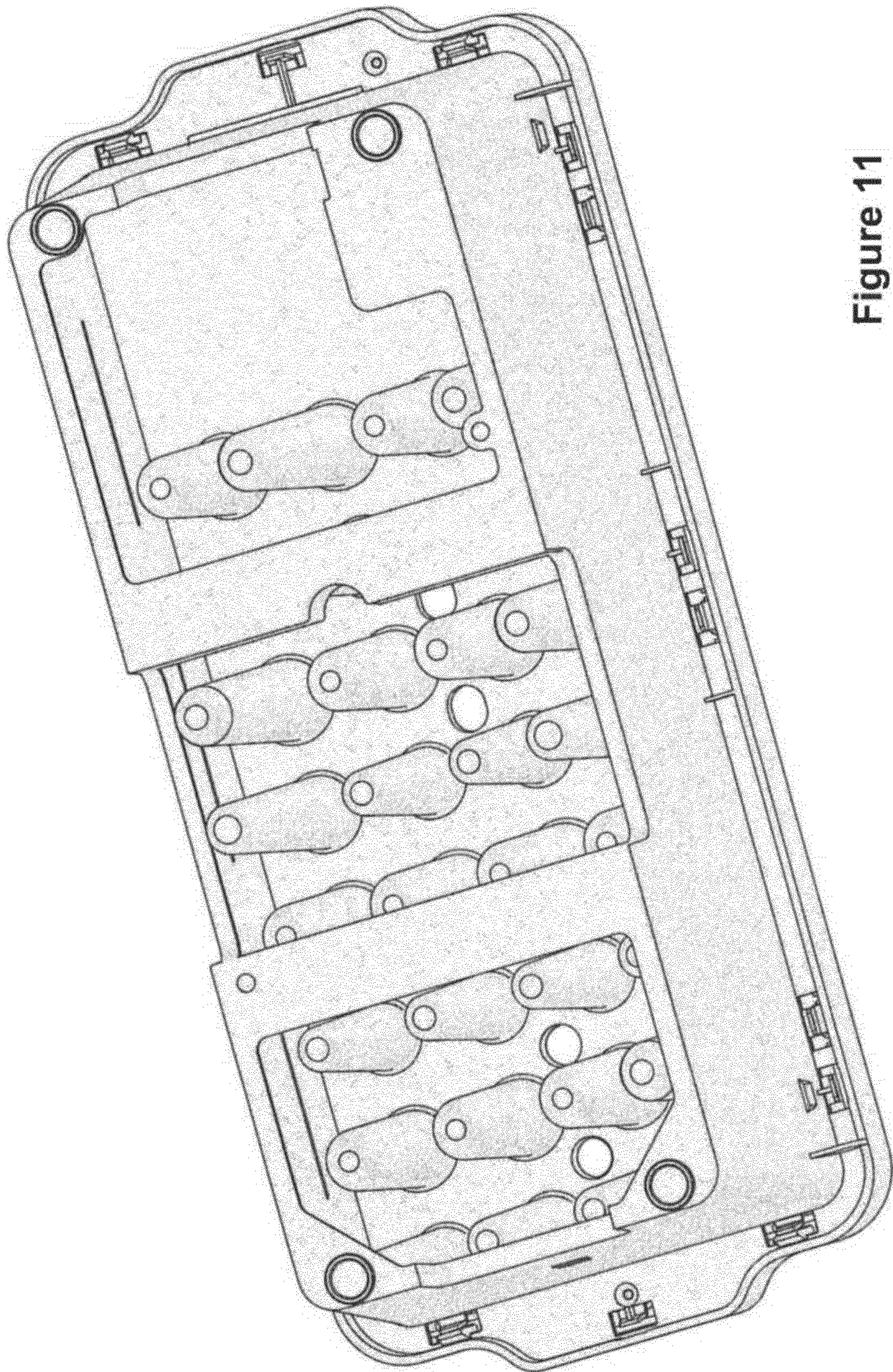


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