



US00D987460S

(12) **United States Design Patent** (10) **Patent No.:** **US D987,460 S**
Lingyun et al. (45) **Date of Patent:** **** May 30, 2023**

(54) **CONTACT SENSOR**

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

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(30) **Foreign Application Priority Data**

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(51) **LOC (14) Cl.** **10-05**

(52) **U.S. Cl.**

USPC **D10/106.6**

(58) **Field of Classification Search**

USPC D10/104.1-106.95, 118-118.2, 70, 46,
D10/81, 96-103; D14/240, 242, 300,
D14/383-385; D8/330-332

CPC G08B 25/10; G08B 29/22; G08B 29/046;
G08B 6/00; G08B 5/36; G08B 13/2491;
G08B 13/24; G08B 3/10; G08B 13/08;
G08B 25/008; G08B 13/1472; G08B
13/149; G08B 17/113; G08B 17/10;
G01R 33/02; G01R 33/038; G01R
33/0047; G01R 33/0023; G01R 33/0088;
G01V 3/081; G10K 15/04; G10K 1/067;
H04N 5/2252; H04N 7/186; H04N
5/2256; H05K 1/144; G06K 7/10425;
G06K 19/0723; G06K 7/10297; G06K
7/10366; H04W 4/80; G07C 9/29; G07C
9/28; G07C 9/00182; G07C 2209/61;
G07C 2209/63; G01S

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

D666,934 S * 9/2012 Krumpe D10/106.6
D744,884 S * 12/2015 Roberts D10/104.1

(Continued)

FOREIGN PATENT DOCUMENTS

CN 305159637 * 12/2018
CN 306876105 * 4/2021

(Continued)

OTHER PUBLICATIONS

David Ludlow, Neos Smart Motion Kit Review, Date first available
Aug. 4, 2020, [online]retrieved Jun. 24, 2022,available from <https://www.trustedreviews.com/reviews/neos-smart-motion-kit> (Year: 2020).*

(Continued)

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(57) **CLAIM**

The ornamental design for a contact sensor, as shown and
described.

DESCRIPTION

FIG. 1 is a perspective view of a contact sensor showing our
new design;

FIG. 2 is another perspective view thereof;

FIG. 3 is a front view thereof;

FIG. 4 is a back view thereof;

FIG. 5 is a left side view thereof;

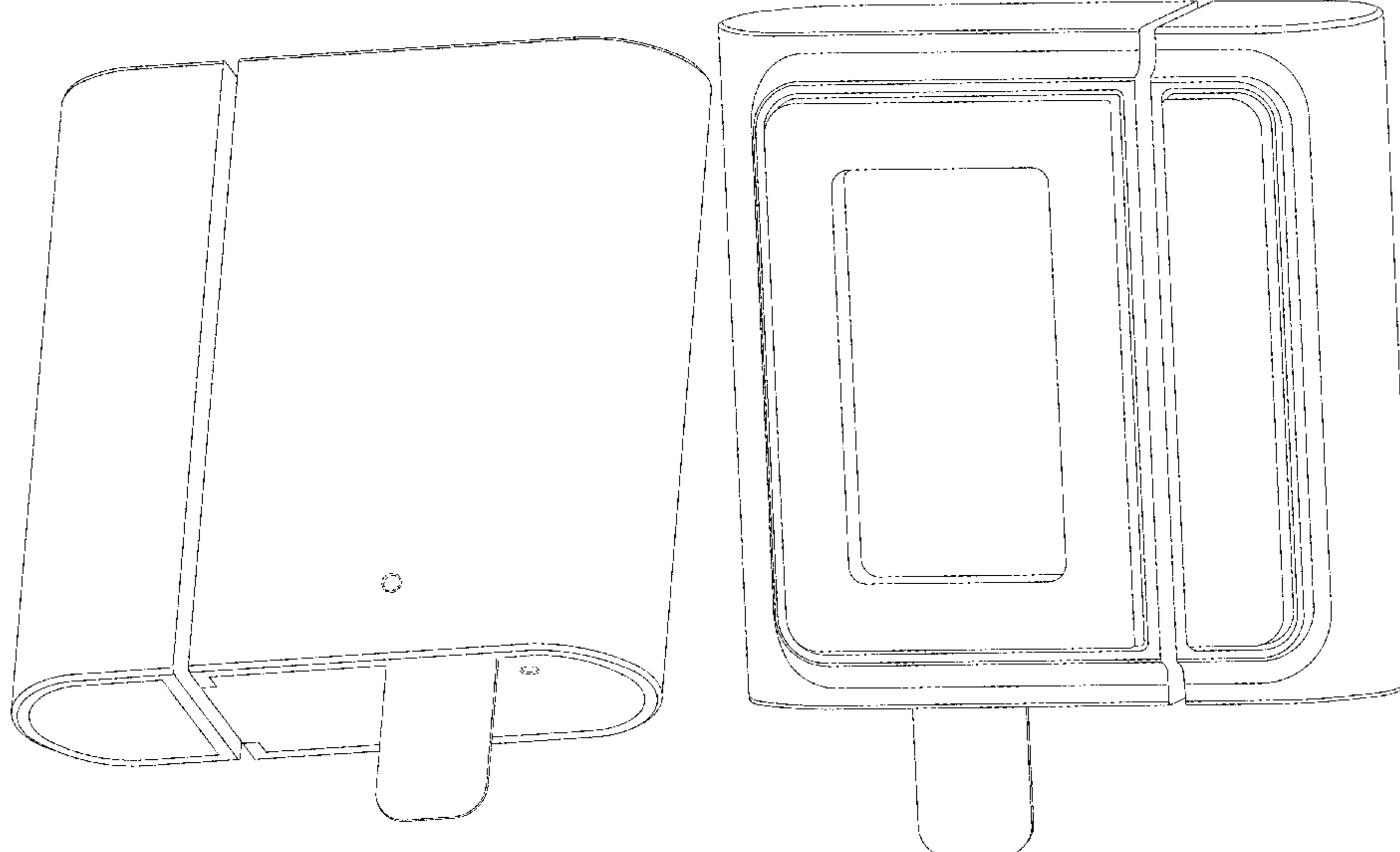
FIG. 6 is a right side view thereof;

FIG. 7 is a top view thereof; and,

FIG. 8 is a bottom view thereof.

The broken lines shown are included for the purpose of
illustrating portions of the contact sensor that form no part
of the claimed design.

1 Claim, 8 Drawing Sheets



(58) **Field of Classification Search**

CPC 13/765; H01Q 5/25; G06F 21/70; G06F 21/86; G06F 1/24; H04B 1/38; H05B 47/11; H05B 47/13; G01J 5/0025; G01J 5/0205; G01J 1/42; G01J 5/10; F21V 23/0471; F21V 17/10; H03K 17/941; G01D 5/34; G01D 11/30; Y02B 20/40; G01N 2201/061; G01N 21/53; Y10T 29/49826; Y10T 29/49194; Y10T 29/49169; Y10T 29/49876; Y10T 29/49881; Y10T 29/49817; Y10T 403/1666

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D787,299 S * 5/2017 Liu D8/350
D805,941 S * 12/2017 Jou D10/118.2
D833,311 S * 11/2018 Reimer D10/106.6
D848,294 S * 5/2019 Laurans D10/70
D864,005 S * 10/2019 Lee D10/106.6
D866,378 S * 11/2019 Reimer D10/106.6
D868,609 S * 12/2019 Wang D10/106.6
D883,832 S * 5/2020 Wang D10/106.6

D893,330 S * 8/2020 Xu D10/106.1
D940,581 S * 1/2022 Wang D10/106.6
2022/0101705 A1* 3/2022 Carlson G08B 3/10

FOREIGN PATENT DOCUMENTS

CN 307346994 * 3/2022
EM 003373315-0005 * 9/2016
GB 8102175000-2000 * 6/2018
JP D1677183 * 4/2020
WO D211711-002 * 10/2020

OTHER PUBLICATIONS

2gig, DW10 Thin Door Window Contact, Date first available Jun. 26, 2010, [online]retrieved Jun. 15, 2022,available from https://www.amazon.com/2gig-DW10-Window-Contact-Listed/dp/B003TZ9YZU/ref=sr_1_72_ssapa?crd=OGBQW34CNX0V&keywords=XFINITY+Door%2FWindow+sensor&qid=1655301309&s=hi&sprefix=xfinity+door%2Fw (Year: 2010).*
VOCOLinc Store, Door Window Alarm Magnetic Contact Sensor, Date first available Apr. 15, 2020, [online]retrieved Jun. 22, 2022, available from https://www.amazon.com/dp/B087PCQ518/ref=sspa_dk_detail_6?psc=1&pd_rd_i=B087PCQ518&pd_rd_w=ncOq2&content-id=amzn1.sym.3481f441-61ac-4028-9c1a-7f9ce8ec50c5&pf_rd_p= (Year: 2020).*

* cited by examiner

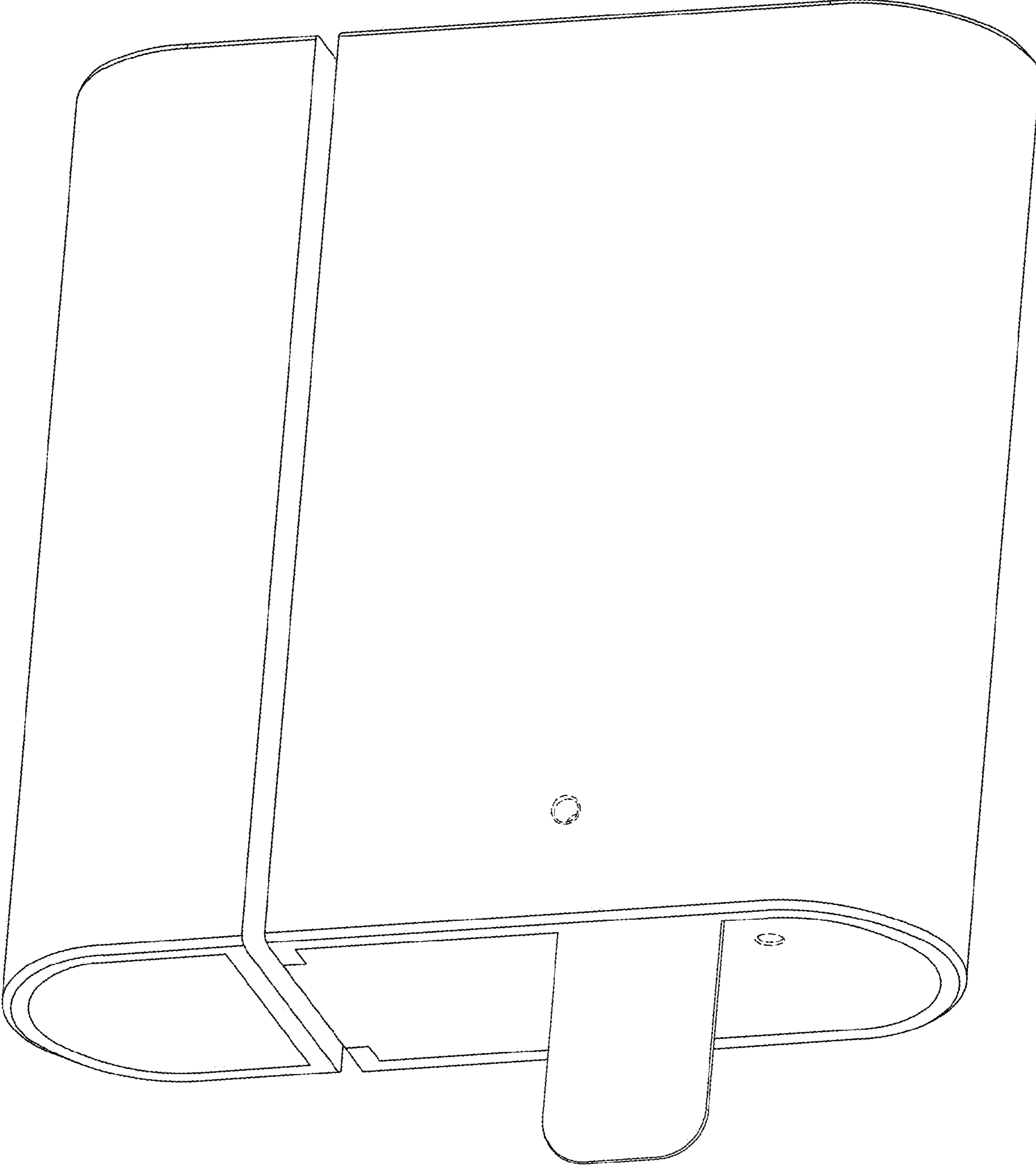


FIG. 1

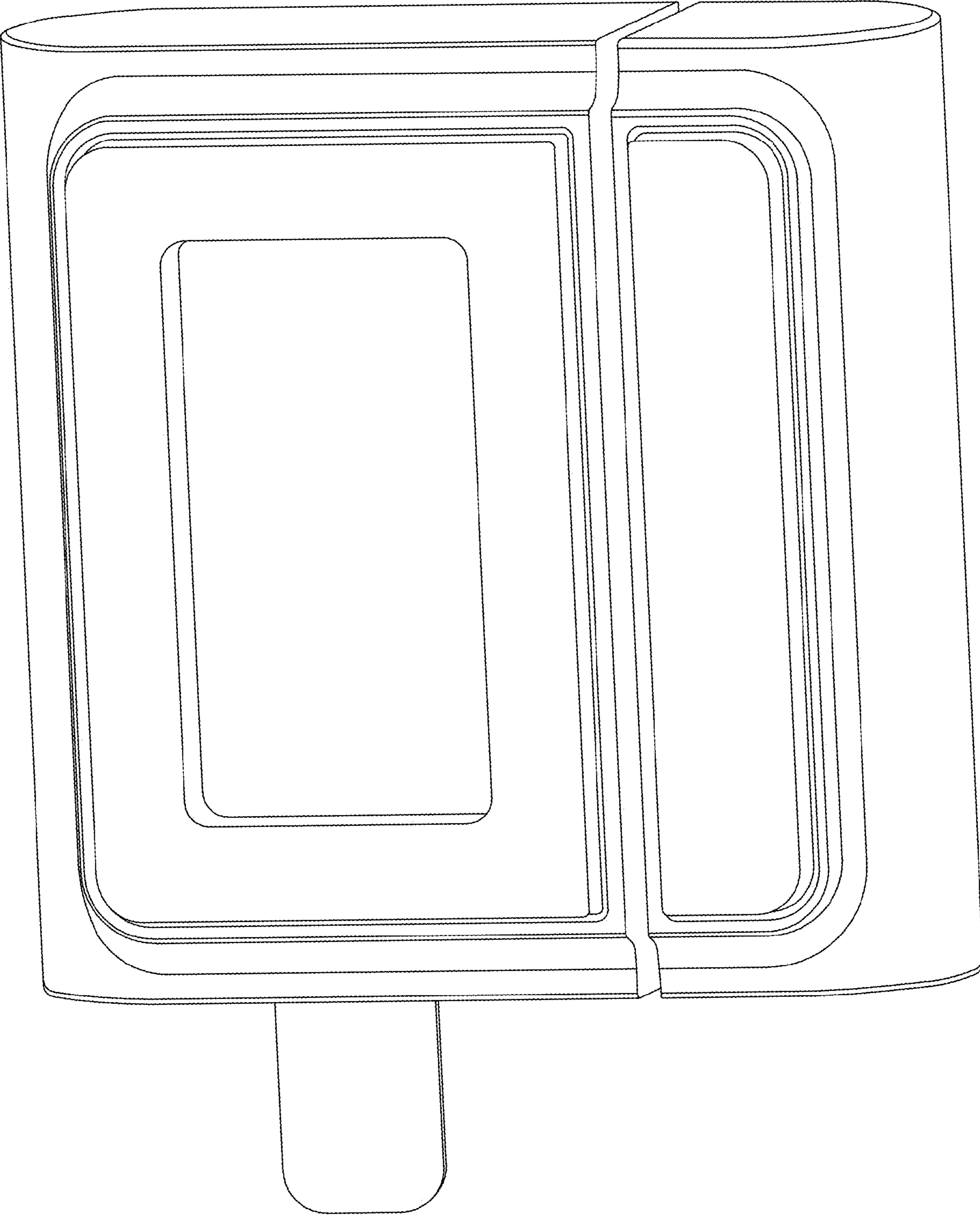


FIG. 2

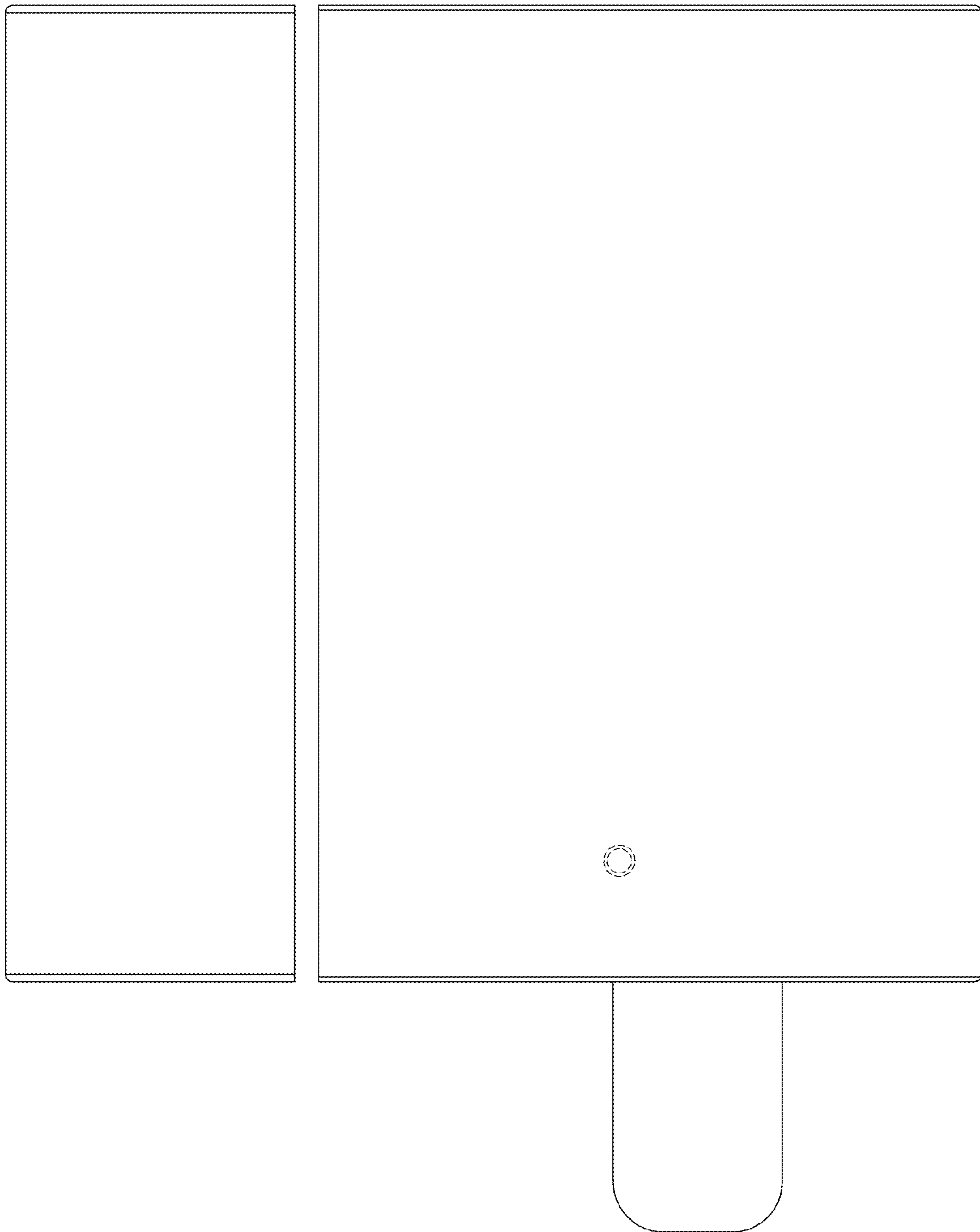


FIG. 3

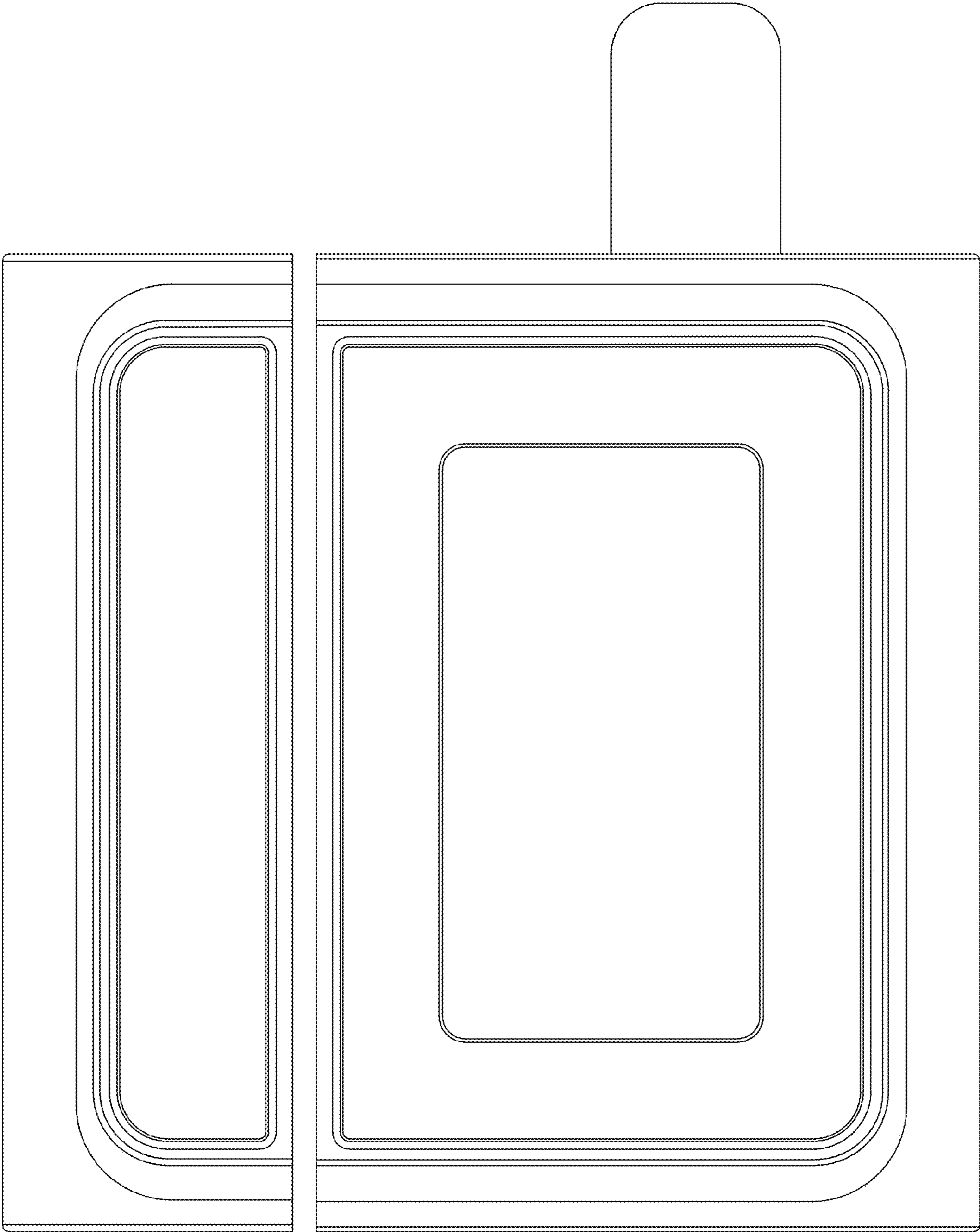


FIG. 4

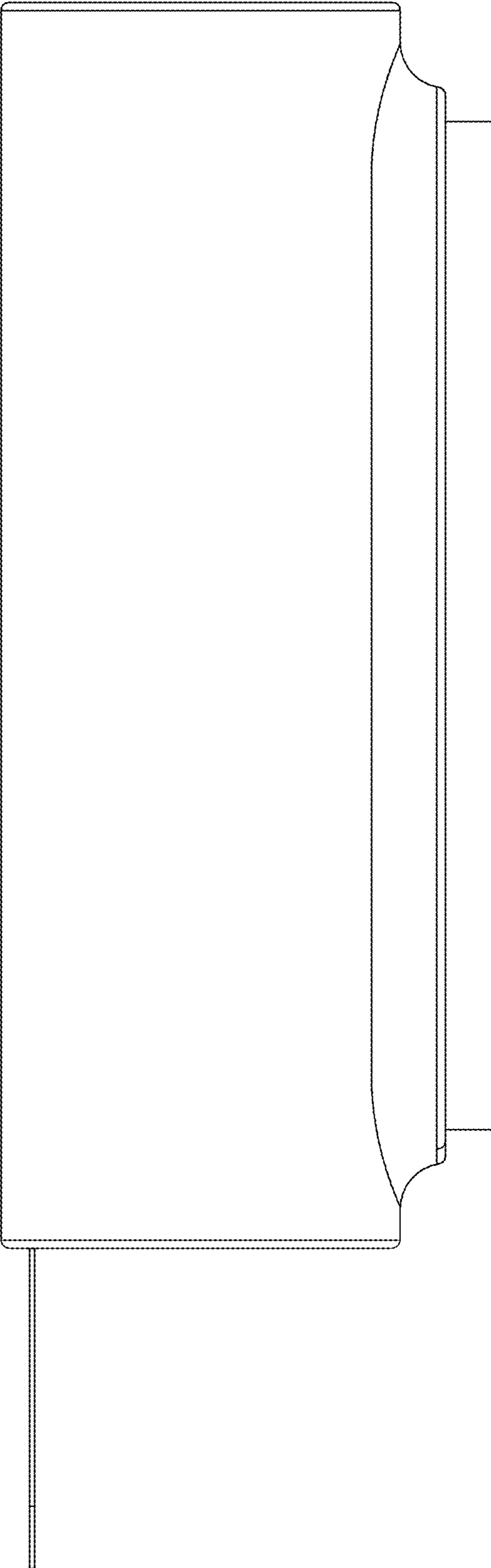


FIG. 5

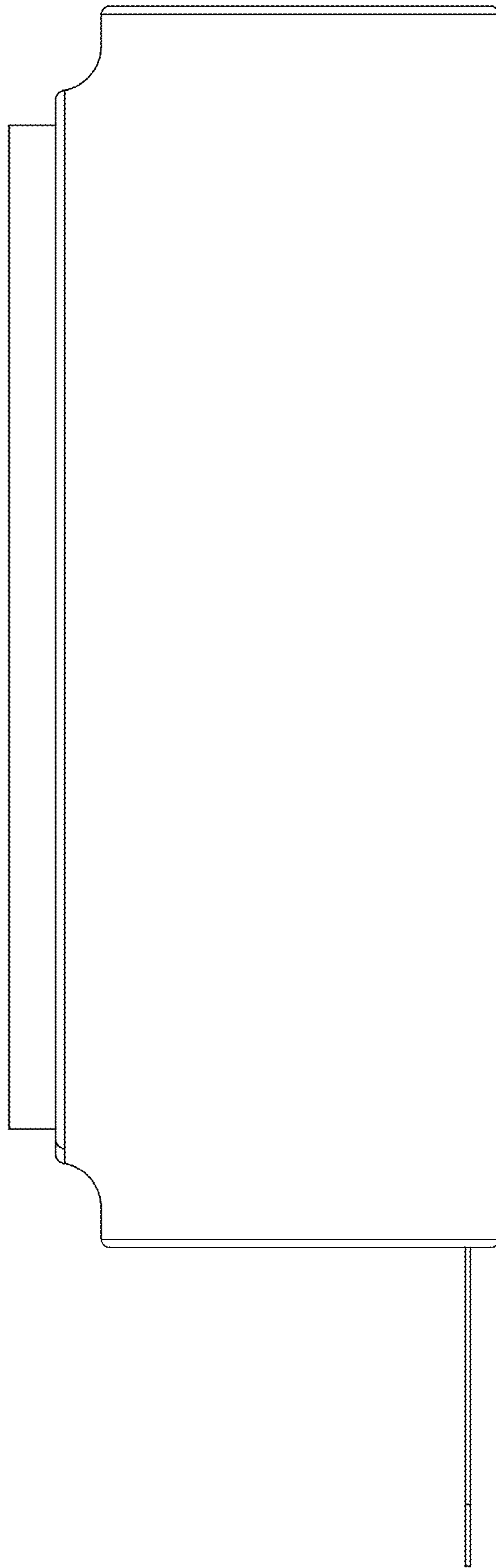


FIG. 6

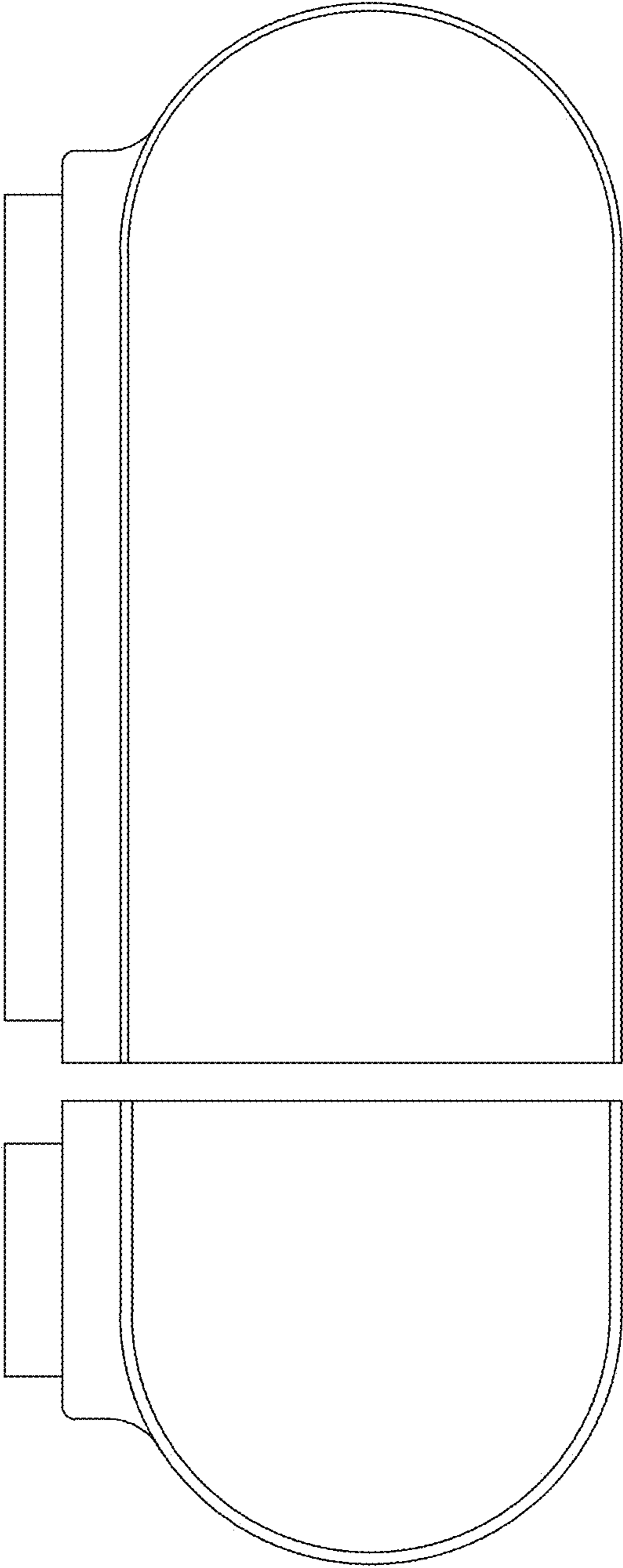


FIG. 7

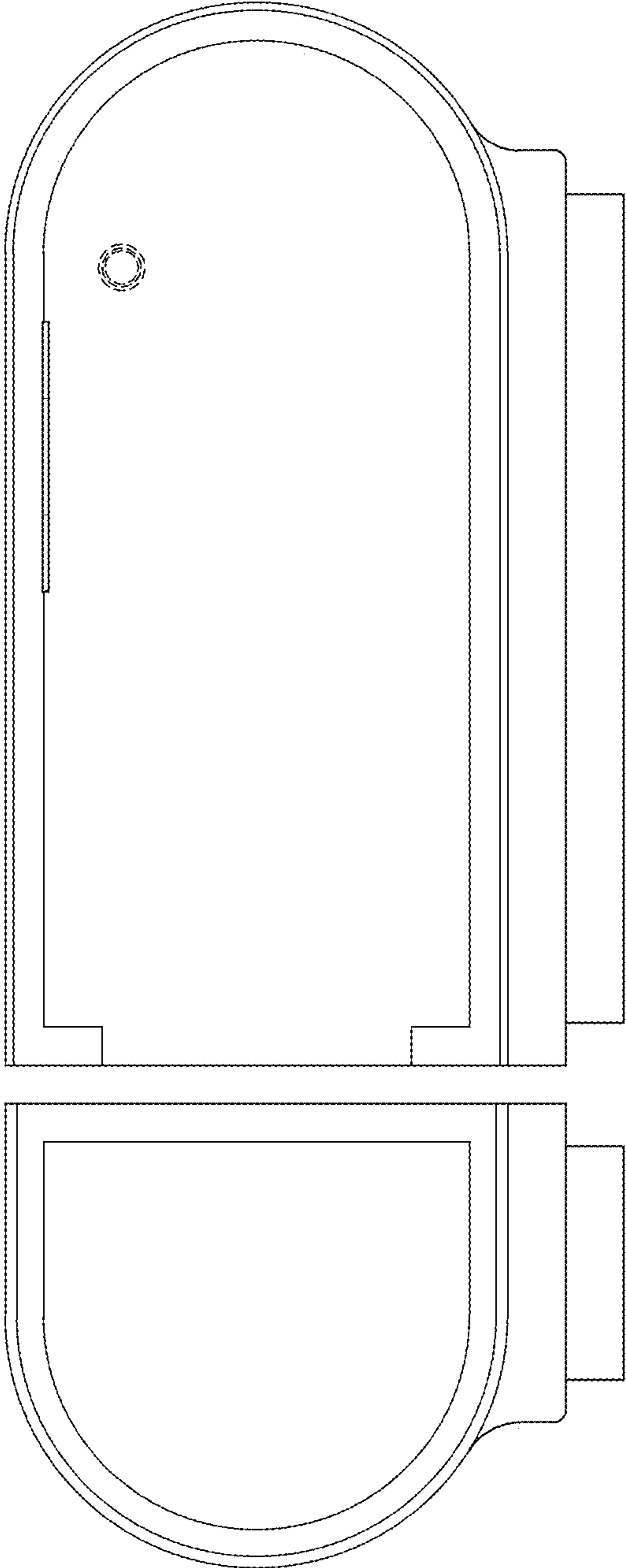


FIG. 8