

US00D864005S

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

(10) **Patent No.: US D864,005 S**  
(45) **Date of Patent: \*\* Oct. 22, 2019**

(54) **DOOR SENSOR**

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

(21) Appl. No.: **29/655,713**

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(30) **Foreign Application Priority Data**

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(51) **LOC (12) Cl.** ..... **10-05**

(52) **U.S. Cl.**  
USPC ..... **D10/106.6**

(58) **Field of Classification Search**

USPC ..... D10/104.1–106.95, 108–109.2, 114.1, D10/114.2, 114.6, 114.7, 114.9, 116.1, D10/118, 118.1, 118.2, 120, 121; D13/125, 134, 158; D14/159; D16/203; D26/72; D8/330, 331, 332, 333, 334, D8/335, 336, 337, 338, 339, 340, 341, D8/342, 343, 396, 356, 394; 292/288,

(Continued)

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D666,934 S \* 9/2012 Krumpe ..... D10/106.6  
D680,459 S \* 4/2013 Corso ..... D10/106.6

(Continued)

**FOREIGN PATENT DOCUMENTS**

CN 302670835 S 12/2013  
CN 303255414 S 6/2015

**OTHER PUBLICATIONS**

“Samsung SmartThings Multipurpose Sensor”. available Aug. 22, 2018, [online], [site visited May 20, 2019]. Retrieved from Internet, (Year: 2018).\*

(Continued)

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(57) **CLAIM**

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

**DESCRIPTION**

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

FIG. 2 is a front view thereof;

FIG. 3 is a rear view thereof;

FIG. 4 is a left-side view thereof;

FIG. 5 is a right-side view thereof;

FIG. 6 is a top view thereof;

FIG. 7 is a bottom view thereof;

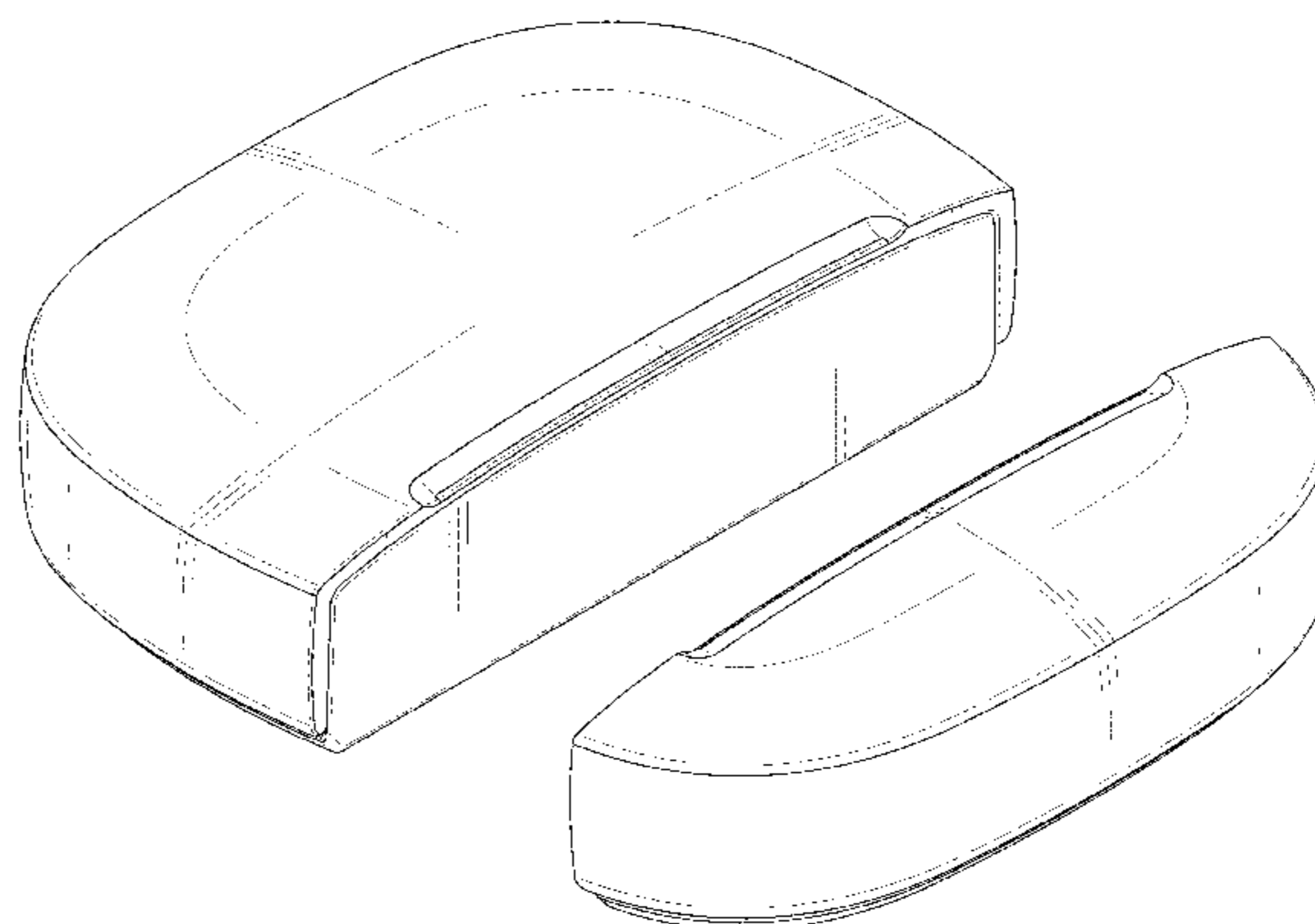
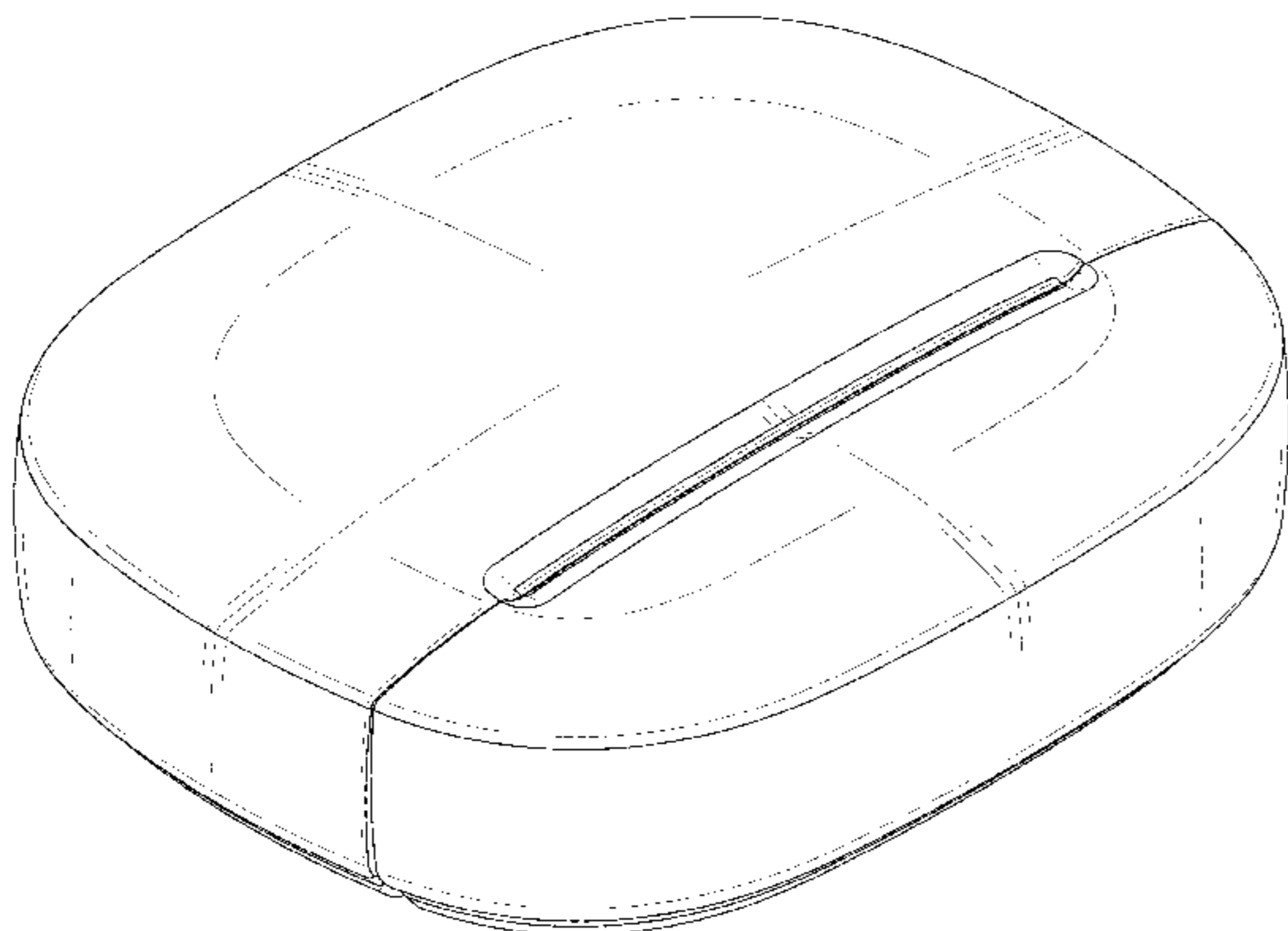
FIG. 8 is a perspective view thereof in an open position;

FIG. 9 is an enlarged view of the encircled portion in FIG. 7; and,

FIG. 10 is a front view thereof in an open position, shown in an environment of use.

The evenly spaced dashed broken lines shown in FIG. 3 showing portions of the door sensor that form no part of the claimed design; and the evenly spaced dashed broken lines in FIG. 10 showing a door in an environment that form no part of the claimed design. The dot-dot-dash broken lines in FIGS. 7 and 9 encircling portions of the drawing disclosure illustrated in an enlargement form no part of the claimed design.

**1 Claim, 10 Drawing Sheets**



(58) **Field of Classification Search**

USPC ..... 292/289, 290, 291, 292; 70/14, 20, 21,  
 70/22, 57, 57.1, 284, 285, 286, 314, 266,  
 70/277, 271; 340/628, 584, 693.5, 748  
 CPC ..... G08B 13/2491; G08B 13/08; E05B 9/00;  
 E05B 9/02; E05B 2009/006; E05B 49/00;  
 E05B 19/00; E05B 15/00; E05B 49/02;  
 E05B 17/00; E05B 3/00; A63H 33/28

See application file for complete search history.

D788,624 S \* 6/2017 Iritani ..... D10/106.5  
 D789,819 S \* 6/2017 Chen ..... D10/106.6  
 D793,266 S \* 8/2017 Ye ..... D10/118.2  
 D800,005 S \* 10/2017 Wong ..... D10/118.2  
 D805,941 S \* 12/2017 Jou ..... D10/106.6  
 D818,387 S \* 5/2018 Chen ..... D10/118.2  
 D819,474 S \* 6/2018 Bolger ..... D10/106.2  
 D820,123 S \* 6/2018 Chou ..... D10/70  
 D828,342 S \* 9/2018 Chen ..... D14/240  
 D848,293 S \* 5/2019 Laurans ..... D10/70

(56) **References Cited**

U.S. PATENT DOCUMENTS

D724,462 S \* 3/2015 Bould ..... D10/106.2  
 D744,884 S \* 12/2015 Roberts ..... D10/104.1  
 D757,586 S \* 5/2016 Li ..... D10/106.6  
 D766,750 S \* 9/2016 Fadell ..... D10/106.3  
 D778,185 S \* 2/2017 Ookawa ..... D10/104.1  
 D778,192 S \* 2/2017 Bolger ..... D10/106.2  
 D778,750 S \* 2/2017 Phillips ..... D10/106.9  
 D778,754 S \* 2/2017 Yang ..... D10/118.2  
 D787,299 S \* 5/2017 Liu ..... D8/330  
 D788,603 S \* 6/2017 Liu ..... D10/102

OTHER PUBLICATIONS

“Dell Samsung SmartThings Hub” available May 21, 2018, [online],  
 [site visited May 21, 2018]. Retrieved from Internet, (Year: 2018).  
 Door/Window Sensor (Sold Out). LifeSmart Singapore Pte Ltd  
 [online]. pp. 1-4 [retrieved on Apr. 4, 2018]. Retrieved from the  
 Internet: <URL: <https://www.ilifsmart.sg/products/door-window-sensor>.  
 Hank door contact sensor overview and inclusion process. YouTube  
 [online]. 1 Page [retrieved on Jul. 6, 2018]. Retrieved from the  
 Internet: <URL: [https://www.youtube.com/watch?v=1Dh1rDqP\\_1A](https://www.youtube.com/watch?v=1Dh1rDqP_1A).

\* cited by examiner

FIG. 1

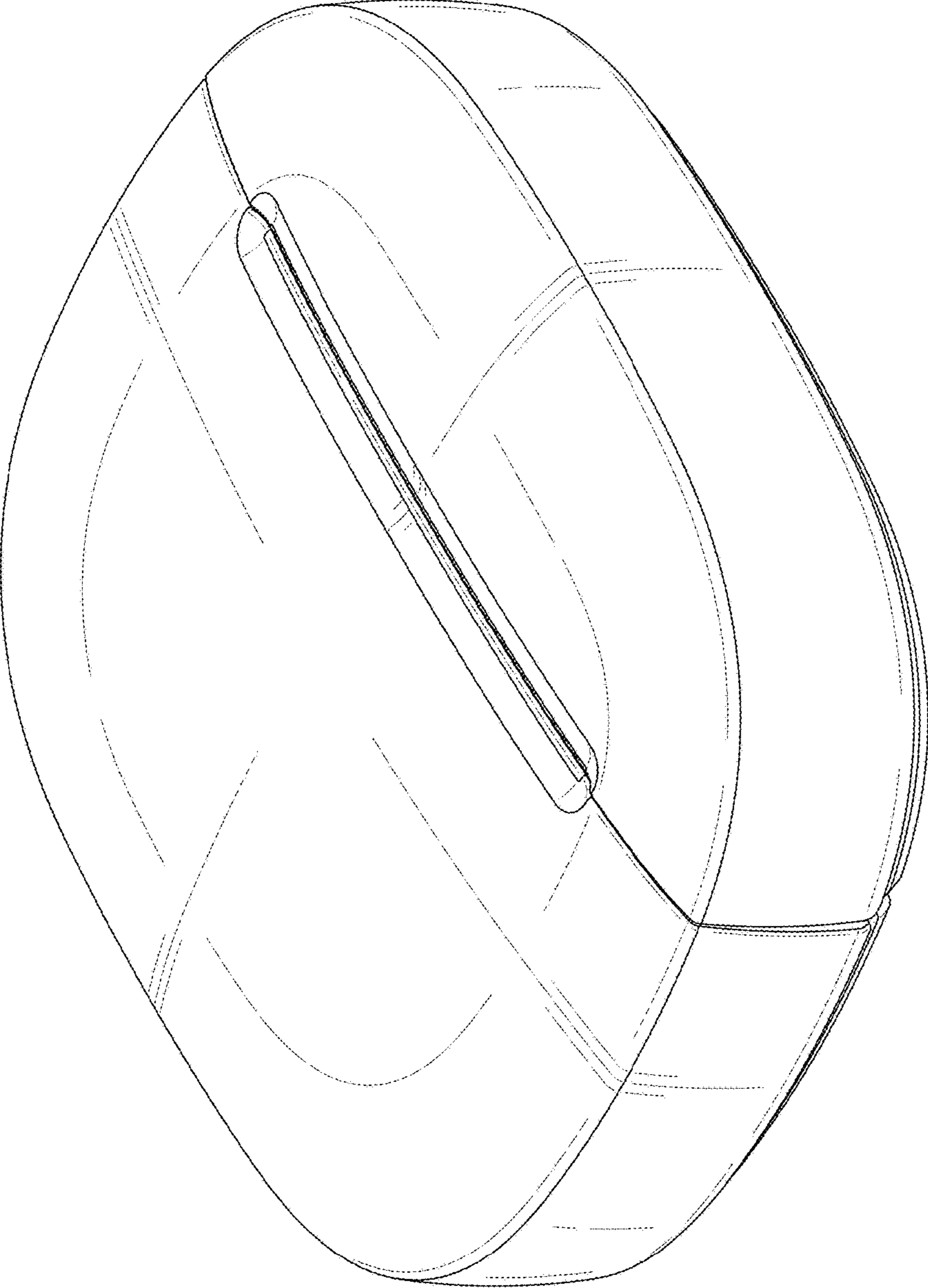


FIG. 2

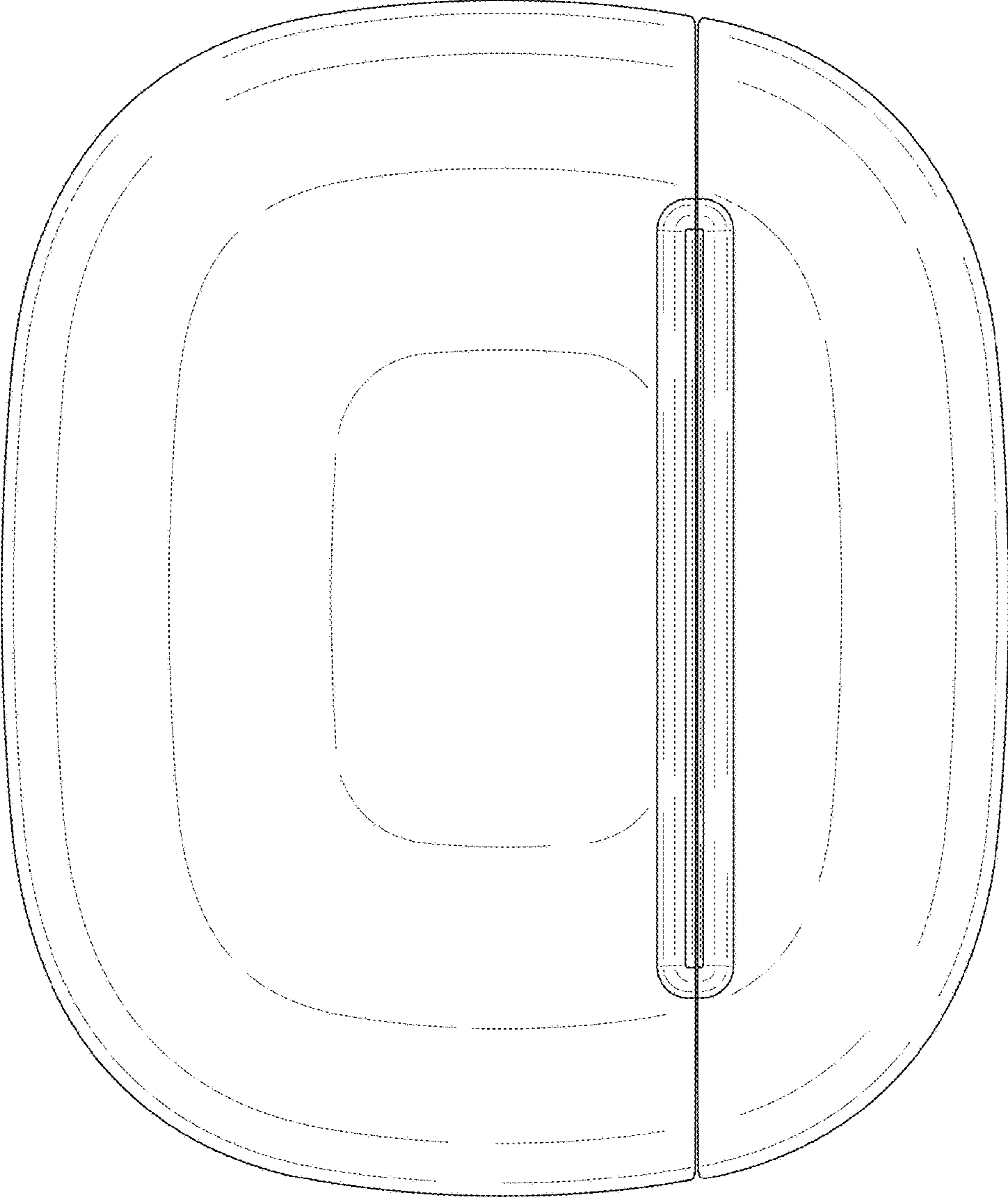


FIG. 3

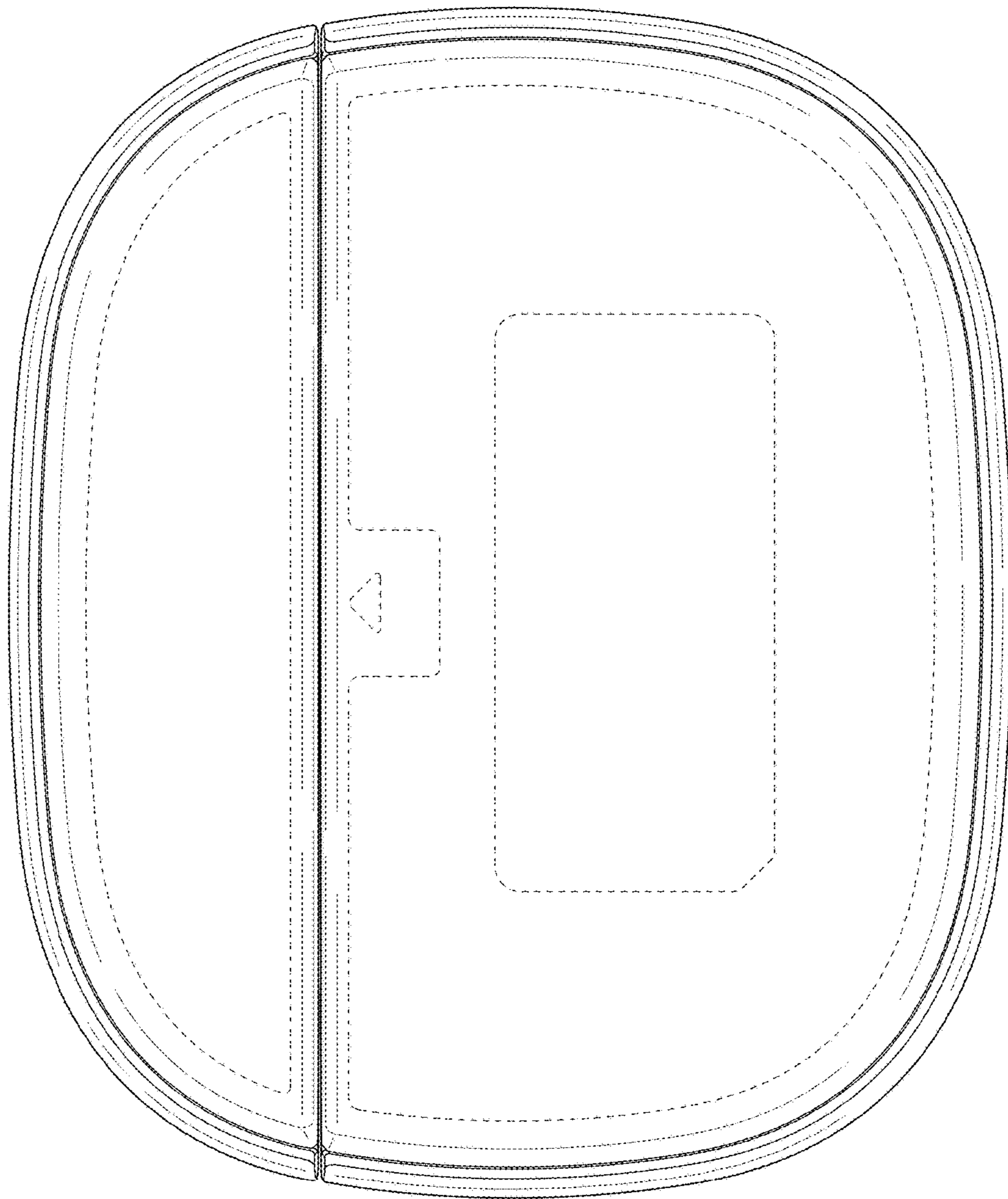


FIG. 4

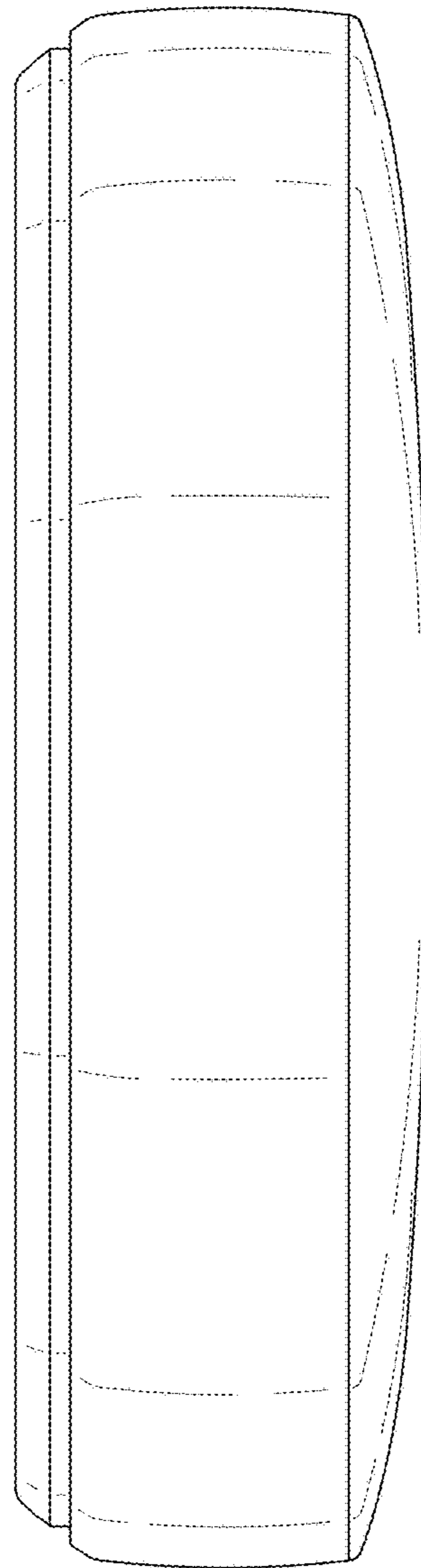


FIG. 5

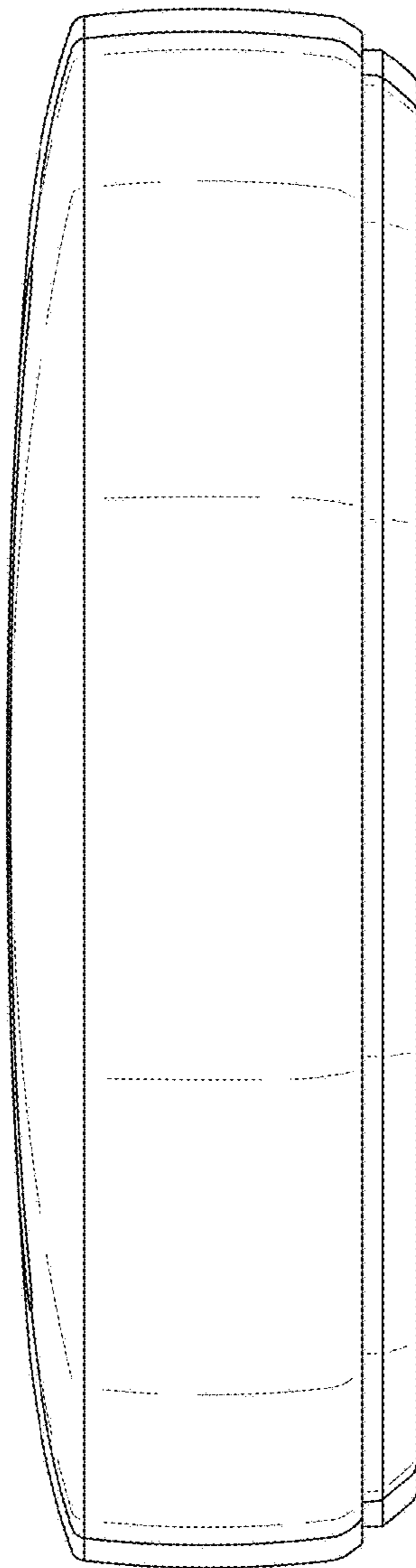


FIG. 6

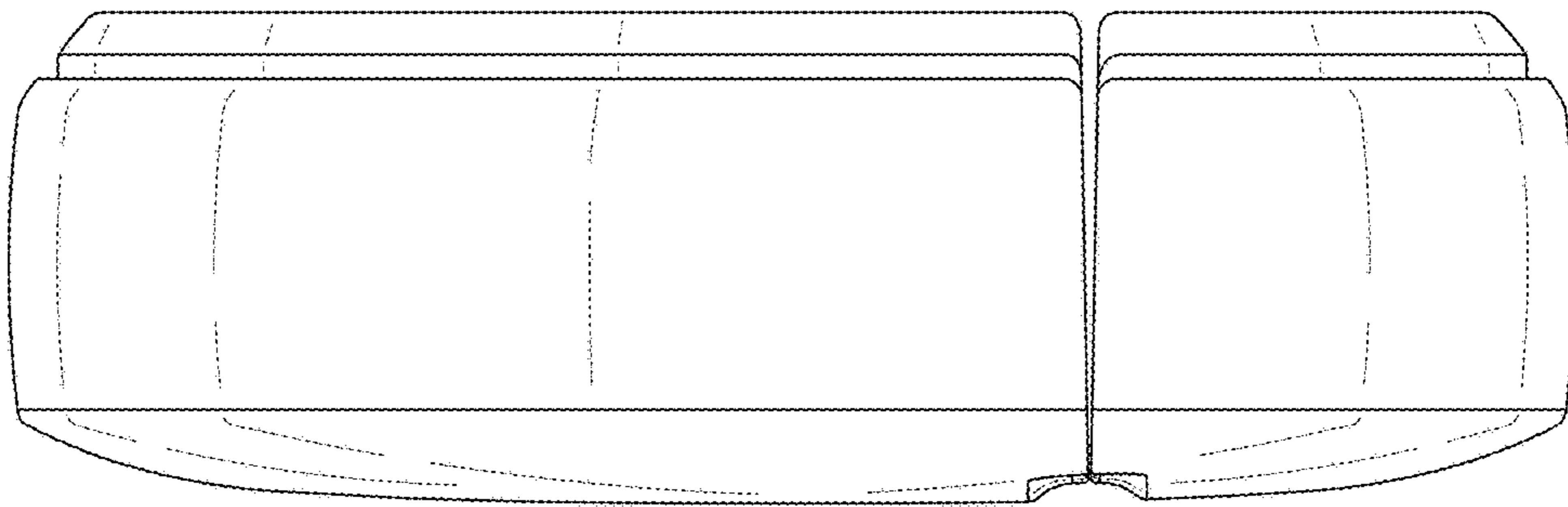
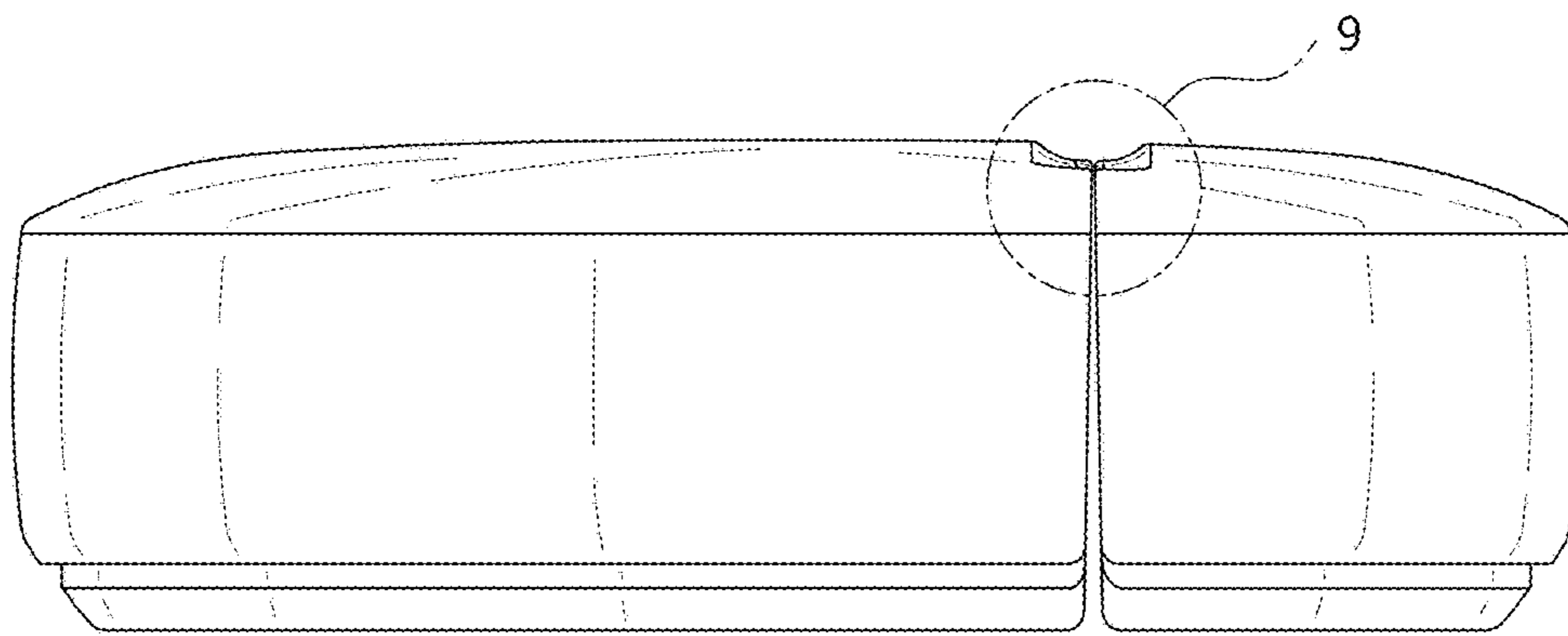




FIG. 7



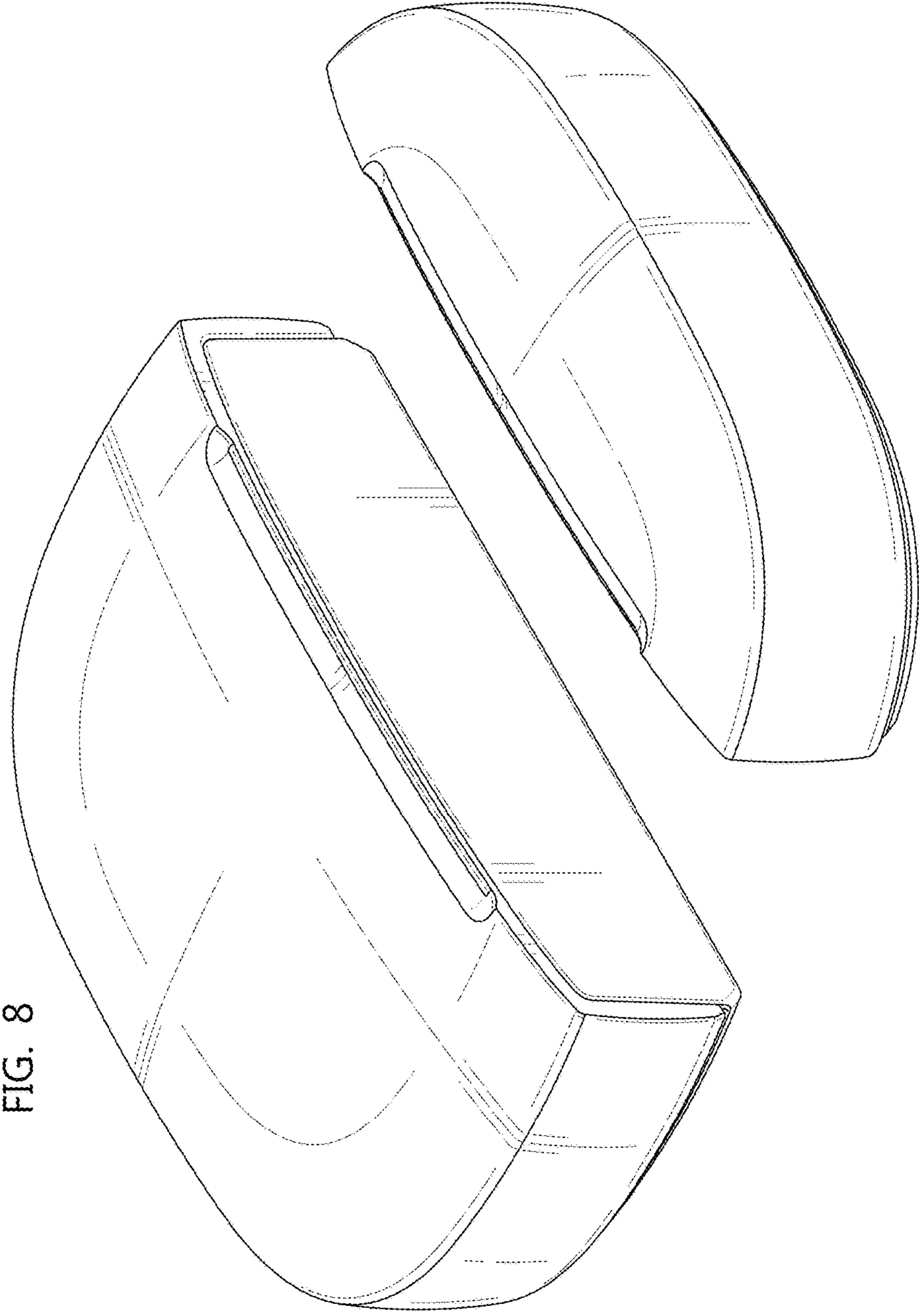


FIG. 8

FIG. 9

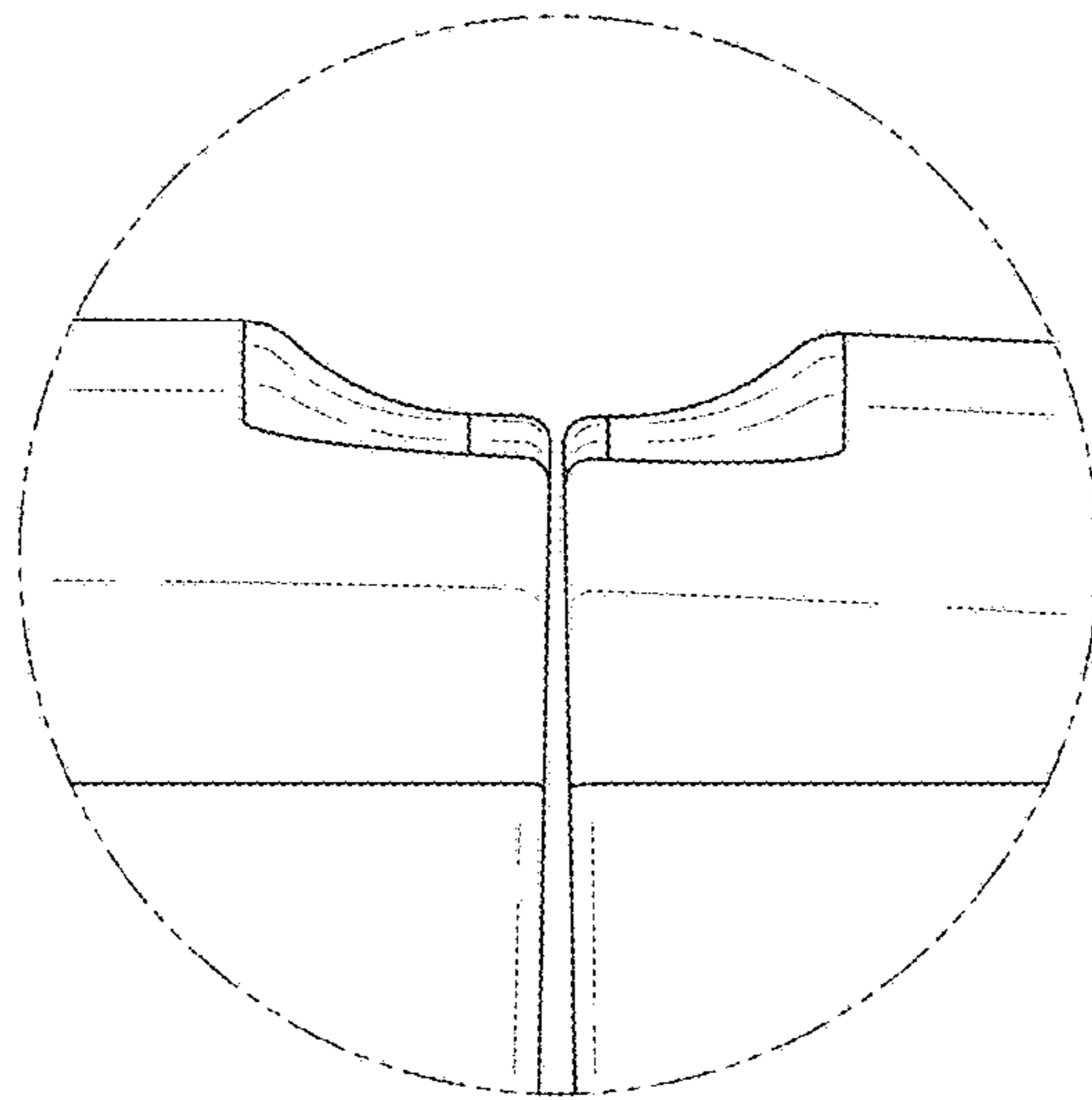


FIG. 10

