



US00D975154S

(12) **United States Design Patent** (10) **Patent No.:** **US D975,154 S**  
**Cho et al.** (45) **Date of Patent:** **\*\* Jan. 10, 2023**

(54) **SERVICE ROBOT**

FOREIGN PATENT DOCUMENTS

(71) Applicant: **SAMSUNG ELECTRONICS CO., LTD.**, Suwon-si (KR)

WO WO-2022019376 A1 \* 1/2022

*Primary Examiner* — Patricia A Palasik

(72) Inventors: **Yonghee Cho**, Suwon-si (KR); **Jiwoong Hwang**, Suwon-si (KR)

(74) *Attorney, Agent, or Firm* — Cantor Colburn LLP

(73) Assignee: **SAMSUNG ELECTRONICS CO., LTD.**, Gyeonggi-Do (KR)

(57) **CLAIM**

The ornamental design for a service robot, as shown and described.

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

**DESCRIPTION**

(21) Appl. No.: **29/786,046**

FIG. 1 is a front perspective view of a service robot, showing our new design;

(22) Filed: **May 28, 2021**

FIG. 2 is a front view thereof;

(30) **Foreign Application Priority Data**

FIG. 3 is a rear view thereof;

Nov. 30, 2020 (KR) ..... 30-2020-0058478

FIG. 4 is a left-side view thereof;

(51) **LOC (14) Cl.** ..... **15-99**

FIG. 5 is a right-side view thereof;

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

FIG. 6 is a top view thereof;

USPC ..... **D15/199**

FIG. 7 is a bottom view thereof;

(58) **Field of Classification Search**

FIG. 8 is a front perspective view of the service robot shown in an alternate position;

USPC ..... D7/605, 606, 629; D12/14, 86, 88, 90, D12/91; D15/199; D21/578–583, 621; D34/34

FIG. 9 is a front view thereof;

CPC ..... B25J 5/007; B25J 11/008; B60G 5/01; B60G 2300/07; Y10S 901/01

FIG. 10 is a rear view thereof;

See application file for complete search history.

FIG. 11 is a left-side view thereof;

(56) **References Cited**

U.S. PATENT DOCUMENTS

FIG. 12 is a right-side view thereof;

D620,511 S \* 7/2010 Publ ..... D23/207

FIG. 13 is a top view thereof;

D644,256 S \* 8/2011 Kitano ..... D15/199

FIG. 14 is a bottom view thereof;

D700,923 S \* 3/2014 Lin ..... D15/199

FIG. 15 is a front perspective view of the service robot shown in another alternate position;

D821,265 S \* 6/2018 Mäkelä ..... D3/271.12

FIG. 16 is a front view thereof;

D822,739 S \* 7/2018 Kato ..... D15/199

FIG. 17 is a rear view thereof;

D826,302 S \* 8/2018 Tsukamoto ..... D15/199

FIG. 18 is a left-side view thereof;

FIG. 19 is a right-side view thereof;

FIG. 20 is a top view thereof; and,

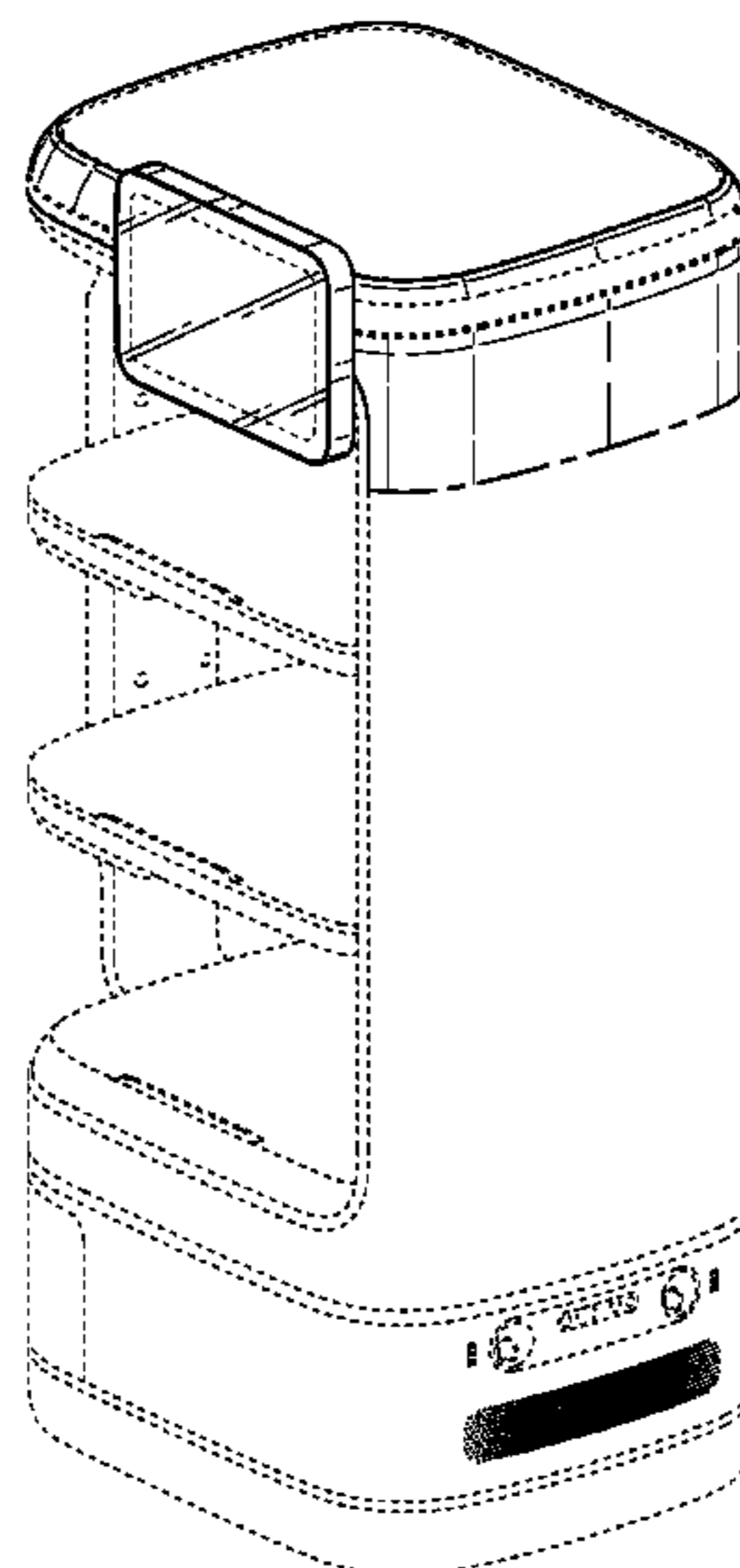
FIG. 21 is a bottom view thereof.

The broken lines illustrating portions of the service robot form no part of the claimed design.

The dot-dash broken lines in the figures illustrate a boundary of the claimed design and form no part of the claimed design.

(Continued)

**1 Claim, 21 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

D840,619 S \* 2/2019 Kim ..... A47J 37/0713  
 D15/199  
 D869,533 S \* 12/2019 Kim ..... A63H 11/00  
 D15/199  
 D870,787 S \* 12/2019 Kim ..... D15/199  
 D871,474 S \* 12/2019 Kolb ..... D15/199  
 D879,174 S \* 3/2020 Kammermeier ..... D15/199  
 10,576,617 B1 \* 3/2020 Asada ..... B25J 11/008  
 D881,961 S \* 4/2020 Bergeron ..... D15/199  
 D883,353 S \* 5/2020 Zhang ..... D15/199  
 D883,354 S \* 5/2020 Jafarzadeh ..... D15/199  
 D884,043 S \* 5/2020 Song ..... D15/199  
 D888,790 S \* 6/2020 Yao ..... D15/199  
 D908,151 S \* 1/2021 Song ..... D15/199  
 D908,152 S \* 1/2021 Cacioppo ..... D15/199  
 D908,153 S \* 1/2021 Cacioppo ..... D15/199  
 D909,441 S \* 2/2021 Zhao ..... D15/199  
 D909,442 S \* 2/2021 Zhao ..... D15/199  
 D915,486 S \* 4/2021 Gidwell ..... D15/199

D918,978 S \* 5/2021 Li ..... D15/199  
 D919,687 S \* 5/2021 Song ..... D15/199  
 D921,083 S \* 6/2021 Hernandez ..... D15/199  
 D922,465 S \* 6/2021 Lee ..... B25J 11/00  
 D15/199  
 D924,956 S \* 7/2021 Pajevic ..... D15/199  
 D931,921 S \* 9/2021 Haddadin ..... D15/199  
 D934,932 S \* 11/2021 Han ..... D15/199  
 D934,933 S \* 11/2021 Cho ..... D15/199  
 D934,934 S \* 11/2021 Park ..... D15/199  
 D939,004 S \* 12/2021 Gidwell ..... D15/199  
 D939,602 S \* 12/2021 Wang ..... B25J 11/00  
 D15/199  
 D944,305 S \* 2/2022 Liu ..... D15/199  
 D947,915 S \* 4/2022 Li ..... D15/199  
 2005/0216126 A1 \* 9/2005 Koselka ..... B25J 5/007  
 700/259  
 2016/0114488 A1 \* 4/2016 Mascorro Medina .....  
 B25J 11/008  
 901/1

\* cited by examiner

FIG. 1

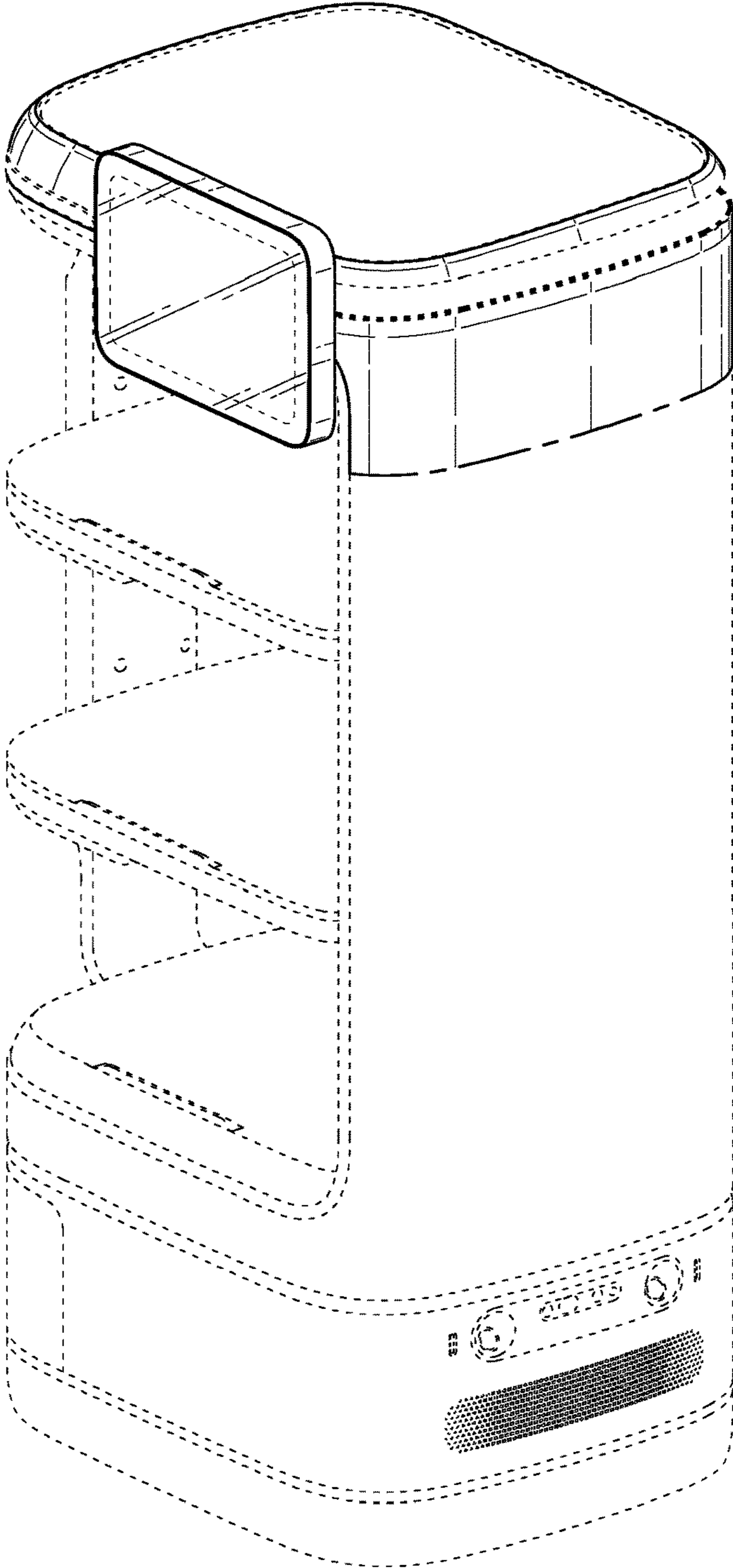


FIG. 2

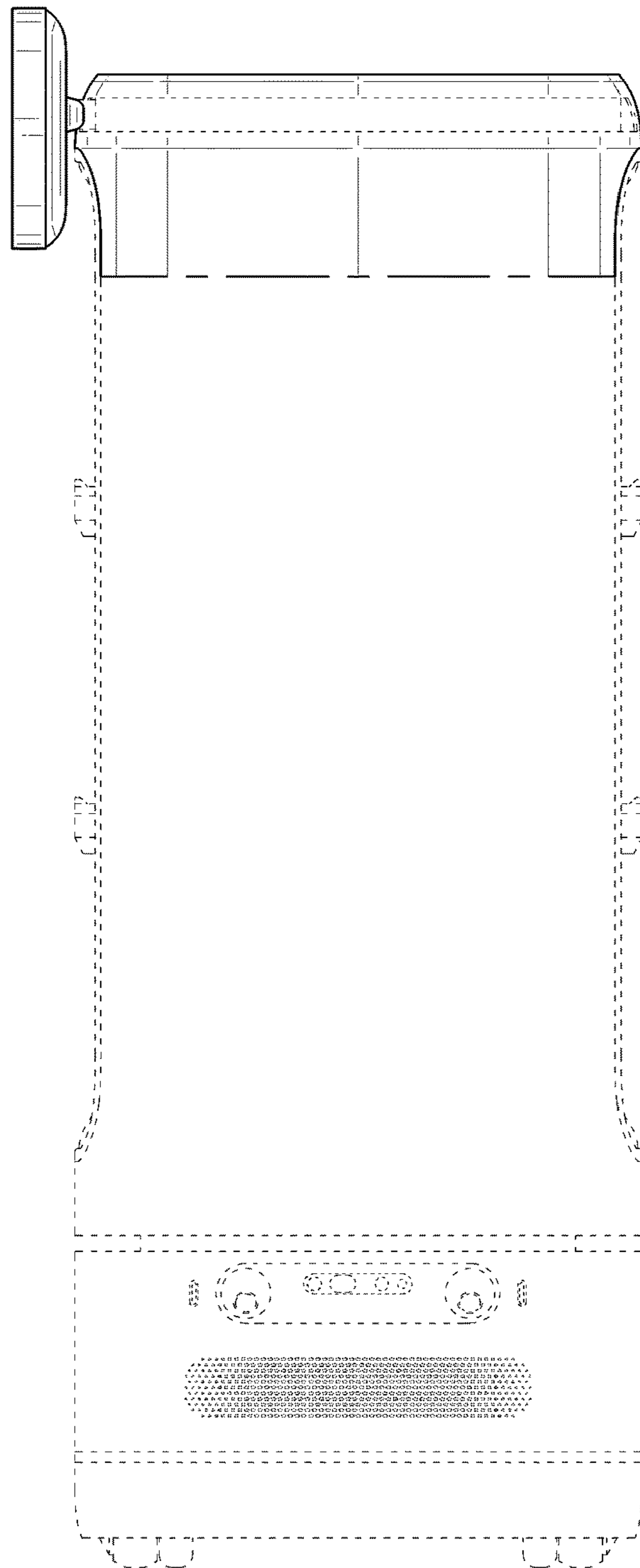


FIG. 3

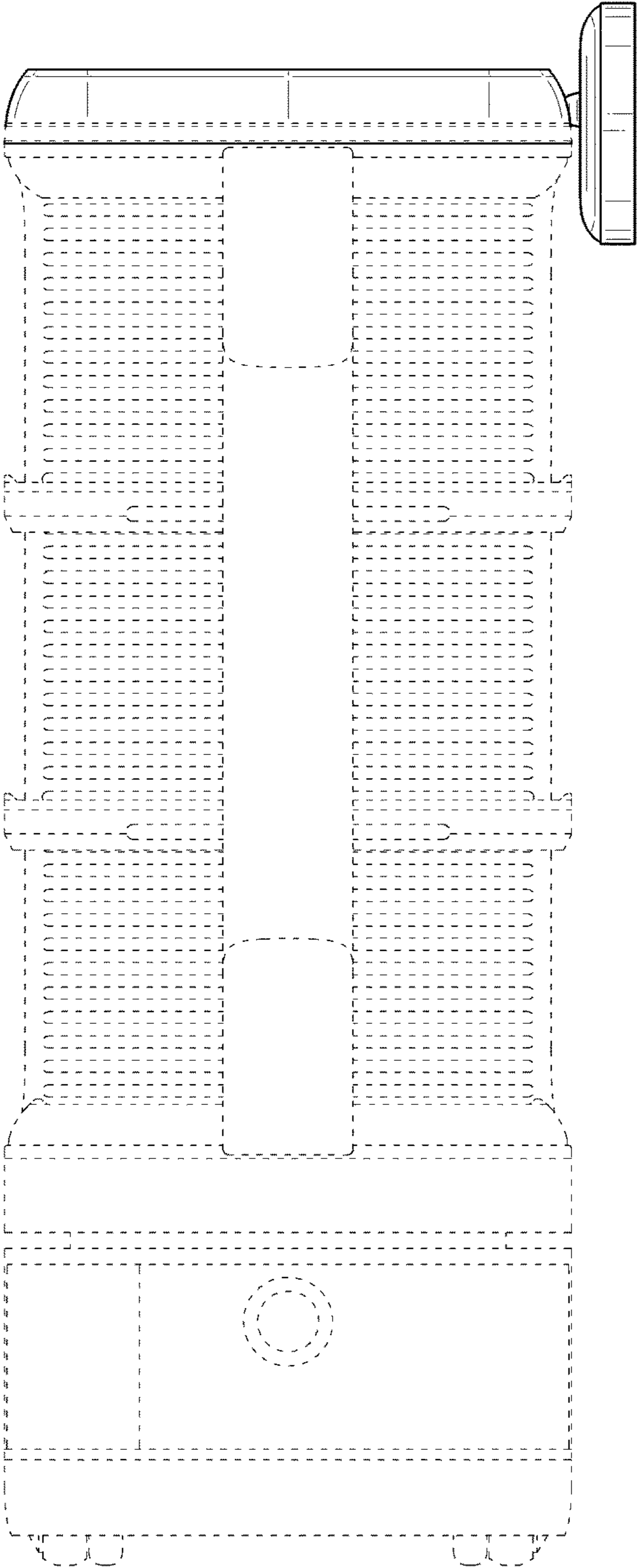


FIG. 4

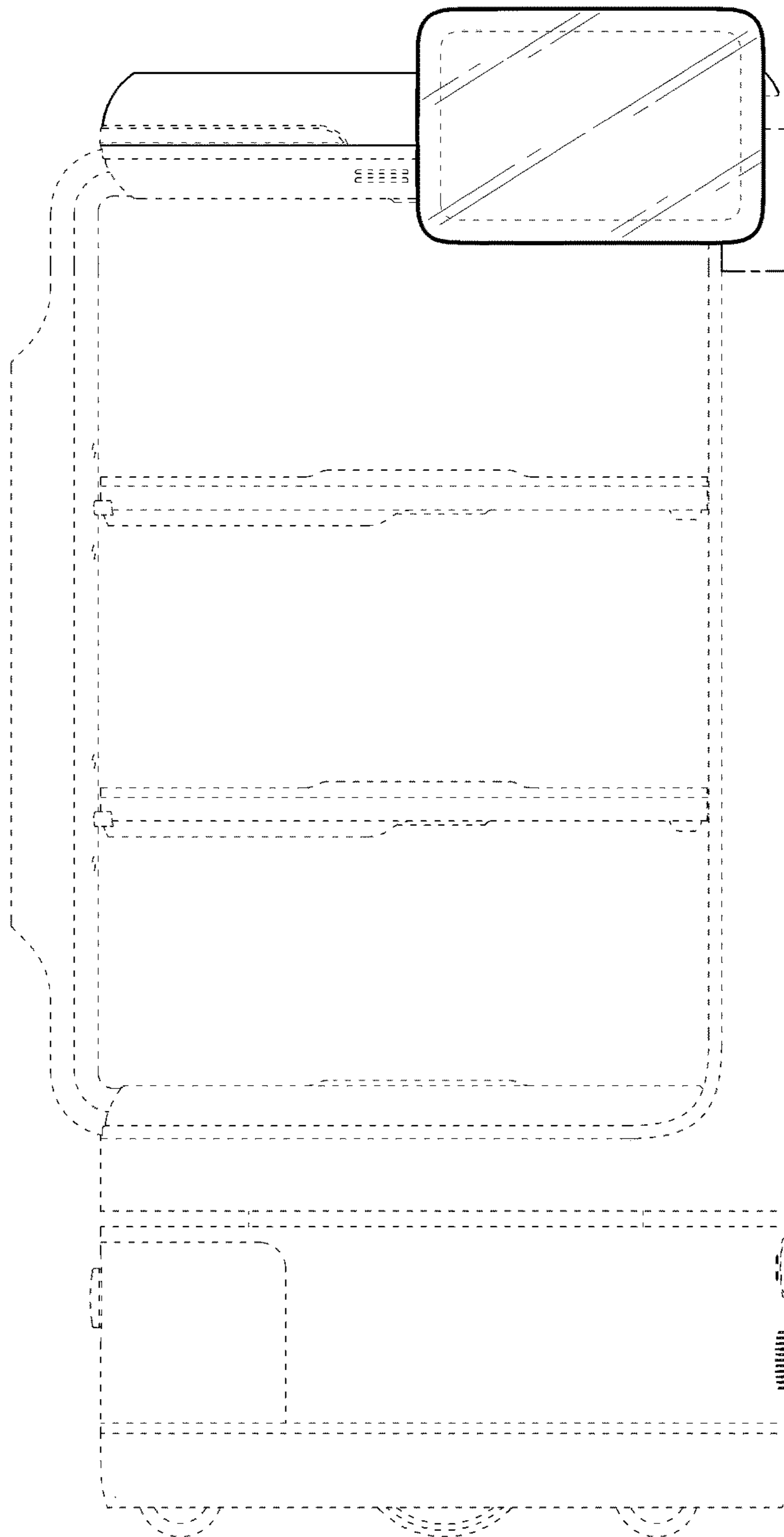


FIG. 5

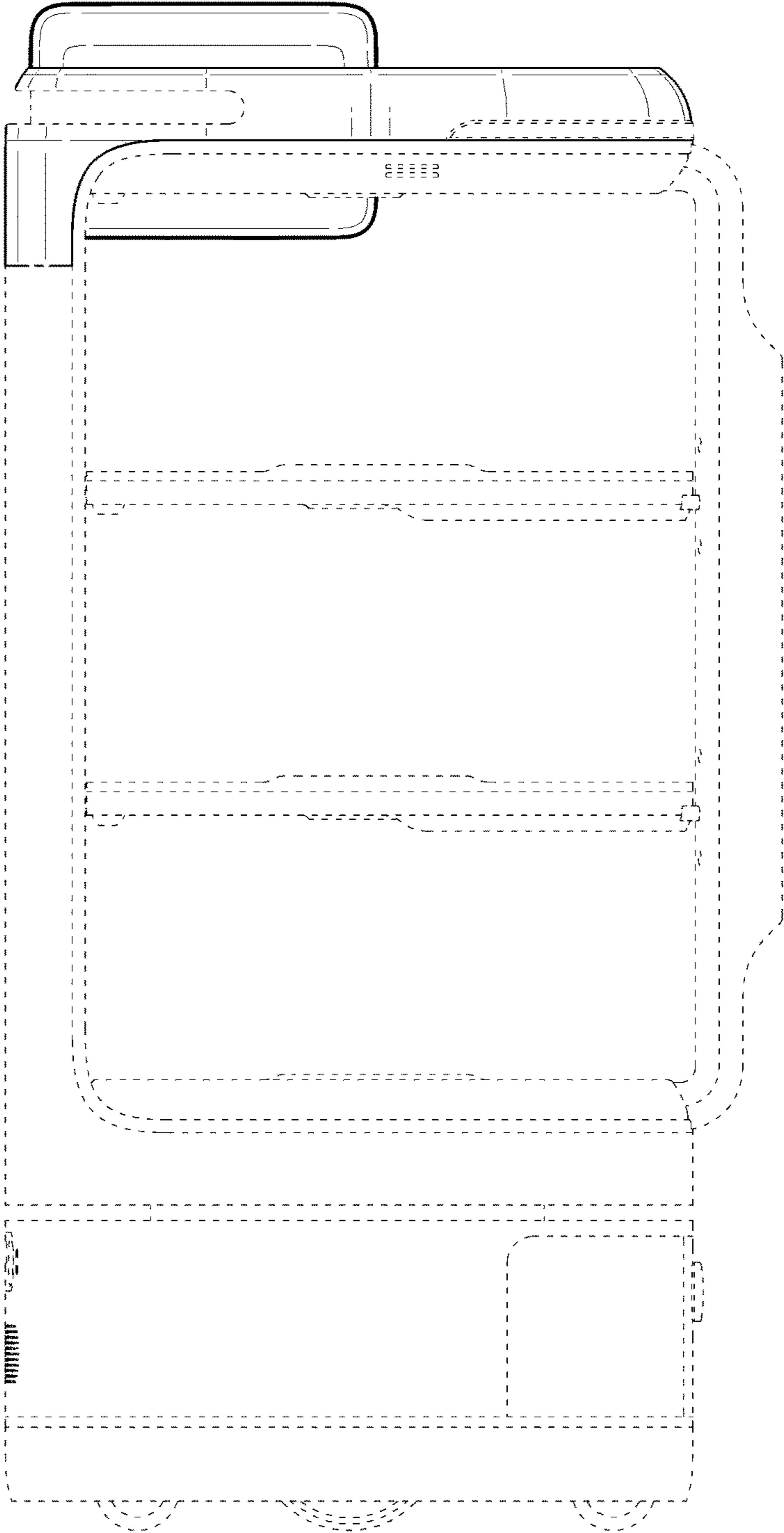


FIG. 6

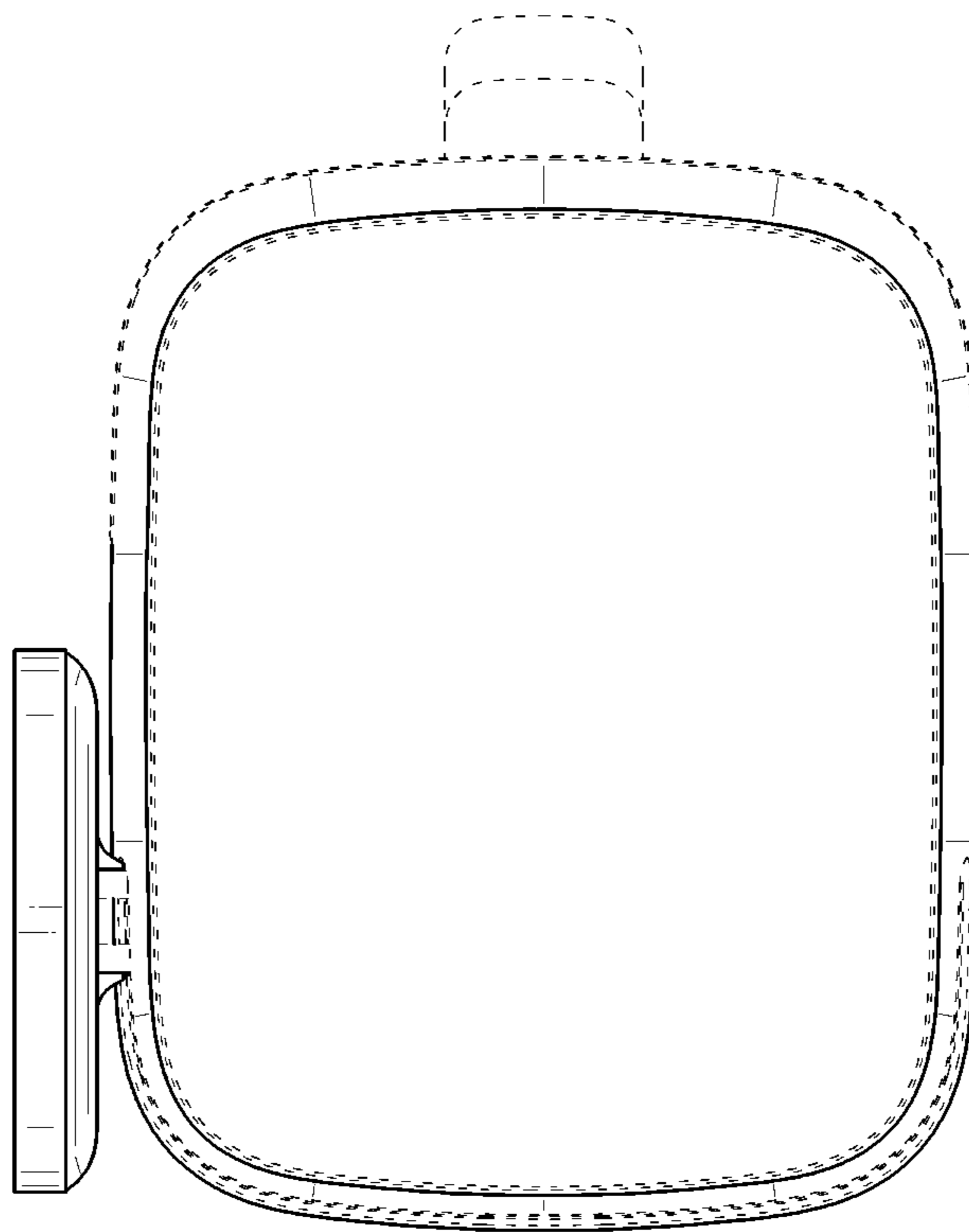




FIG. 7

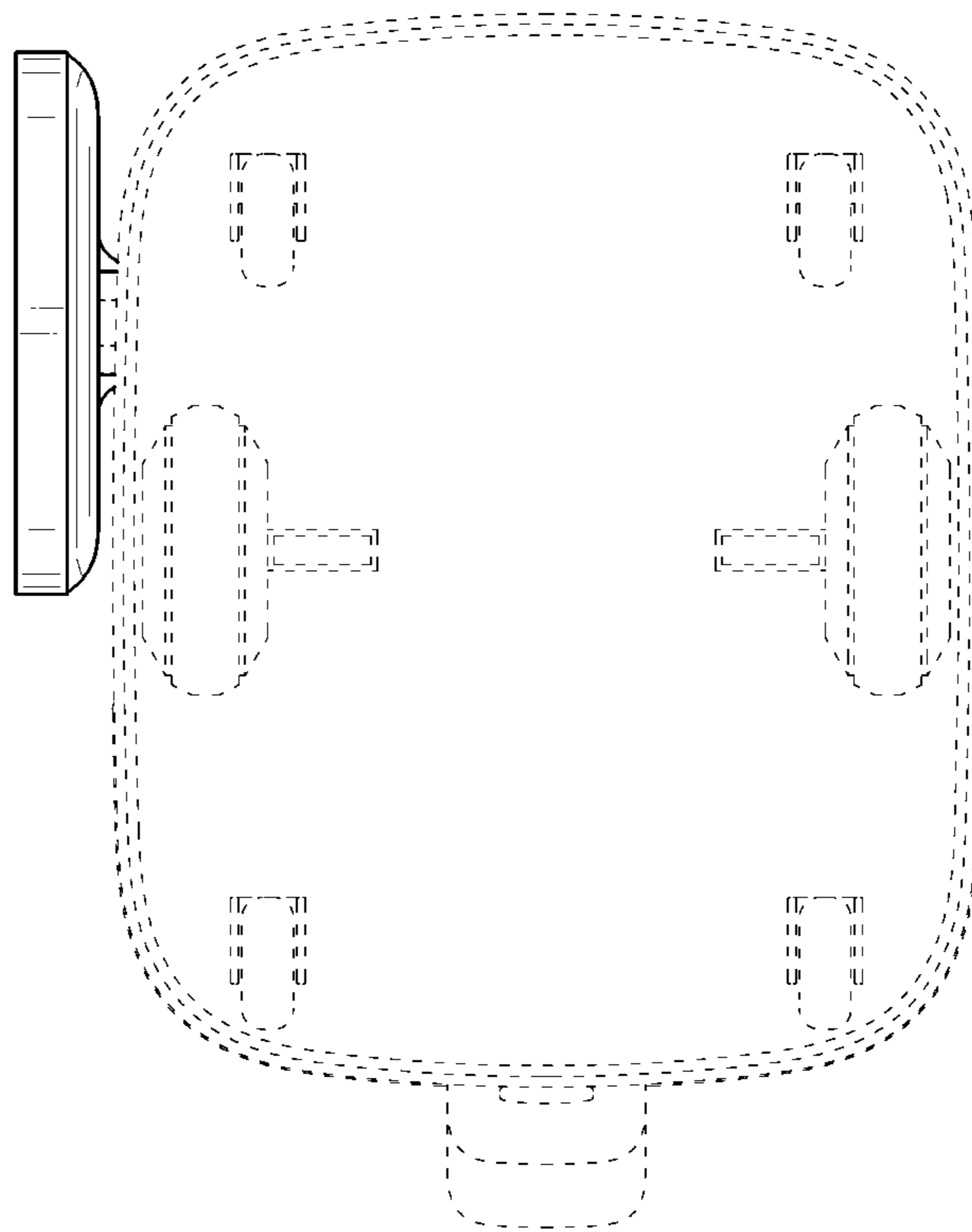


FIG. 8

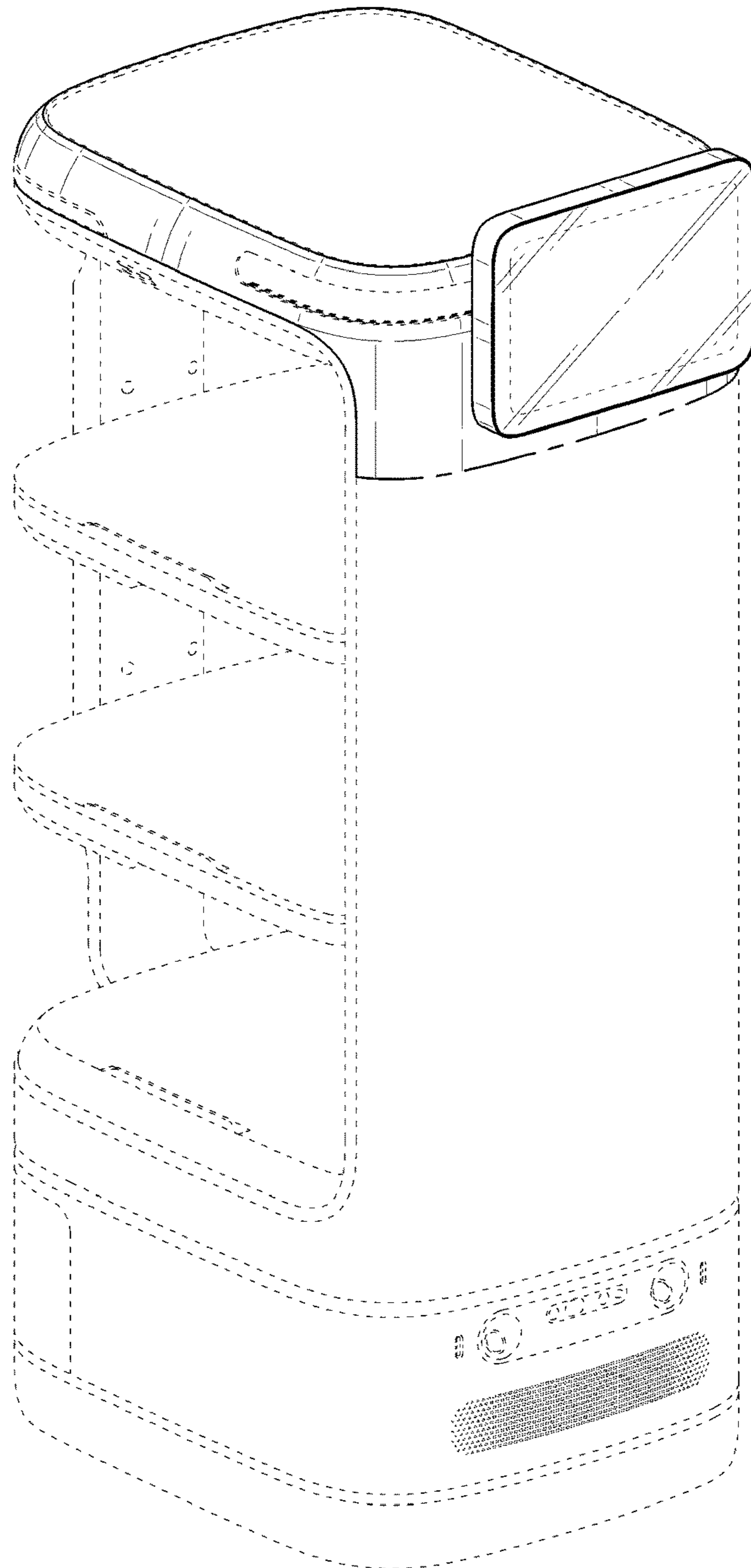


FIG. 9

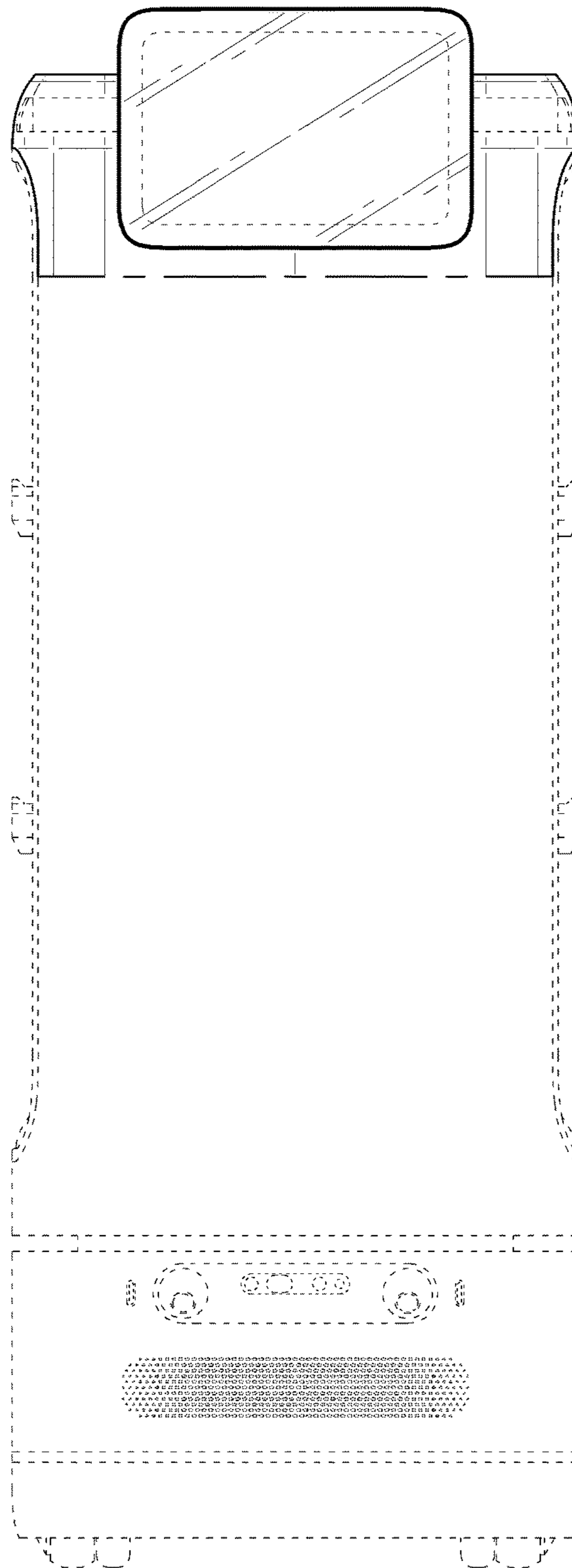


FIG. 10

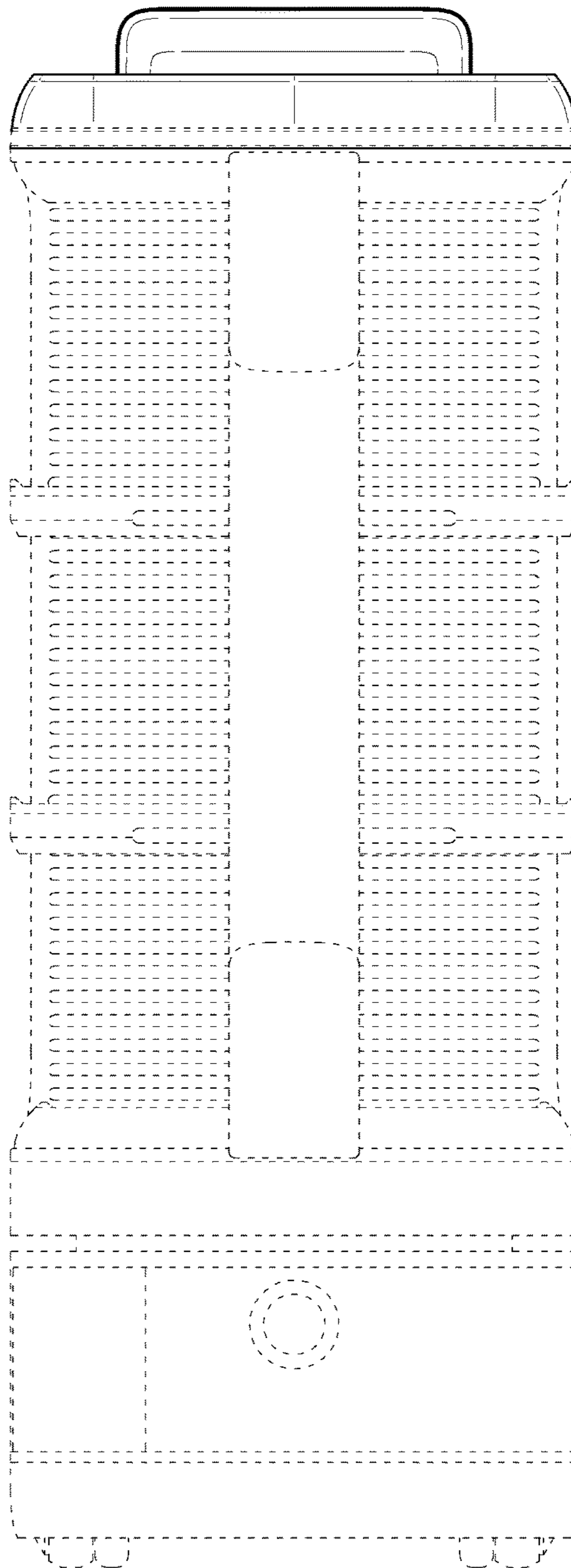


FIG. 11

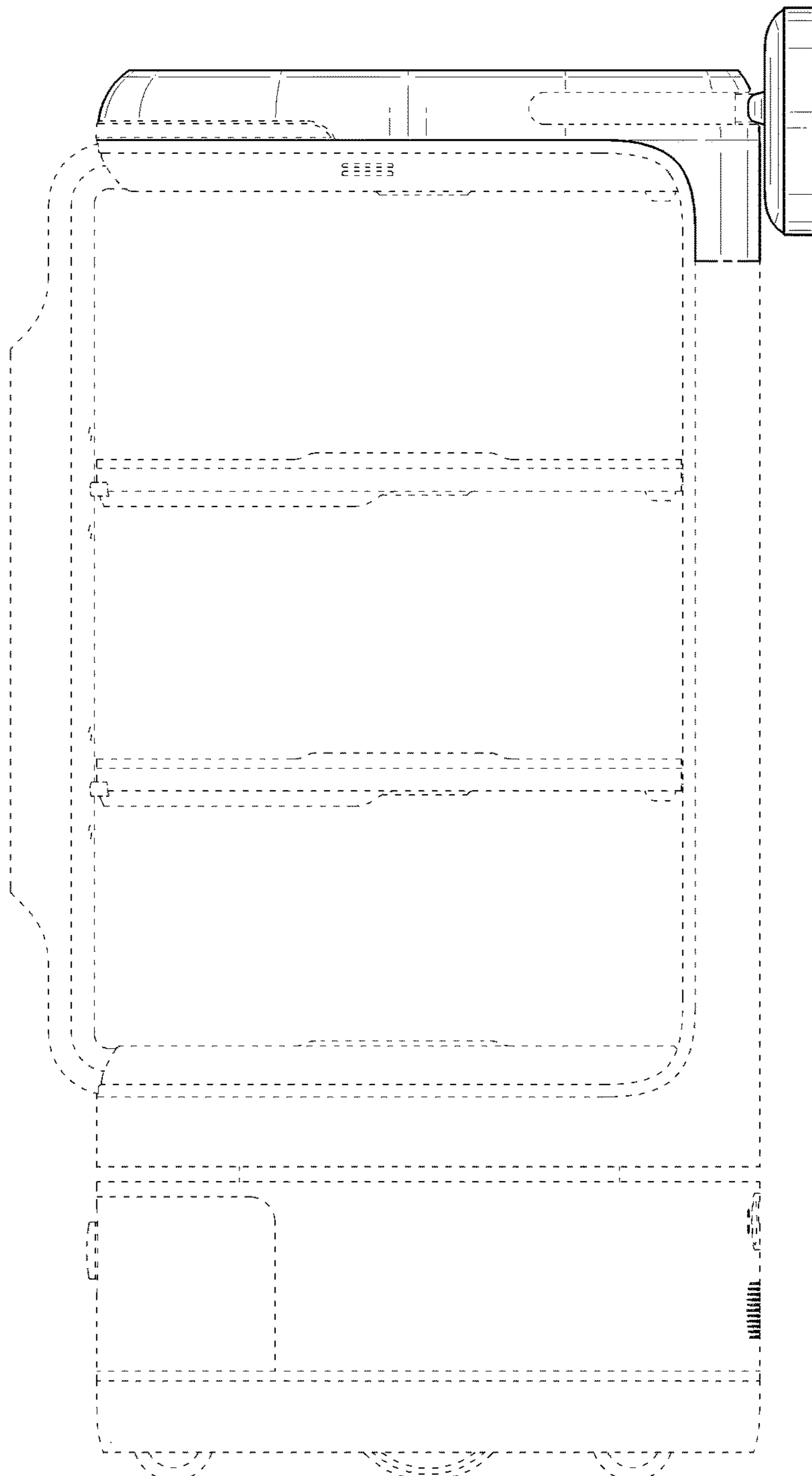


FIG. 12

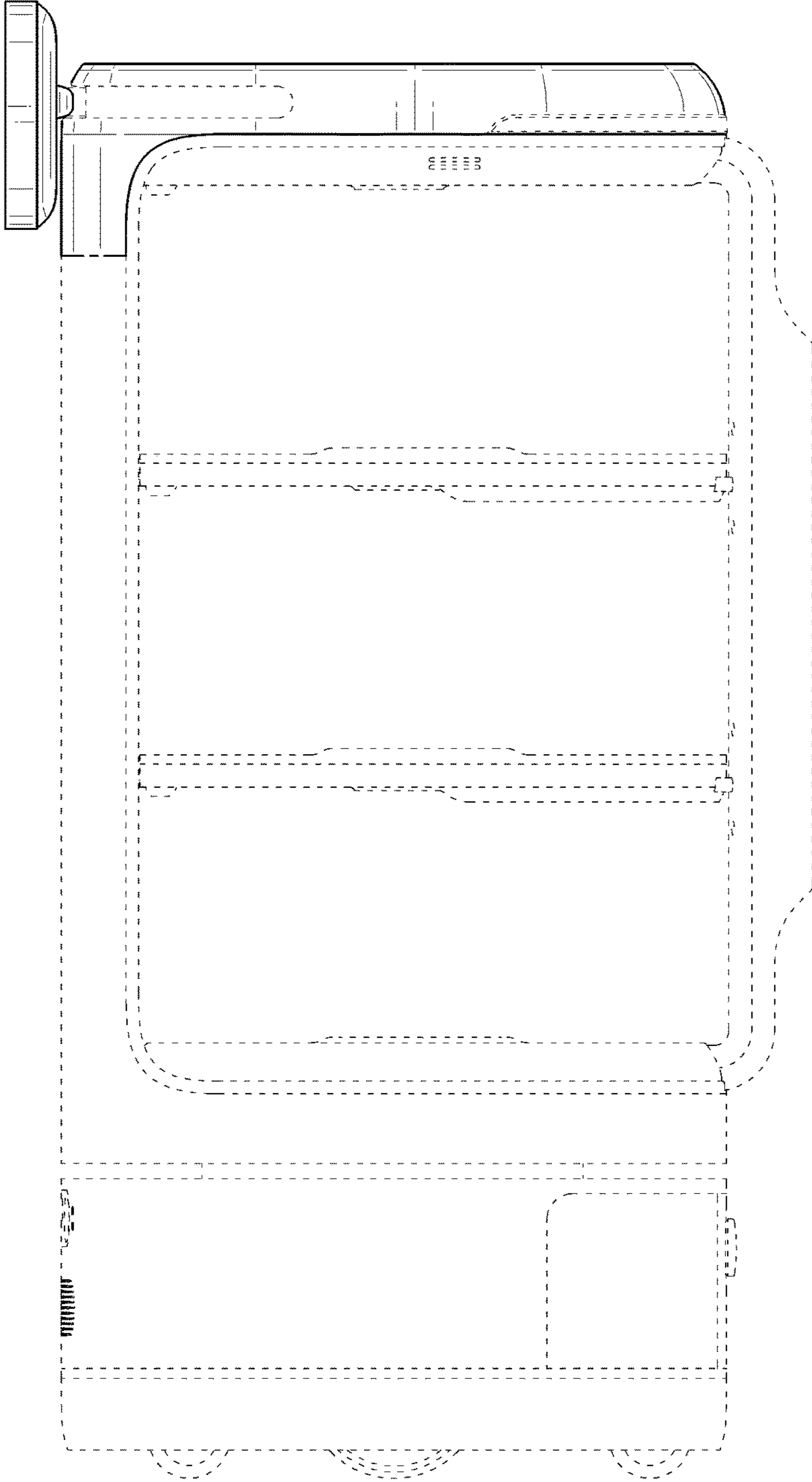


FIG. 13

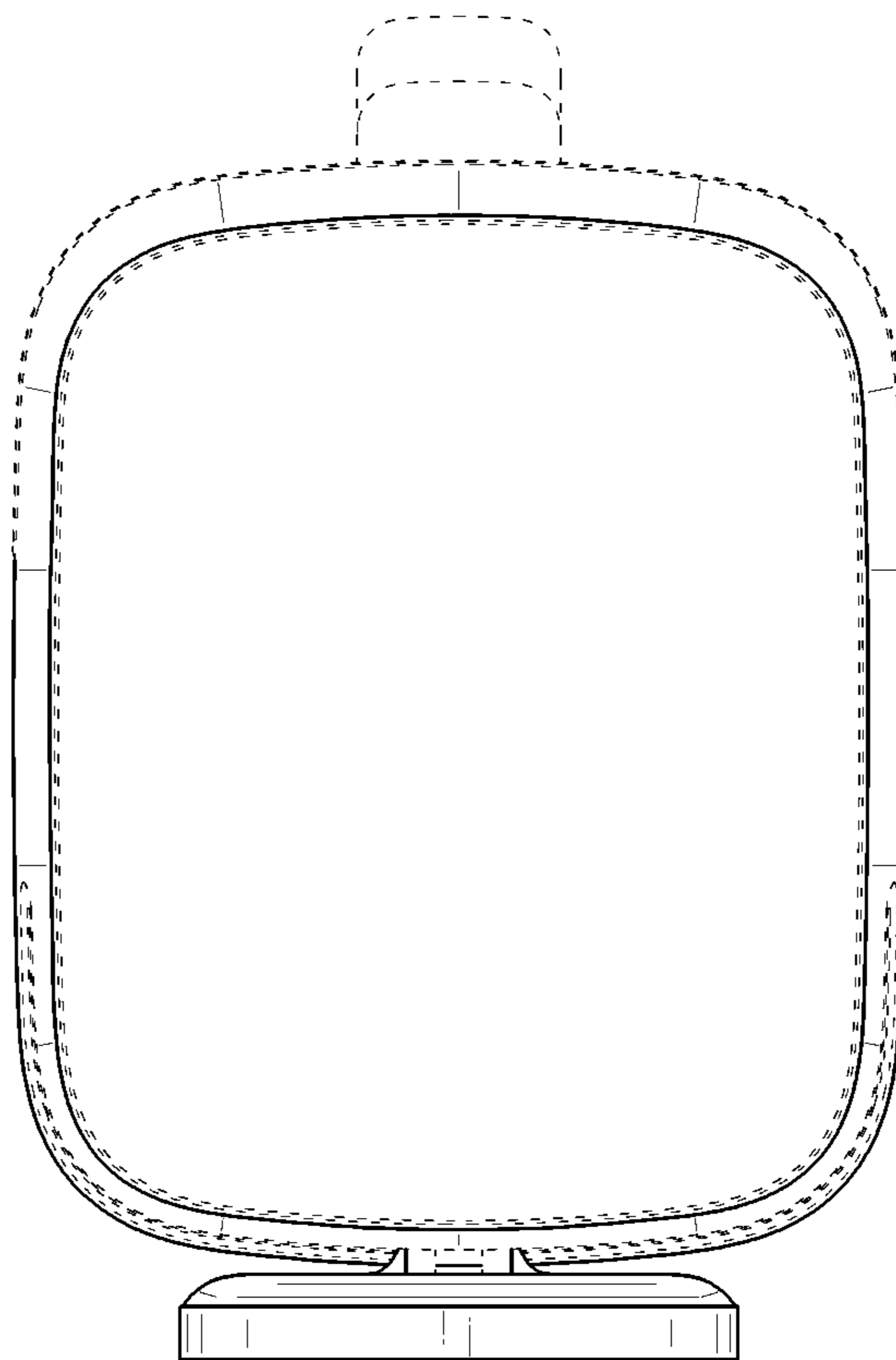


FIG. 14

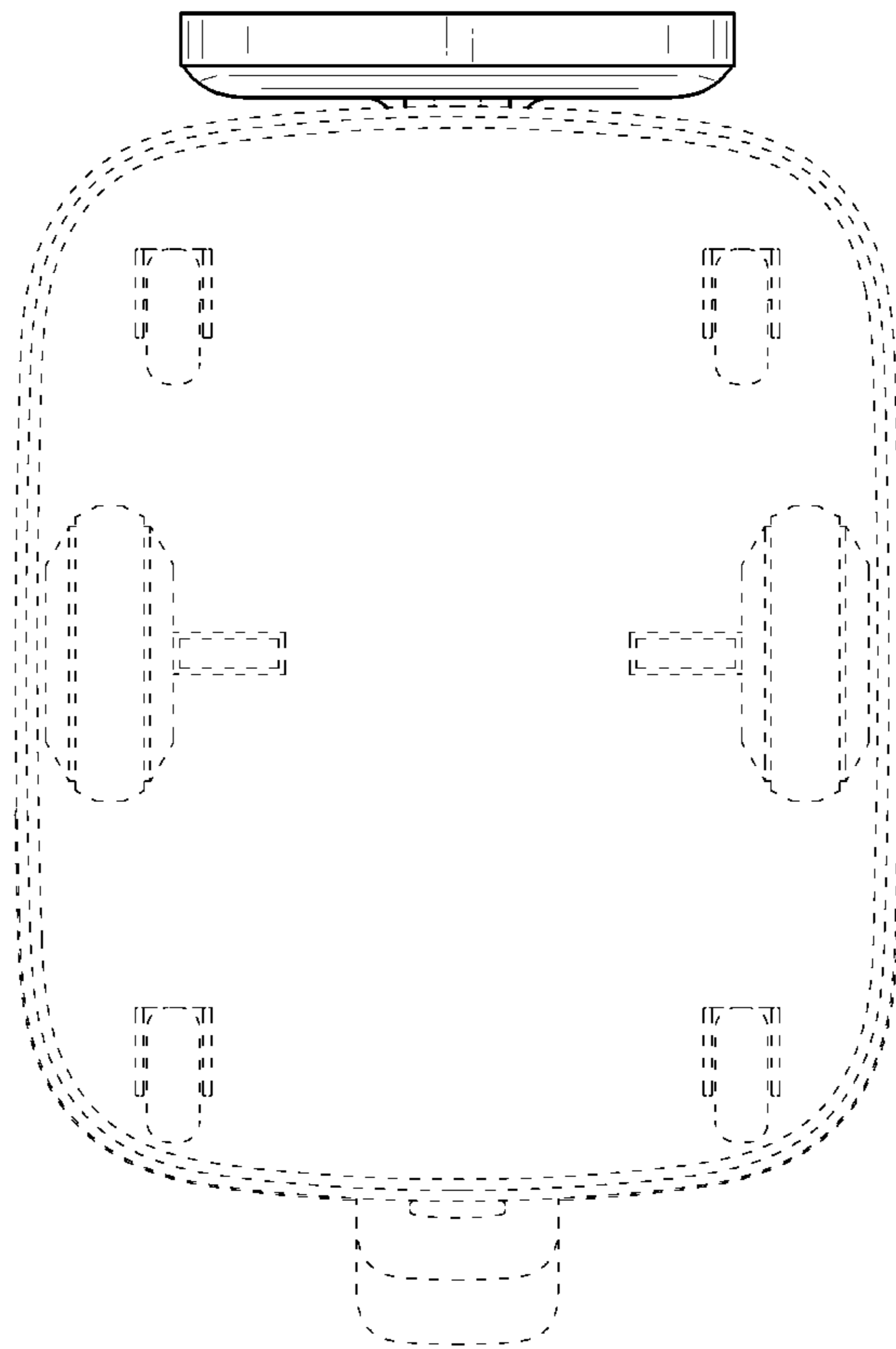




FIG. 15

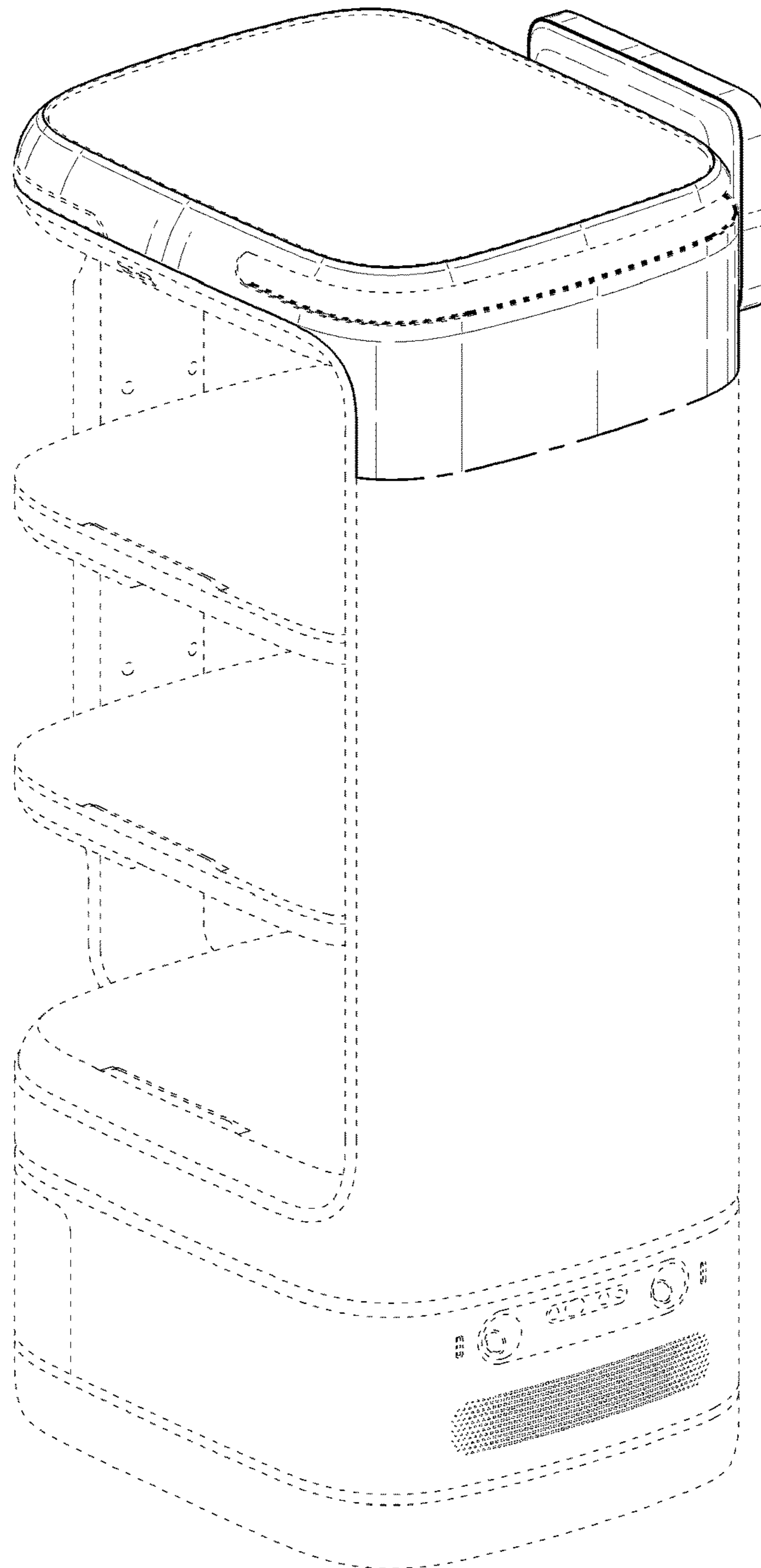


FIG. 16

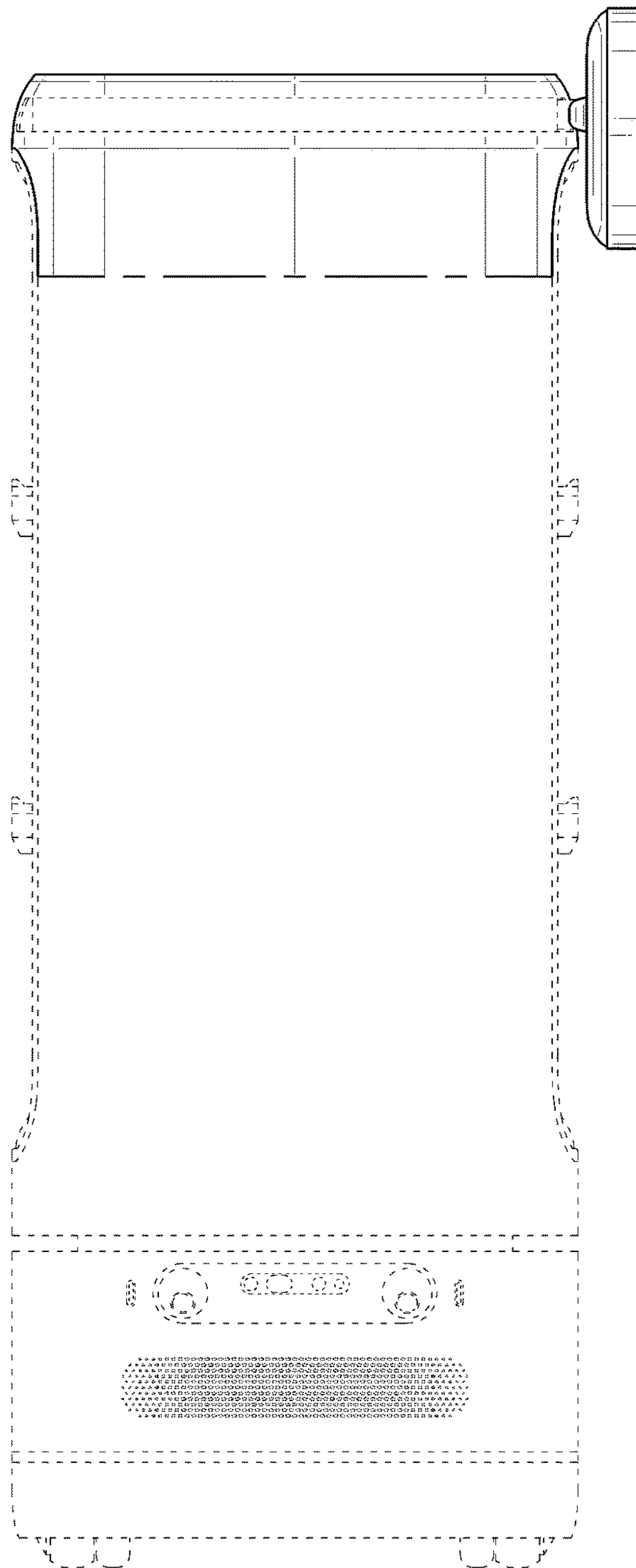


FIG. 17

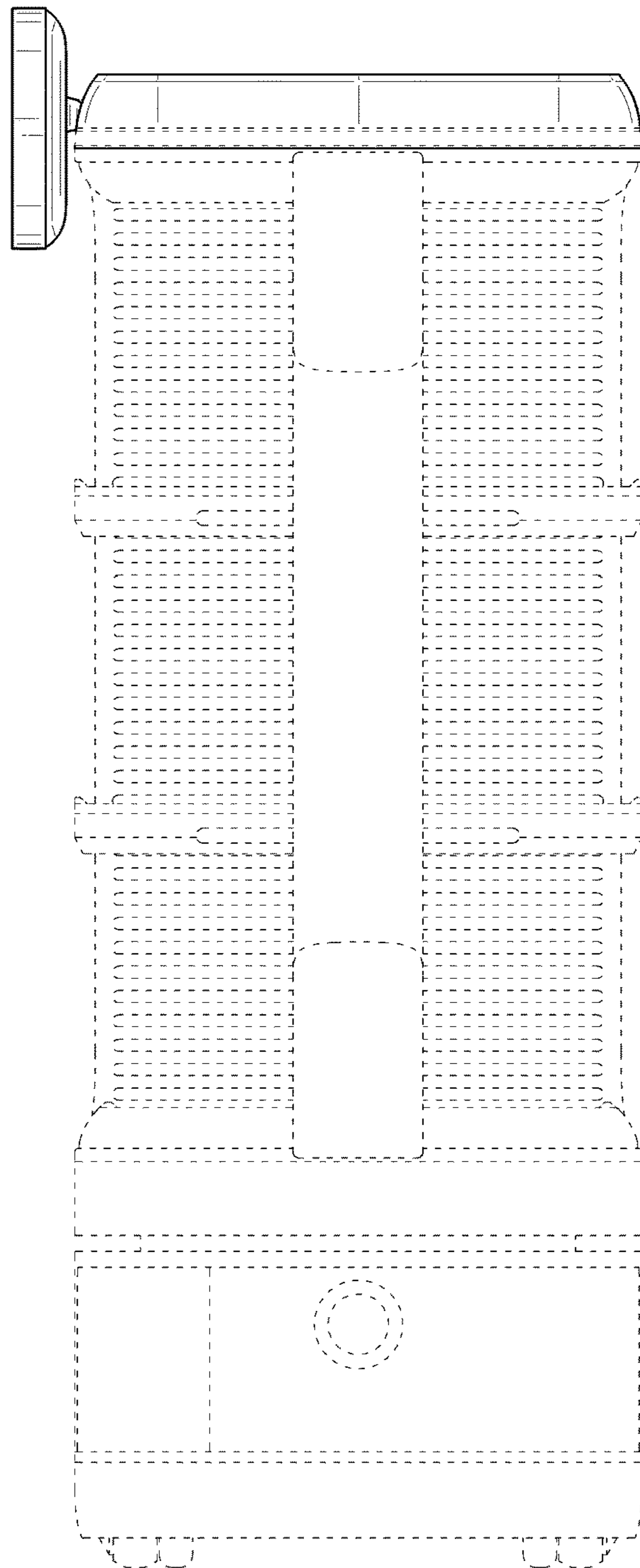


FIG. 18

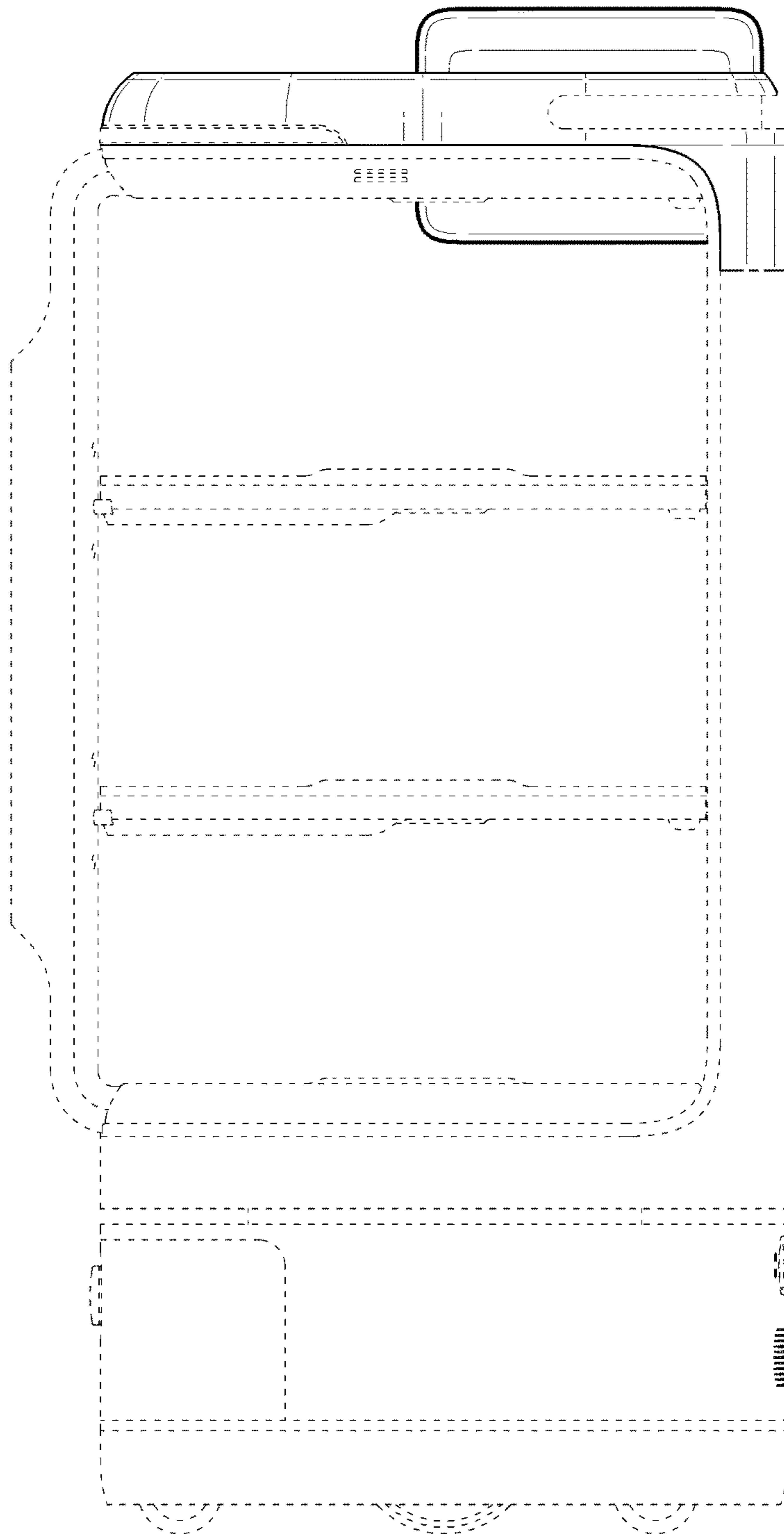


FIG. 19

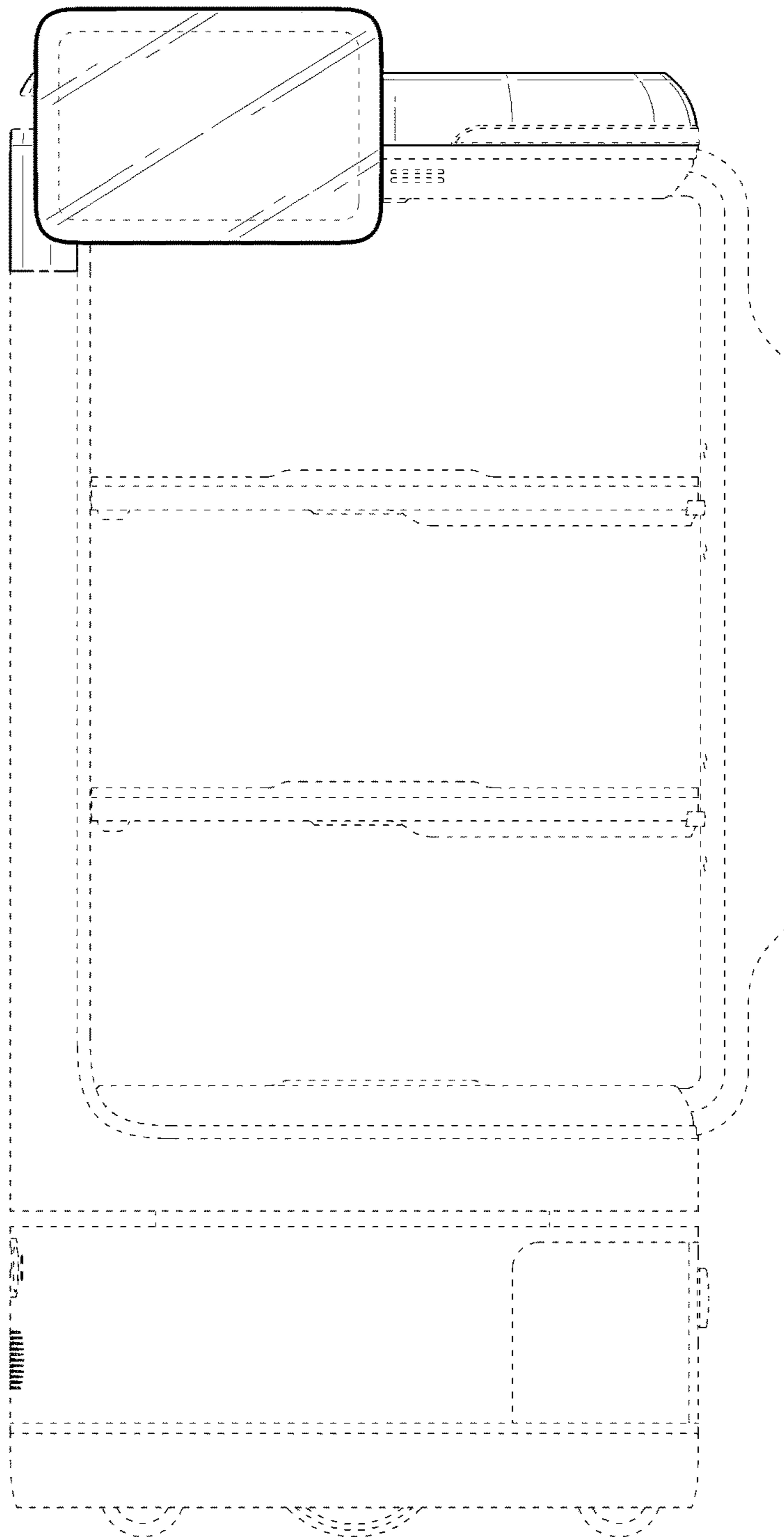


FIG. 20

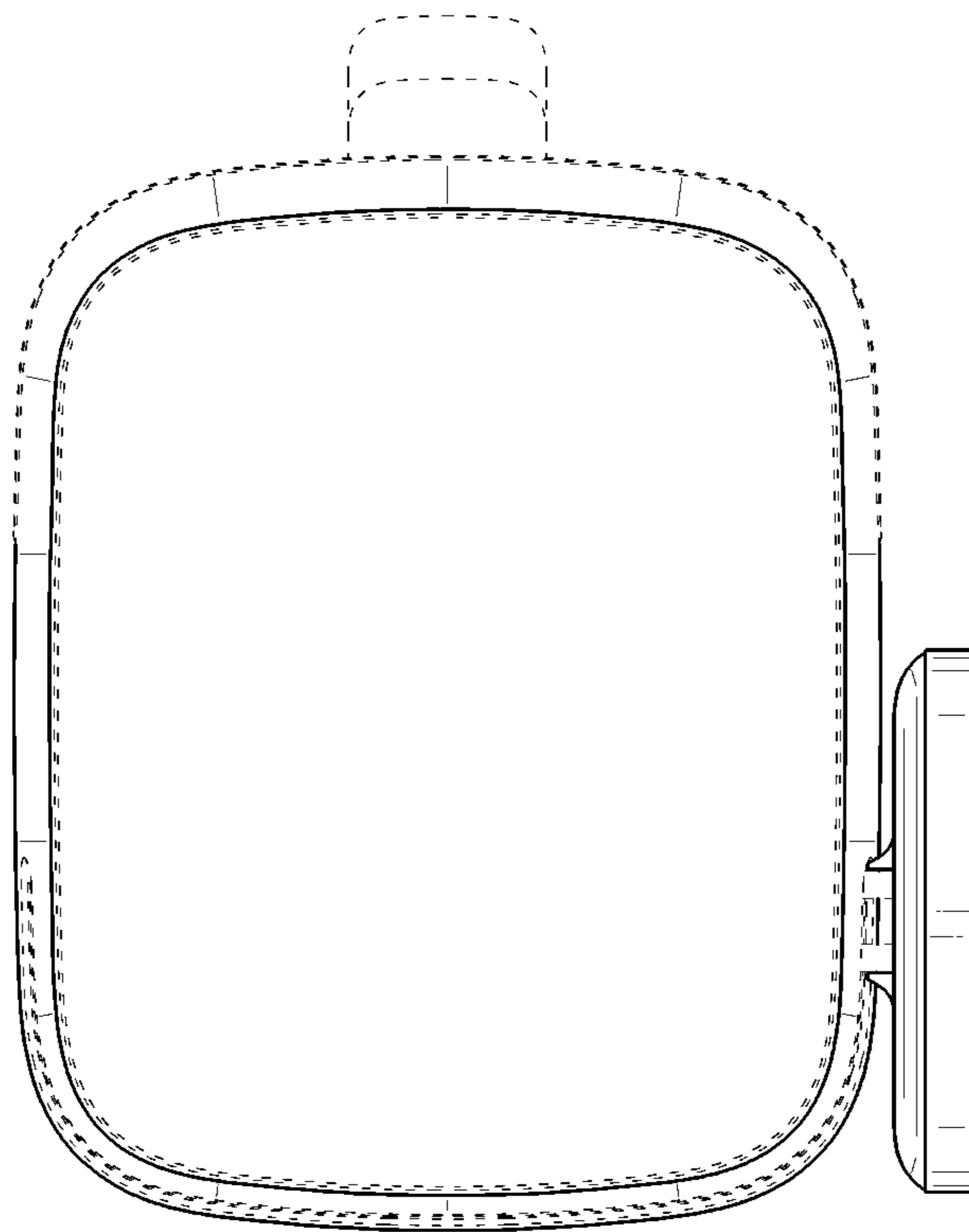


FIG. 21

