

US00D987561S

(12) **United States Design Patent** (10) **Patent No.:** **US D987,561 S**  
**Son et al.** (45) **Date of Patent:** **\*\* May 30, 2023**

(54) **STERILIZATION CHARGING CASE FOR MASK TYPE AIR PURIFIERS**

(71) Applicant: **LG ELECTRONICS INC.**, Seoul (KR)

(72) Inventors: **Youngjee Son**, Seoul (KR); **Bodeung Hwang**, Seoul (KR)

(73) Assignee: **LG ELECTRONICS INC.**, Seoul (KR)

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

(21) Appl. No.: **35/514,107**

(22) Filed: **Dec. 28, 2021**

(80) **Hague Agreement Data**

Int. Filing Date: **Dec. 28, 2021**

Int. Reg. No.: **DM/220099**

Int. Reg. Date: **Dec. 28, 2021**

Int. Reg. Pub. Date: **Apr. 22, 2022**

(30) **Foreign Application Priority Data**

Aug. 13, 2021 (KR) ..... 30-2021-0038661

(51) **LOC (14) Cl.** ..... **13-02**

(52) **U.S. Cl.**  
USPC ..... **D13/107**

(58) **Field of Classification Search**  
USPC ..... D13/103, 107, 108, 109, 110, 112, 118,  
D13/119, 120, 121, 184, 199

(Continued)

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D496,331 S \* 9/2004 Nan ..... D13/103  
D572,655 S \* 7/2008 Osiecki ..... D13/107

(Continued)

**FOREIGN PATENT DOCUMENTS**

CN 306039810 \* 9/2020  
EM 008412100-0001 \* 9/2022

(Continued)

**OTHER PUBLICATIONS**

“Replacement Charging Case: Epic Air Sport ANC”, first accessed Dec. 7, 2022. JLab.com [https://www.jlab.com/products/replacement-charging-case-for-epic-air-sport-anc-true-wireless-earbuds?variant=36452998217800] (Year: 2022).\*

(Continued)

*Primary Examiner* — Rosemary K Tarcza

*Assistant Examiner* — Seth David Kumpf

(74) *Attorney, Agent, or Firm* — Birch, Stewart, Kolasch & Birch, LLP

(57) **CLAIM**

The ornamental design for a sterilization charging case for mask type air purifiers, as shown and described.

**DESCRIPTION**

1. Sterilization charging case for mask type air purifiers

1.1 : Perspective

1.2 : Rear perspective view

1.3 : Front

1.4 : Back

1.5 : Left

1.6 : Right

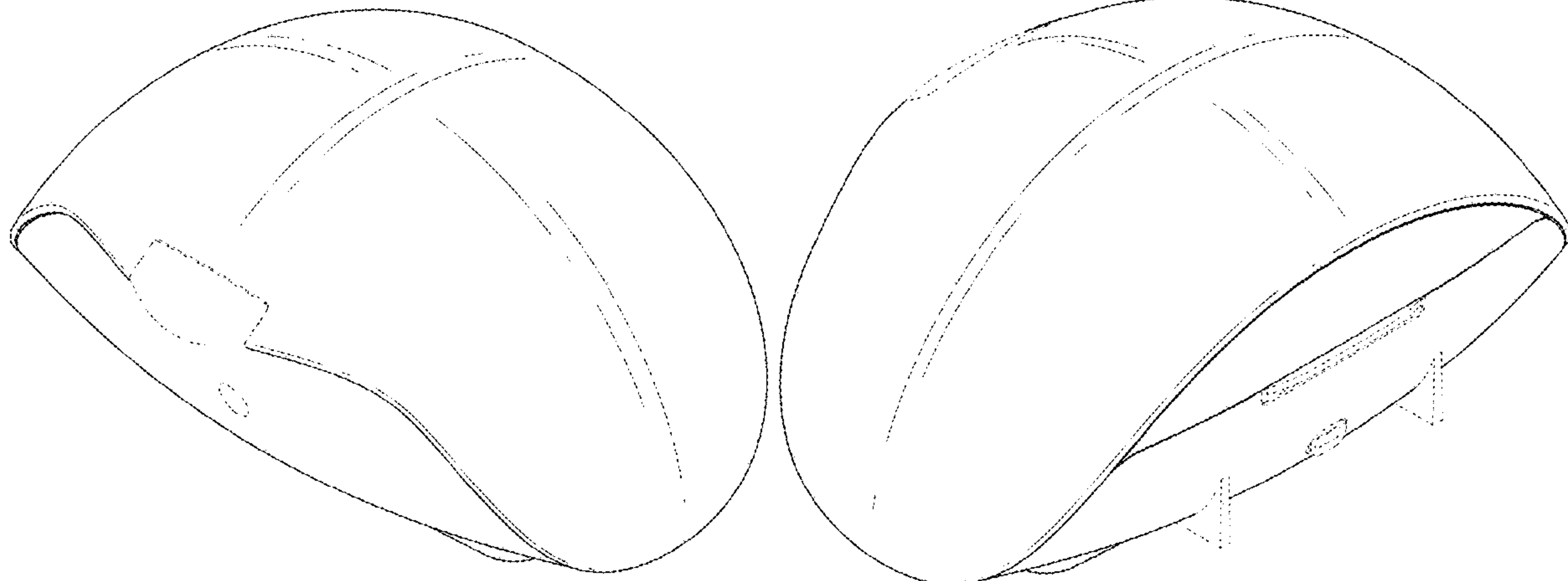
1.7 : Top

1.8 : Bottom

1.9 : Reference

The broken lines indicate portions of the article that form no part of the claimed design; reproduction 1.9 is a reference view showing an open state of the upper door; the broken lines showing the inner shapes of the sterilization charging case in the reproduction 1.9 form no part of the claimed design.

**1 Claim, 9 Drawing Sheets**



(58) **Field of Classification Search**  
 CPC .... H01M 10/44; H01M 10/46; H01M 10/465;  
 H01M 10/482; H01M 2200/30; H01M  
 2250/30; H01M 2250/40; H04B 1/08;  
 H04B 1/086; H01H 3/02; H01H 3/12;  
 H01H 9/0214; H01H 9/0264; H01H  
 23/00; H01H 23/02; H01H 23/04; H01H  
 23/08; H02B 1/26; H02B 1/30; H05K  
 5/00

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D654,866 S \* 2/2012 Rautiainen ..... D13/108  
 D668,220 S \* 10/2012 Chu ..... D13/107  
 D699,674 S \* 2/2014 Man ..... D13/108  
 D793,954 S \* 8/2017 Clervi ..... D13/107  
 D933,602 S \* 10/2021 Zhang ..... D3/294  
 D955,983 S \* 6/2022 Ma ..... D3/298

FOREIGN PATENT DOCUMENTS

HK 2119232-0001 \* 12/2021  
 JP D1680094 \* 3/2021

KR 301049746.0000 \* 3/2020  
 KR 301070776.0000 \* 8/2020  
 KR 301138036.0000 \* 11/2021

OTHER PUBLICATIONS

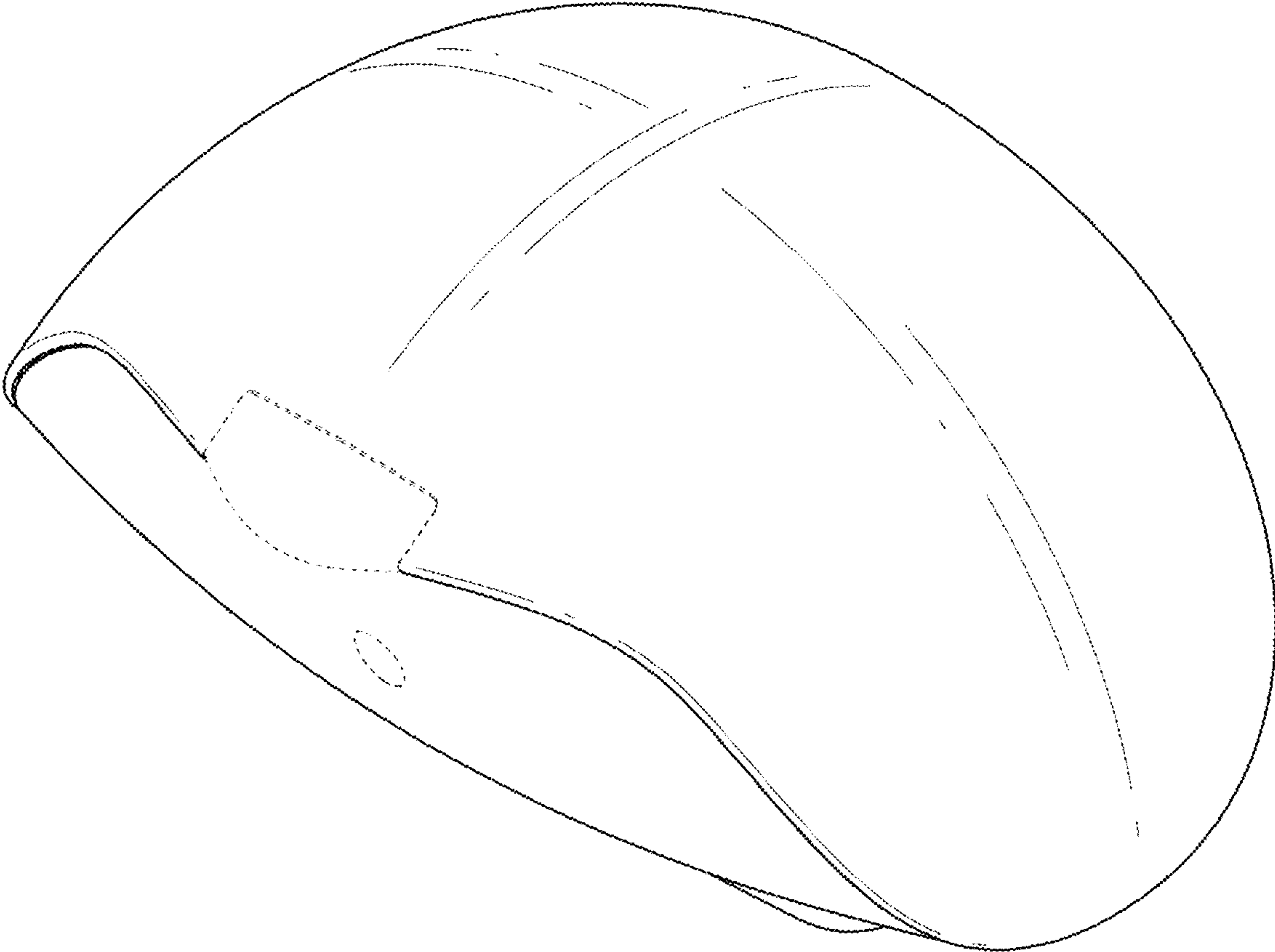
“Kissmart Compatible with Jabra Elite Active 65t Charging Case, Replacement Charger Case Cradle Dock for Jabra Elite Active 65t/ Elite 65t Earbuds (Capacity 500mah) (Yellow)”, first available Aug. 8, 2019. Amazon.com [<https://www.amazon.com/dp/B07WBZPMW3>] (Year: 2019).\*

“How to Enable or Disable AirPods Pro 2 Charging Case Sounds”, first published Sep. 23, 2022. Mactrast.com [<https://www.mactrast.com/2022/09/how-to-enable-or-disable-airpods-pro-2-charging-case-sounds/>] (Year: 2022).\*

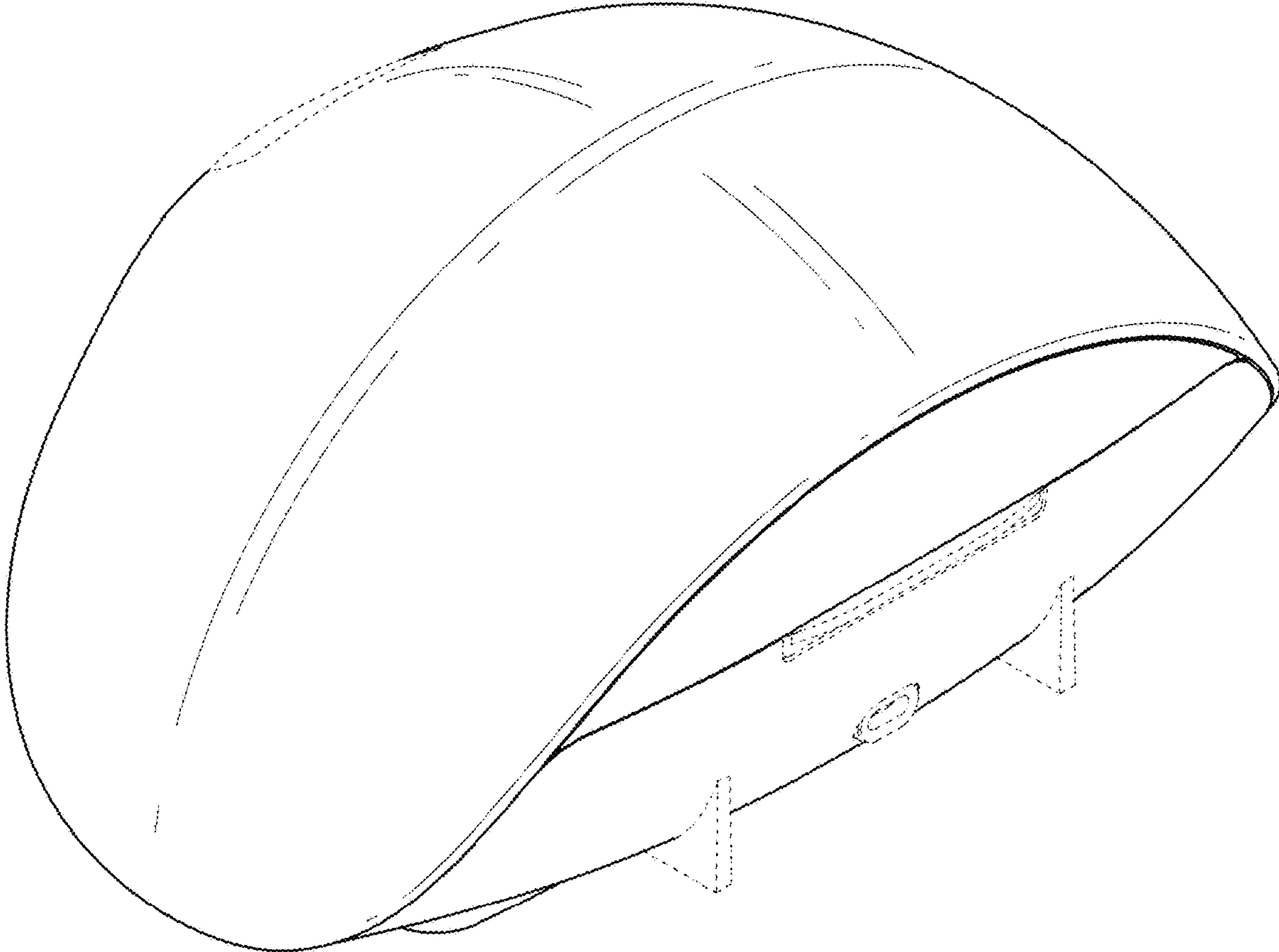
“Smatree Charging Case Compatible for BeatsX, Powerbeats 3, Powerbeats 2, Bose SoundSport, Jaybird X4/X3/X2, Powerbeats High-Performance Headphones (Not Fit with Beats Flex!)”, first available Jun. 19, 2017. Amazon.com [<https://www.amazon.com/dp/B072ZL43TG>] (Year: 2017).\*

\* cited by examiner

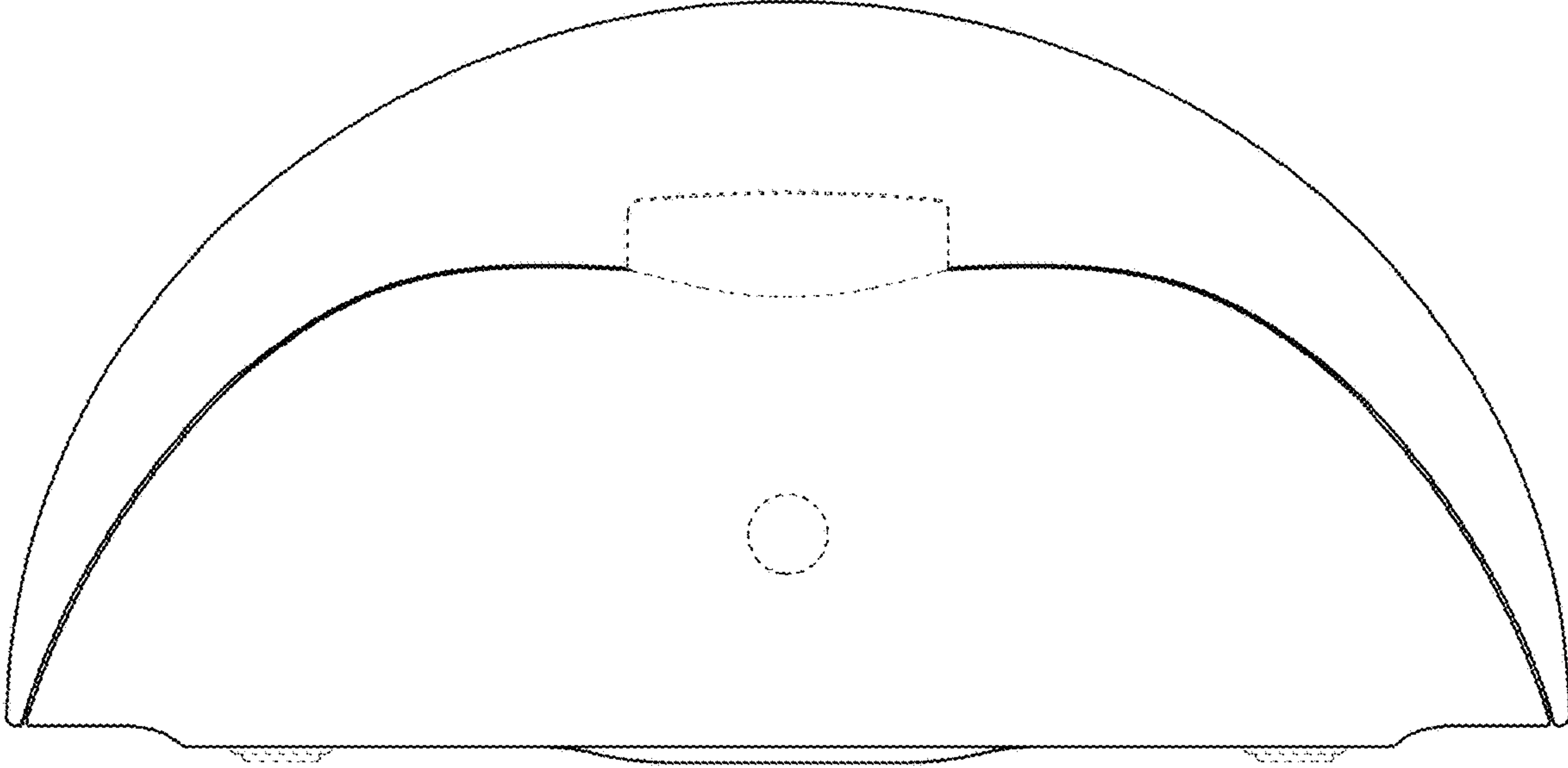
1.1



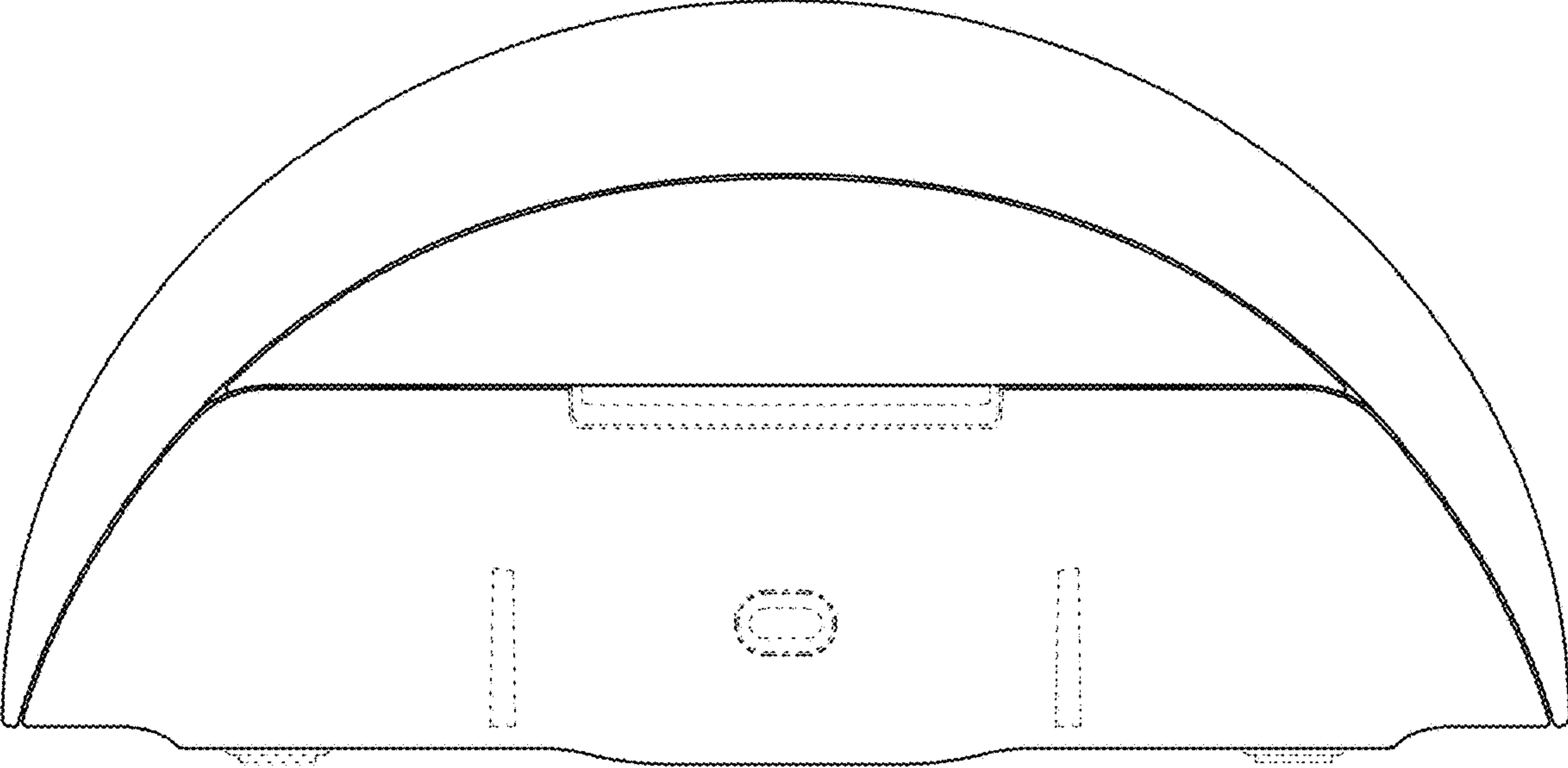
1.2



1.3

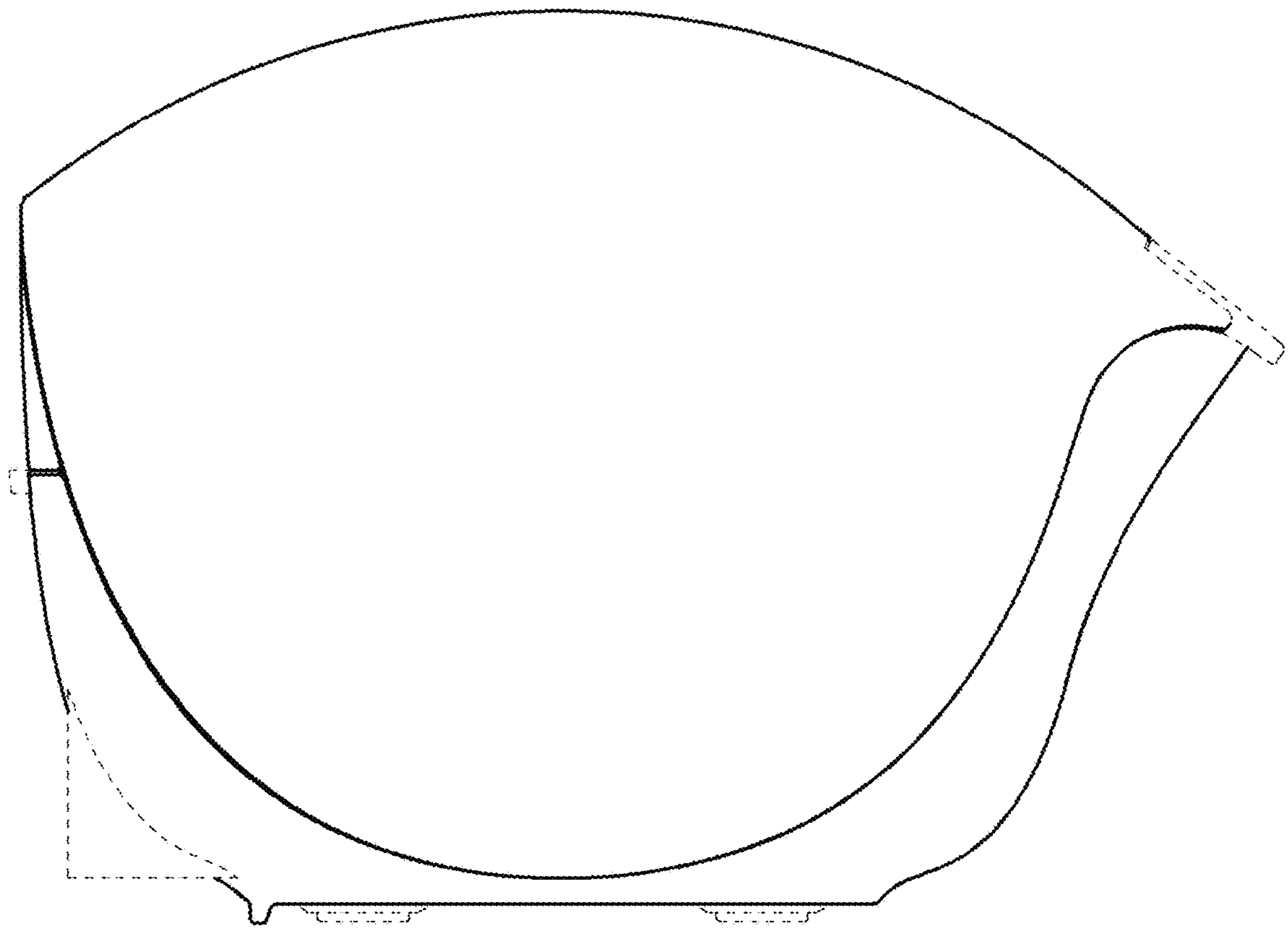


1.4

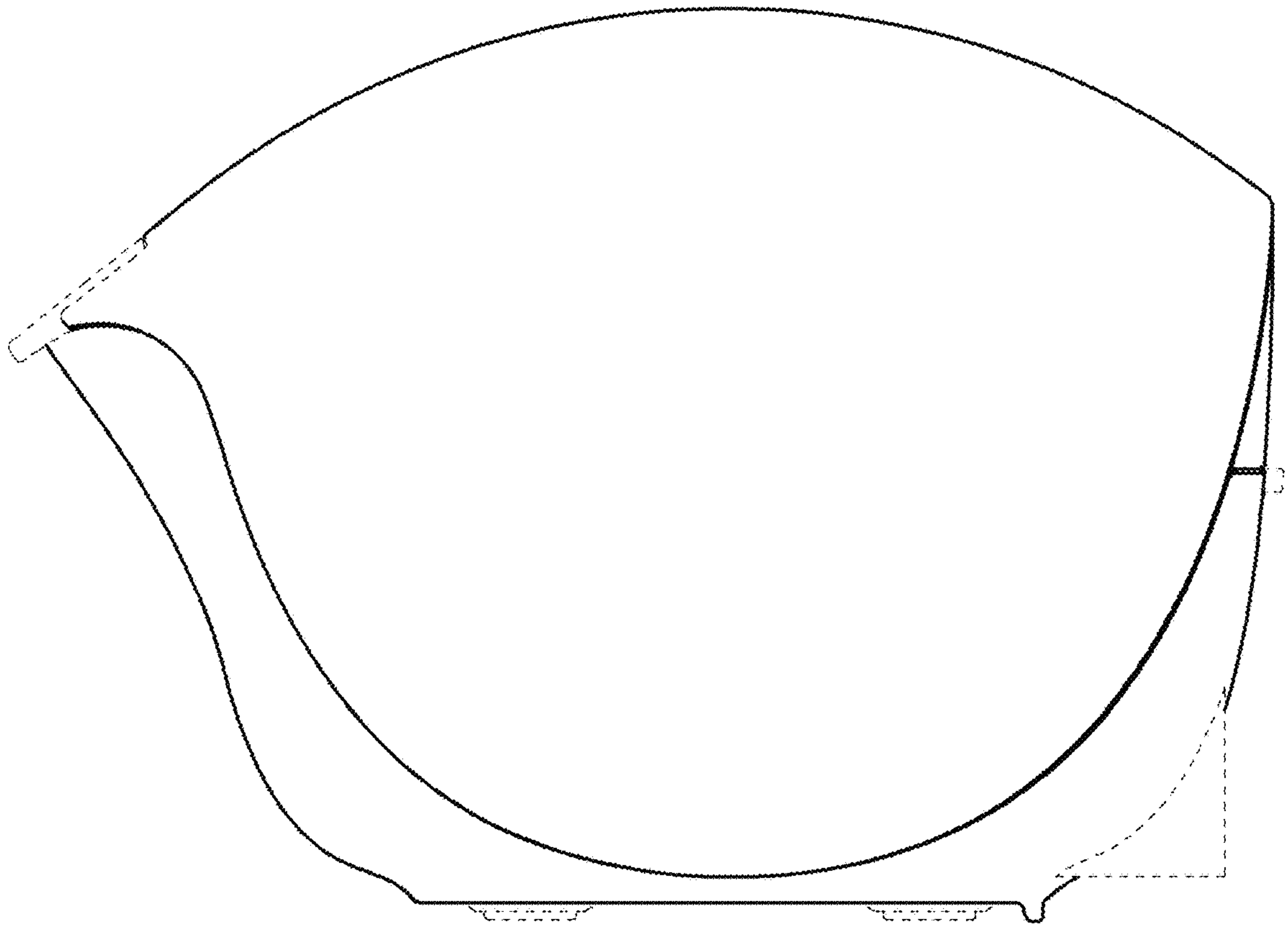




1.5

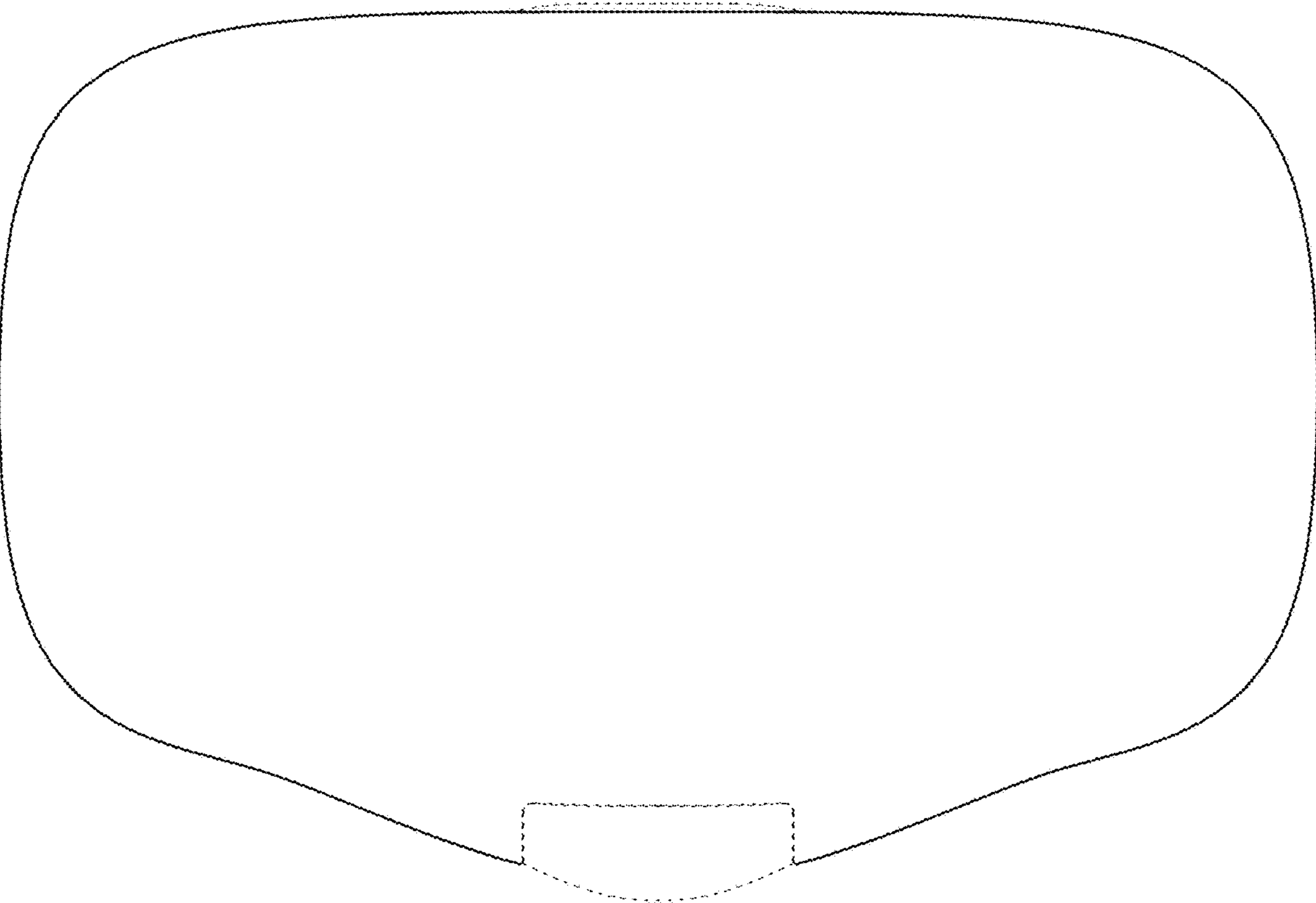


1.6

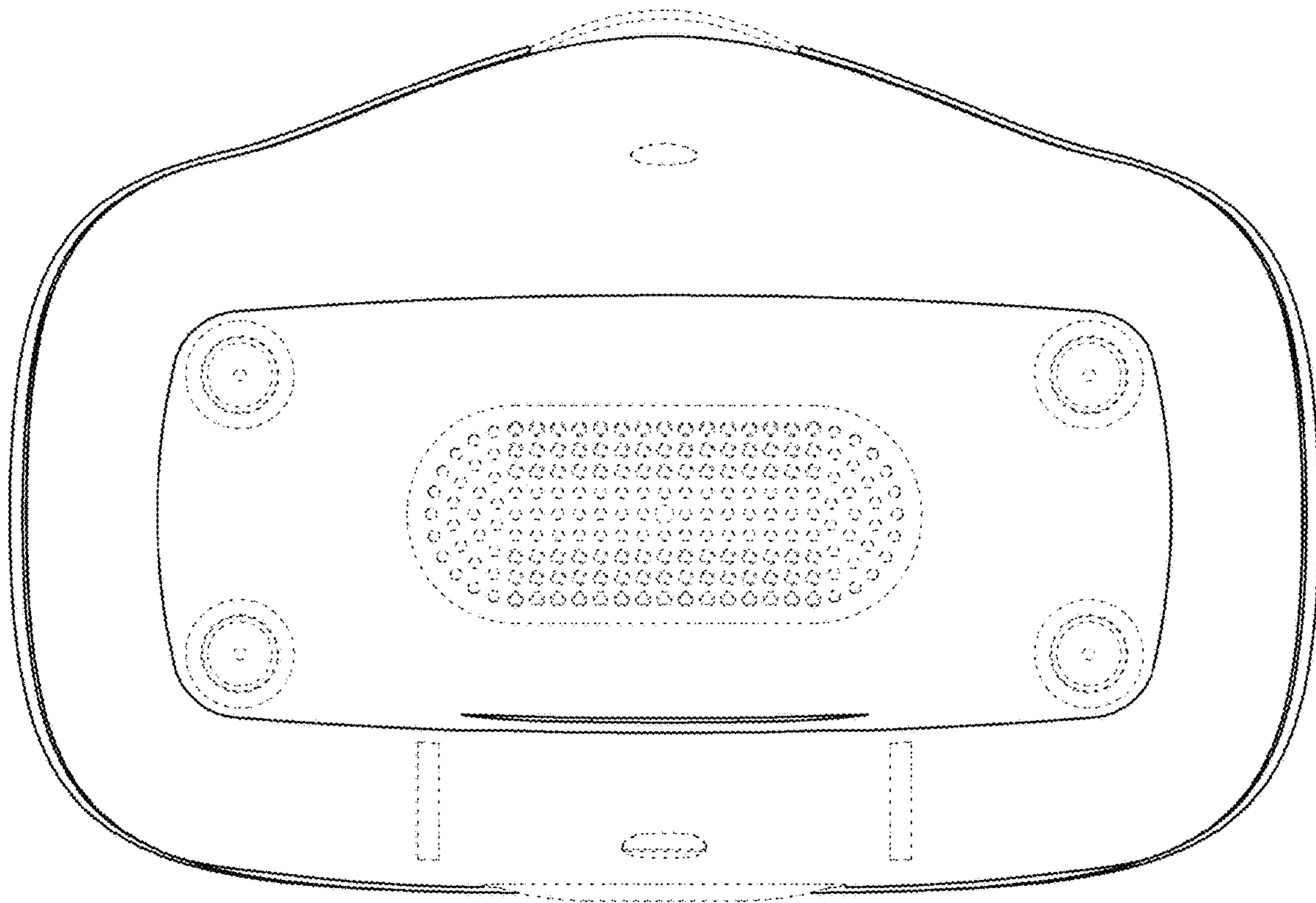




1.7



1.8



1.9

