

US00D870787S

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

(10) **Patent No.:** **US D870,787 S**
(45) **Date of Patent:** **** Dec. 24, 2019**

(54) **ROBOT FOR GUIDING PEOPLE**
(71) Applicant: **LG ELECTRONICS INC.**, Seoul (KR)
(72) Inventors: **Jinsu Kim**, Seoul (KR); **Hyunjung Kim**, Seoul (KR); **Taewoo Yoo**, Seoul (KR); **Jihyun Lee**, Seoul (KR); **Soonho Jung**, Seoul (KR)

D456,080 S * 4/2002 Karlsson D24/185
D549,756 S * 8/2007 Park D15/199
D563,443 S * 3/2008 Ahn D15/199
D566,737 S * 4/2008 Matsuda D15/199
D572,739 S * 7/2008 Jennings D15/199
D579,035 S * 10/2008 Kim B25J 11/008
D15/199
D608,804 S * 1/2010 Labak D15/199
D631,074 S * 1/2011 Peters D15/144

(73) Assignee: **LG Electronics Inc.**, Seoul (KR)

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

Primary Examiner — Richard E Chilcot

(21) Appl. No.: **35/505,293**

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

(22) Filed: **Jan. 10, 2018**

(80) **Hague Agreement Data**

Int. Filing Date: **Jan. 10, 2018**
Int. Reg. No.: **DM/100728**
Int. Reg. Date: **Jan. 10, 2018**
Int. Reg. Pub. Date: **Jul. 13, 2018**

(57) **CLAIM**

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

(30) **Foreign Application Priority Data**

Jan. 4, 2018 (KR) 30-2018-0000568

(51) **LOC (12) Cl.** **15-99**

(52) **U.S. Cl.**
USPC **D15/199**

(58) **Field of Classification Search**
USPC D7/300, 305-311, 397-400; D10/22, 23, D10/25, 28; D14/159, 176, 209.1, 216, D14/221, 239, 265, 496, 497, 508, 509, D14/125; D15/10-13, 22, 122, 199
CPC A63H 11/00; A63H 2200/00; B25J 9/00; B25J 9/04; B25J 918/00; G06N 3/00; G06N 3/004; G06N 3/008
See application file for complete search history.

DESCRIPTION

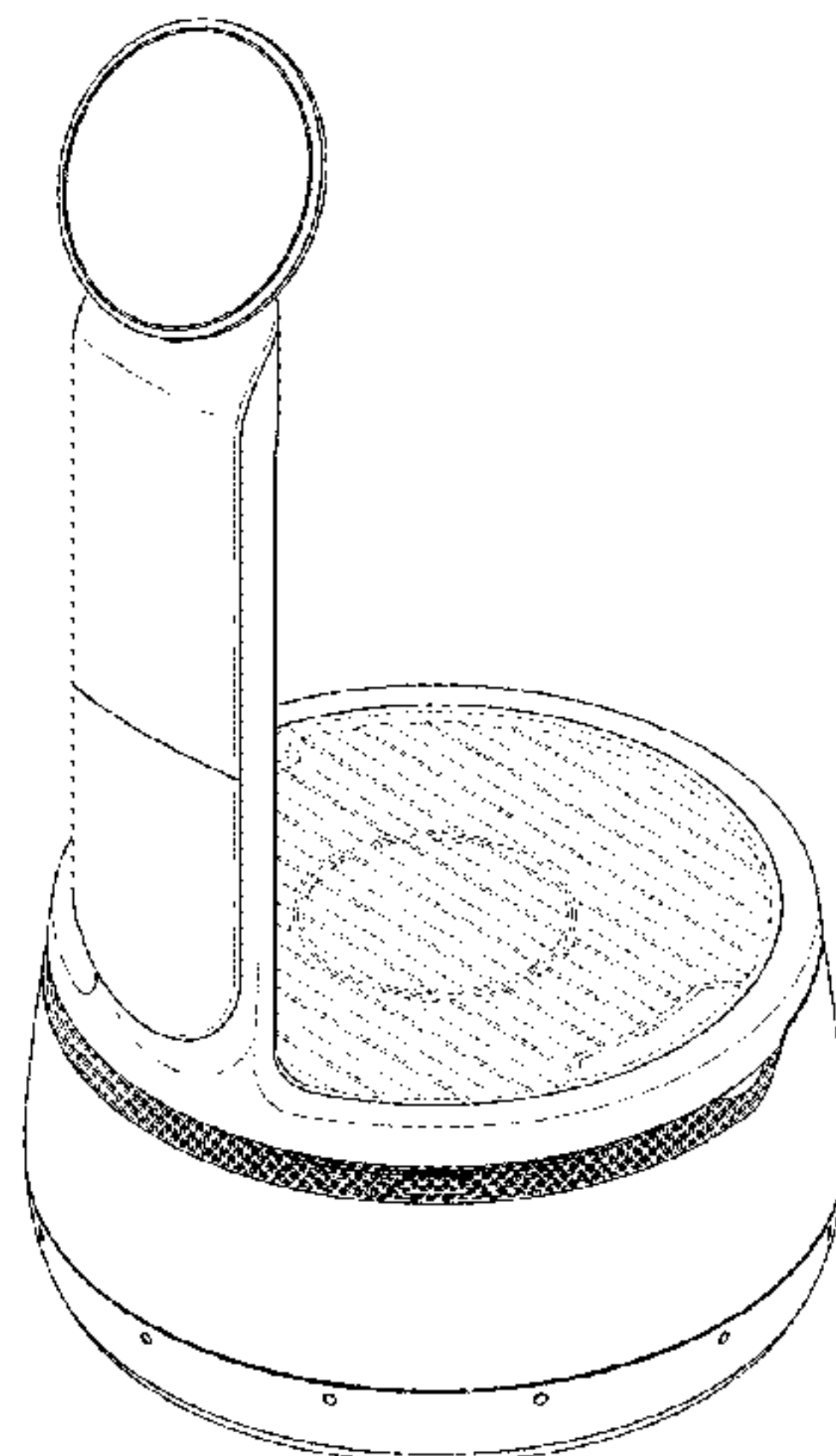
1. Robot for guiding people
1.1 : Perspective
1.2 : Front
1.3 : Back
1.4 : Left
1.5 : Right
1.6 : Top
1.7 : Bottom
1.8 : Reference view showing a state of use in which a module for fixing carriers is installed in a robot for guiding people
1.9 : Reference view showing a state of use in which a basket module is installed in a robot for guiding people
1.10 : Reference view showing a state of use in which a module for serving is installed in a robot for guiding people
The broken lines in reproductions **1.8-1.10** are for the purpose of illustrating environmental structure and form no part of the claimed design.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,717,364 A * 1/1988 Furukawa A63H 11/00
367/198
D298,766 S * 11/1988 Tanno D21/578

1 Claim, 9 Drawing Sheets



(56)

References Cited

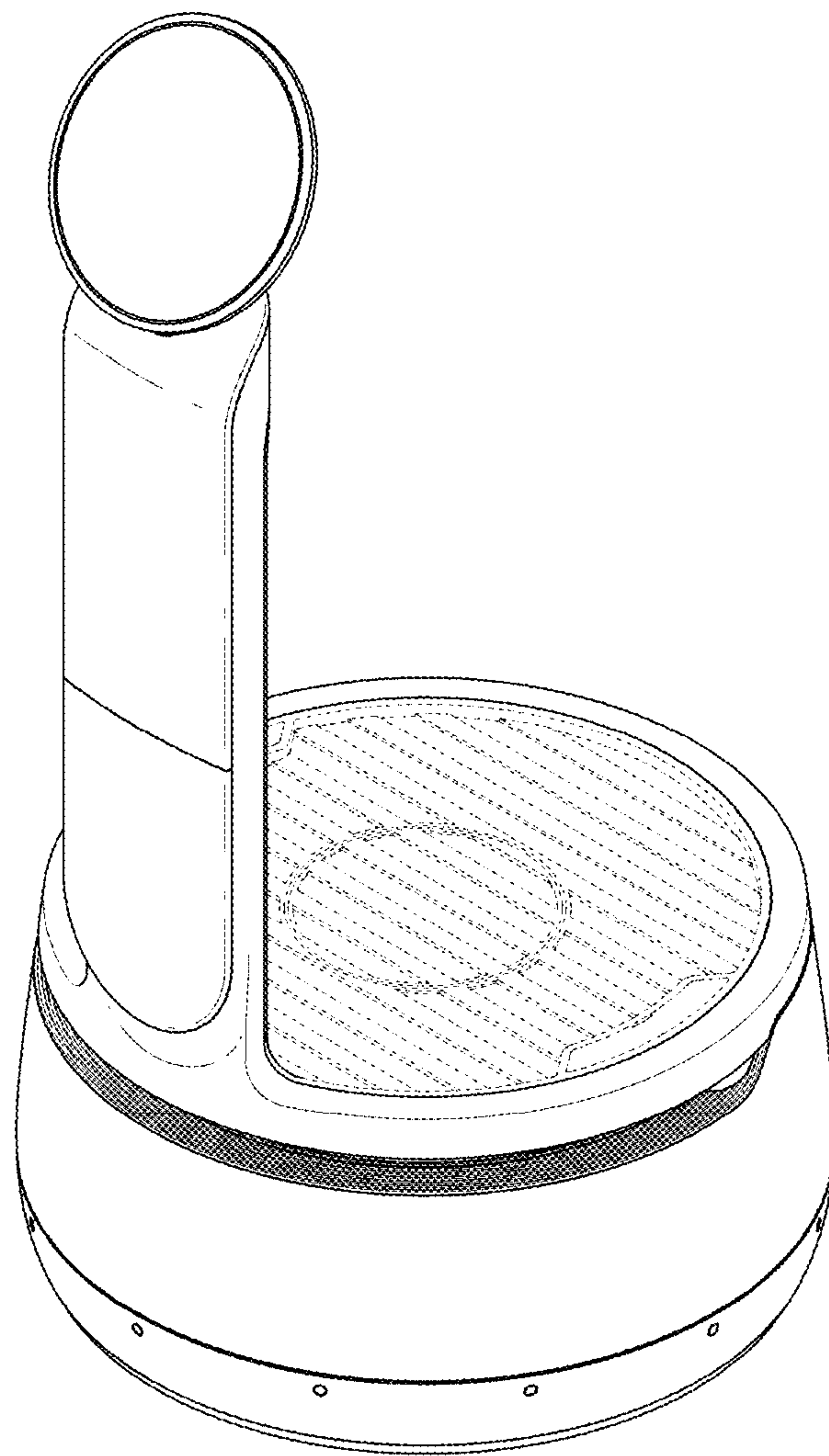
U.S. PATENT DOCUMENTS

D635,603 S * 4/2011 Paz Rodriguez D15/199
 D644,256 S * 8/2011 Kitano D15/199
 D663,333 S * 7/2012 Kitano D15/199
 D675,656 S * 2/2013 Sutherland D15/199
 8,494,675 B2 * 7/2013 Ichinose G05D 1/024
 700/245
 8,620,547 B2 * 12/2013 Monsere B60T 8/885
 701/22
 D701,256 S * 3/2014 Song D15/199
 D720,378 S * 12/2014 Dye D15/199
 8,935,006 B2 * 1/2015 Vu B25J 5/007
 700/264
 D725,166 S * 3/2015 Paik D15/199
 D732,096 S * 6/2015 Jang D15/199
 D735,258 S * 7/2015 Jang D15/199
 D739,450 S * 9/2015 Jain D15/199
 D752,668 S * 3/2016 Pedersen D15/199
 9,291,698 B2 * 3/2016 Watanabe G01S 5/0072
 D761,339 S * 7/2016 White, Jr. D15/199

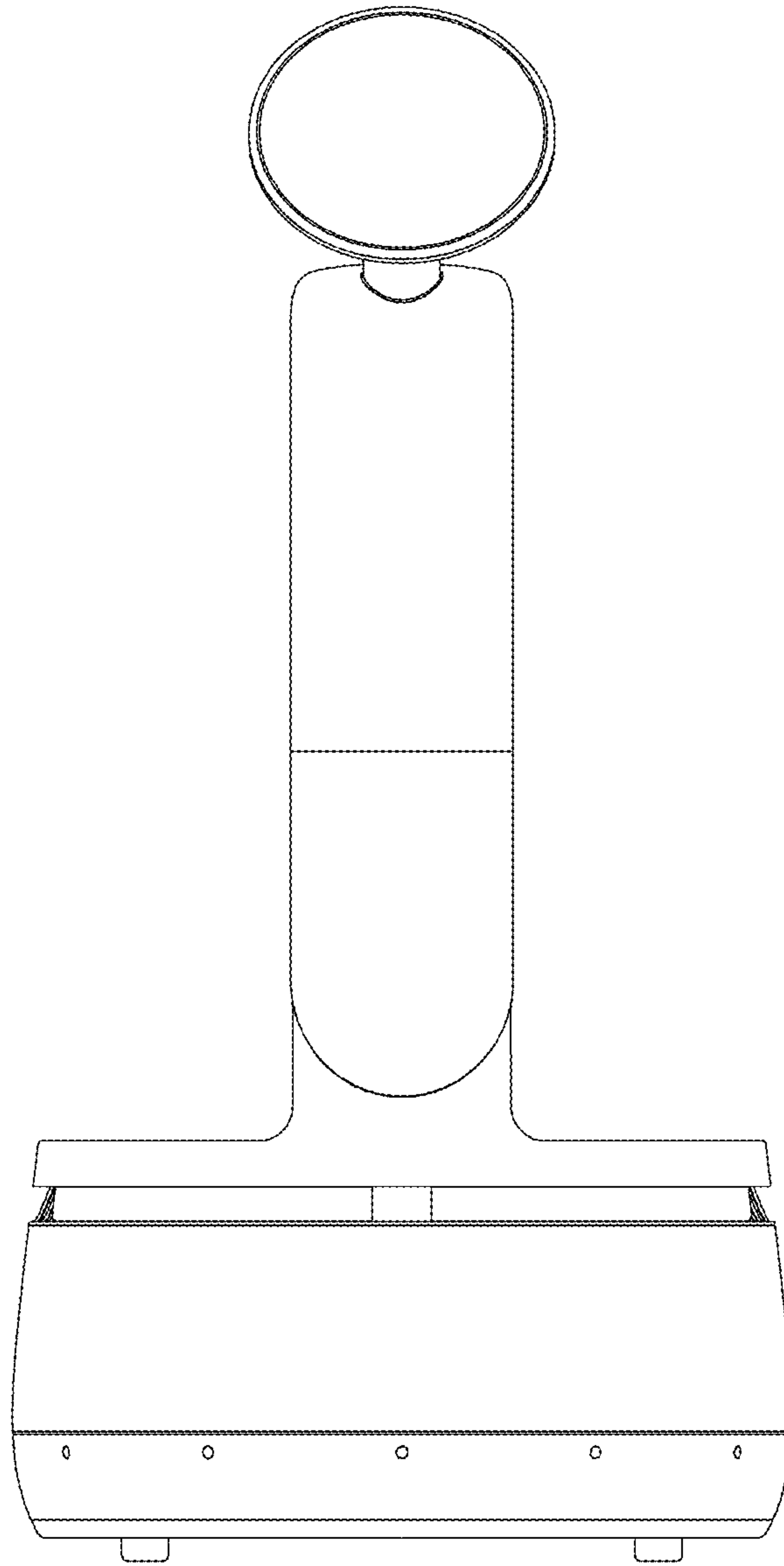
D761,894 S * 7/2016 Ho D15/199
 D769,953 S * 10/2016 Bauman D15/199
 9,469,031 B2 * 10/2016 Saito B25J 9/1676
 D781,945 S * 3/2017 Uno D15/199
 D802,040 S * 11/2017 Canoso D15/199
 D810,167 S * 2/2018 Yang D15/199
 D810,800 S * 2/2018 Wang D15/199
 D811,458 S * 2/2018 Wang D15/199
 D813,284 S * 3/2018 Wei D15/199
 D813,285 S * 3/2018 Wei D15/199
 D817,375 S * 5/2018 Deyle D15/199
 D820,334 S * 6/2018 Lee D15/199
 D826,303 S * 8/2018 Metta D15/199
 2007/0132419 A1 * 6/2007 Hashimoto B25J 5/007
 318/568.12
 2008/0147261 A1 * 6/2008 Ichinose G01C 22/006
 701/24
 2009/0169347 A1 * 7/2009 Teng B25J 5/00
 414/401
 2015/0190927 A1 * 7/2015 Sutherland H04W 4/70
 700/259
 2018/0178375 A1 * 6/2018 Yang B25J 5/007

* cited by examiner

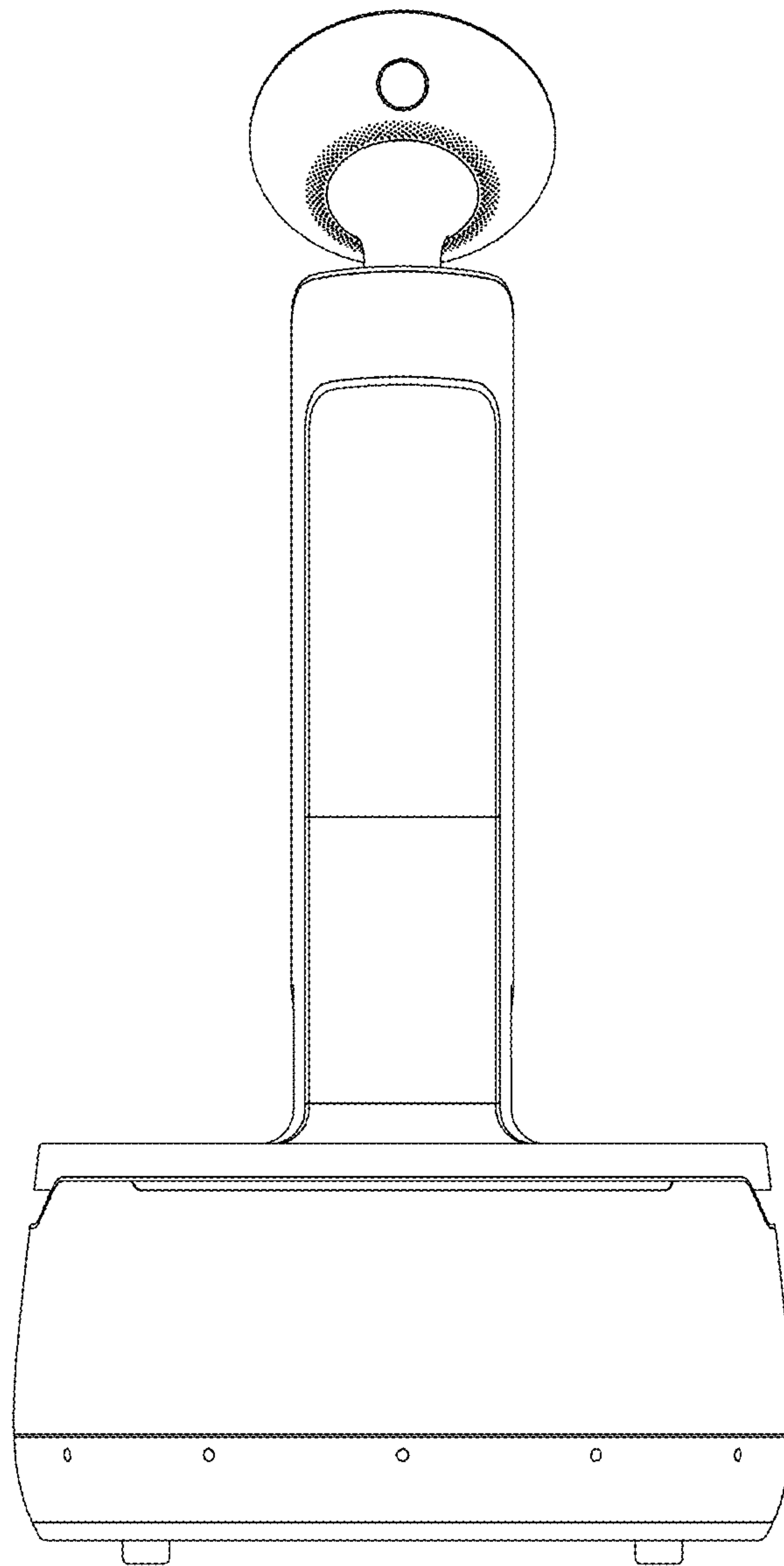
1.1



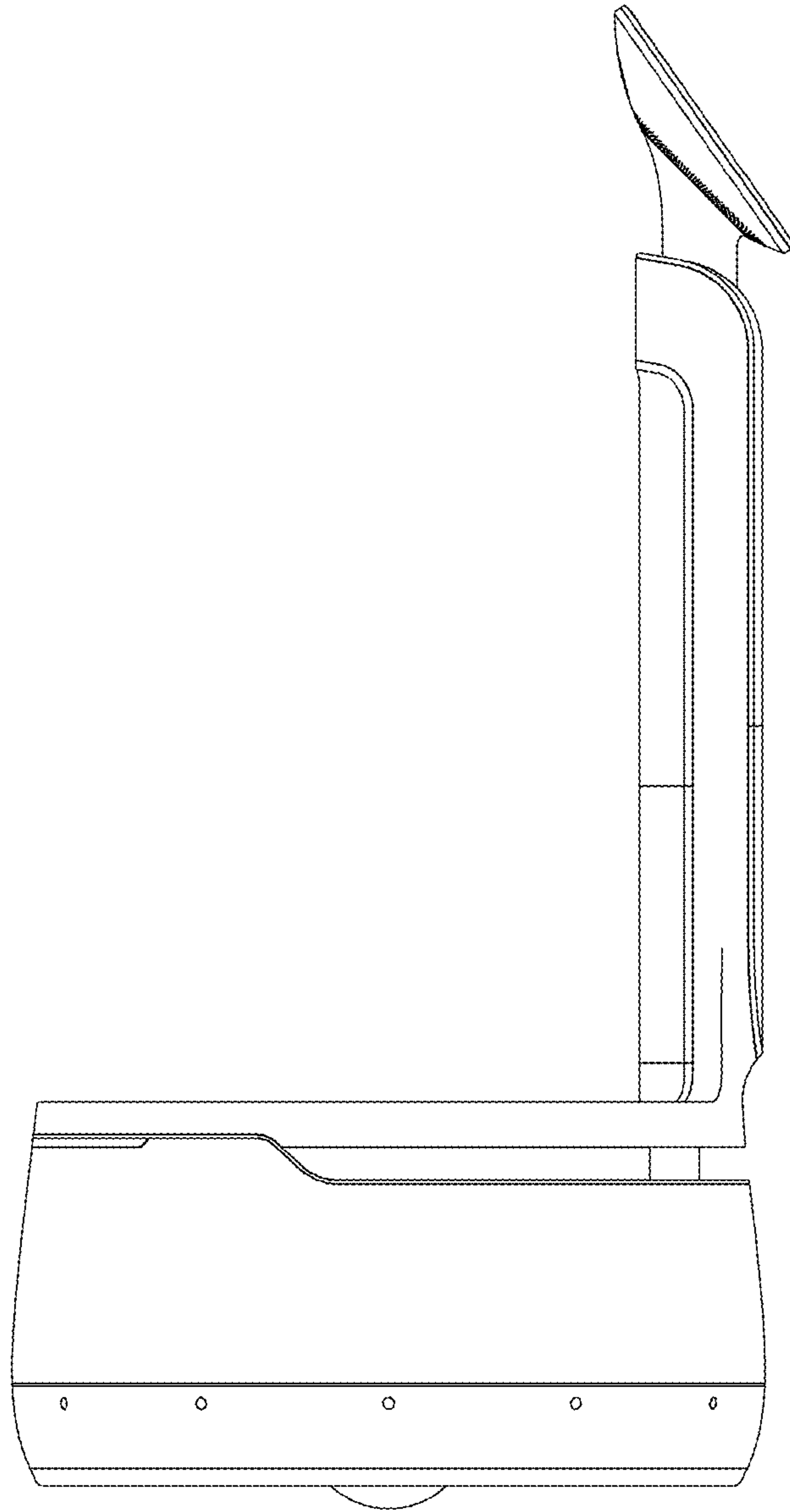
1.2



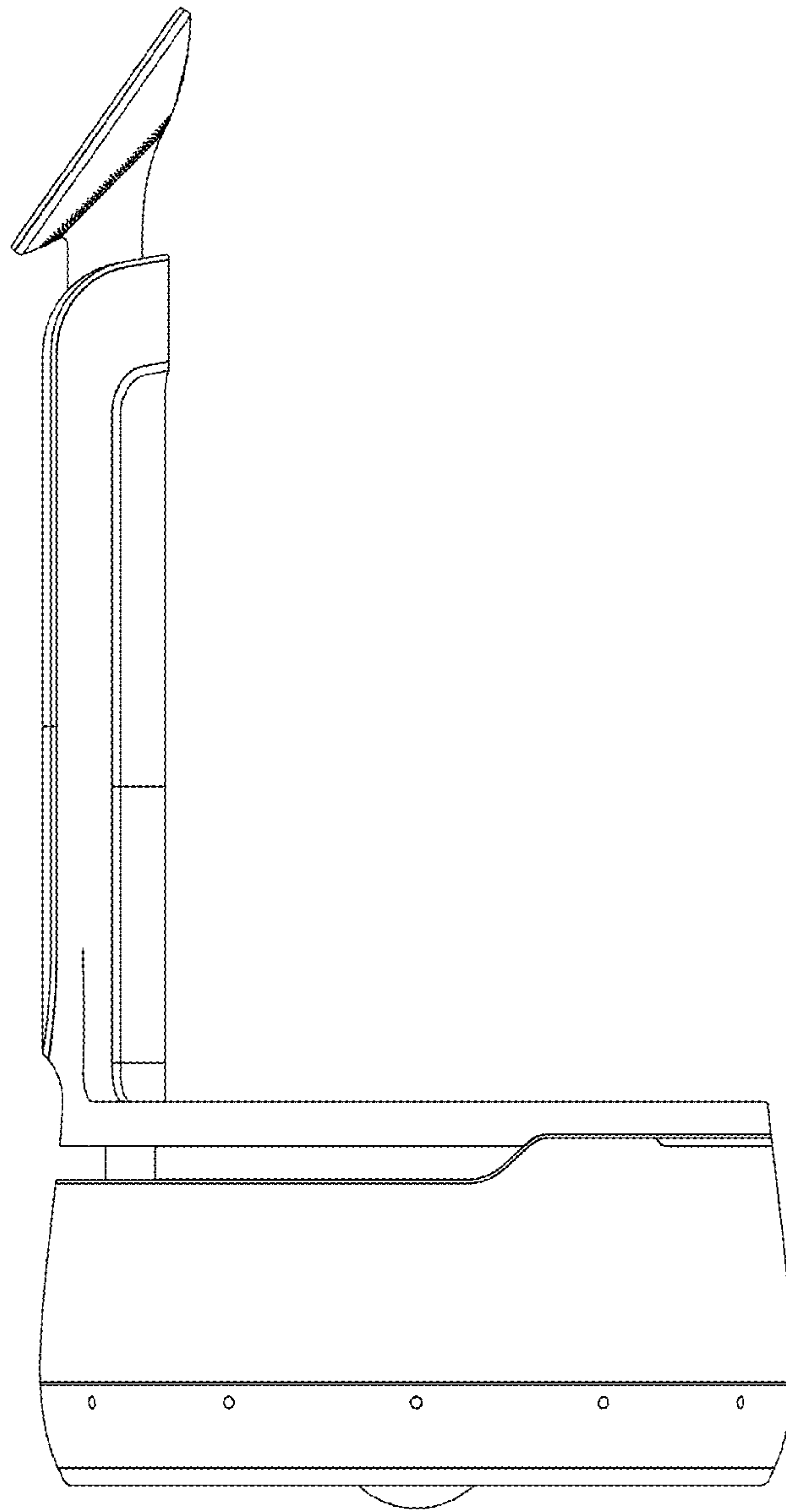
1.3



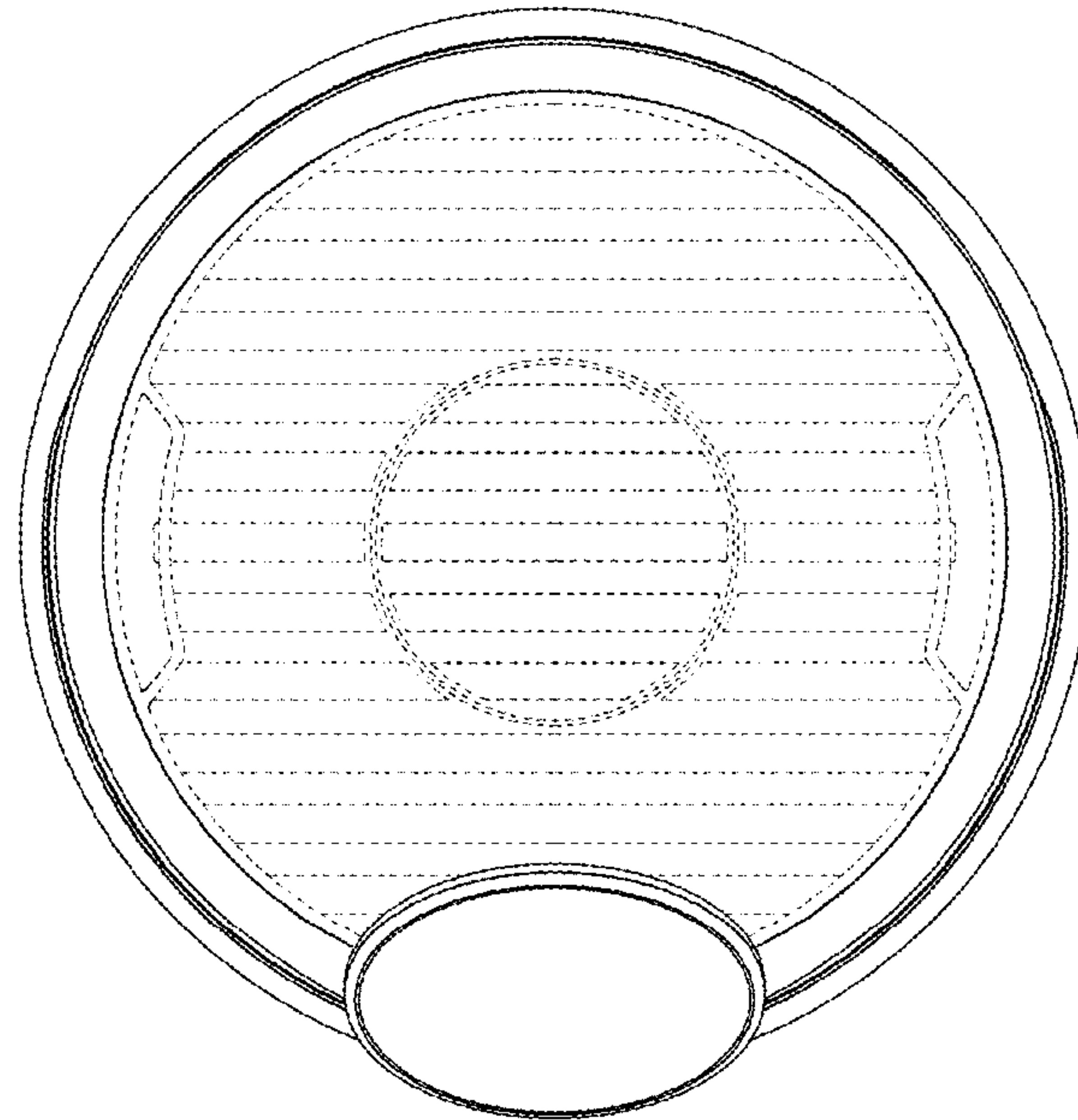
1.4



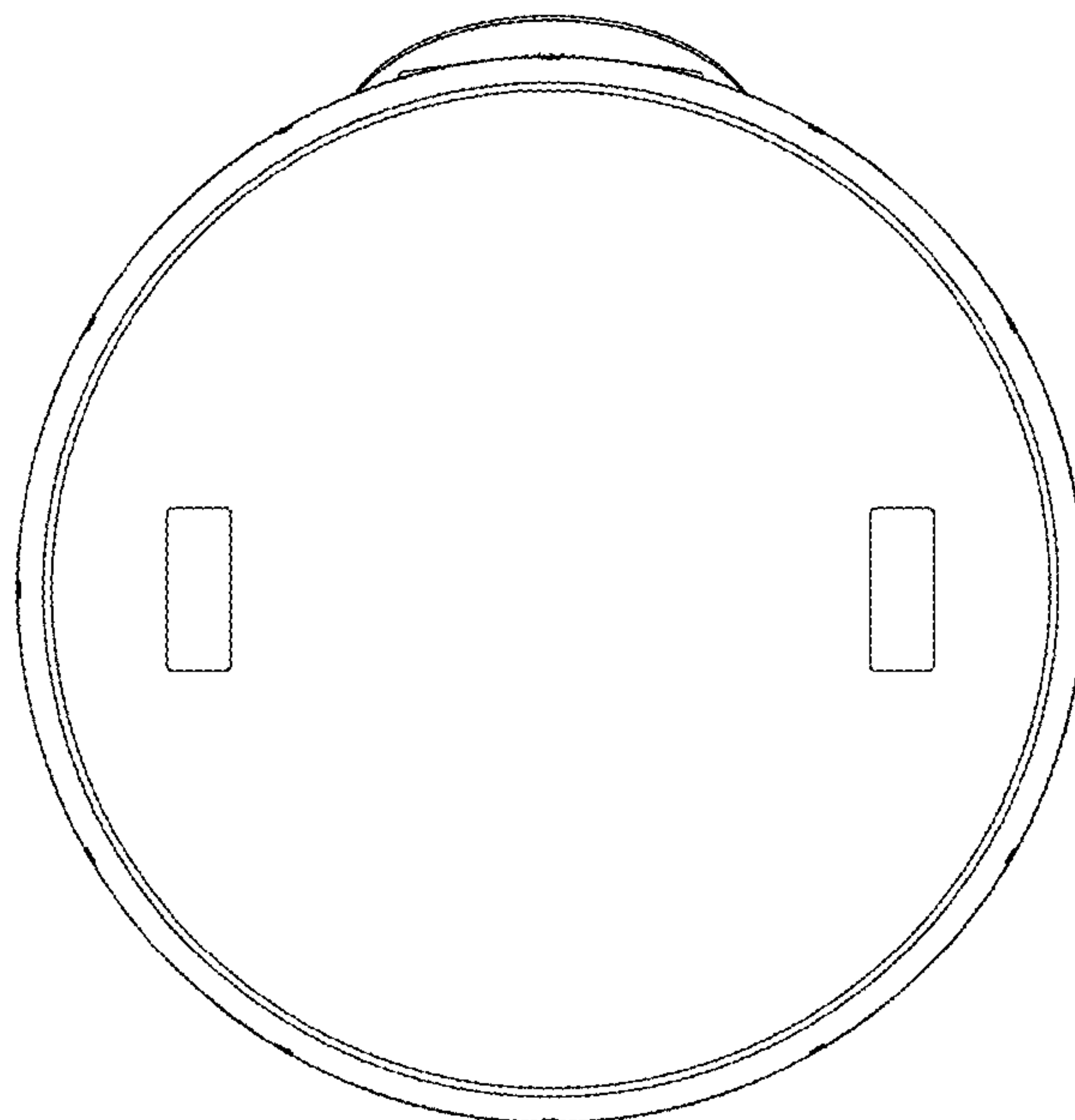
1.5



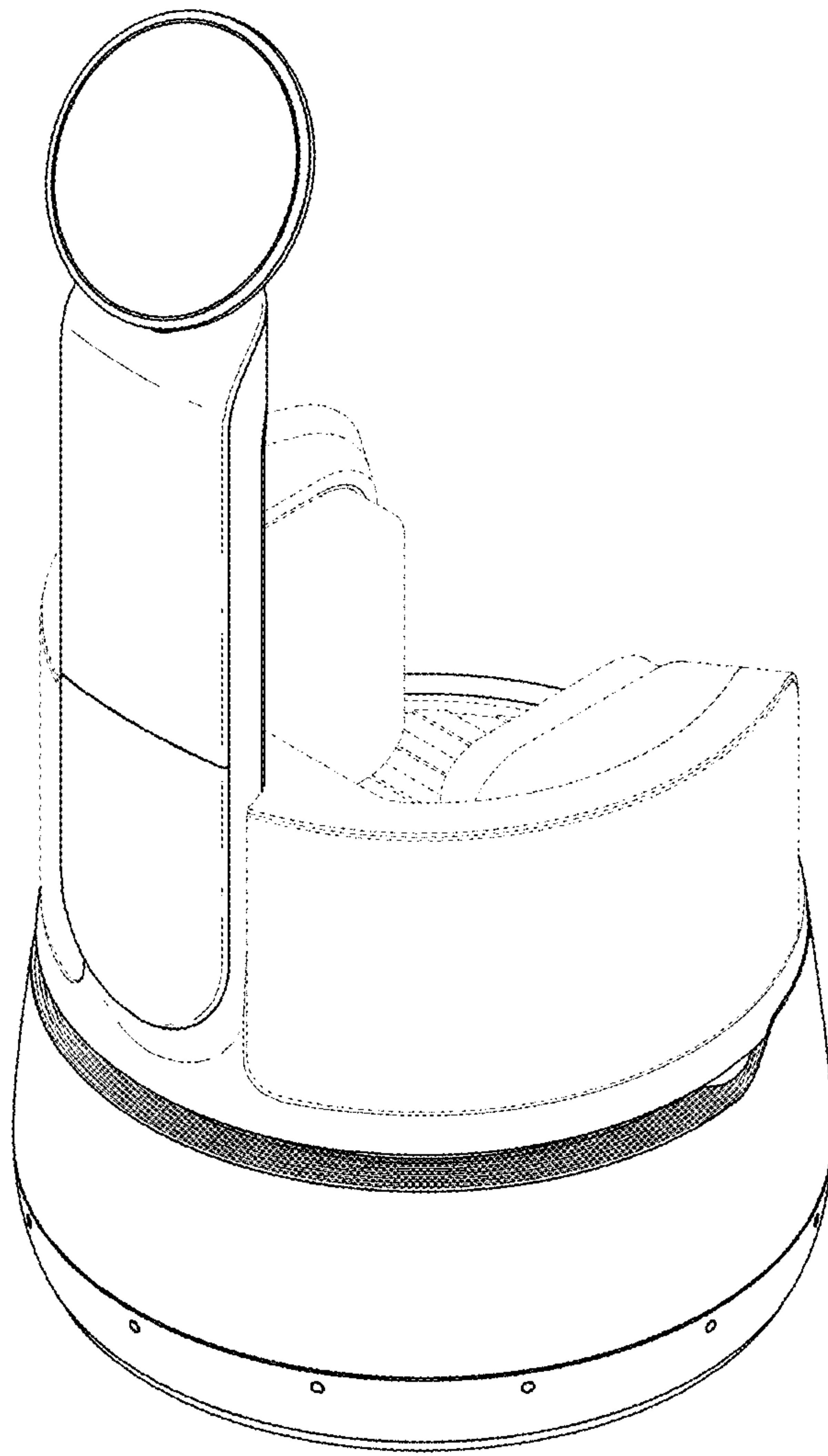
1.6



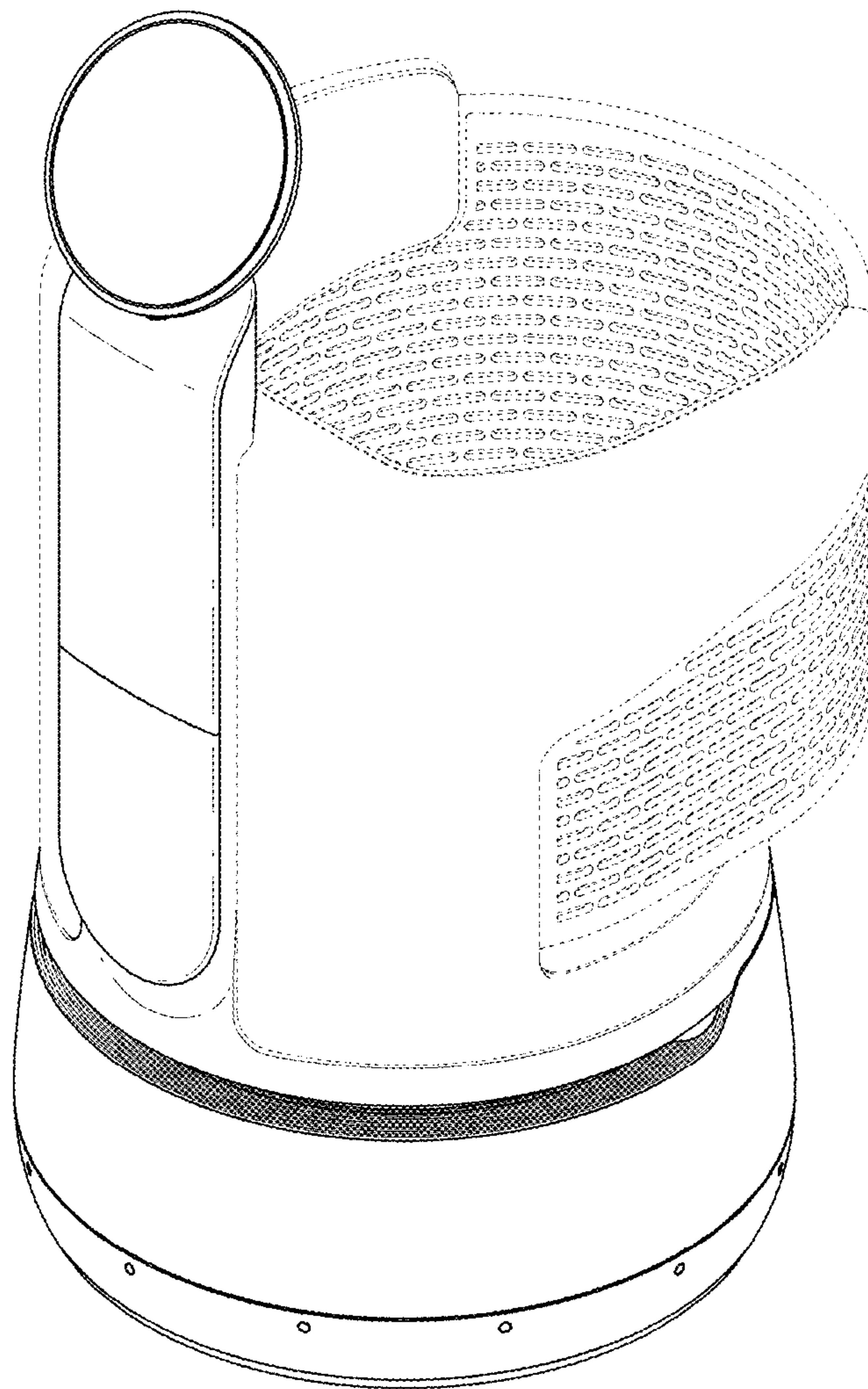
1.7



1.8



1.9



1.10

