



US00D870787S

(12) **United States Design Patent** (10) **Patent No.:** **US D870,787 S**  
**Kim et al.** (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**

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

(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**

*Primary Examiner* — Richard E Chilcot  
 (74) *Attorney, Agent, or Firm* — Birch, Stewart, Kolasch & Birch, LLP

(Continued)

(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**

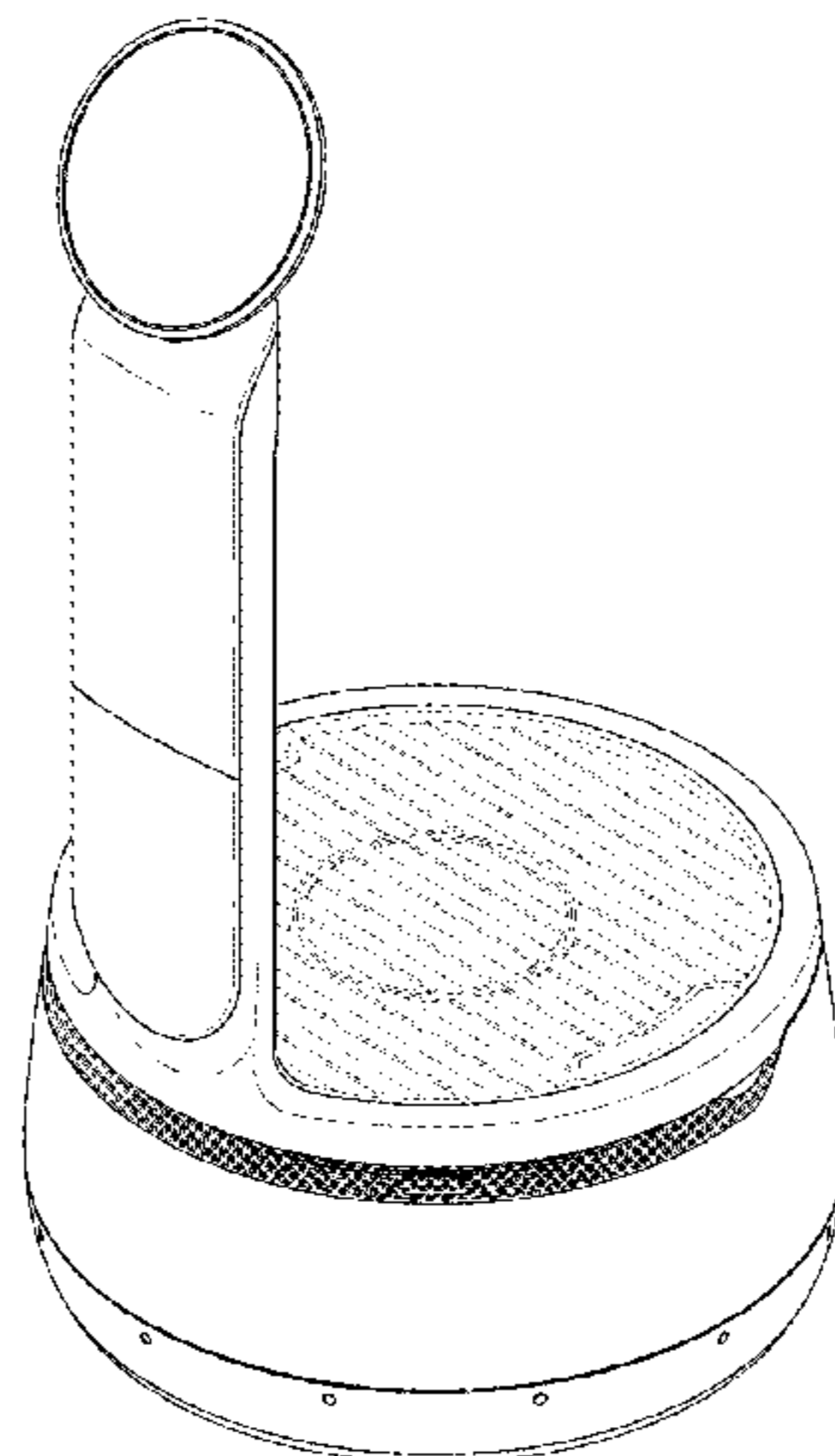
1. Robot for guiding people  
**1.1** : Perspective  
**1.2** : Front  
**1.3** : Back  
**1.4** : Left  
**1.5** : Right  
**1.6** : Top  
**1.7** : Bottom  
**1.8** : Reference view showing a state of use in which a module for fixing carriers is installed in a robot for guiding people  
**1.9** : Reference 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)

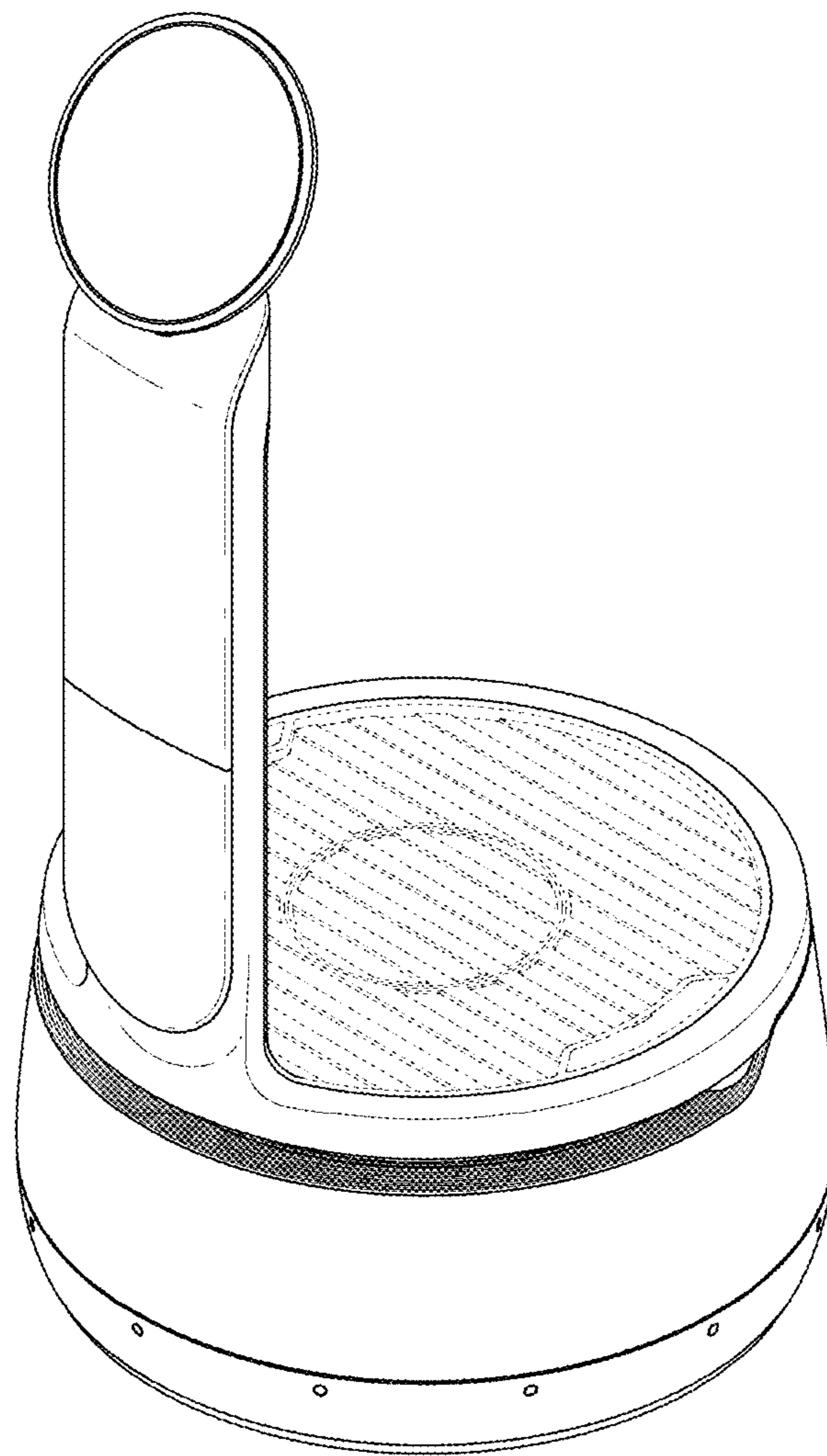
References Cited

U.S. PATENT DOCUMENTS

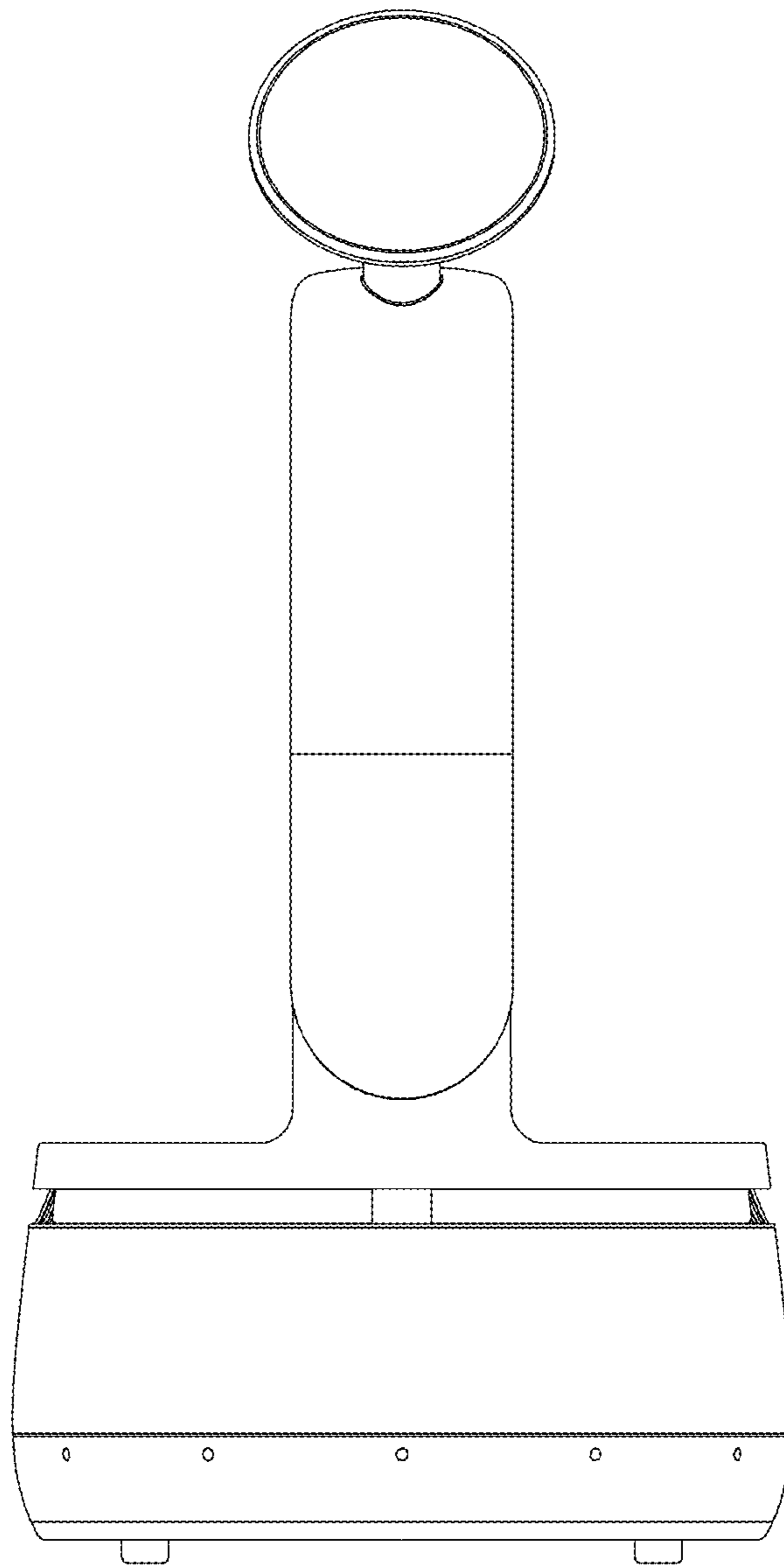
D635,603 S *	4/2011	Paz Rodriguez	.....	D15/199	D761,894 S *	7/2016	Ho	.....	D15/199
D644,256 S *	8/2011	Kitano	.....	D15/199	D769,953 S *	10/2016	Bauman	.....	D15/199
D663,333 S *	7/2012	Kitano	.....	D15/199	9,469,031 B2 *	10/2016	Saito	.....	B25J 9/1676
D675,656 S *	2/2013	Sutherland	.....	D15/199	D781,945 S *	3/2017	Uno	.....	D15/199
8,494,675 B2 *	7/2013	Ichinose	.....	G05D 1/024	D802,040 S *	11/2017	Canoso	.....	D15/199
				700/245	D810,167 S *	2/2018	Yang	.....	D15/199
8,620,547 B2 *	12/2013	Monsere	.....	B60T 8/885	D810,800 S *	2/2018	Wang	.....	D15/199
				701/22	D811,458 S *	2/2018	Wang	.....	D15/199
D701,256 S *	3/2014	Song	.....	D15/199	D813,284 S *	3/2018	Wei	.....	D15/199
D720,378 S *	12/2014	Dye	.....	D15/199	D813,285 S *	3/2018	Wei	.....	D15/199
8,935,006 B2 *	1/2015	Vu	.....	B25J 5/007	D817,375 S *	5/2018	Deyle	.....	D15/199
				700/264	D820,334 S *	6/2018	Lee	.....	D15/199
D725,166 S *	3/2015	Paik	.....	D15/199	D826,303 S *	8/2018	Metta	.....	D15/199
D732,096 S *	6/2015	Jang	.....	D15/199	2007/0132419 A1 *	6/2007	Hashimoto	.....	B25J 5/007
D735,258 S *	7/2015	Jang	.....	D15/199					318/568.12
D739,450 S *	9/2015	Jain	.....	D15/199	2008/0147261 A1 *	6/2008	Ichinose	.....	G01C 22/006
D752,668 S *	3/2016	Pedersen	.....	D15/199					701/24
9,291,698 B2 *	3/2016	Watanabe	.....	G01S 5/0072	2009/0169347 A1 *	7/2009	Teng	.....	B25J 5/00
D761,339 S *	7/2016	White, Jr.	.....	D15/199					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

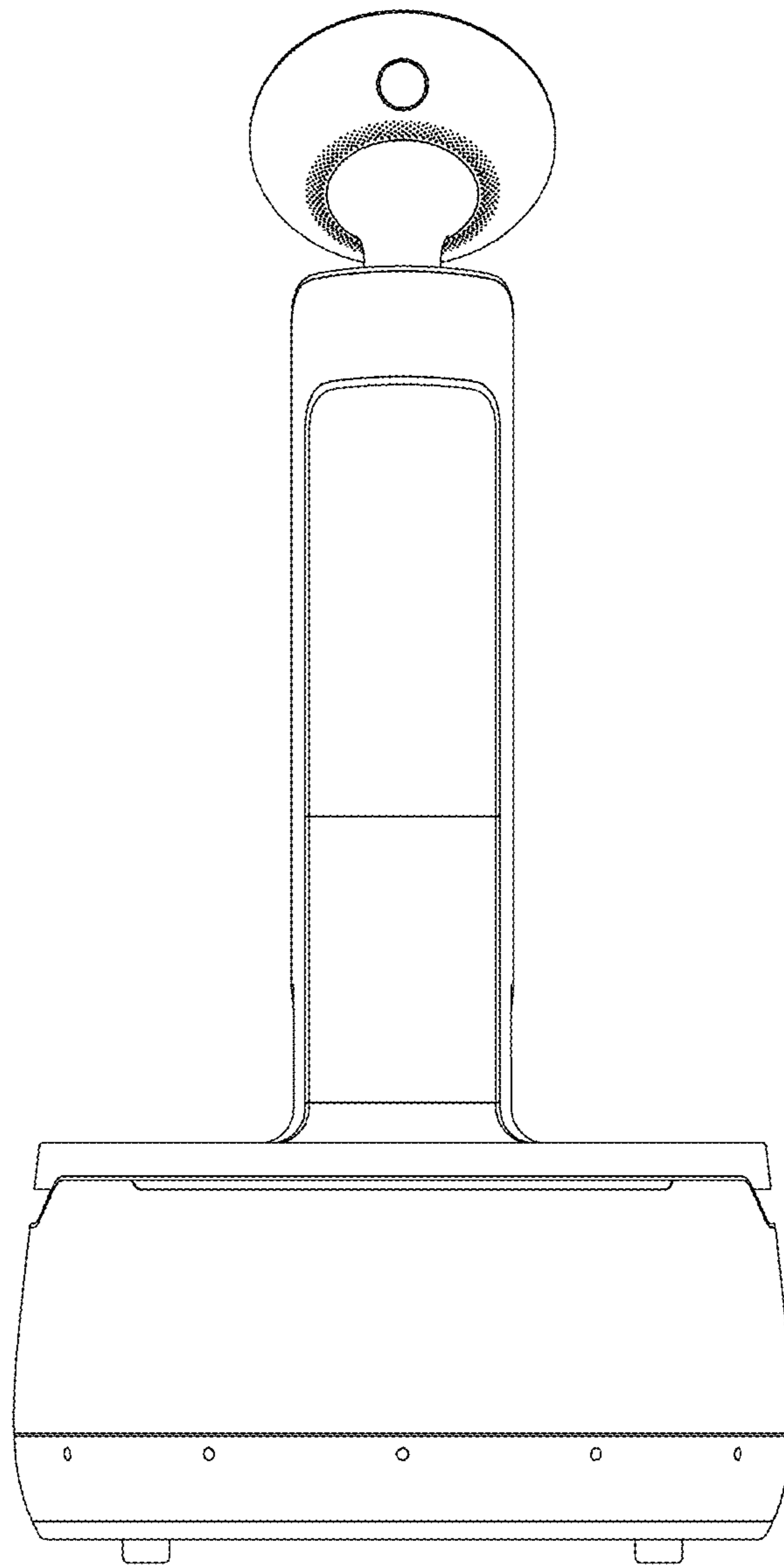
1.1



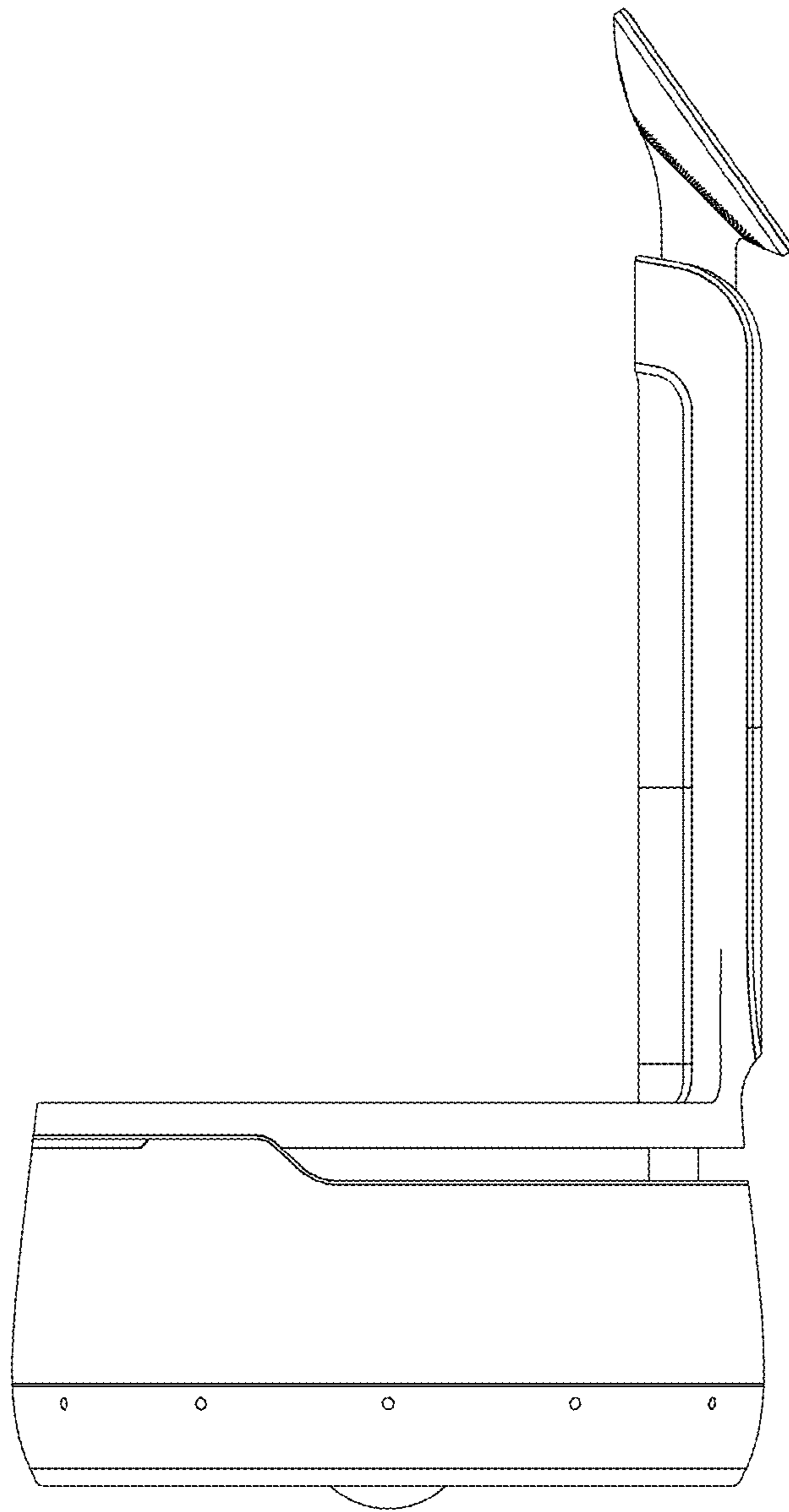
1.2



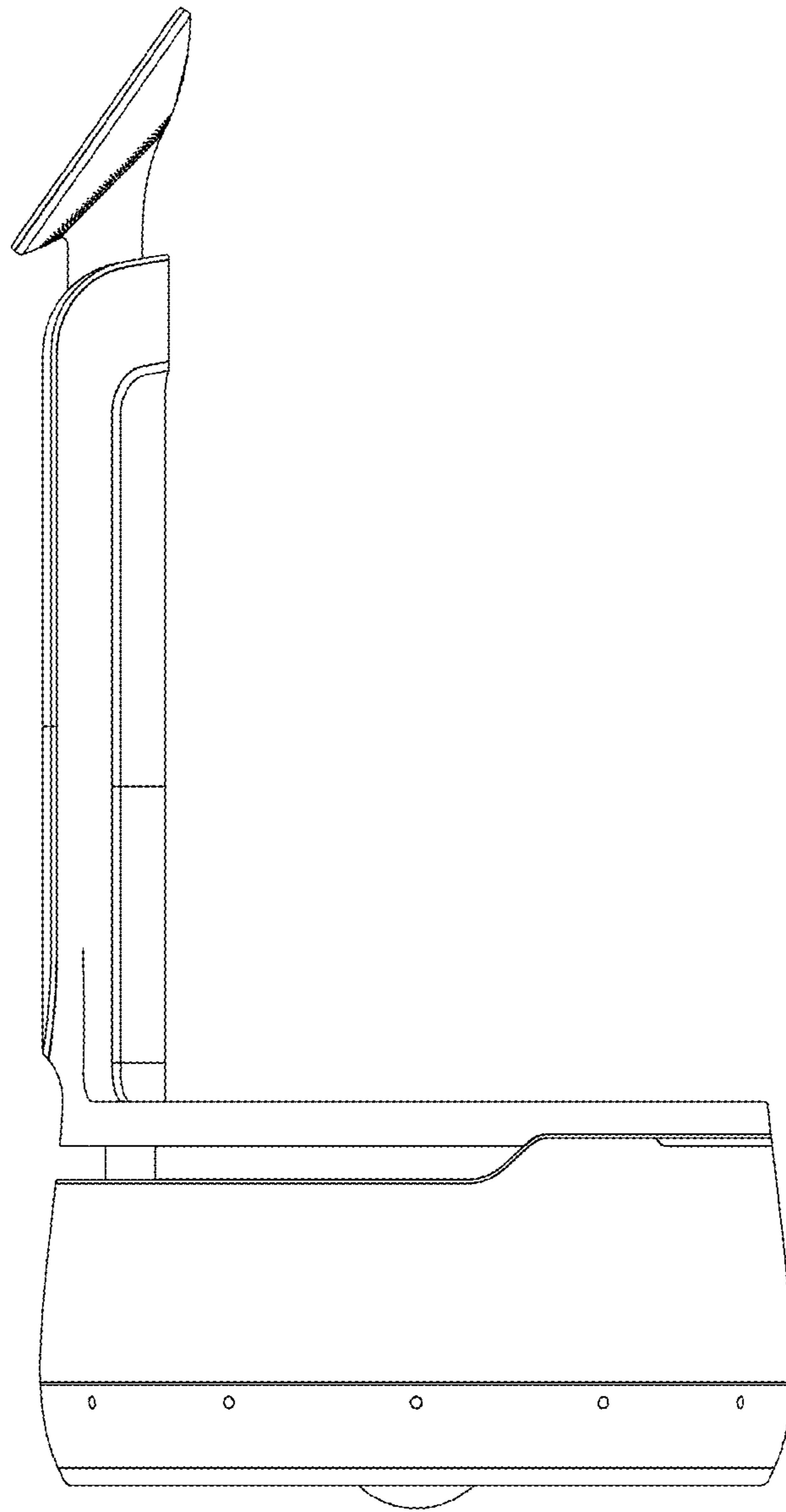
1.3



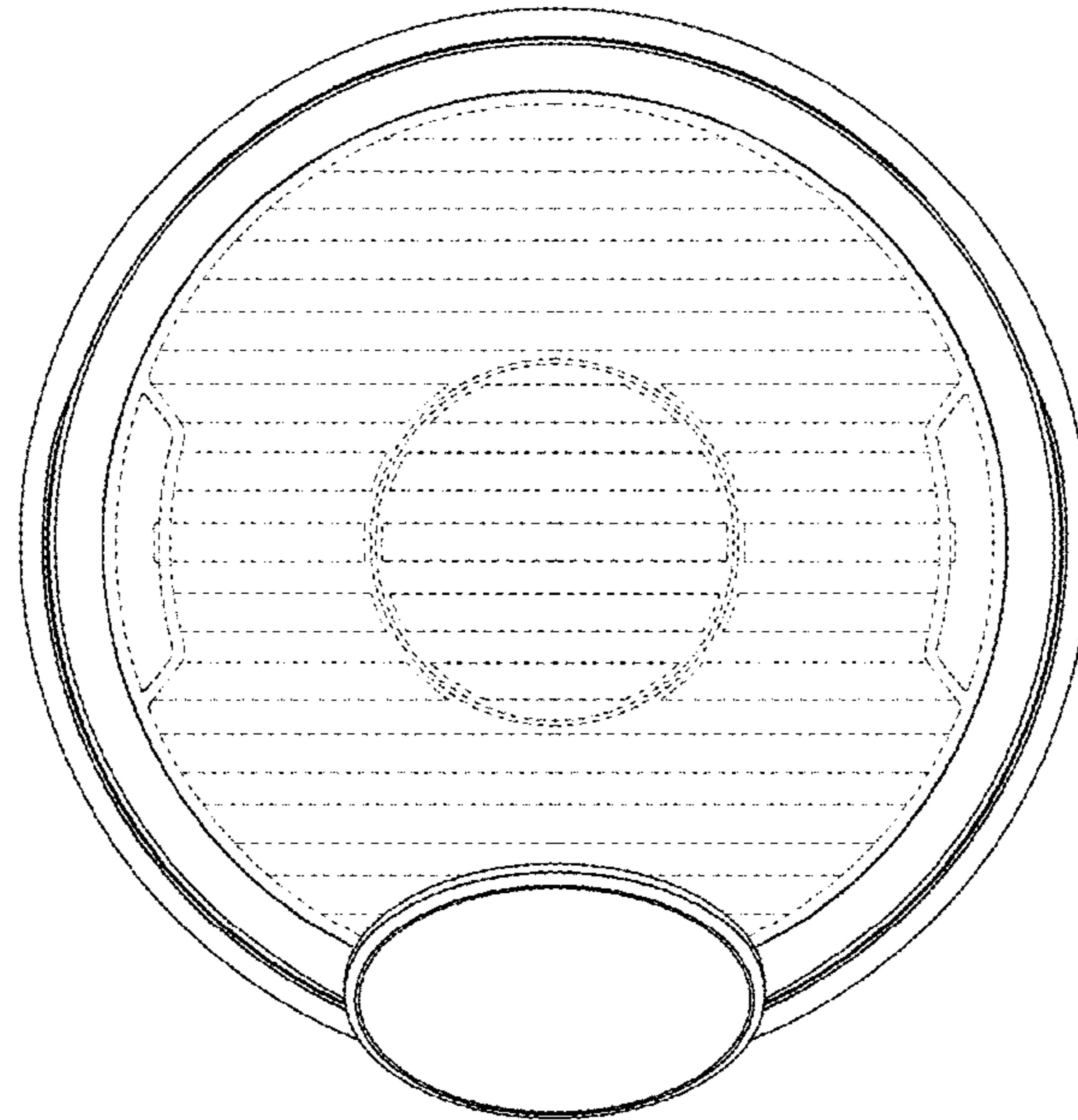
1.4



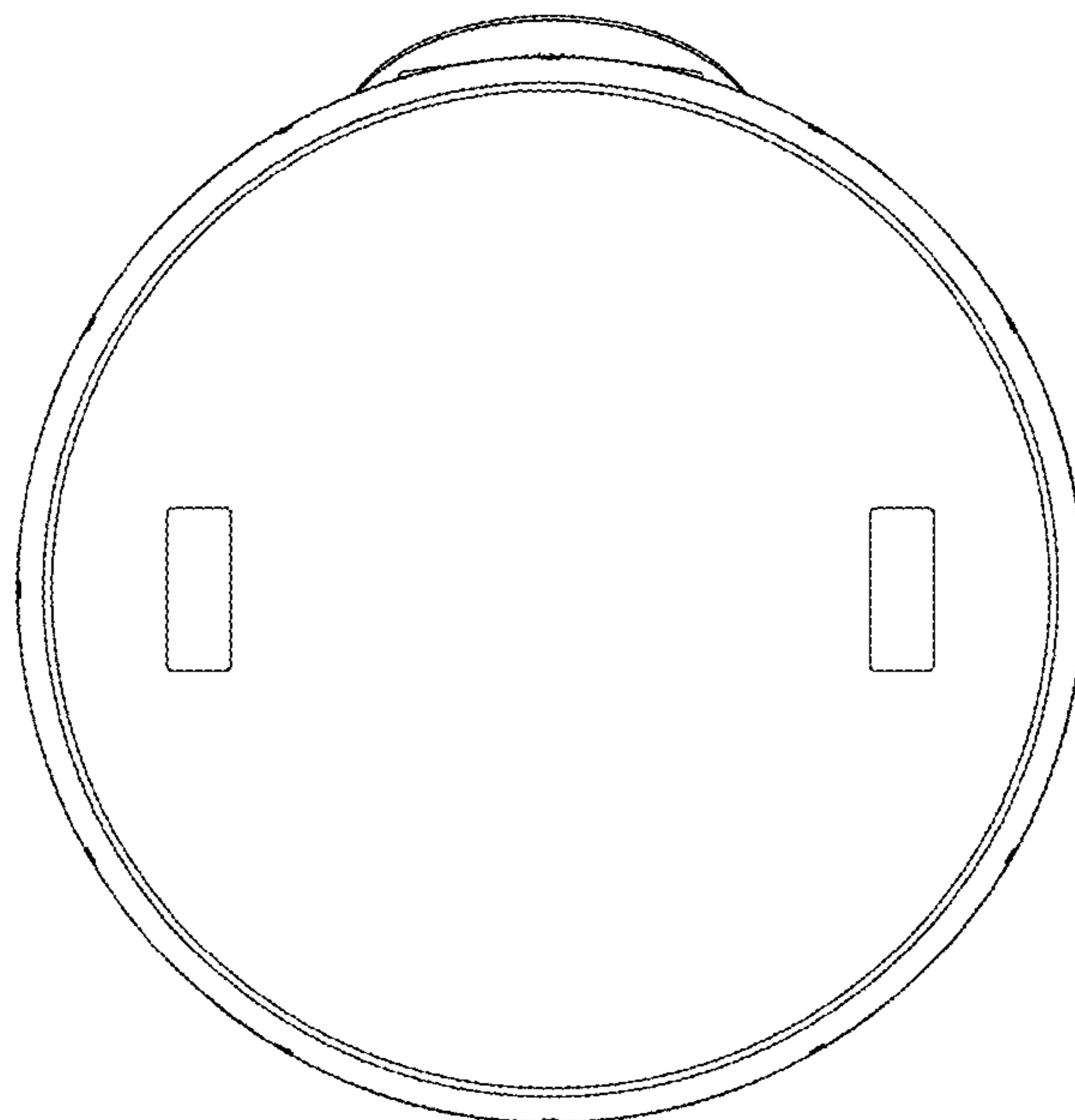
1.5



1.6

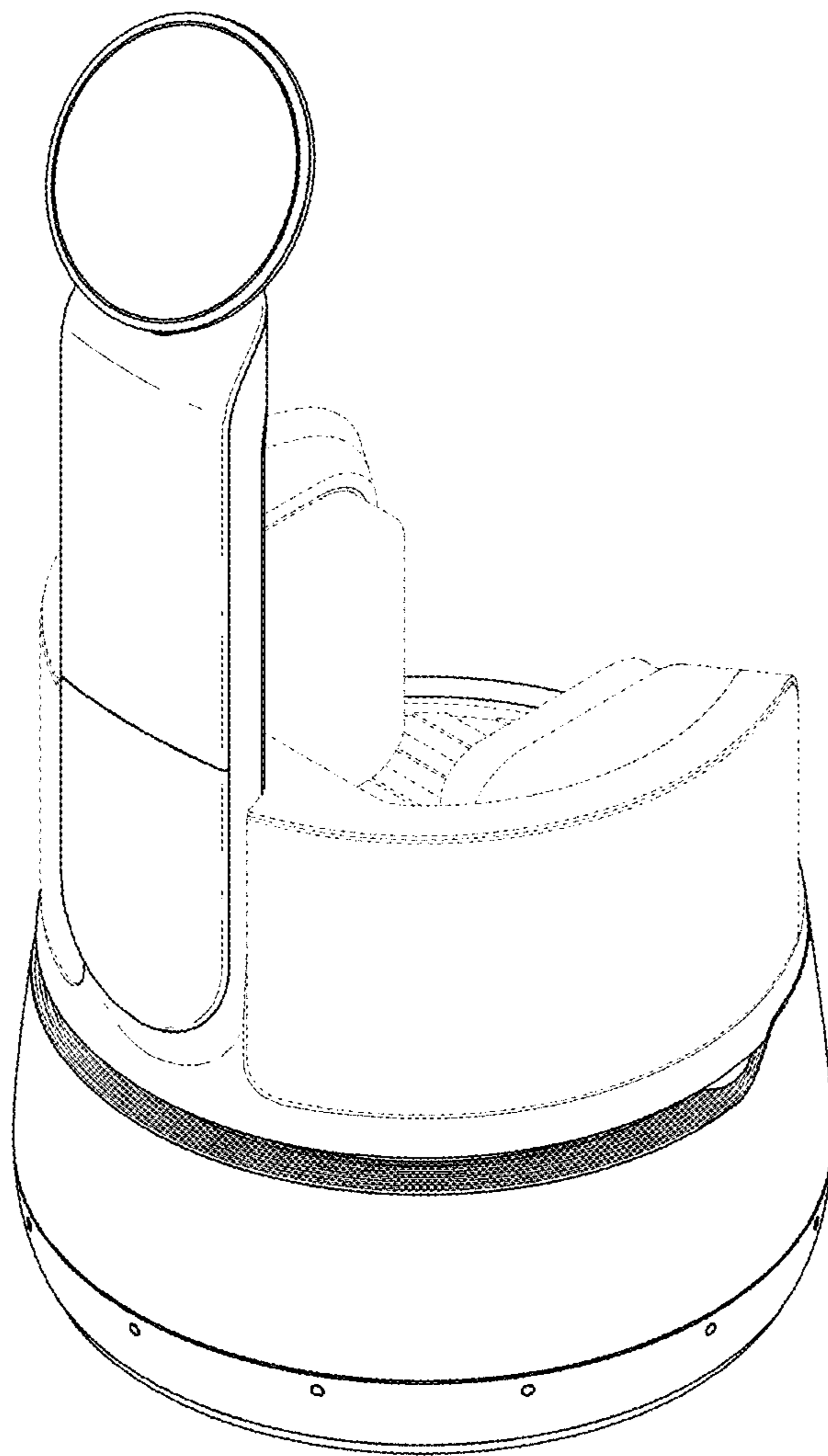


1.7

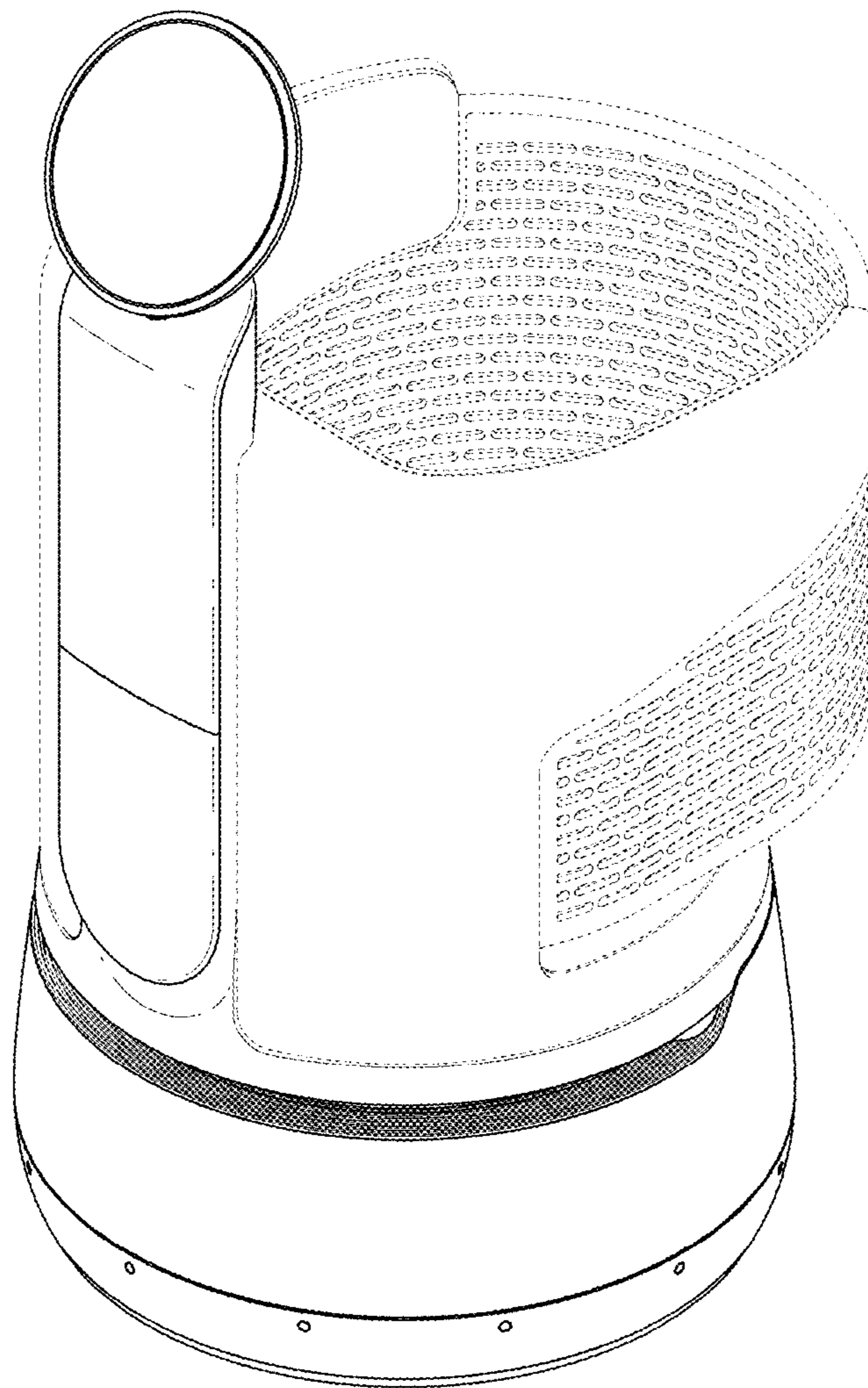




1.8



1.9



1.10

