



US00D923889S

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

(10) **Patent No.:** **US D923,889 S**

(45) **Date of Patent:** **** Jun. 29, 2021**

(54) **ROBOTIC VACUUM CLEANER**
(71) Applicant: **LG ELECTRONICS INC., Seoul (KR)**
(72) Inventors: **Seongmin Kim, Seoul (KR); Seunghyun Song, Seoul (KR); Hoil Jeon, Seoul (KR)**
(73) Assignee: **LG ELECTRONICS INC., Seoul (KR)**
(**) Term: **15 Years**
(21) Appl. No.: **35/508,481**
(22) Filed: **Jul. 29, 2019**
(80) **Hague Agreement Data**

Int. Filing Date: **Jul. 29, 2019**
Int. Reg. No.: **DM/204190**
Int. Reg. Date: **Jul. 29, 2019**
Int. Reg. Pub. Date: **Jan. 31, 2020**

(51) **LOC (13) Cl.** **32-03**
(52) **U.S. Cl.**
USPC **D32/21**

(58) **Field of Classification Search**
USPC D32/21, 23, 24, 31
CPC A47L 5/365; A47L 11/4011; A47L 2201/022; A47L 2201/04; A47L 5/14; A47L 5/30; A47L 5/36; A47L 7/0014; A47L 7/0019; A47L 7/04; A47L 9/0027; A47L 9/0036; A47L 9/0045; A47L 9/0081; A47L 9/009; A47L 9/08; A47L 9/14; A47L 9/1608; A47L 9/1675; A47L 9/1691; A47L 9/20; A47L 9/22; A47L 9/244; A47L 9/325
See application file for complete search history.

(56) **References Cited**
U.S. PATENT DOCUMENTS

D660,530 S * 5/2012 Geringer D32/21
D665,547 S * 8/2012 Nam D32/21

D670,877 S * 11/2012 Geringer D32/21
D690,477 S * 9/2013 Lee D32/21
D690,478 S * 9/2013 Li D32/21
D690,887 S * 10/2013 Lee D32/21
D703,397 S * 4/2014 Sungkyung D32/21
D714,002 S * 9/2014 Casini D32/21
D714,003 S * 9/2014 Casini D32/21
D771,332 S * 11/2016 Verhoorn D32/21
D771,333 S * 11/2016 Verhoorn D32/21
D781,512 S * 3/2017 Neumann D32/21
D835,869 S * 12/2018 Li D32/21
D843,671 S * 3/2019 Chei D32/21
D860,559 S * 9/2019 Thackray D32/21
D869,109 S * 12/2019 Yu D32/21
D869,797 S * 12/2019 Chei D32/21
D870,403 S * 12/2019 Ebrahimi Afrouzi D32/21
D870,994 S * 12/2019 Zhou D32/21
D871,693 S * 12/2019 Ebrahimi Afrouzi D32/21
D871,694 S * 12/2019 Casini D32/21
D872,953 S * 1/2020 Ebrahimi Afrouzi D32/21

(Continued)

Primary Examiner — Khawaja Anwar
(74) *Attorney, Agent, or Firm* — Birch, Stewart, Kolasch & Birch, LLP

(57) **CLAIM**

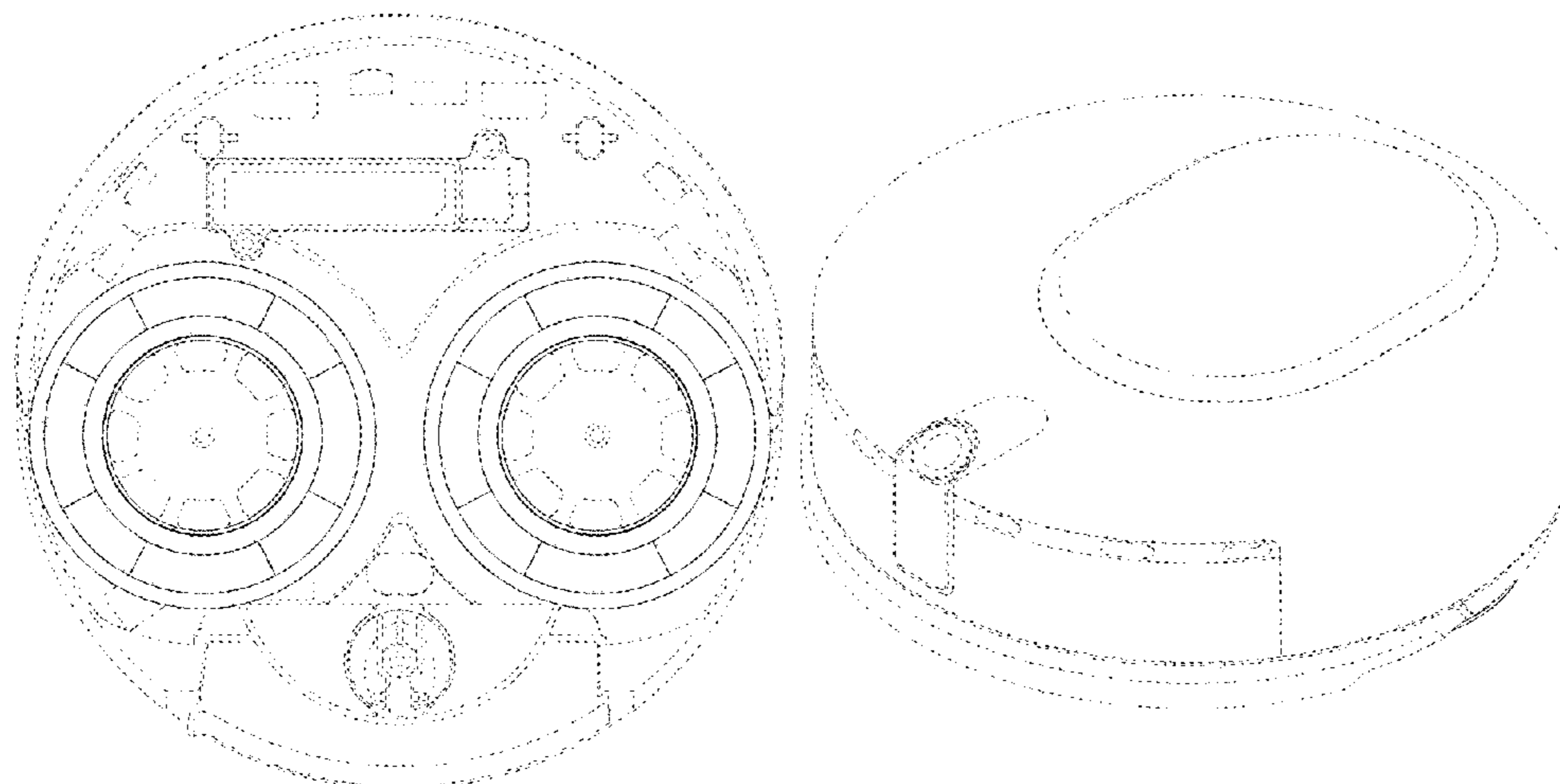
The ornamental design for robotic vacuum cleaner, as shown and described.

DESCRIPTION

- 1. Robotic vacuum cleaner
- 1.1 : Bottom
- 1.2 : Perspective
- 1.3 : Front
- 1.4 : Back
- 1.5 : Left
- 1.6 : Right
- 1.7 : Top

The broken lines indicate portions of the article that form no part of the claimed design.

1 Claim, 4 Drawing Sheets



(56)

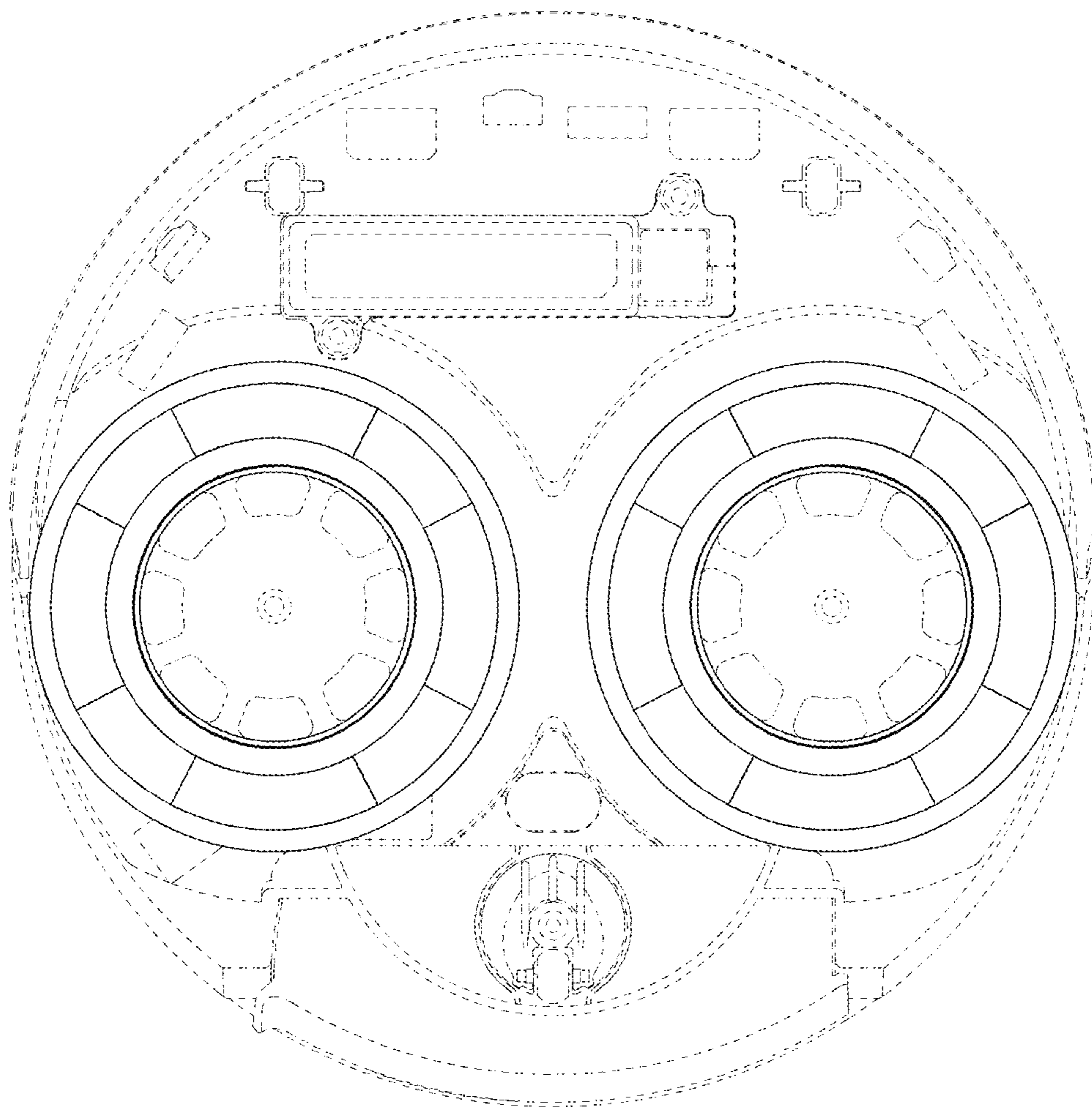
References Cited

U.S. PATENT DOCUMENTS

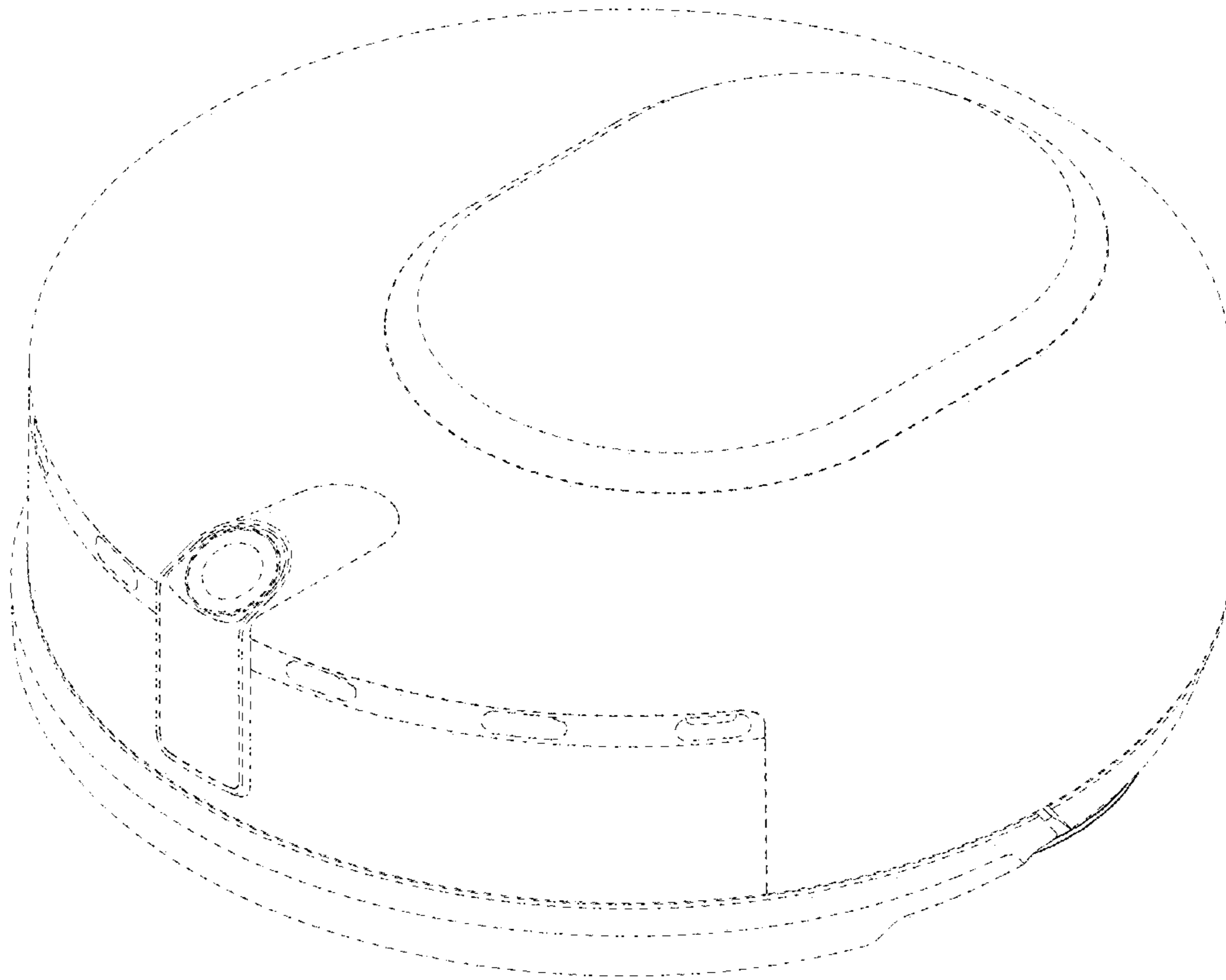
| | | | | |
|------------|---|---------|------------------------|--------|
| D884,298 S | * | 5/2020 | Li | D32/21 |
| D890,457 S | * | 7/2020 | Pearce | D32/21 |
| D901,110 S | * | 11/2020 | Li | D32/21 |
| D902,507 S | * | 11/2020 | Ebrahimi Afrouzi | D32/21 |
| D902,508 S | * | 11/2020 | Ebrahimi Afrouzi | D32/21 |
| D902,509 S | * | 11/2020 | Ebrahimi Afrouzi | D32/21 |
| D903,961 S | * | 12/2020 | Li | D32/21 |

* cited by examiner

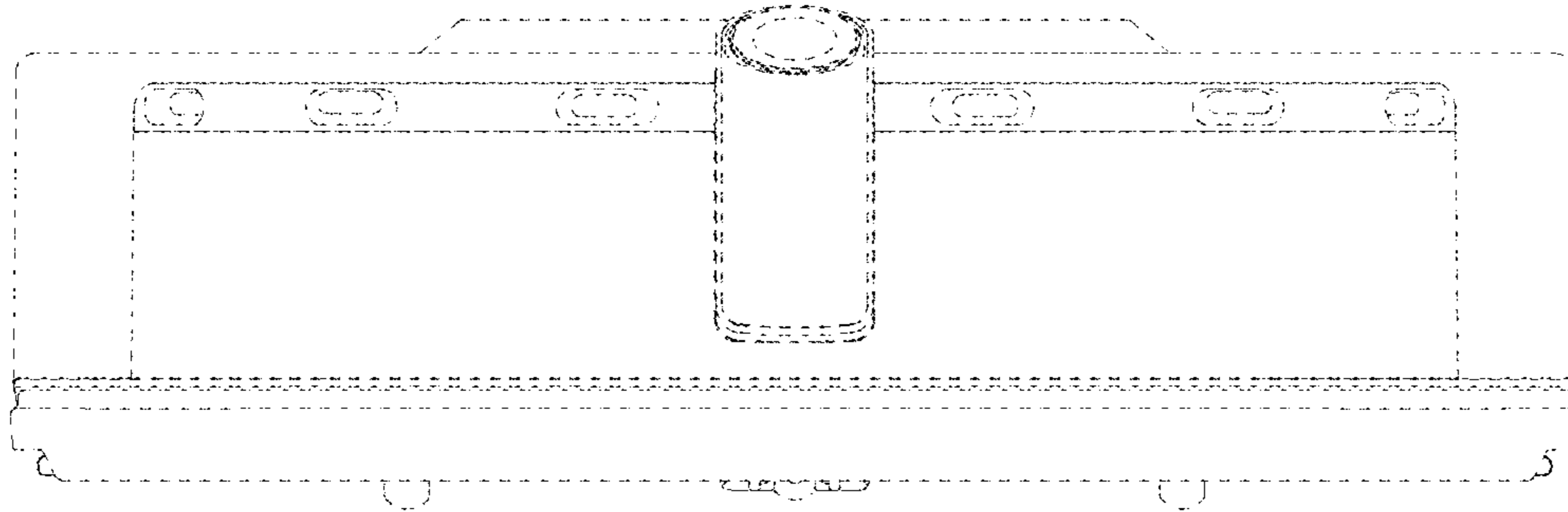
1.1



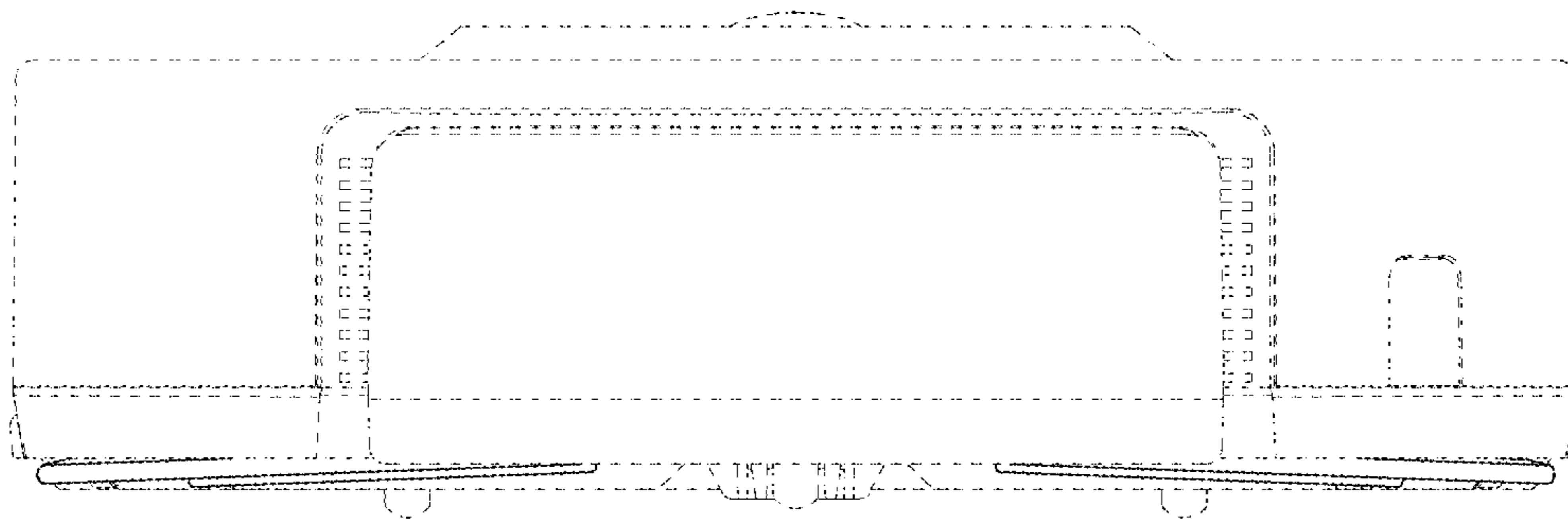
1.2



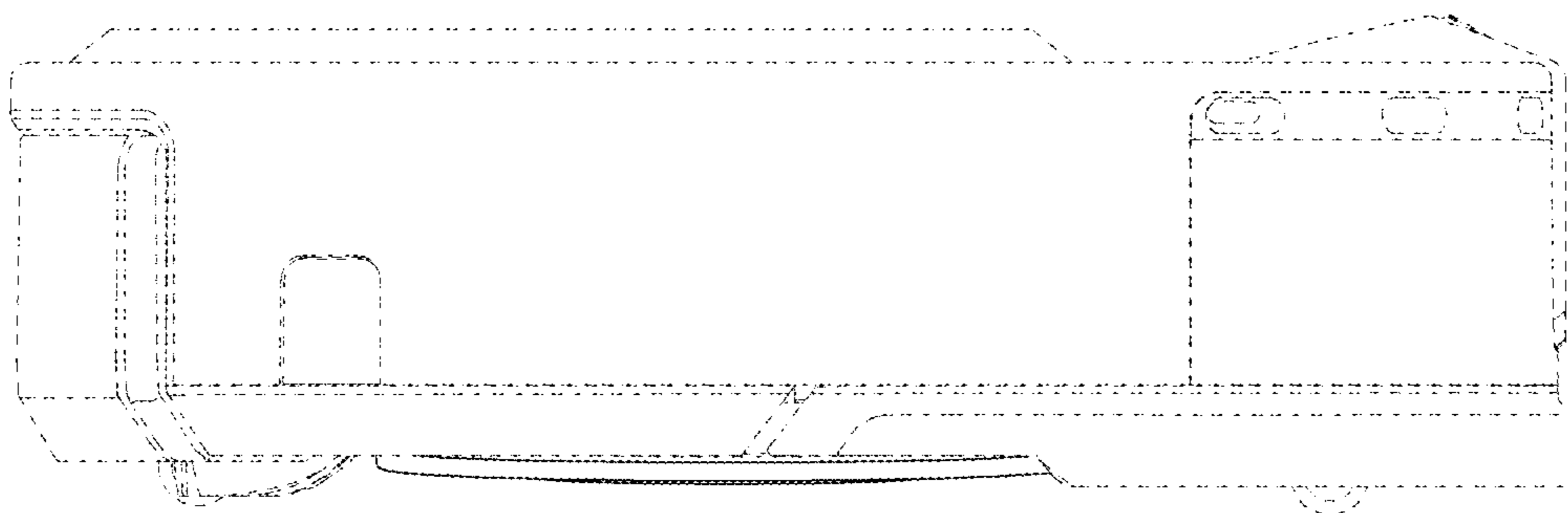
1.3



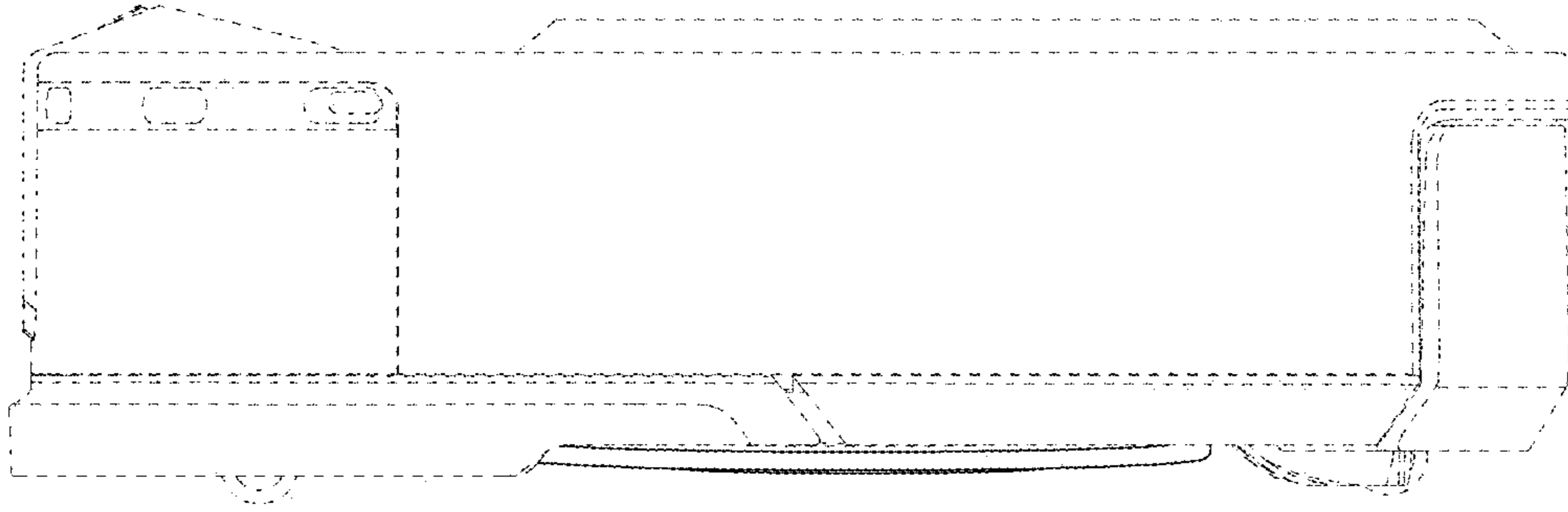
1.4



1.5



1.6



1.7

