



US00D840619S

(12) **United States Design Patent** (10) **Patent No.:** **US D840,619 S**
Kim et al. (45) **Date of Patent:** **** Feb. 12, 2019**

(54) **ROBOT FOR CLEANING**

(56) **References Cited**

(71) Applicant: **LG ELECTRONICS INC.**, Seoul (KR)
(72) Inventors: **Seongmin Kim**, Seoul (KR); **Jaeyoung Kim**, Seoul (KR); **Hyeonjeong An**, Seoul (KR); **Myungwhoon Lee**, Seoul (KR)
(73) Assignee: **LG ELECTRONICS INC.**, Seoul (KR)

U.S. PATENT DOCUMENTS

D453,402 S *	2/2002	Kato	.....	D32/1
D473,354 S *	4/2003	Kato	.....	D32/1
D524,495 S *	7/2006	Ljunggren	.....	D32/21
D548,411 S *	8/2007	Schroter	.....	D32/21
D551,815 S *	9/2007	Schroeter	.....	D32/21
D555,305 S *	11/2007	Chun	.....	D32/21
D555,307 S *	11/2007	Chun	.....	D32/31
D659,311 S *	5/2012	Geringer	.....	D32/21
D660,530 S *	5/2012	Geringer	.....	D32/21
D670,877 S *	11/2012	Geringer	.....	D32/21
D704,400 S *	5/2014	Shin	.....	D32/21
D720,510 S *	12/2014	Shin	.....	D32/21
D720,511 S *	12/2014	Shin	.....	D32/21
D737,008 S *	8/2015	Cheon	.....	D32/31
D744,181 S *	11/2015	Cheon	.....	D32/31
D744,183 S *	11/2015	Cheon	.....	D32/31
D744,709 S *	12/2015	Cheon	.....	D32/31
D745,233 S *	12/2015	Choi	.....	D32/31
D745,757 S *	12/2015	Choi	.....	D32/21

(**) Term: **15 Years**
(21) Appl. No.: **35/503,960**
(22) Filed: **May 16, 2017**

(80) **Hague Agreement Data**

Int. Filing Date: **May 16, 2017**
Int. Reg. No.: **DM/096208**
Int. Reg. Date: **May 16, 2017**
Int. Reg. Pub. Date: **Nov. 17, 2017**

(30) **Foreign Application Priority Data**

Nov. 23, 2016 (KR) 30-2016-0056459

(51) **LOC (11) Cl.** **15-05**
(52) **U.S. Cl.**
USPC **D32/21**; D15/199
CPC **A47J 37/0713** (2013.01)

(58) **Field of Classification Search**
USPC D32/19-33; D4/102, 127, 128, 133, 136; D15/199
CPC A47J 37/0713; A47L 9/2842; A47L 2201/00; A47L 5/30; A47L 5/28; A47L 5/362; A47L 9/04; A46B 13/005; A46B 13/001; A61C 17/26; G06N 3/008; B25J 9/1697; G01S 13/931; B62D 58/032; B62D 57/032; E01H 1/053; E01H 1/02
See application file for complete search history.

(Continued)

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

(57) **CLAIM**

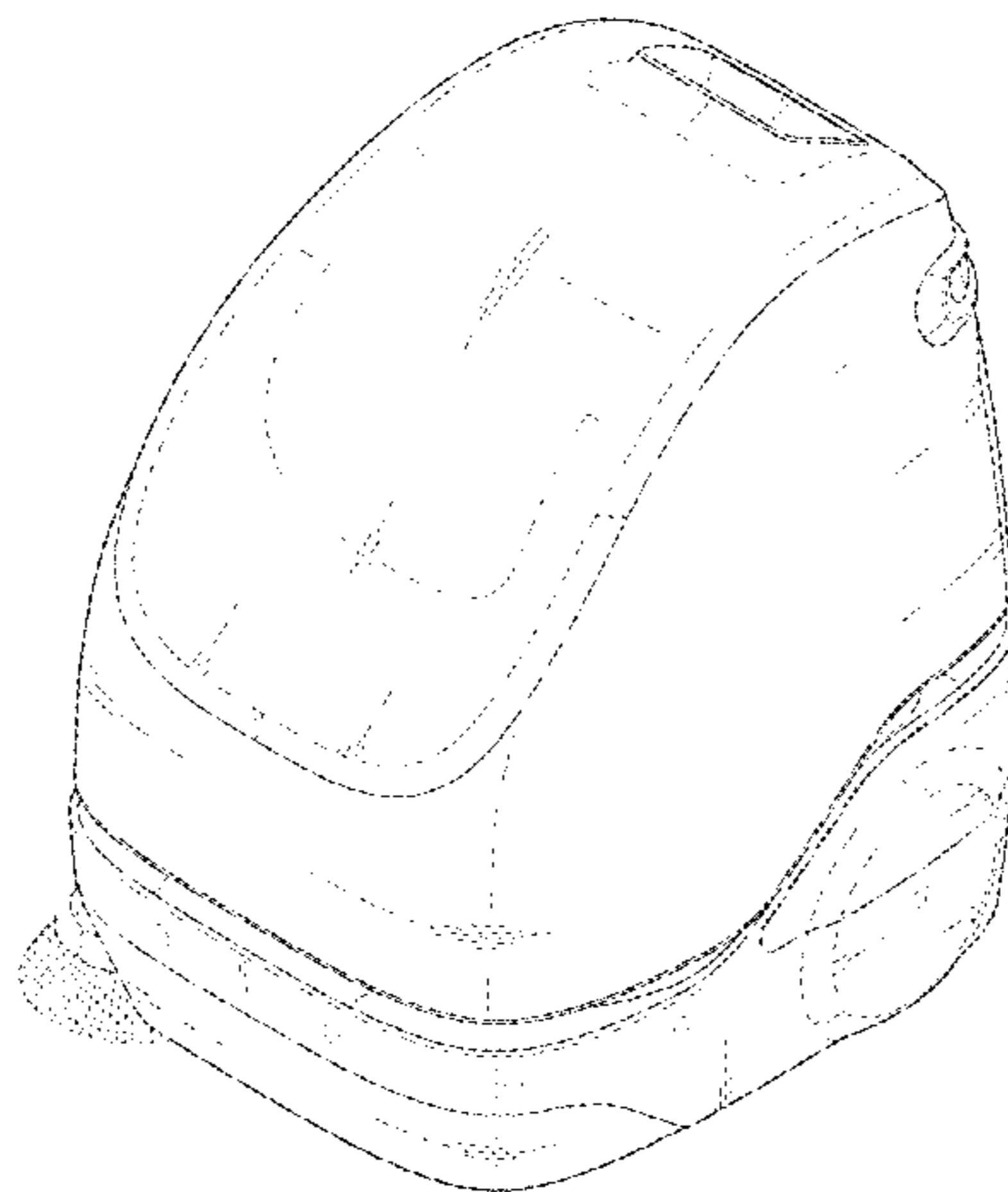
The ornamental design for a robot for cleaning, as shown and described.

DESCRIPTION

- 1. Robot for cleaning
- 1.1 : Perspective
- 1.2 : Front
- 1.3 : Back
- 1.4 : Left
- 1.5 : Right
- 1.6 : Top
- 1.7 : Bottom
- 1.8 : Back perspective

The broken lines depict portions of the robot for cleaning that form no part of the claimed design.

1 Claim, 8 Drawing Sheets



(56)

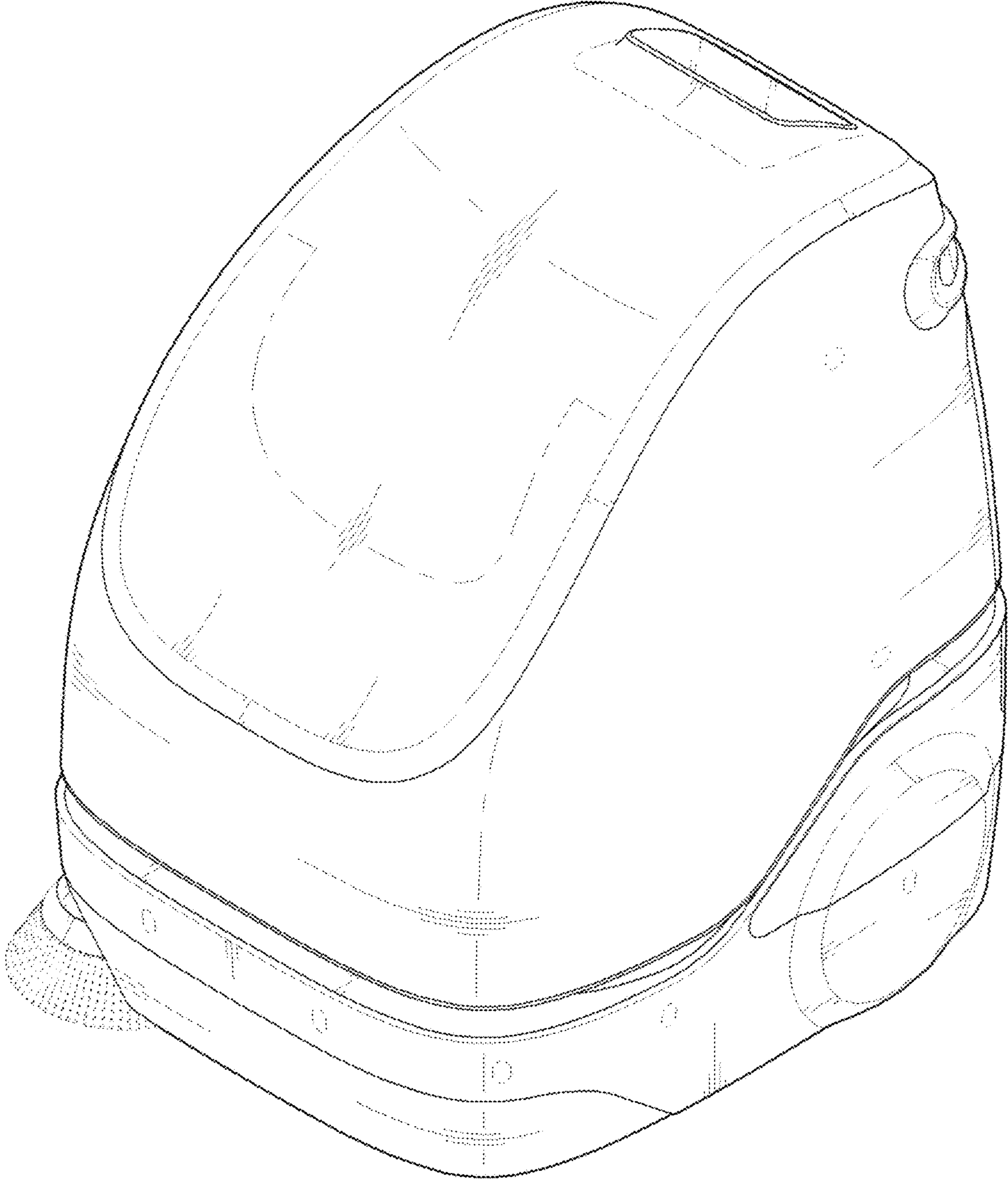
References Cited

U.S. PATENT DOCUMENTS

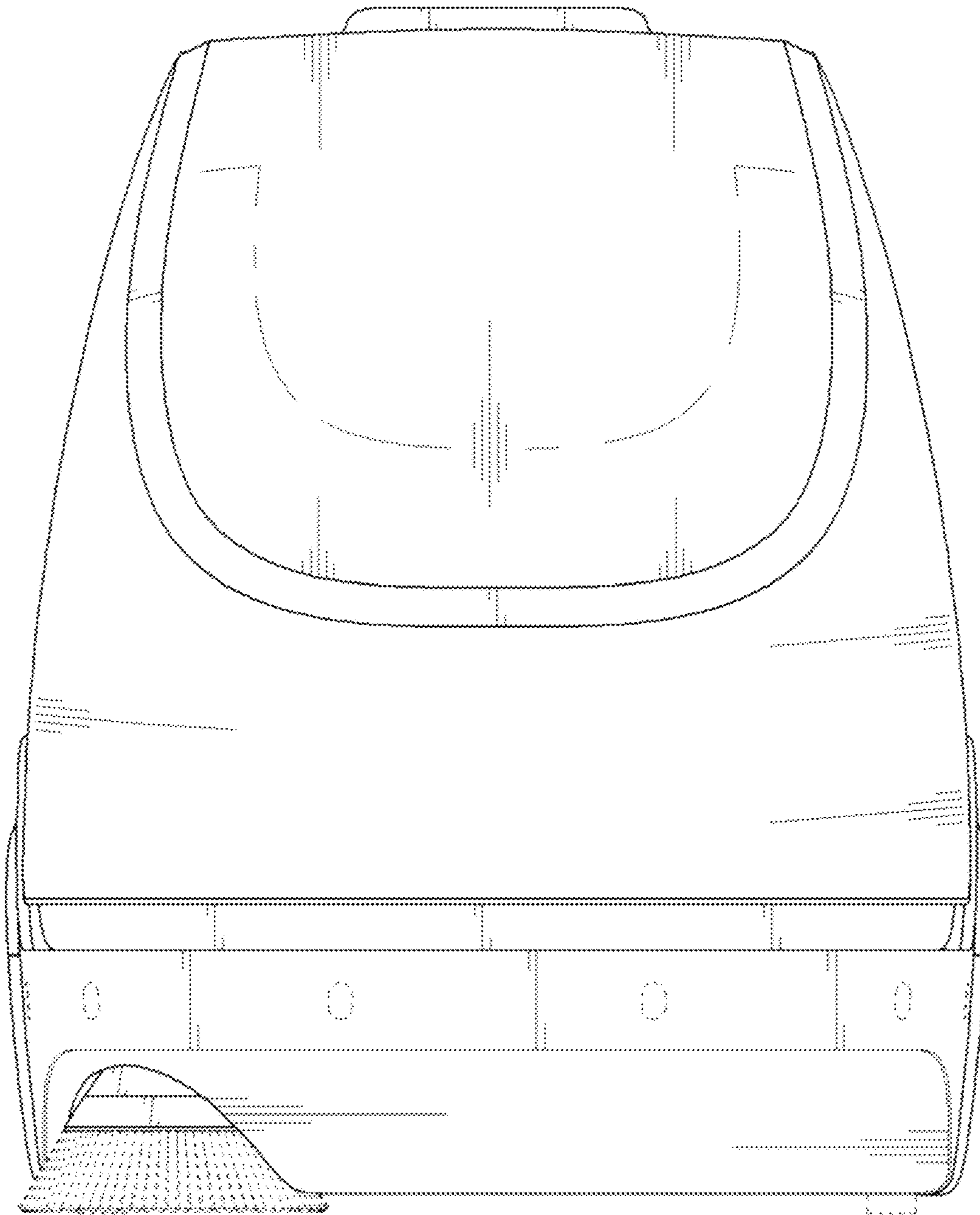
D746,005 S *	12/2015	Cheon	D32/21
D751,260 S *	3/2016	Kim	D32/21
D751,777 S *	3/2016	Cheon	D32/21
D752,300 S *	3/2016	Cheon	D32/31
D766,524 S *	9/2016	Ochi	D32/21
D771,885 S *	11/2016	Caruso	D32/21
D773,758 S *	12/2016	Caruso	D32/21
D778,514 S *	2/2017	Park	D32/21
2006/0236492 A1 *	10/2006	Sudo	A47L 11/24 15/319

* cited by examiner

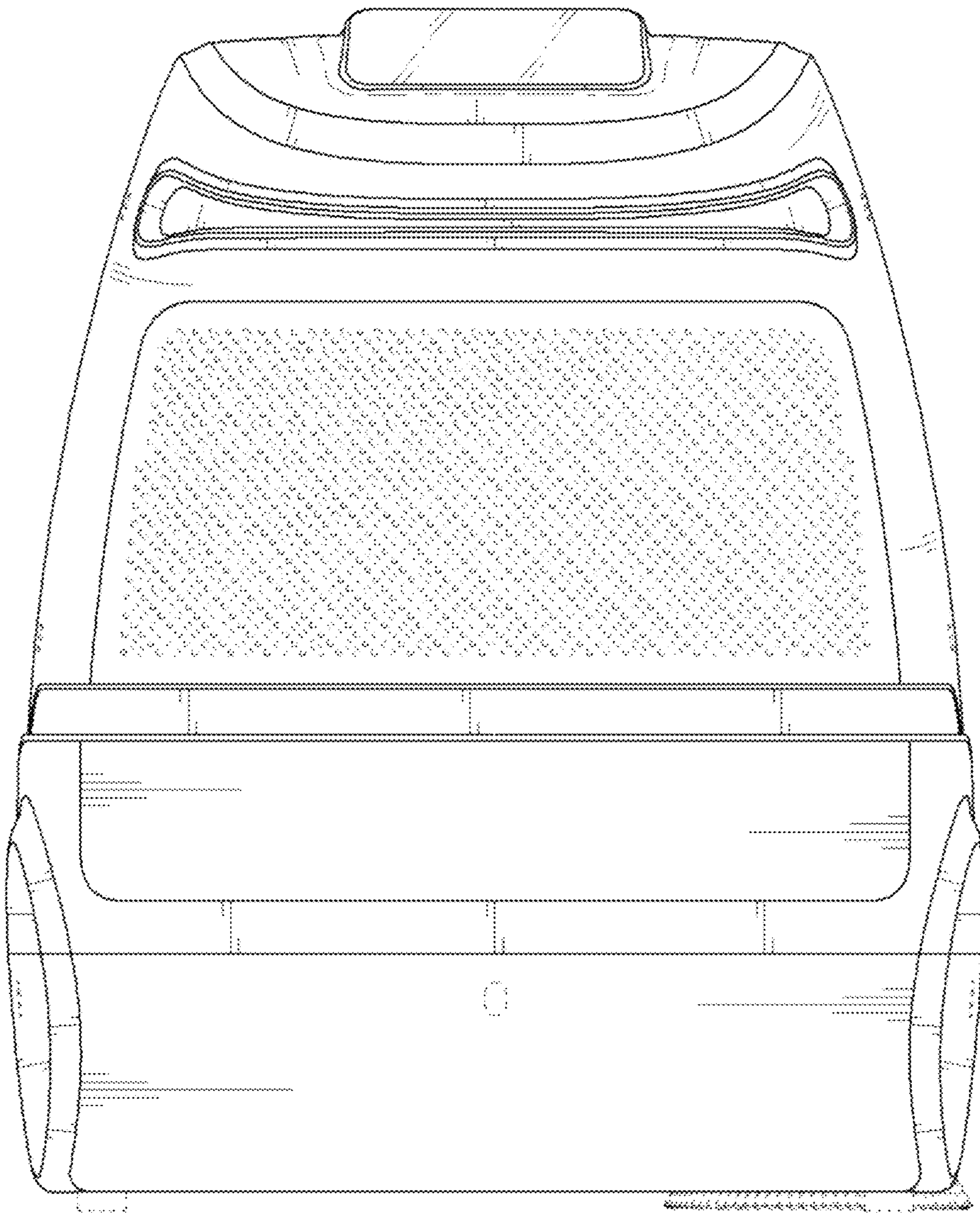
1.1



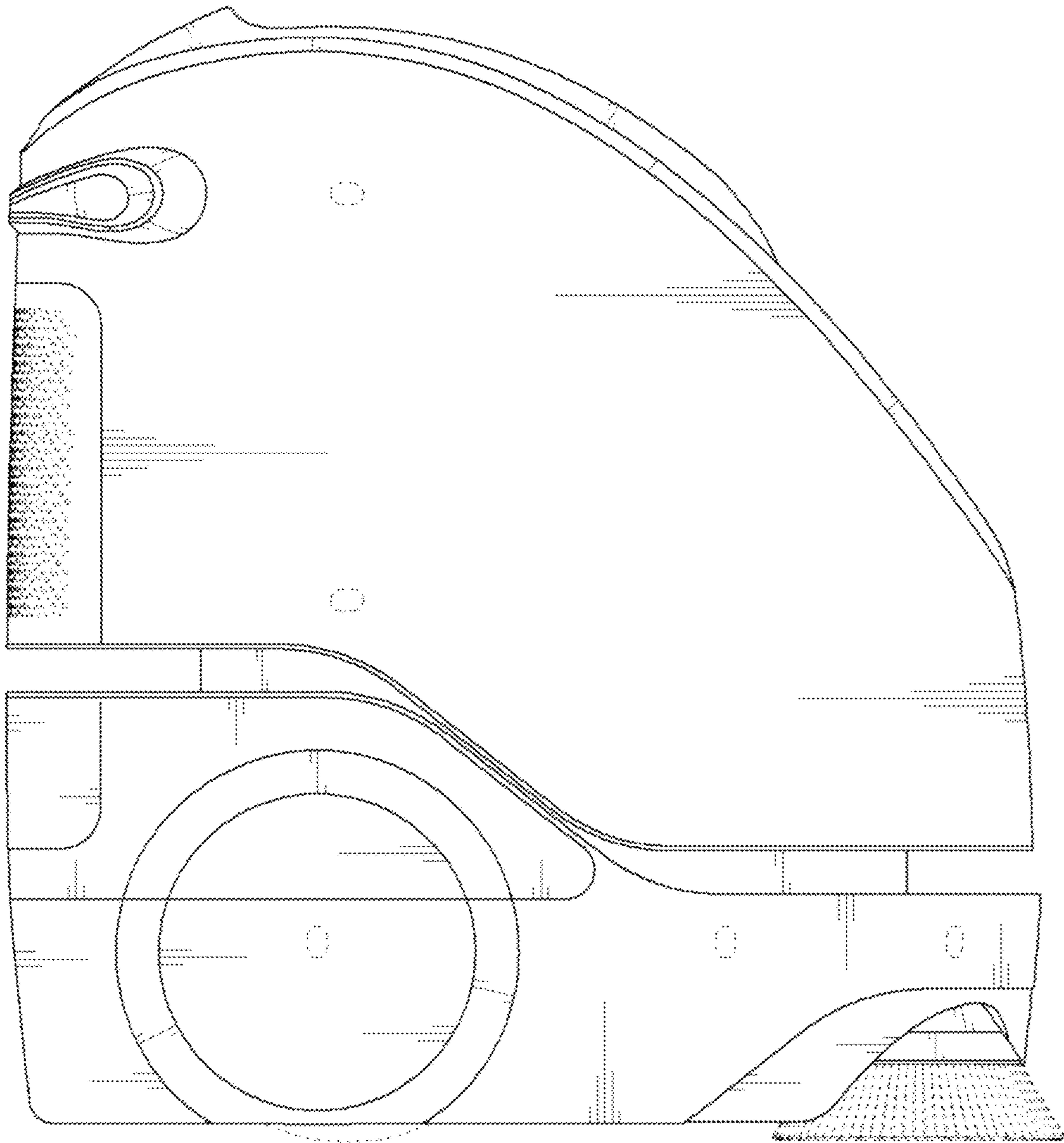
1.2



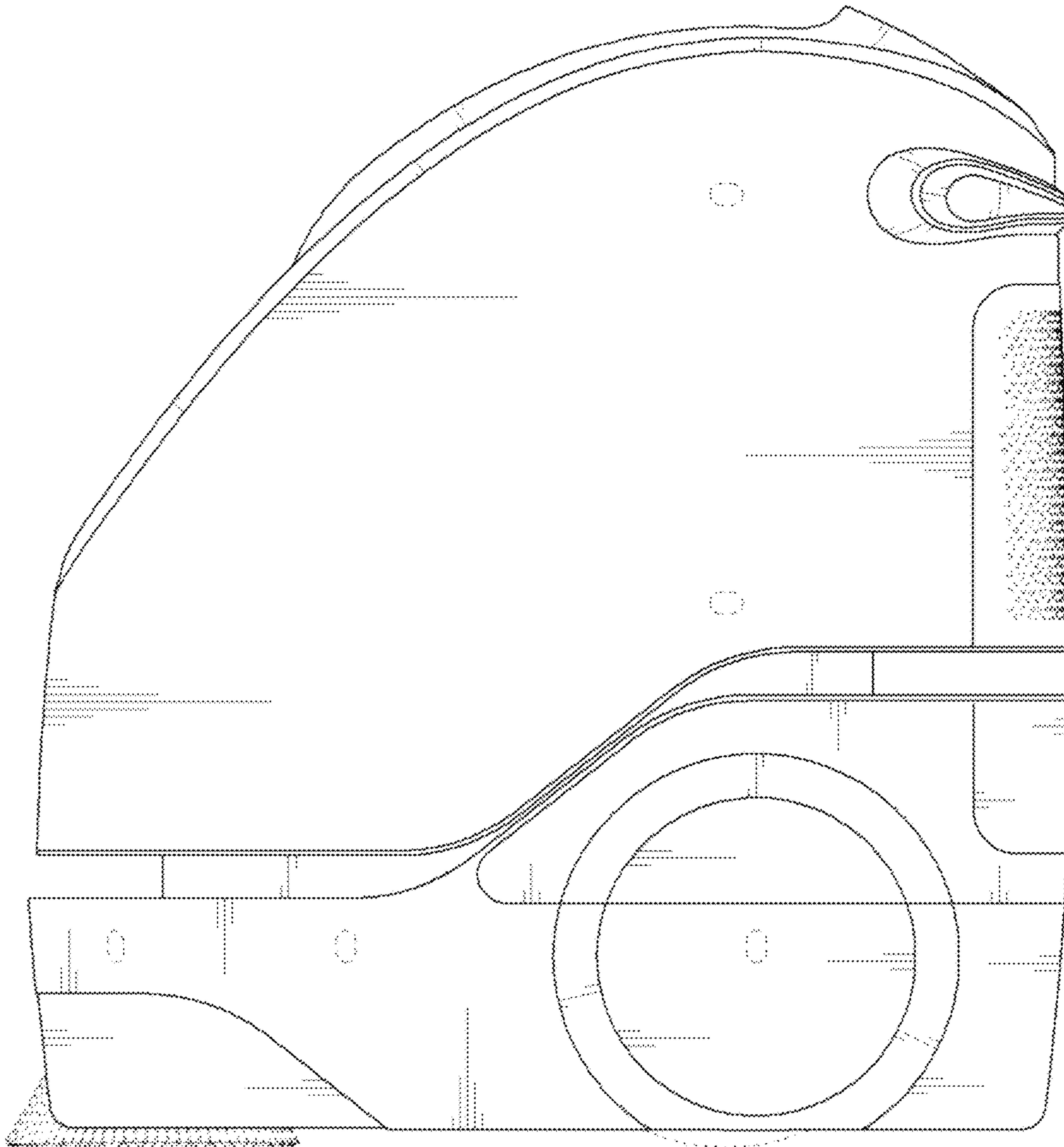
1.3



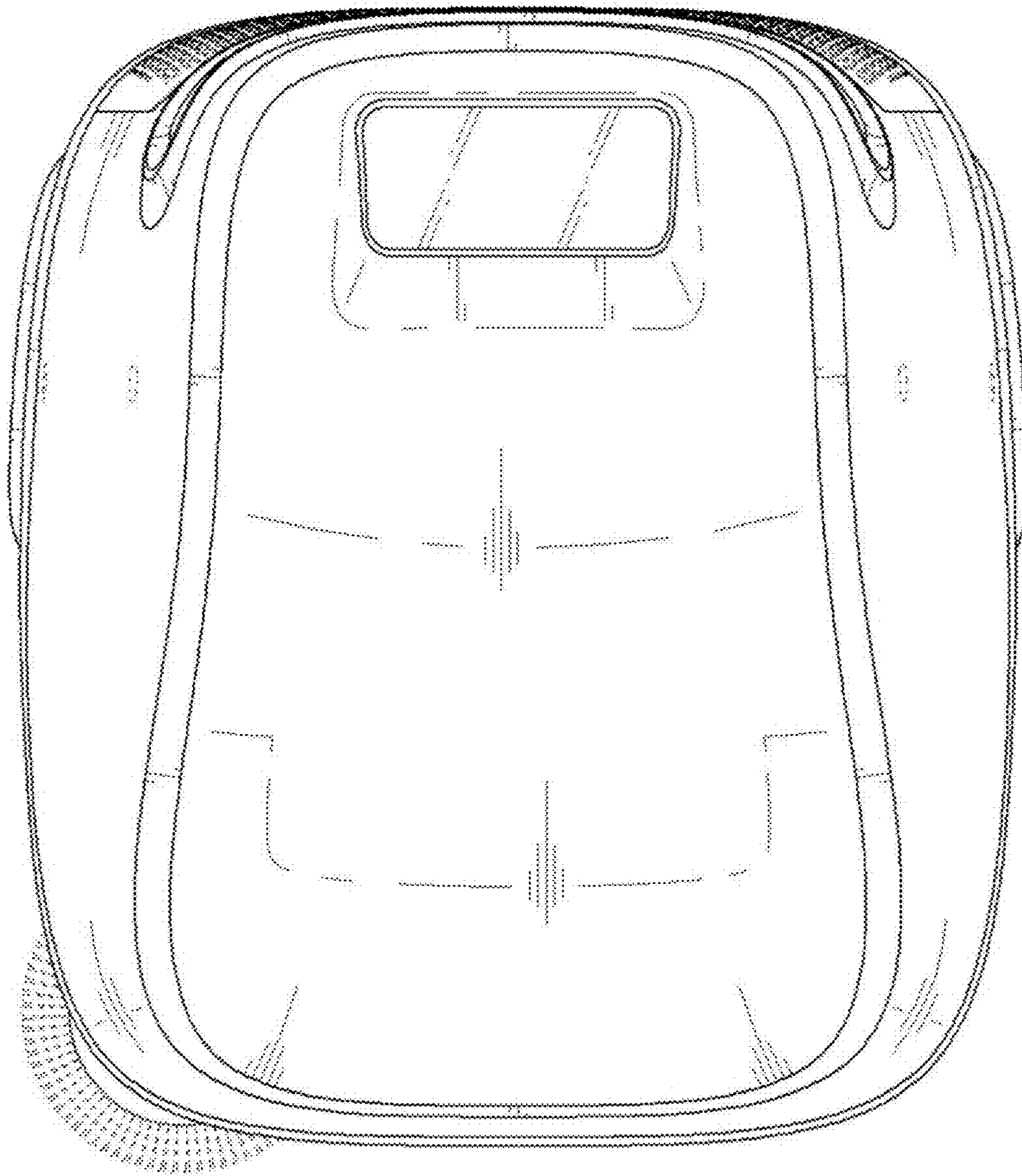
1.4



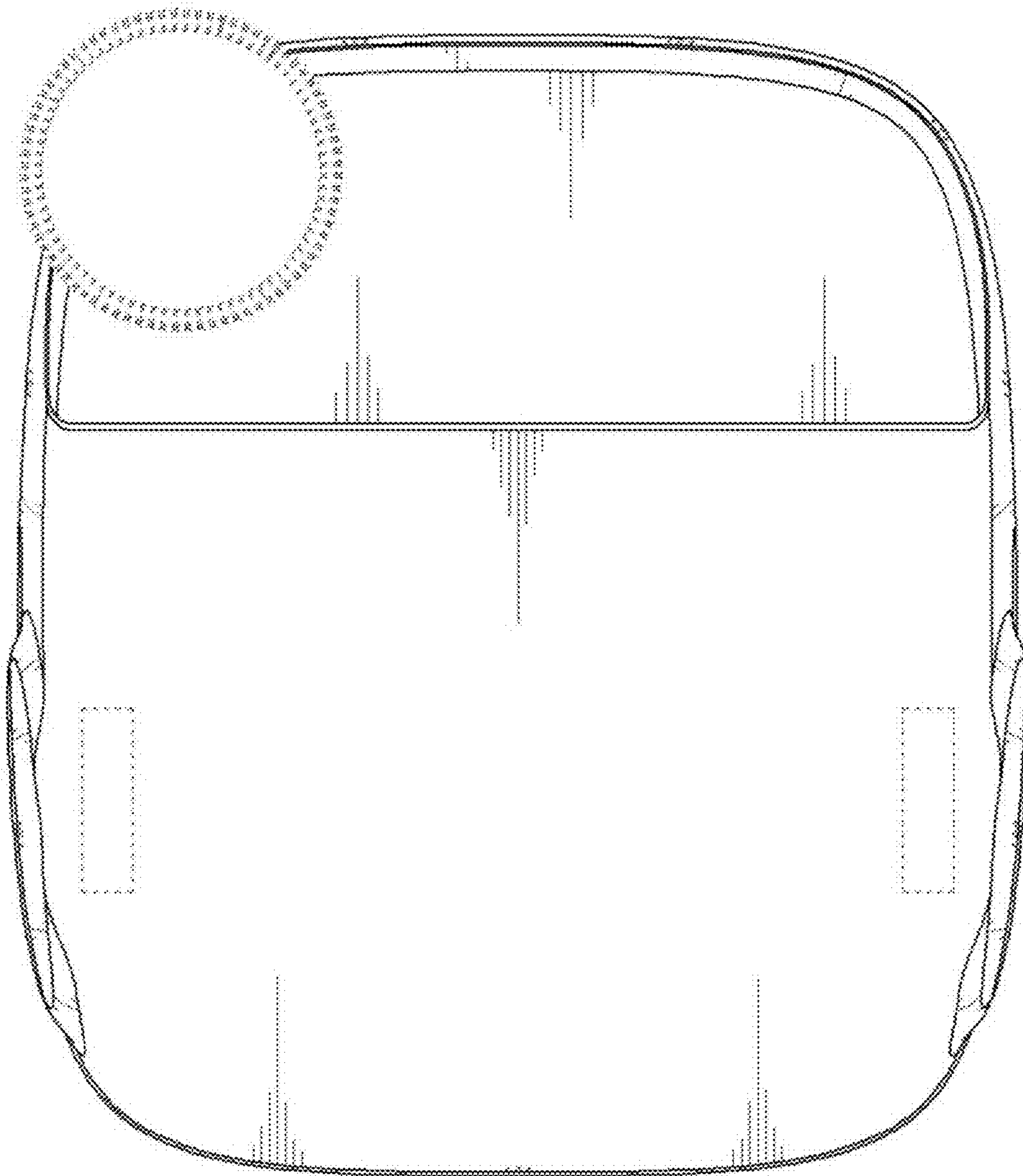
1.5



1.6



1.7



1.8

