



US00D944962S

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

(10) **Patent No.:** **US D944,962 S**
(45) **Date of Patent:** **** Mar. 1, 2022**

(54) **AIR PURIFIER FOR VEHICLES**

(71) Applicants: **LG ELECTRONICS INC.**, Seoul (KR); **HYUNDAI MOTOR COMPANY**, Seoul (KR); **KIA MOTORS CORPORATION**, Seoul (KR)

(72) Inventors: **Donggeun Kim**, Seoul (KR); **Seungil Lee**, Seoul (KR); **Jinwan Bae**, Seoul (KR); **Joungyoung Joung**, Seoul (KR); **Hyunjin Yoon**, Seoul (KR); **Euseok Lee**, Seoul (KR); **Jaebom Im**, Seoul (KR); **Sanghyun Choi**, Seoul (KR); **Mijin Park**, Seoul (KR); **Hyunwook Lee**, Seoul (KR); **Daekee Shin**, Seoul (KR)

(73) Assignees: **LG ELECTRONICS INC.**, Seoul (KR); **HYUNDAI MOTOR COMPANY**, Seoul (KR); **KIA MOTORS CORPORATION**, Seoul (KR)

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

(21) Appl. No.: **35/510,275**

(22) Filed: **Aug. 18, 2020**

(80) **Hague Agreement Data**

Int. Filing Date: **Aug. 18, 2020**
Int. Reg. No.: **DM/210148**
Int. Reg. Date: **Aug. 18, 2020**
Int. Reg. Pub. Date: **Sep. 18, 2020**

(30) **Foreign Application Priority Data**

Feb. 24, 2020 (KR) 30-2020-0008170

(51) **LOC (13) Cl.** **23-04**

(52) **U.S. Cl.**
USPC **D23/366**

(58) **Field of Classification Search**

USPC D23/332, 333, 335, 336, 342, 351, 352, D23/355-366, 369

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

D118,613 S * 1/1940 Blazey D10/125
D621,021 S * 8/2010 Koenig D23/368

(Continued)

Primary Examiner — Natasha Vujcic

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

(57) **CLAIM**

The ornamental design for an air purifier for vehicles, as shown and described.

DESCRIPTION

1. Air purifier for vehicles

1.1 : Perspective

1.2 : Front

1.3 : Back

1.4 : Left

1.5 : Right

1.6 : Top

1.7 : Bottom

1.8 : Reference

1.9 : Perspective

1.10 : Front

1.11 : Back

1.12 : Left

1.13 : Right

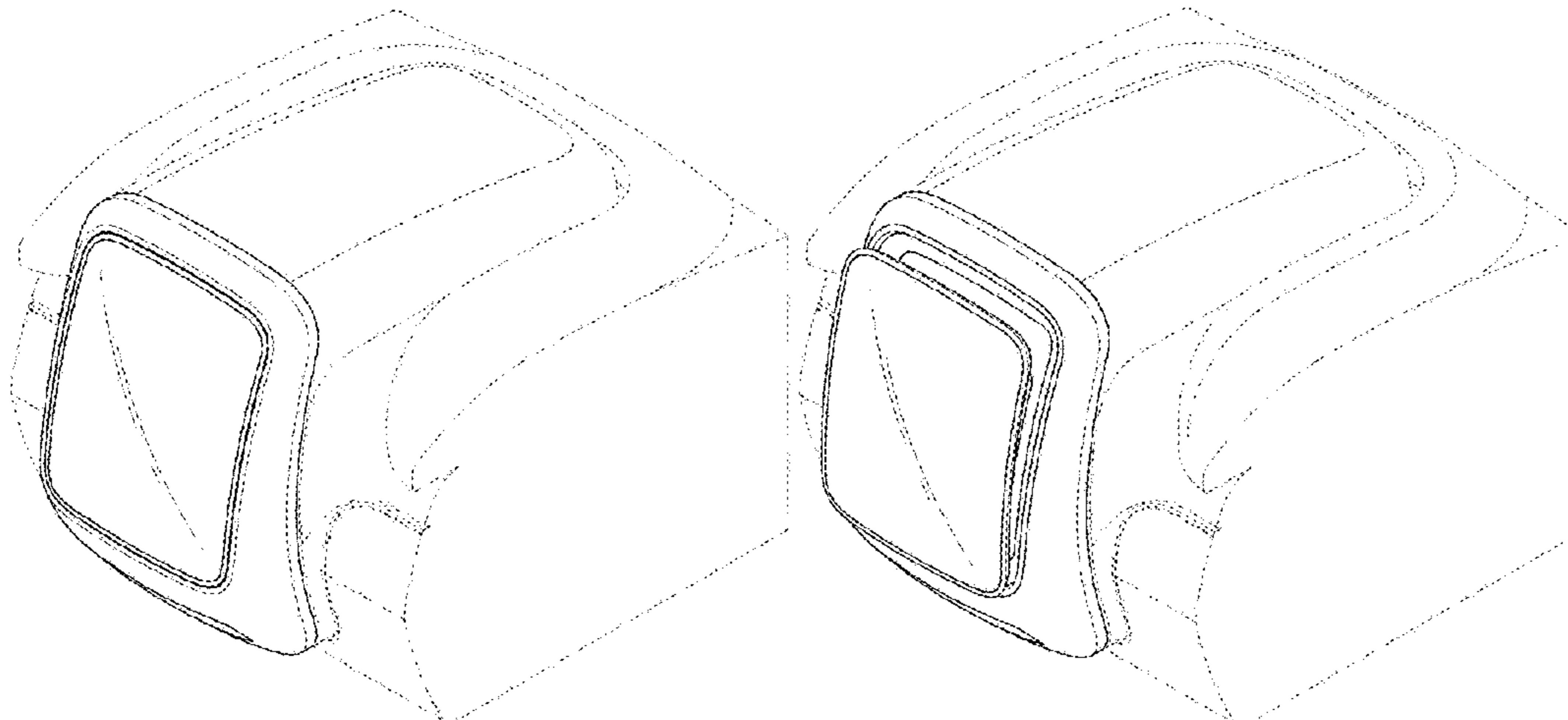
1.14 : Top

1.15 : Bottom

1.16 : Reference

The broken lines indicate portions of the article that form no part of the claimed design; reproductions 1.1 to 1.7 show the state before the operation of the front air outlet; the broken lines show the portion of a vehicle where the subject design is installed in reproduction 1.8 are for the purpose of

(Continued)



illustrating environmental structure form no part of the claimed design; reproductions 1.9 to 1.15 show the state after that the front air outlet protrudes forward after tilting; reproduction 1.16 is a reference view that does not form the claimed design for the purpose of showing a state of use in which the display part is activated.

1 Claim, 16 Drawing Sheets

(58) **Field of Classification Search**

CPC A61L 9/16; A61L 9/22; F24F 3/16; F24F 13/20; F24F 13/28; B01D 47/00; B01D 47/027; B01D 2221/02; B01D 2259/4508

See application file for complete search history.

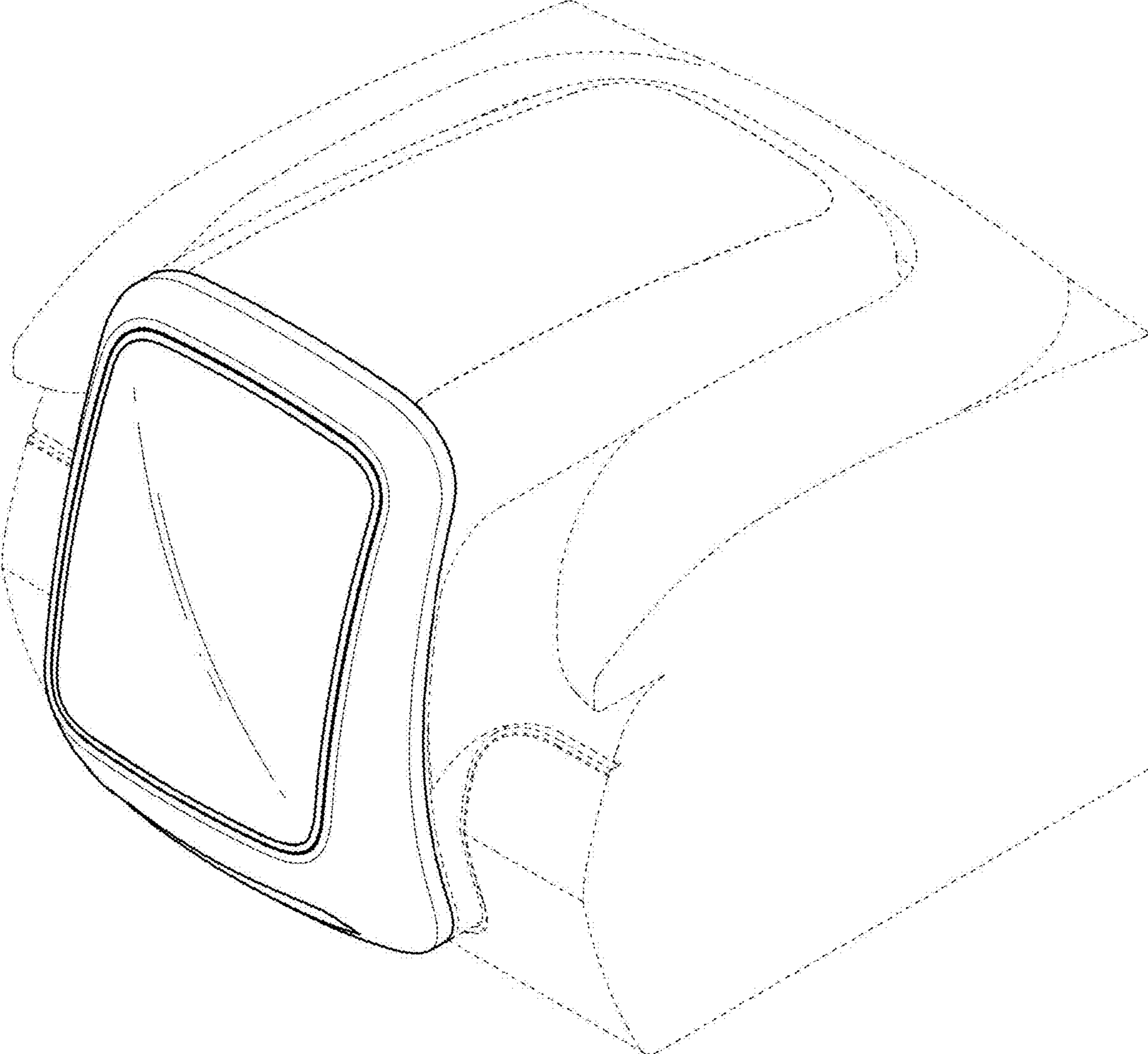
(56) **References Cited**

U.S. PATENT DOCUMENTS

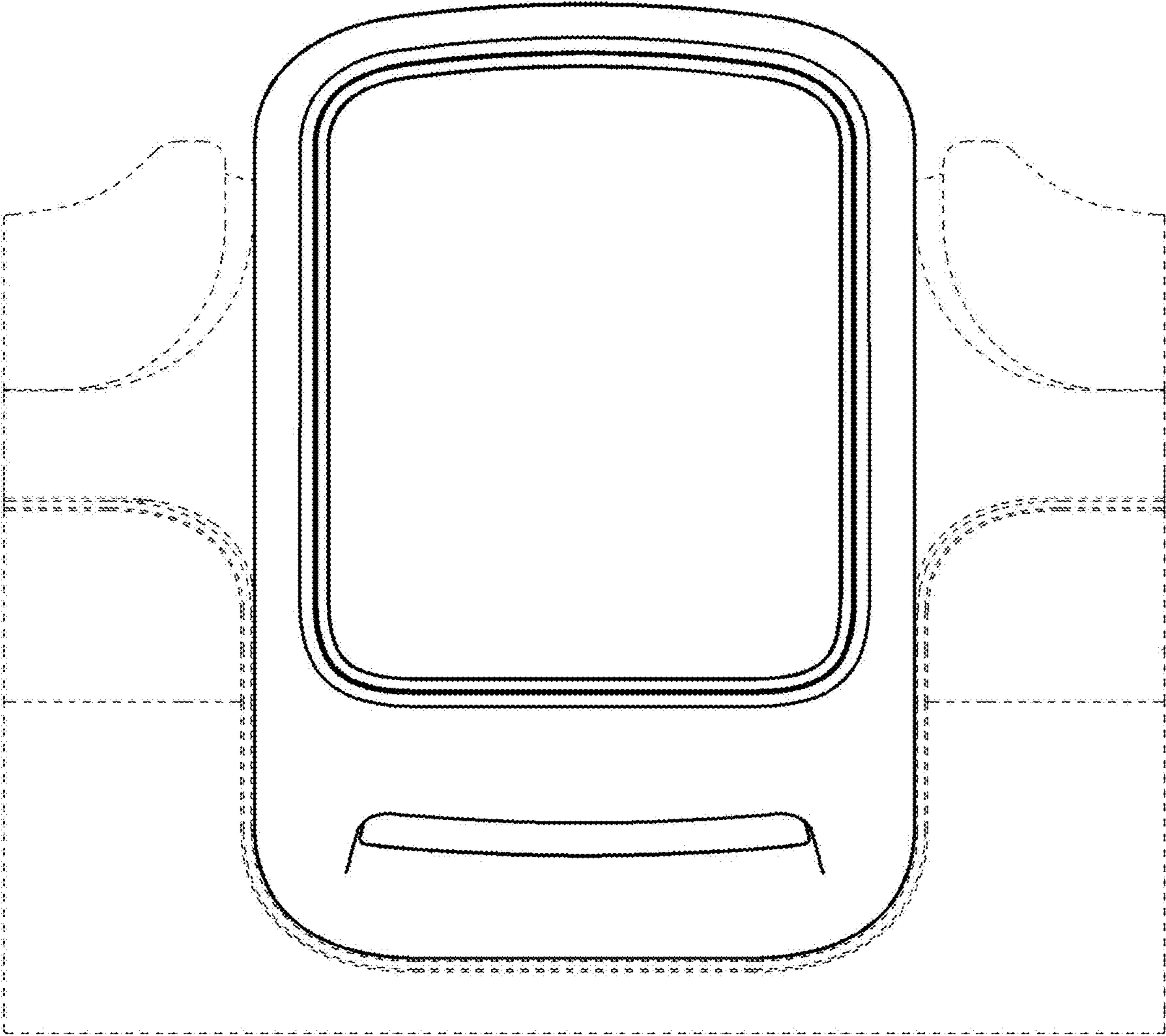
D657,036 S *	4/2012	Vetu	D23/364
D729,368 S *	5/2015	Markwick	D23/366
D729,920 S *	5/2015	Lim	D23/364
D803,377 S *	11/2017	Gobber	D23/366
D819,798 S *	6/2018	Hwang	D23/364
D835,307 S *	12/2018	Thompson	D26/26
D840,304 S *	2/2019	Kang	D12/192
D844,765 S *	4/2019	Zhang	D23/364
D864,431 S *	10/2019	Thompson	D26/26
D871,564 S *	12/2019	Brandenburg	D23/366
D879,284 S *	3/2020	Puffer	D23/385
D889,627 S *	7/2020	Brandenburg	D23/366
D895,096 S *	9/2020	Brandenburg	D23/366
D923,452 S *	6/2021	Bae	D8/330

* cited by examiner

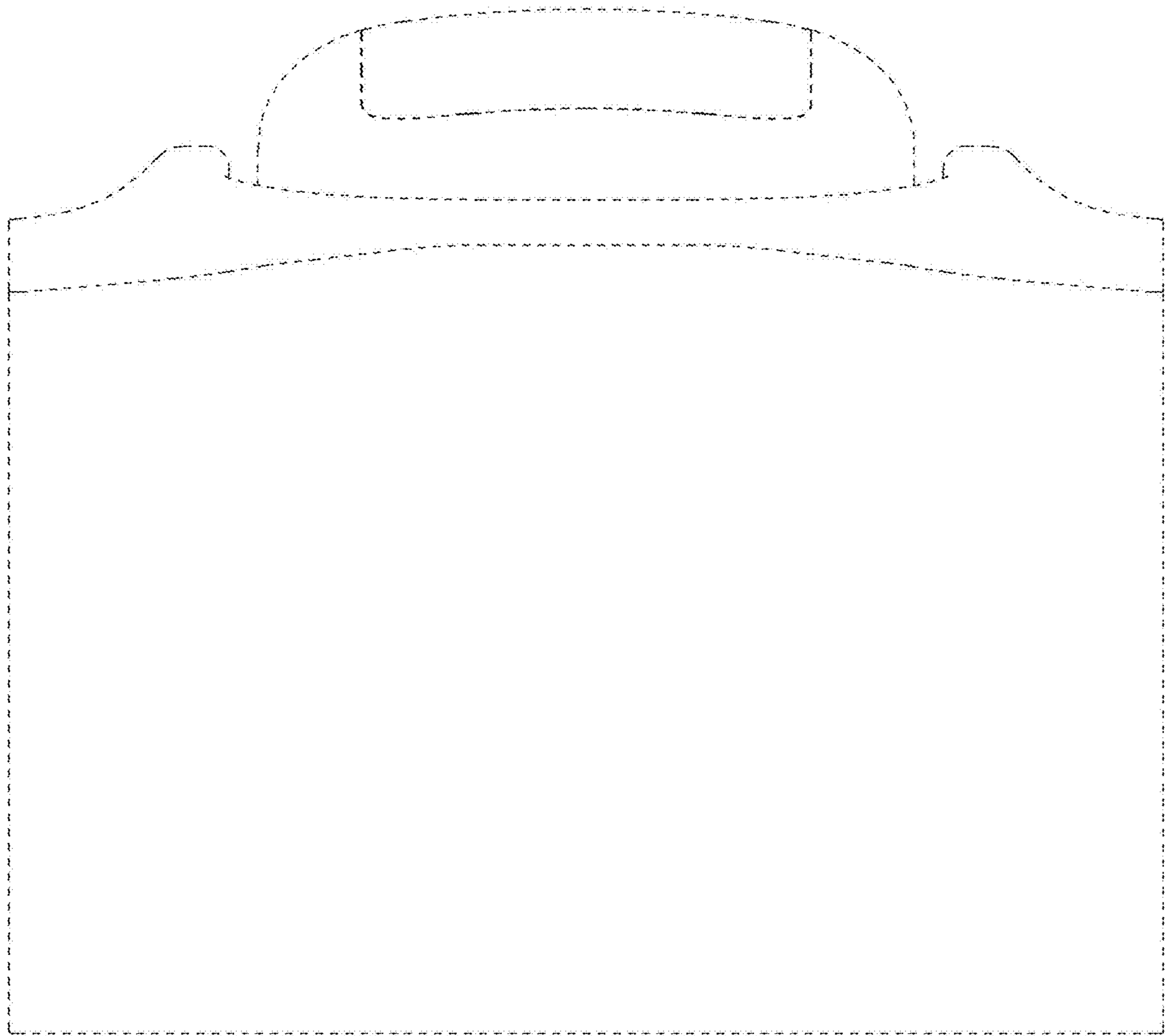
1.1



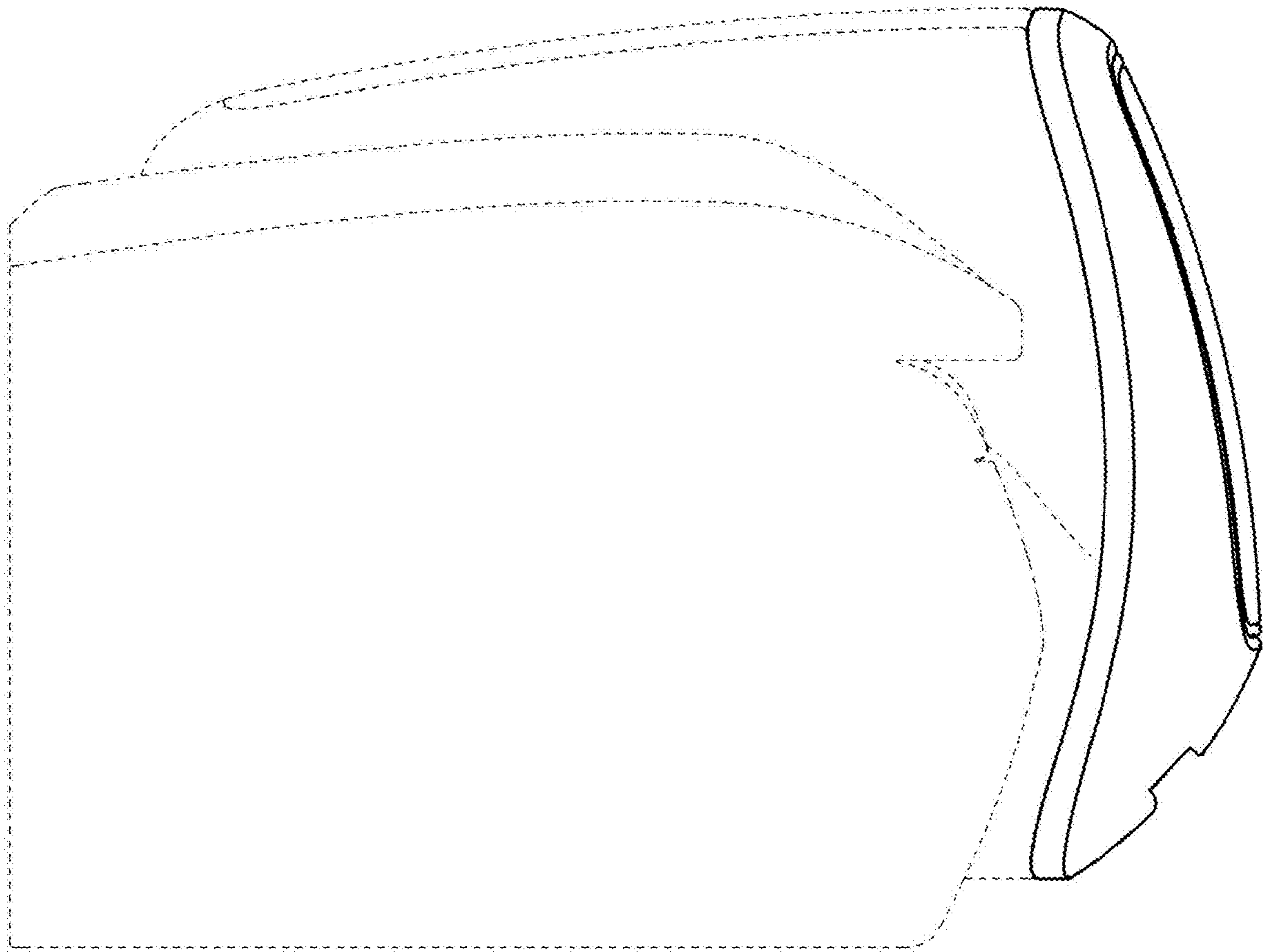
1.2



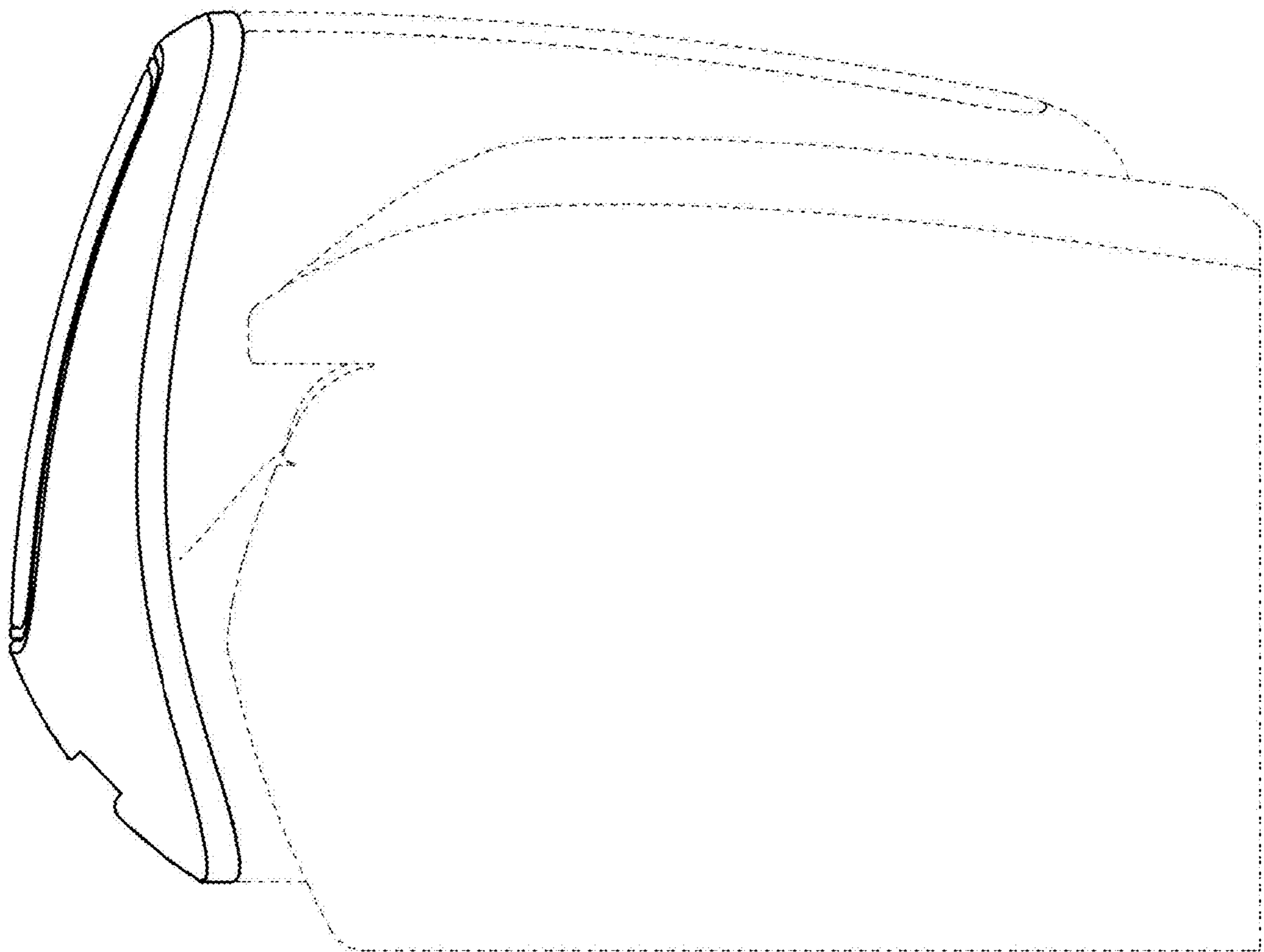
1.3



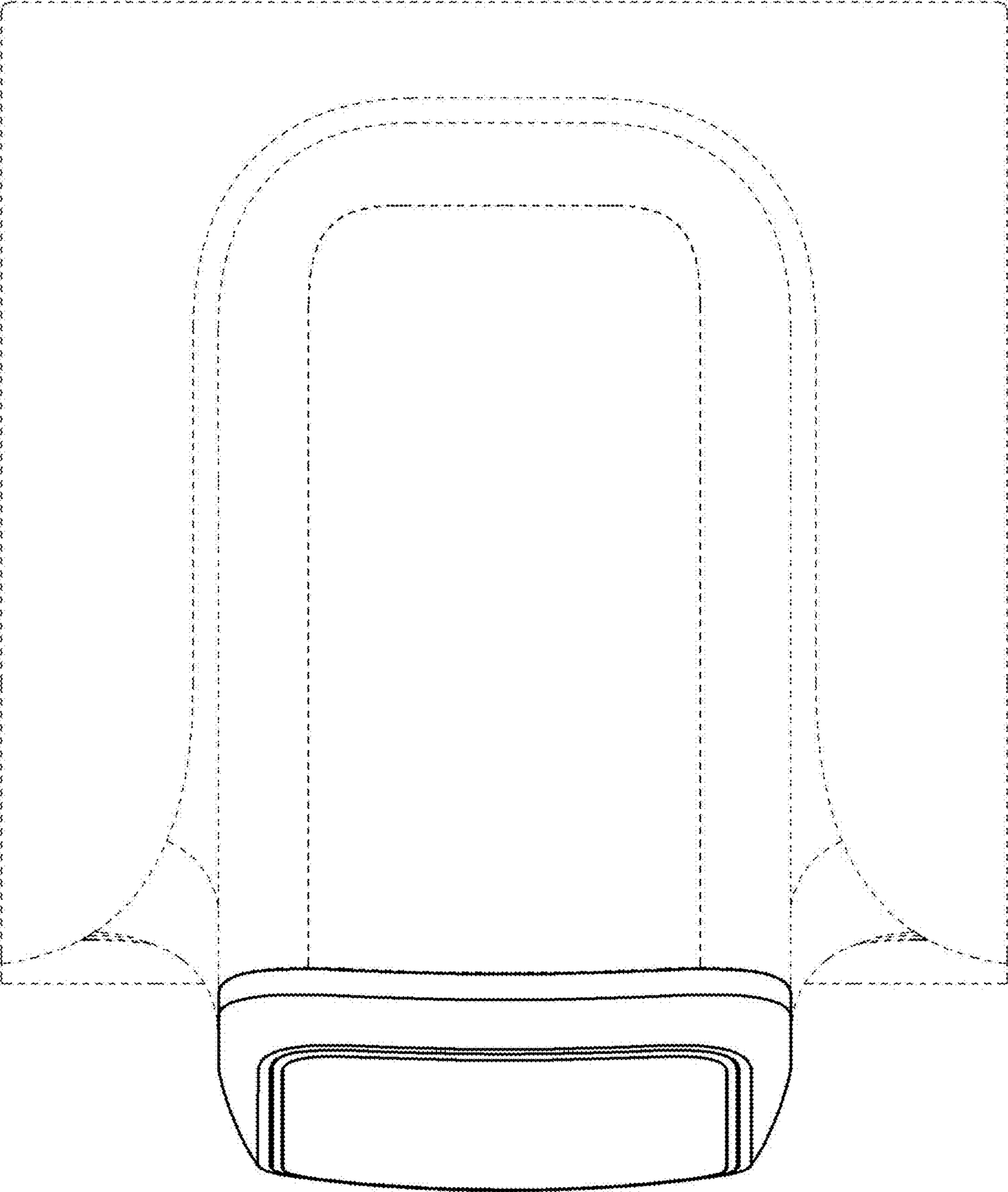
1.4



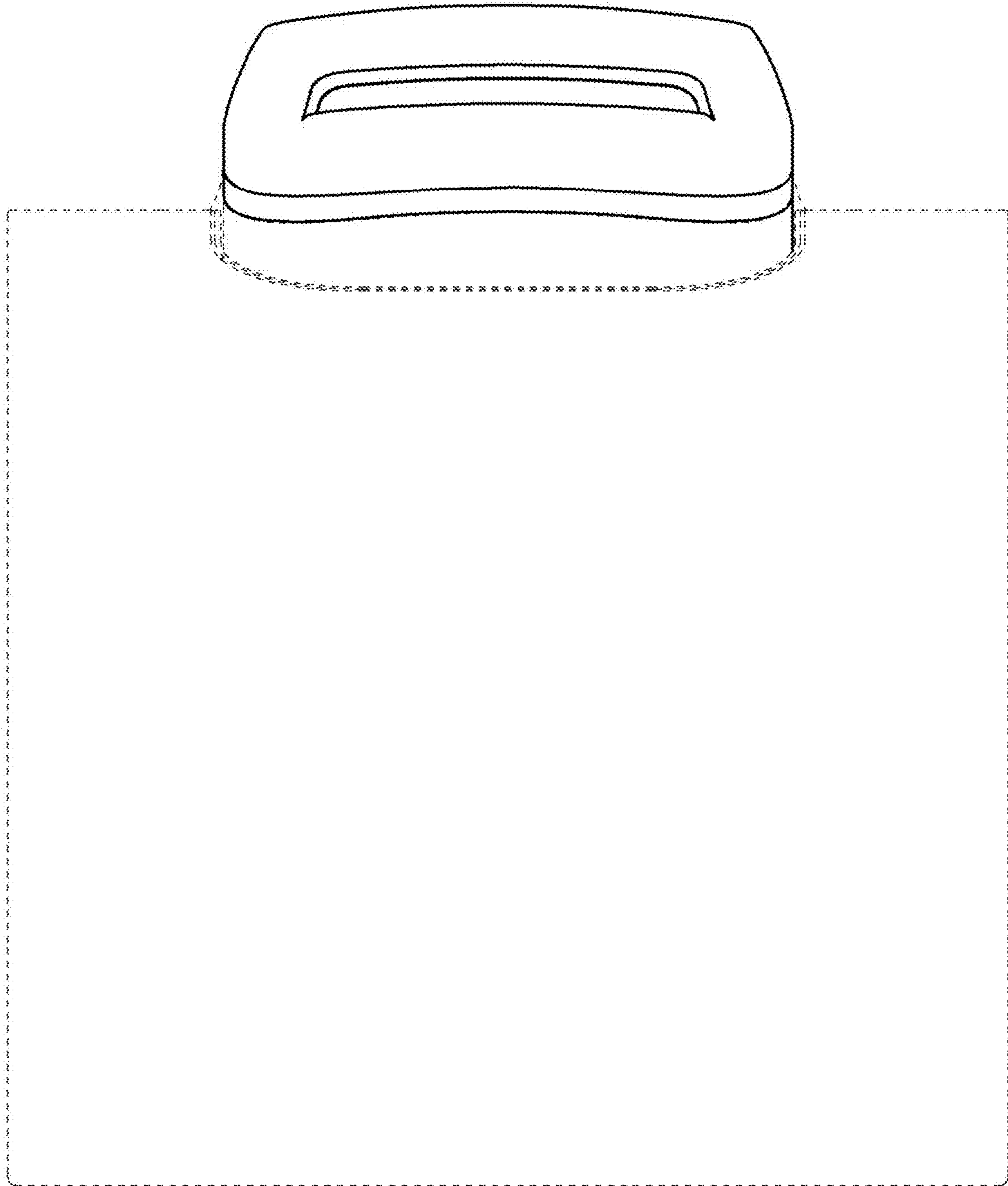
1.5



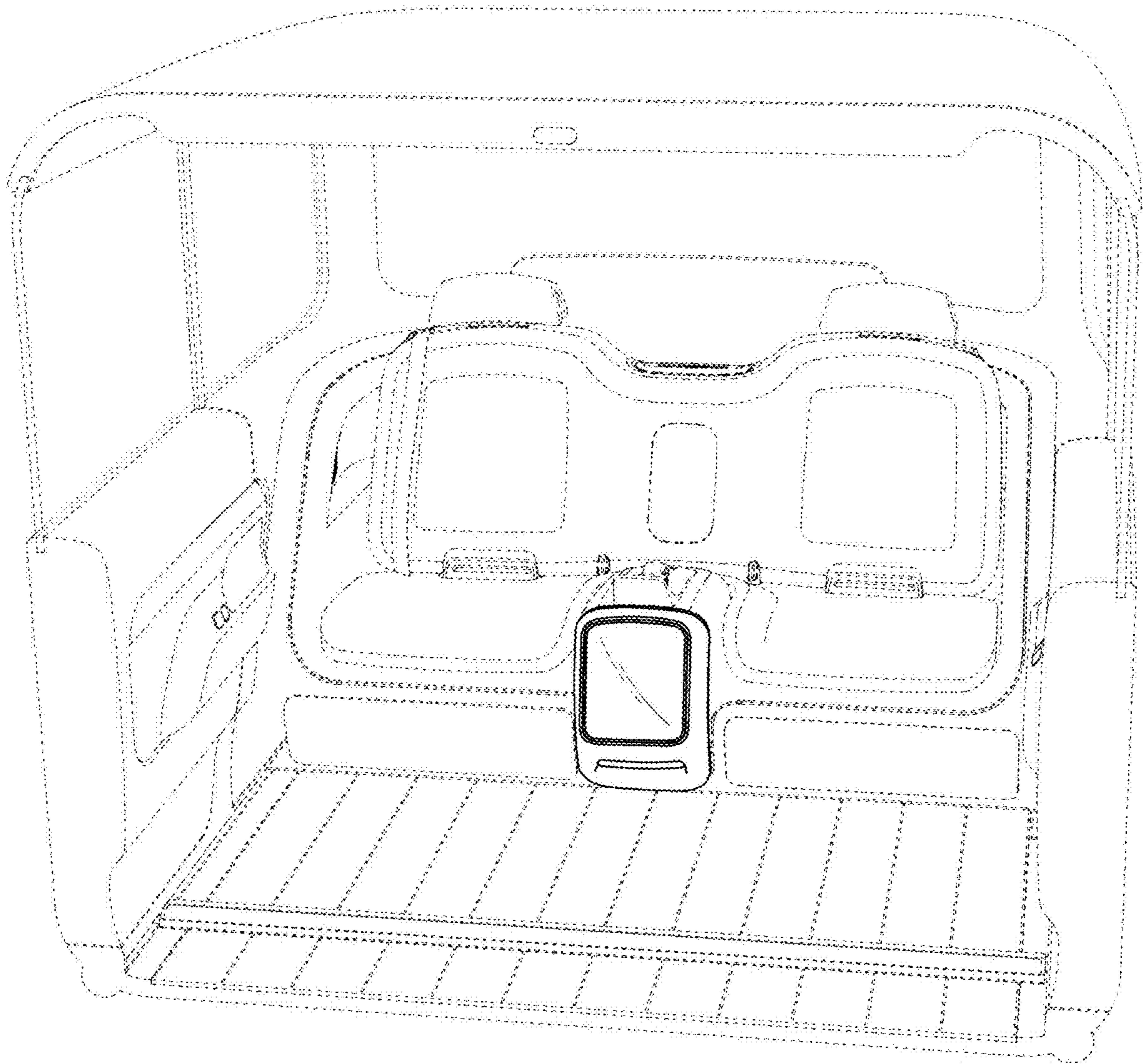
1.6



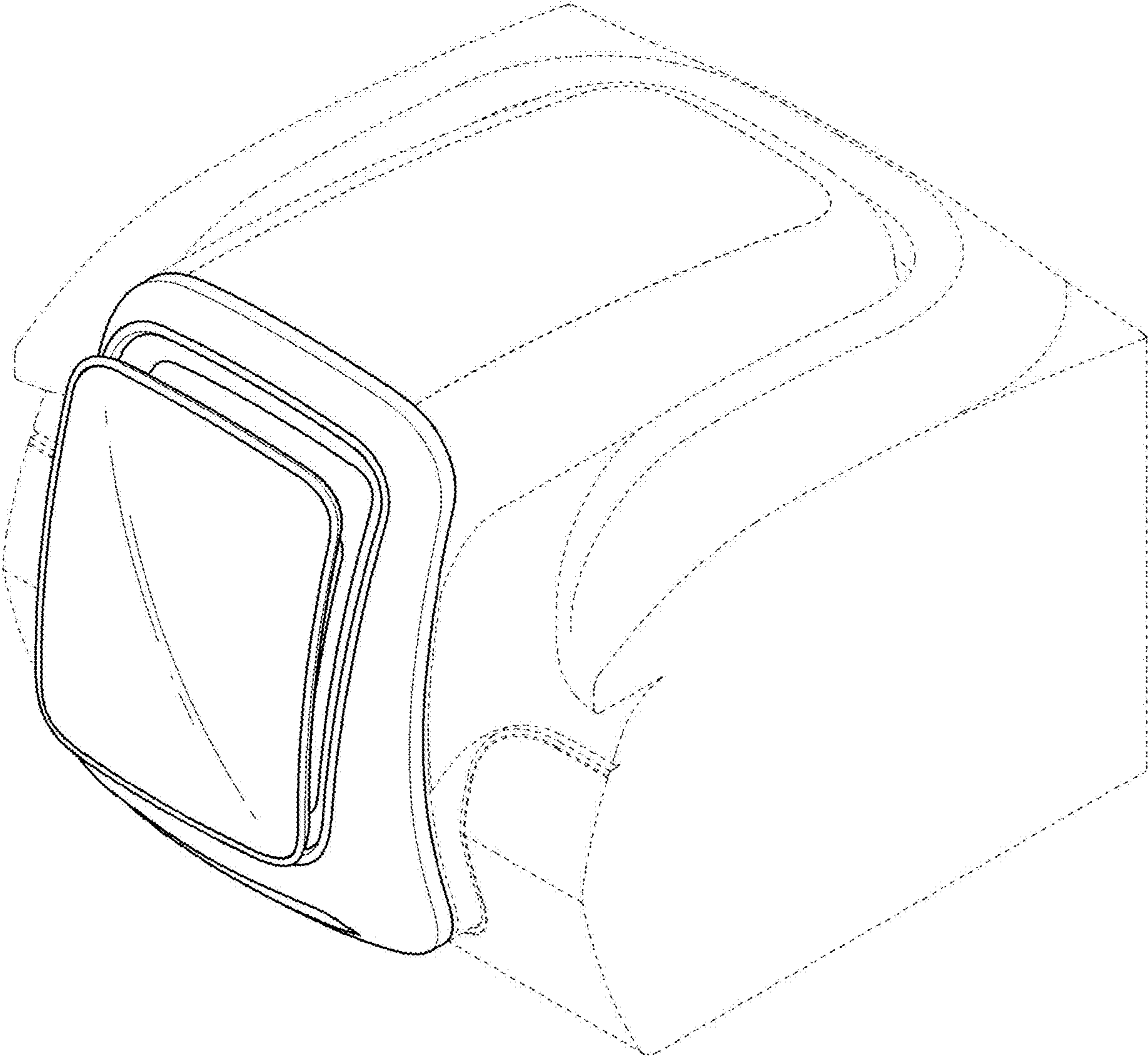
1.7



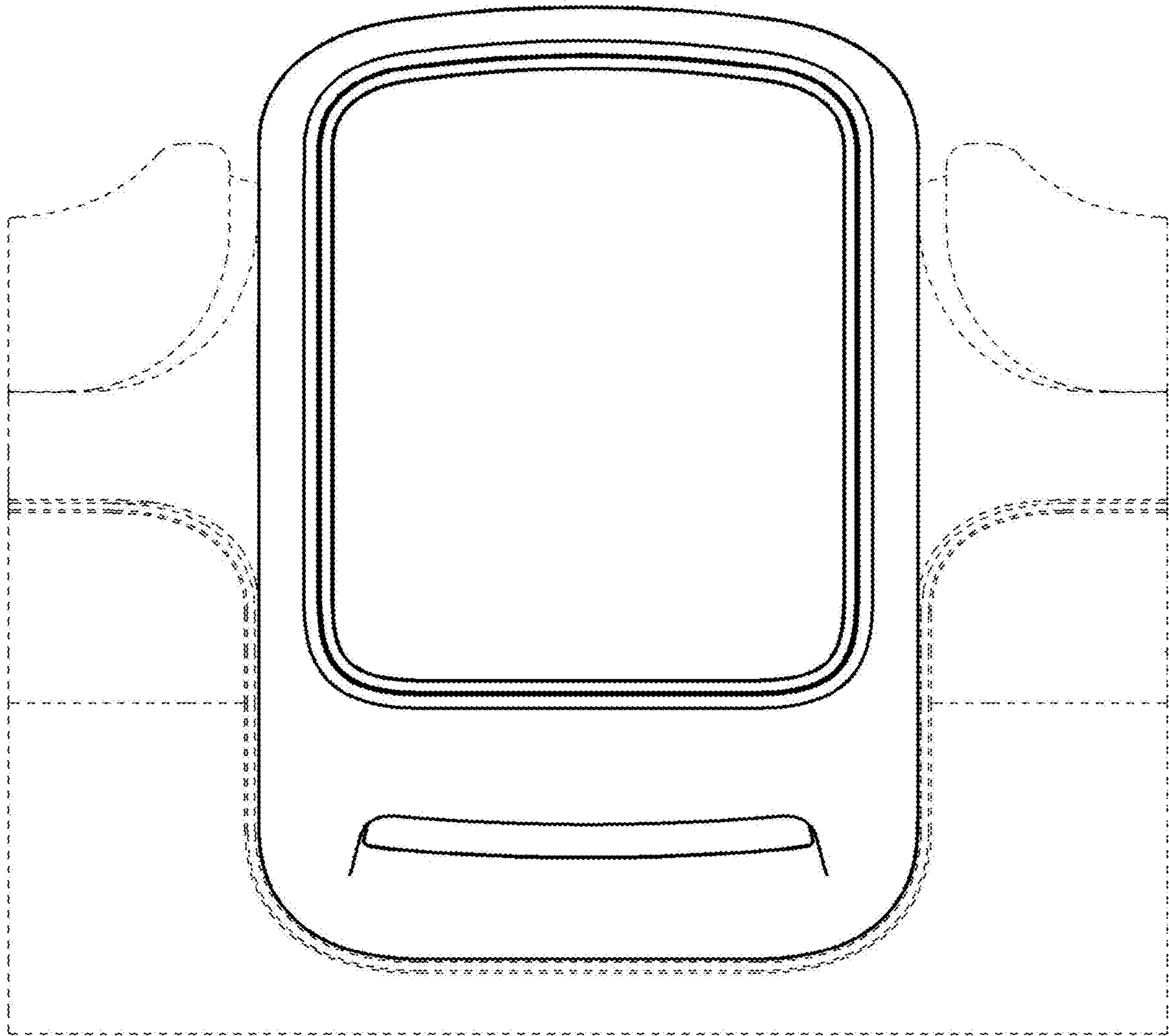
1.8



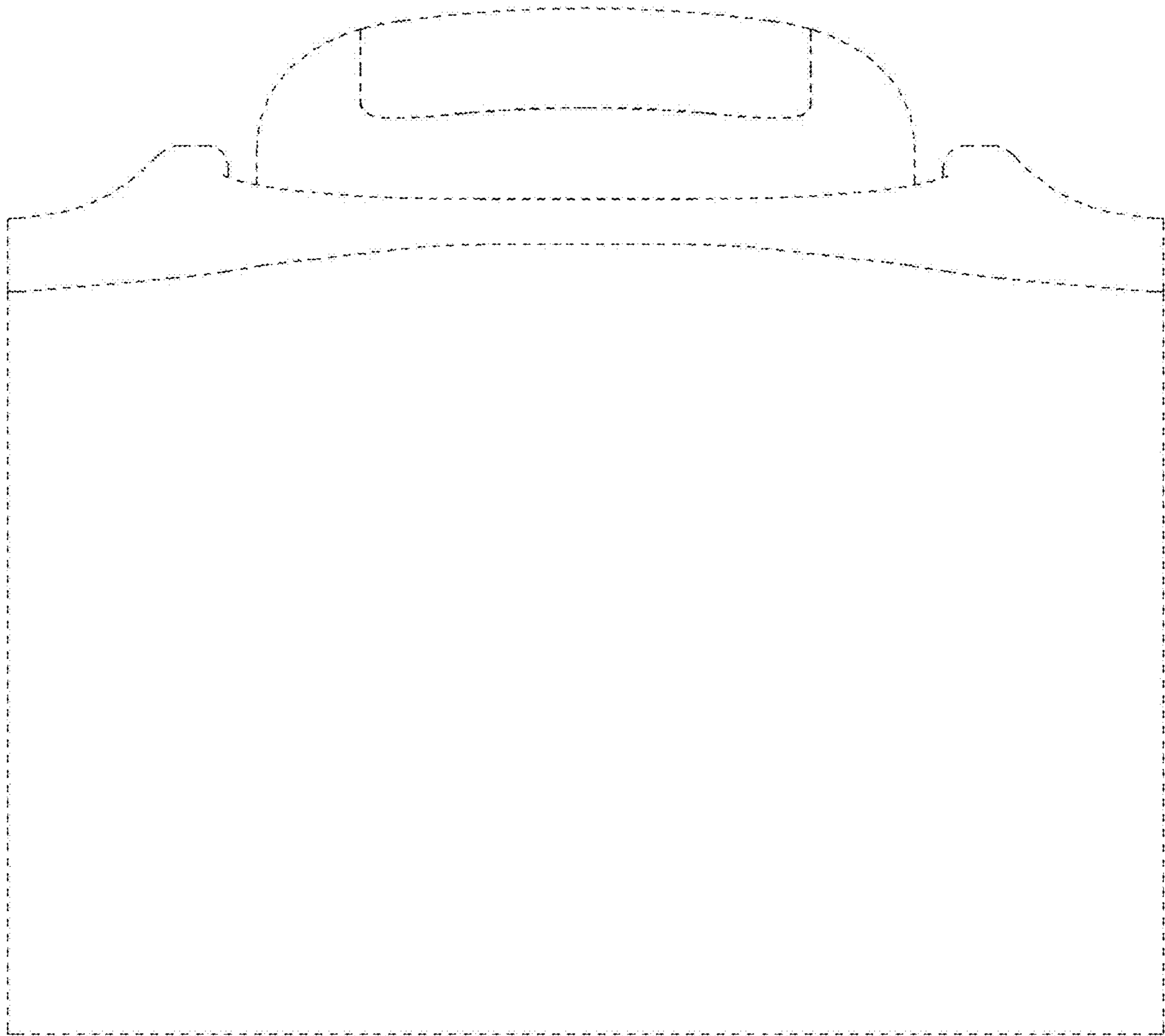
1.9



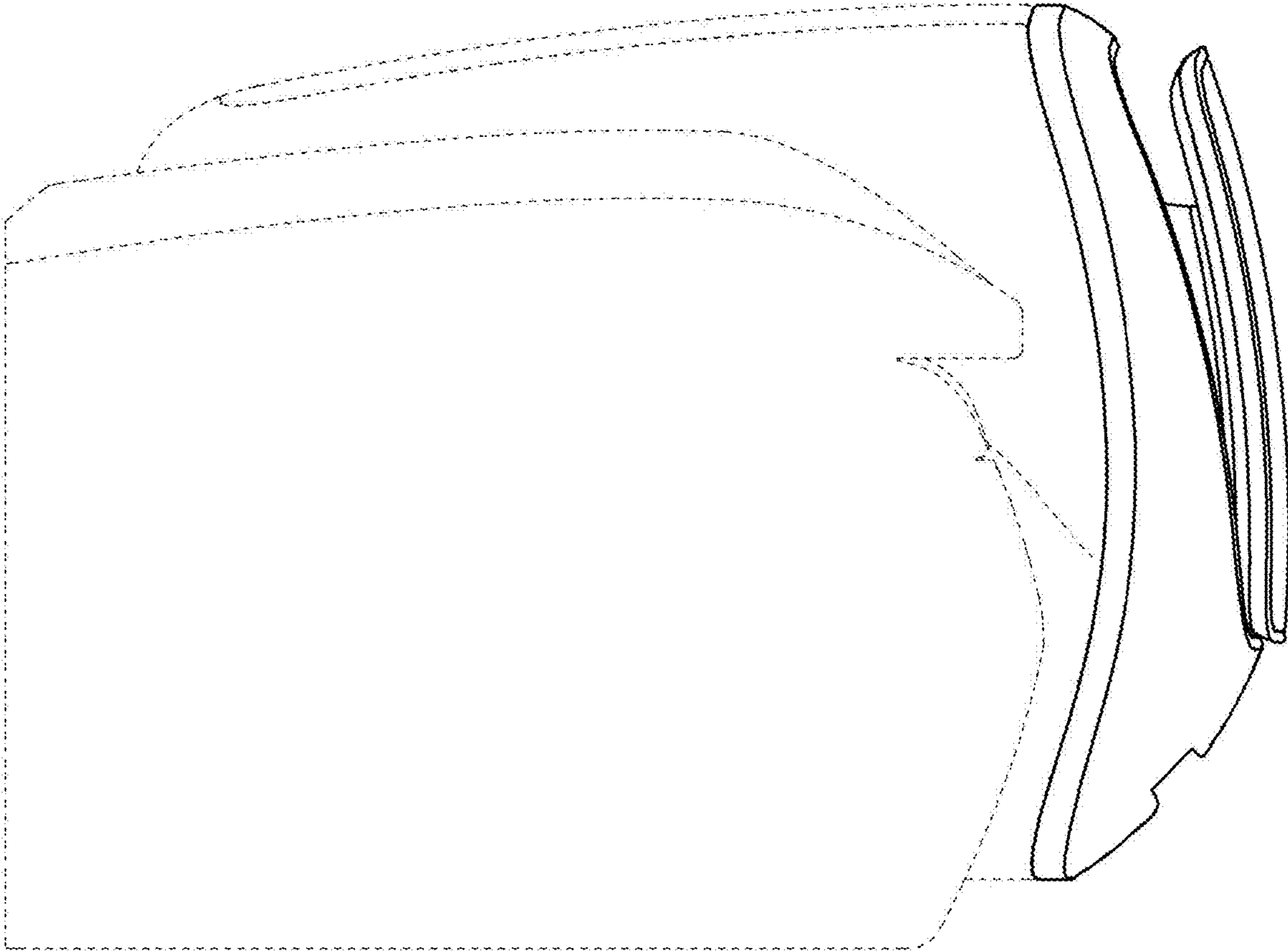
1.10



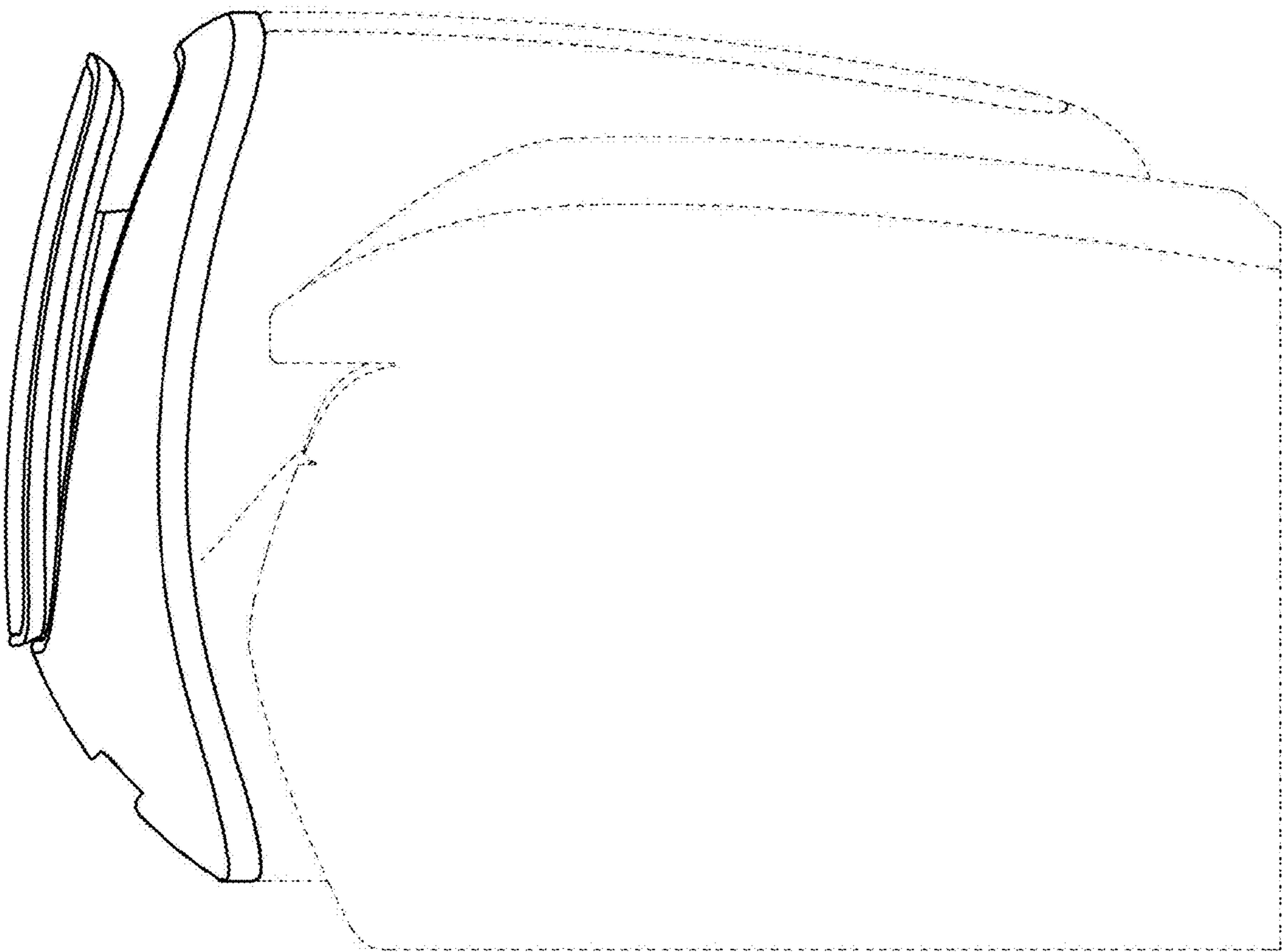
1.11



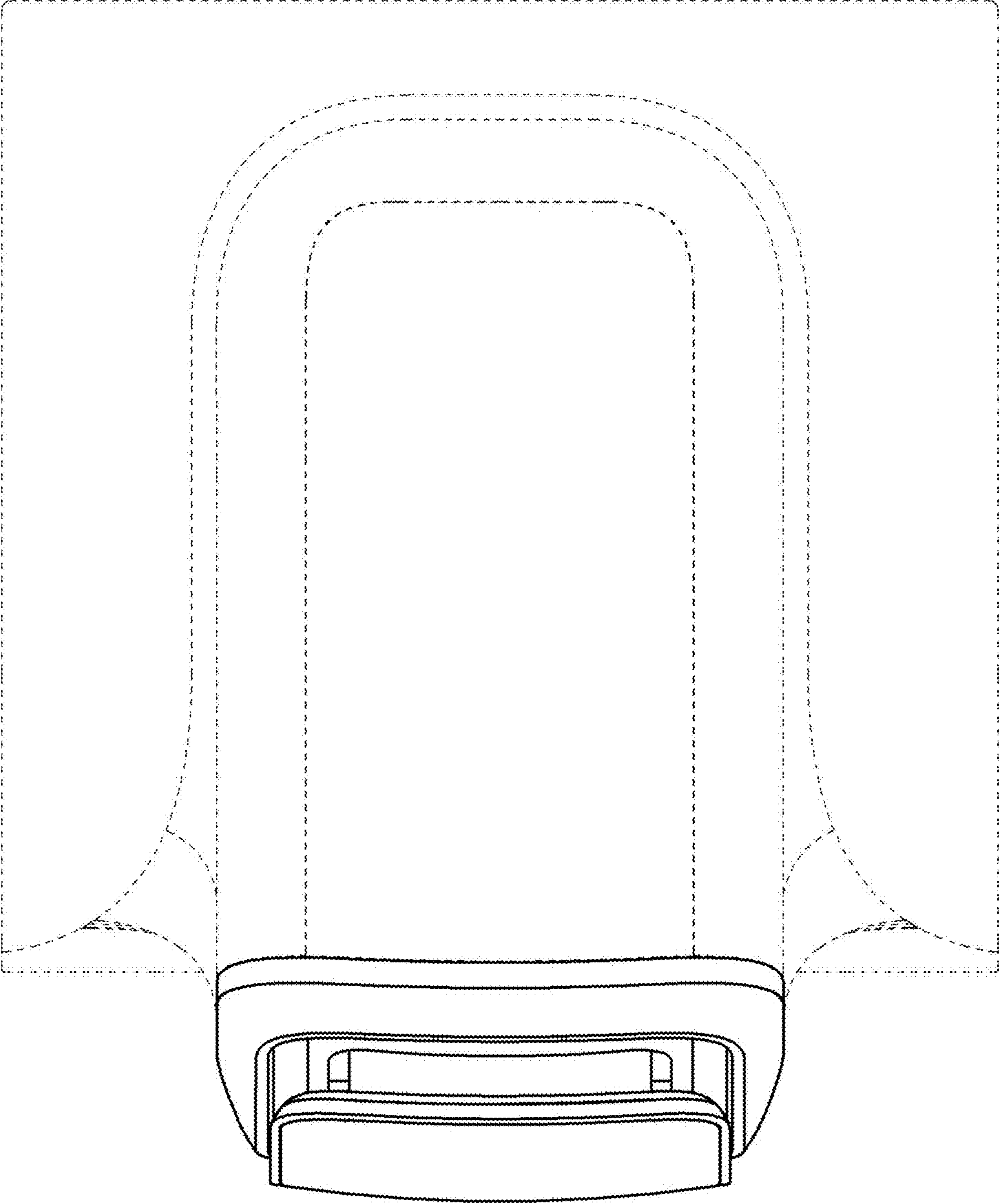
1.12



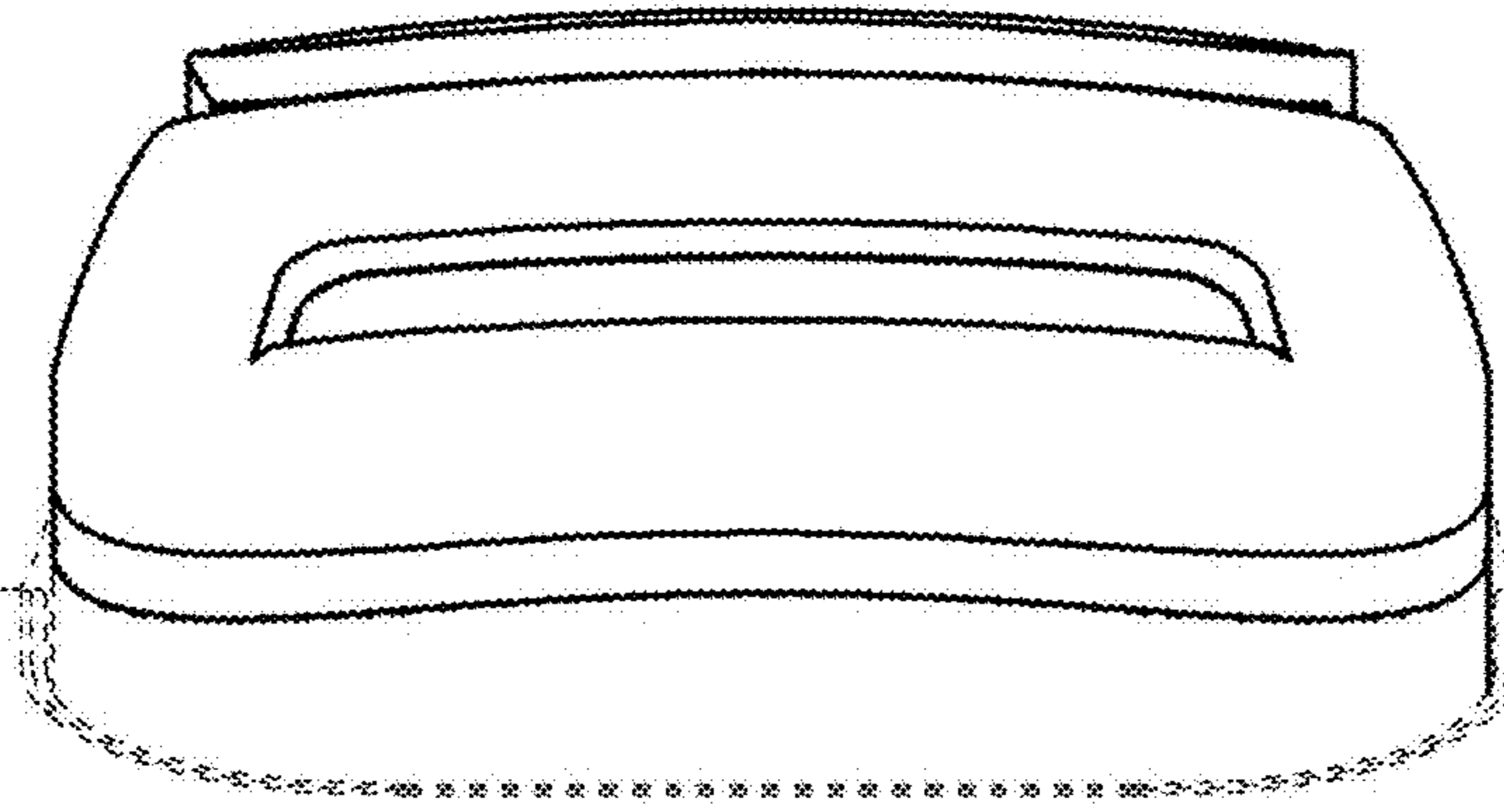
1.13



1.14



1.15



1.16

