



US00D878227S

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

(10) **Patent No.:** **US D878,227 S**

(45) **Date of Patent:** **\*\* Mar. 17, 2020**

(54) **PARTICLE CHARACTERIZATION DEVICE**

(71) Applicant: **MALVERN INSTRUMENTS LIMITED**, Malvern (GB)

(72) Inventors: **John Cross**, Warwick (GB); **David Boyce**, Warwick (GB); **Chris Langley**, Warwick (GB); **Mark Shadbolt**, Malvern (GB)

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

(21) Appl. No.: **35/504,661**

(22) Filed: **Dec. 13, 2017**

(80) **Hague Agreement Data**

Int. Filing Date: **Dec. 13, 2017**

Int. Reg. No.: **DM/100202**

Int. Reg. Date: **Dec. 13, 2017**

Int. Reg. Pub. Date: **Mar. 23, 2018**

(51) **LOC (12) Cl.** ..... **10-04**

(52) **U.S. Cl.**  
USPC ..... **D10/81**

(58) **Field of Classification Search**  
USPC ..... D10/81, 46; D24/216  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D644,544 S \* 9/2011 Yukikado ..... D10/81  
D665,917 S \* 8/2012 TerMaat ..... D24/216

D683,642 S \* 6/2013 Buesser ..... D10/81  
D722,515 S \* 2/2015 Zock ..... D10/81  
D758,221 S \* 6/2016 Fujiwara ..... D10/81  
D762,133 S \* 7/2016 Derocher ..... D10/81  
D796,979 S \* 9/2017 Delavy ..... D10/81  
D797,587 S \* 9/2017 Delavy ..... D10/81  
D800,000 S \* 10/2017 Barton ..... D10/81  
D830,210 S \* 10/2018 Ihara ..... D10/81  
D838,198 S \* 1/2019 Kimura ..... D10/81

\* cited by examiner

*Primary Examiner* — George D. Kirschbaum

(57) **CLAIM**

We claim the ornamental design for a particle characterization device, as shown and described.

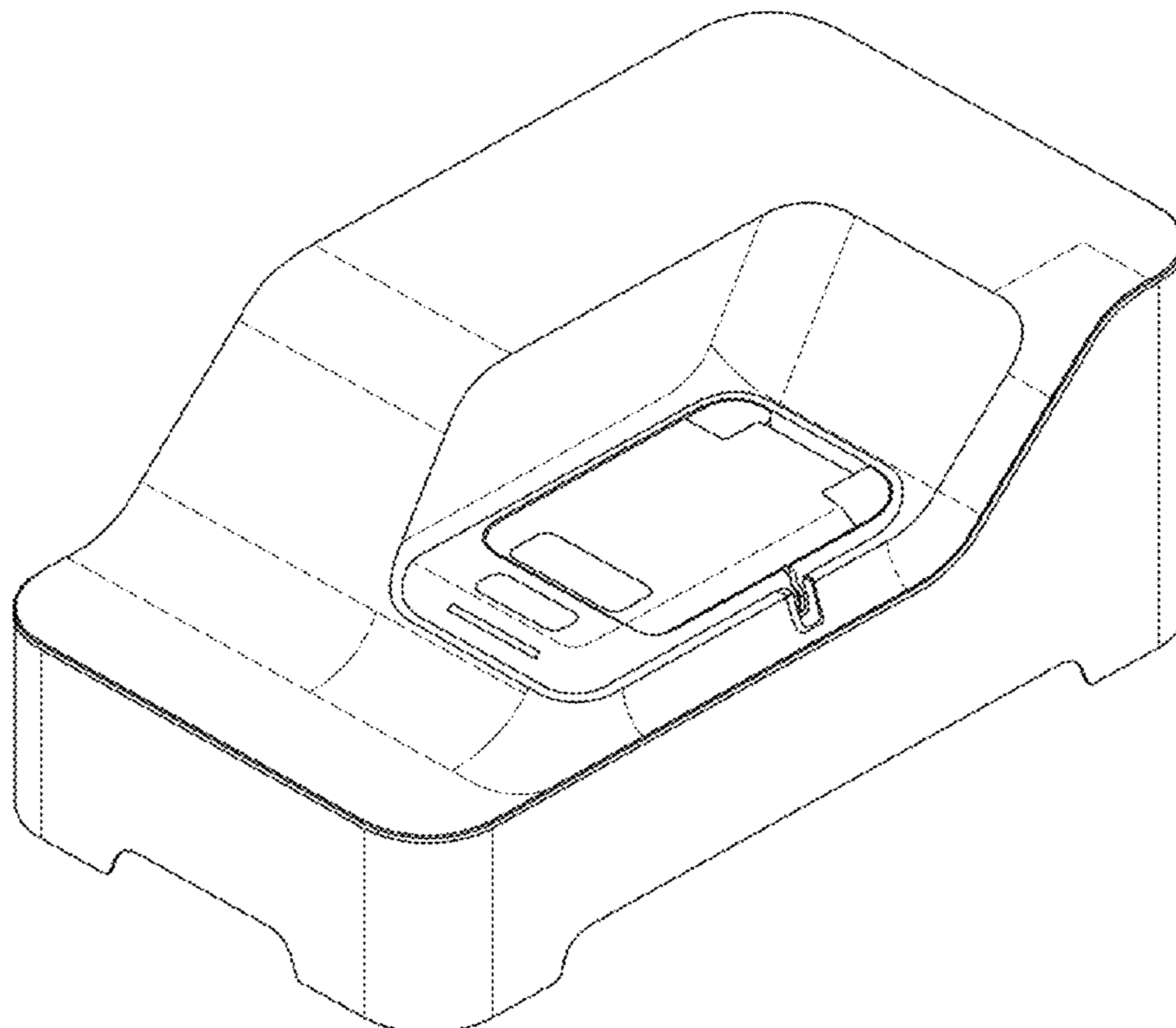
**DESCRIPTION**

- 1. Particle characterization device
- 1.1 is a bottom view.
- 1.2 is a rear view.
- 1.3 is a front view.
- 1.4 is a side view.
- 1.5 is a front perspective view.
- 1.6 is a side view of the opposite side of 1.4.
- 1.7 is a top view.

The broken lines shown in the drawings illustrate portions that form no part of the claimed design.

The dash-dot lines shown in the drawings represent the bounds of the claimed design.

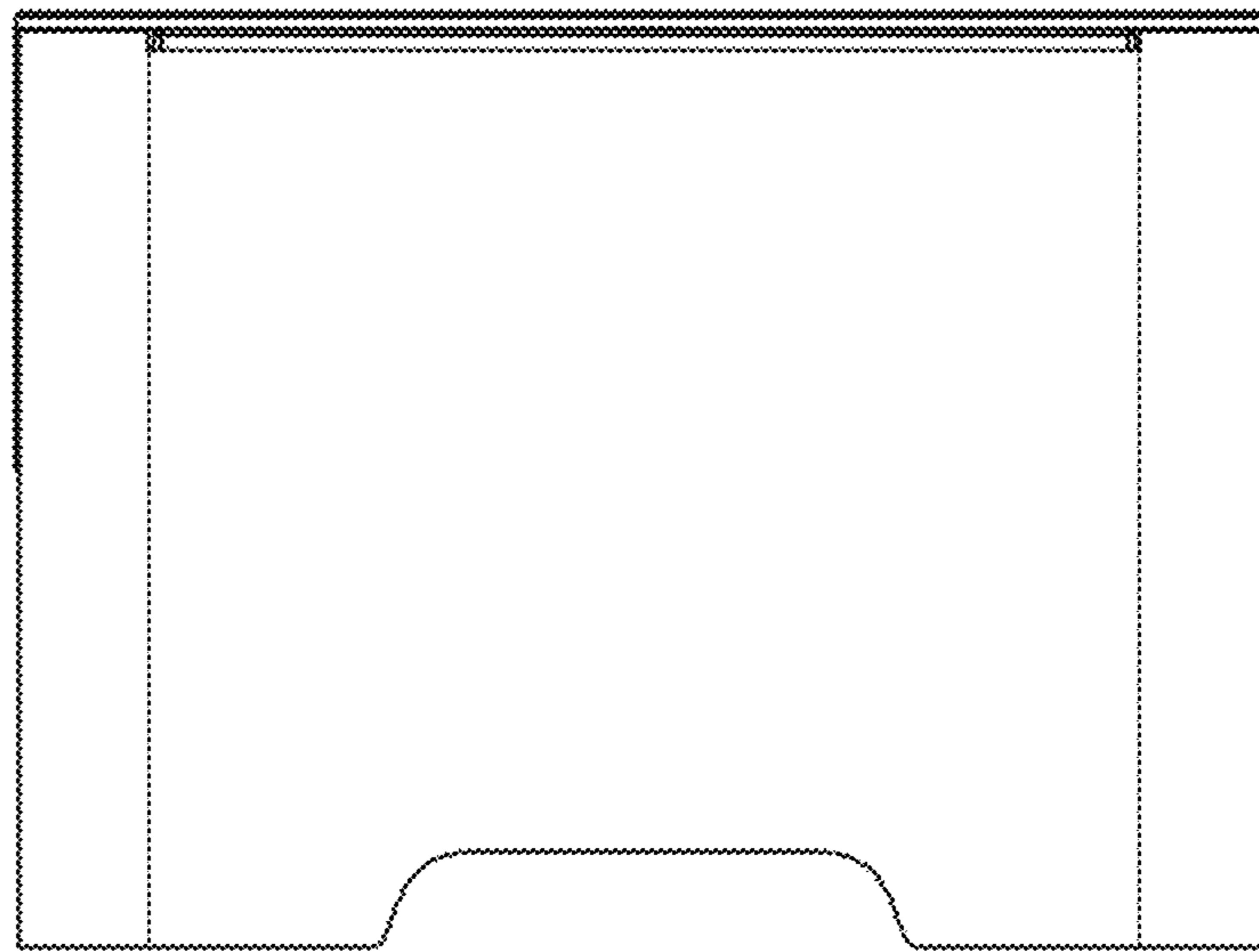
**1 Claim, 7 Drawing Sheets**



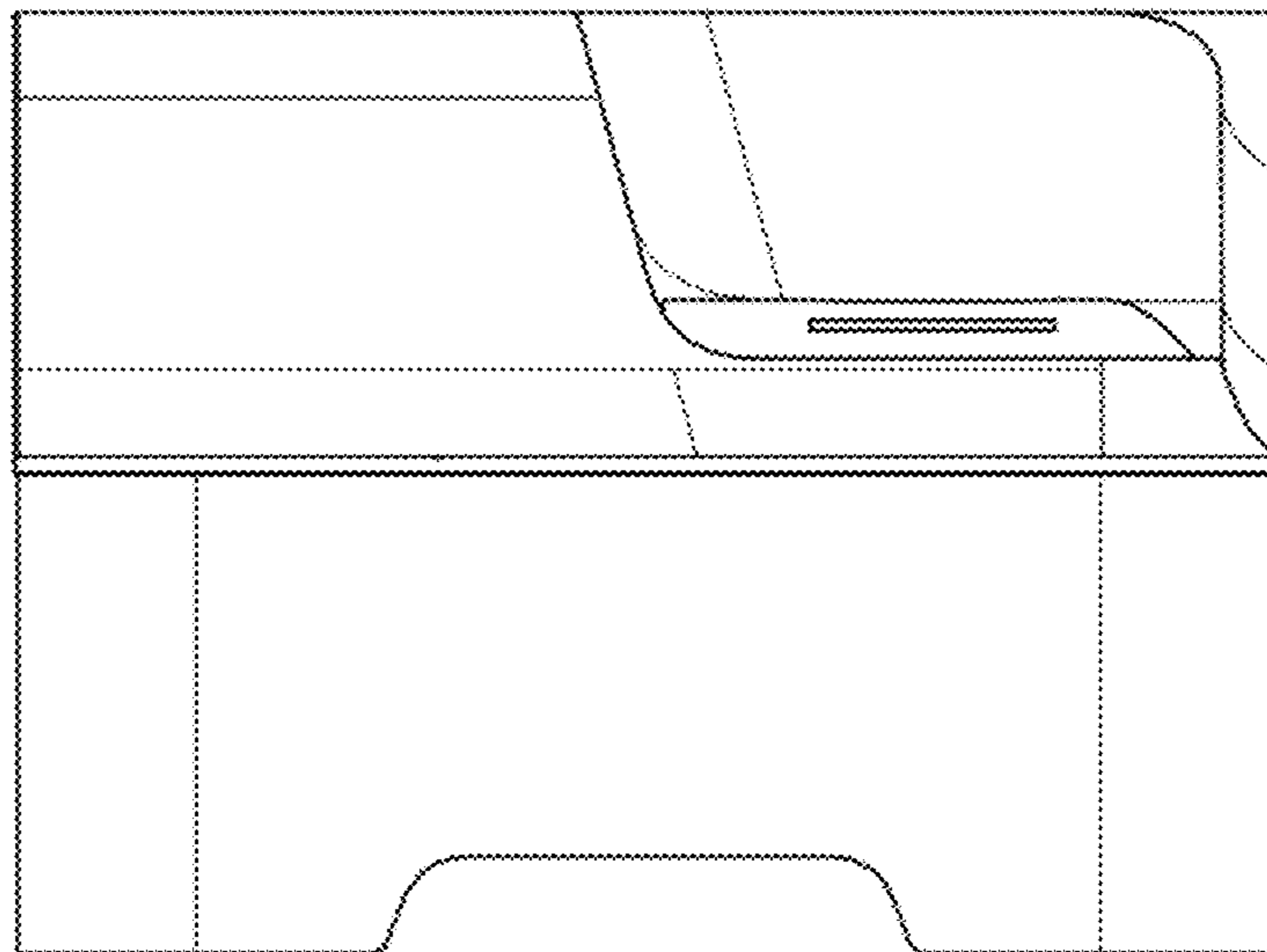
1.1



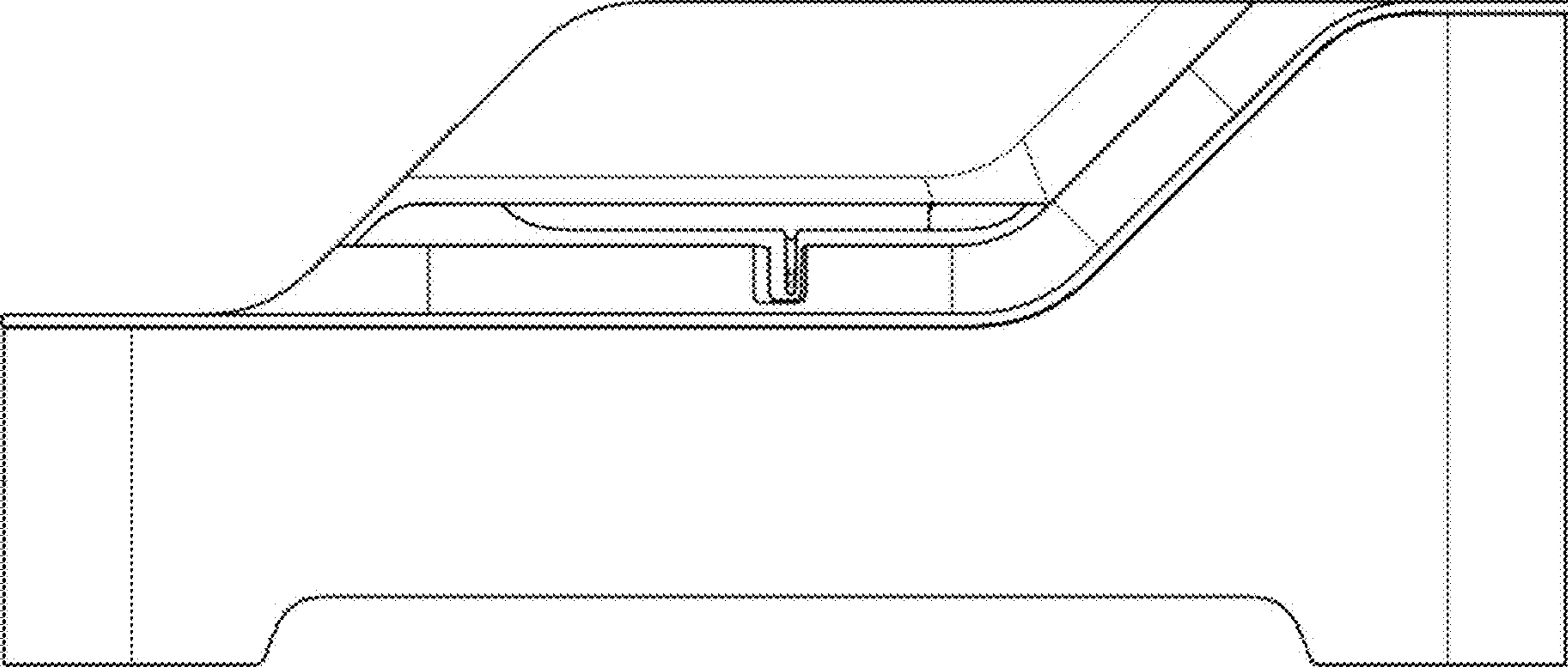
1.2



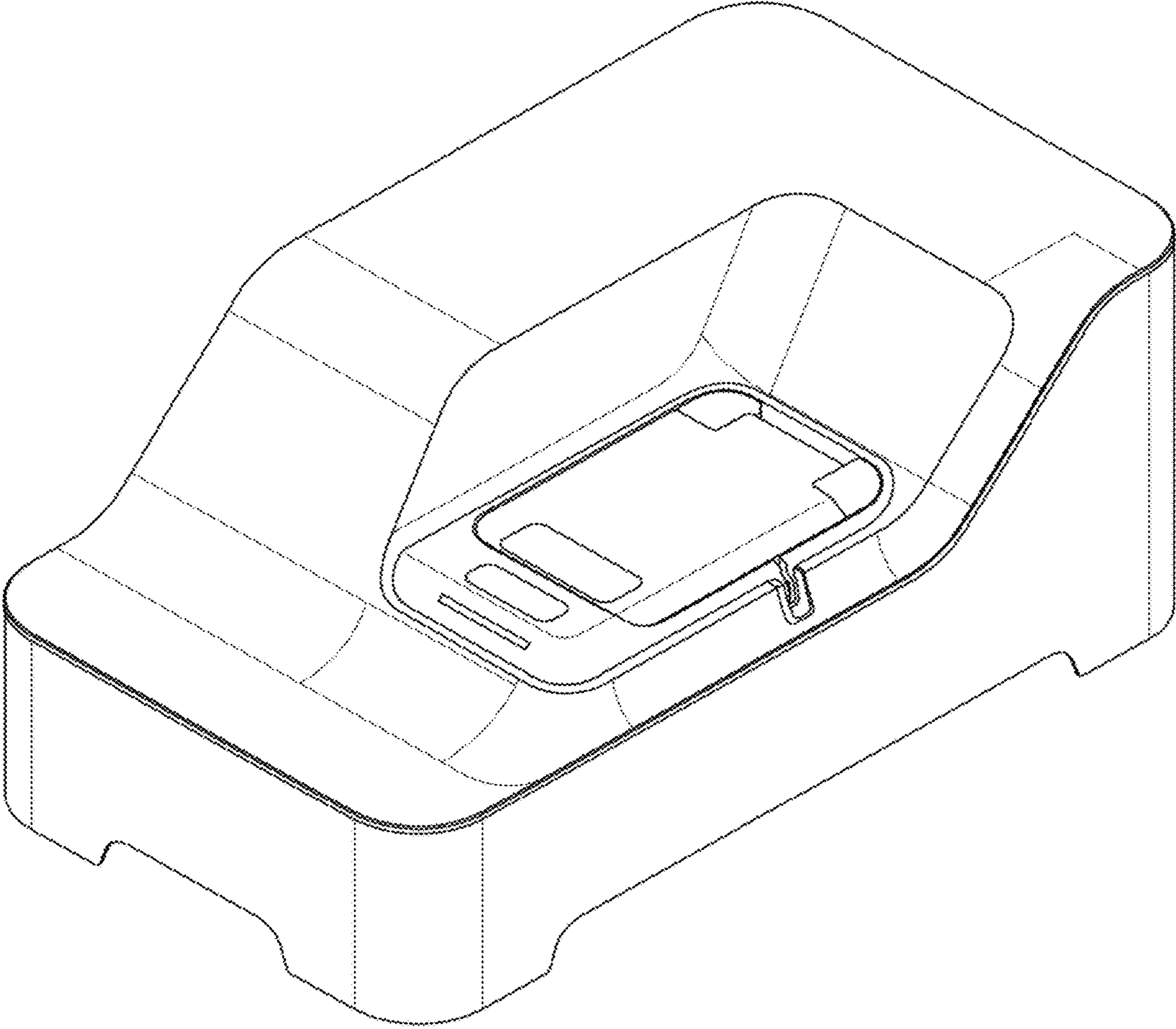
1.3



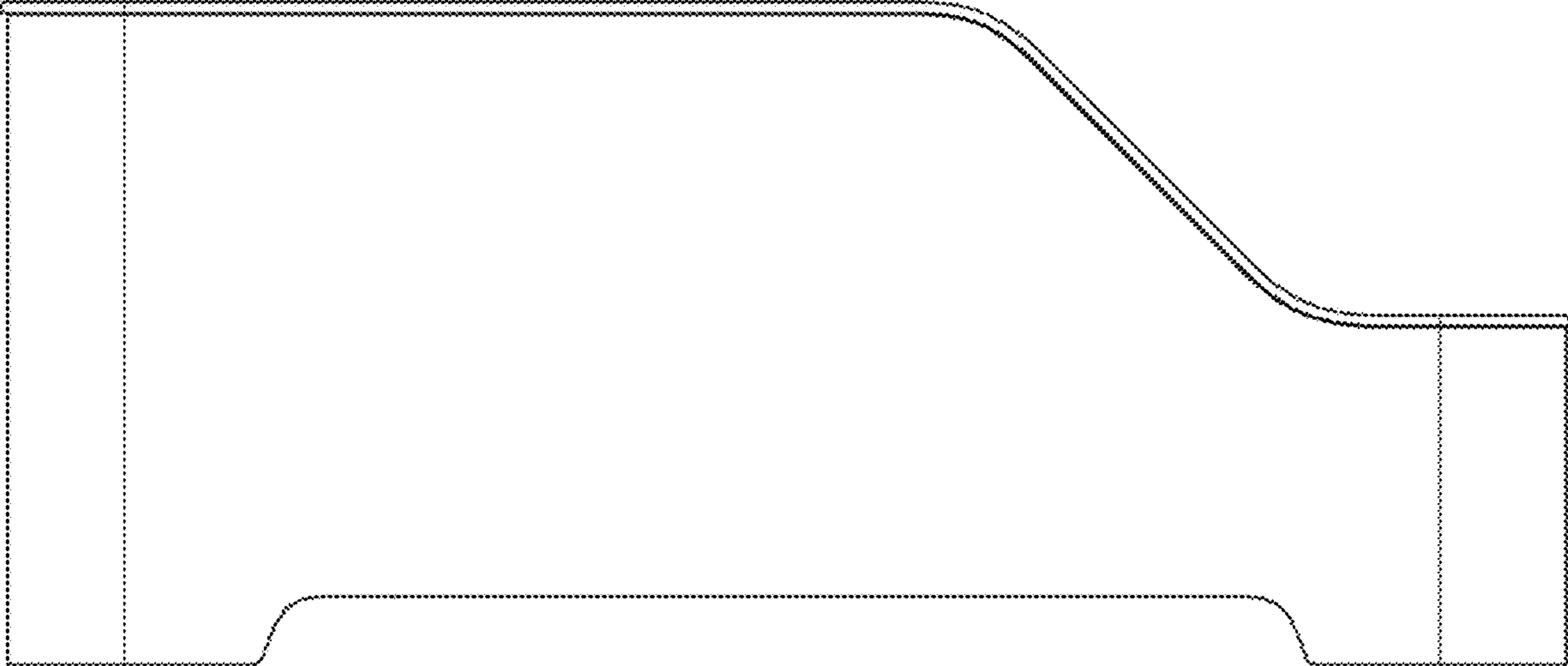
1.4



1.5



1.6



1.7

