



US00D930174S

(12) **United States Design Patent** (10) **Patent No.:** **US D930,174 S**  
**Sonoda et al.** (45) **Date of Patent:** **\*\* Sep. 7, 2021**

(54) **HAND WARMER**

(71) Applicant: **Kobayashi Pharmaceutical Co., Ltd.**,  
Osaka (JP)

(72) Inventors: **Goro Sonoda**, Osaka (JP); **Tetsuya Maruyama**, Osaka (JP)

(73) Assignee: **Kobayashi Pharmaceutical Co., Ltd.**,  
Osaka (JP)

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

(21) Appl. No.: **35/508,896**

(22) Filed: **May 21, 2019**

(80) **Hague Agreement Data**

Int. Filing Date: **May 21, 2019**

Int. Reg. No.: **DM/206605**

Int. Reg. Date: **May 21, 2019**

Int. Reg. Pub. Date: **Mar. 27, 2020**

(30) **Foreign Application Priority Data**

Nov. 21, 2018 (JP) ..... 2018-025440  
Nov. 21, 2018 (JP) ..... 2018-025441  
Nov. 21, 2018 (JP) ..... 2018-025442  
Nov. 21, 2018 (JP) ..... 2018-025443  
Nov. 21, 2018 (JP) ..... 2018-025444  
Nov. 21, 2018 (JP) ..... 2018-025445  
Nov. 21, 2018 (JP) ..... 2018-025446

(51) **LOC (13) Cl.** ..... **24-04**

(52) **U.S. Cl.**  
USPC ..... **D24/206**

(58) **Field of Classification Search**  
USPC ..... D24/207, 208, 189; D2/610  
CPC .... A61F 7/02; A61F 7/03; A61F 7/034; A61F  
2007/0036; A41D 13/081; A41D 13/0051;  
A45C 3/14

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,549,510 A \* 8/1925 Schnitzler ..... A61F 7/08  
383/105  
D154,277 S \* 6/1949 Schnitzler ..... D24/192  
4,227,270 A \* 10/1980 Rivera ..... A45C 9/00  
248/102  
D258,155 S \* 2/1981 Mathews ..... 8/160  
4,287,621 A \* 9/1981 Kertz ..... B60N 3/00  
224/276  
D270,320 S \* 8/1983 Smith ..... A47G 9/0253  
D6/601  
D295,079 S \* 4/1988 Wagle ..... D24/119

(Continued)

FOREIGN PATENT DOCUMENTS

JP 2019010447 A \* 1/2019

*Primary Examiner* — George D. Kirschbaum

*Assistant Examiner* — Calvin E Vansant

(74) *Attorney, Agent, or Firm* — Fitch, Even, Tabin &  
Flannery LLP

(57) **CLAIM**

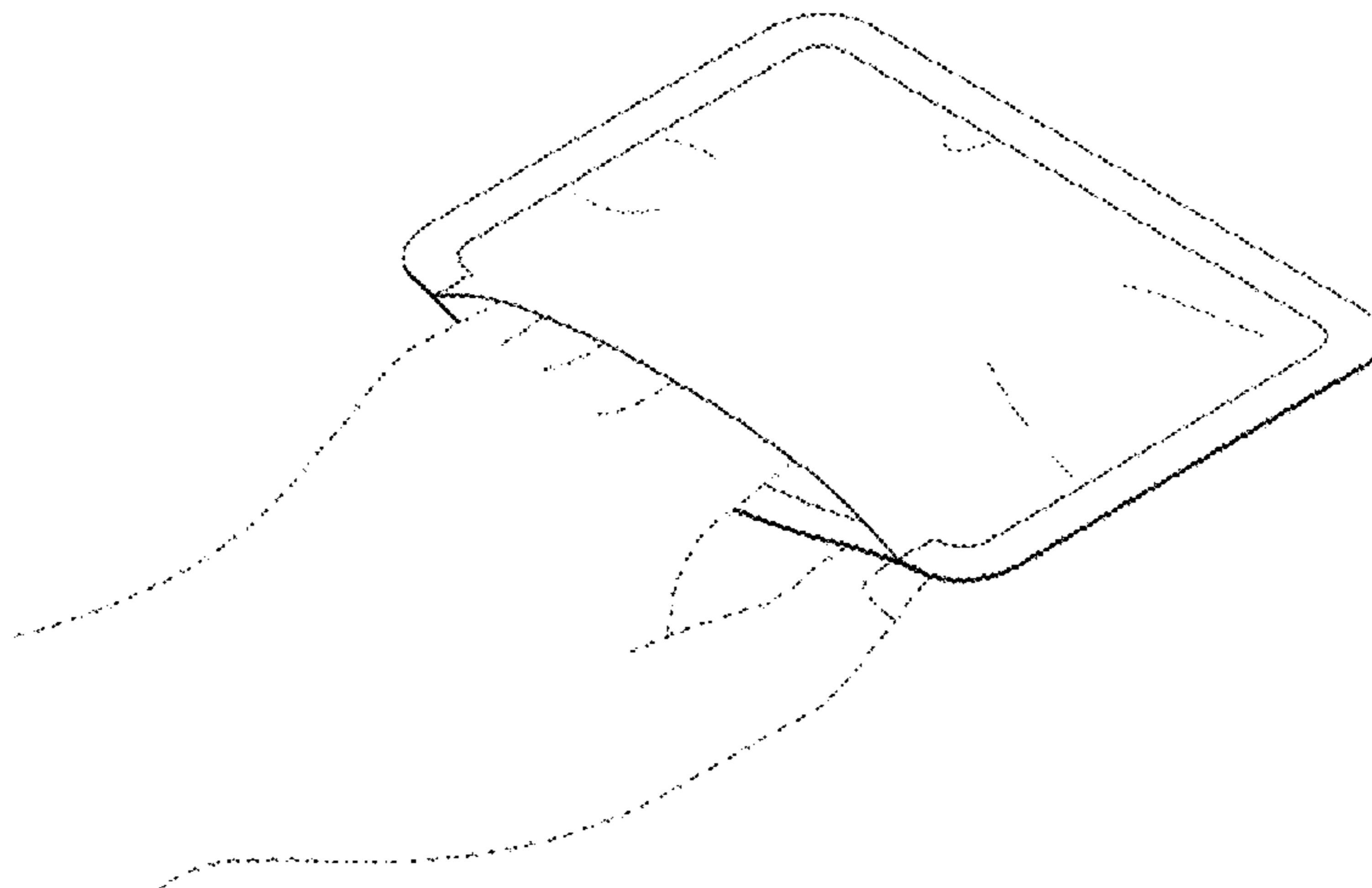
The ornamental design for a hand warmer, as shown and described.

**DESCRIPTION**

- 1. Hand warmer
- 1.1 : Perspective
- 1.2 : Front
- 1.3 : Top
- 1.4 : Right
- 1.5 : Back
- 1.6 : Bottom
- 1.7 : Cross sectional
- 1.8 : In-use view for reference

The left view is omitted because it is a mirror image of the right view; reproduction 1.7 shows the cross-sectional view

(Continued)



taken along line A-A in reproduction 1.2; the thin lines on the article in reproduction 1.1 shows a three-dimensional shape of the article surface.

**1 Claim, 8 Drawing Sheets**

(56)

**References Cited**

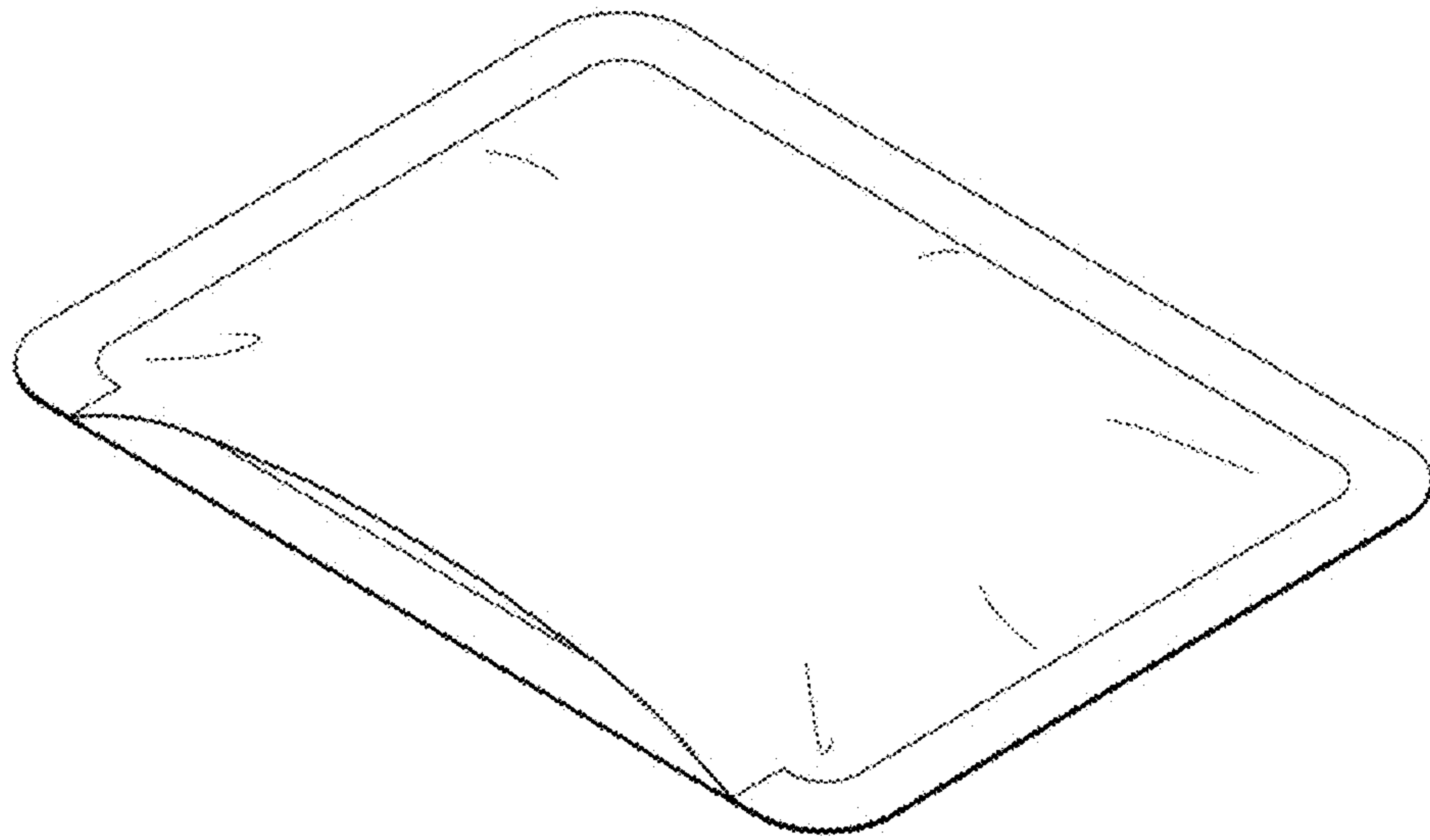
U.S. PATENT DOCUMENTS

D315,845 S \* 4/1991 Lafley ..... 5/646  
 5,050,596 A \* 9/1991 Walasek ..... F25D 3/08  
 607/111  
 5,084,986 A \* 2/1992 Usui ..... A61F 7/03  
 126/204  
 5,603,727 A \* 2/1997 Clark ..... A61F 7/02  
 126/204  
 5,679,052 A \* 10/1997 Rucki ..... A61F 7/02  
 2/267  
 5,715,841 A \* 2/1998 Utecht ..... A61B 42/10  
 128/897  
 6,318,359 B1 \* 11/2001 Schmidt ..... F28D 20/028  
 126/263.03  
 D456,517 S \* 4/2002 Kraska ..... D24/189  
 D458,687 S \* 6/2002 Dale ..... D24/189  
 D545,441 S \* 6/2007 Miyachika ..... D24/189  
 D553,250 S \* 10/2007 Juta ..... D24/190  
 D564,721 S \* 3/2008 Vinson ..... D32/40  
 D650,085 S \* 12/2011 Rucker ..... D24/207  
 D683,040 S \* 5/2013 Arsenault ..... D24/206  
 D685,489 S \* 7/2013 Nishioka ..... D24/206

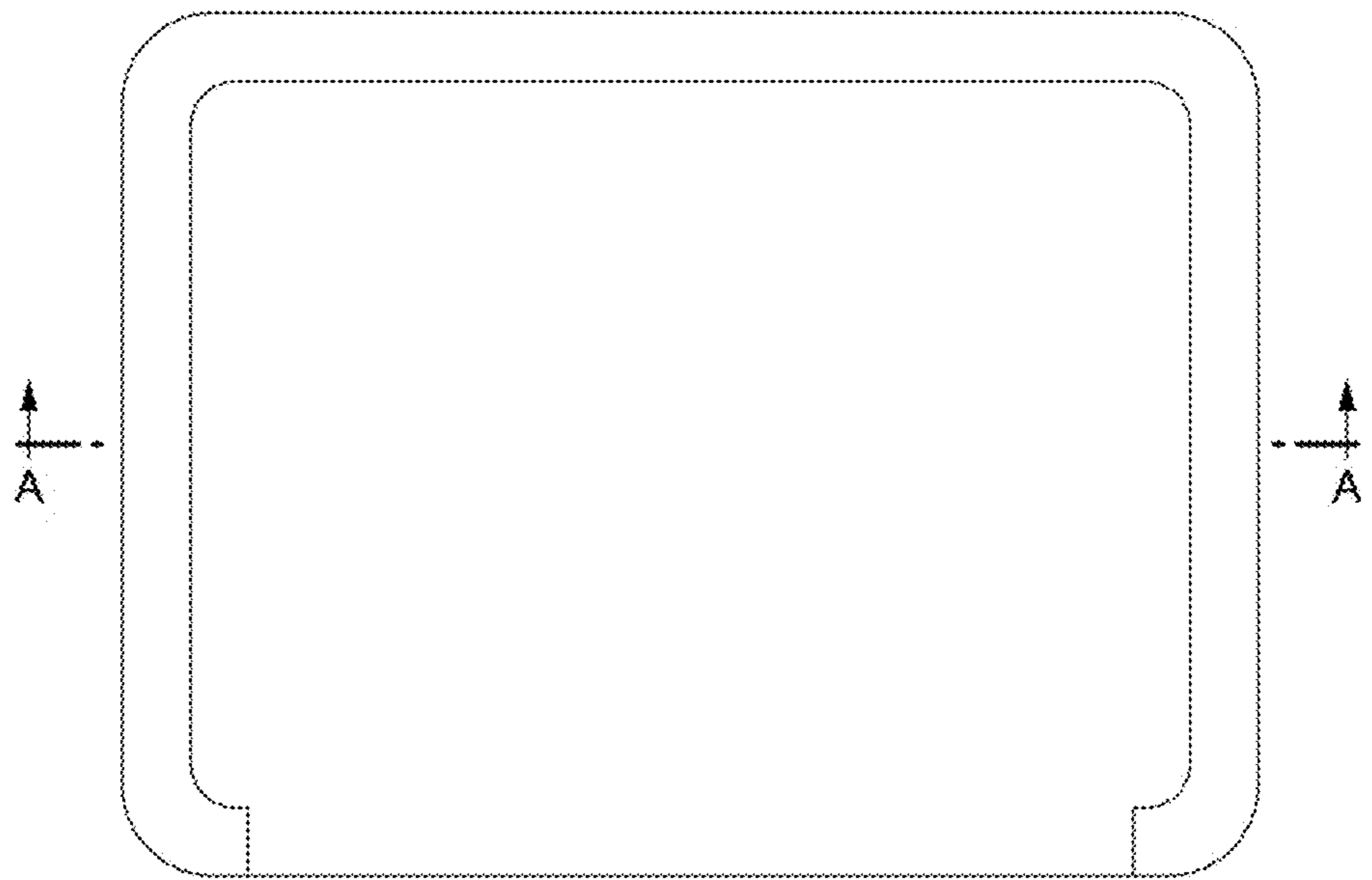
D687,558 S \* 8/2013 Sonoda ..... D24/206  
 D690,022 S \* 9/2013 Sonoda ..... D24/206  
 D699,052 S \* 2/2014 Jalan ..... A47G 9/0253  
 D6/601  
 8,721,700 B2 \* 5/2014 Stuffel ..... A61F 7/007  
 607/111  
 D746,996 S \* 1/2016 Karlsson ..... D24/189  
 D774,657 S \* 12/2016 Landini ..... D24/207  
 D783,227 S \* 4/2017 Ledingham ..... A41D 13/081  
 D2/610  
 9,671,133 B2 \* 6/2017 Sonoda ..... F24V 30/00  
 D825,071 S \* 8/2018 Suzuki ..... D24/206  
 10,172,738 B2 \* 1/2019 Whitely ..... A61F 7/02  
 D843,588 S \* 3/2019 Slowey ..... D24/189  
 D866,770 S \* 11/2019 Hahn ..... D24/189  
 D875,955 S \* 2/2020 Turner ..... D24/189  
 D885,597 S \* 5/2020 Godfrey ..... A63H 9/00  
 D24/206  
 D887,174 S \* 6/2020 Bridgham ..... D6/601  
 D890,355 S \* 7/2020 Nordeen ..... A47G 9/0253  
 D24/206  
 D896,546 S \* 9/2020 Lowder ..... D6/601  
 D904,794 S \* 12/2020 Steinbock ..... A47G 9/0253  
 D6/601  
 D905,473 S \* 12/2020 Moule ..... D6/602  
 2002/0124315 A1 \* 9/2002 Clarke ..... A63H 9/00  
 5/636  
 2007/0256679 A1 \* 11/2007 Yim ..... A61F 7/034  
 126/263.02  
 2008/0087271 A1 \* 4/2008 Ajiri ..... A61F 7/034  
 126/263.02  
 2012/0071955 A1 \* 3/2012 Yockel ..... A61F 7/02  
 607/114

\* cited by examiner

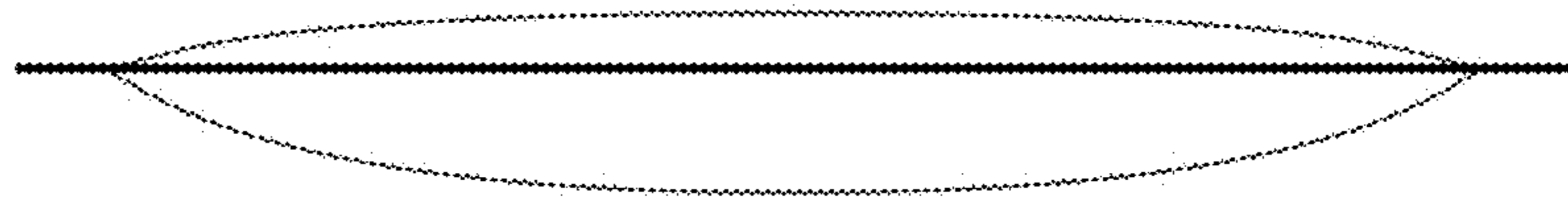
1.1



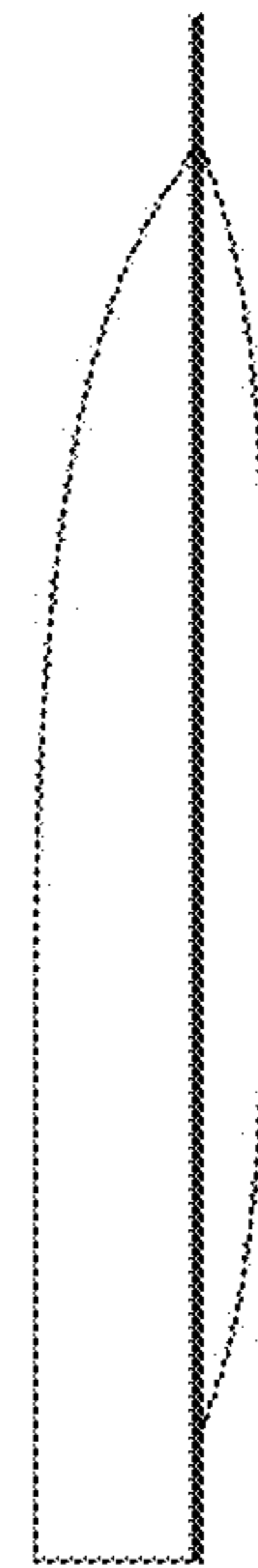
1.2



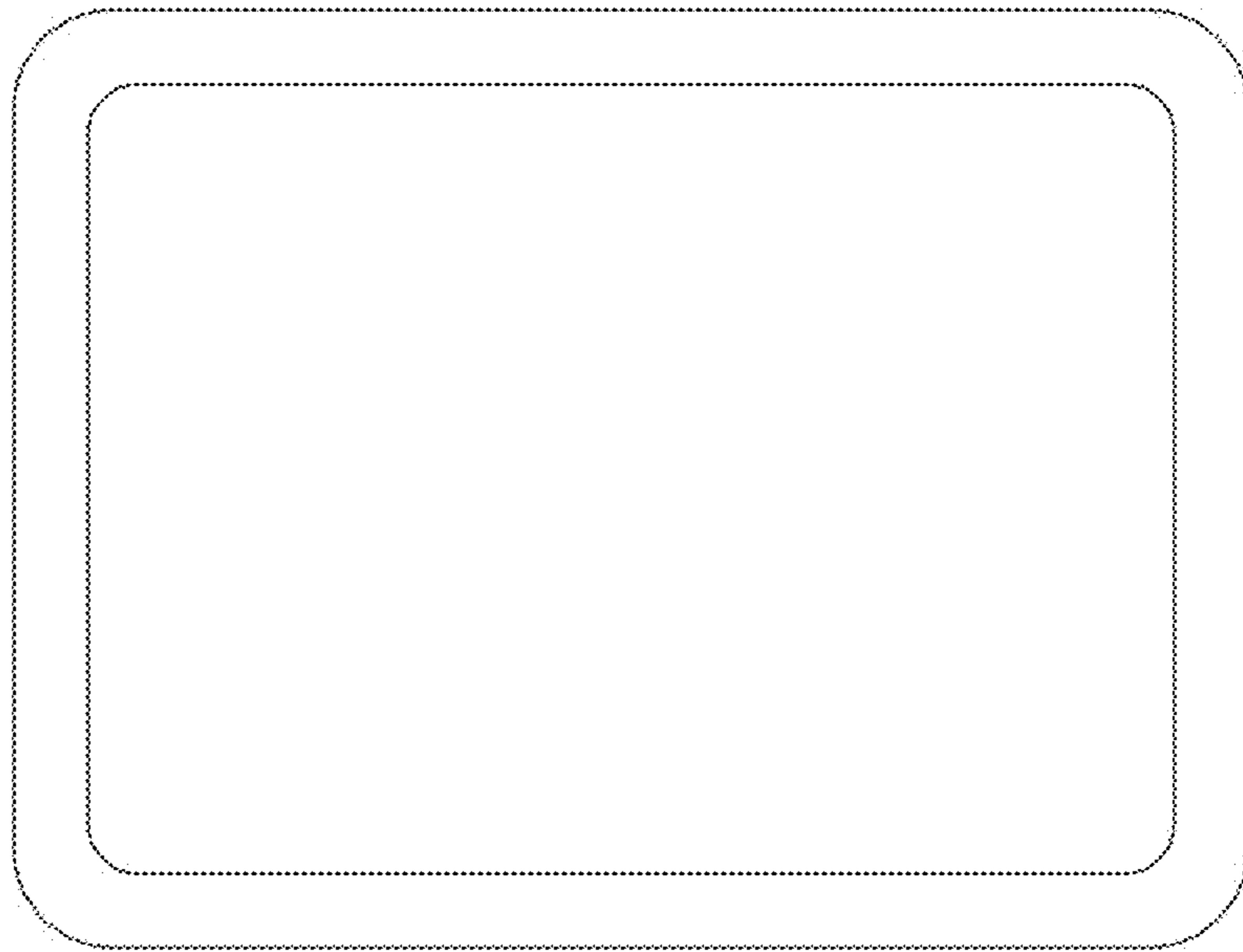
1.3



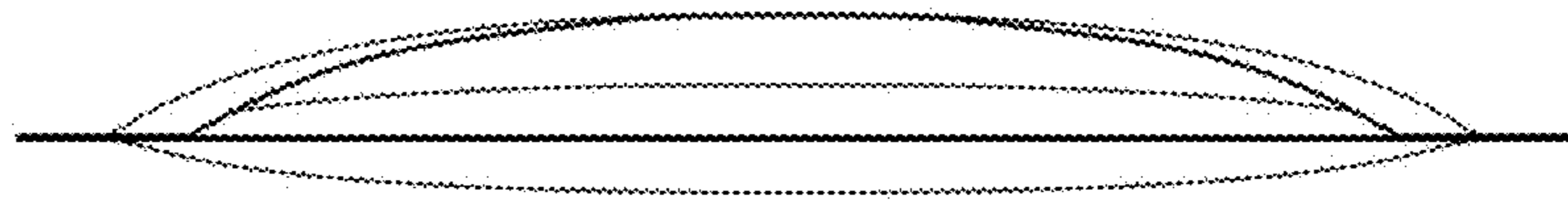
1.4



1.5



1.6





1.7



1.8

