



US00D791089S

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

(10) **Patent No.:** **US D791,089 S**
(45) **Date of Patent:** **** Jul. 4, 2017**

(54) **LIGHT-EMITTING DIODE**

(71) Applicants: **CITIZEN ELECTRONICS CO., LTD.**, Yamanashi-ken (JP); **CITIZEN WATCH CO., LTD.**, Tokyo (JP)

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(73) Assignees: **CITIZEN ELECTRONICS CO., LTD.**, Yamanashi-Ken (JP); **CITIZEN WATCH CO., LTD.**, Tokyo (JP)

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

(21) Appl. No.: **29/561,827**

(22) Filed: **Apr. 20, 2016**

(30) **Foreign Application Priority Data**

Oct. 23, 2015 (JP) D2015-023531
Oct. 23, 2015 (JP) D2015-023543

(51) **LOC (10) Cl.** **13-03**

(52) **U.S. Cl.**
USPC **D13/180**

(58) **Field of Classification Search**
USPC D13/180; D26/1
CPC ... H01L 25/167; H01L 25/0753; H01L 27/15;
H01L 27/156; H01L 31/02; H01L 33/00;
H01L 33/04; H01L 33/08; H01L 33/10;
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

D618,635 S * 6/2010 Imai D13/180
D658,603 S * 5/2012 Egawa D13/180
(Continued)

FOREIGN PATENT DOCUMENTS

EP 002551812-0001 10/2014
EP 002551812-0002 10/2014
(Continued)

OTHER PUBLICATIONS

Design U.S. Appl. No. 29/504,427, filed Oct. 6, 2014.
Design U.S. Appl. No. 29/504,423, filed Oct. 6, 2014.

Primary Examiner — Selina Sikder

(74) *Attorney, Agent, or Firm* — Wenderoth, Lind & Ponack, L.L.P.

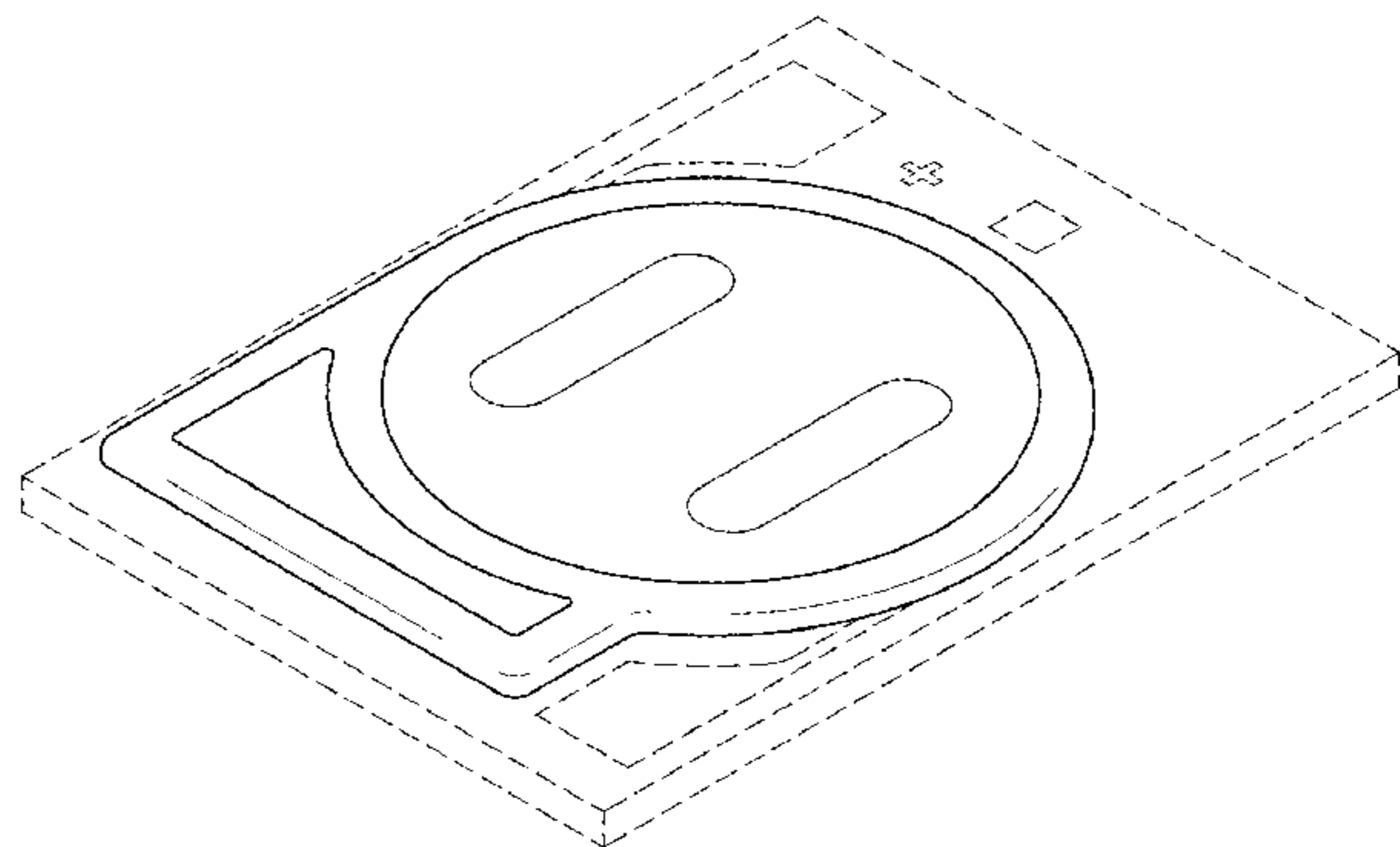
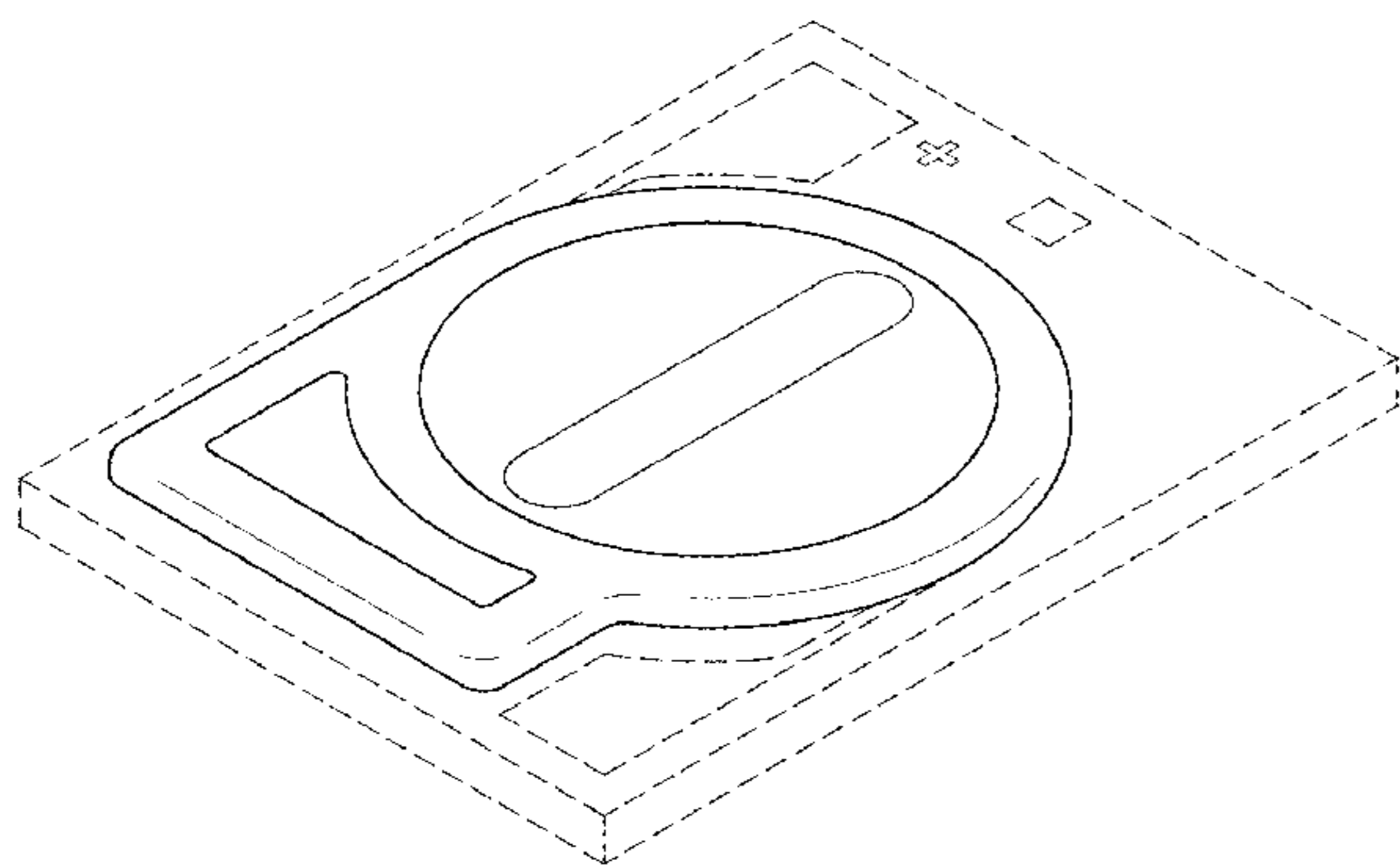
(57) **CLAIM**

The ornamental design for a light-emitting diode, as shown and described.

DESCRIPTION

FIG. 1 is a top perspective view of a first embodiment of a light-emitting diode showing an upper surface with front and left side surfaces;
FIG. 2 is a bottom perspective view thereof showing a bottom surface with rear and right side surfaces;
FIG. 3 is a front view thereof, a rear view being a mirror image of FIG. 3;
FIG. 4 is a top plan view thereof;
FIG. 5 is a bottom plan view thereof;
FIG. 6 is a left side view thereof;
FIG. 7 is a right side view thereof;
FIG. 8 is a top perspective view of a second embodiment of a light-emitting diode showing an upper surface with front and left side surfaces;
FIG. 9 is a bottom perspective view thereof showing a bottom surface with rear and right side surfaces;
FIG. 10 is a front view thereof, a rear view being a mirror image of FIG. 10;
FIG. 11 is a top plan view thereof;
FIG. 12 is a bottom plan view thereof;
FIG. 13 is a left side view thereof; and,
FIG. 14 is a right side view thereof.
The broken lines shown herein are for illustrative purposes only and form no part of the claimed design.

1 Claim, 6 Drawing Sheets



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(58) **Field of Classification Search**

CPC H01L 33/20; H01L 33/38; H01L 33/42;
H01L 33/4862; H01L 33/483; H01L
33/486

See application file for complete search history.

2011/0180817 A1* 7/2011 Ishizaki F21V 3/00
257/88
2011/0278605 A1* 11/2011 Agatani H01L 25/0753
257/89
2013/0193462 A1* 8/2013 Ishizaki F21V 3/00
257/88
2014/0268783 A1* 9/2014 Agatani H01L 25/0753
362/249.06

(56) **References Cited**

U.S. PATENT DOCUMENTS

D669,041 S * 10/2012 Imai D13/180
D683,708 S * 6/2013 Sasano D13/180
8,735,914 B2 * 5/2014 Agatani H01L 25/0753
257/88
D706,231 S * 6/2014 Hussell D13/180
D712,850 S * 9/2014 Welch D13/180
D714,236 S 9/2014 Watanabe et al.
D727,860 S 4/2015 Watanabe et al.
D762,182 S * 7/2016 Akiyama D13/180
D766,196 S * 9/2016 Akiyama D13/180
9,490,235 B2 * 11/2016 Edmond H01L 25/0753
9,508,910 B2 * 11/2016 Akiyama H05B 33/089
9,577,153 B2 * 2/2017 Agatani H01L 33/62
2008/0231169 A1 * 9/2008 Hata H01B 1/10
313/500
2010/0320483 A1 * 12/2010 Kadotani F21K 9/00
257/88
2011/0050071 A1 * 3/2011 Chung F21K 9/00
313/46

FOREIGN PATENT DOCUMENTS

EP 002551812-0003 10/2014
EP 002551812-0004 10/2014
EP 002551812-0005 10/2014
EP 002551812-0006 10/2014
EP 002551812-0007 10/2014
EP 002551812-0008 10/2014
JP D1465336 3/2013
JP D1465337 3/2013
JP D1465486 3/2013
JP D1481437 10/2013
JP D1522668 4/2015
JP D1522669 4/2015
JP D1522842 4/2015
JP D1523331 5/2015
JP D1532207 8/2015
JP D1536637 11/2015
JP D1536638 11/2015

* cited by examiner

Fig. 1

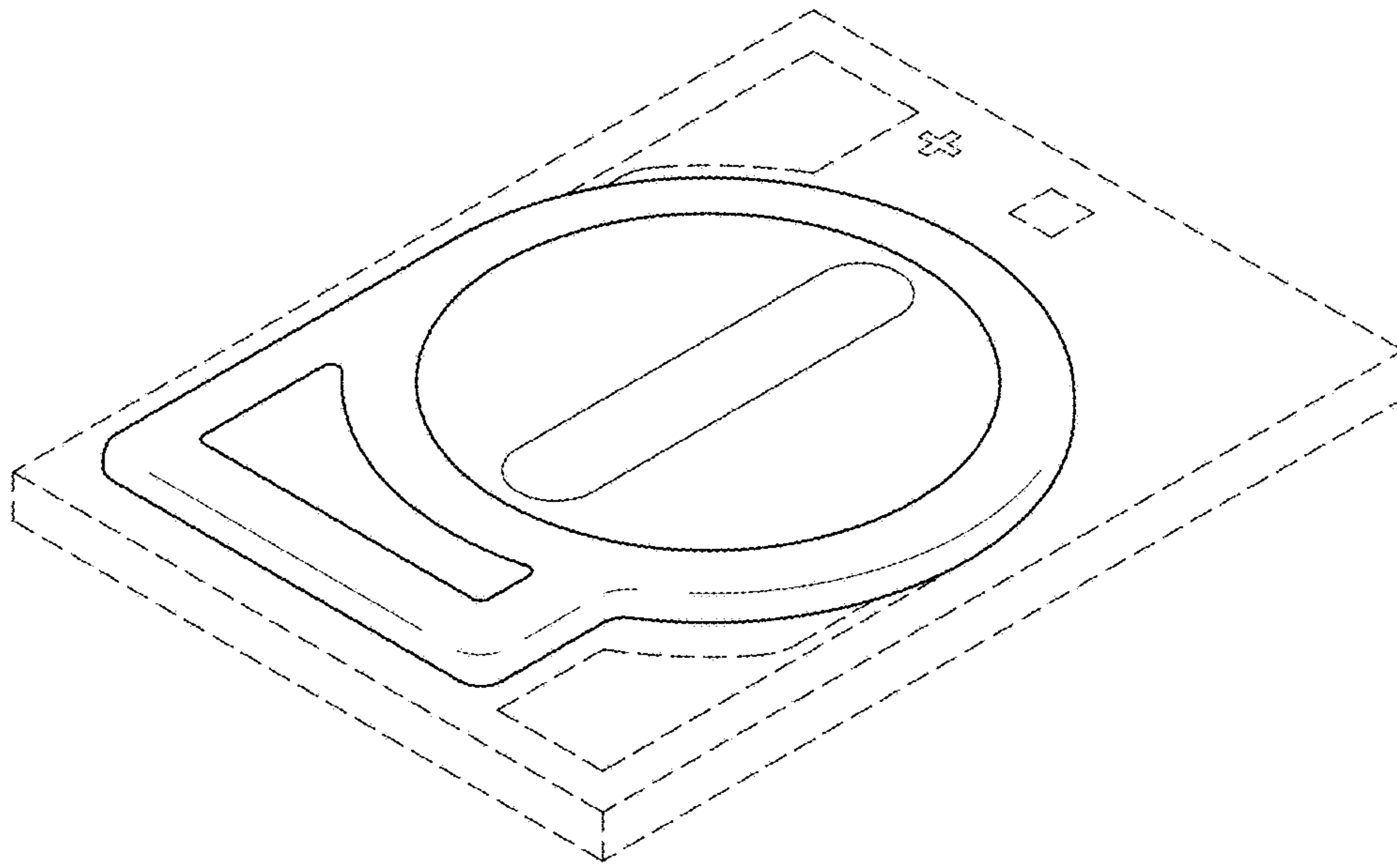


Fig. 2

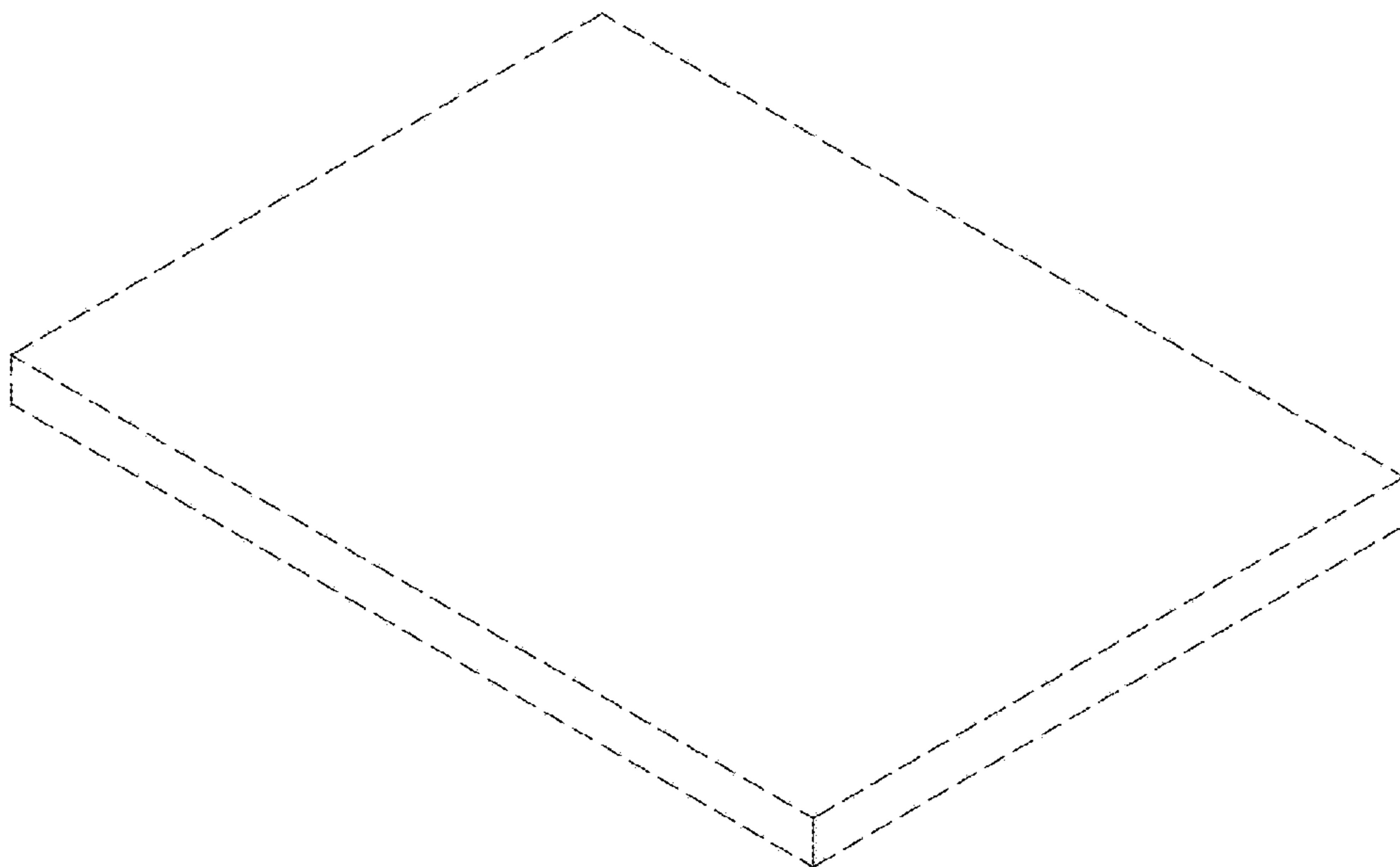


Fig. 3



Fig. 4

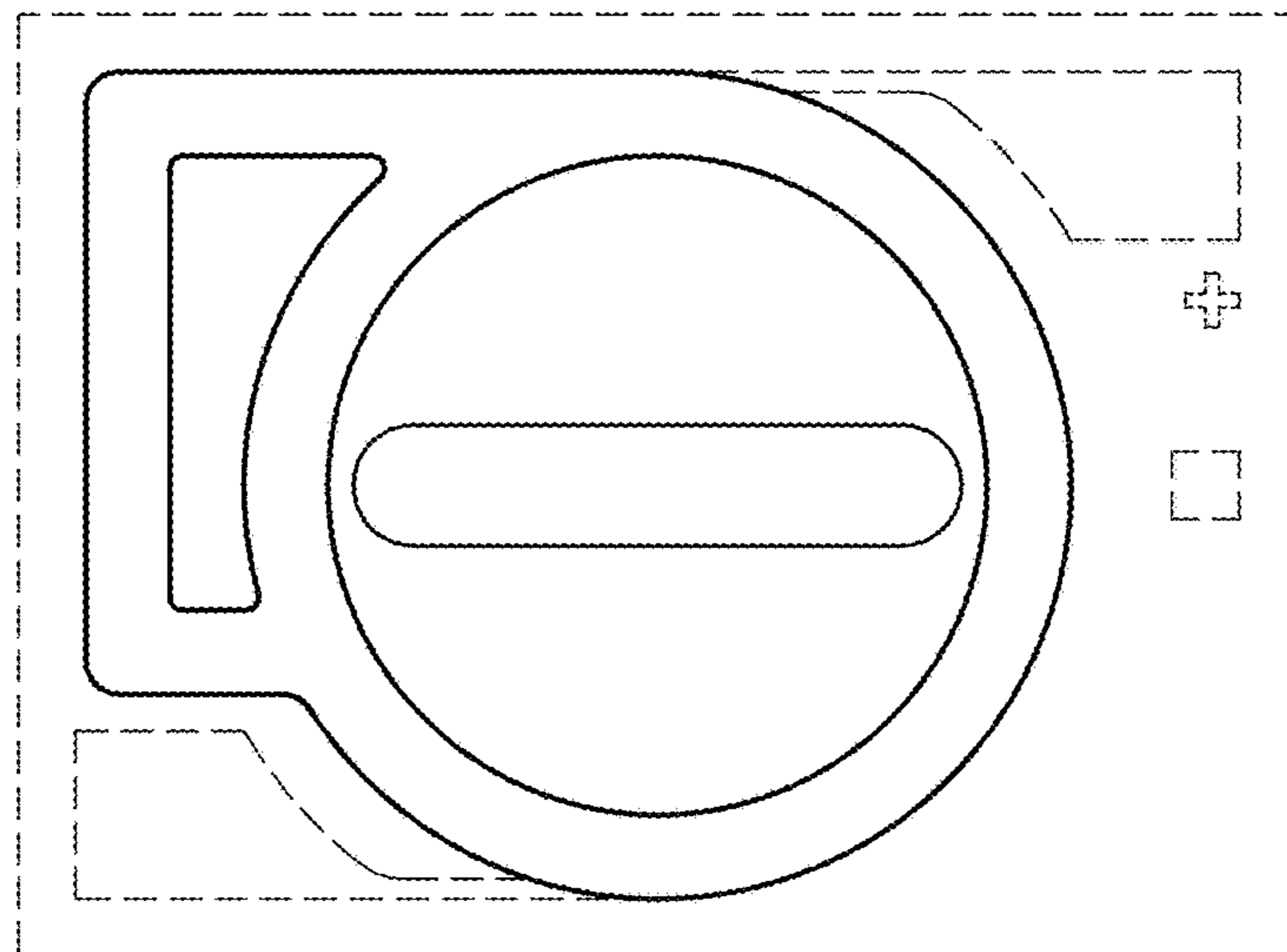


Fig. 5



Fig. 6

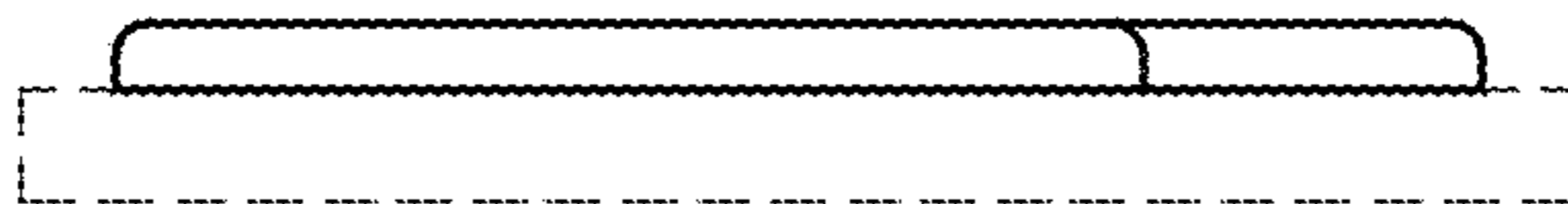


Fig. 7

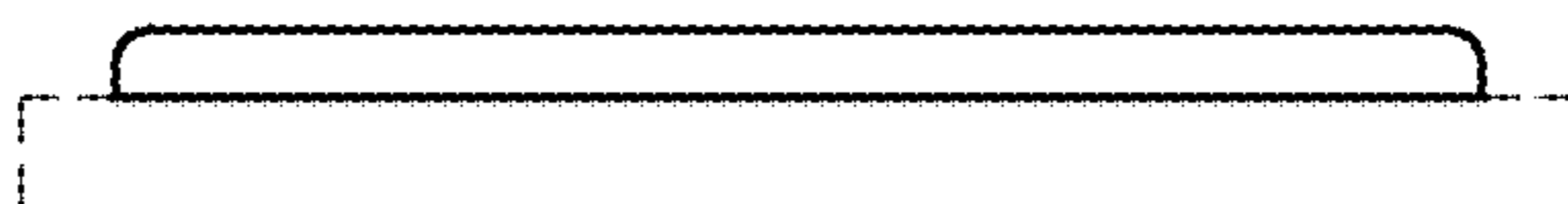


Fig. 8

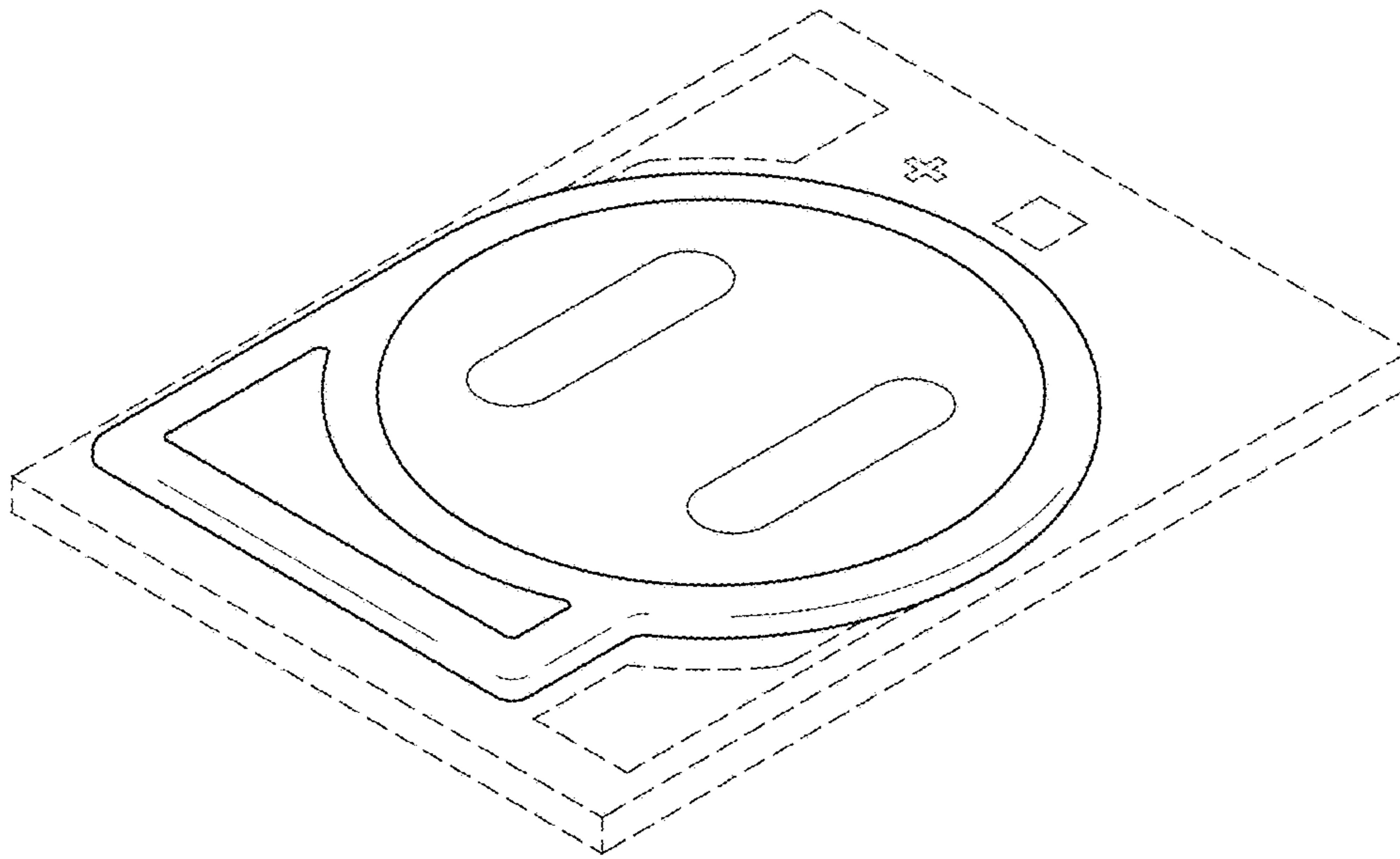


Fig. 9

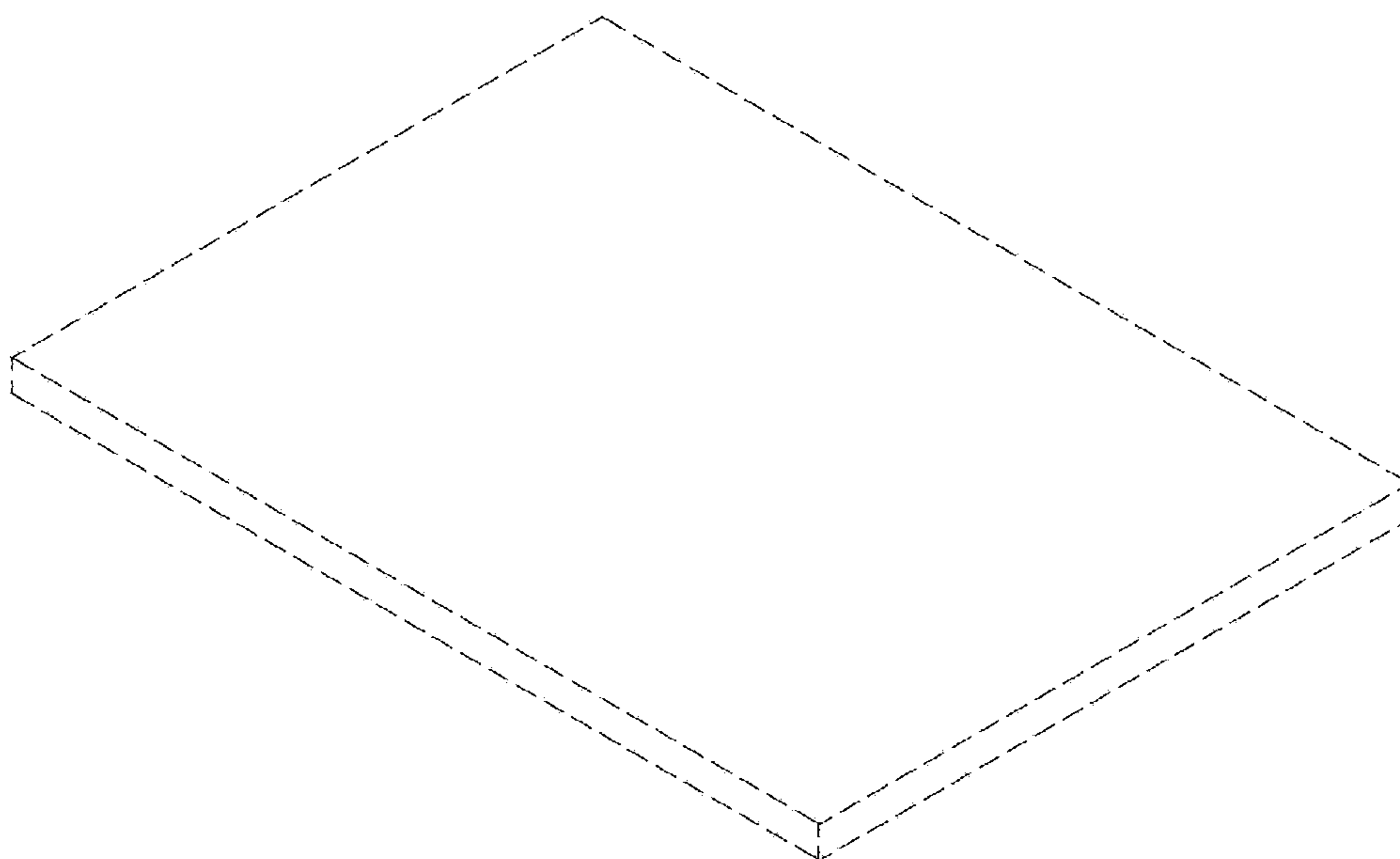


Fig. 10

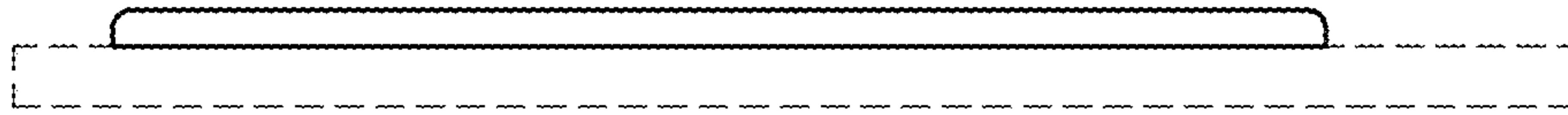


Fig. 11

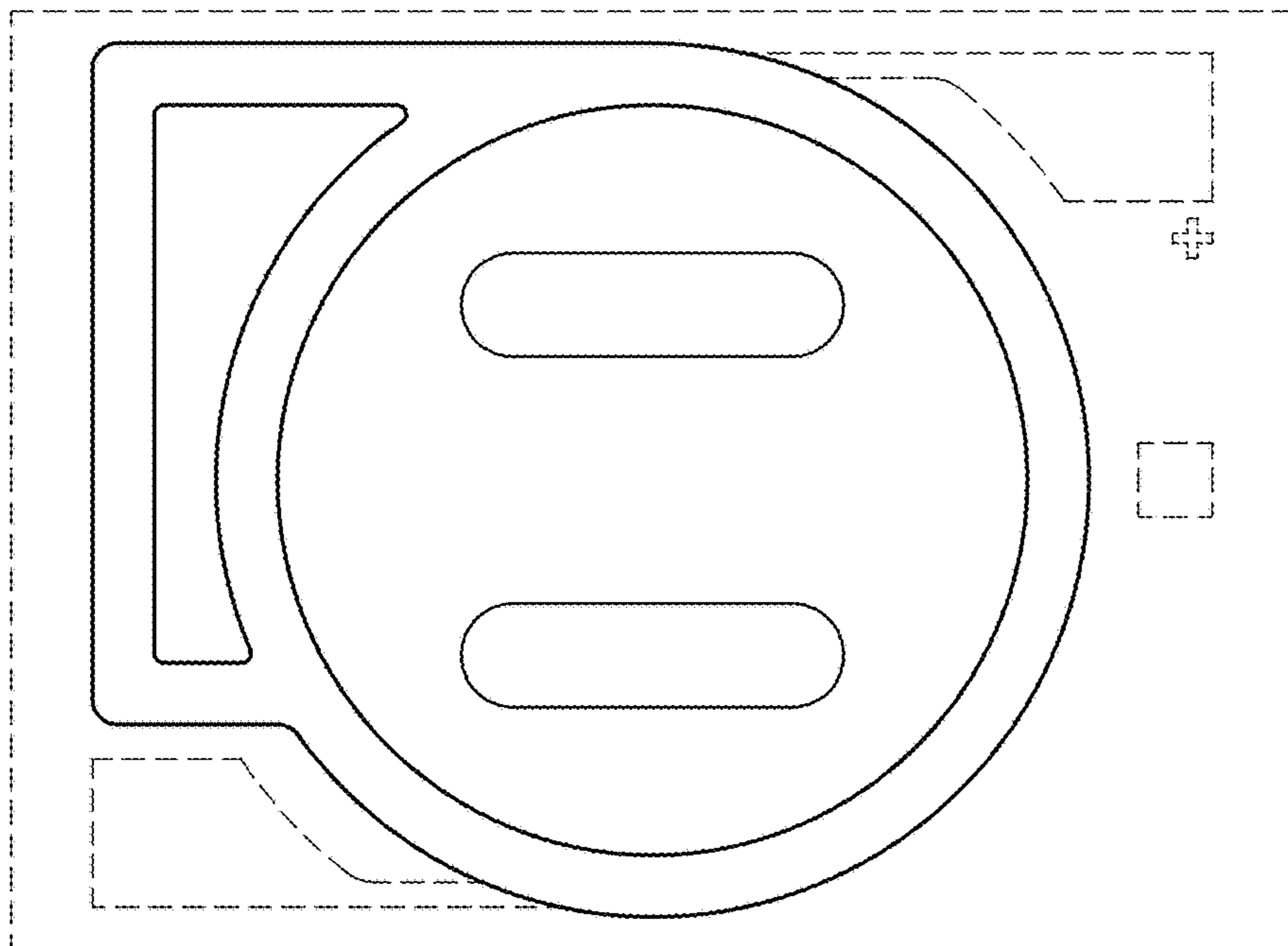


Fig. 12

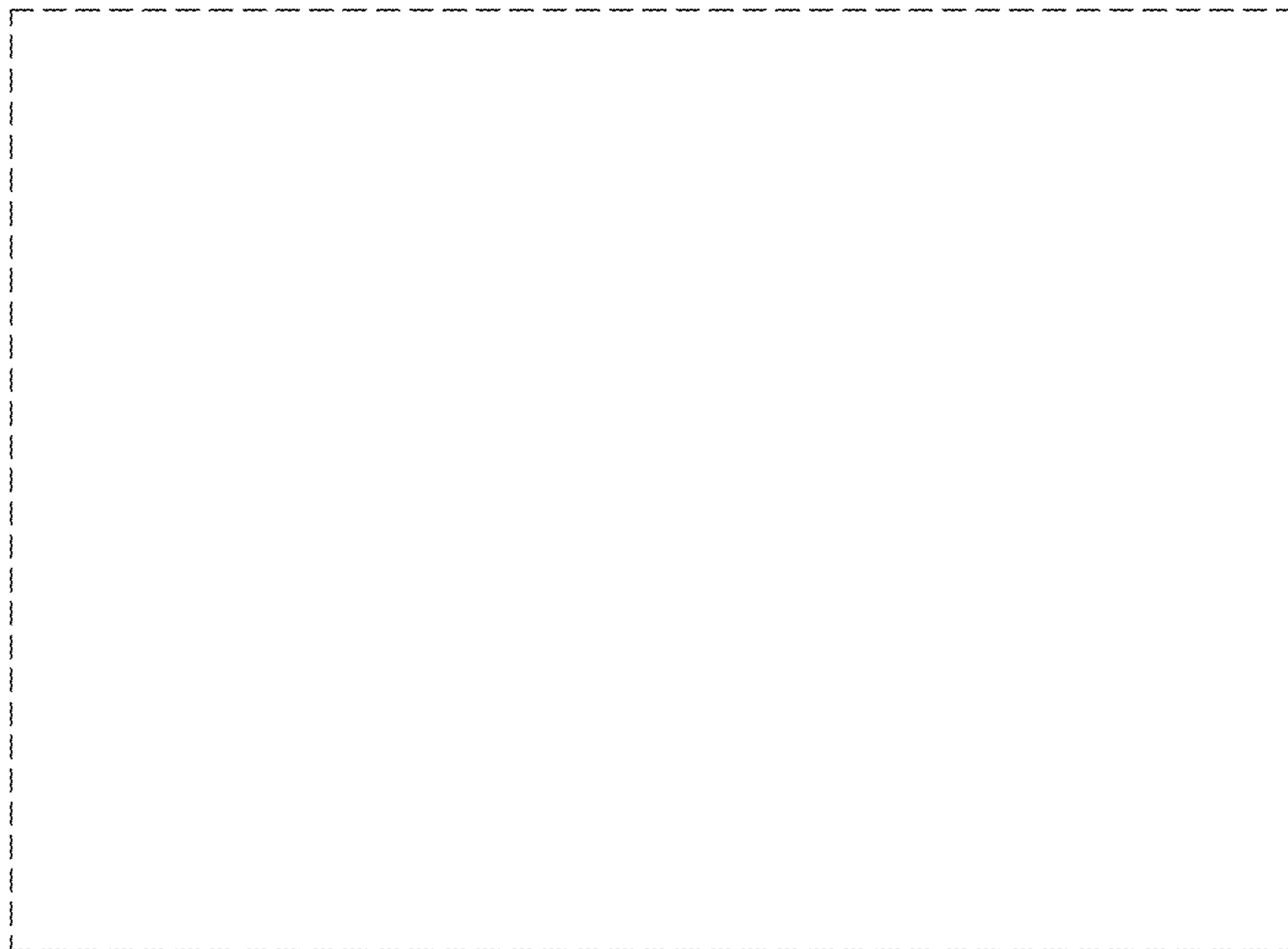


Fig. 13



Fig. 14



UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : D791,089 S
APPLICATION NO. : 29/561827
DATED : July 4, 2017
INVENTOR(S) : Satoshi Goto

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the Title Page

In Item (73) Assignee, please change "CITIZEN WATCH CO., LTD" to --CITIZEN WATCH CO., LTD.--.

Signed and Sealed this
Twelfth Day of December, 2017



Joseph Matal

*Performing the Functions and Duties of the
Under Secretary of Commerce for Intellectual Property and
Director of the United States Patent and Trademark Office*