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(12) **United States Design Patent**  
**Castillo**

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(54) **LED LENS**

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(73) Assignee: **Cree, Inc.**, Durham, NC (US)

(\*\*) Term: **14 Years**

(21) Appl. No.: **29/471,928**

(22) Filed: **Nov. 6, 2013**

**Related U.S. Application Data**

(63) Continuation of application No. 29/420,272, filed on May 7, 2012, now Pat. No. Des. 697,664.

(51) **LOC (10) Cl.** ..... **26-99**

(52) **U.S. Cl.**  
USPC ..... **D26/120**

(58) **Field of Classification Search**

USPC ..... D26/63, 120, 118, 113, 119, 121, 122, D26/123, 65, 66, 68, 124, 125, 72, 76, 1, 2, D26/128, 69, 74, 88, 89, 87, 61, 92, 98, 93, D26/86; 362/158, 240, 260, 235, 249.02, 362/249.11, 294, 364, 335; D13/179, 180  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

1,404,004 A 1/1922 Benford  
1,535,486 A 4/1925 Lundy

(Continued)

**FOREIGN PATENT DOCUMENTS**

EP 1107210 A2 6/2001  
GB 2282700 4/1995

(Continued)

**OTHER PUBLICATIONS**

Future Ughting Solutions “the 6 Steps to LED Lighting Success” brochure. Date: undated. 6 pages.

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(57) **CLAIM**

The ornamental design for an LED lens, as shown and described.

**DESCRIPTION**

FIG. 1 is a transparent top perspective view of the LED Lens, the flange of the lens being shown in phantom lines;

FIG. 2 is a transparent bottom perspective view of the lens of FIG. 1;

FIG. 3 is a transparent top plan view of the lens of FIG. 1;

FIG. 4 is a transparent bottom plan view of the lens of FIG. 1;

FIG. 5 is a transparent left side elevation of the lens of FIG. 1, the right side elevation being a mirror image thereof;

FIG. 6 is a transparent front elevation of the lens of FIG. 1;

FIG. 7 is a transparent back elevation of the lens of FIG. 1;

FIG. 8 is an opaque top perspective view of the lens of FIG. 1;

FIG. 9 is an opaque bottom perspective view of the lens of FIG. 1;

FIG. 10 is an opaque top plan view of the lens of FIG. 1;

FIG. 11 is an opaque bottom plan view of the lens of FIG. 1;

FIG. 12 is an opaque left side elevation of the lens of FIG. 1, the right side elevation being a mirror image thereof;

FIG. 13 is an opaque front elevation of the lens of FIG. 1;

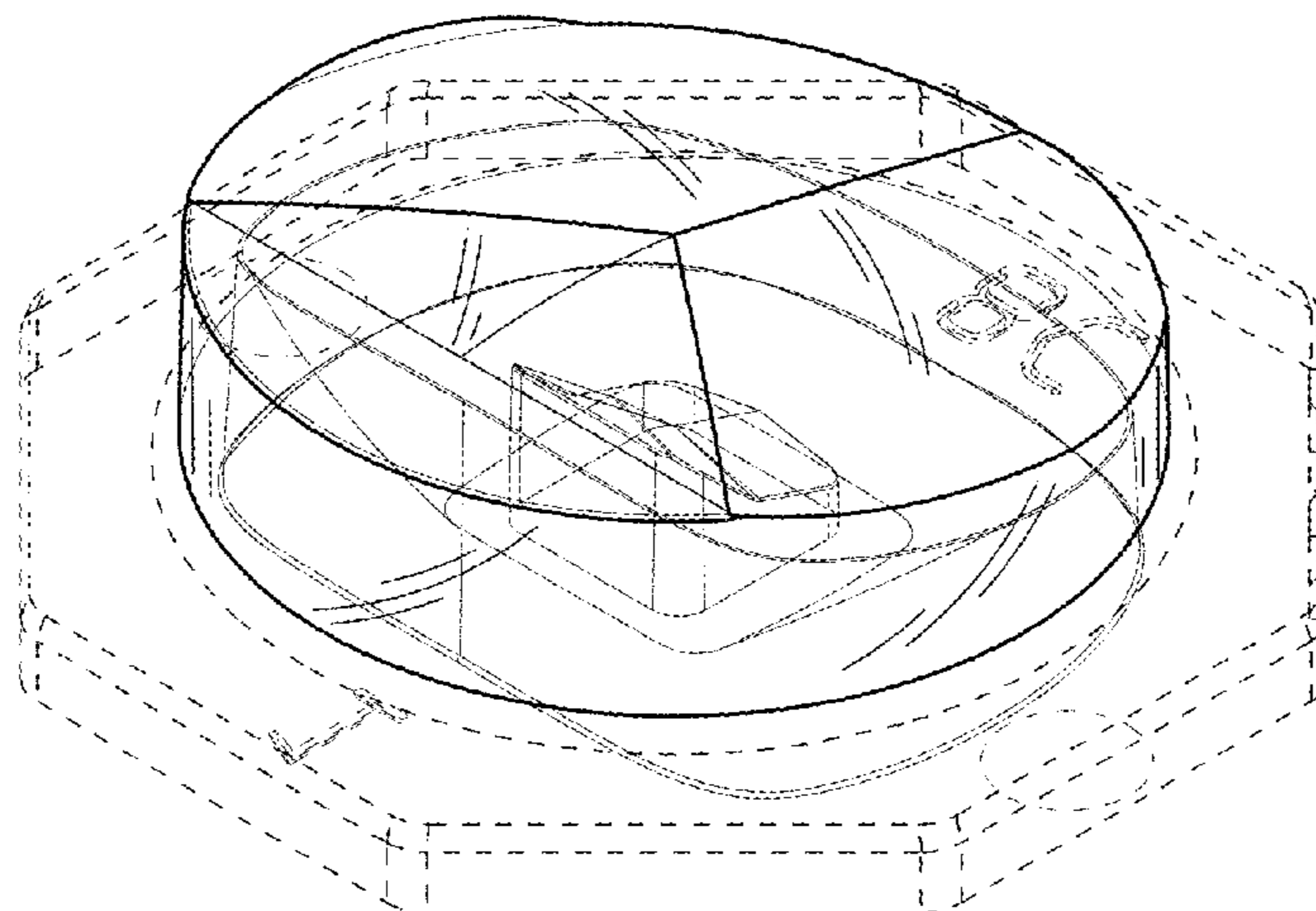
FIG. 14 is an opaque back elevation of the lens of FIG. 1;

FIG. 15 is a side-to-side sectional view taken along the middle of the lens of FIG. 1; and,

FIG. 16 is a front-to-back sectional view taken along the middle of the lens of FIG. 1.

The phantom lines are provided for illustrative purposes only and form no part of the claimed design.

**1 Claim, 7 Drawing Sheets**





(56)

References Cited

U.S. PATENT DOCUMENTS

2004/0207999 A1 10/2004 Suehiro et al.  
 2004/0212291 A1 10/2004 Keuper  
 2005/0023538 A1\* 2/2005 Ishii et al. .... 257/79  
 2005/0073849 A1 4/2005 Rhoads et al.  
 2005/0083699 A1 4/2005 Rhoads et al.  
 2005/0179041 A1 8/2005 Harbers et al.  
 2005/0205878 A1 9/2005 Kan  
 2005/0224826 A1 10/2005 Keuper et al.  
 2005/0281047 A1 12/2005 Coushaine et al.  
 2006/0013000 A1 1/2006 Coushaine et al.  
 2006/0013002 A1 1/2006 Coushaine et al.  
 2006/0039143 A1 2/2006 Katoh et al.  
 2006/0067640 A1 3/2006 Hsieh et al.  
 2006/0082999 A1 4/2006 Klein  
 2006/0083000 A1 4/2006 Yoon et al.  
 2006/0105482 A1 5/2006 Alferink et al.  
 2006/0181902 A1 8/2006 Tamura et al.  
 2006/0186431 A1 8/2006 Miki et al.  
 2006/0198144 A1 9/2006 Miyairi et al.  
 2007/0019416 A1 1/2007 Han et al.  
 2007/0058369 A1 3/2007 Parkyn et al.  
 2007/0126020 A1 6/2007 Lin et al.  
 2007/0201225 A1 8/2007 Holder et al.  
 2008/0100773 A1\* 5/2008 Hwang et al. .... 349/62  
 2008/0101063 A1 5/2008 Koike et al.  
 2008/0203412 A1 8/2008 Shyu et al.  
 2008/0205061 A1 8/2008 Holder et al.  
 2008/0239722 A1\* 10/2008 Wilcox ..... 362/268

2009/0086498 A1 4/2009 Condon et al.  
 2009/0290360 A1 11/2009 Wilcox et al.  
 2010/0014286 A1 1/2010 Yoneda et al.  
 2010/0039810 A1\* 2/2010 Holder et al. .... 362/235  
 2010/0073927 A1 3/2010 Lewin et al.  
 2010/0073928 A1\* 3/2010 Kim et al. .... 362/245  
 2010/0073937 A1\* 3/2010 Ho ..... 362/335  
 2010/0073938 A1 3/2010 Ho  
 2010/0085763 A1 4/2010 Aguglia  
 2010/0085764 A1 4/2010 Chuang  
 2010/0110695 A1 5/2010 Nakamura  
 2010/0128488 A1 5/2010 Marcoux  
 2010/0135028 A1 6/2010 Kokubo  
 2010/0226130 A1\* 9/2010 Cheng et al. .... 362/294  
 2010/0271708 A1\* 10/2010 Wilcox ..... 359/654  
 2011/0235338 A1\* 9/2011 Chen et al. .... 362/311.02

FOREIGN PATENT DOCUMENTS

JP 60199746 10/1985  
 JP 61160328 7/1986  
 JP 61185980 8/1986  
 JP 61214485 9/1986  
 JP 8264839 10/1996  
 WO WO9950596 10/1999  
 WO WO0024062 4/2000  
 WO WO2006111805 A1 10/2006  
 WO WO2007018927 A2 2/2007  
 WO WO2008144672 A1 11/2008

\* cited by examiner

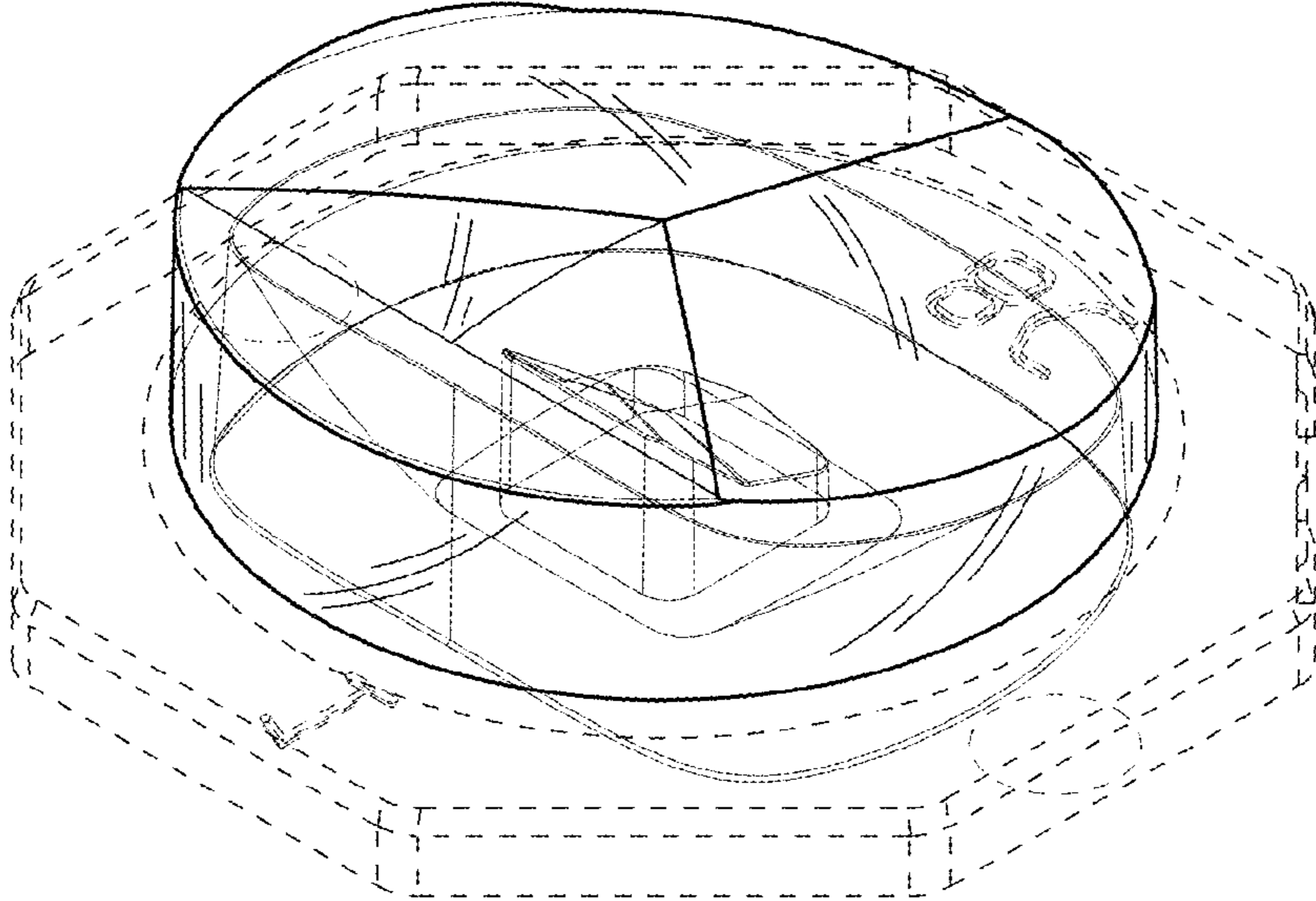


FIG. 1

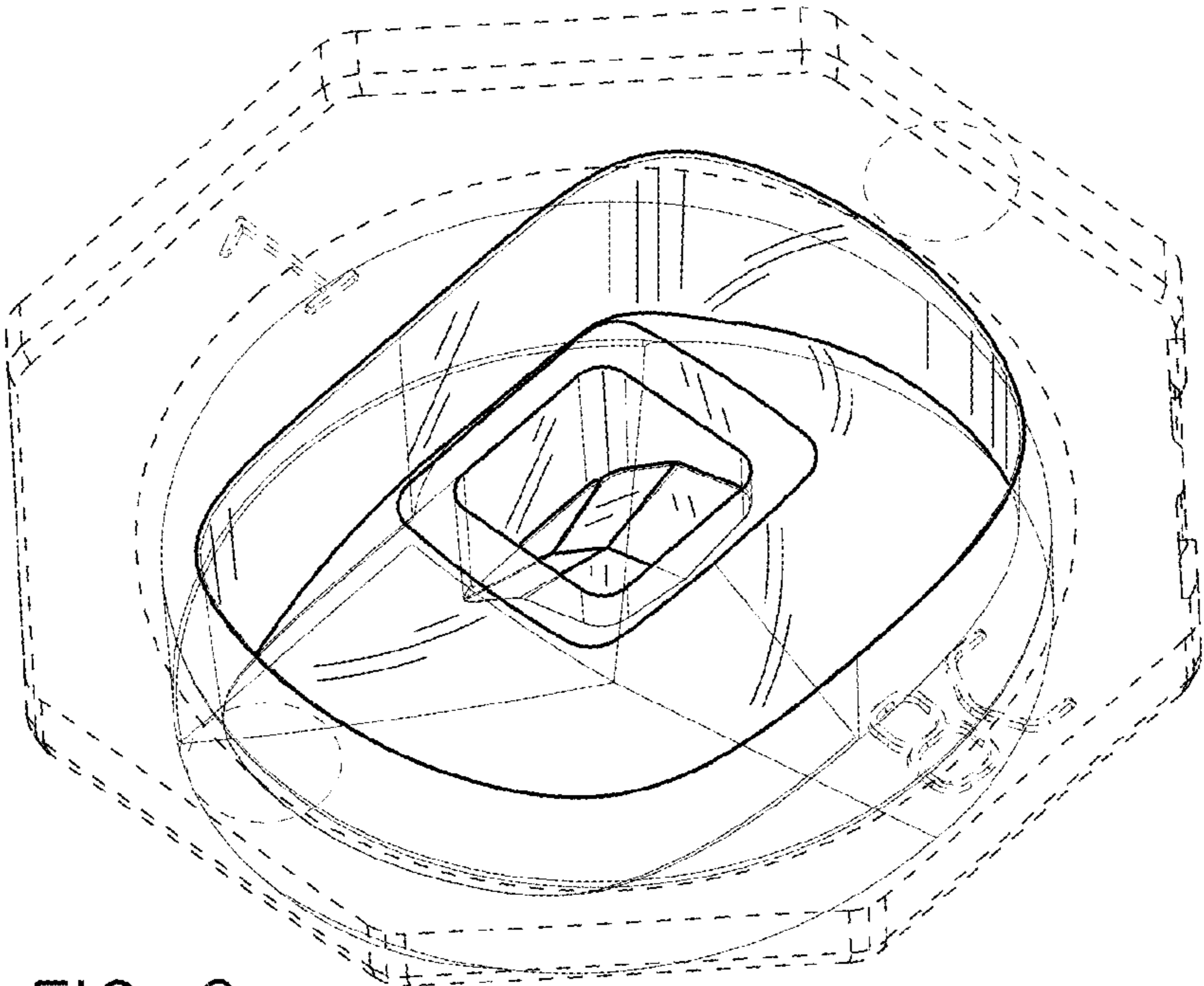


FIG. 2

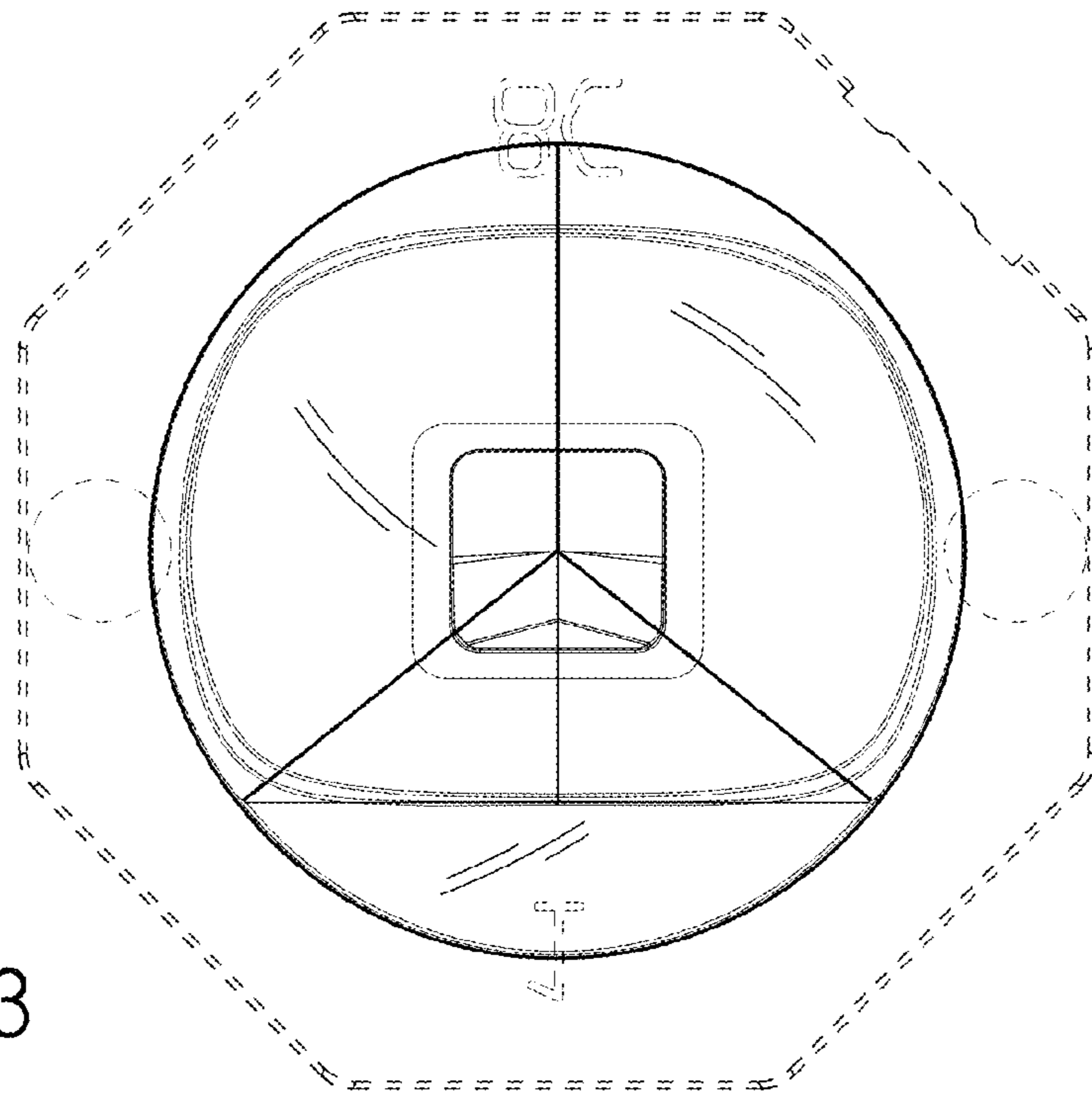


FIG. 3

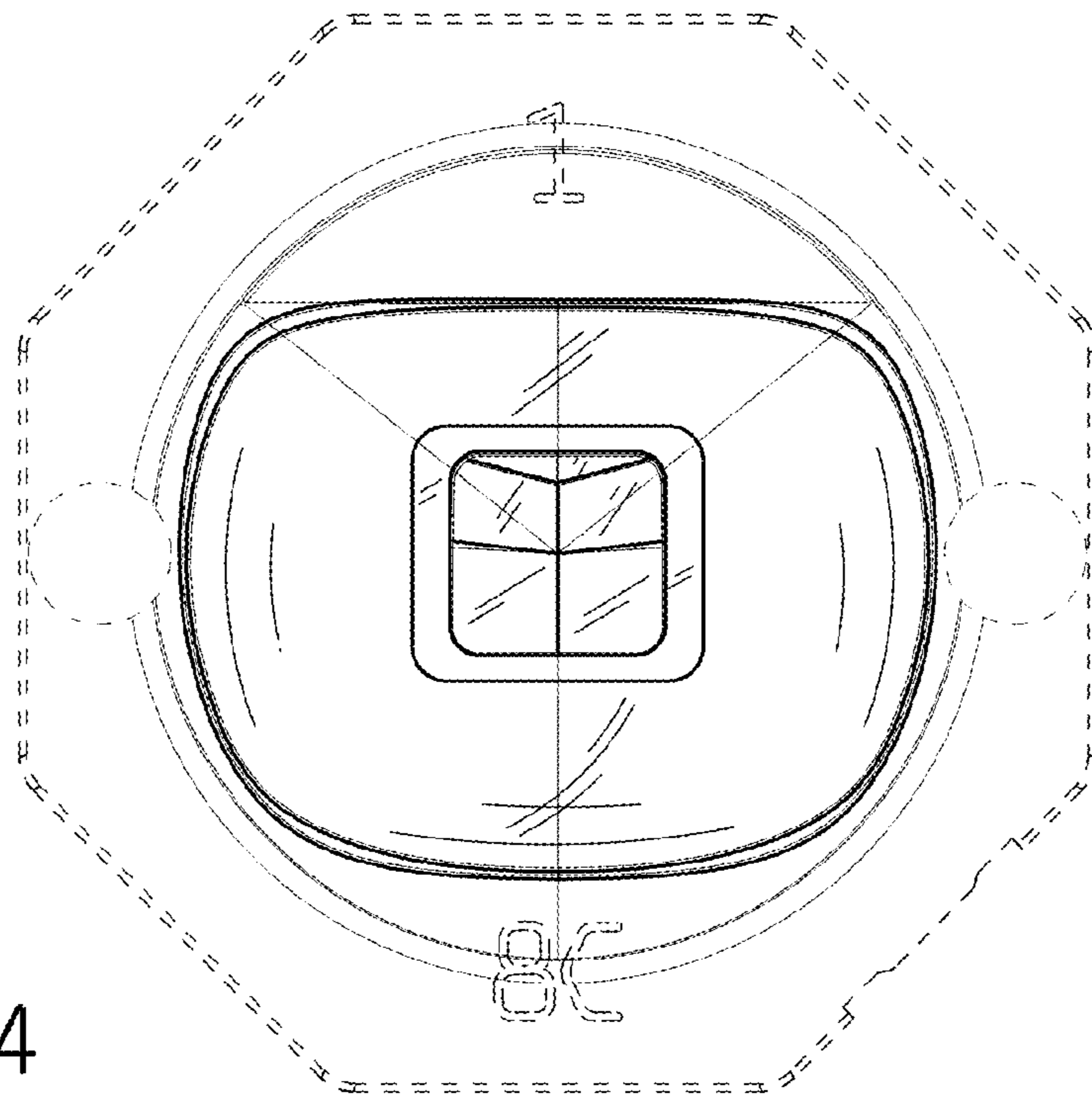


FIG. 4

FIG. 5

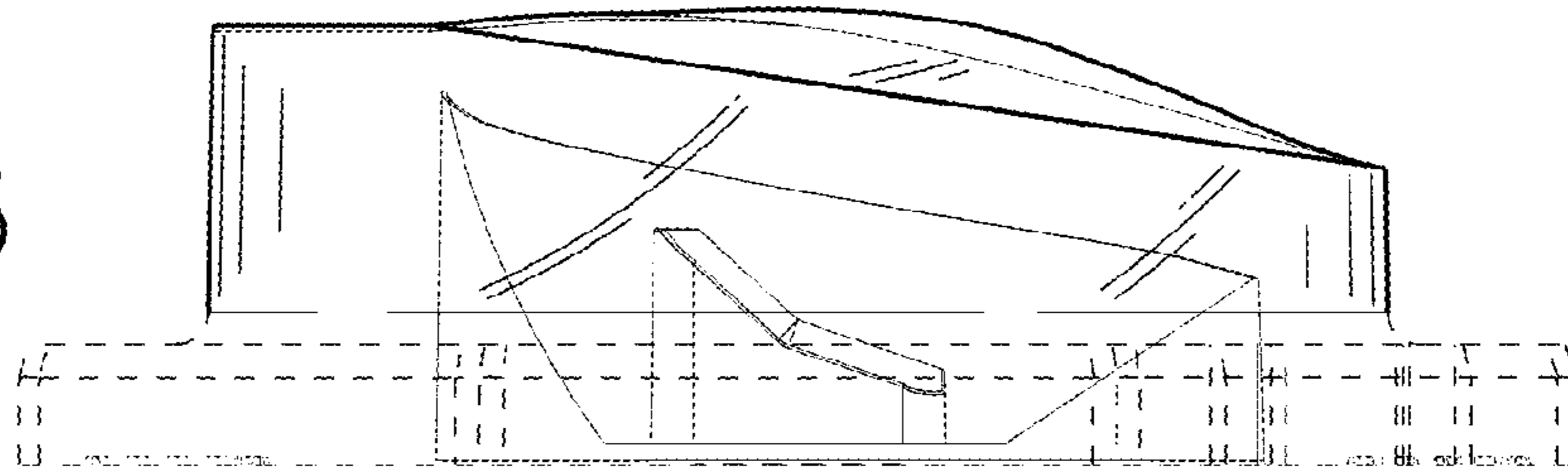


FIG. 6

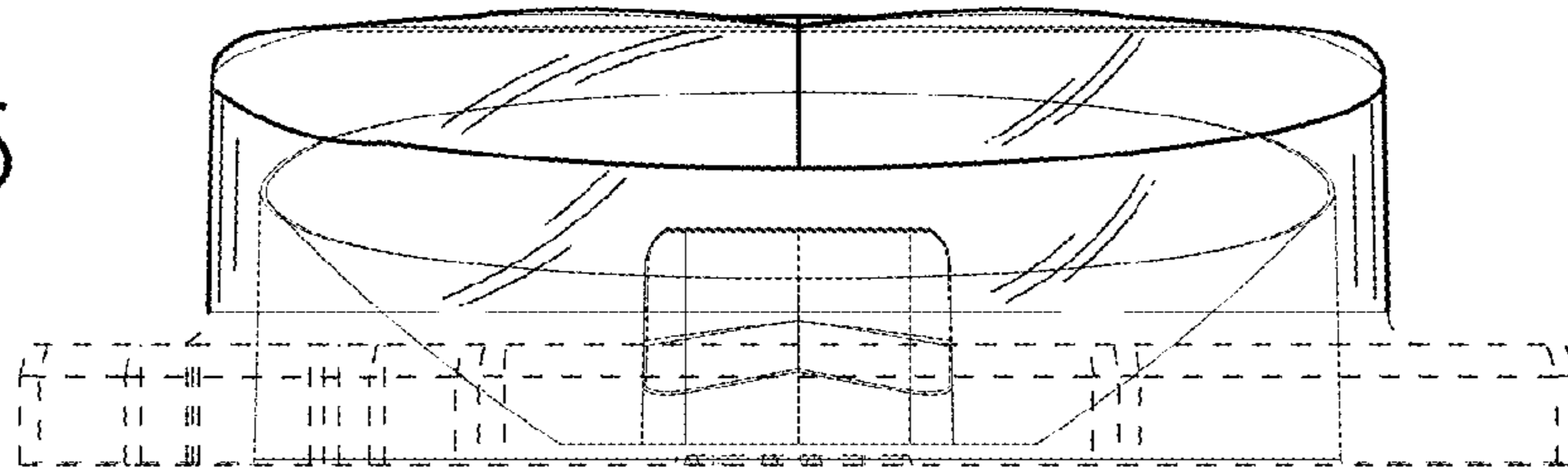
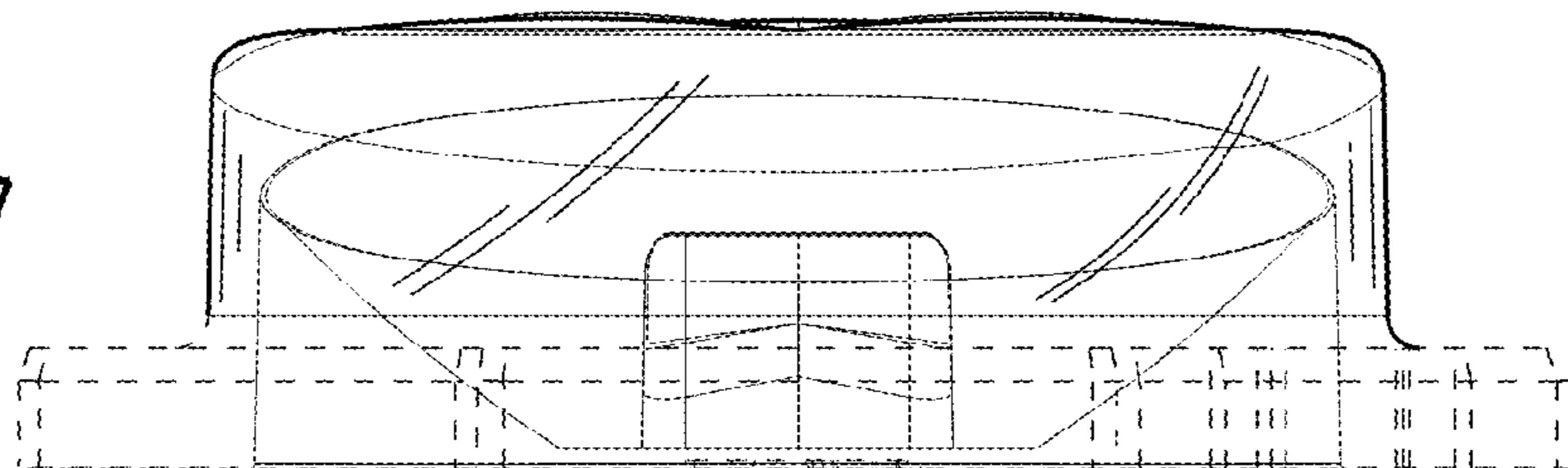


FIG. 7



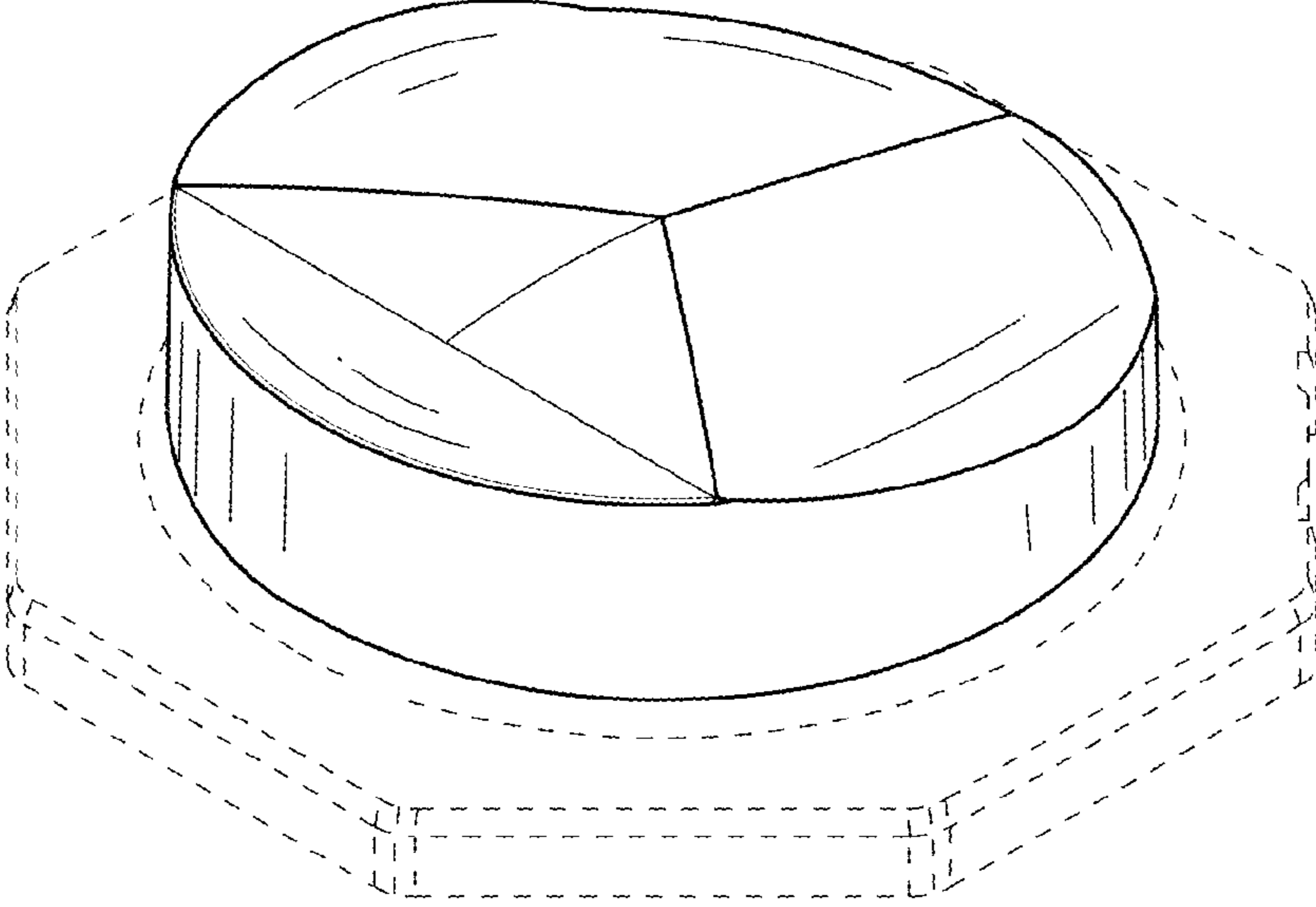


FIG. 8

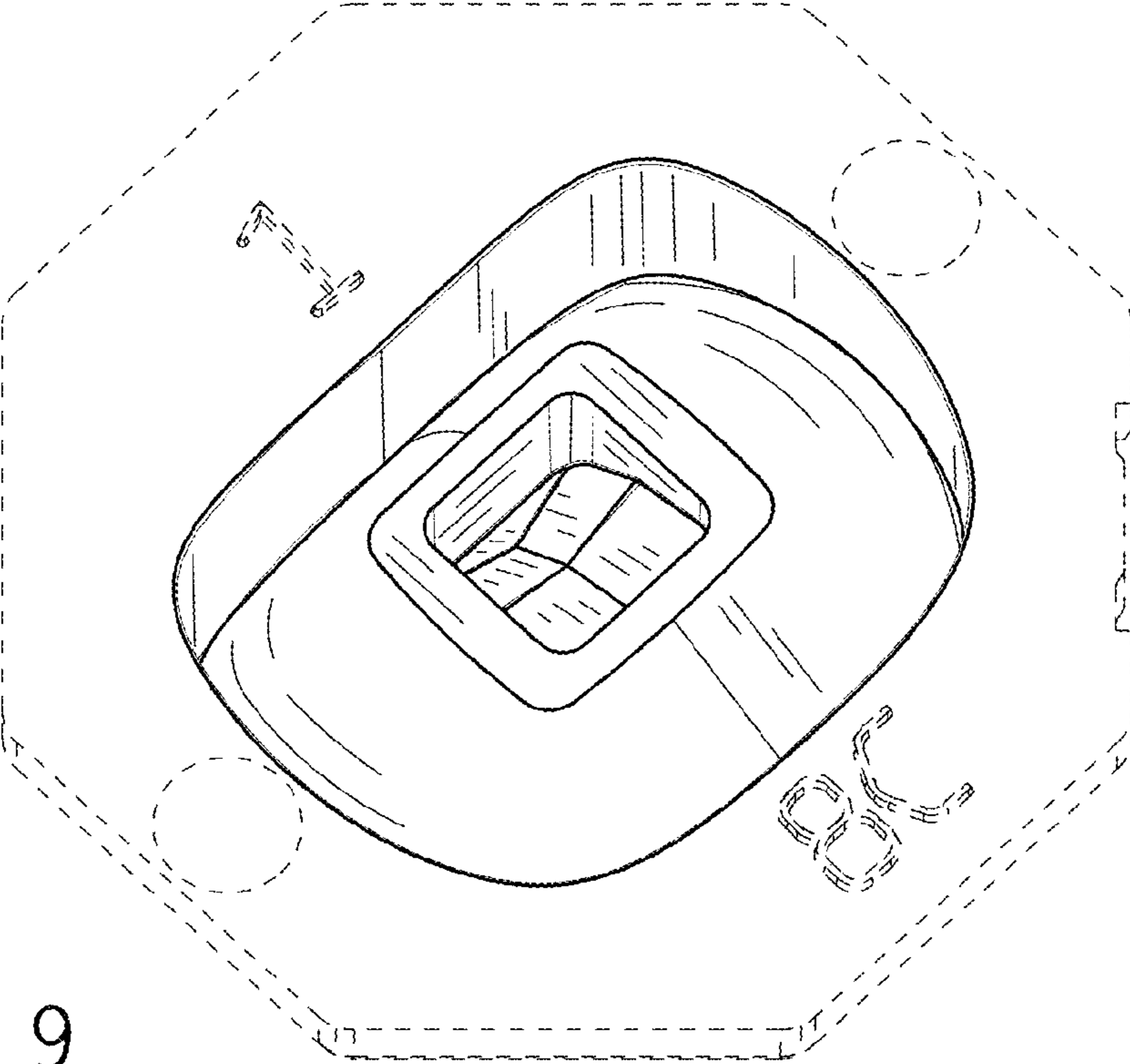


FIG. 9

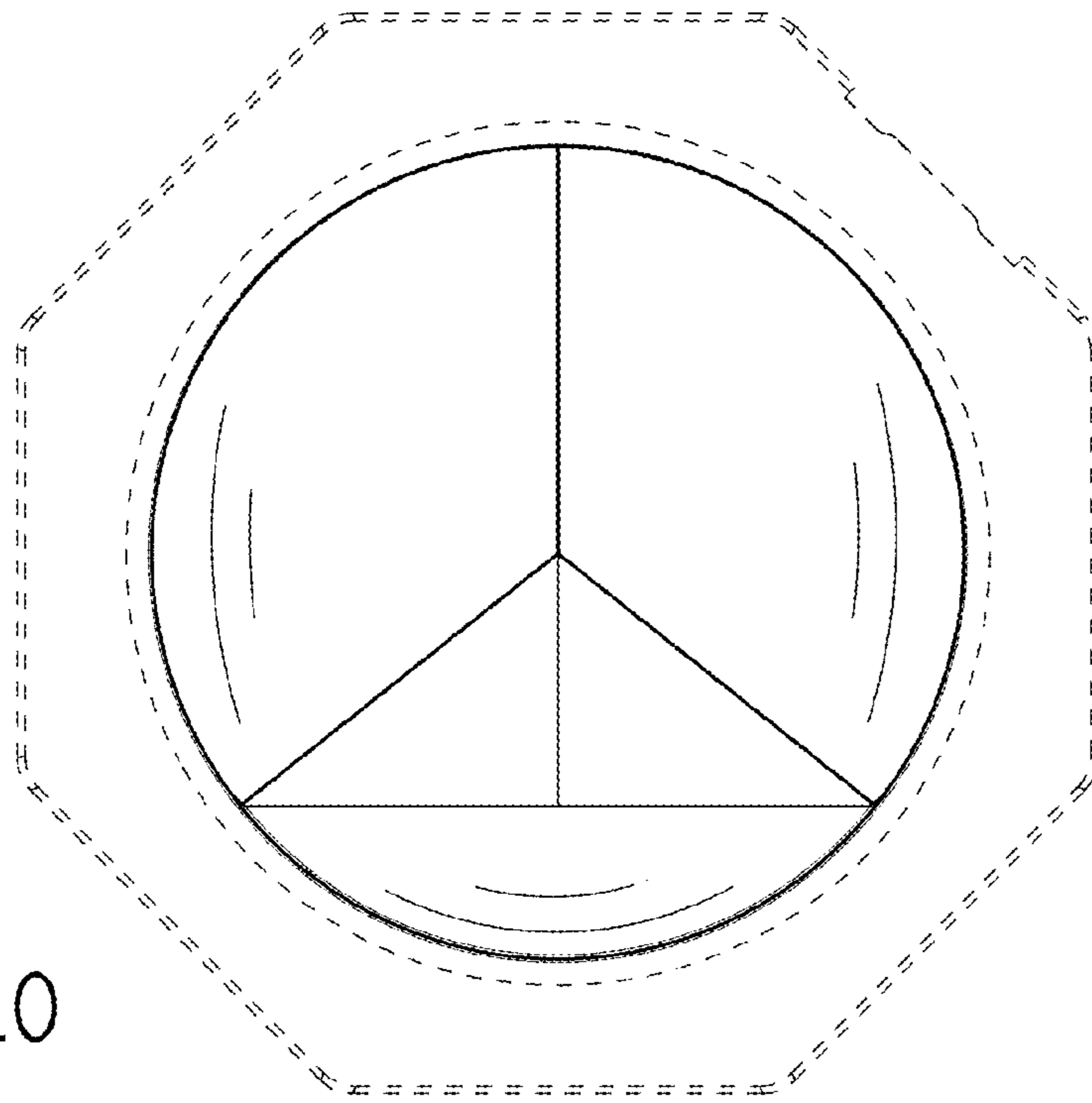


FIG. 10

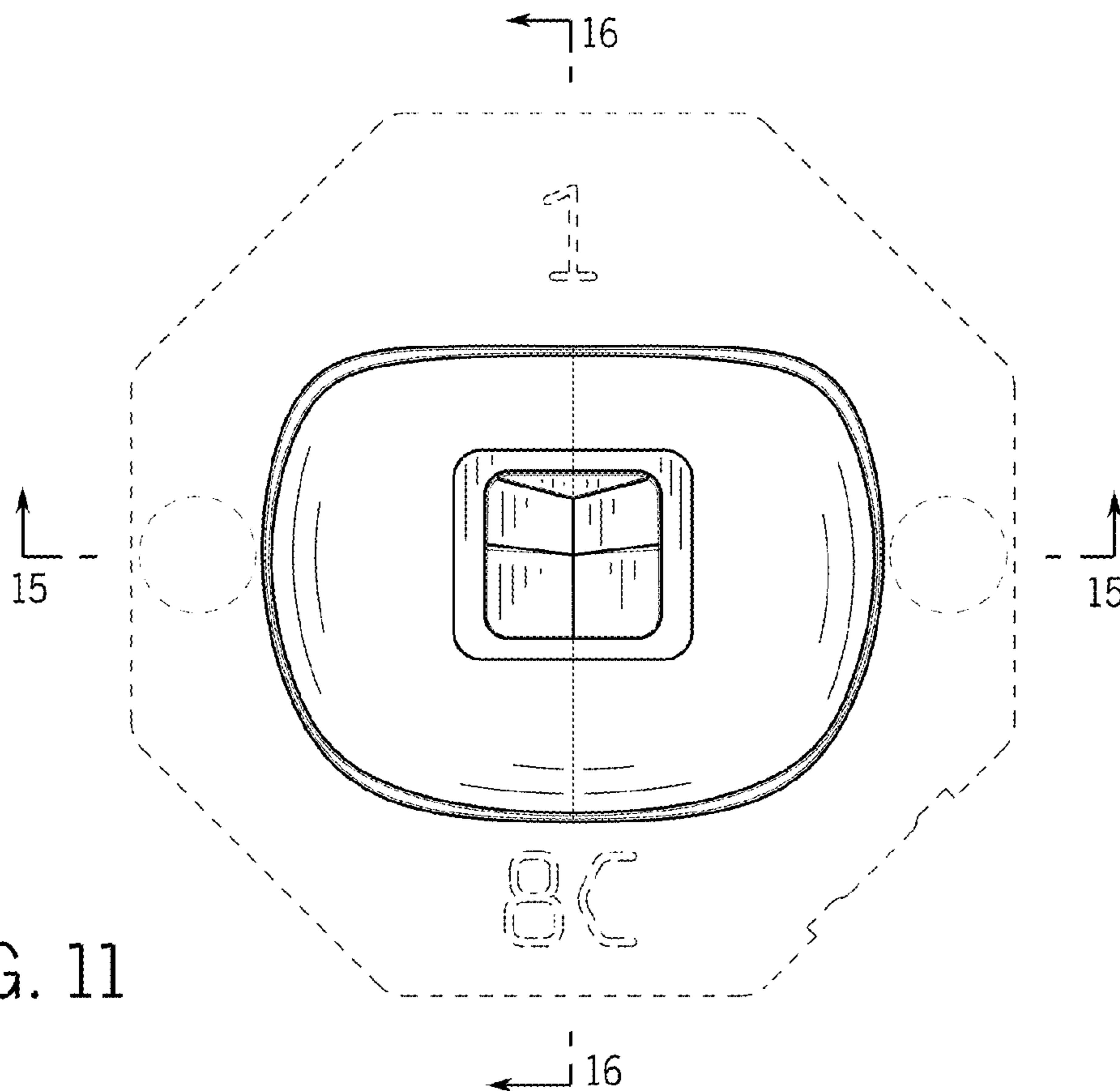


FIG. 11



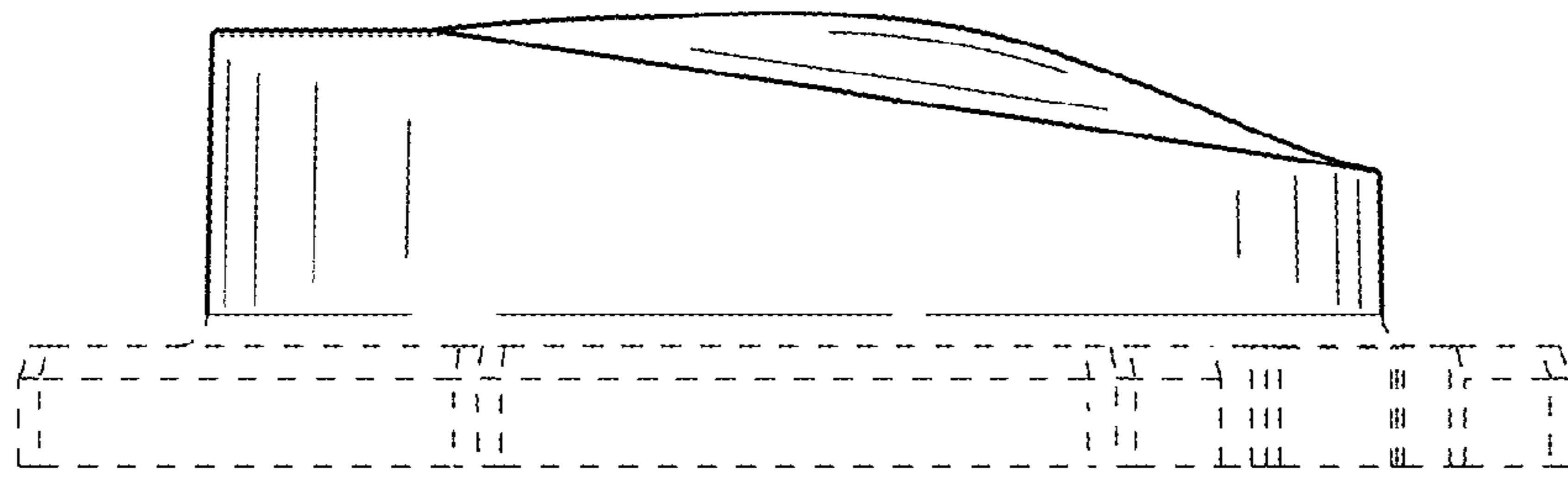


FIG. 12

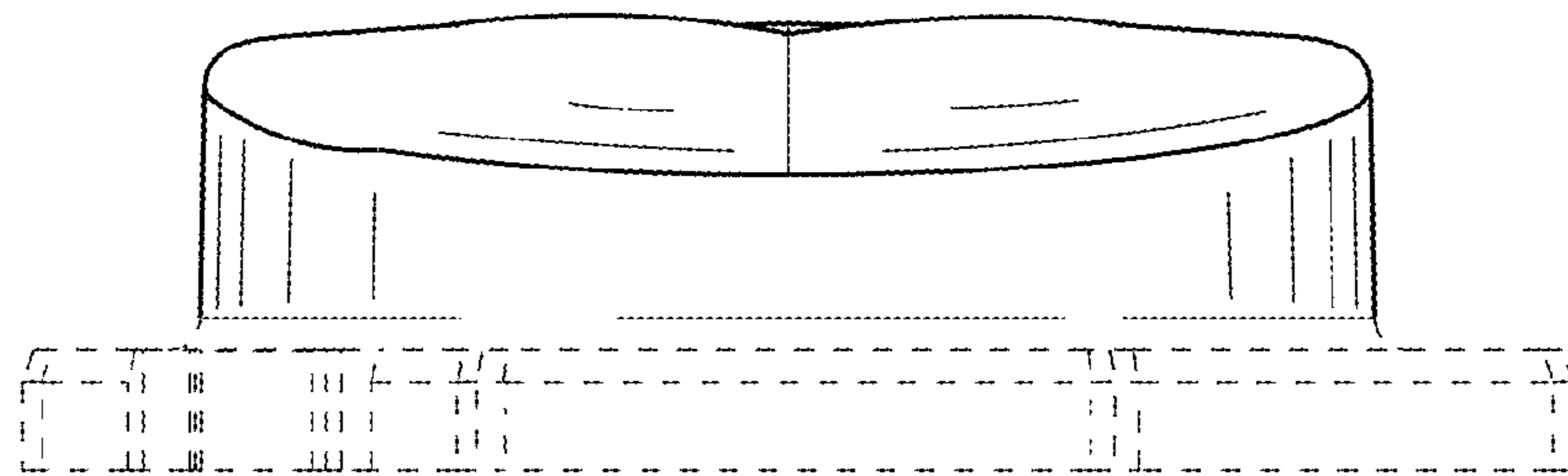


FIG. 13

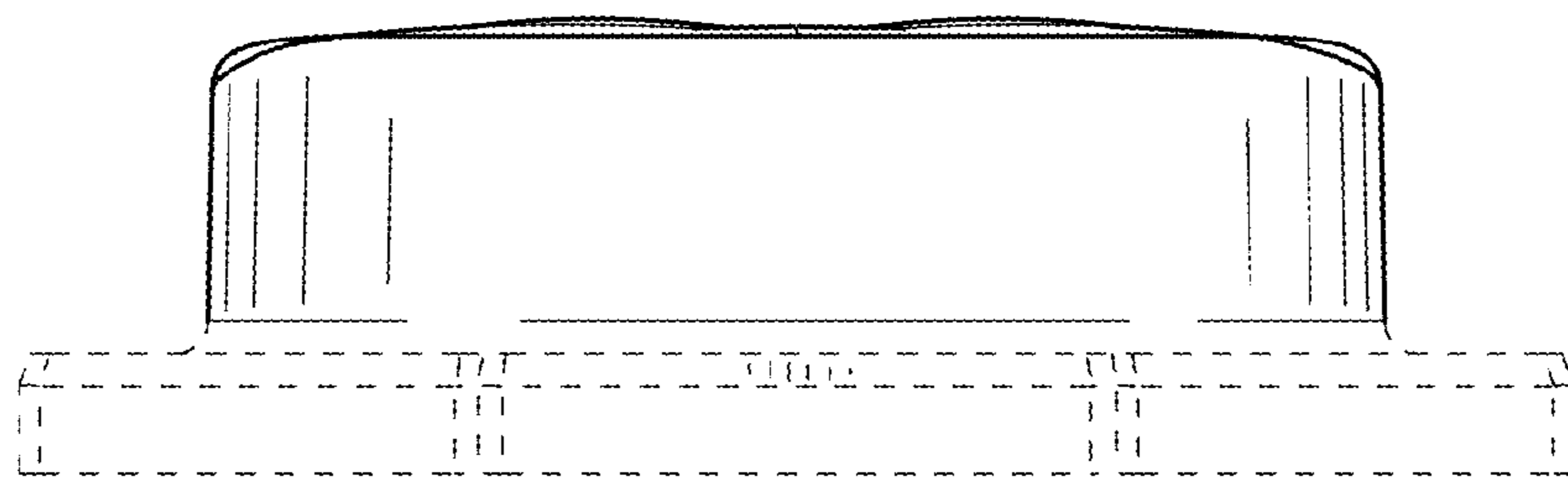


FIG. 14

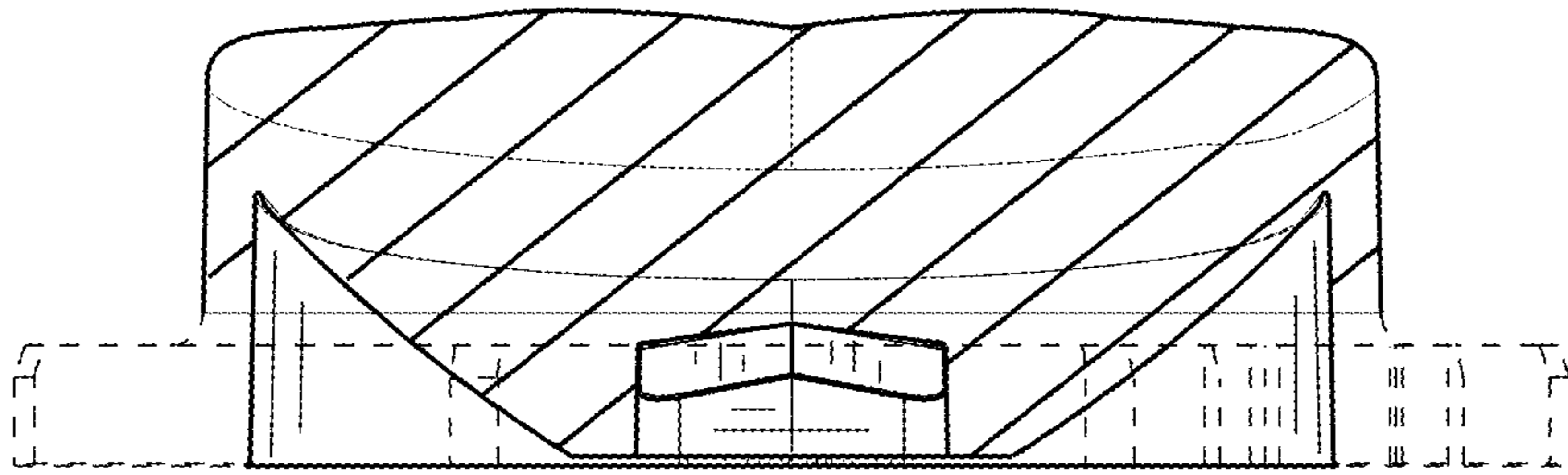


FIG. 15

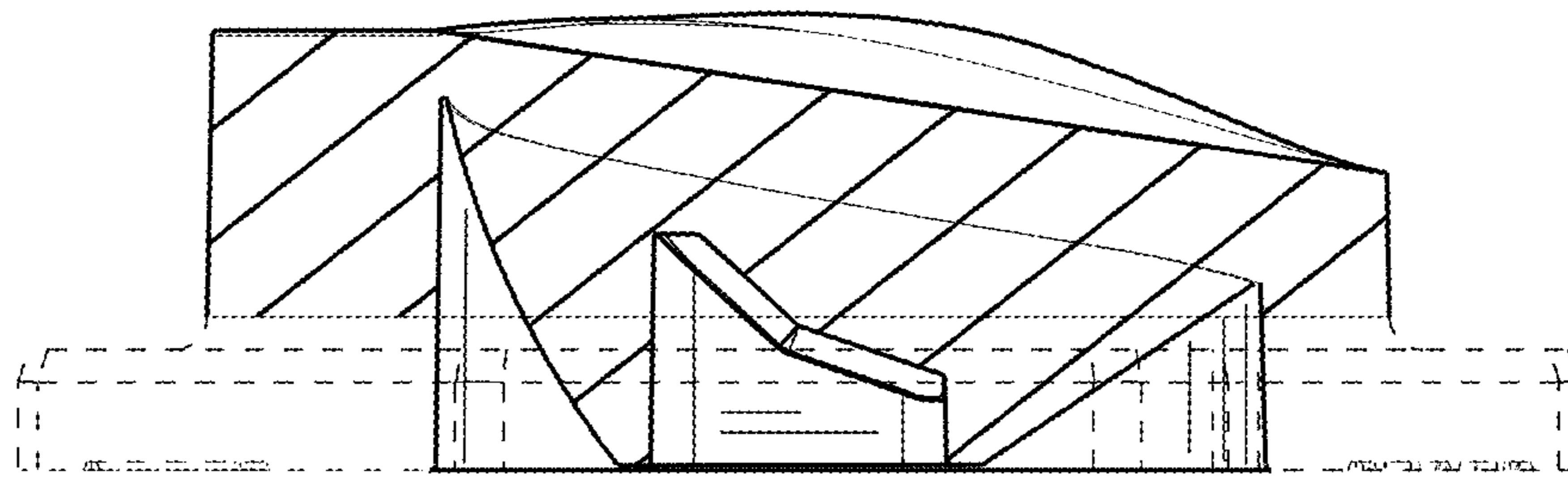


FIG. 16