



US00D857996S

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

(10) **Patent No.:** **US D857,996 S**

(45) **Date of Patent:** **** Aug. 27, 2019**

(54) **BALL JOINT COMPACT**

2,701,659 A 2/1955 Baltosser

3,039,132 A 6/1962 Coleman

3,100,589 A 8/1963 Love

(Continued)

(71) Applicant: **HCT GROUP HOLDINGS LIMITED**, Central (CN)

(72) Inventor: **Samuel Chen**, Los Angeles, CA (US)

FOREIGN PATENT DOCUMENTS

(73) Assignee: **HCT GROUP HOLDINGS LIMITED**, Hong Kong (HK)

CN 1196212 A 10/1998

JP 2533414 Y2 4/1997

(Continued)

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

Primary Examiner — Jennifer Rivard

Assistant Examiner — Alison M Ofstun

(21) Appl. No.: **29/609,963**

(74) *Attorney, Agent, or Firm* — Seager, Tufte & Wickhem LLP

(22) Filed: **Jul. 7, 2017**

(51) **LOC (12) Cl.** **28-03**

(52) **U.S. Cl.**

USPC **D28/82**

(58) **Field of Classification Search**

USPC D28/64.1, 76–84; D9/503–505, 722, 529,
D9/420, 425, 428; D3/295; D19/103,
D19/106

CPC A45D 33/006; A45D 33/003; A45D
33/04–33; A45D 33/025; A45D 33/02;
A45D 33/20; A45D 33/22; A45D 33/24;
A45D 33/26; A45D 33/28; A45D 33/18;
A45D 40/22; A45D 40/222; A45D 40/24;
A45D 2200/051–053; A45D
2040/223–228

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,527,052 A 2/1925 McAndrews
1,616,381 A 2/1927 Harold
1,620,002 A 3/1927 Barany
1,642,780 A 9/1927 Kole et al.
1,668,658 A 5/1928 Reutter
1,748,491 A 2/1930 May
2,055,389 A 9/1936 George

(57) **CLAIM**

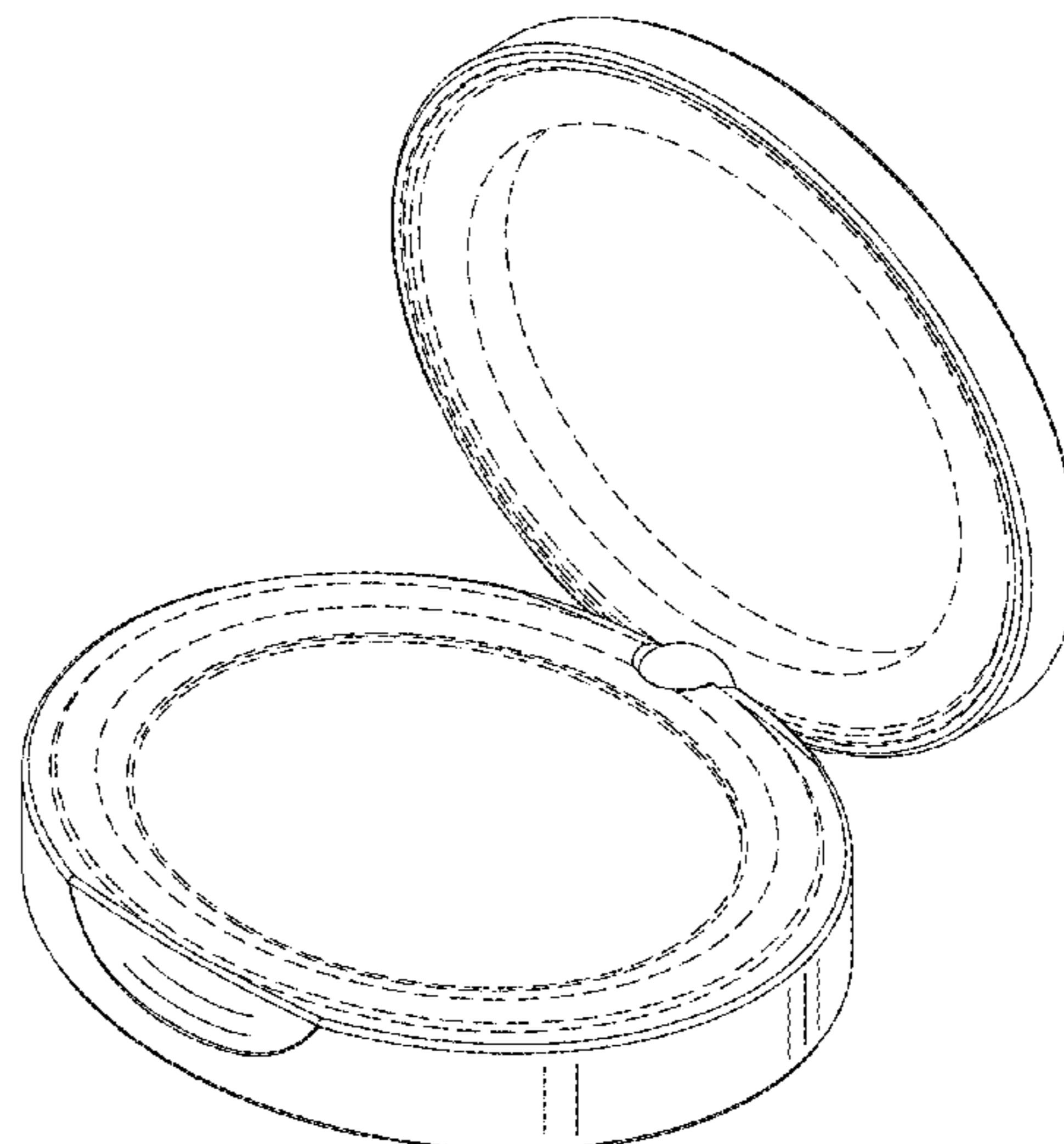
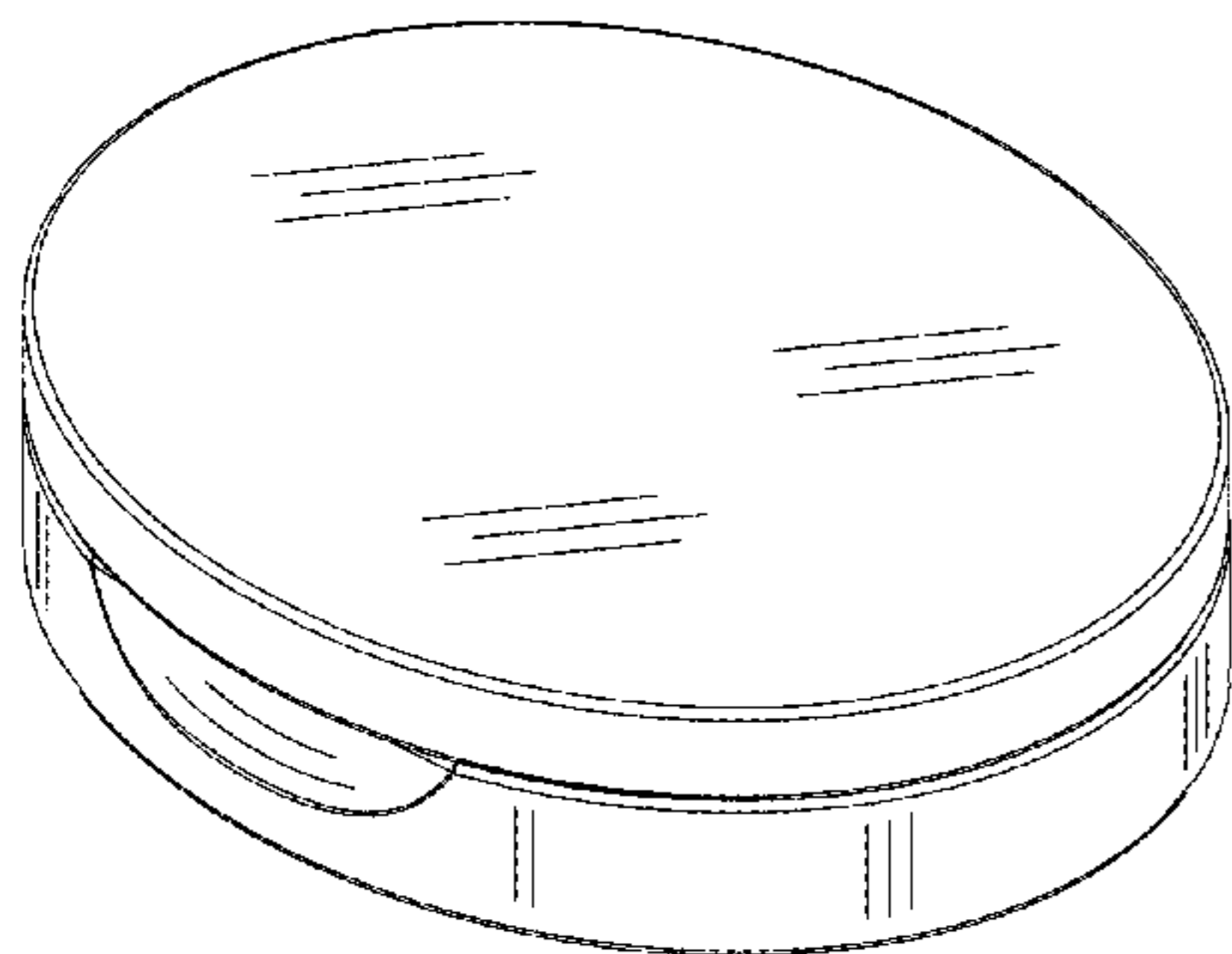
The ornamental design for a ball joint compact, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of the ball joint compact showing the new design;
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a right side view thereof, the left side being a mirror image;
FIG. 5 is a top view thereof;
FIG. 6 is a bottom view thereof;
FIG. 7 is a perspective view thereof, with the lid open;
FIG. 8 is a right side view thereof, with the lid open, the left side being a mirror image;
FIG. 9 is a rear view thereof, with the lid open;
FIG. 10 is a perspective view thereof, with the lid open and partially tilted; and,
FIG. 11 is a top view thereof, with the lid open and partially tilted.

The broken lines in the drawings illustrate unclaimed portions of the article which form no part of the claimed design. The claimed design extends to the broken line boundaries but does not include the boundaries or the area within the boundaries.

1 Claim, 11 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

| | | | | | |
|--------------|---------|------------------------|-----------------|---------|------------------------------------|
| 3,476,123 A | 11/1969 | Flax | 7,316,235 B2 | 1/2008 | Maio et al. |
| 3,552,402 A | 1/1971 | Levy | 7,334,685 B2 | 2/2008 | Mathiez |
| D268,292 S | 3/1983 | Chevassus | D564,707 S | 3/2008 | Barresi |
| 4,421,127 A | 12/1983 | Geer | 7,337,787 B2 | 3/2008 | Matsuoka |
| D281,731 S | 12/1985 | Phu | D566,899 S | 4/2008 | De Baschmakoff |
| 4,681,127 A | 7/1987 | Gueret | D576,354 S | 9/2008 | Dominski et al. |
| 4,696,317 A | 9/1987 | Shioi et al. | D576,770 S | 9/2008 | Mascotte et al. |
| D293,612 S | 1/1988 | Bulwik | D581,597 S | 11/2008 | Martinez |
| 5,005,697 A | 4/1991 | Jimbo et al. | D586,504 S | 2/2009 | Moon |
| D316,763 S | 5/1991 | Ferrari | 7,494,030 B2 | 2/2009 | Bennett |
| D318,346 S * | 7/1991 | Bakic D28/82 | D595,900 S | 7/2009 | Yamamoto |
| 5,107,871 A | 4/1992 | Butcher et al. | D599,953 S * | 9/2009 | Gibson D27/190 |
| 5,107,984 A | 4/1992 | Welschoff | D600,857 S | 9/2009 | Maddy et al. |
| D342,808 S * | 12/1993 | Bakic D28/82 | 7,614,405 B2 | 11/2009 | Allen et al. |
| 5,348,031 A | 9/1994 | Cloud | D611,657 S | 3/2010 | Maddy et al. |
| 5,353,818 A | 10/1994 | Suzuki et al. | D626,289 S | 10/2010 | Lee |
| 5,431,176 A | 7/1995 | Favre | 7,828,000 B2 | 11/2010 | Lee |
| D365,892 S | 1/1996 | Markham | 7,832,564 B2 | 11/2010 | Kim |
| 5,495,209 A | 2/1996 | Gerstenberg | 7,909,195 B2 | 3/2011 | Rathbone et al. |
| 5,603,340 A | 2/1997 | Gueret | D642,333 S | 7/2011 | Praster |
| 5,655,553 A | 8/1997 | Giese et al. | 8,006,707 B2 | 8/2011 | Thorpe et al. |
| 5,704,378 A | 1/1998 | Machelett | D645,617 S | 9/2011 | Mahdavi |
| 5,713,471 A | 2/1998 | Gueret | 8,025,067 B2 | 9/2011 | Thorpe et al. |
| 5,769,234 A | 6/1998 | Gueret | D655,046 S | 2/2012 | Nakamura |
| D398,079 S | 9/1998 | Denison | 8,118,040 B2 | 2/2012 | Bennett |
| 5,813,420 A | 9/1998 | Sussman | 8,132,578 B2 | 3/2012 | LoPrete |
| D401,017 S | 11/1998 | Thorpe | 8,210,187 B1 | 7/2012 | Zhang |
| 5,875,795 A | 3/1999 | Bouix | D666,773 S | 9/2012 | Greenfield |
| D408,591 S * | 4/1999 | Litton D28/82 | 8,286,648 B2 | 10/2012 | Thorpe et al. |
| 5,896,866 A | 4/1999 | Quennessen | 8,387,627 B2 | 3/2013 | Yeom |
| 5,950,638 A | 9/1999 | Crosta | D688,420 S | 8/2013 | Lai |
| 5,988,185 A | 11/1999 | Gueret | 8,590,545 B2 | 11/2013 | Won |
| D422,120 S | 3/2000 | Orsomando | D697,800 S * | 1/2014 | Villarreal D28/82 |
| 6,053,183 A | 4/2000 | Rizzo | 8,678,222 B2 | 3/2014 | Thorpe et al. |
| 6,070,749 A | 6/2000 | Jouliia | 8,839,803 B2 | 9/2014 | Holloway |
| D428,209 S | 7/2000 | Kudo et al. | D721,853 S * | 1/2015 | Koo D28/82 |
| 6,119,891 A | 9/2000 | Favre | D722,404 S * | 2/2015 | Son D28/82 |
| 6,138,686 A | 10/2000 | Yuhara | D722,405 S * | 2/2015 | Hwang D28/82 |
| 6,149,008 A | 11/2000 | Yuhara | D723,220 S | 2/2015 | Guor |
| D434,875 S | 12/2000 | Gavin | D724,786 S * | 3/2015 | Jung D28/82 |
| 6,173,719 B1 | 1/2001 | Petit | D726,377 S * | 4/2015 | Koo D28/82 |
| D439,019 S | 3/2001 | Motosko | D728,860 S | 5/2015 | Blanch |
| D439,376 S | 3/2001 | Lerolle | D732,740 S * | 6/2015 | Yoon D28/82 |
| D442,338 S | 5/2001 | Roman | D736,468 S | 8/2015 | Goswell |
| 6,283,298 B1 | 9/2001 | Seidler | D742,070 S * | 10/2015 | Park D28/82 |
| 6,298,863 B1 | 10/2001 | Byun | D774,697 S * | 12/2016 | Praster D28/82 |
| 6,311,701 B1 | 11/2001 | Yuhara et al. | D777,984 S * | 1/2017 | Son D28/82 |
| 6,336,460 B2 | 1/2002 | Yuhara | D788,371 S * | 5/2017 | Lee D28/82 |
| 6,354,308 B1 | 3/2002 | Kuk | D793,624 S * | 8/2017 | Hwang D28/82 |
| D457,687 S | 5/2002 | Millar | 9,889,532 B2 | 2/2018 | Osaki et al. |
| D457,986 S | 5/2002 | Rodriguez et al. | D817,551 S * | 5/2018 | Montoli A45D 33/00 D28/82 |
| D462,809 S | 9/2002 | LaSpina et al. | 2002/0056660 A1 | 5/2002 | Gueret |
| D468,058 S | 12/2002 | Thorpe | 2002/0096185 A1 | 7/2002 | Givens |
| 6,532,970 B2 | 3/2003 | Phue | 2002/0162565 A1 | 11/2002 | Sebban |
| D478,689 S | 8/2003 | Thorpe | 2003/0024545 A1 | 2/2003 | Delage |
| D479,016 S | 8/2003 | Sgariboldi | 2003/0154997 A1 | 8/2003 | Lin |
| D479,366 S * | 9/2003 | Goswell D28/82 | 2004/0200755 A1 | 10/2004 | Gueret |
| D479,630 S | 9/2003 | Lai | 2004/0206370 A1 | 10/2004 | Byun |
| D485,018 S | 1/2004 | Beilman | 2006/0027481 A1 | 2/2006 | Gelardi et al. |
| 6,712,076 B2 | 3/2004 | Alexander et al. | 2006/0118454 A1 | 6/2006 | Kang |
| D496,759 S * | 9/2004 | Rodriguez D28/82 | 2006/0186019 A1 | 8/2006 | Lu |
| D498,024 S | 11/2004 | Leppla et al. | 2006/0278665 A1 | 12/2006 | Bennett |
| D503,245 S | 3/2005 | Vanoncini | 2007/0029226 A1 | 2/2007 | Yuhara et al. |
| D505,518 S | 5/2005 | Benjamin et al. | 2007/0080094 A1 | 4/2007 | Moon |
| D507,078 S | 7/2005 | Greenfield | 2007/0131240 A1 | 6/2007 | Prague |
| 6,945,403 B2 | 9/2005 | Lombardi | 2007/0187284 A1 | 8/2007 | Goto et al. |
| 6,997,321 B2 | 2/2006 | Young | 2007/0228079 A1 | 10/2007 | Vogel et al. |
| 7,083,354 B2 | 8/2006 | Byun | 2007/0235056 A1 | 10/2007 | Vintimiglia et al. |
| D537,985 S * | 3/2007 | Bakic D28/82 | 2007/0261710 A1 | 11/2007 | Son et al. |
| D539,481 S | 3/2007 | Lui | 2008/0011320 A1 | 1/2008 | Bouix et al. |
| 7,240,402 B2 | 7/2007 | Suzuki et al. | 2008/0023023 A1 | 1/2008 | Boye et al. |
| D554,292 S | 10/2007 | Thorpe | 2008/0078419 A1 | 4/2008 | Hirst |
| D554,293 S | 10/2007 | Thorpe | 2008/0178903 A1 | 7/2008 | Thorpe et al. |
| D554,294 S | 10/2007 | Thorpe | 2008/0302384 A1 | 12/2008 | Parker |
| D554,804 S | 11/2007 | Bernard | 2009/0071502 A1 | 3/2009 | Durgeon |
| | | | 2009/0272400 A1 | 11/2009 | Park et al. |
| | | | 2009/0288677 A1 | 11/2009 | Chen |
| | | | 2009/0293902 A1 | 12/2009 | Ramos |

(56)

References Cited

U.S. PATENT DOCUMENTS

2009/0320874 A1 12/2009 Boye et al.
2010/0008074 A1 1/2010 Kang
2010/0031971 A1 2/2010 Ha
2010/0288299 A1 11/2010 Won
2010/0307530 A1 12/2010 Bennett
2011/0253166 A1 10/2011 Lin
2011/0266297 A1 11/2011 Thorpe et al.
2012/0136748 A1 5/2012 Shasteen et al.
2013/0068801 A1 3/2013 Lai
2013/0087165 A1 4/2013 Lee et al.
2013/0161345 A1 6/2013 Tatin
2013/0284202 A1 10/2013 Limongi et al.
2014/0014659 A1 1/2014 Thorpe et al.
2014/0023689 A1 1/2014 Kim et al.
2016/0083152 A1 3/2016 Eberlein

FOREIGN PATENT DOCUMENTS

JP 3051335 B2 6/2000
JP 3080777 U 10/2001
JP 2002306236 A 10/2002
JP 2004222853 A 8/2004
JP 5945015 B2 4/2016
KR 200322309 Y1 7/2003
KR 200328446 Y1 9/2003
KR 20090004125 A 1/2009
KR 2009008597 U 8/2009
KR 20090104593 A 10/2009
WO 2006101339 A1 9/2006
WO 2008010628 A1 1/2008

* cited by examiner

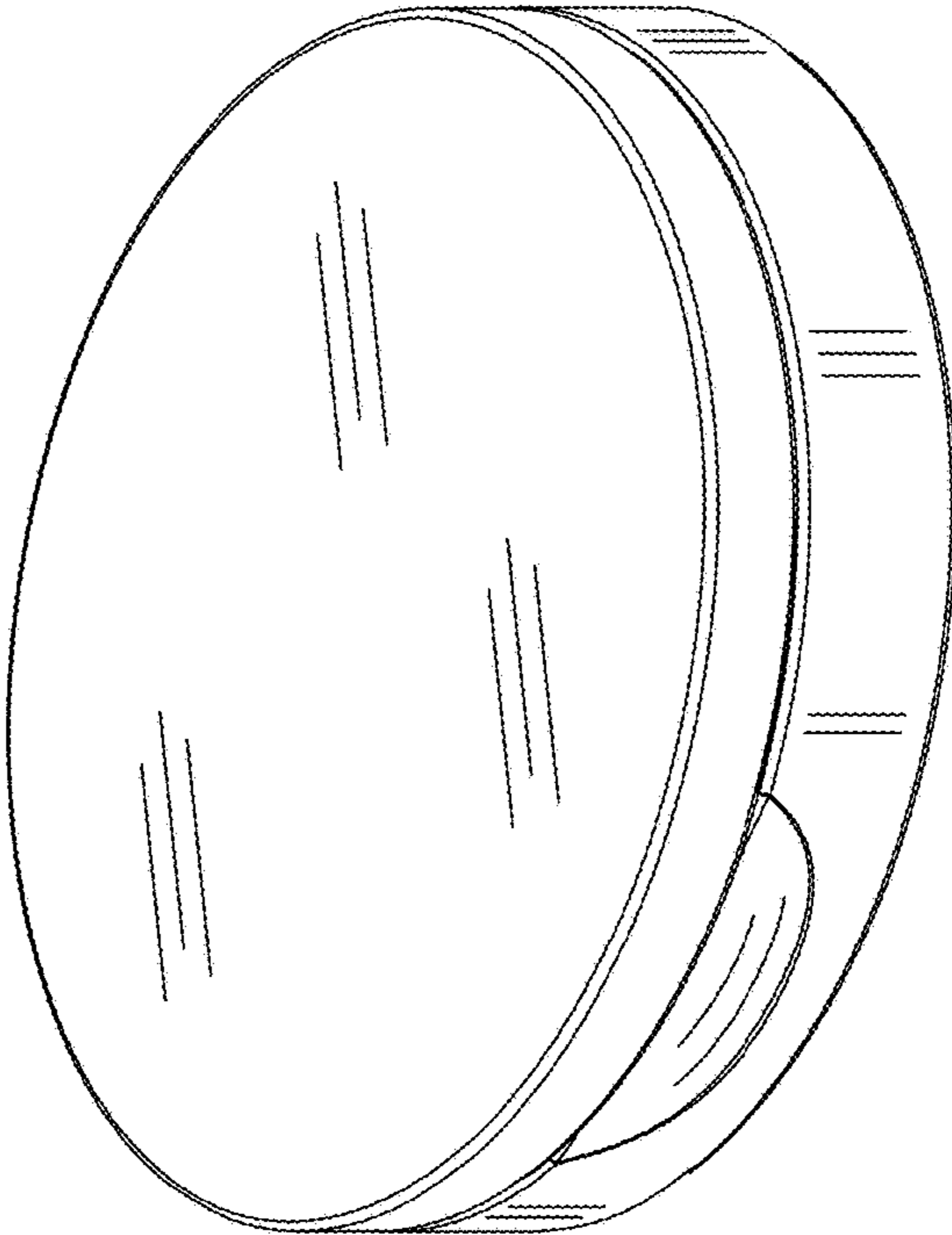


FIG. 1

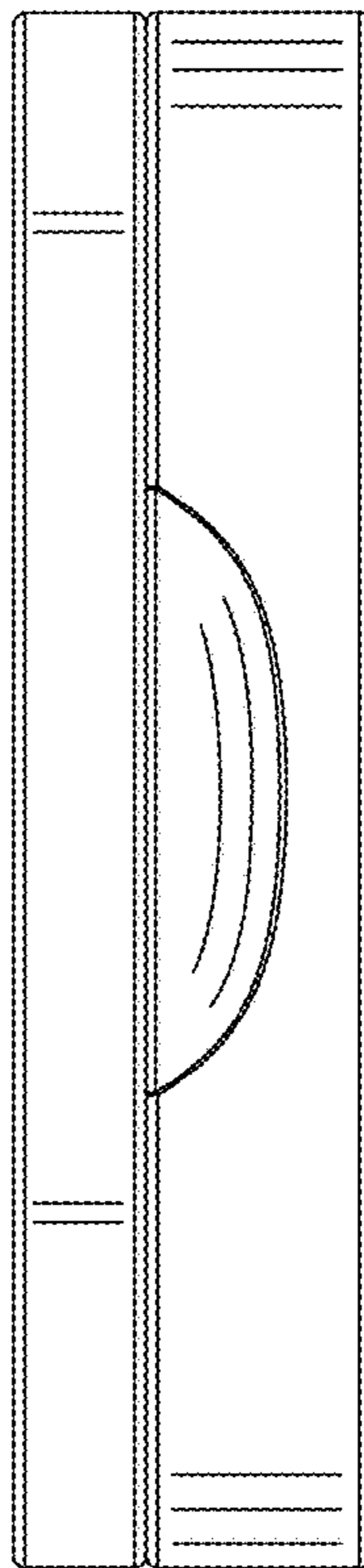


FIG. 2

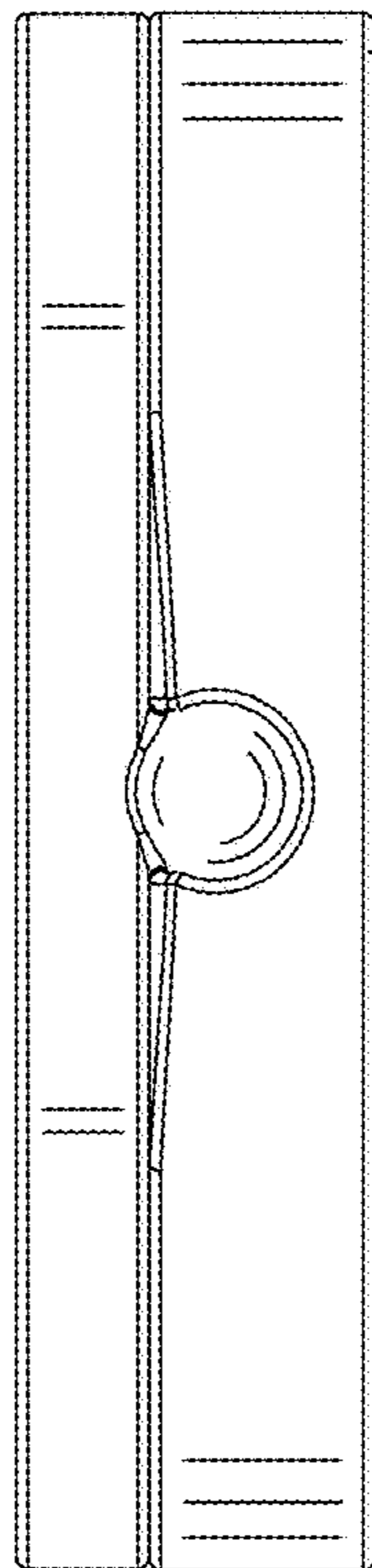


FIG. 3

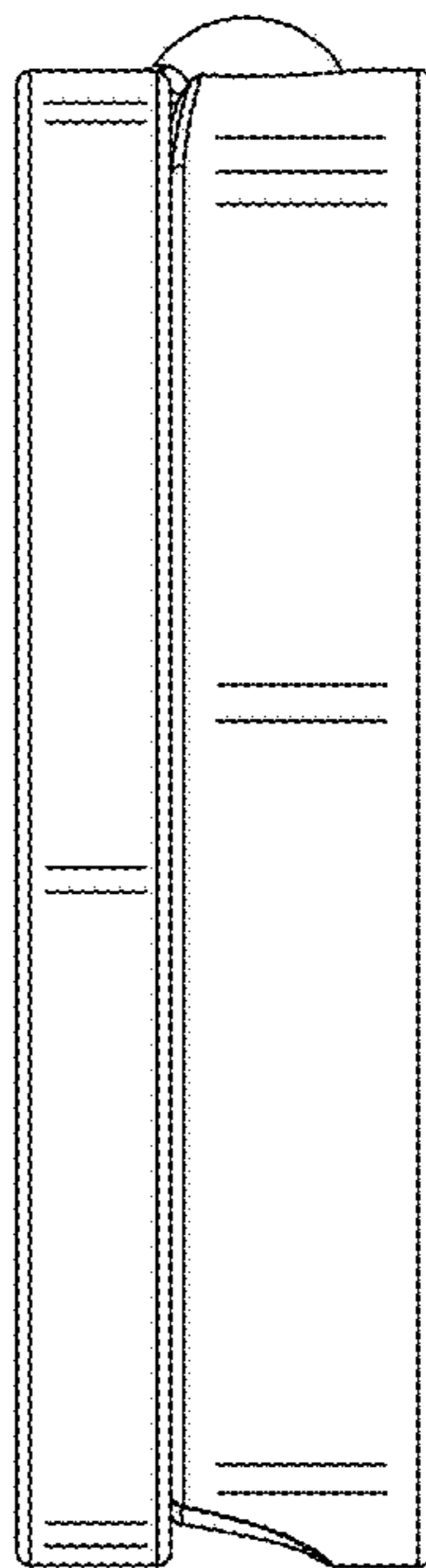


FIG. 4

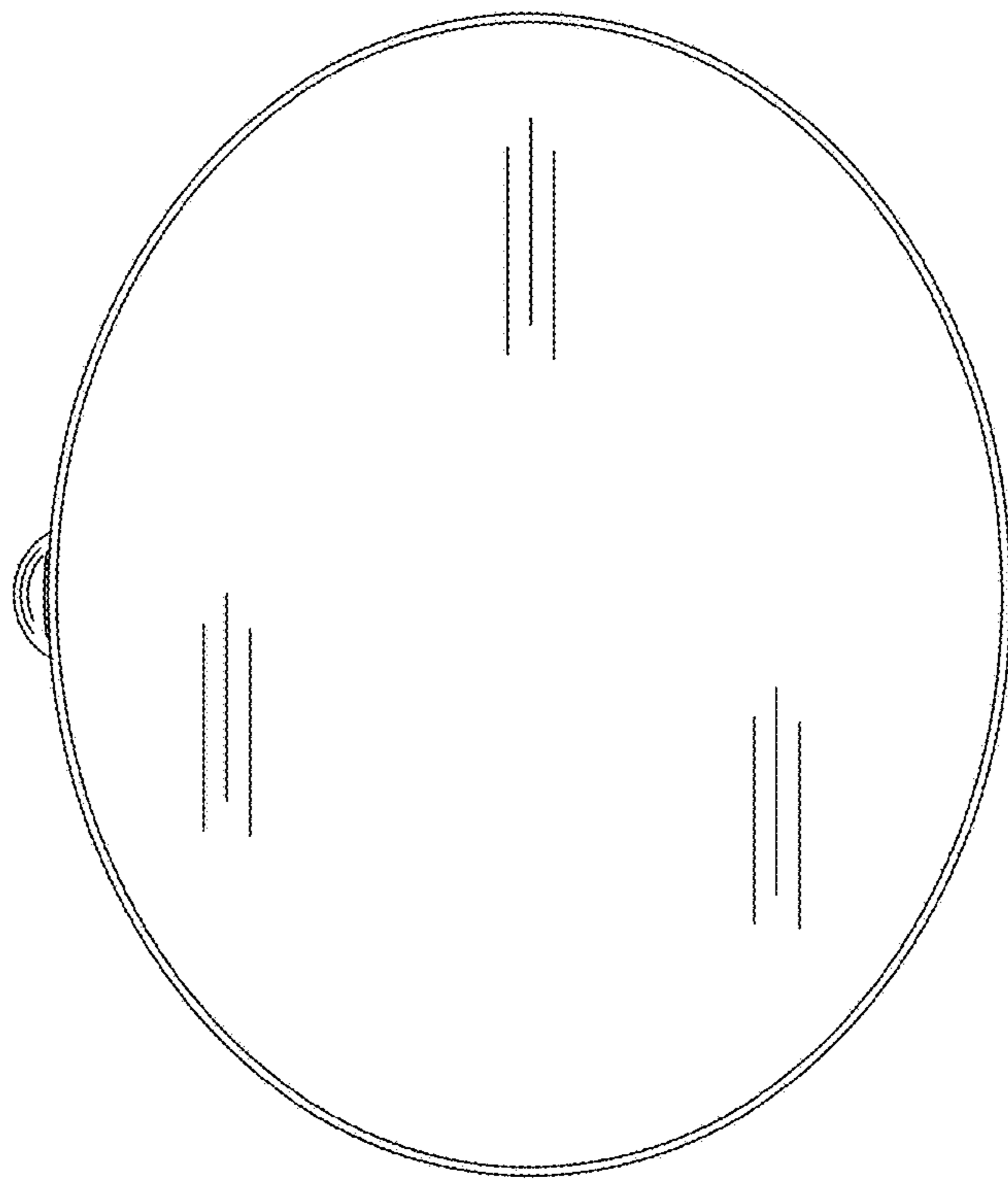


FIG. 5

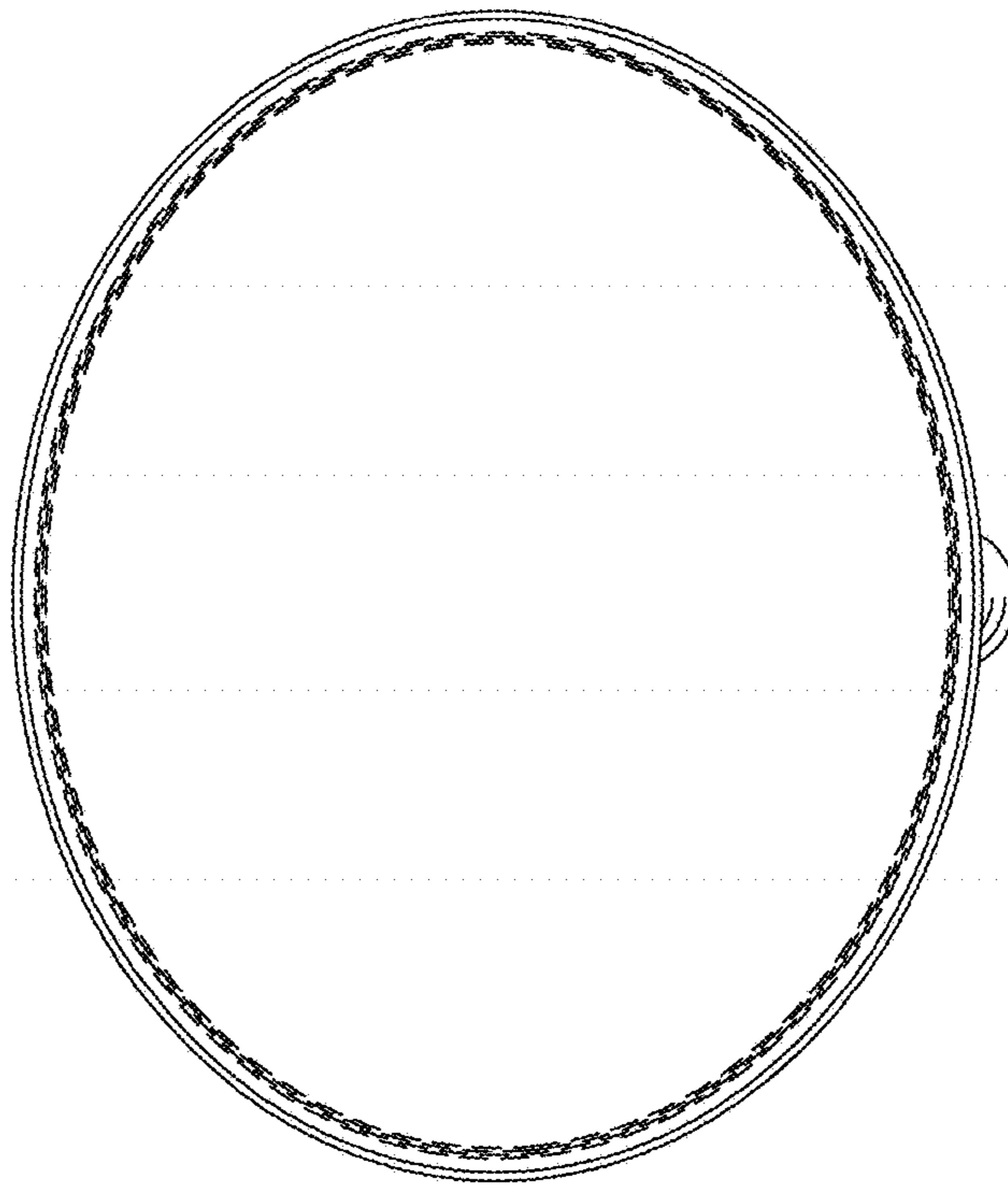


FIG. 6

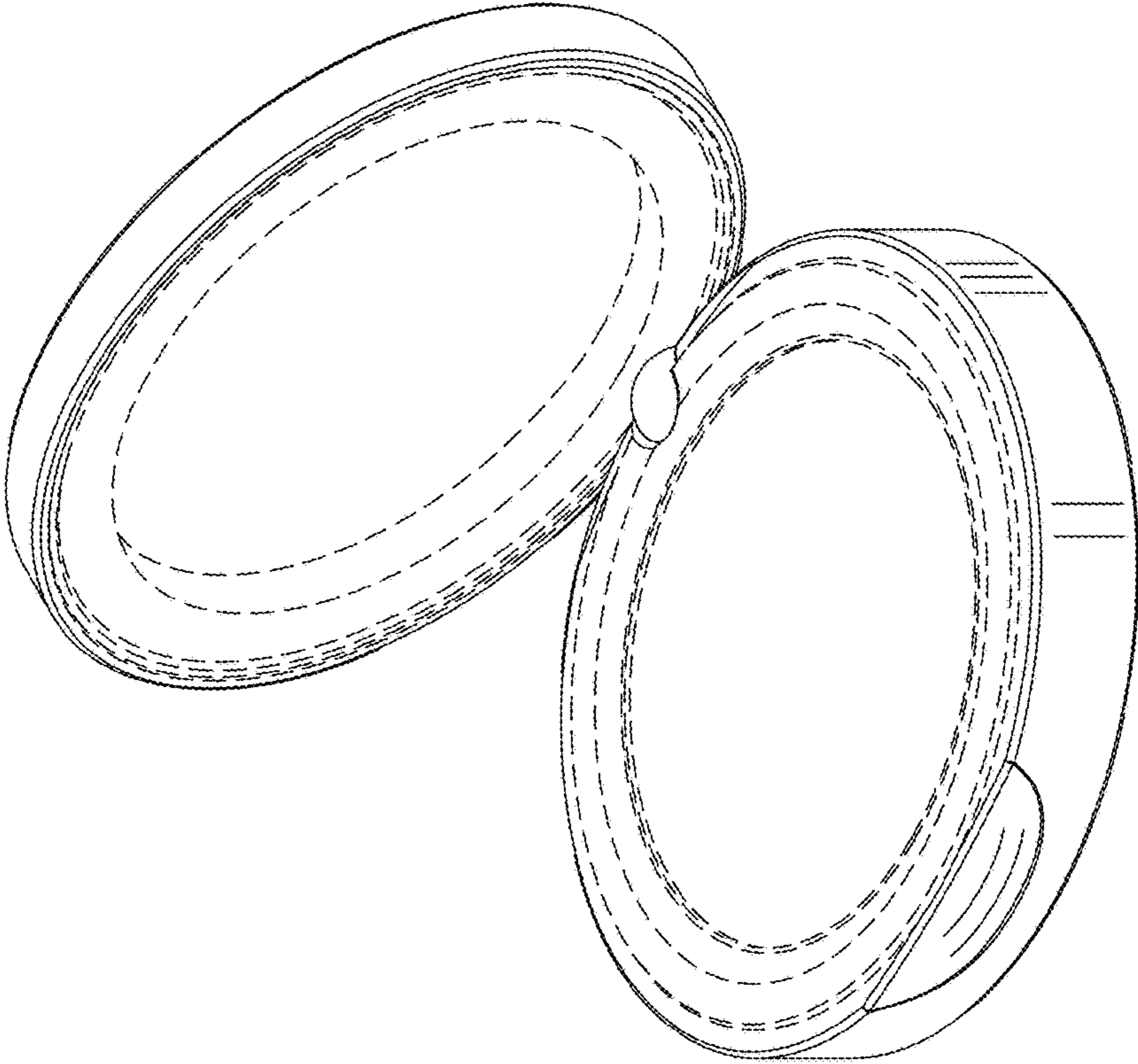


FIG. 7

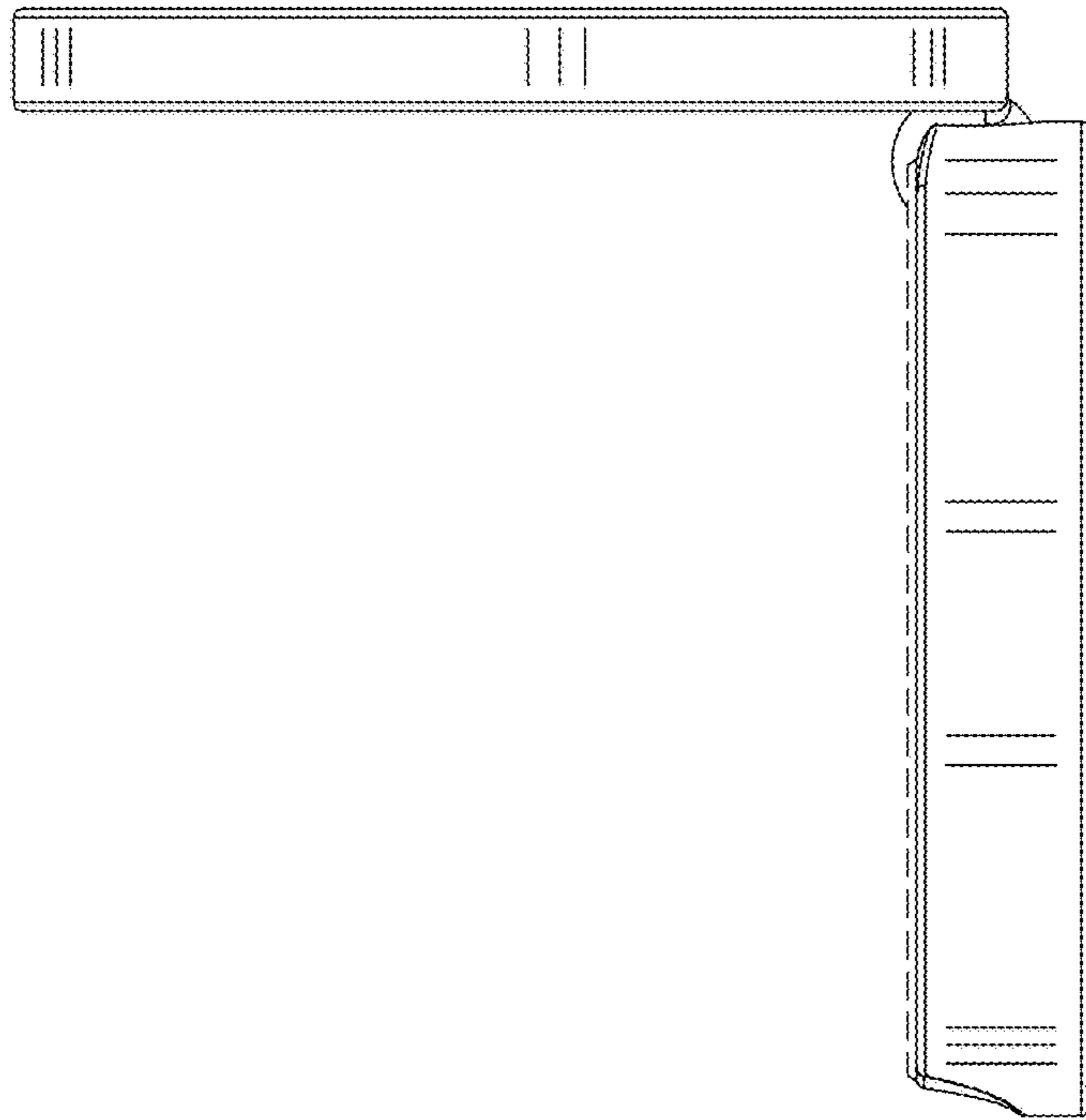


FIG. 8

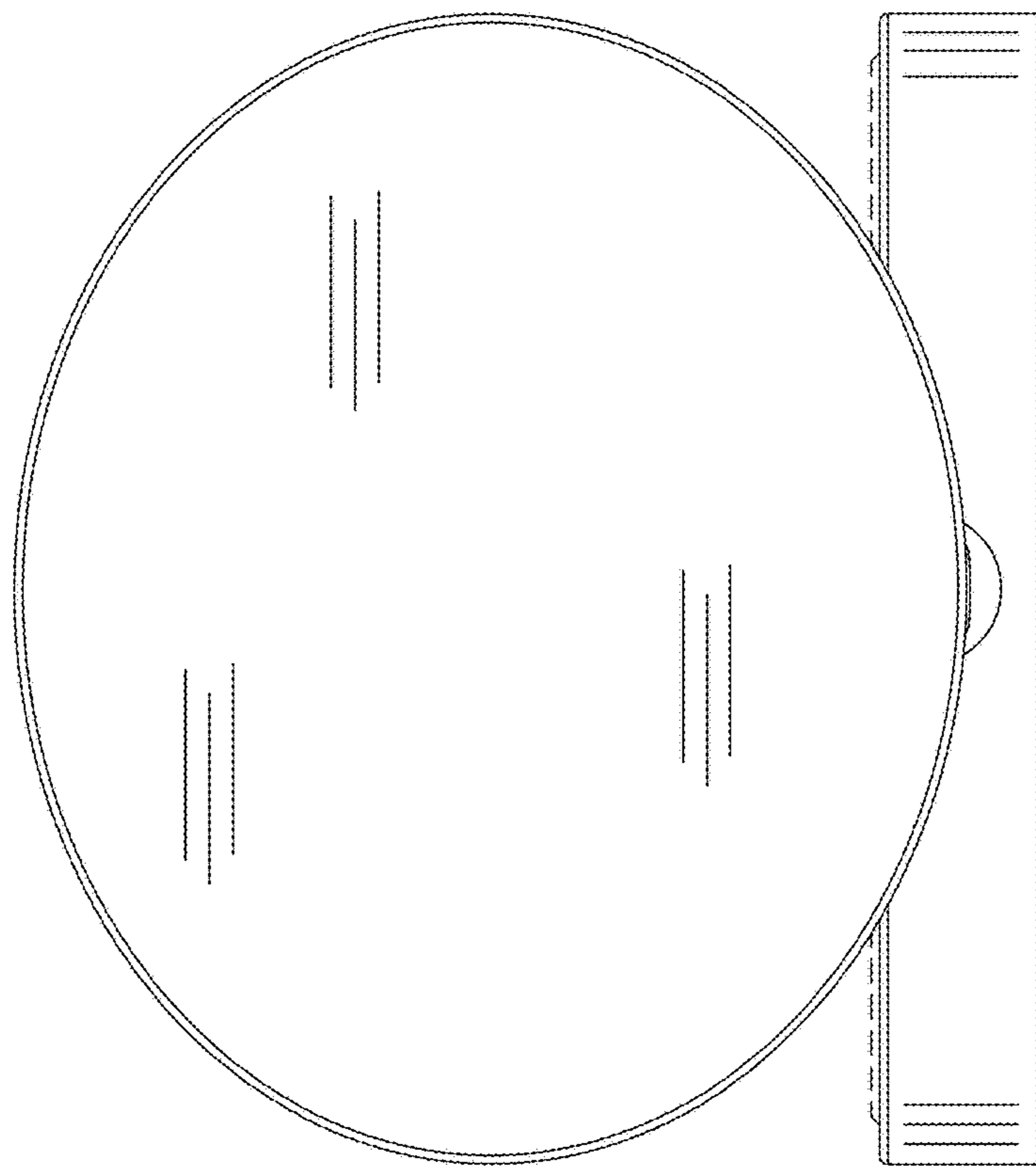


FIG. 9

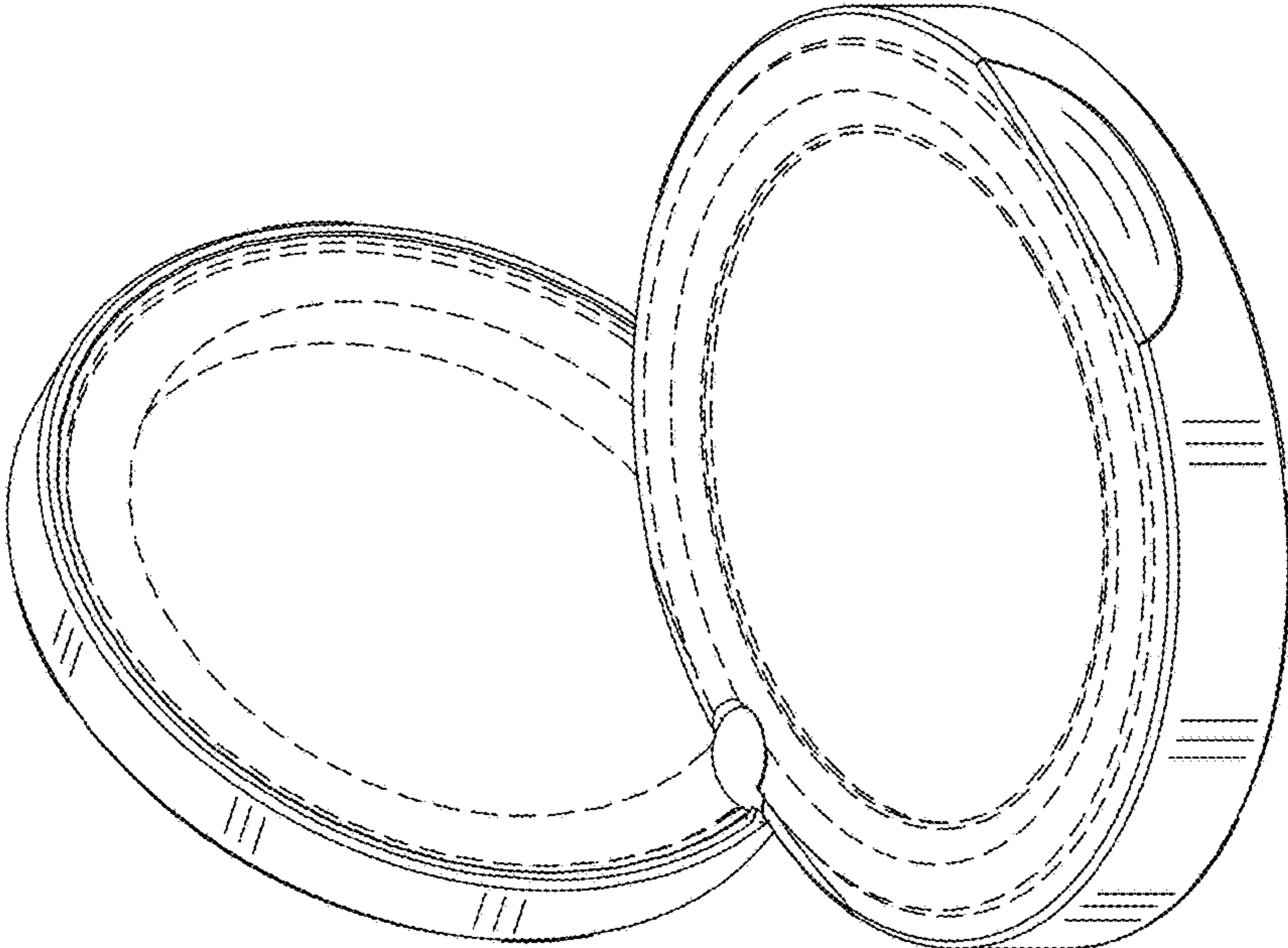


FIG. 10

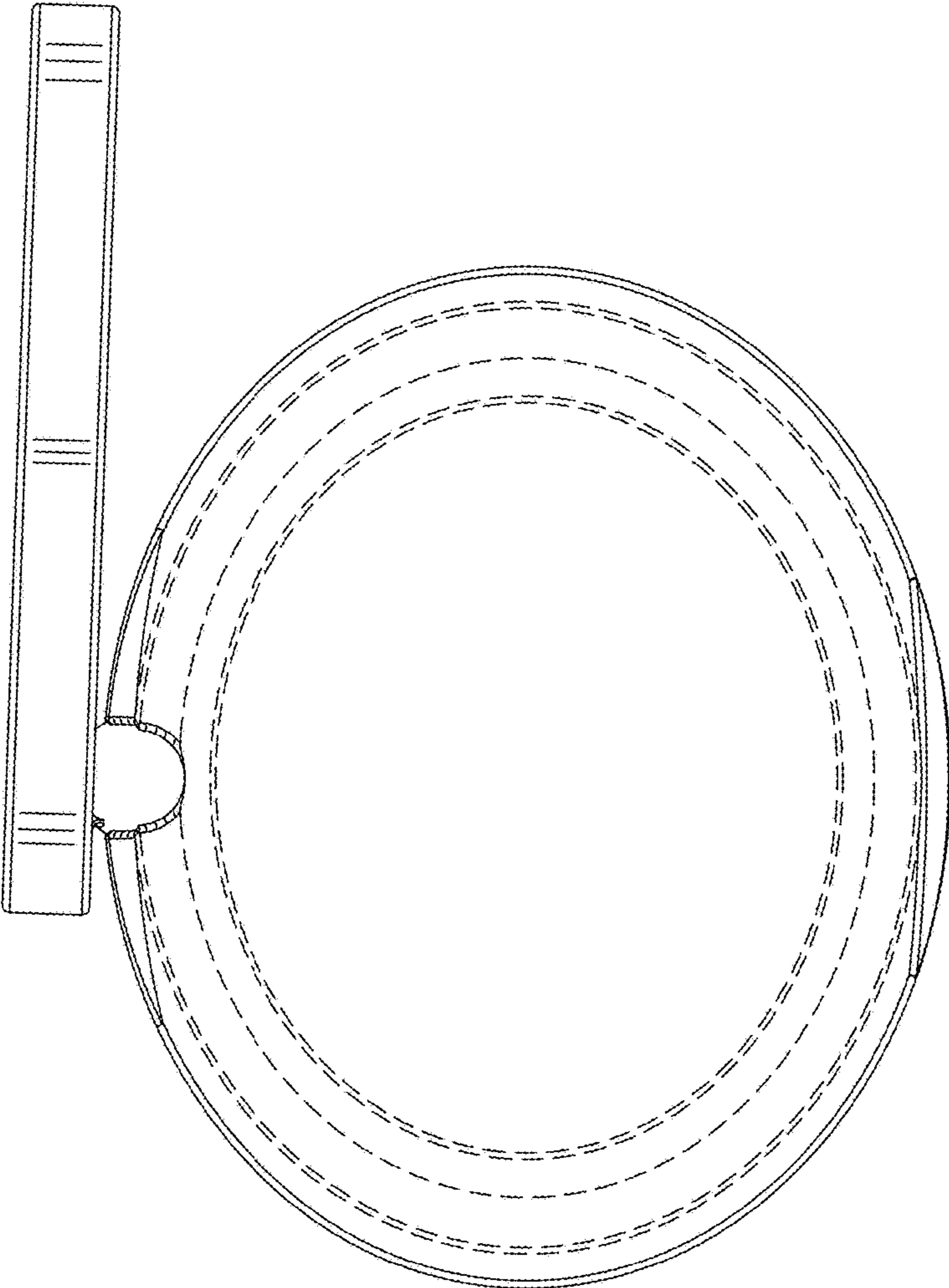


FIG. 11