



US00D872064S

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

(10) **Patent No.:** **US D872,064 S**

(45) **Date of Patent:** **** Jan. 7, 2020**

- (54) **EARPHONE**
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- (**) Term: **15 Years**
- (21) Appl. No.: **29/660,040**
- (22) Filed: **Aug. 15, 2018**
- (51) **LOC (12) Cl.** **14-01**
- (52) **U.S. Cl.**
USPC **D14/223**
- (58) **Field of Classification Search**
USPC D14/223; D24/174; 128/864, 865, 866;
181/129, 130, 135; 379/430, 431;
381/380, 381; 455/90.3, 575.1, 569.1
CPC H04R 1/10; H04R 1/1066; H04R 1/1016;
H04R 5/033; H04R 5/0335; H04R 25/00
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 2,248,837 A * 7/1941 Walters H04R 25/652
381/380
- 2,971,065 A * 2/1961 Busse H04R 25/456
381/321
- 3,821,647 A * 6/1974 Minasian H03D 1/10
455/269
- 4,069,400 A * 1/1978 Johanson H04R 25/60
381/322
- D266,271 S * 9/1982 Johanson D24/174
- D287,280 S * 12/1986 Topholm D24/174
- D287,764 S * 1/1987 Topholm D24/174
- D287,765 S * 1/1987 Topholm D24/174
- 4,702,238 A * 10/1987 Scott A61F 11/08
128/867
- D304,944 S * 12/1989 Behringer D14/188

- 5,054,079 A * 10/1991 Frielingsdorf H04R 1/46
379/430
- 5,812,680 A * 9/1998 Glendon H04R 25/60
381/322
- 6,122,388 A * 9/2000 Feldman H04R 25/604
381/322
- D481,709 S * 11/2003 Solderits D14/223
- D505,411 S * 5/2005 Sakai D14/192
- 7,120,267 B2 * 10/2006 Ito H04M 1/05
381/375
- D532,520 S * 11/2006 Kampmeier D24/174
- D550,657 S * 9/2007 Gan D14/223
- D559,837 S * 1/2008 Nakano D14/223
- D568,290 S * 5/2008 Wikel D14/205
- D579,006 S * 10/2008 Kim D14/223
- D603,380 S * 11/2009 Hutchieson D14/223
- D634,300 S * 3/2011 Yang D14/206

(Continued)

FOREIGN PATENT DOCUMENTS

JP D1526001 * 5/2015

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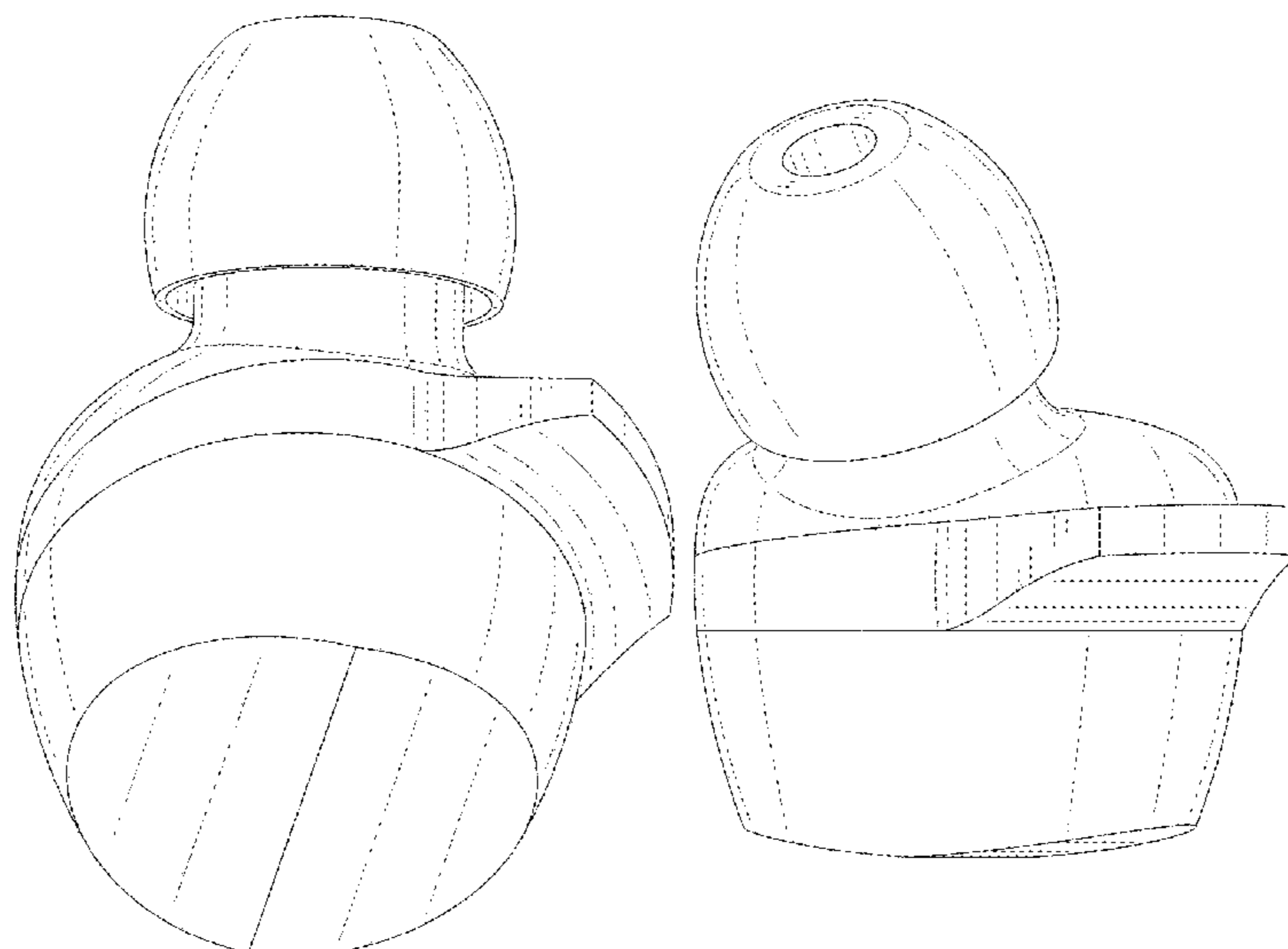
(57) **CLAIM**

The ornamental design for an earphone, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of an earphone showing my new design;
 FIG. 2 is another perspective view thereof;
 FIG. 3 is a front view thereof;
 FIG. 4 is a rear view thereof;
 FIG. 5 is a left side view thereof;
 FIG. 6 is a right side view thereof;
 FIG. 7 is a top view thereof; and,
 FIG. 8 is a bottom view thereof.

1 Claim, 8 Drawing Sheets



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References Cited

U.S. PATENT DOCUMENTS

D635,558 S * 4/2011 Zheng D14/206
 D641,010 S * 7/2011 Kwon D14/223
 D641,011 S * 7/2011 Gondo D14/206
 D654,056 S * 2/2012 Hoggarth D14/205
 D656,489 S * 3/2012 Kumagai D14/223
 D666,581 S * 9/2012 Perez D14/223
 D668,244 S * 10/2012 Matsumura D14/223
 D697,058 S * 1/2014 Thompson D14/205
 D698,026 S * 1/2014 Kuwata D24/174
 D699,226 S * 2/2014 Yoon D14/206
 D702,668 S * 4/2014 Narita H04R 1/10
 D711,356 S * 8/2014 Yang D14/223
 D712,882 S * 9/2014 Wang D14/223
 D719,132 S * 12/2014 Toelle D14/205
 D725,082 S * 3/2015 Palmborg D14/223
 D733,101 S * 6/2015 Pi D14/223
 D733,102 S * 6/2015 Palmborg D14/223
 9,055,369 B2 * 6/2015 Yang H04R 1/10
 D735,169 S * 7/2015 Shieh D14/223
 D740,255 S * 10/2015 Samrelius D14/206

D761,770 S * 7/2016 Kanou D14/206
 D764,445 S * 8/2016 Czaniecki D14/223
 D777,170 S * 1/2017 Mihara D14/483
 D777,710 S * 1/2017 Palmborg D14/223
 D781,269 S * 3/2017 Choe D14/223
 D782,997 S * 4/2017 Shin D14/205
 D782,998 S * 4/2017 Shin D14/205
 D795,225 S * 8/2017 Sumii D14/223
 D806,879 S * 1/2018 Horbinski D24/174
 D810,047 S * 2/2018 Tzeng D14/205
 D812,042 S * 3/2018 Xiao D14/223
 D813,205 S * 3/2018 Palmborg D14/223
 D813,206 S * 3/2018 Tang D14/223
 D813,848 S * 3/2018 Palmborg D14/223
 D841,626 S * 2/2019 Tang D14/223
 D843,354 S * 3/2019 Kumano D14/223
 D845,932 S * 4/2019 Lu D14/223
 D852,171 S * 6/2019 Cai D14/223
 D855,589 S * 8/2019 Madsen D14/223
 D858,488 S * 9/2019 Zheng D14/223
 2004/0101151 A1 * 5/2004 Webber H04R 1/105
 381/328
 2013/0259286 A1 * 10/2013 Chung H04R 1/1016
 381/380

* cited by examiner

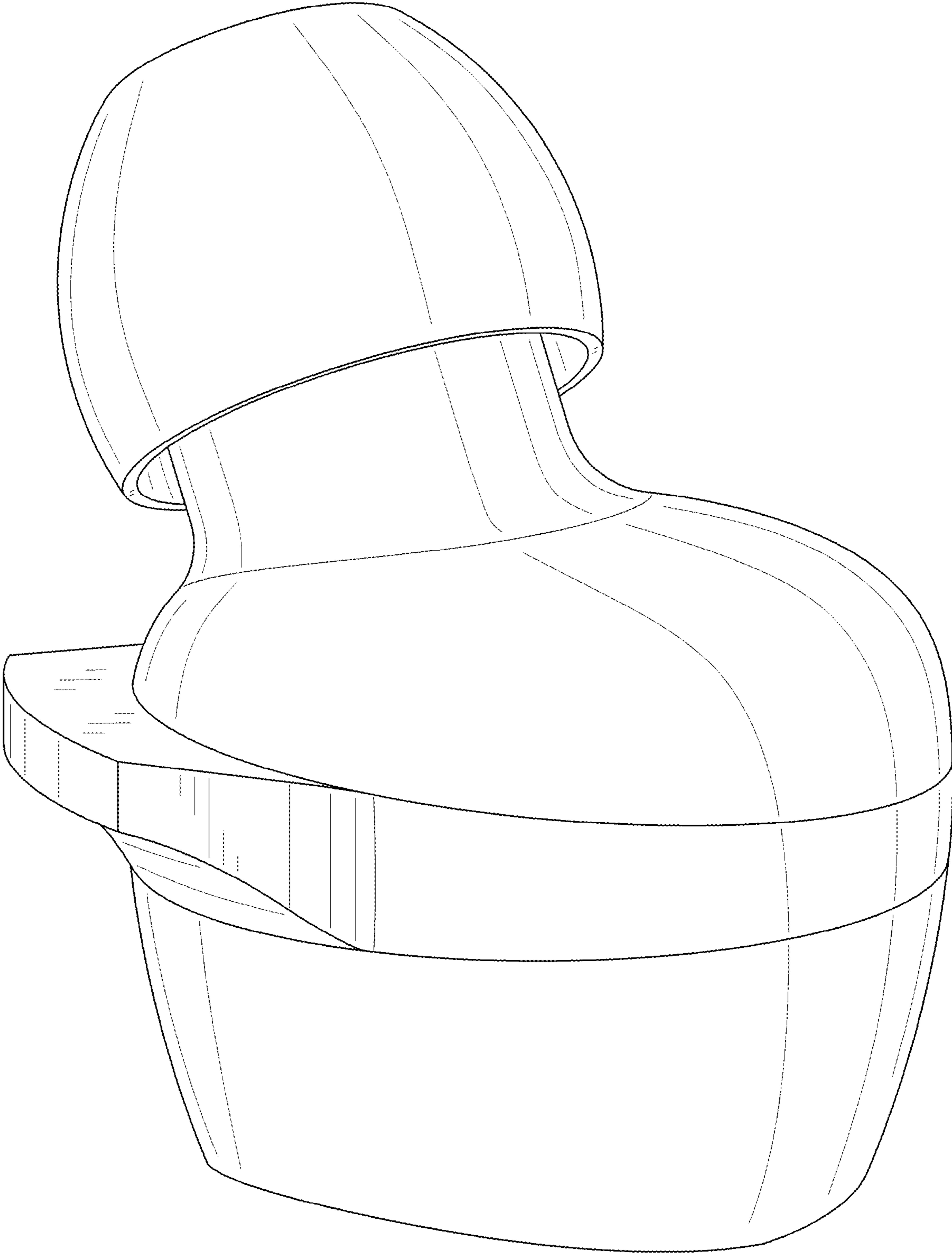


FIG. 1

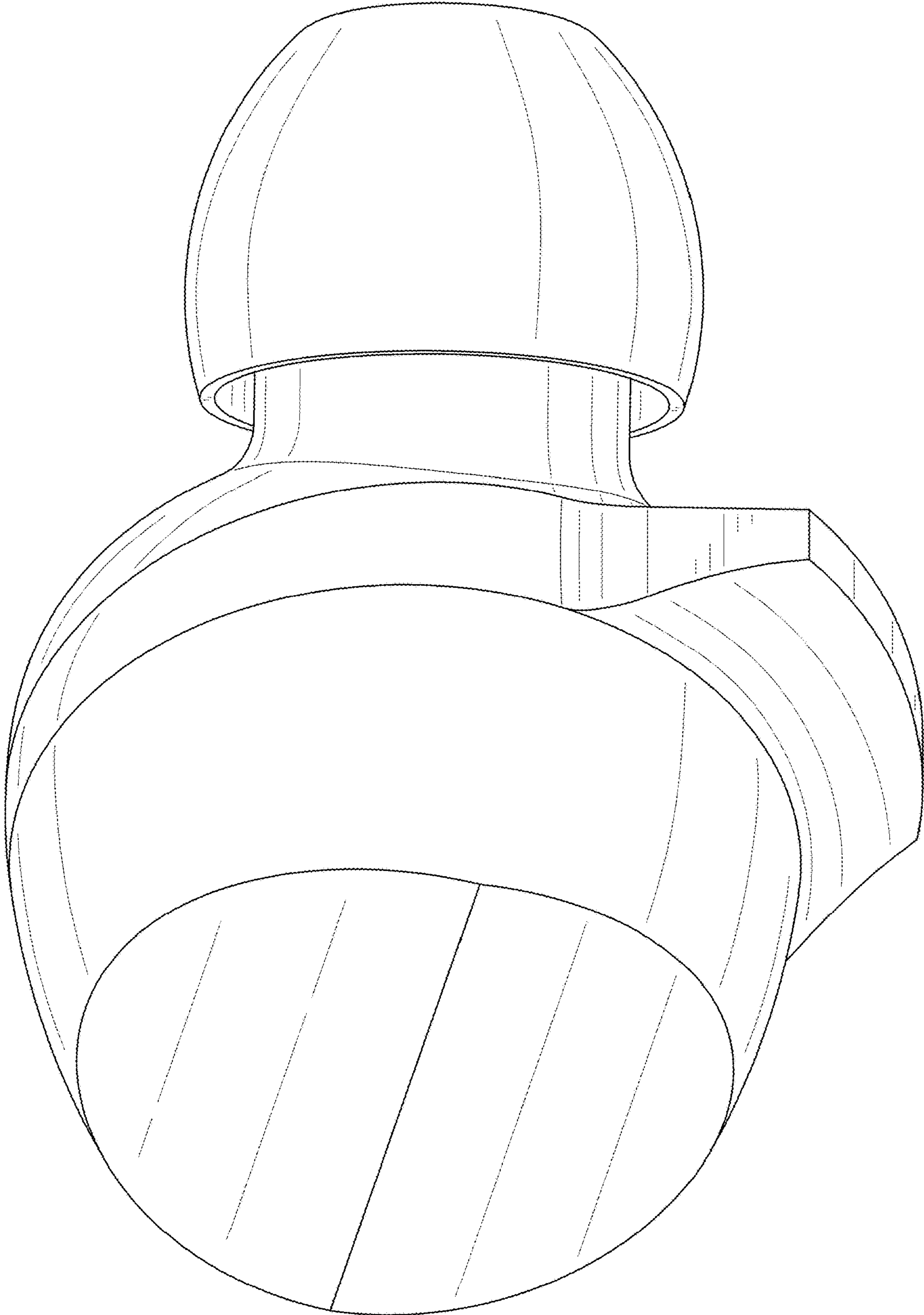


FIG. 2

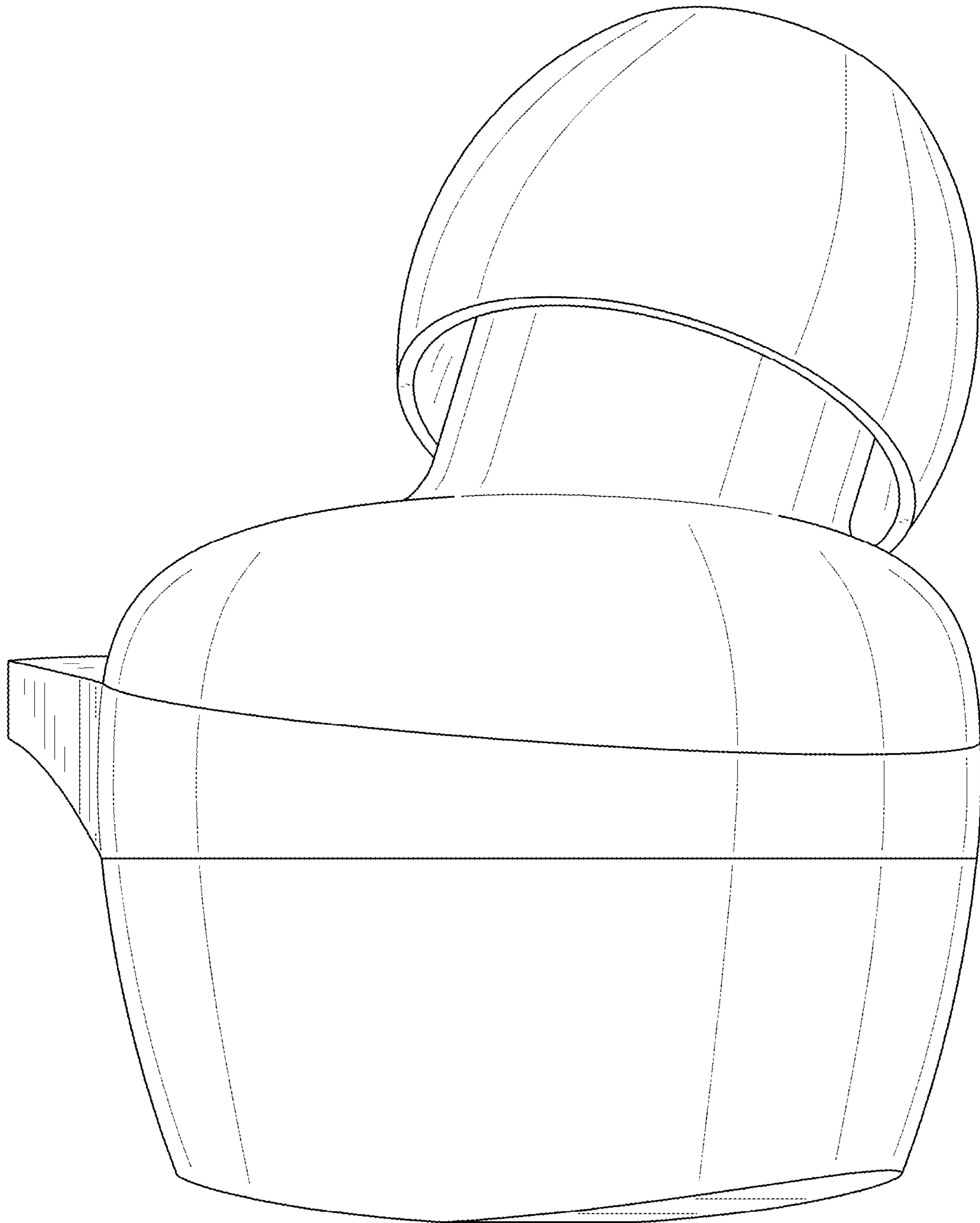


FIG. 3

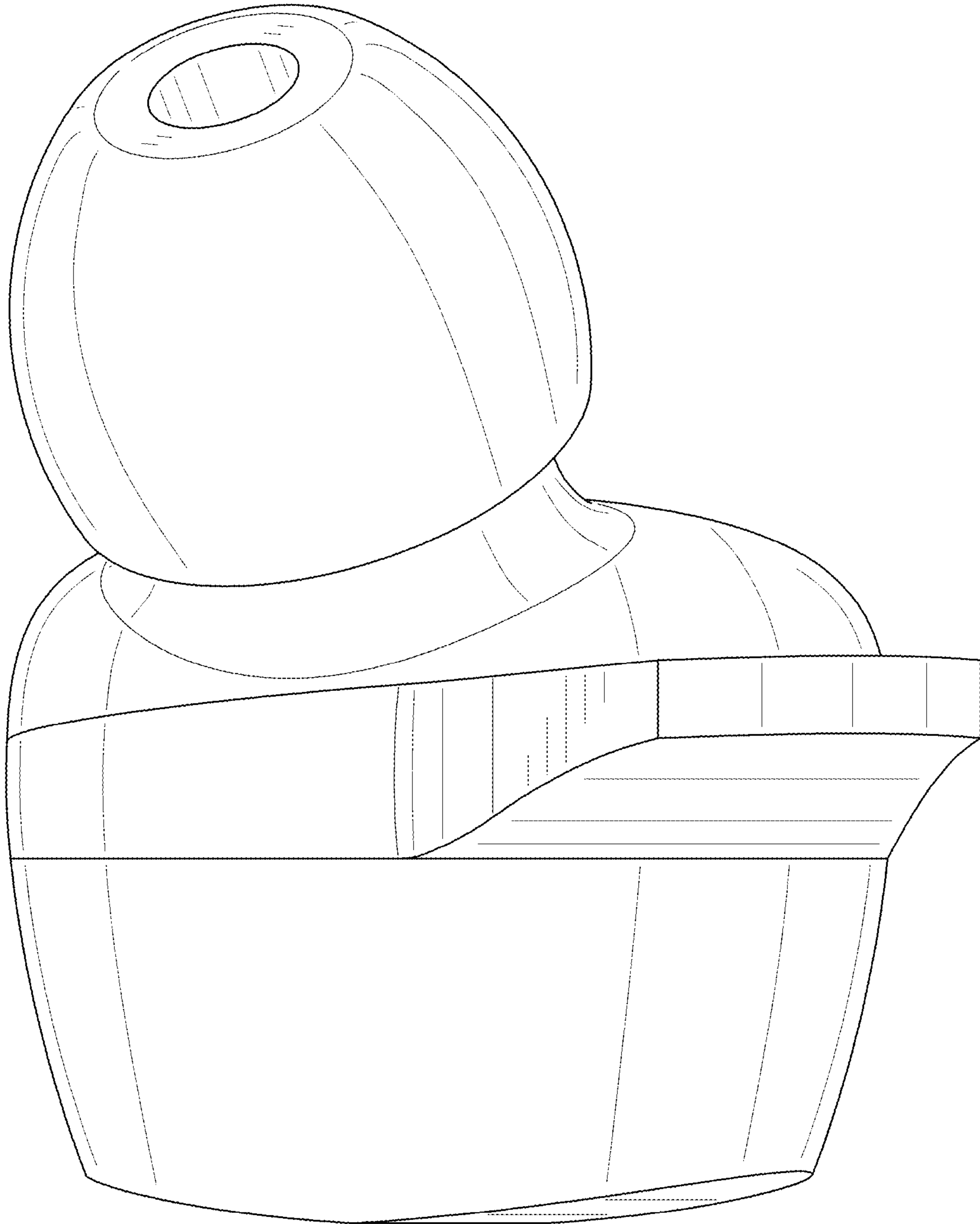


FIG. 4

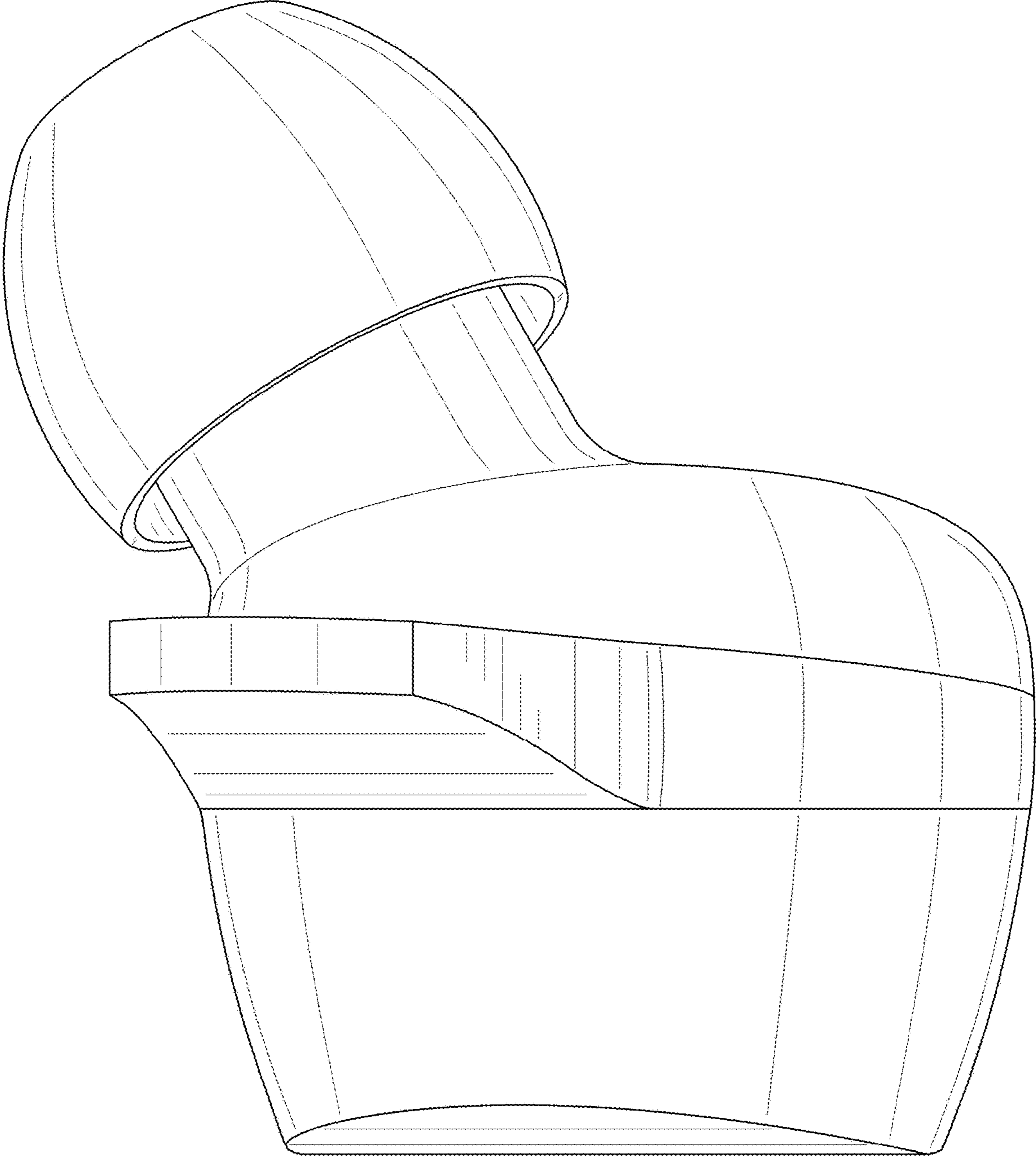


FIG. 5

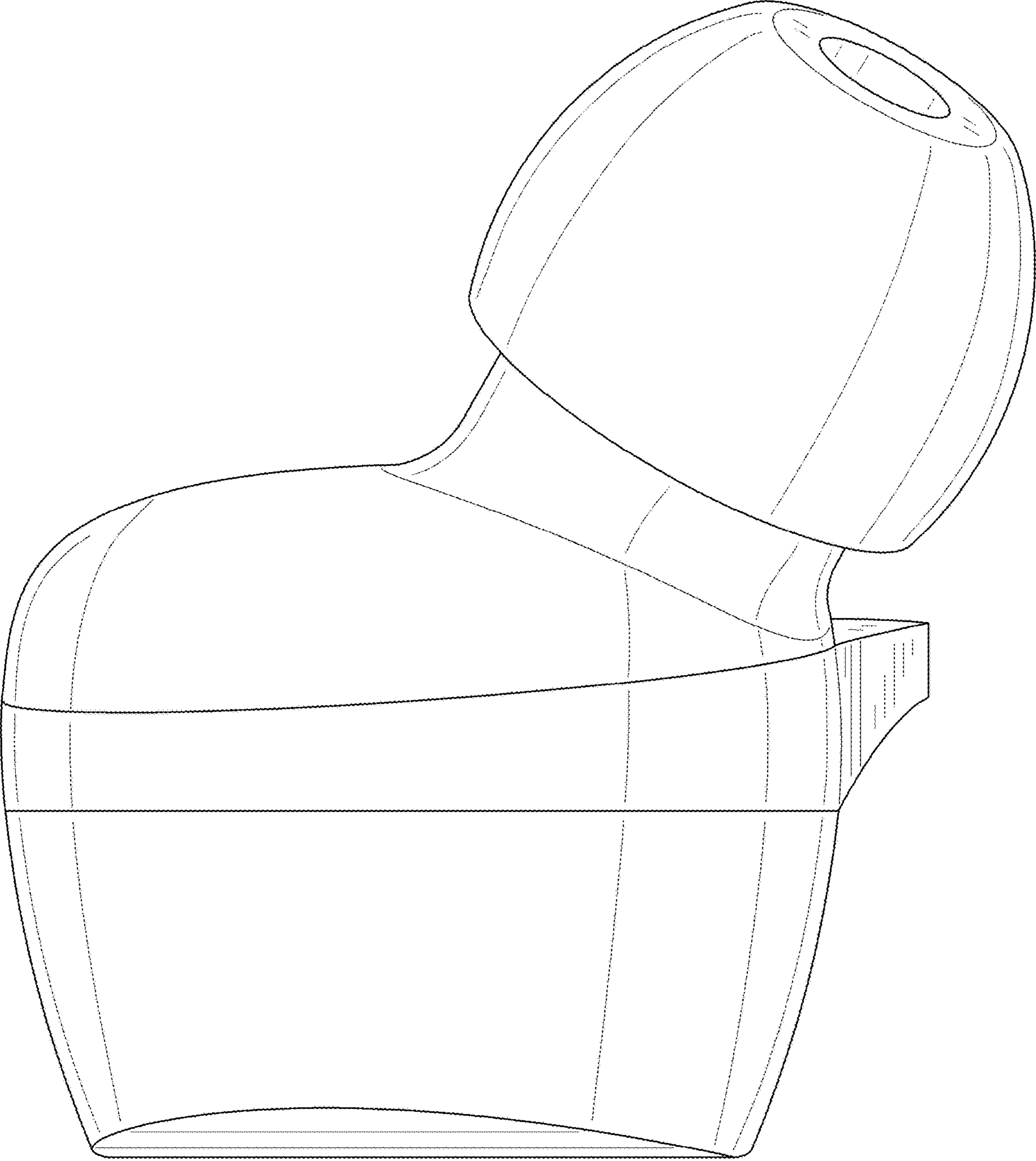


FIG. 6

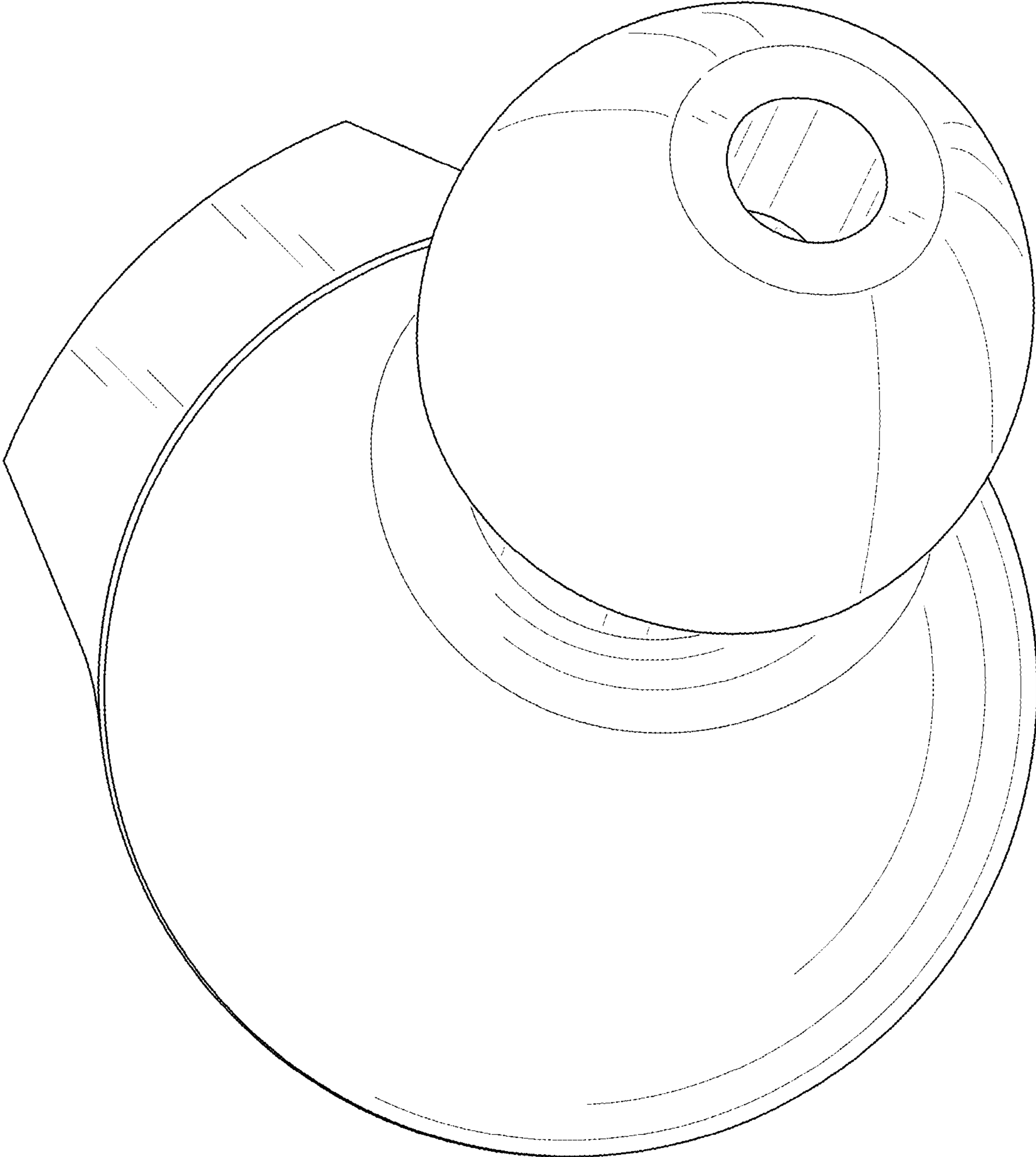


FIG. 7

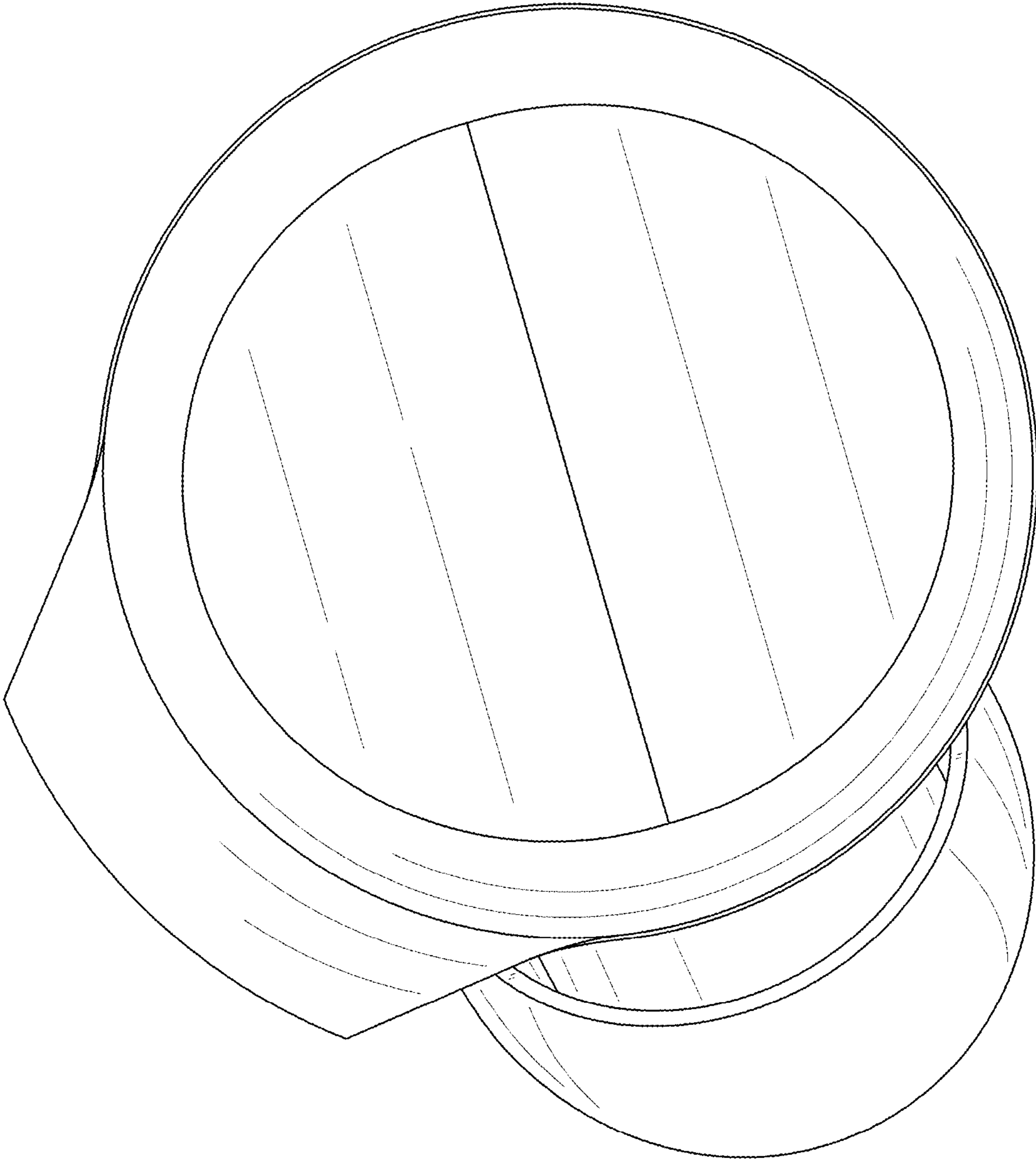


FIG. 8