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(12)

United States Design Patent
Chen

(10)

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(45)

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(54) MICROPHONE

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(58) Field of Classification Search USPC D14/228, 225–227, 229, 496, 497, 172, D14/217; D13/110; D21/483; 381/355–356, 174 CPC H04R 25/00; H04R 19/04; H04R 11/04; H04R 1/08; H04R 9/08; H04R 19/02; H04R 3/00; H04R 1/02; H04R 7/12 See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

2,081,622 A * 5/1937 Foster H04R 1/08 381/361

2,920,140 A * 1/1960 Morgan H04R 19/04 381/113

D190,864 S * 7/1961 Deschamps D14/228

3,007,012 A * 10/1961 Olson H04R 19/04 381/174

3,201,530 A * 8/1965 Levy H04R 1/08 381/91

D218,315 S * 8/1970 Rusch D14/228

D220,108 S * 3/1971 van de Poel D14/228

D239,290 S * 3/1976 Saito D14/225

4,340,787 A * 7/1982 Gorike H04R 9/047 381/179

4,344,184 A * 8/1982 Edwards H04B 1/04 343/702

D277,852 S * 3/1985 Watson D14/228

(Continued)

FOREIGN PATENT DOCUMENTS

CN 305366555 * 9/2019

CN 307002446 * 12/2021

(Continued)

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(57) CLAIM

An ornamental design for a microphone, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a microphone;

FIG. 2 is a front view of the microphone of FIG. 1 thereof;

FIG. 3 is a rear view of the microphone of FIG. 1 thereof;

FIG. 4 is a left side view of the microphone of FIG. 1 thereof;

FIG. 5 is a right side view of the microphone of FIG. 1 thereof;

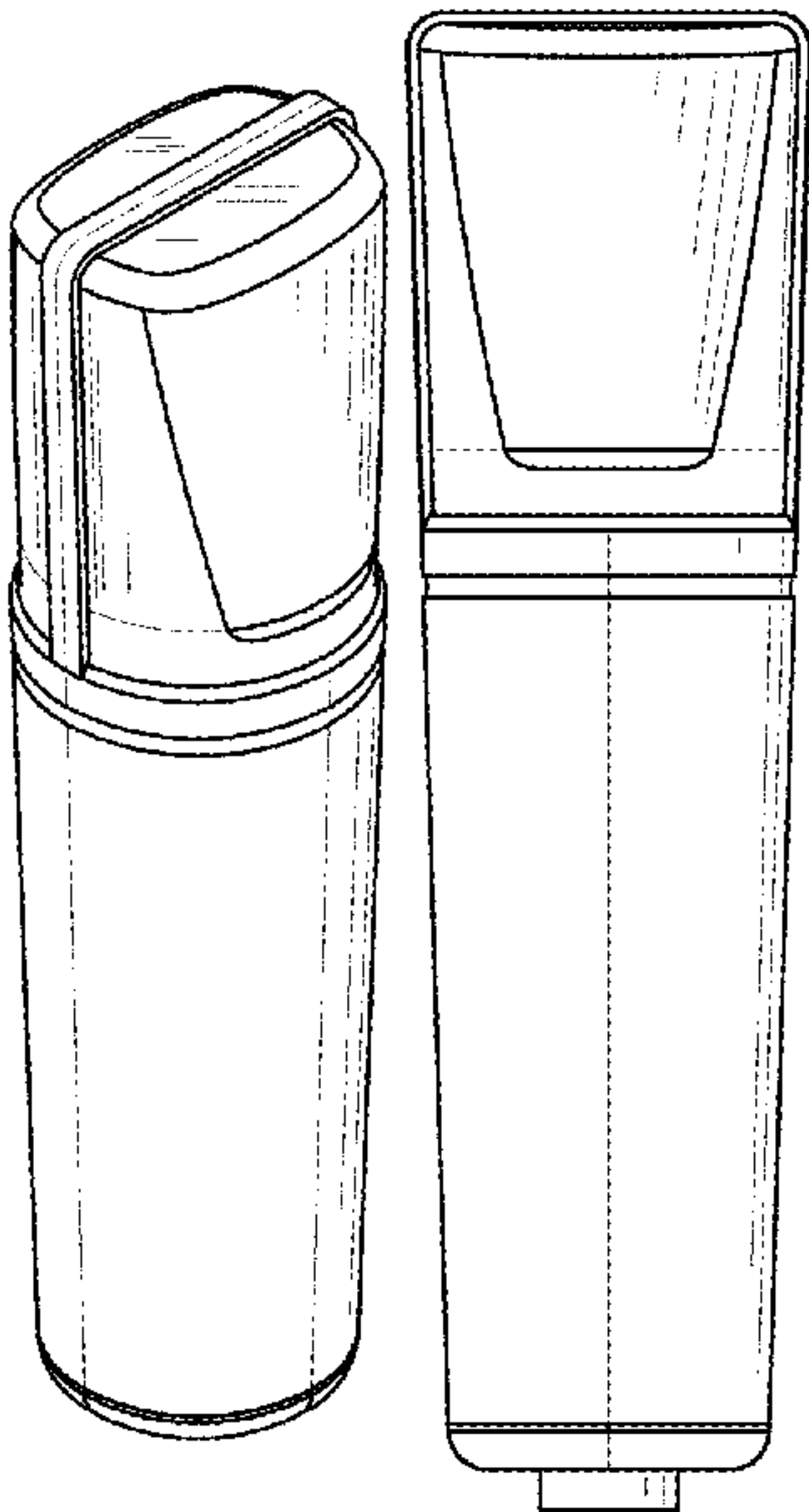
FIG. 6 is a top view of the microphone of FIG. 1 thereof;

and,

FIG. 7 is a bottom view of the microphone of FIG. 1 thereof.

The broken lines depict portions of the microphone that form no part of the claimed design.

1 Claim, 3 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

4,628,525 A * 12/1986 Iwahara H04R 1/086
381/26
D368,093 S * 3/1996 Starck D14/189
D396,860 S * 8/1998 Yasutomi D14/188
D399,830 S * 10/1998 Nagai D13/199
D400,540 S * 11/1998 Cruver, IV D14/228
D415,163 S * 10/1999 Chen D14/228
D439,852 S * 4/2001 Hisatsune D10/104.1
D442,932 S * 5/2001 Koike D14/155
D444,782 S * 7/2001 Chung D14/228
D447,131 S * 8/2001 Hough D14/228
D449,042 S * 10/2001 Chung D14/228
D479,837 S * 9/2003 Sundquist D14/228
D516,546 S * 3/2006 Sobol D14/228
D531,171 S * 10/2006 Gustafson D14/228
D549,209 S * 8/2007 Bauman D14/155
D582,843 S * 12/2008 Linardos D13/103
D586,333 S * 2/2009 Tkachuk D14/223
D594,855 S * 6/2009 Metlen D14/225
D594,856 S * 6/2009 Marshall D14/228
D596,167 S * 7/2009 Fleischer D14/228
D599,786 S * 9/2009 Metlen D14/225
D603,845 S * 11/2009 Tkachuk D14/223
D603,849 S * 11/2009 Durrett D14/228
D604,274 S * 11/2009 Durrett D14/228
D605,637 S * 12/2009 Sank D14/225
D632,653 S * 2/2011 Wikel D13/144
D634,307 S * 3/2011 Arpe D14/228
D664,920 S * 8/2012 Huang D13/107
D686,185 S * 7/2013 Nee D14/155
D707,661 S * 6/2014 Okita D14/228
D708,170 S * 7/2014 Duek D14/225
D737,253 S * 8/2015 Henricksen D14/228
D748,610 S * 2/2016 Smith D14/225
D751,533 S * 3/2016 Godfrey D14/228
D774,494 S * 12/2016 Sunwoo D14/227
9,877,113 B2 * 1/2018 Akino H04R 19/04
D813,207 S * 3/2018 Shultz D14/225
D835,612 S * 12/2018 Tong D14/225
D842,846 S * 3/2019 Mai D14/225
D850,423 S * 6/2019 Chen D14/227

D851,073 S * 6/2019 Tong D14/227
D864,922 S * 10/2019 Mai D14/227
D889,442 S * 7/2020 Bovin D14/228
D895,583 S * 9/2020 Smith D14/227
D898,771 S * 10/2020 You D14/497
D899,407 S * 10/2020 Mai D14/227
D905,023 S * 12/2020 Renwick D14/227
D909,964 S * 2/2021 Sun D13/103
D917,429 S * 4/2021 Xiang D14/228
D917,430 S * 4/2021 Mai D14/228
D917,432 S * 4/2021 Mai D14/227
D918,184 S * 5/2021 Xiang D14/228
D918,186 S * 5/2021 Mai D14/227
D925,505 S * 7/2021 Wang D14/228
D925,506 S * 7/2021 Wang D14/228
D926,734 S * 8/2021 Balac D14/225
D929,973 S * 9/2021 Mai D14/227
D933,640 S * 10/2021 Zhou D14/225
D946,556 S * 3/2022 Mai D14/228
D954,685 S * 6/2022 Mai D14/227
2004/0005070 A1 * 1/2004 Kanda H04R 19/04
381/174
2006/0002576 A1 * 1/2006 Akino H04R 1/021
381/361
2008/0152174 A1 * 6/2008 Marshall H04R 19/04
381/172
2010/0208929 A1 * 8/2010 Heil H04R 11/04
381/355
2012/0237072 A1 * 9/2012 Akino H04R 19/04
381/356
2014/0003628 A1 * 1/2014 Akino H04R 19/04
381/104
2017/0078787 A1 * 3/2017 Akino H04R 19/016
2017/0149121 A1 * 5/2017 Zachara H01Q 1/27
2017/0171670 A1 * 6/2017 Akino H04R 1/04

FOREIGN PATENT DOCUMENTS

CN 307180034 * 3/2022
CN 307211778 * 3/2022
CN 307407680 * 6/2022

* cited by examiner

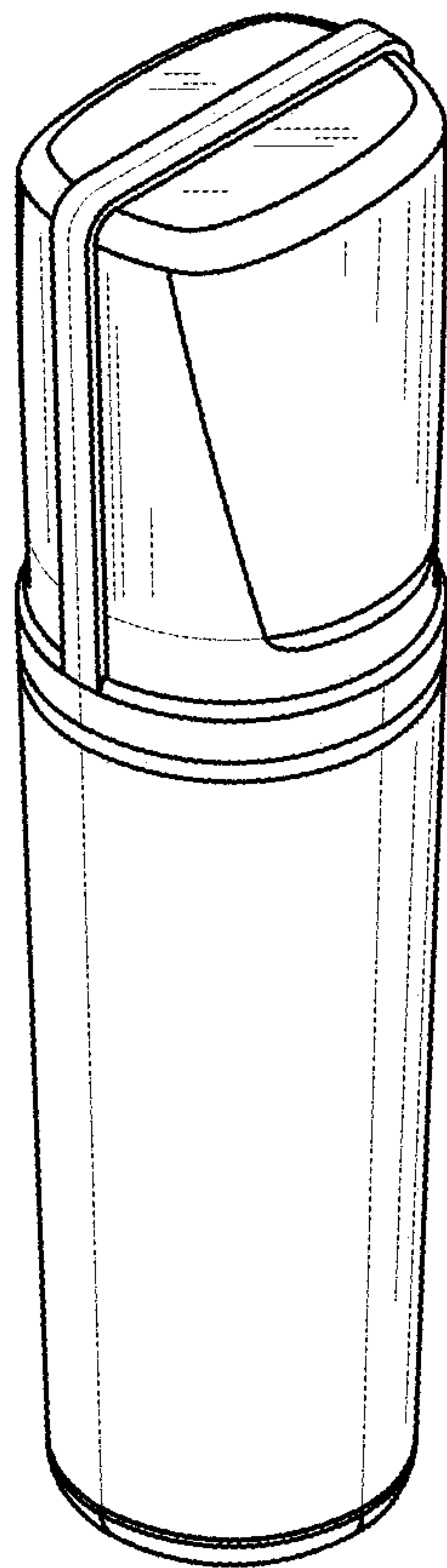


FIG. 1

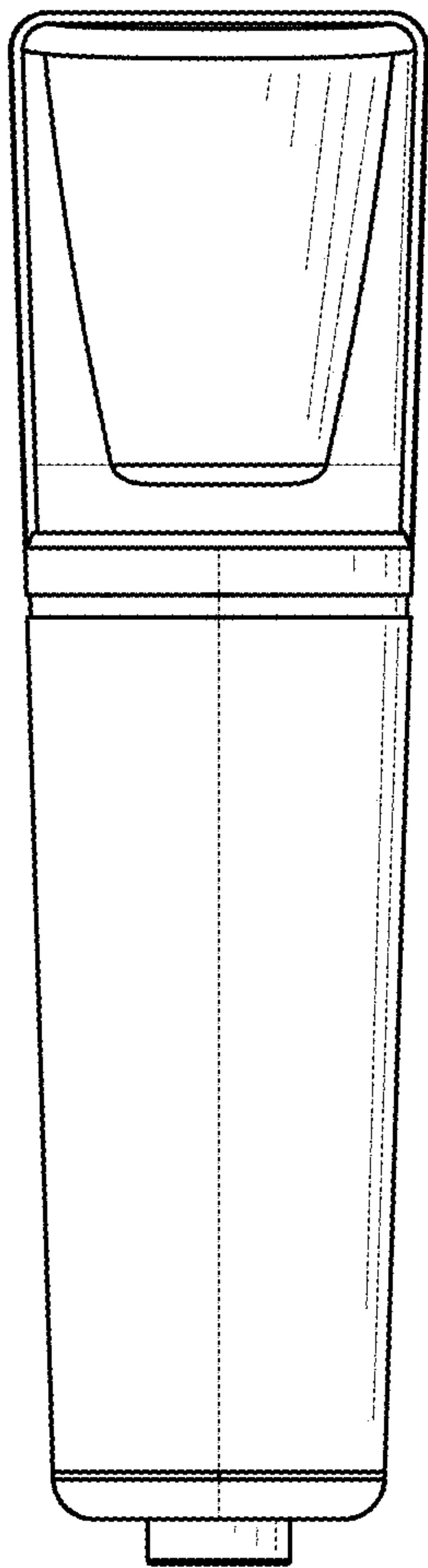


FIG. 2

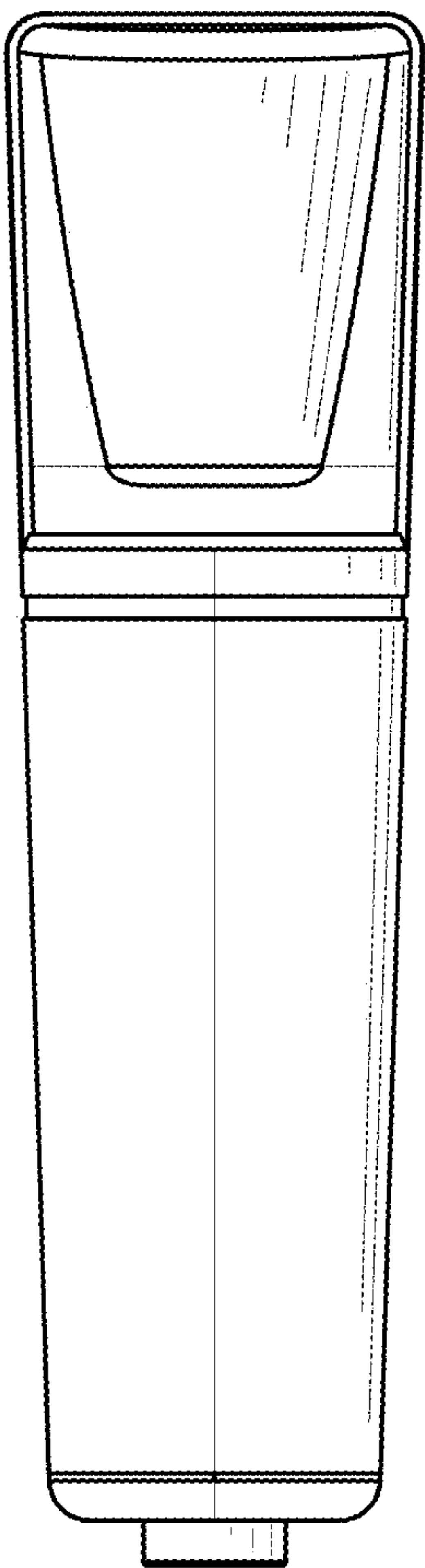


FIG. 3

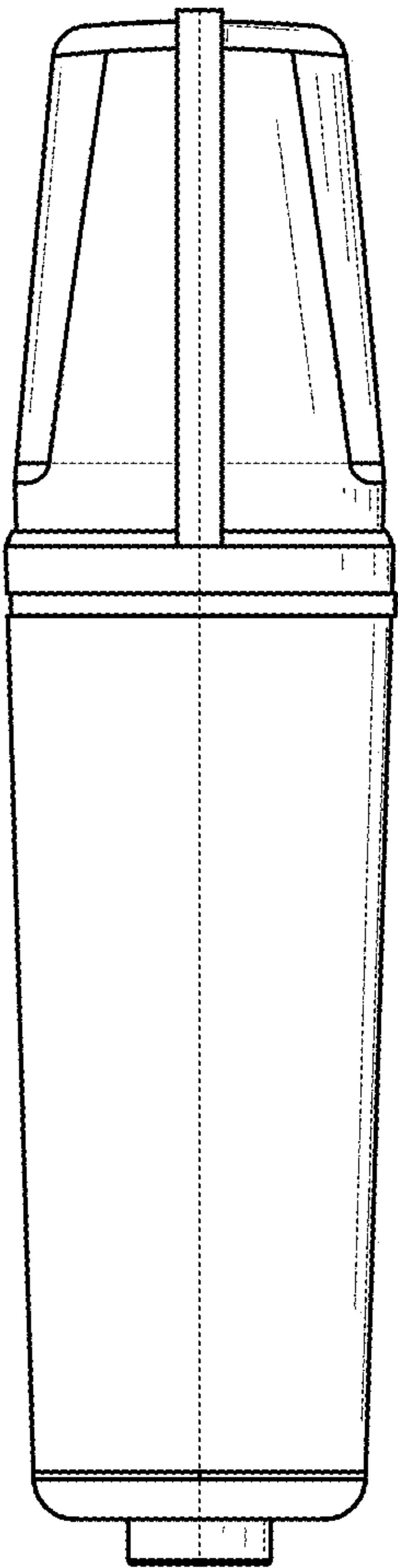


FIG. 4

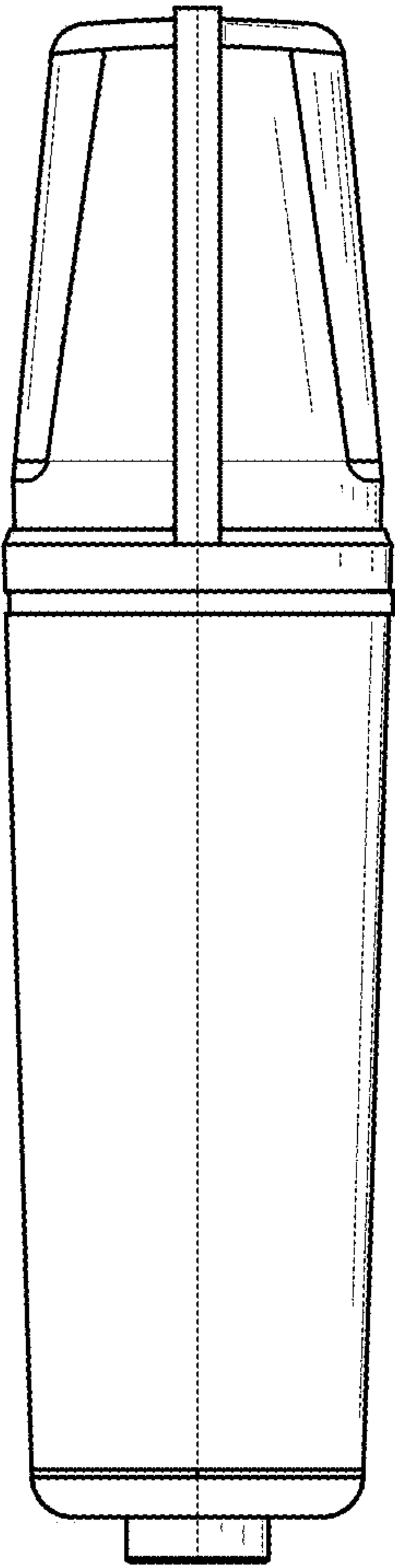


FIG. 5

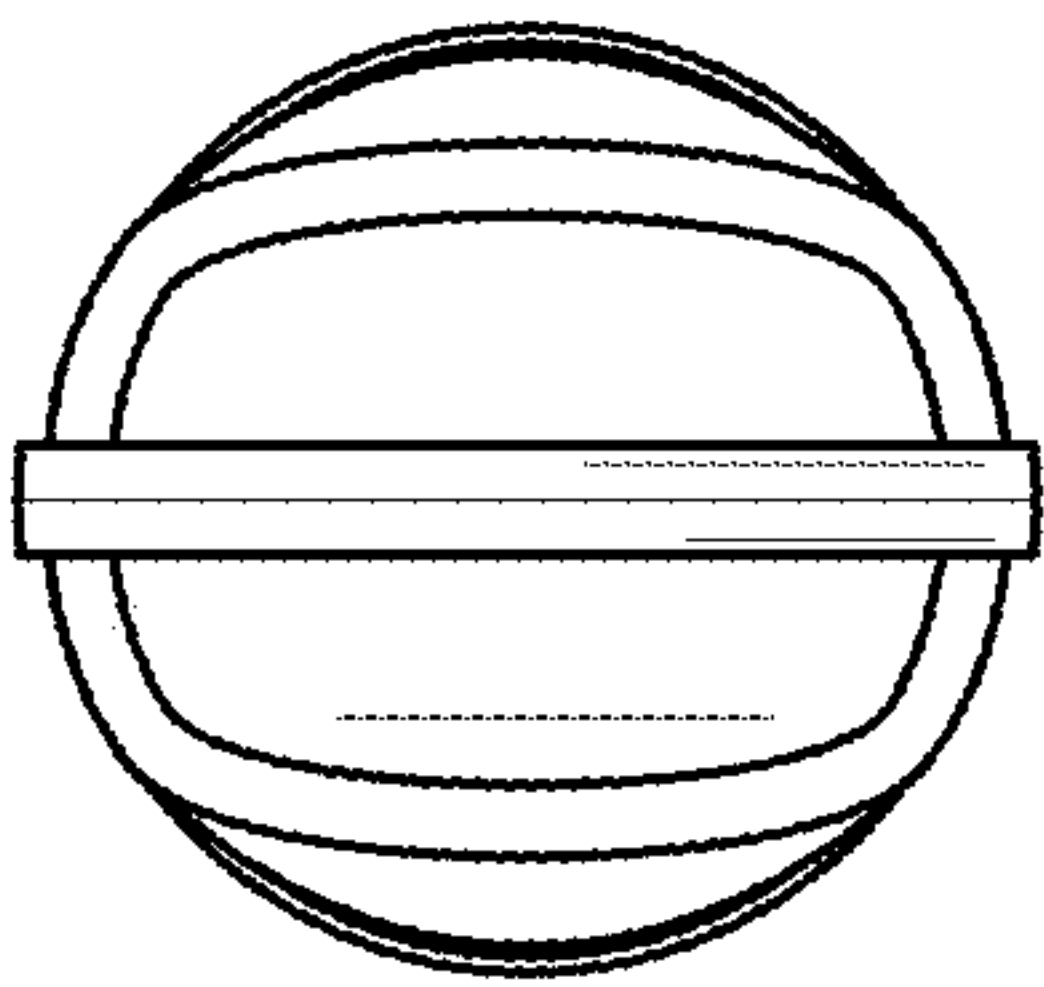


FIG. 6

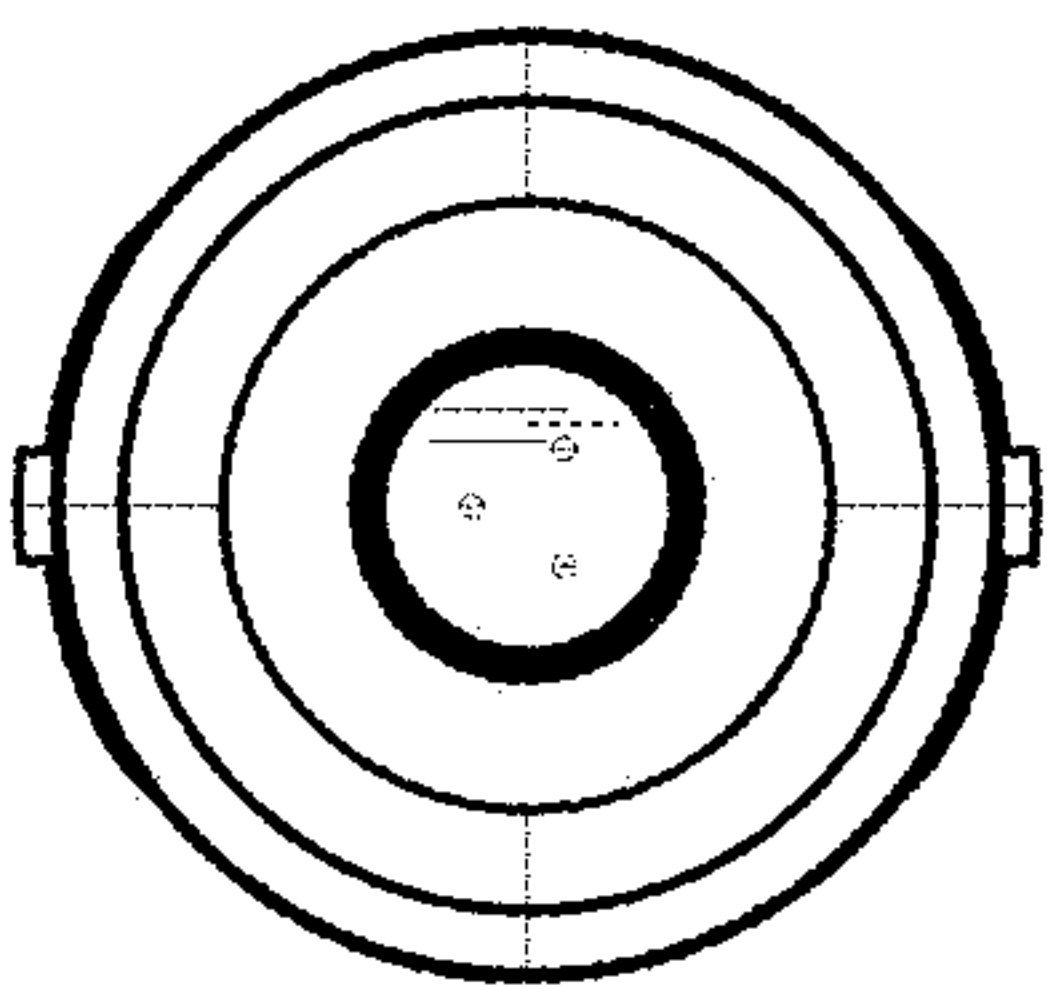


FIG. 7