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

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(54) **AUTOMATIC FOOD FEEDER FOR ANIMALS**

(71) Applicant: **Rensong Zeng**, Shenzhen (CN)

(72) Inventor: **Rensong Zeng**, Shenzhen (CN)

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

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(51) **LOC (12) Cl.** **30-07**

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

USPC **D30/122**

(58) **Field of Classification Search**

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CPC A01K 5/02; A01K 5/0225; A01K 5/0114; A01K 5/025; A01K 5/0266; A01K 5/0275; A01K 5/0283; A01K 5/0291; A01K 5/0258; A01K 5/0142; A01K 5/0233; A01K 29/00; A01K 7/00; G01F 11/24; G01F 23/02; B67D 1/0425; B67D 1/04; B67D 1/00; B67D 1/02; B67D

1/0871; B67D 1/0802; A47J 41/0033; A47J 41/005; A47J 41/0088; A47J 41/0094; A47J 31/04; A47J 31/053; B05B 11/00; B05B 11/0002; B05B 11/0005; B05B 11/001; C02F 1/003; C02F 1/283; C02F 2307/02

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

867,621 A * 10/1907 Tannehill A01K 39/026
119/77
2,533,578 A * 12/1950 Gomersall A47J 31/4457
220/663
3,217,923 A * 11/1965 Price A47J 31/4457
220/663
3,340,851 A * 9/1967 Frank A01K 5/0291
119/51.13

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Primary Examiner — Susan Moon Lee

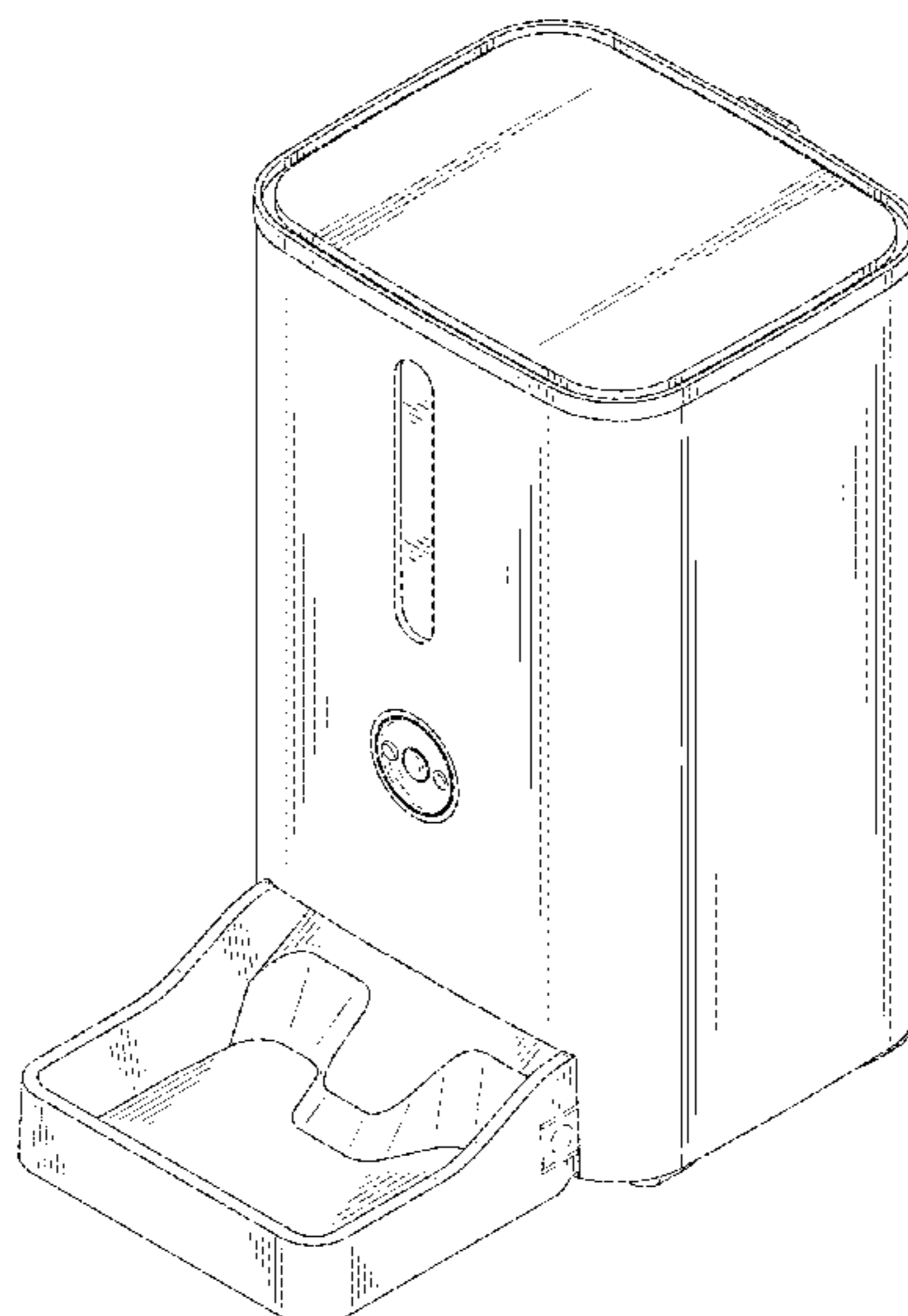
(57) **CLAIM**

The ornamental design for an automatic food feeder for animals, as shown and described.

DESCRIPTION

FIG. 1 is a first perspective view of an automatic food feeder for animals showing my new design; FIG. 2 is a second perspective view thereof; FIG. 3 is a front elevational view thereof; FIG. 4 is a rear elevational view thereof; FIG. 5 is a left elevational view thereof; FIG. 6 is a right elevational view thereof; FIG. 7 is a top plan view thereof; and, FIG. 8 is a bottom plan view thereof. The broken lines in the drawings illustrate portions of the automatic food feeder for animals which form no part of the claimed design.

1 Claim, 8 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

3,720,184 A * 3/1973 Pearce A01K 5/0225
119/51.5
3,754,527 A * 8/1973 Jenkins A01K 5/0291
119/51.14
3,985,104 A * 10/1976 Klemer A01K 5/0291
119/51.12
4,034,715 A * 7/1977 Arner A01K 5/0114
119/51.5
4,079,699 A * 3/1978 Longmore A01K 5/0291
119/51.11
4,279,221 A * 7/1981 Arvizu A01K 5/0291
119/51.11
4,281,624 A * 8/1981 Raines A01K 5/0225
119/52.1
4,485,765 A * 12/1984 Schwartz A01K 5/0291
119/51.13
4,721,063 A * 1/1988 Atchley A01K 5/0114
119/52.1
4,735,171 A * 4/1988 Essex A01K 5/0291
119/51.12
4,840,143 A * 6/1989 Simon A01K 5/0225
119/52.1
5,230,300 A * 7/1993 Mezinsky A01K 5/0291
119/51.11
5,239,943 A * 8/1993 Kim A01K 5/0291
119/51.12
D351,689 S * 10/1994 VanSkiver D30/121
D364,942 S * 12/1995 VanSkiver D30/121
5,809,934 A * 9/1998 Gavet A01K 7/02
119/52.1
5,845,600 A * 12/1998 Mendes A01K 7/02
119/51.5
6,044,795 A * 4/2000 Matsuura A01K 5/02
119/51.02
D431,145 S * 9/2000 Woebcke D7/306
6,142,099 A * 11/2000 Lange, Jr. A01K 5/0142
119/51.5
6,487,987 B1 * 12/2002 Choi A01K 5/0291
119/51.11
6,651,592 B2 * 11/2003 Maddox A01K 5/0114
119/712
6,763,962 B1 * 7/2004 Wang B29C 37/0078
220/62.12
6,863,025 B2 * 3/2005 Ness A01K 7/02
119/51.5
7,146,930 B1 * 12/2006 Ness A01K 7/02
119/77
7,228,816 B2 * 6/2007 Turner A01K 5/0114
119/51.02
7,426,901 B2 * 9/2008 Turner A01K 5/0114
119/51.02
7,895,973 B1 * 3/2011 Whelan A01K 5/025
119/51.02
7,913,647 B1 * 3/2011 Martin A01K 7/04
119/52.1
D637,769 S * 5/2011 Weber D30/121
8,161,911 B2 * 4/2012 Jalbert A01K 1/0107
119/501
8,166,922 B2 * 5/2012 Jalbert A01K 1/0107
119/501

8,578,882 B2 * 11/2013 Araujo A01K 5/02
119/51.01
D699,400 S * 2/2014 Itzhak-Sigron D30/121
8,701,595 B2 * 4/2014 Jin A01K 5/0291
119/51.01
9,137,967 B2 * 9/2015 Lathim A01K 5/0225
9,198,398 B2 * 12/2015 Rogers A01K 7/06
D751,774 S * 3/2016 Allen D30/122
9,345,231 B2 * 5/2016 Jalbert A01K 5/0114
D759,905 S * 6/2016 Stewart D30/122
9,374,981 B2 * 6/2016 Powers A01K 5/0225
9,414,568 B2 * 8/2016 Veness A01K 5/0114
9,750,229 B2 * 9/2017 Stewart A01K 5/0275
D806,958 S * 1/2018 Maloney D30/122
10,098,321 B2 * 10/2018 McKay A01K 7/00
D835,356 S * 12/2018 Xie D30/122
D836,850 S * 12/2018 Li D30/122
D840,115 S * 2/2019 Nieves D30/122
D843,665 S * 3/2019 Zeng D30/122
D844,258 S * 3/2019 Xu D30/122
D846,815 S * 4/2019 Darkwah D30/132
D852,431 S * 6/2019 Ma D30/122
D876,022 S * 2/2020 Hua D30/122
D876,023 S * 2/2020 Eom D30/122
D877,424 S * 3/2020 Xu D30/122
2006/0196433 A1 * 9/2006 Ness A01K 5/0114
119/52.1
2007/0193524 A1 * 8/2007 Turner A01K 5/02
119/51.02
2011/0146580 A1 * 6/2011 Jalbert A01K 5/0142
119/51.02
2013/0092090 A1 * 4/2013 McCallum A01K 1/0356
119/74
2013/0213308 A1 * 8/2013 Koskey, Jr. A01K 7/027
119/74
2013/0298839 A1 * 11/2013 Richards C02F 1/008
119/75
2013/0333622 A1 * 12/2013 Jin A01K 5/0291
119/51.01
2014/0277701 A1 * 9/2014 Martin A01K 5/0114
700/231
2014/0305970 A1 * 10/2014 Musumeci B65D 33/04
222/228
2015/0068463 A1 * 3/2015 Worry A01K 5/0291
119/57.1
2015/0143750 A1 * 5/2015 Jalbert A01K 5/0291
49/25
2015/0145644 A1 * 5/2015 Jalbert A01K 5/0142
340/5.61
2015/0164044 A1 * 6/2015 Powers A01K 5/0114
119/61.5
2016/0286755 A1 * 10/2016 Feng A01K 5/0291
2017/0099804 A1 * 4/2017 Chang H04Q 9/00
2017/0202178 A1 * 7/2017 Gordon A01K 5/0142
2018/0192614 A1 * 7/2018 Chen A01K 29/005
2019/0029221 A1 * 1/2019 Anderton A01K 5/0233
2019/0029222 A1 * 1/2019 Anderton A01K 5/0275
2019/0053463 A1 * 2/2019 Hill A01K 1/035
2019/0059322 A1 * 2/2019 Xu A01K 7/02
2019/0343073 A1 * 11/2019 Oates A01K 5/0291
2020/0037577 A1 * 2/2020 Dzamba A01K 5/0291
2020/0037579 A1 * 2/2020 Eom A01K 5/0142
2020/0100459 A1 * 4/2020 Chen A01K 5/0275
2020/0100460 A1 * 4/2020 Chen A01K 5/0225

* cited by examiner

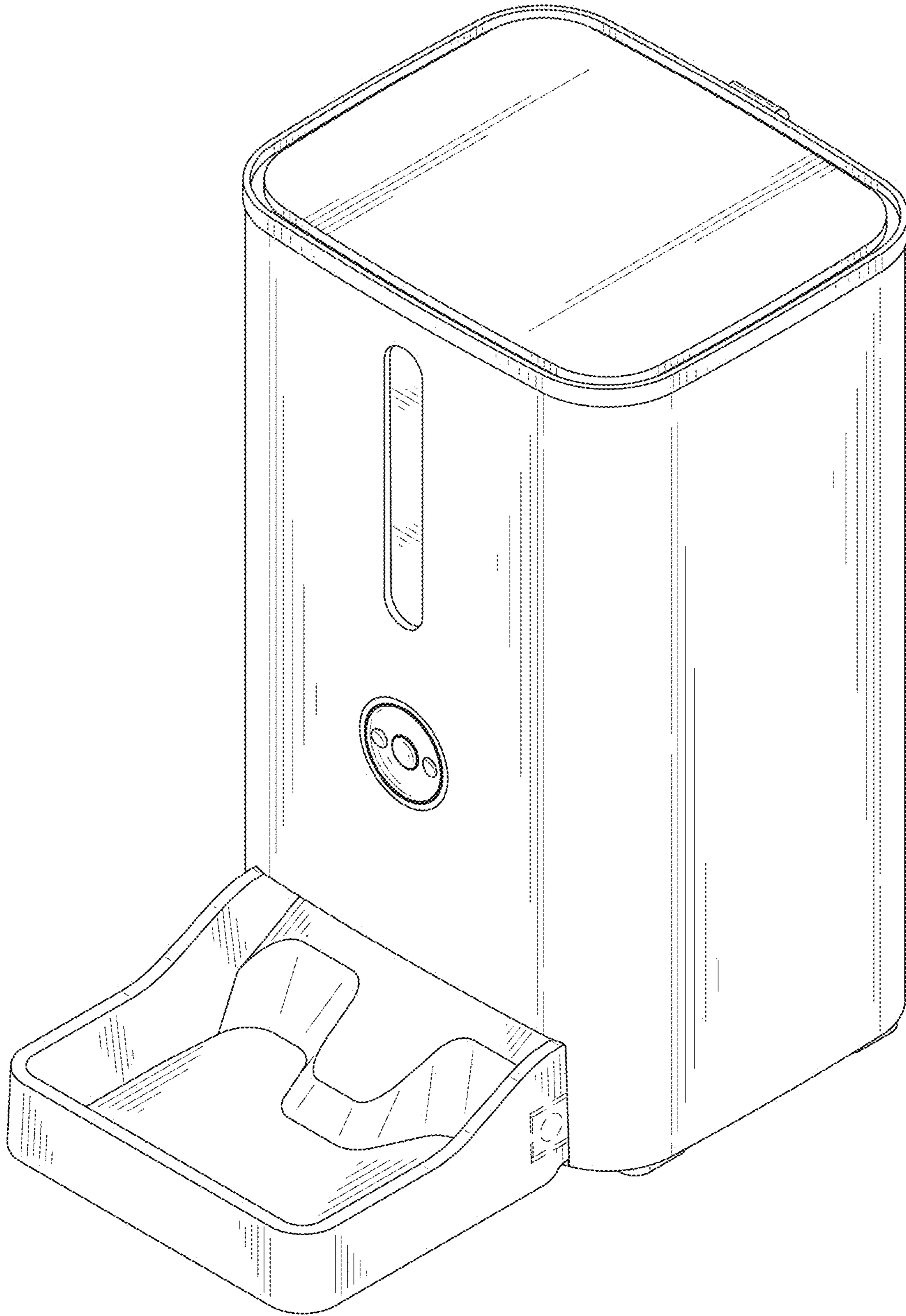


FIG. 1

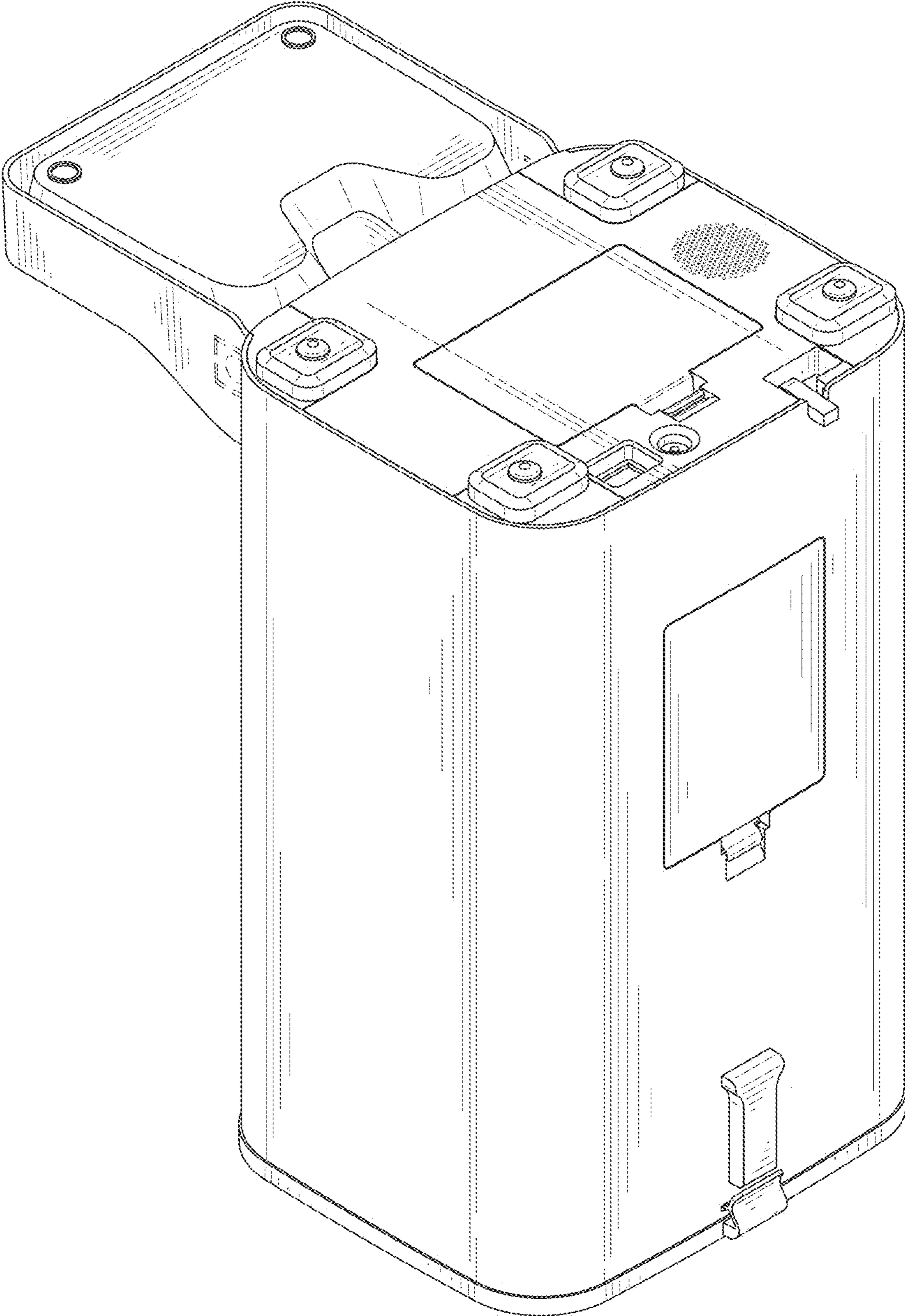


FIG. 2

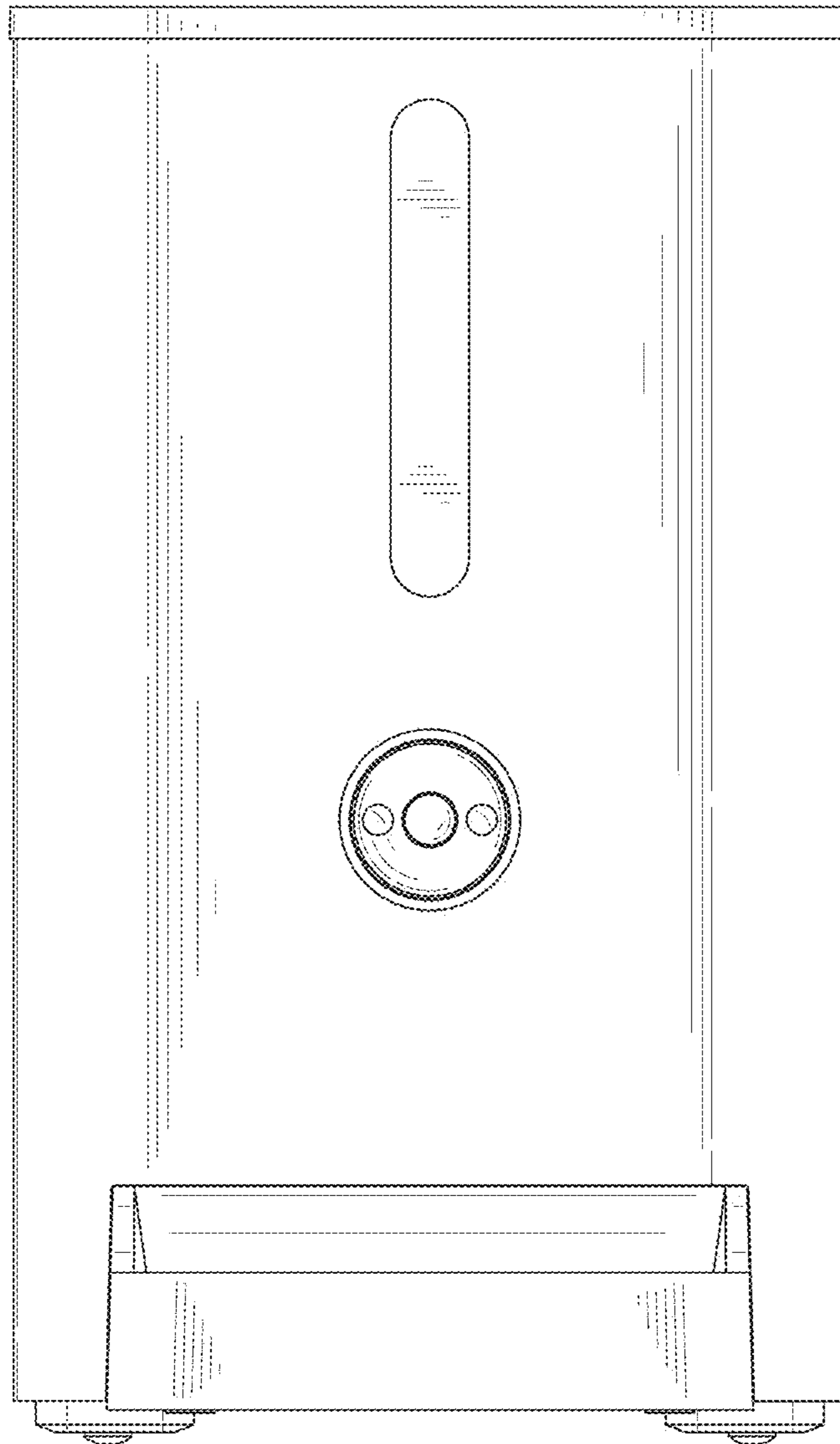


FIG. 3

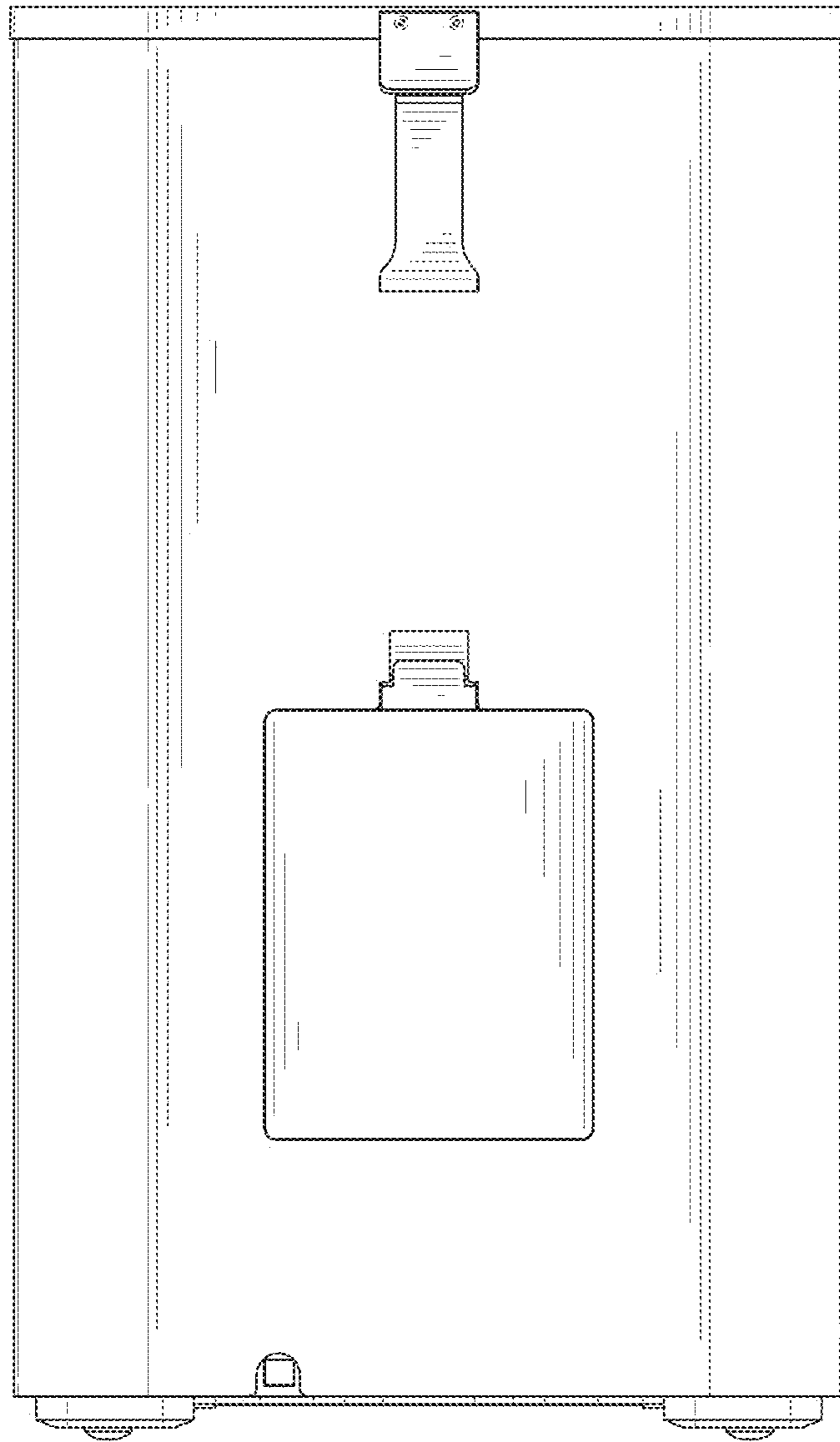


FIG. 4

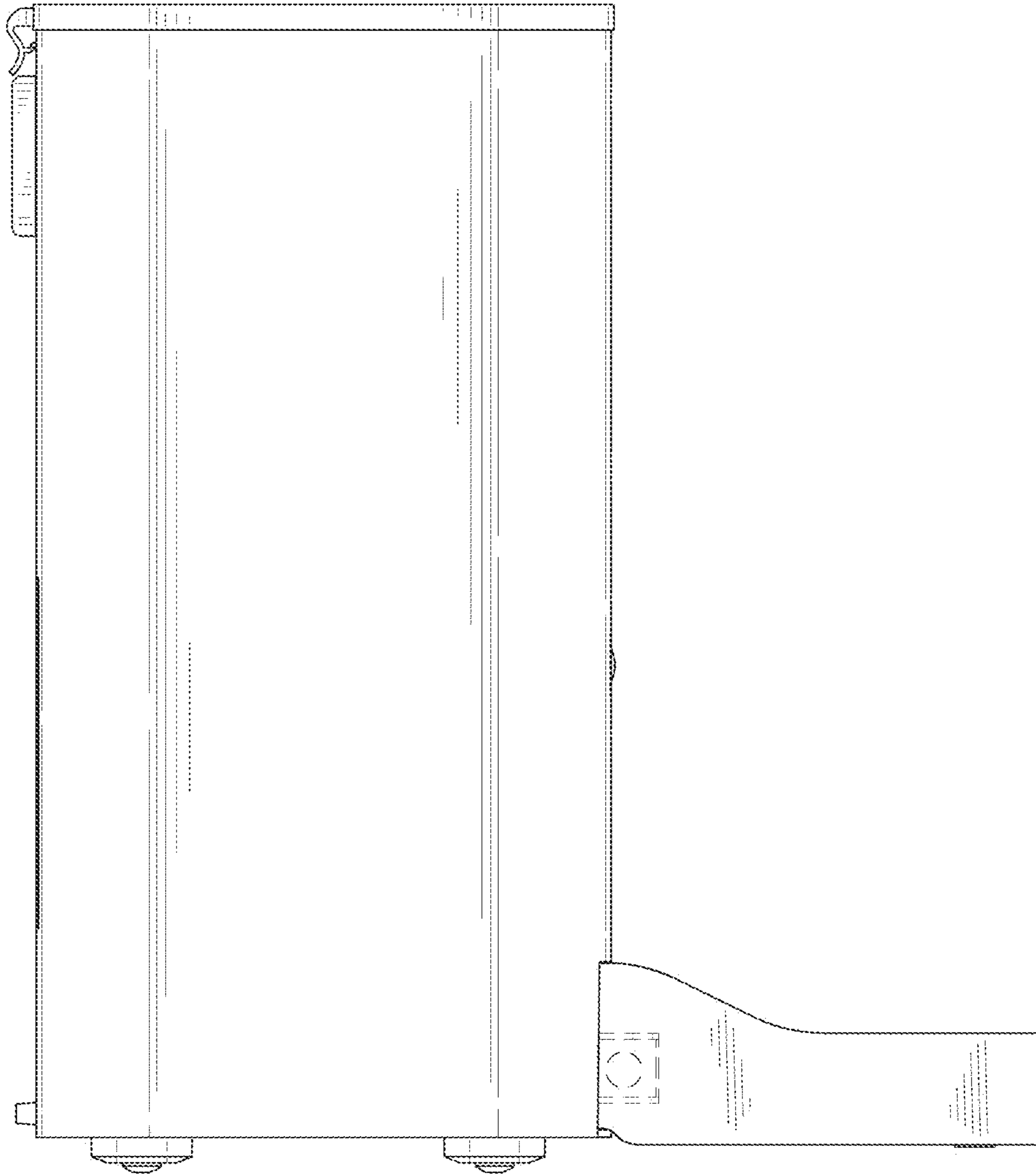


FIG. 5

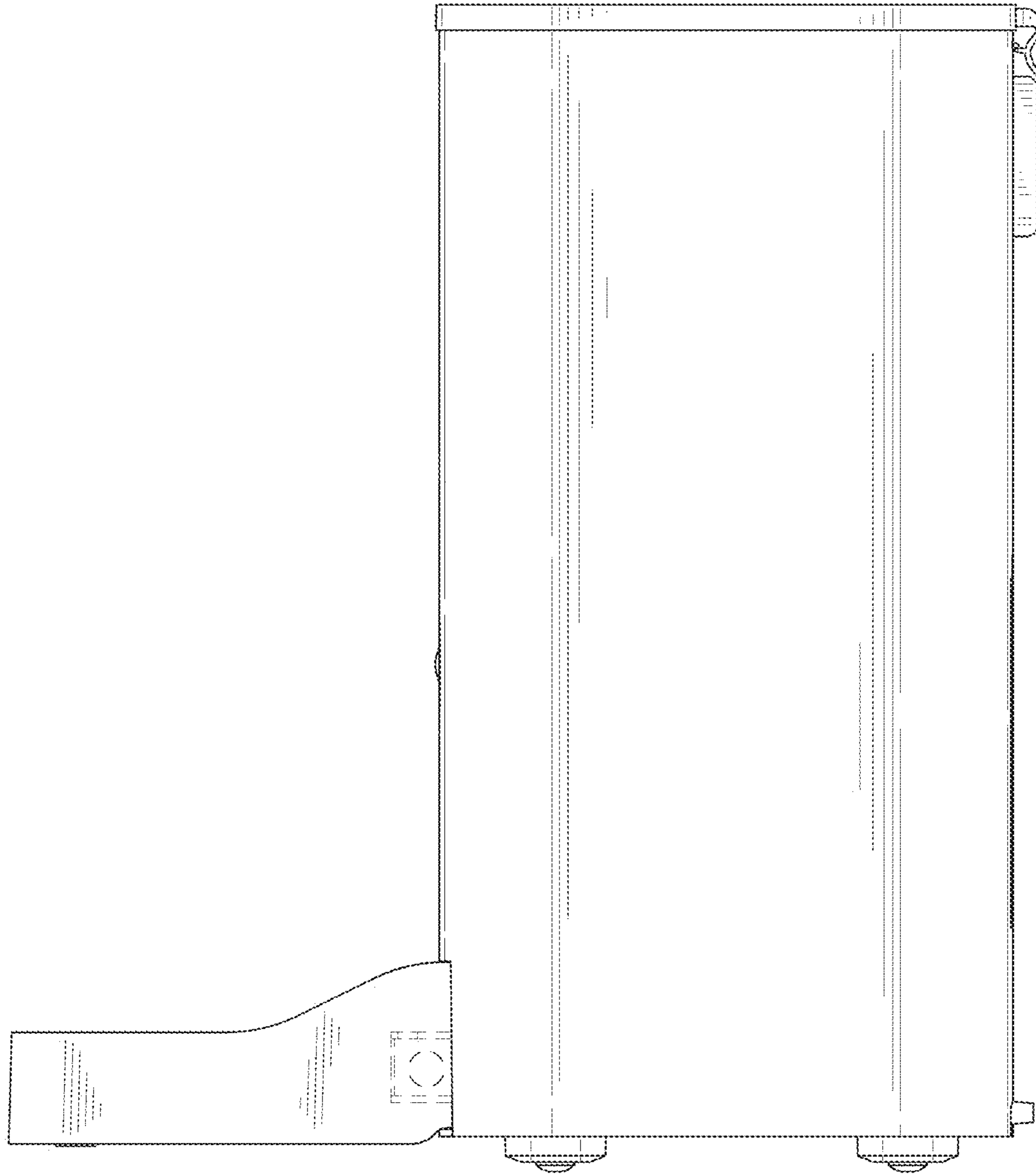


FIG. 6

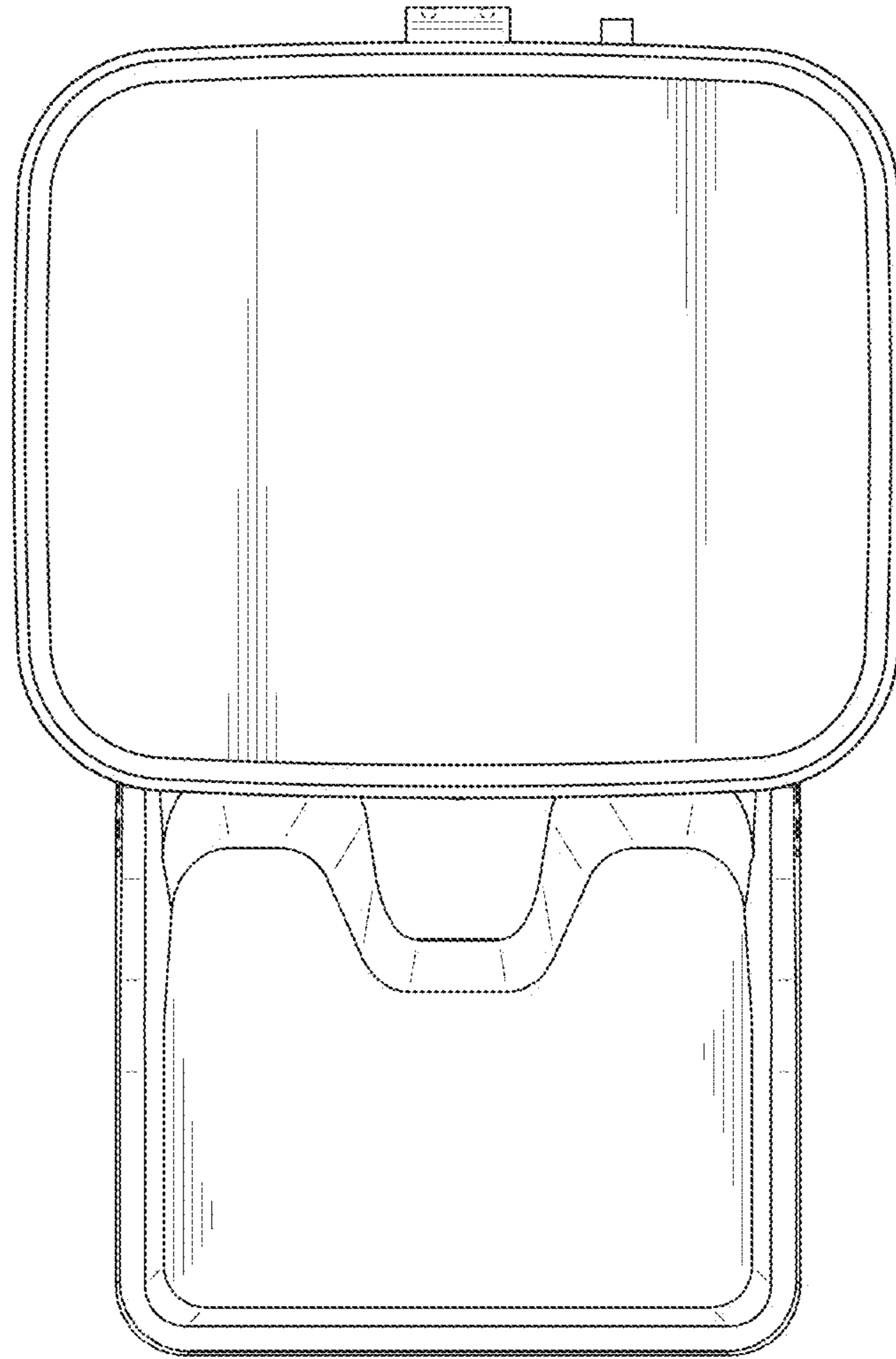


FIG. 7

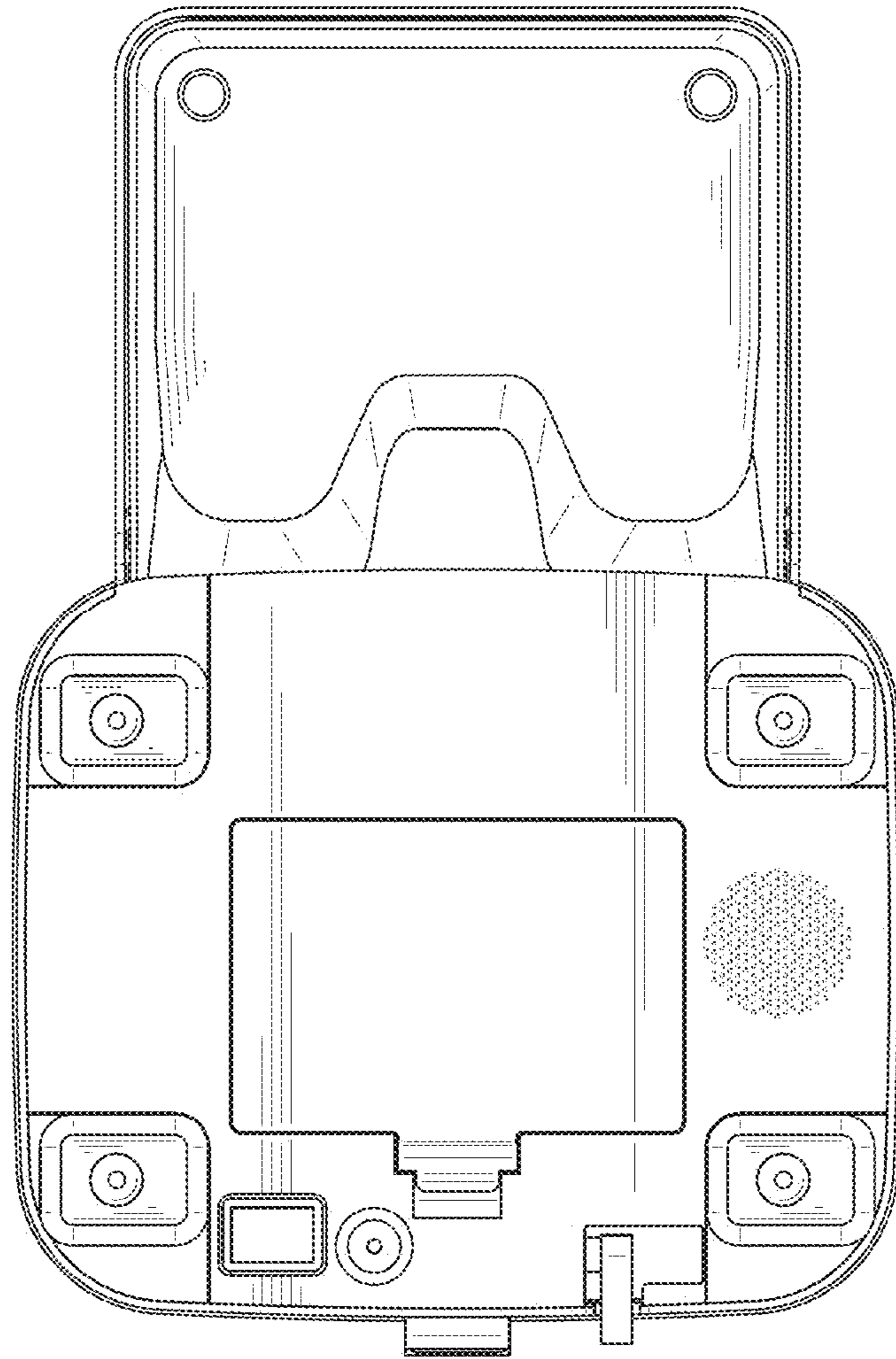


FIG. 8