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(54) VAPORIZER CARTRIDGE

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See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

7,258,868	B2	8/2007	Welch et al.
8,479,747	B2	7/2013	O’Connell
D690,461	S	9/2013	Chen
8,550,068	B2	10/2013	Terry et al.
8,757,147	B2	6/2014	Terry et al.
8,757,169	B2	6/2014	Gysland
8,899,239	B2	12/2014	Hon

8,955,522	B1	2/2015	Bowen et al.
D730,571	S	5/2015	Chen
9,095,175	B2	8/2015	Terry et al.
9,226,525	B2	1/2016	Liu

(Continued)

FOREIGN PATENT DOCUMENTS

WO	WO-2017139595	A1	8/2017
WO	WO-2019119612	A1	6/2019

(Continued)

OTHER PUBLICATIONS

Menthol Pods By: Jull found on line (Jun. 24, 2023) <https://www.electrictobacconist.com/juul-menthol-pods-p4615> (Feb. 8, 2021).*

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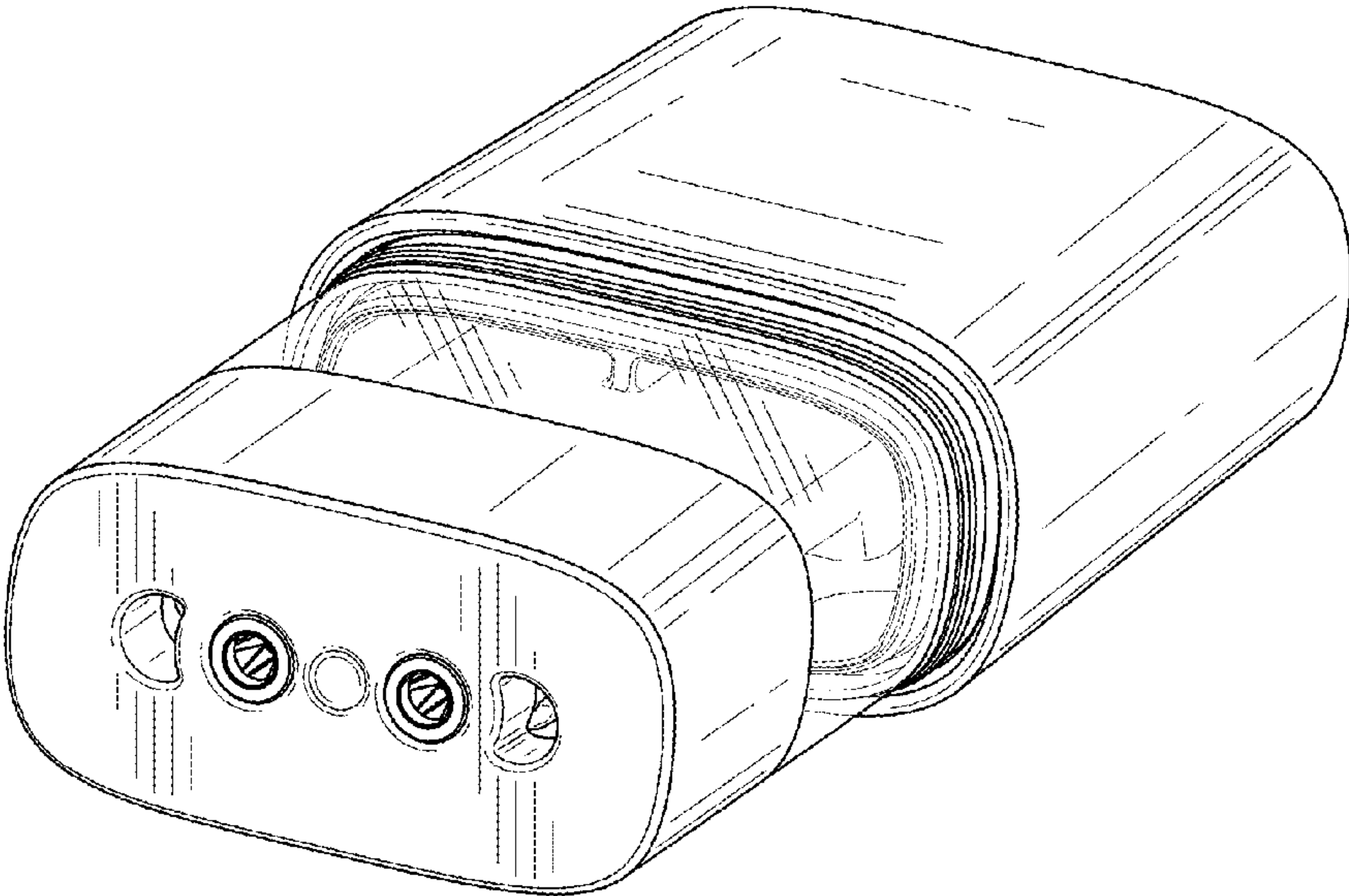
(57) CLAIM

The ornamental design for a vaporizer cartridge, as shown and described.

DESCRIPTION

FIG. 1 is a bottom, front, and right side perspective view of a vaporizer cartridge of our design;
FIG. 2 is a bottom, rear, and left side perspective view thereof;
FIG. 3 is a top, front, and left side perspective view thereof;
FIG. 4 is a front view thereof;
FIG. 5 is a rear view thereof;
FIG. 6 is a right side view thereof;
FIG. 7 is a left side view thereof;
FIG. 8 is a bottom view thereof; and,
FIG. 9 is a top view thereof.
The dashed broken lines illustrate portions of the vaporizer cartridge that form no part of the claimed design.

1 Claim, 6 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D749,261 S	2/2016	Chen	10,117,461 B2	11/2018	Chen
D750,321 S	2/2016	Chen	10,123,568 B1	11/2018	Zhu
9,308,336 B2	4/2016	Newton	10,136,675 B2	11/2018	Li et al.
D769,519 S	10/2016	Chen	10,149,496 B2	12/2018	Chen
9,497,993 B2	11/2016	Vallar	10,172,393 B2	1/2019	Li et al.
9,497,998 B2	11/2016	Chen	10,178,880 B2	1/2019	Dubief
D774,247 S	12/2016	Chen	10,182,599 B2	1/2019	Zhu
9,555,203 B2	1/2017	Terry et al.	10,188,146 B2	1/2019	Chen
D778,831 S	2/2017	Chen	10,188,148 B2	1/2019	Althorpe et al.
9,572,373 B2	2/2017	Chen	10,194,694 B2	2/2019	Davis et al.
9,603,389 B2	3/2017	Chen	10,195,370 B2	2/2019	Chen
9,603,390 B2	3/2017	Li et al.	10,207,914 B2	2/2019	Murison et al.
9,648,909 B2	5/2017	Zhou et al.	D842,536 S *	3/2019	Bowen D27/167
9,655,890 B2	5/2017	Hearn et al.	10,219,546 B2	3/2019	Li et al.
9,668,520 B2	6/2017	Boldrini	D846,796 S	4/2019	Pan
9,675,118 B2	6/2017	Chen	10,264,821 B2	4/2019	Lipowicz
9,693,584 B2	7/2017	Hearn et al.	D849,996 S *	5/2019	Duque D27/194
9,723,870 B2	8/2017	Hearn	10,279,934 B2	5/2019	Christensen et al.
9,743,691 B2	8/2017	Minskoff et al.	10,285,436 B2	5/2019	Branton
9,750,282 B2	9/2017	Liu	10,285,444 B2	5/2019	Clemens et al.
9,770,054 B2	9/2017	Chen	10,285,445 B2	5/2019	Metz et al.
D800,381 S	10/2017	Chen	10,287,155 B2	5/2019	Murison et al.
9,795,167 B2	10/2017	Chen	10,292,430 B2	5/2019	Zhang et al.
9,795,169 B1	10/2017	Zhu	10,300,225 B2	5/2019	Terry et al.
9,795,170 B1	10/2017	Zhu	10,301,077 B1	5/2019	Finlow-Bates
9,814,264 B2	11/2017	Coelho Belo Fernandes De Carvalho	10,306,930 B2	6/2019	Qiu
9,826,781 B1	11/2017	Zhu	10,314,340 B2	6/2019	Davis et al.
9,848,646 B2	12/2017	Liu	10,321,712 B2	6/2019	Lipowicz
9,861,129 B2	1/2018	Liu et al.	10,321,722 B2	6/2019	Qiu
9,861,134 B2	1/2018	Zhu	D853,635 S	7/2019	Chen
9,861,135 B2	1/2018	Chen	10,349,682 B2	7/2019	Hon
9,877,517 B2	1/2018	Liu	10,349,684 B2	7/2019	Ampolini et al.
9,883,698 B2	2/2018	Zhu	10,357,058 B1	7/2019	Contreras
9,883,699 B2	2/2018	Zhu	10,357,064 B1	7/2019	Kleizo et al.
9,888,722 B2	2/2018	Chen	10,357,623 B2	7/2019	Fang
9,888,727 B2	2/2018	Li et al.	10,368,582 B2	8/2019	Lord
9,901,119 B2	2/2018	Liu	10,383,368 B2	8/2019	Larson
9,907,341 B1	3/2018	Zhu	10,390,566 B2	8/2019	Hu et al.
9,927,452 B2	3/2018	Watson et al.	D858,868 S *	9/2019	Bowen D27/162
9,936,731 B2	4/2018	Hopps	D861,239 S	9/2019	Chen
9,943,108 B2	4/2018	Lord	10,398,174 B2	9/2019	Phillips et al.
9,949,511 B2	4/2018	Liu	10,398,178 B2	9/2019	Scatterday
D817,544 S	5/2018	Chen	10,407,196 B2	9/2019	Slurink
9,955,726 B2	5/2018	Brinkley et al.	10,412,996 B2	9/2019	Bright et al.
9,961,940 B2	5/2018	Anderson, Jr. et al.	D861,549 S	10/2019	Lai
9,974,335 B2	5/2018	Lord	D861,594 S	10/2019	Lai
9,980,513 B2	5/2018	Chen	D861,978 S	10/2019	Lai
9,980,517 B2	5/2018	Zhu	D863,673 S	10/2019	Lai
9,980,520 B2	5/2018	Hearn et al.	D865,279 S *	10/2019	Pino D27/172
9,993,028 B2	6/2018	Li et al.	10,433,583 B2	10/2019	Wang et al.
9,999,245 B1	6/2018	Zhu	10,440,989 B2	10/2019	Gardella et al.
9,999,248 B2	6/2018	Liu	10,440,991 B2	10/2019	Levitz et al.
9,999,255 B2	6/2018	Li et al.	10,463,078 B2	11/2019	Davis et al.
10,004,270 B2	6/2018	Li et al.	10,470,499 B2	11/2019	Clemens et al.
10,004,271 B2	6/2018	Li et al.	10,477,895 B2	11/2019	Wang et al.
10,004,272 B2	6/2018	Li et al.	D869,086 S	12/2019	Pan
10,004,274 B2	6/2018	Li et al.	D870,034 S	12/2019	Lai
D823,534 S	7/2018	Chen	D870,368 S *	12/2019	Leon Duque D27/162
D823,536 S	7/2018	Lai	D870,961 S *	12/2019	Levinson D27/162
10,015,989 B2	7/2018	Davis et al.	10,492,539 B2	12/2019	Chen
10,034,494 B2	7/2018	Ampolini et al.	10,506,831 B2	12/2019	Shen et al.
D825,834 S	8/2018	Chen	10,506,834 B2	12/2019	Liu
D826,471 S	8/2018	Wang	10,512,284 B2	12/2019	Wang et al.
D827,195 S	8/2018	Chen	10,512,738 B2	12/2019	Fornarelli
10,039,326 B2	8/2018	Wu	10,524,504 B2	1/2020	Li et al.
10,051,889 B2	8/2018	Chen	10,525,217 B2	1/2020	Morris
10,058,126 B2	8/2018	Chen	10,542,780 B2	1/2020	Chung
D828,953 S	9/2018	Chen	D874,721 S	2/2020	Lai
10,070,668 B2	9/2018	Li et al.	D875,302 S	2/2020	Pan
10,080,387 B2	9/2018	Phillips et al.	D875,303 S	2/2020	Pan
D829,648 S	10/2018	Chen	D875,305 S	2/2020	Lai
D829,982 S	10/2018	Wang	D875,306 S	2/2020	Pan
D829,983 S	10/2018	Wang	10,555,557 B2	2/2020	Liu
10,111,469 B2	10/2018	Zhu	D877,976 S	3/2020	Ding et al.
			D877,977 S	3/2020	Ding et al.
			D879,708 S	3/2020	Chen
			D880,053 S	3/2020	Han
			D880,060 S	3/2020	Chen
			D881,460 S	4/2020	Han

(56)

References Cited

U.S. PATENT DOCUMENTS

D882,065 S	4/2020	Wang	2017/0245549 A1	8/2017	Nedelman
10,624,391 B2	4/2020	Chen	2017/0258143 A1	9/2017	Lederer
10,631,578 B2	4/2020	Chen	2017/0280773 A1	10/2017	Force
D883,563 S	5/2020	Pan	2017/0280778 A1	10/2017	Force
D883,567 S	5/2020	Liu	2017/0283154 A1	10/2017	Karles et al.
D883,780 S	5/2020	Wu	2017/0295848 A1	10/2017	LaMothe
D884,266 S	5/2020	Wang	2017/0347709 A1	12/2017	Laakso et al.
D884,267 S	5/2020	Wang	2017/0367405 A1	12/2017	Zhu
D885,652 S	5/2020	Ding et al.	2018/0007741 A1	1/2018	Metz et al.
D885,654 S	5/2020	Ding	2018/0014575 A1	1/2018	Fursa
D885,655 S	5/2020	Ding	2018/0016040 A1	1/2018	Ewing et al.
D885,657 S	5/2020	Lai	2018/0020722 A1	1/2018	Davis et al.
D887,632 S *	6/2020	Duque D27/167	2018/0020723 A1	1/2018	Davis et al.
10,721,971 B2	7/2020	Barbaric et al.	2018/0029866 A1	2/2018	Scott et al.
D893,096 S *	8/2020	Leon Duque D27/194	2018/0042301 A1	2/2018	Rostami
D898,278 S	10/2020	Carlberg et al.	2018/0070632 A1	3/2018	Sur et al.
D902,480 S *	11/2020	Chen D27/194	2018/0070637 A1	3/2018	Deng et al.
10,822,123 B2	11/2020	Barbaric et al.	2018/0077967 A1	3/2018	Hatton et al.
D912,309 S *	3/2021	Bowen D27/162	2018/0116288 A1	5/2018	Hu et al.
D919,881 S	5/2021	Carlberg et al.	2018/0140018 A1	5/2018	Hu et al.
D921,284 S *	6/2021	Belisle D27/162	2018/0153208 A1	6/2018	Schaller et al.
D923,864 S *	6/2021	Carlberg D27/162	2018/0153218 A1	6/2018	Verleur et al.
D927,052 S *	8/2021	Qiu D27/162	2018/0160737 A1	6/2018	Verleur et al.
D927,061 S *	8/2021	Leon Duque D27/167	2018/0170588 A1	6/2018	Boldrini
D928,394 S *	8/2021	Jones D27/162	2018/0184714 A1	7/2018	Liu
D930,236 S *	9/2021	Fornarelli D27/167	2018/0184717 A1	7/2018	Jiang et al.
D932,094 S *	9/2021	Laidlaw D27/162	2018/0192705 A1	7/2018	Lord
D933,286 S *	10/2021	Weiss D27/162	2018/0235281 A1	8/2018	Wang et al.
D945,699 S *	3/2022	Hermiz D27/162	2018/0235284 A1	8/2018	Lord
D952,244 S *	5/2022	Carlberg D27/167	2018/0279672 A1	10/2018	Davis et al.
D957,044 S *	7/2022	Kim D27/162	2018/0279684 A1	10/2018	Hon
D957,726 S *	7/2022	Liu D27/162	2018/0280636 A1	10/2018	Jiang et al.
D966,604 S *	10/2022	Ou D27/162	2018/0289067 A1	10/2018	Courbat et al.
D970,803 S *	11/2022	Carlberg D27/162	2018/0292250 A1	10/2018	Colotte et al.
D973,268 S *	12/2022	Ding D27/167	2018/0296777 A1	10/2018	Terry et al.
D979,132 S *	2/2023	Leon Duque D27/194	2018/0303158 A1	10/2018	Chen
2009/0126745 A1	5/2009	Hon	2018/0310615 A1	11/2018	Zhu
2012/0111347 A1	5/2012	Hon	2018/0310626 A1	11/2018	Zhou et al.
2012/0325228 A1	12/2012	Williams	2018/0310628 A1	11/2018	Qiu
2013/0056012 A1	3/2013	Hearn et al.	2018/0317550 A1	11/2018	Zhu
2013/0087160 A1	4/2013	Gherghe	2018/0317559 A1	11/2018	Qiu
2013/0220316 A1	8/2013	Oglesby et al.	2018/0325171 A1	11/2018	Zhu
2014/0109921 A1	4/2014	Chen	2018/0332896 A1	11/2018	Wang et al.
2014/0123989 A1	5/2014	LaMothe	2018/0338536 A1	11/2018	Hu et al.
2014/0209109 A1	7/2014	Larson	2018/0360113 A1	12/2018	Reinitz et al.
2014/0246016 A1	9/2014	Terry et al.	2018/0360119 A1	12/2018	Kuwa et al.
2014/0283854 A1	9/2014	Magne	2018/0360120 A1	12/2018	Huang et al.
2014/0283946 A1	9/2014	Kribs	2018/0368474 A1	12/2018	Bache et al.
2014/0360517 A1	12/2014	Taggart et al.	2019/0000143 A1	1/2019	Zhu
2015/0090281 A1	4/2015	Chen	2019/0006866 A1	1/2019	Zhu
2015/0157055 A1	6/2015	Lord	2019/0022345 A1	1/2019	Kotch
2015/0272218 A1	10/2015	Chen	2019/0031407 A1	1/2019	Biel et al.
2015/0314085 A1	11/2015	Banoun	2019/0038553 A1	2/2019	Engqvist
2015/0359261 A1	12/2015	Li et al.	2019/0046743 A1	2/2019	Engqvist
2016/0157522 A1	6/2016	Zhu	2019/0046745 A1	2/2019	Nettenstrom et al.
2016/0192710 A1	7/2016	Liu	2019/0090544 A1	3/2019	Minskoff et al.
2016/0198770 A1	7/2016	Alarcon	2019/0098932 A1	4/2019	Fan et al.
2016/0221707 A1	8/2016	Xu et al.	2019/0099562 A1	4/2019	Nettenstrom et al.
2016/0278163 A1	9/2016	Chen	2019/0124991 A1	5/2019	Davis et al.
2016/0309785 A1	10/2016	Holtz	2019/0133186 A1	5/2019	Fraser
2016/0332754 A1	11/2016	Brown et al.	2019/0142066 A1	5/2019	Gill et al.
2016/0345630 A1	12/2016	Mironov et al.	2019/0166912 A1	6/2019	Ding et al.
2017/0013880 A1	1/2017	O'Brien et al.	2019/0166913 A1	6/2019	Trzeciecki
2017/0048930 A1	2/2017	Marsh et al.	2019/0174826 A1	6/2019	Zhu
2017/0049153 A1	2/2017	Guo et al.	2019/0174832 A1	6/2019	Lin et al.
2017/0056368 A1	3/2017	Hearn et al.	2019/0208811 A1	7/2019	Biel et al.
2017/0086496 A1	3/2017	Cameron	2019/0216132 A1	7/2019	Phan et al.
2017/0094999 A1	4/2017	Hearn et al.	2019/0223502 A1	7/2019	Qiu et al.
2017/0105448 A1	4/2017	Scarpulla	2019/0223504 A1	7/2019	Chen
2017/0105455 A1	4/2017	Qiu	2019/0223513 A1	7/2019	Clemens et al.
2017/0135398 A1	5/2017	Scott et al.	2019/0246692 A1	8/2019	Li et al.
2017/0188636 A1	7/2017	Li et al.	2019/0246698 A1	8/2019	Nakano et al.
2017/0208870 A1	7/2017	Liu	2019/0246701 A1	8/2019	Nakano et al.
2017/0231274 A1	8/2017	Davis et al.	2019/0246703 A1	8/2019	Nakano et al.
2017/0241857 A1	8/2017	Hearn et al.	2019/0274356 A1	9/2019	Deng et al.
			2019/0276167 A1	9/2019	Brown et al.
			2019/0281892 A1	9/2019	Hejazi et al.
			2019/0289920 A1	9/2019	Lord
			2019/0313696 A1	10/2019	Ding et al.

(56)

References Cited

U.S. PATENT DOCUMENTS

2019/0321570 A1 10/2019 Rubin
2019/0321572 A1 10/2019 Stalder et al.
2019/0335809 A1 11/2019 Han
2019/0335812 A1 11/2019 Ampolini et al.
2019/0335815 A1 11/2019 Scatterday
2019/0350256 A1 11/2019 Hejazi
2019/0357595 A1 11/2019 Liu
2019/0364967 A1 12/2019 Wu
2019/0364968 A1 12/2019 Fu et al.
2019/0364972 A1 12/2019 Lin et al.
2019/0369127 A1 12/2019 Fu et al.
2019/0373949 A1 12/2019 Pan
2019/0373959 A1 12/2019 Nakano et al.
2019/0387797 A1 12/2019 Christensen et al.
2019/0387801 A1 12/2019 Takeuchi et al.
2020/0000151 A1 1/2020 Fraser et al.
2020/0008475 A1 1/2020 Lai et al.
2020/0037663 A1 2/2020 Chau et al.
2020/0046024 A1 2/2020 Chen

2020/0054077 A1 2/2020 Chen
2020/0068951 A1 3/2020 Li et al.
2020/0077710 A1 3/2020 Volodarsky et al.
2020/0085108 A1 3/2020 Li et al.
2020/0086067 A1 3/2020 Li et al.
2020/0093172 A1 3/2020 Liu
2020/0107583 A1 4/2020 Wu et al.
2020/0107584 A1 4/2020 Li et al.
2020/0113246 A1 4/2020 Barbaric et al.
2020/0120983 A1 4/2020 Chen
2021/0219608 A1 7/2021 Carlberg et al.

FOREIGN PATENT DOCUMENTS

WO WO-2019127811 A1 7/2019
WO WO-2019179004 A1 9/2019
WO WO-DM/206455 10/2019
WO WO-2019232086 A1 12/2019
WO WO-2020030033 A1 2/2020
WO WO-2020093746 A1 5/2020

* cited by examiner

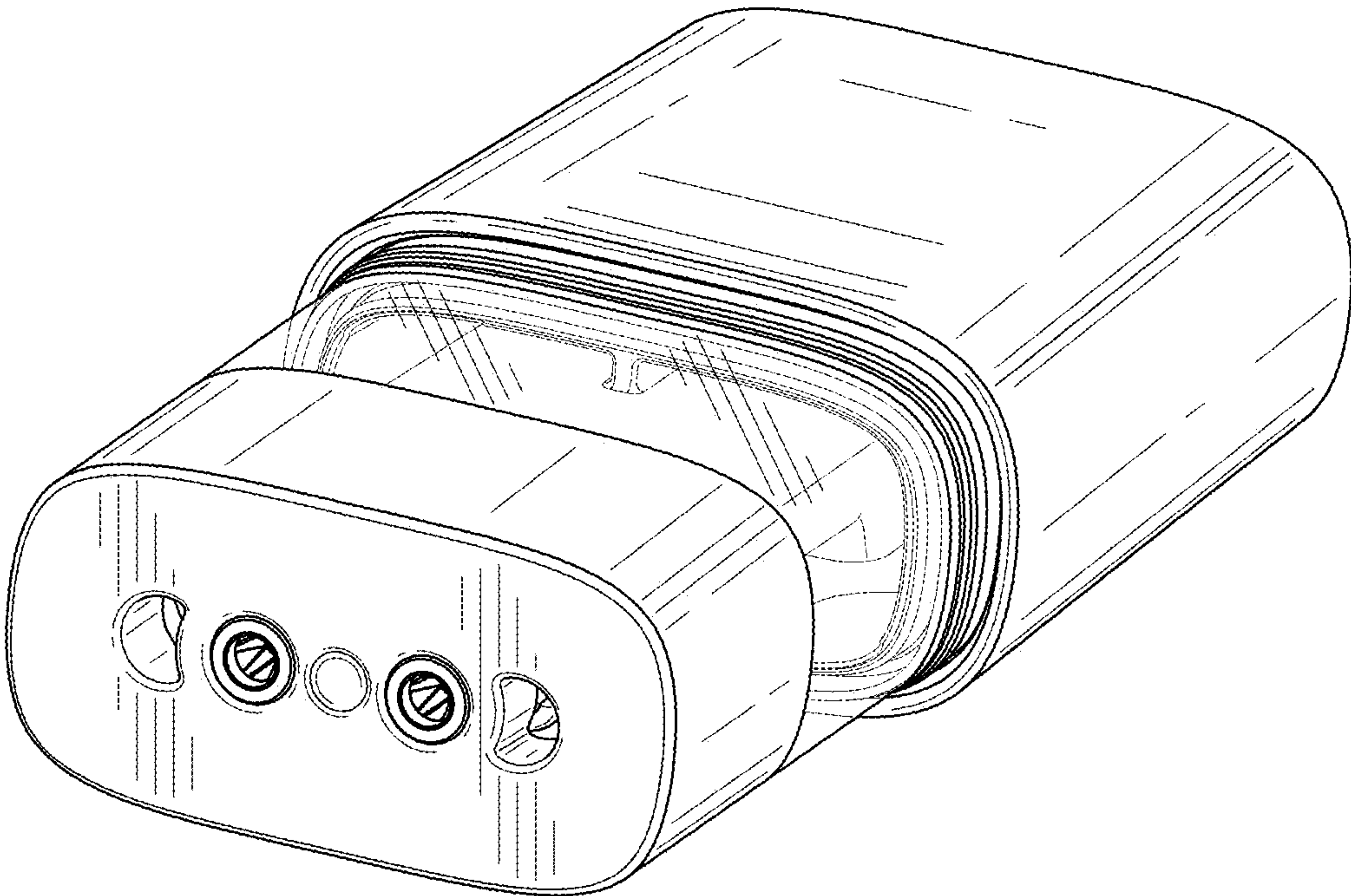


FIG. 1

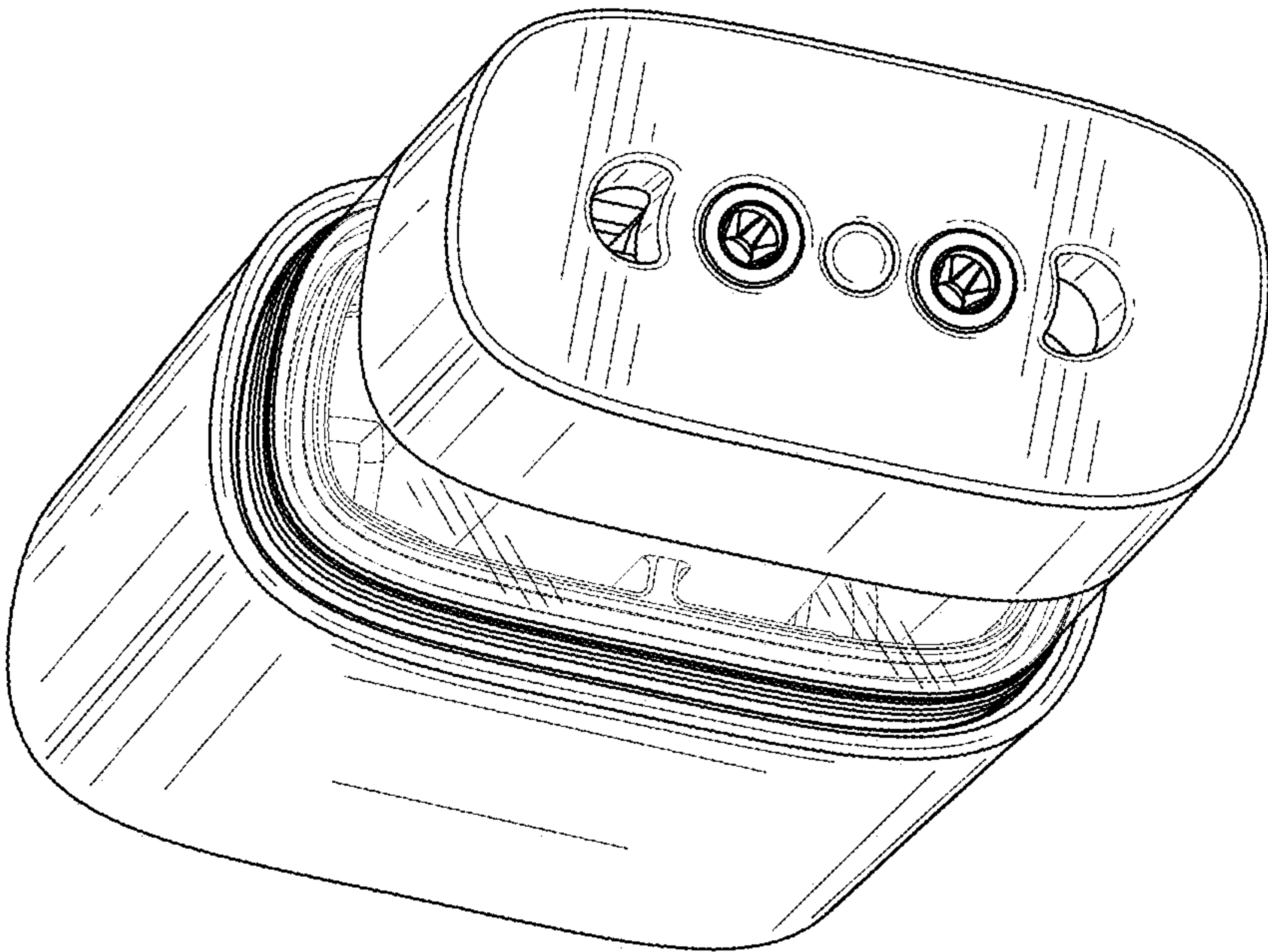


FIG. 2

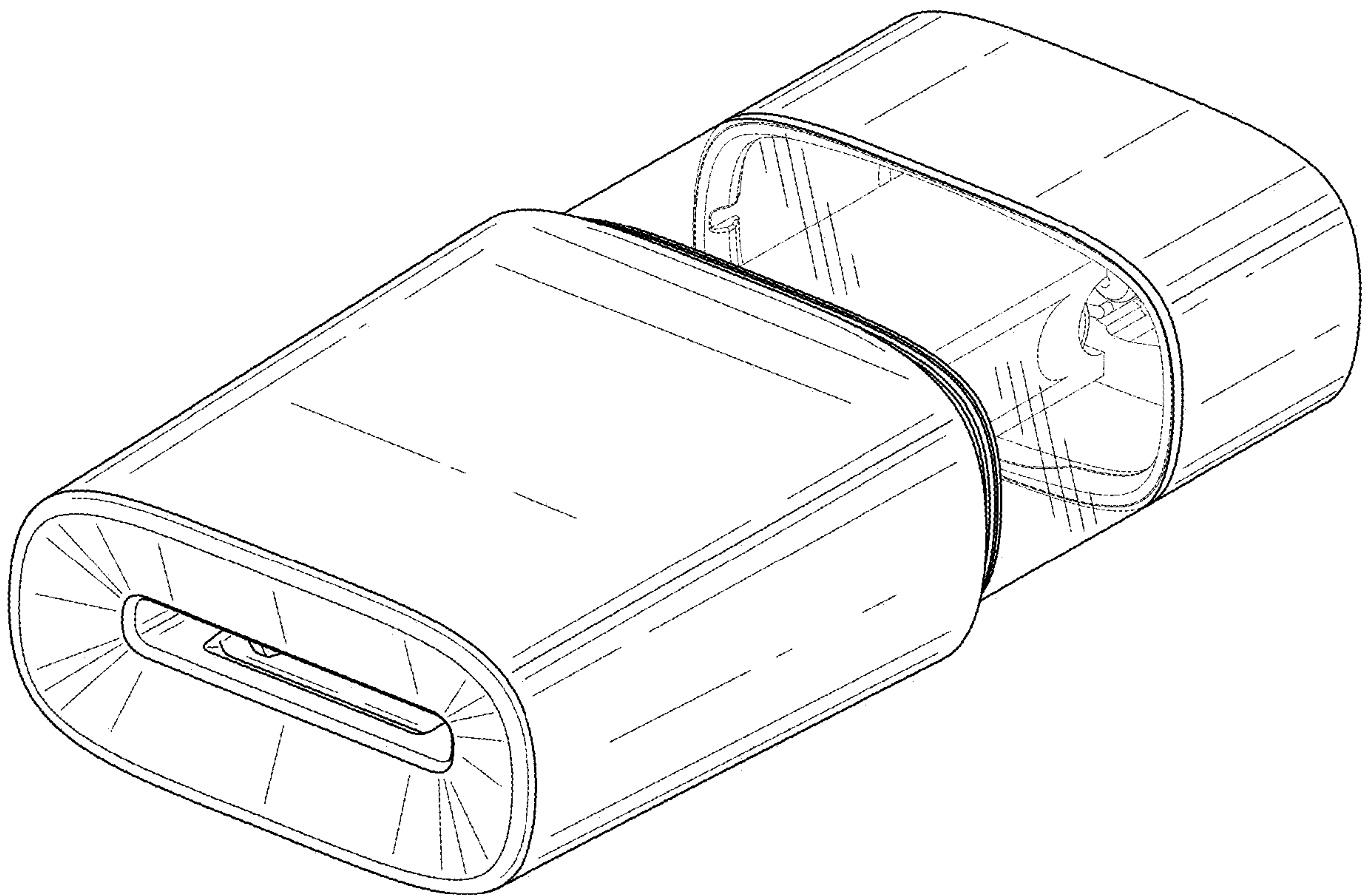


FIG. 3

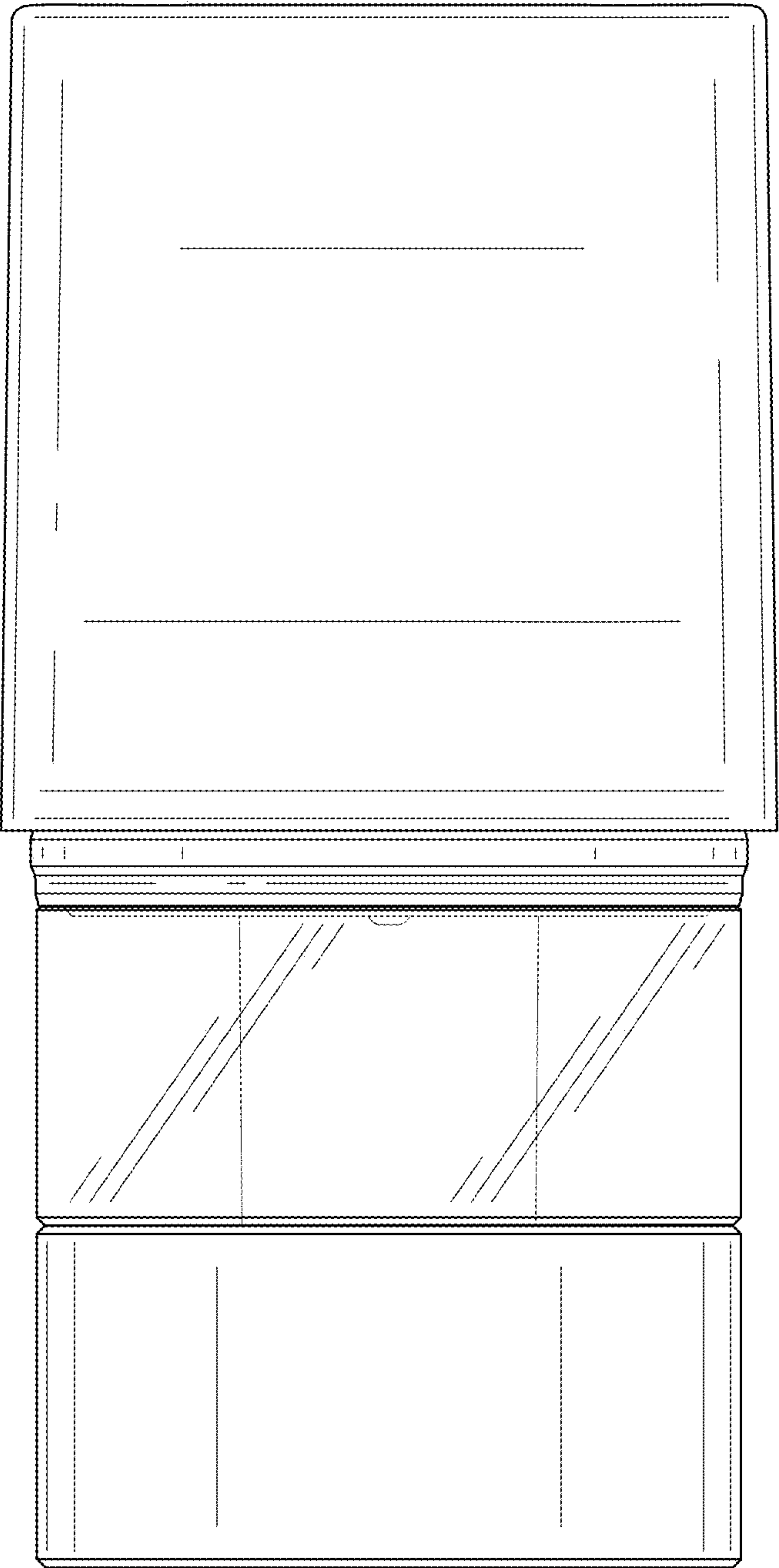


FIG. 4

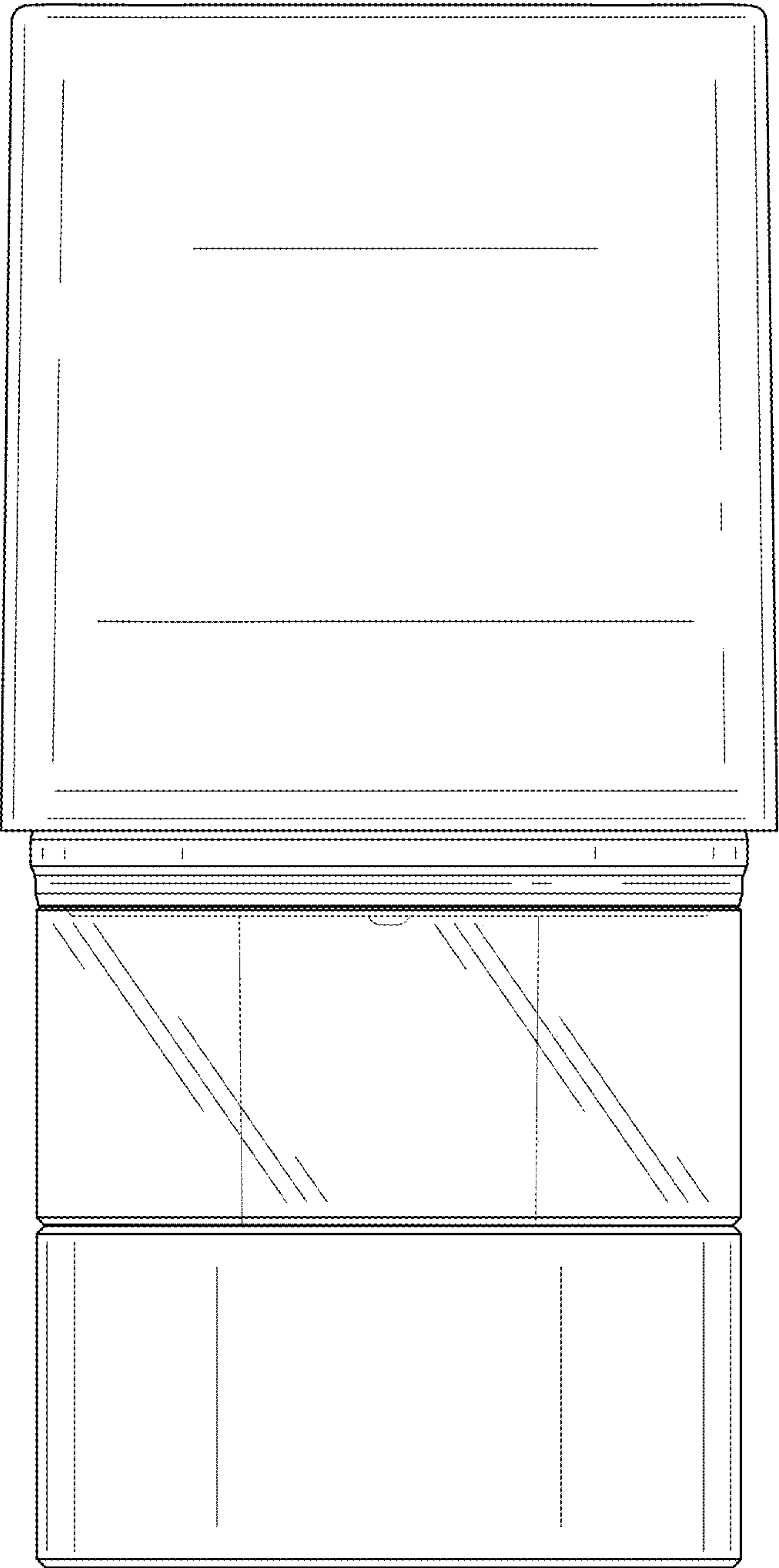


FIG. 5

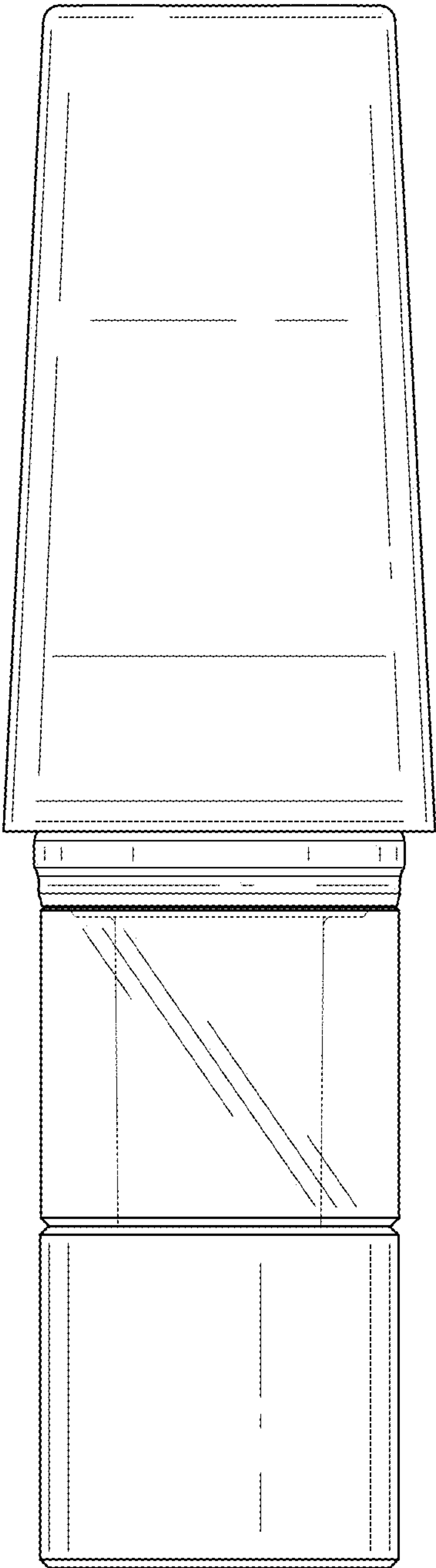


FIG. 6

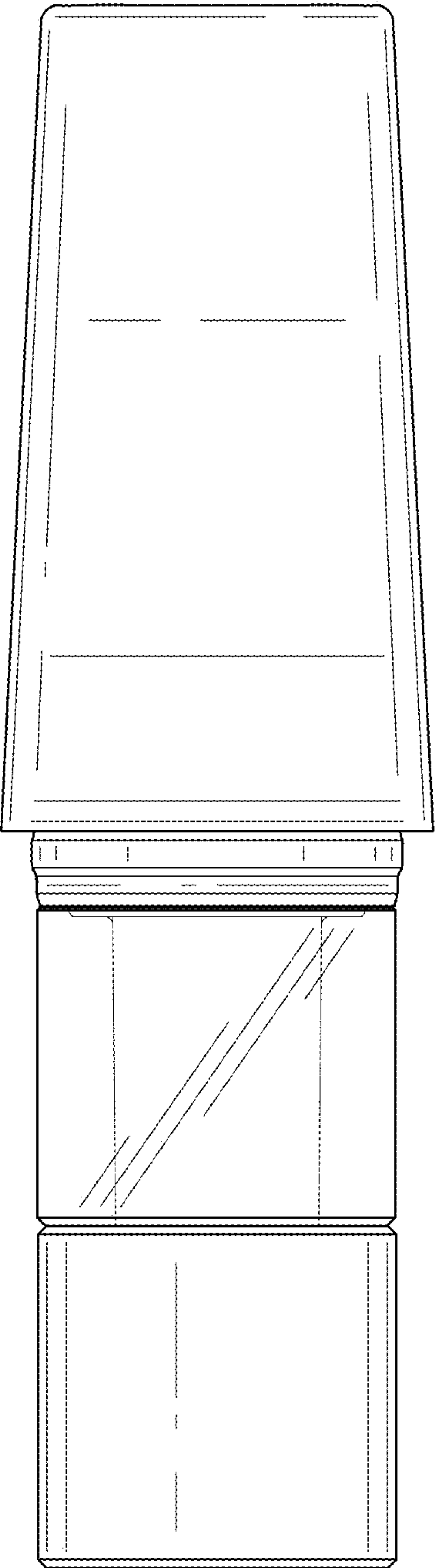


FIG. 7

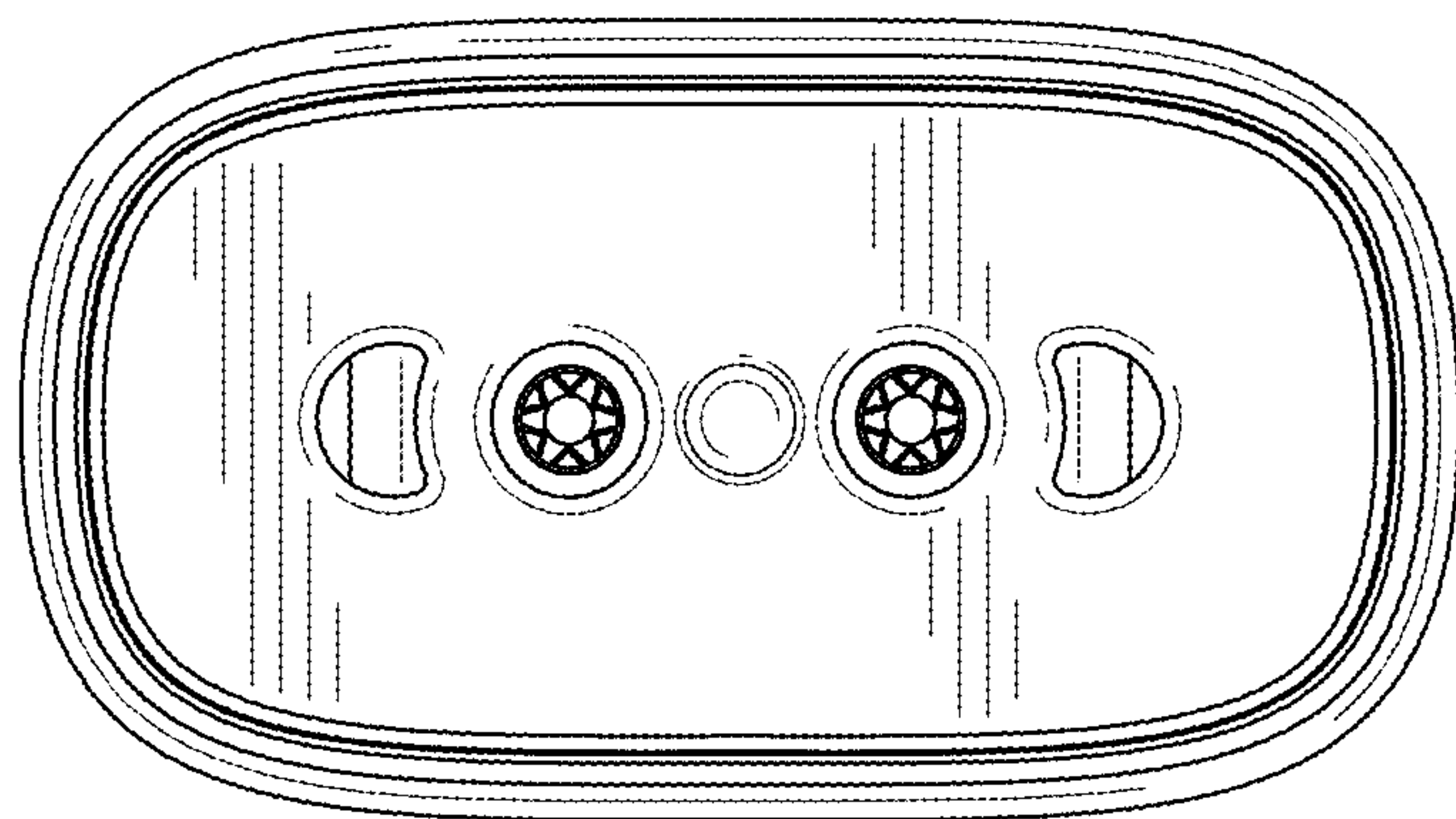


FIG. 8

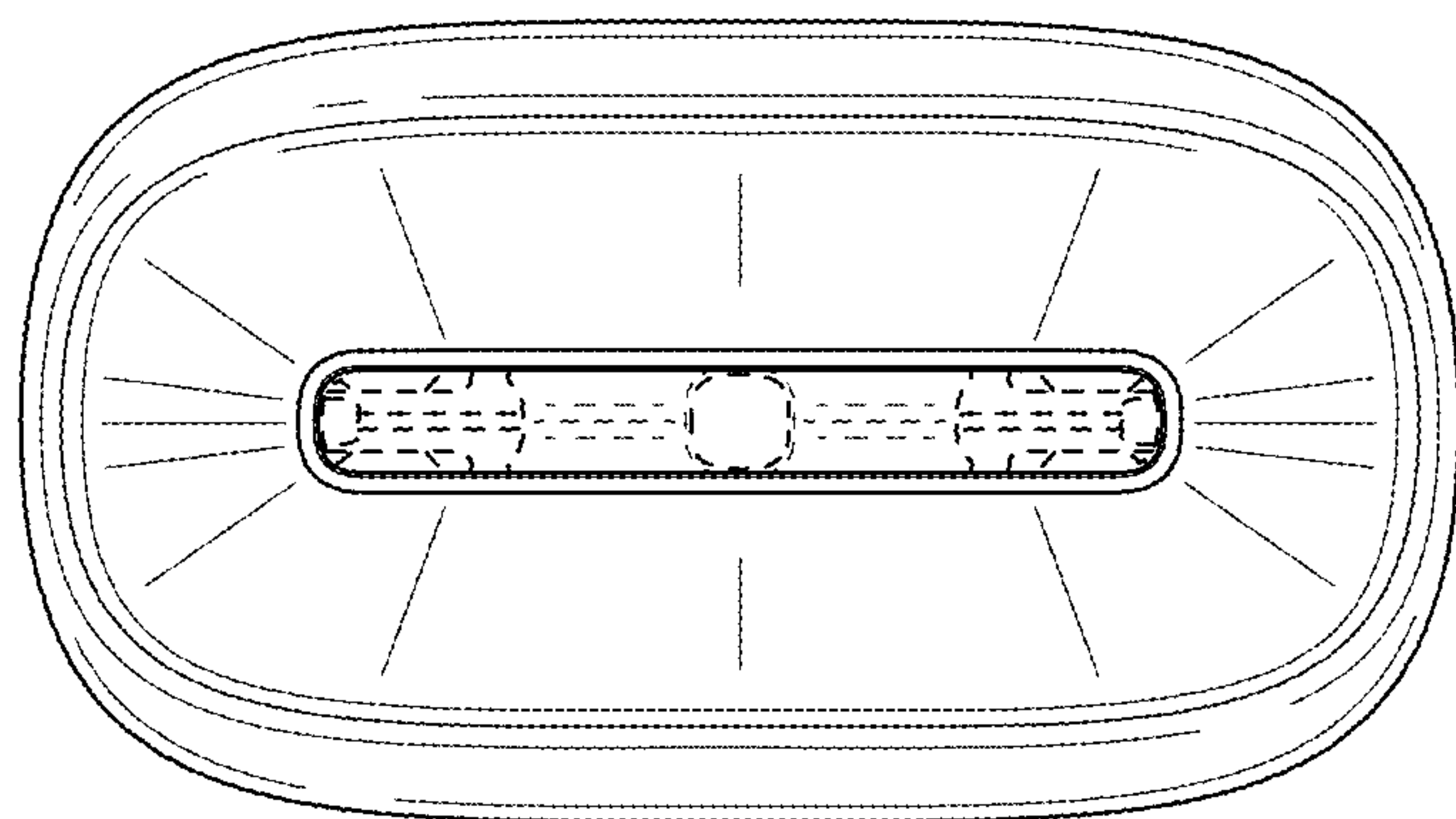


FIG. 9