

(12) **United States Design Patent** (10) **Patent No.:** **US D1,046,817 S**
Xia (45) **Date of Patent:** **** Oct. 15, 2024**

(54) **AUDIO SPEAKER**
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(**) Term: **15 Years**
(21) Appl. No.: **29/878,592**
(22) Filed: **Jun. 25, 2023**
(30) **Foreign Application Priority Data**
Apr. 13, 2023 (CN) 202330199102.0
(51) **LOC (14) Cl.** **14-01**
(52) **U.S. Cl.**
USPC **D14/215**; D14/216
(58) **Field of Classification Search**
USPC D14/215, 216, 204, 209.1, 212, 496,
D14/203.1, 203.3, 203.6; 381/334
CPC H04R 25/00; H04R 25/02; H04R 1/02;
H05K 5/00; G09G 5/00
See application file for complete search history.

(56) **References Cited**
U.S. PATENT DOCUMENTS
4,580,654 A * 4/1986 Hale H04R 1/02
181/146
5,097,513 A * 3/1992 Jordan H04R 3/00
381/349
5,674,076 A * 10/1997 Billings G10H 1/34
381/345
6,431,308 B1 * 8/2002 Vollmer H04R 1/26
181/144
7,639,478 B2 * 12/2009 Wu H05K 5/0008
361/679.01
D687,017 S * 7/2013 Ashcraft D14/216
D698,753 S * 2/2014 Yiu D14/216
D717,769 S * 11/2014 Wong D14/216
D725,076 S * 3/2015 Wong D14/216

D759,632 S * 6/2016 Fischer D14/204
D800,699 S * 10/2017 Fischer D14/216
D803,813 S * 11/2017 Rouffiat D14/215
D805,059 S * 12/2017 Fischer D14/221
D809,964 S * 2/2018 Harshman D14/188
D811,368 S * 2/2018 Fischer D14/216
D835,071 S * 12/2018 Channey D14/496
D839,855 S * 2/2019 Park D14/216
D843,418 S * 3/2019 Demin D14/496
D849,718 S * 5/2019 Park D14/216
D853,990 S * 7/2019 Eriksen H04R 31/00
D14/216
D868,022 S * 11/2019 Distefano D14/204
D884,676 S * 5/2020 He D14/216
D894,871 S * 9/2020 Distefano D14/216
(Continued)

FOREIGN PATENT DOCUMENTS

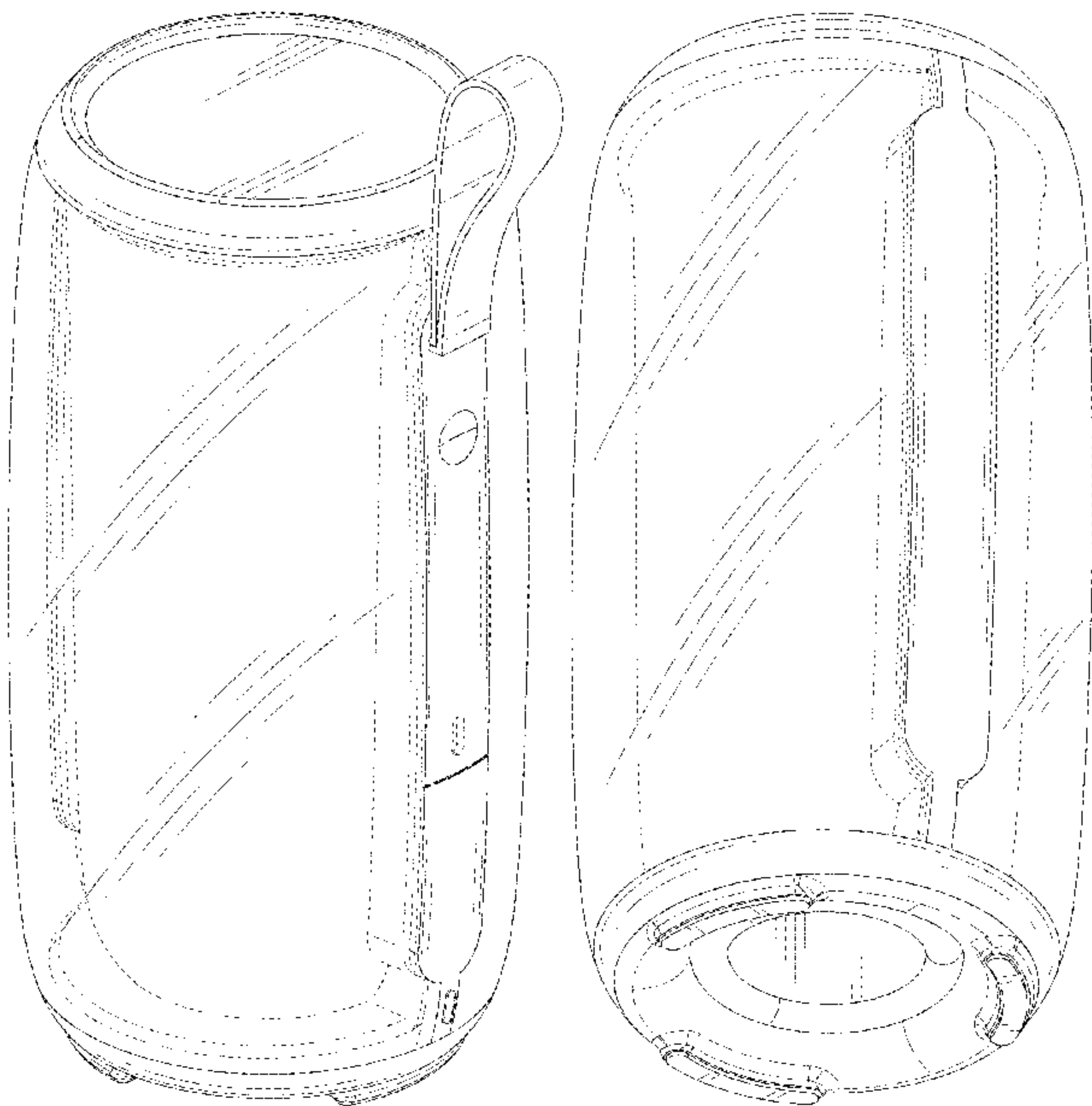
CN 305291163 * 8/2019
Primary Examiner — Paula Allen Greene
(74) *Attorney, Agent, or Firm* — Jeenam Park

(57) **CLAIM**
The ornamental design for an audio speaker, as shown and described.

DESCRIPTION

FIG. 1 is a front, left and top perspective view of an audio speaker, showing my new design;
FIG. 2 is a rear, right and bottom 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 plan view thereof; and,
FIG. 8 is a bottom plan view thereof.
The broken lines shown in the drawings illustrate portions of the audio speaker that form no part of the claimed design.

1 Claim, 8 Drawing Sheets



(56) **References Cited**

U.S. PATENT DOCUMENTS

D902,884	S	*	11/2020	Wang	.....	D14/204
D905,663	S	*	12/2020	Wang	.....	D14/216
D907,601	S	*	1/2021	Yang	.....	D14/216
D916,046	S	*	4/2021	Distefano	.....	D14/204
D935,444	S	*	11/2021	Xu	.....	D14/215
D943,545	S	*	2/2022	Xiong	.....	D14/204
11,277,678	B2	*	3/2022	Eva	.....	H04R 1/025
D954,679	S	*	6/2022	McManigal	.....	H04R 1/02
						D14/215
D966,588	S	*	10/2022	Liang	.....	D26/41
D1,005,980	S	*	11/2023	Lo	.....	D14/204
D1,012,882	S	*	1/2024	Xiong	.....	D14/204
D1,025,003	S	*	4/2024	Li	.....	D14/204
D1,032,564	S	*	6/2024	Nie	.....	D14/216
2014/0079267	A1	*	3/2014	Lyons	.....	H04R 1/026
						381/334
2017/0006374	A1	*	1/2017	Song	.....	F16H 35/18
2017/0187206	A1	*	6/2017	Lafountain	.....	H02J 7/342
2023/0209232	A1	*	6/2023	DeCastro	.....	A63B 71/0622
						381/334

* cited by examiner

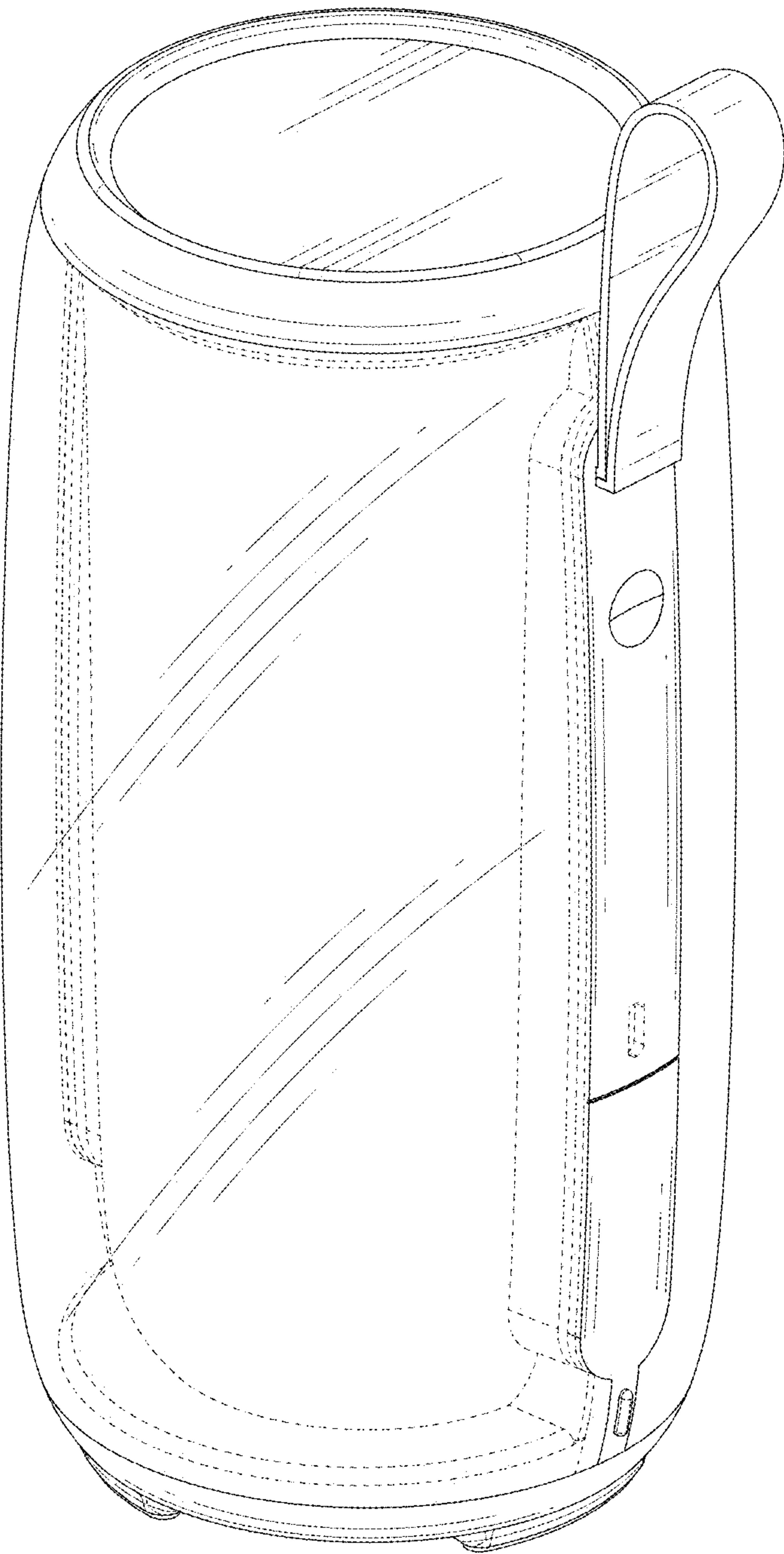


FIG. 1

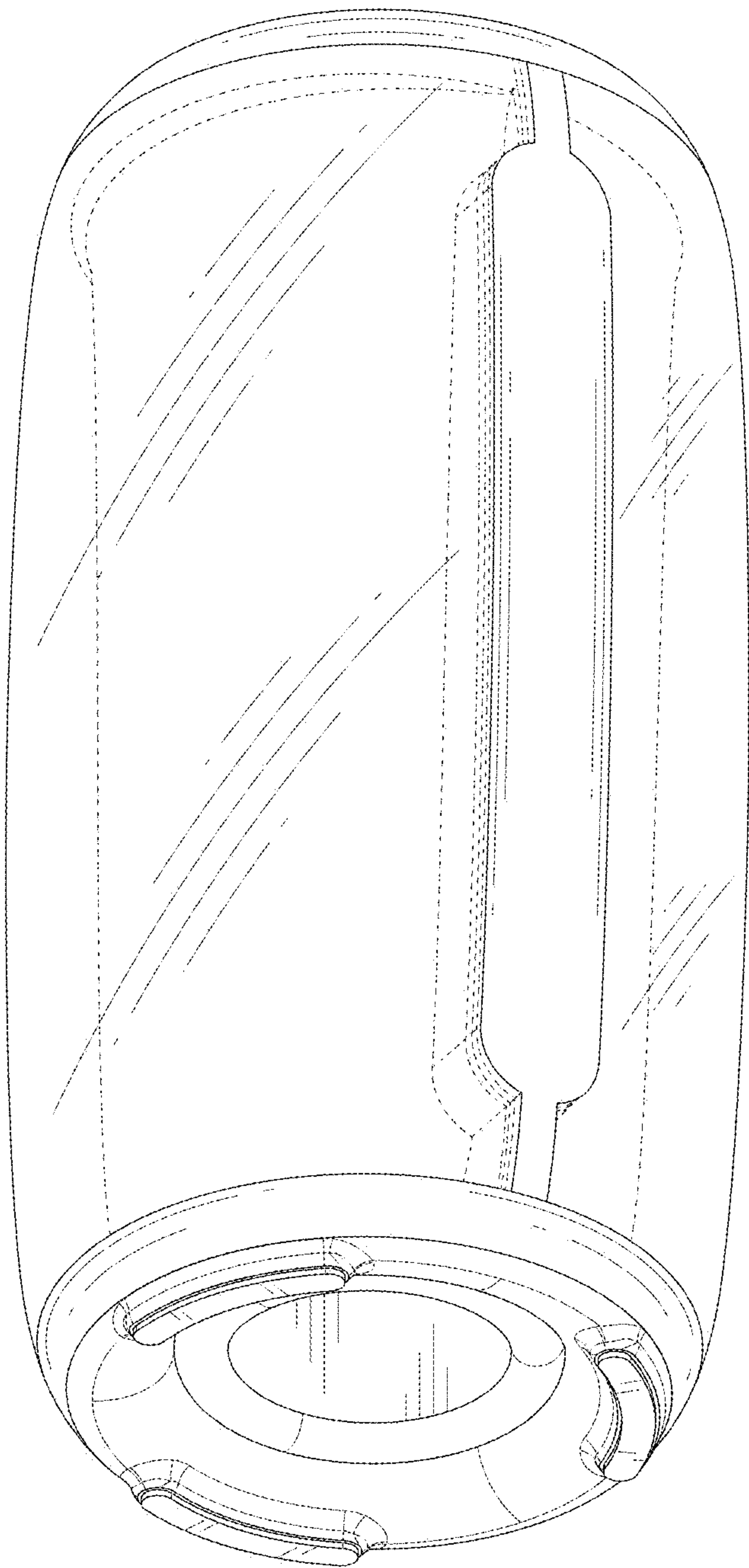


FIG. 2

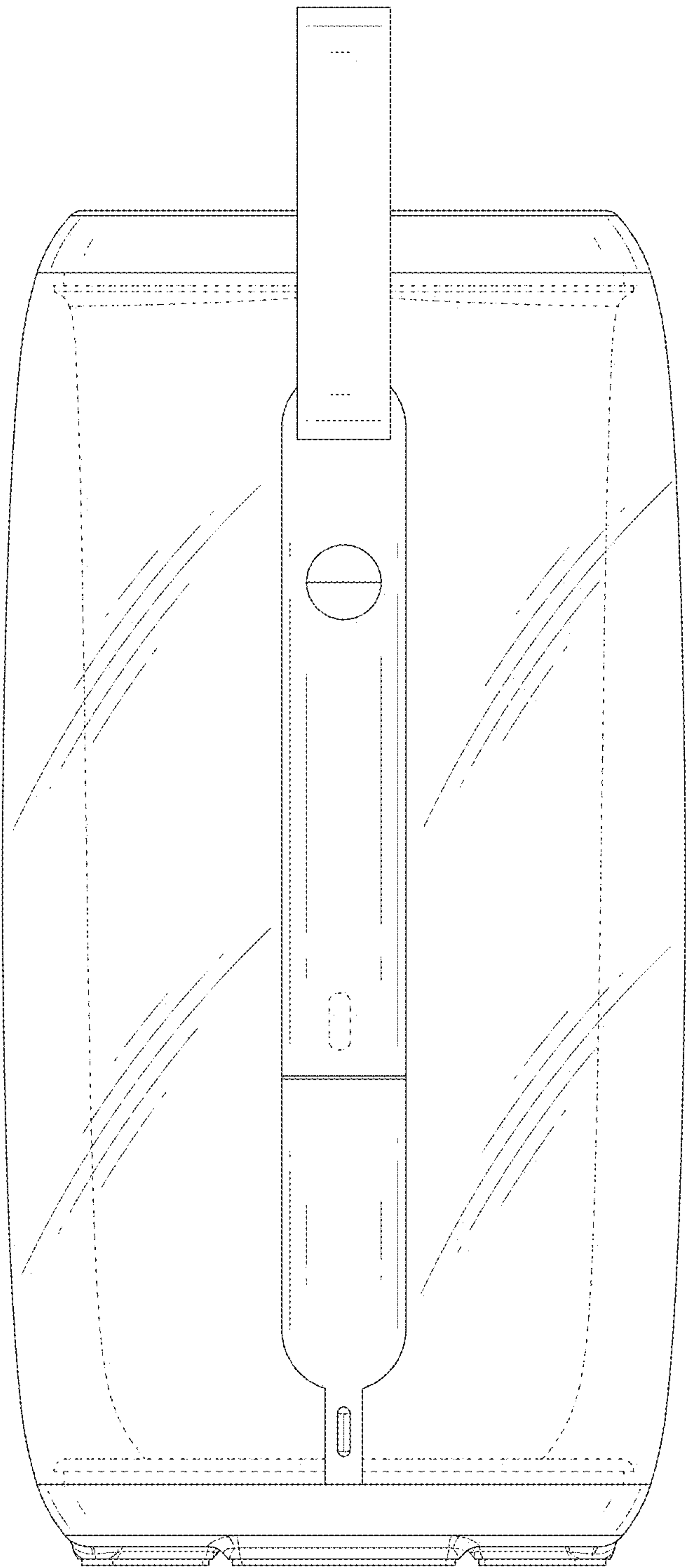


FIG. 3

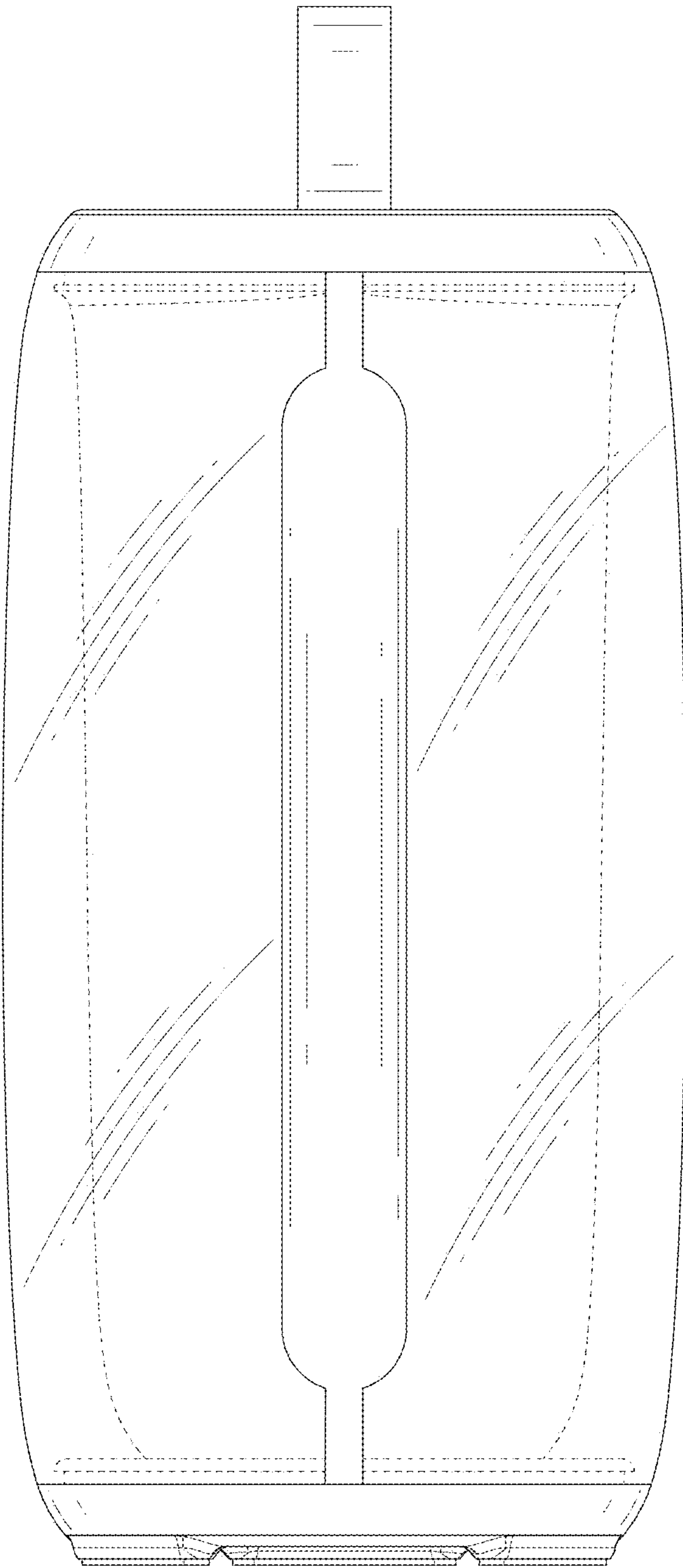


FIG. 4

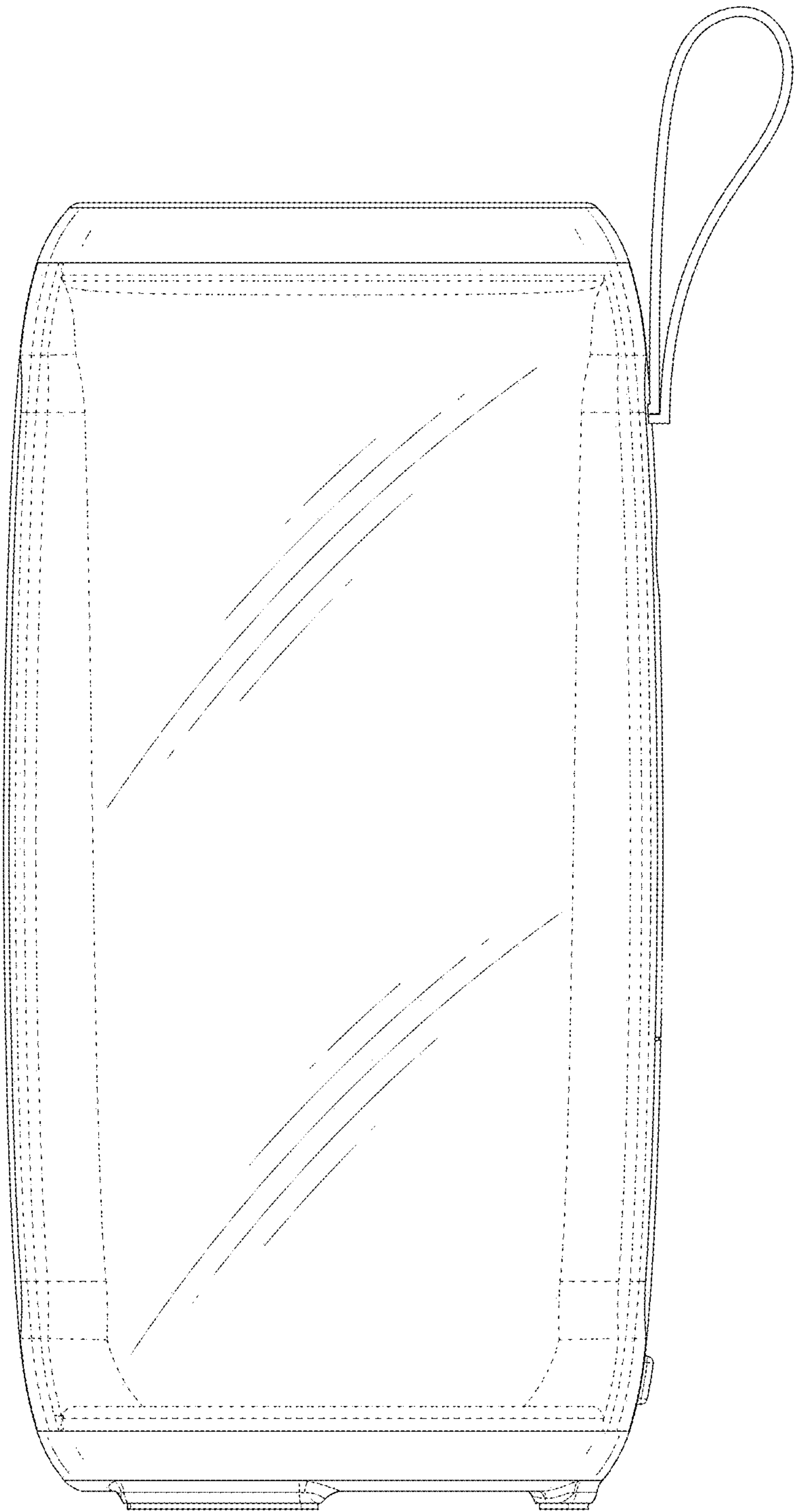


FIG. 5

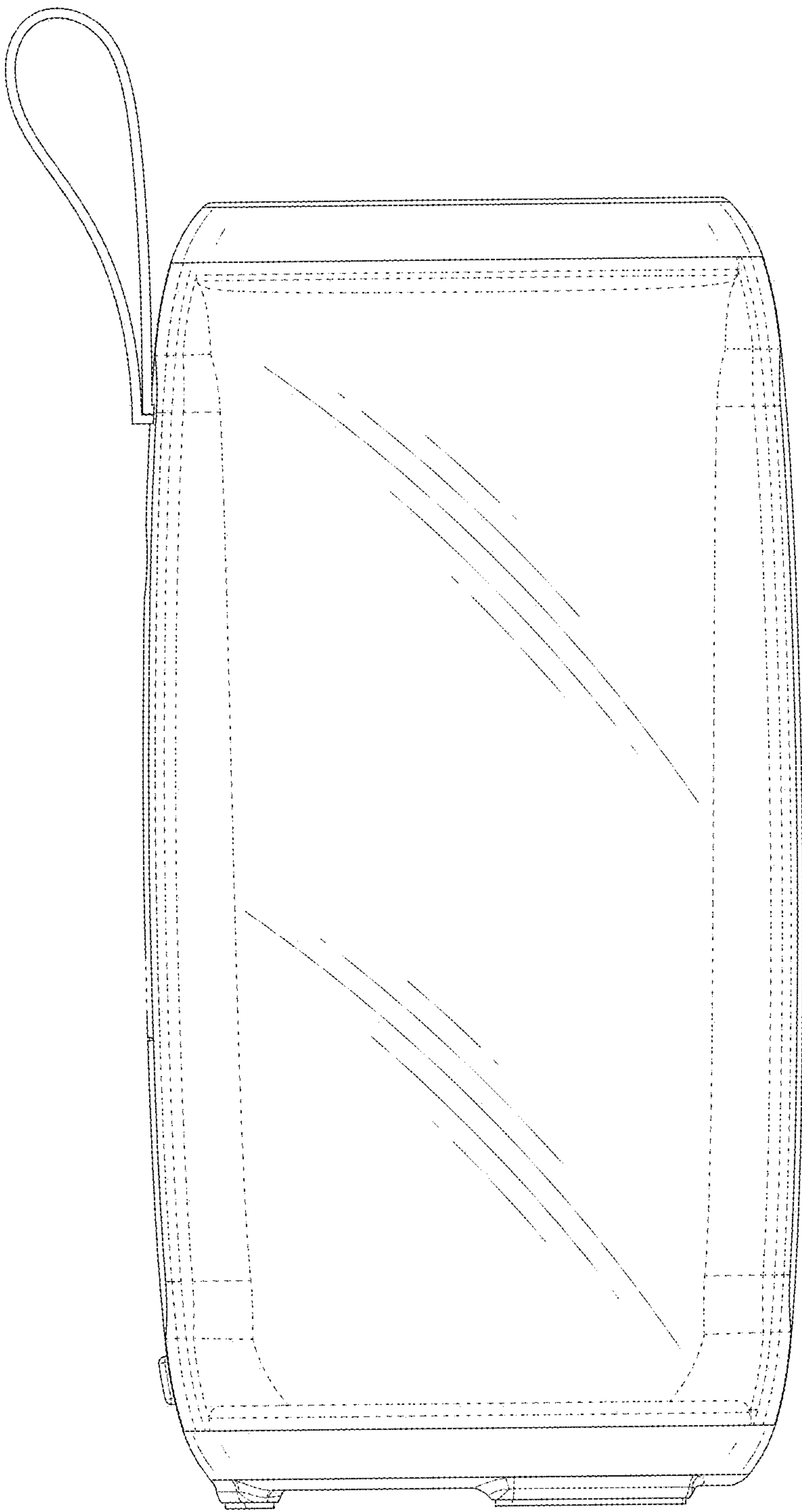


FIG. 6

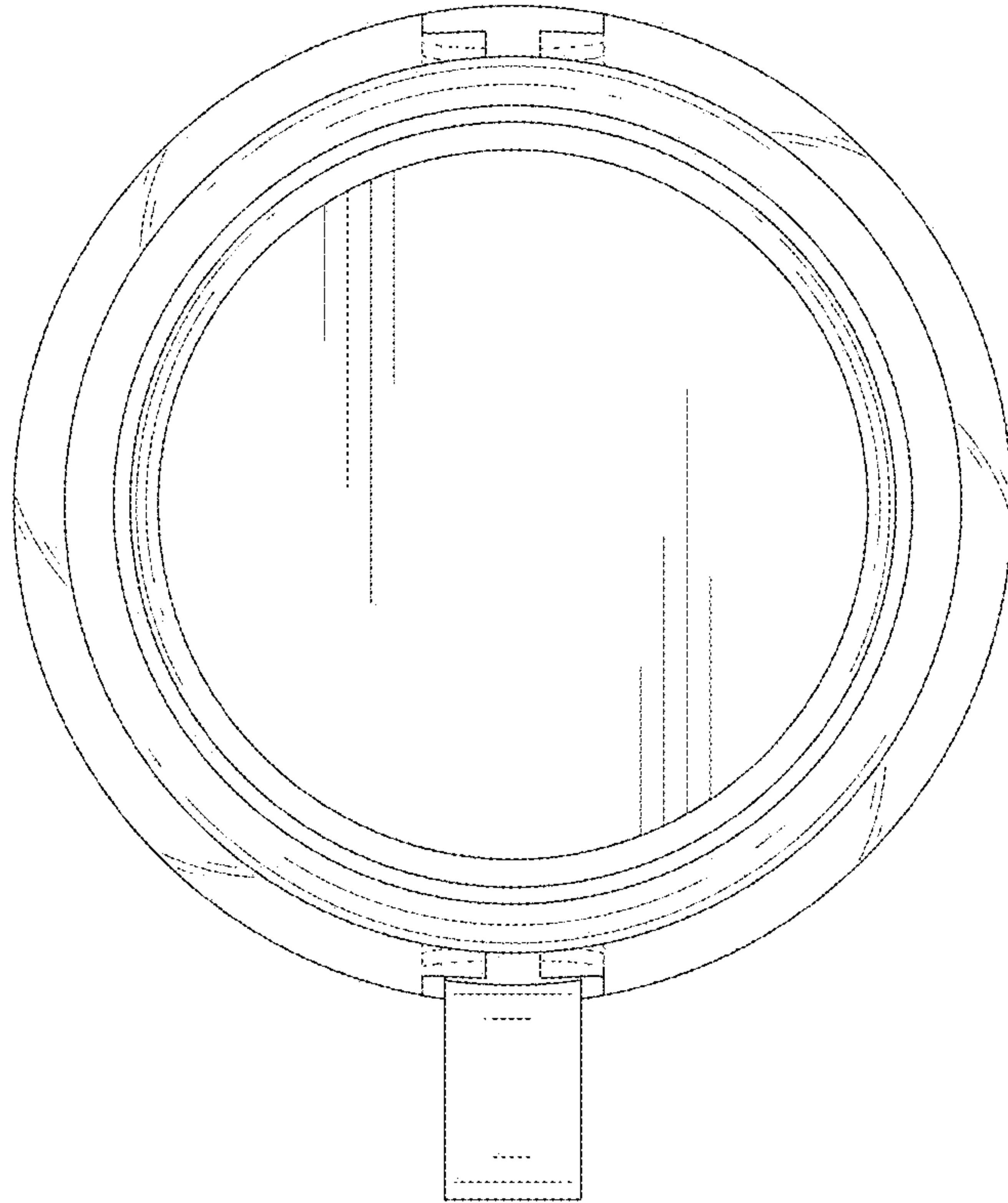


FIG. 7

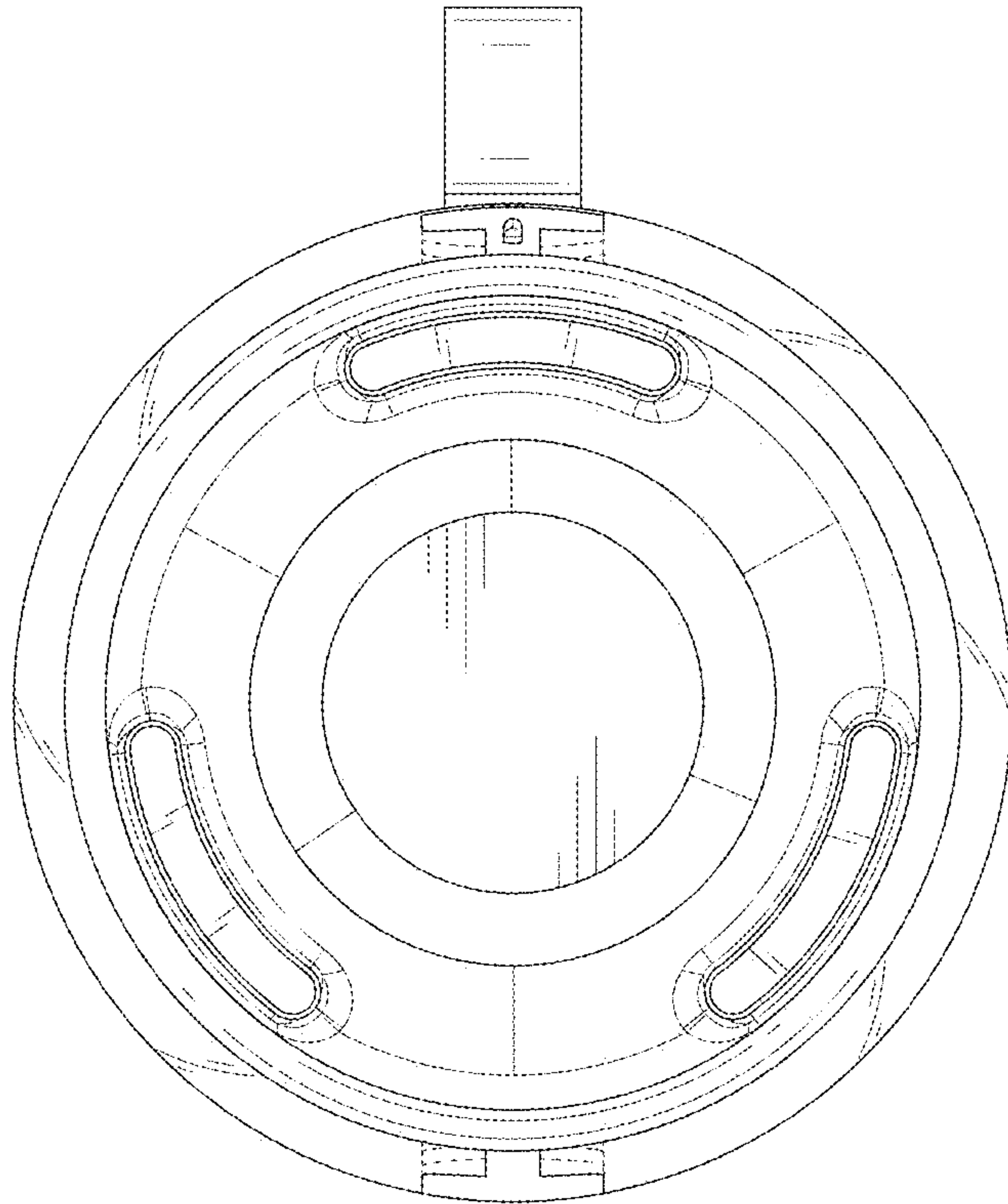


FIG. 8