



US00D977770S

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

(10) **Patent No.:** **US D977,770 S**

(45) **Date of Patent:** **** Feb. 7, 2023**

(54) **HAND VACUUM**

(71) Applicant: **SharkNinja Operating, LLC**,
Needham, MA (US)

(72) Inventor: **Owen R. Johnson**, Needham, MA (US)

(73) Assignee: **SHARKNINJA OPERATING LLC**,
Needham, MA (US)

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

(21) Appl. No.: **29/695,073**

(22) Filed: **Jun. 14, 2019**

(51) **LOC (14) Cl.** **15-05**

(52) **U.S. Cl.**
USPC **D32/18**

(58) **Field of Classification Search**
USPC D32/17, 18, 22, 31; D21/526
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

D290,893 S * 7/1987 Essex D32/18
D290,894 S * 7/1987 Miyamoto D32/18
(Continued)

FOREIGN PATENT DOCUMENTS

CN 304651523 * 5/2018
CN 306072042 * 9/2020
(Continued)

OTHER PUBLICATIONS

Shark IZ163H Rocket Pet Pro Cordless Stick Vacuum, available in Amazon.ca, date first available May 23, 2020 [online], [site visited Mar. 3, 2021], Available from the internet URL: https://www.amazon.ca/dp/B08CC3GWVJ/ref=cm_sw_em_r_mt_imm_awdb_VS55HM0EBQNM6ECPQH8A (Year: 2020).*

(Continued)

Primary Examiner — Jennifer Rivard
Assistant Examiner — Jennylou M Binas

(74) *Attorney, Agent, or Firm* — Grossman, Tucker,
Perreault & Pflieger, PLLC

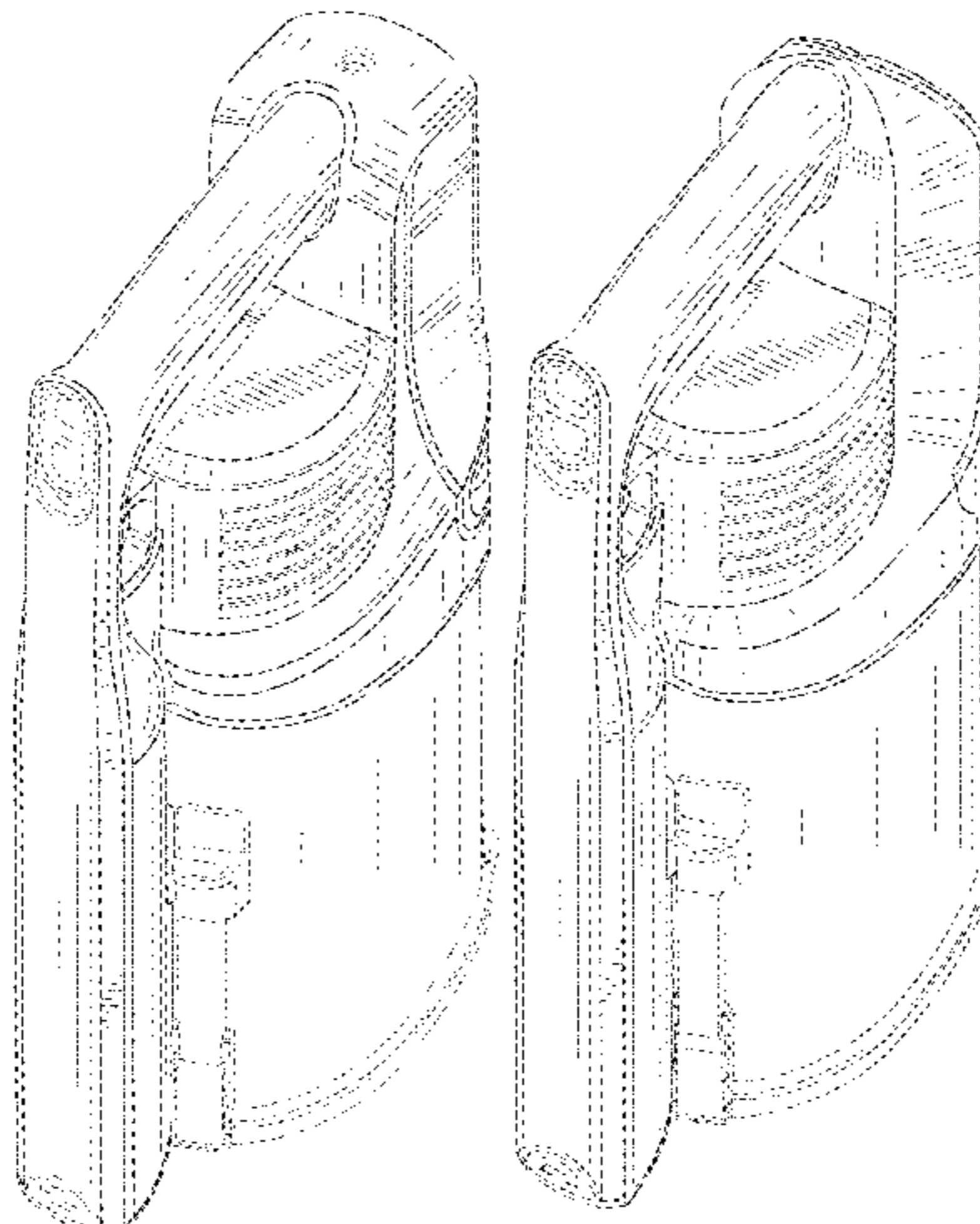
(57) **CLAIM**

The ornamental design for a hand vacuum, as shown and described.

DESCRIPTION

FIG. 1 is a rear, top right perspective view of a hand vacuum, showing the new design;
FIG. 2 is a rear, top left perspective view thereof;
FIG. 3 is a rear, bottom left perspective view thereof;
FIG. 4 is a rear, bottom right perspective view thereof;
FIG. 5 is a front, top right perspective view thereof;
FIG. 6 is a front, top left perspective view thereof;
FIG. 7 is a front, bottom left perspective view thereof;
FIG. 8 is a front, bottom right perspective view thereof;
FIG. 9 is a top view thereof;
FIG. 10 is a bottom view thereof;
FIG. 11 is a right view thereof;
FIG. 12 is a left view thereof;
FIG. 13 is a rear view thereof; and
FIG. 14 is a front view thereof;
FIG. 15 is a rear, top right perspective view of another hand vacuum, showing the new design;
FIG. 16 is a rear, top left perspective view thereof;
FIG. 17 is a rear, bottom left perspective view thereof;
FIG. 18 is a rear, bottom right perspective view thereof;
FIG. 19 is a front, top right perspective view thereof;
FIG. 20 is a front, top left perspective view thereof;
FIG. 21 is a front, bottom left perspective view thereof;
FIG. 22 is a front, bottom right perspective view thereof;
FIG. 23 is a top view thereof;
FIG. 24 is a bottom view thereof;
FIG. 25 is a right view thereof;
FIG. 26 is a left view thereof;
FIG. 27 is a right view thereof; and,
FIG. 28 is a left view thereof.

(Continued)



The broken lines in the figures show portions of the hand vacuum that form no part of the claimed design.

1 Claim, 28 Drawing Sheets

(58) **Field of Classification Search**

CPC A47L 5/24; A47L 5/28; A47L 5/30; A47L 5/34; A47L 5/36; A47L 9/04; A47L 9/102; A47L 9/106; A47L 11/30; A47L 11/302; A47L 11/4005; A47L 11/4008; A47L 11/4044; B04C 5/185; B23Q 11/0046; B23Q 11/0071; E04H 4/1636

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D608,961	S	*	1/2010	Reese	.....	D32/18
D668,010	S		9/2012	Stickney et al.		
8,397,344	B2	*	3/2013	Liddell	.....	A47L 5/24 15/326
D731,130	S		6/2015	Dyson et al.		
D738,584	S		9/2015	Niedzwecki		
D771,890	S	*	11/2016	Kim	.....	D32/34
D772,512	S	*	11/2016	Yoon	.....	D32/34
D775,772	S	*	1/2017	Lee	.....	D32/31
D798,009	S		9/2017	Salagnac		
D799,767	S		10/2017	Palladino et al.		
D800,980	S	*	10/2017	Carter	.....	D32/21
D814,723	S		4/2018	Palladino et al.		
D819,282	S	*	5/2018	Kim	.....	D32/22
9,986,880	B2	*	6/2018	Conrad	.....	A47L 9/165
D827,955	S	*	9/2018	Palladino	.....	D32/18
D830,017	S	*	10/2018	Nam	.....	D32/22
D844,912	S	*	4/2019	Gammack	.....	D32/18
D844,918	S	*	4/2019	Kim	.....	D32/34
D846,212	S	*	4/2019	Gammack	.....	D32/22
D861,268	S	*	9/2019	Meyer	.....	D32/22
D868,400	S	*	11/2019	Niedzwecki	.....	D32/18
D897,616	S	*	9/2020	Chen	.....	D32/22
D902,510	S	*	11/2020	Knight Adams	.....	D32/22
D905,360	S	*	12/2020	Ma	.....	D32/22
D905,919	S	*	12/2020	Niedzwecki	.....	D32/34
D907,315	S	*	1/2021	Tokoi	.....	D32/34
D908,990	S	*	1/2021	Chen	.....	D32/22
D912,344	S	*	3/2021	Choi	.....	D32/22
D922,010	S	*	6/2021	Lin	.....	D32/18
D924,503	S	*	7/2021	Xu	.....	D32/18
D927,110	S	*	8/2021	Ma	.....	D32/22
D927,803	S	*	8/2021	Zou	.....	D32/18
D927,804	S	*	8/2021	Song	.....	D32/18
D929,685	S	*	8/2021	Choi	.....	D32/18
D929,686	S	*	8/2021	Uim	.....	D32/18
D930,296	S	*	9/2021	Song	.....	D32/18
D932,122	S	*	9/2021	Xu	.....	D32/18
D932,124	S	*	9/2021	Lin	.....	D32/22
D933,320	S	*	10/2021	Bloemendaal	.....	D32/22
D935,710	S	*	11/2021	Nakamura	.....	D32/18
D935,713	S	*	11/2021	Ma	.....	D32/22

D936,311	S	*	11/2021	Liu	.....	D32/18
D939,793	S	*	12/2021	Liu	.....	D32/18
D940,413	S	*	1/2022	Zou	.....	D32/18
11,224,324	B2	*	1/2022	Conrad	.....	A47L 9/1608
D943,228	S	*	2/2022	Wang	.....	D32/22
D943,229	S	*	2/2022	Pang	.....	D32/18
D943,847	S	*	2/2022	Tan	.....	D32/18
D945,092	S	*	3/2022	Liu	.....	D32/18
D946,221	S	*	3/2022	Ma	.....	D32/18
D948,142	S	*	4/2022	He	.....	D32/18
D951,568	S	*	5/2022	Abe	.....	D32/18
D954,371	S	*	6/2022	Cai	.....	D32/18
D957,767	S	*	7/2022	Cai	.....	D32/18
D959,071	S	*	7/2022	Kim	.....	D32/18
2018/0055313	A1	*	3/2018	Yang	.....	A47L 9/02
2018/0289227	A1	*	10/2018	Takano	.....	A47L 9/0081
2018/0303304	A1	*	10/2018	Yang	.....	A47L 9/2889
2019/0029487	A1	*	1/2019	Zhou	.....	A47L 5/26
2019/0208974	A1	*	7/2019	Oka	.....	A47L 9/246
2020/0204034	A1	*	6/2020	Shin	.....	H02K 3/34
2020/0214521	A1	*	7/2020	Percy-Raine	.....	A47L 9/1683
2020/0214523	A1	*	7/2020	Kim	.....	A47L 9/02
2021/0045605	A1	*	2/2021	Conrad	.....	A47L 9/322

FOREIGN PATENT DOCUMENTS

GB	6103959	*	10/2020
IN	315217-001-0001	*	12/2019
JP	D1567165	*	1/2017

OTHER PUBLICATIONS

Karcher VC 4s Cordless Stick Vacuum, available in Amazon.ca, date first available Nov. 25, 2020 [online], [site visited Jun. 2, 2021], Available from the internet URL: https://www.amazon.ca/Karcher-Cordless-Stick-Vacuum-Yellow/dp/B08N5DT85K/ref=sr_1_6?dchild=1&keywords=karcher+cordless+stick+vacuum+cleaner&qid=1622663322&sr=8-6 (Year: 2020).*

Womow Cordless Vacuum Cleaner, available in Amazon.ca, date first available Nov. 25, 2020 [online], [site visited Jun. 2, 2021], Available from the internet URL: https://www.amazon.ca/Womow-Cordless-Ultra-Lightweight-Rechargeable-Portable/dp/B08D37D8Y9/ref=sr_1_26?dchild=1&keywords=cordless+stick+vacuum+cle (Year: 2020).*

Hoover 500 3in1 Cordless Vacuum, available in Amazon.co.uk, date first available Jun. 12, 2019 [online], [site visited Jun. 2, 2021], Available from the internet URL: https://www.amazon.co.uk/Hoover-Cordless-Cleaner-HF522UPT-Powerful/dp/B07T375BZQ/ref=psdc_770072031_t3_B082QJ5LB2 (Year: 2019).*

U.S. Appl. No. 29/787,216, filed Jun. 4, 2021, for Vacuum Cleaner, Hand Vacuum, and User Interface, 40 pages.

U.S. Appl. No. 29/603,071, filed May 5, 2017, for Vacuum Cleaner Including Hand Vacuum Component and Surface Cleaning Head Component, 16 pages.

U.S. Appl. No. 29/611,768, filed Jul. 25, 2017, for Vacuum Cleaner Including Hand Vacuum Component, Surface Cleaning Head Component and Wand Component, 19 pages.

U.S. Appl. No. 29/657,807, filed Jul. 25, 2018, for Vacuum Nozzle, Hand Vacuum, and Vacuum Cleaner, 48 pages.

* cited by examiner

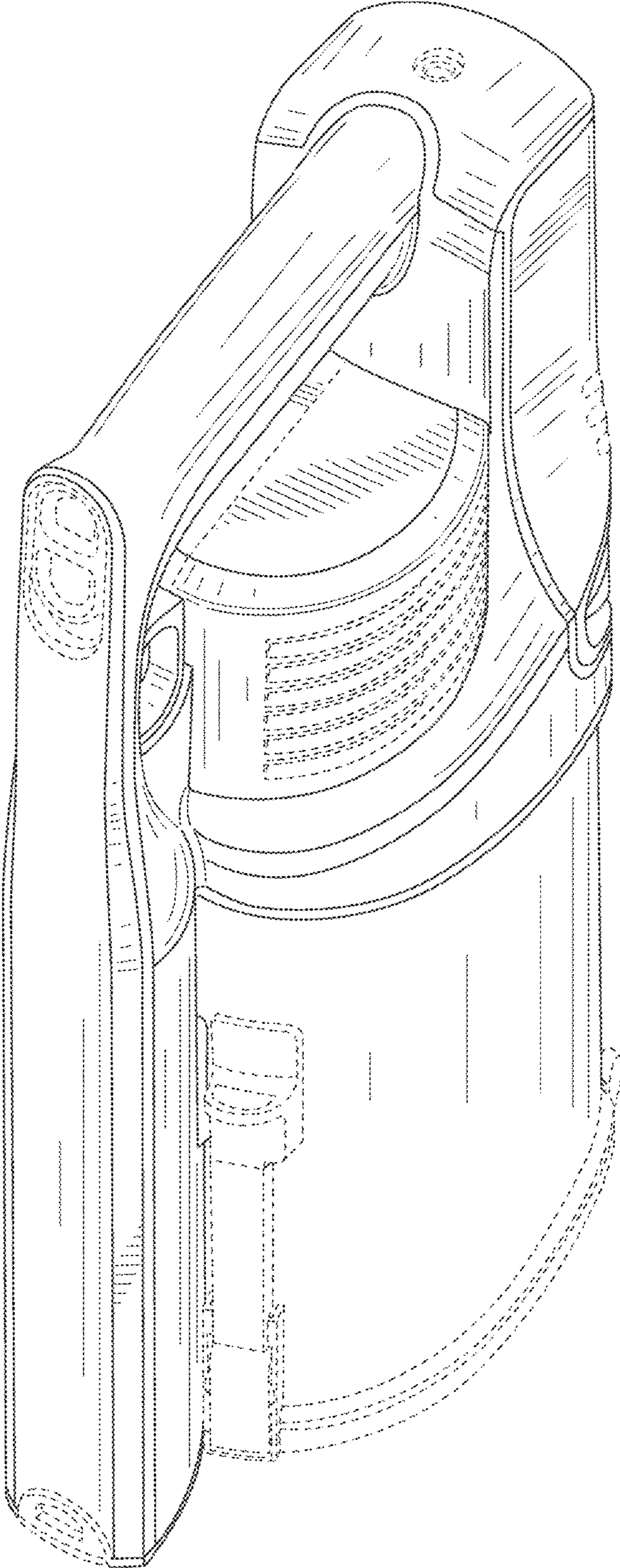


FIG. 1

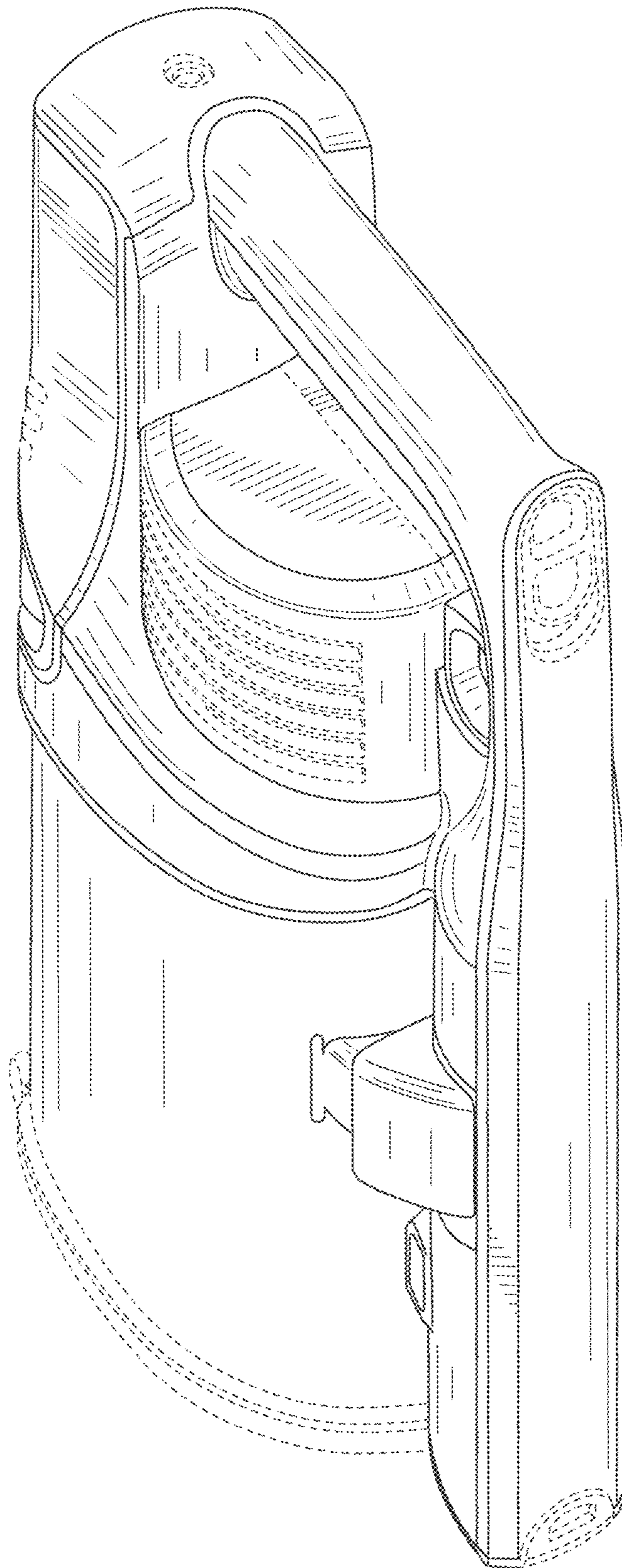


FIG. 2

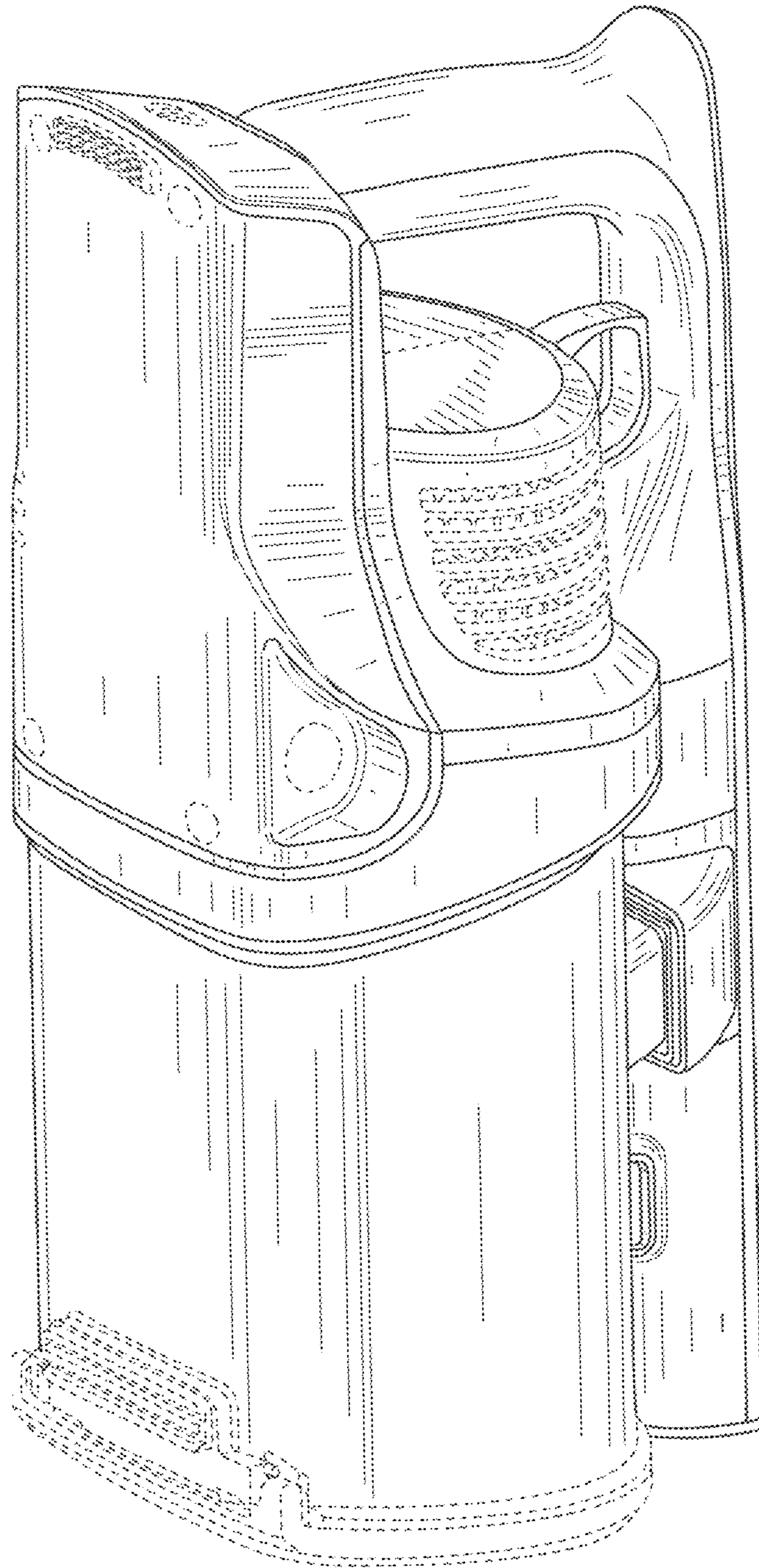


FIG. 3

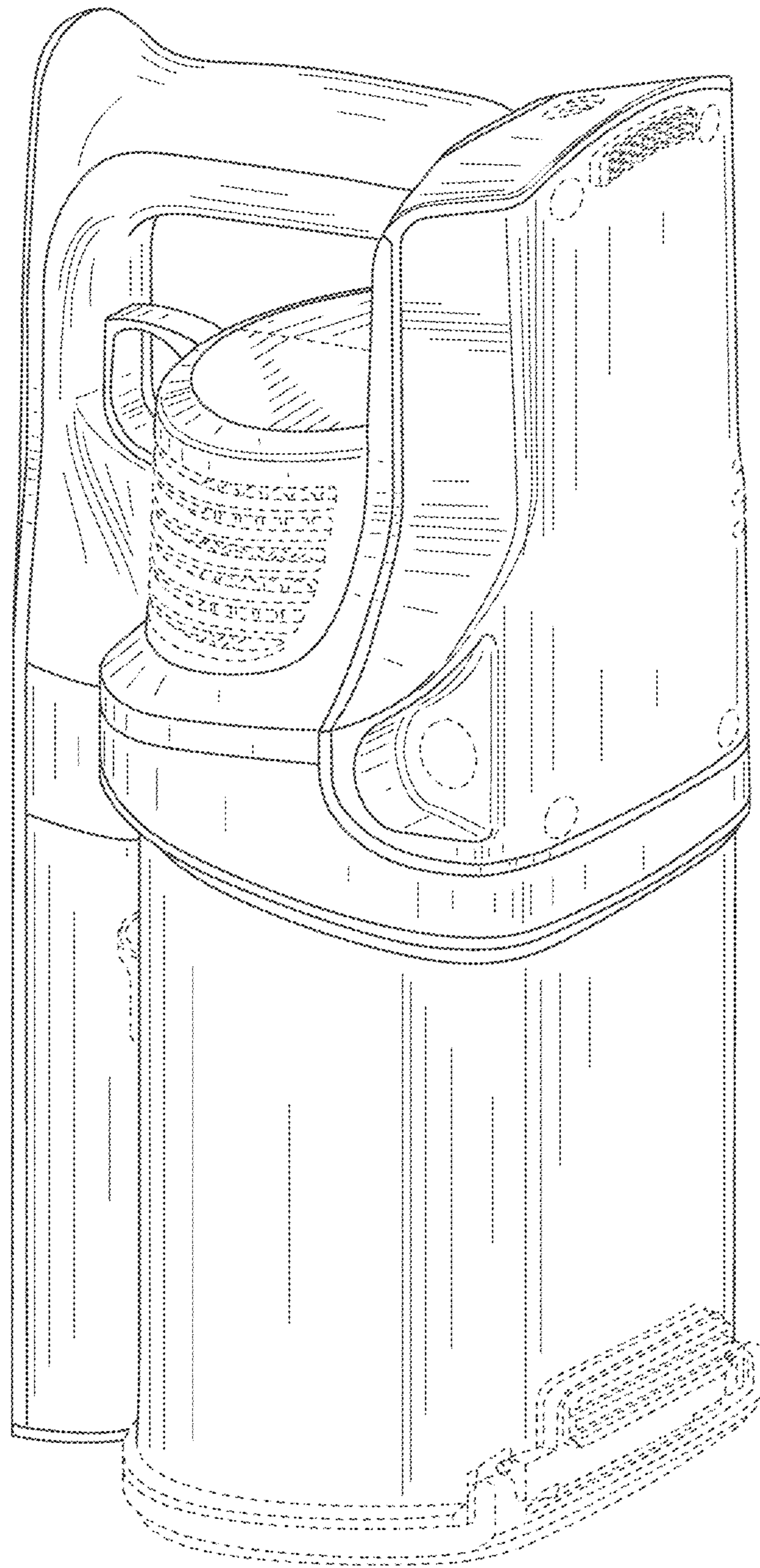


FIG. 4

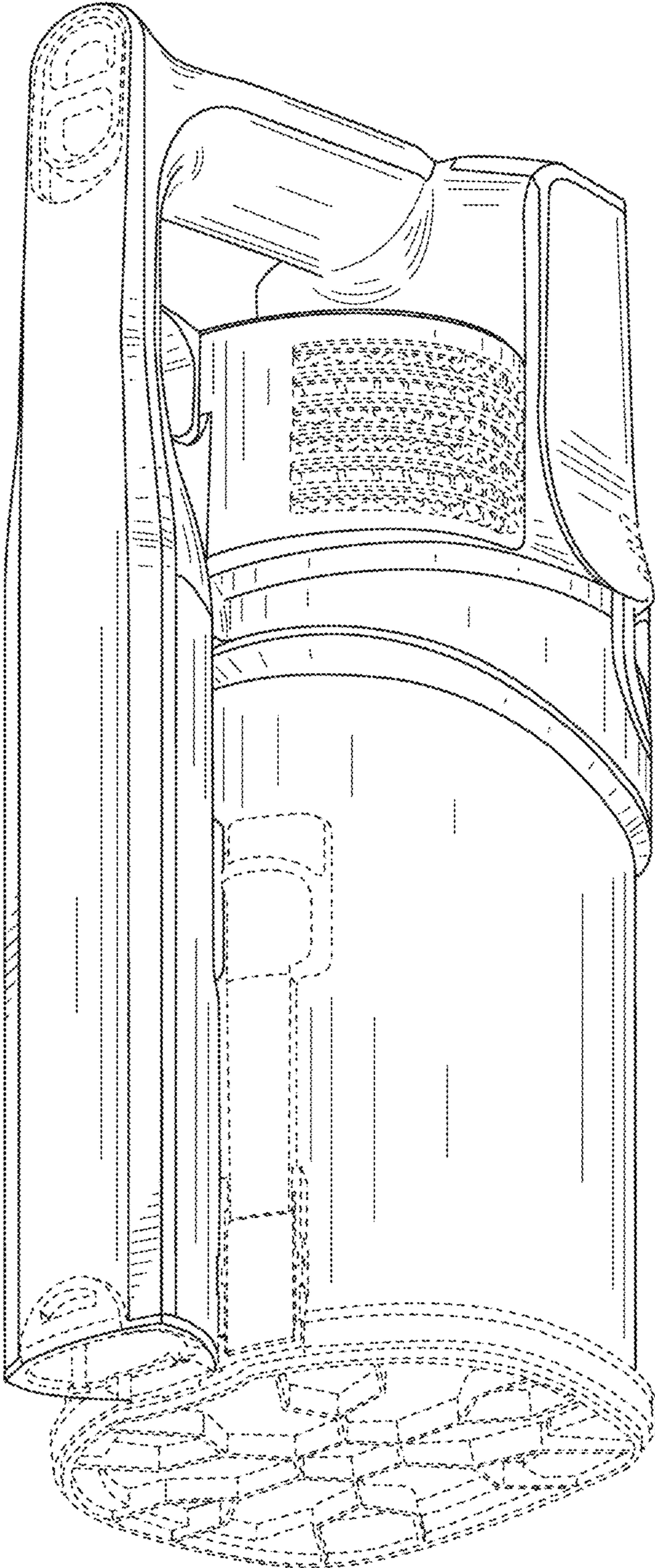


FIG. 5

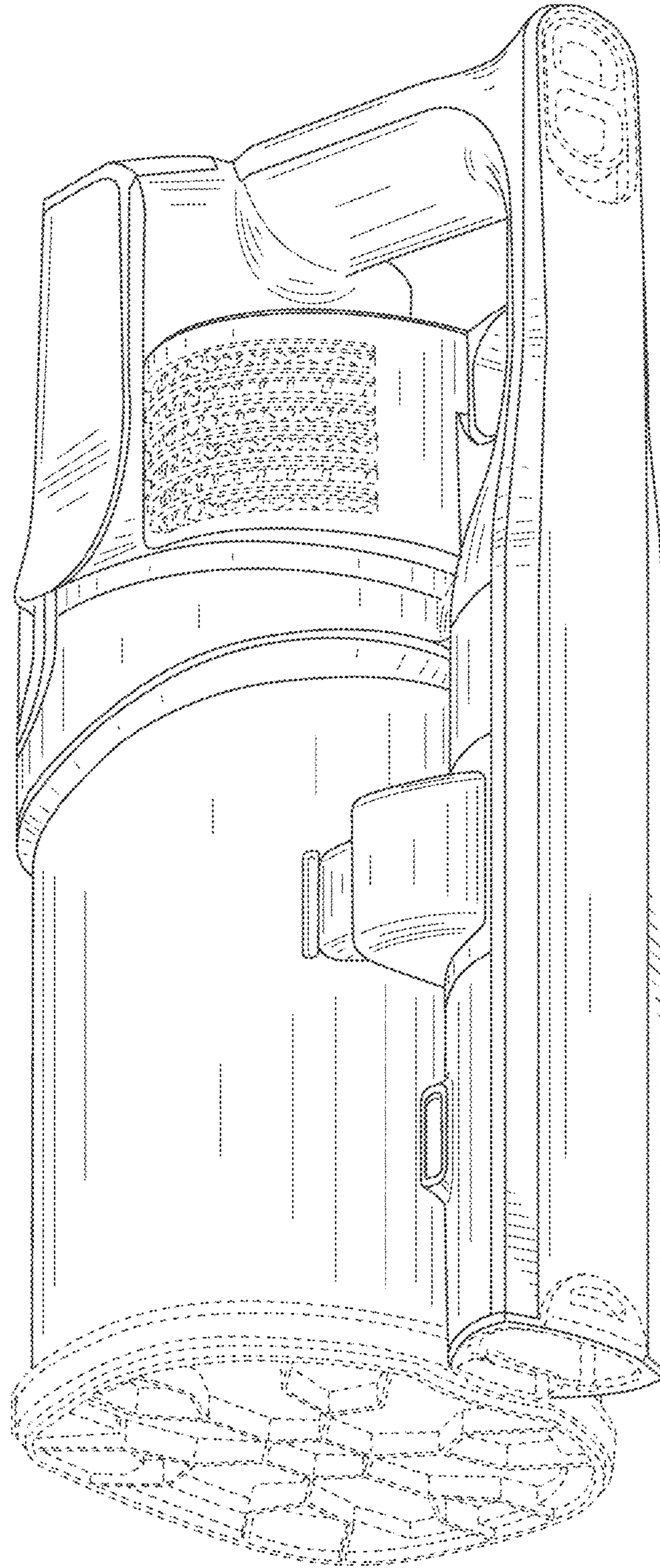


FIG. 6

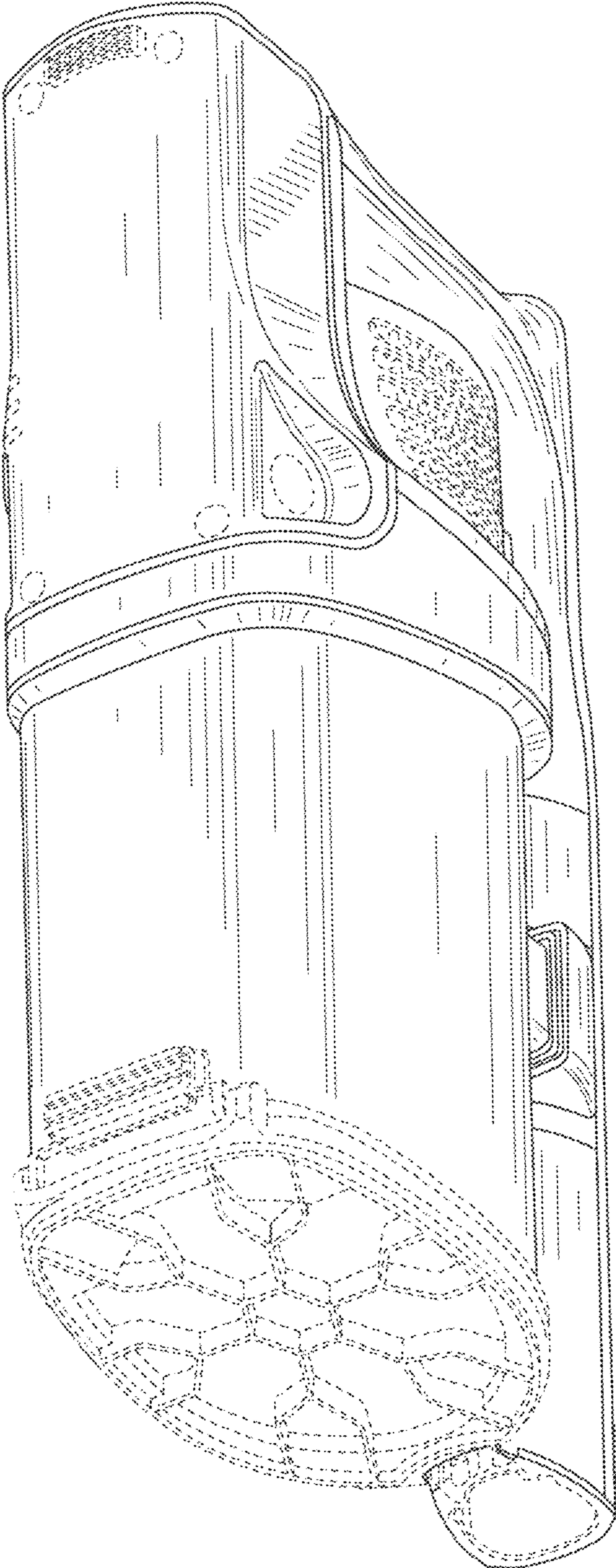


FIG. 7

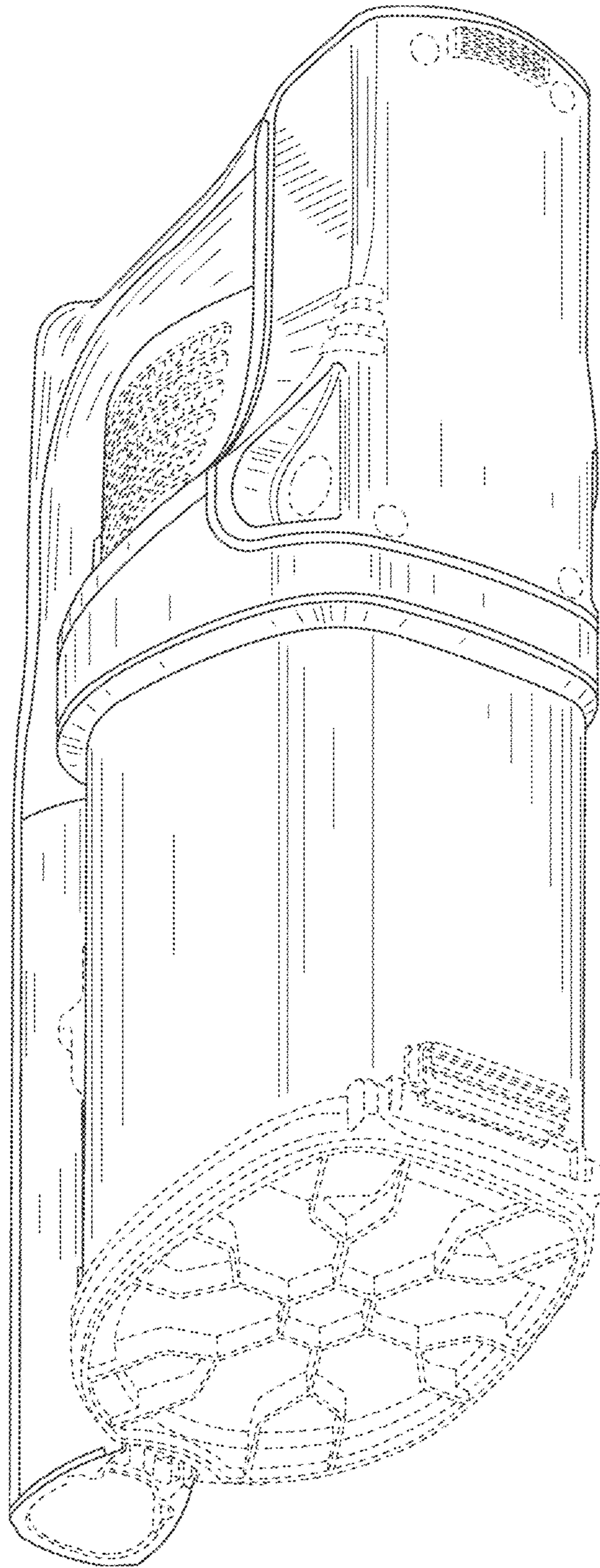


FIG. 8

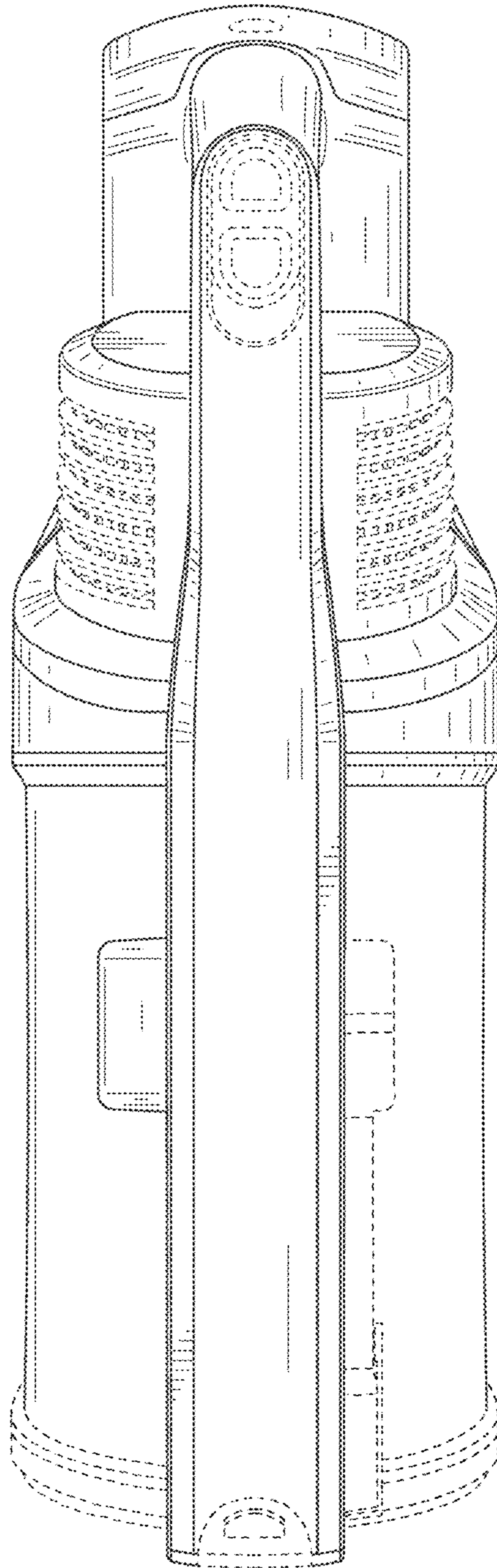


FIG. 9

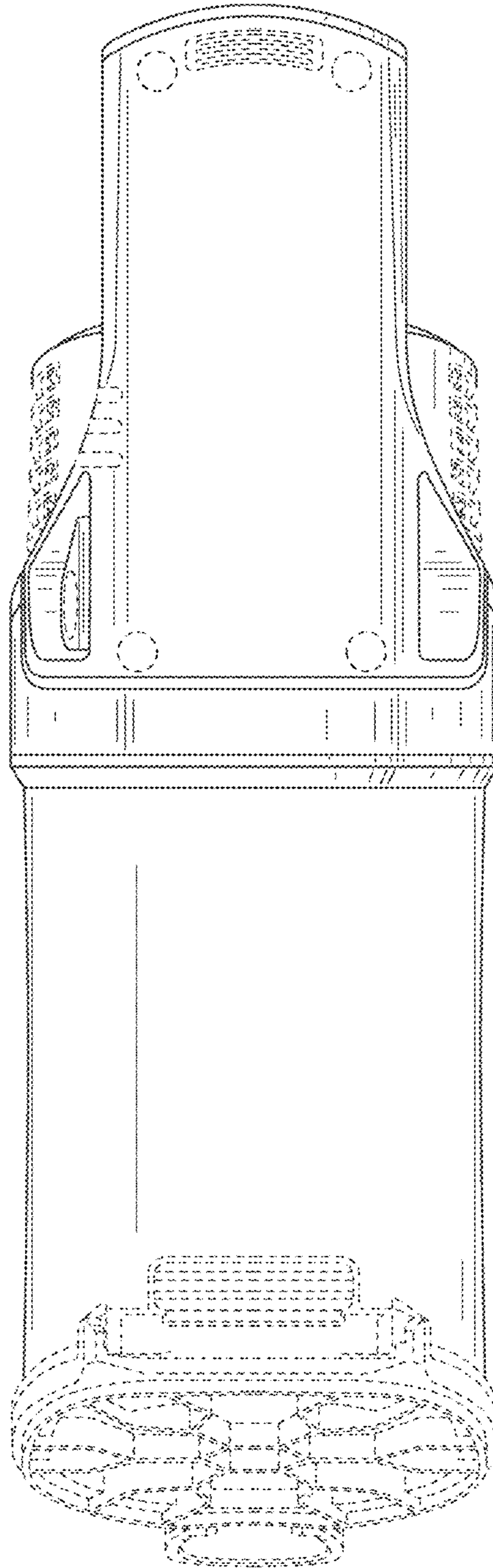


FIG. 10

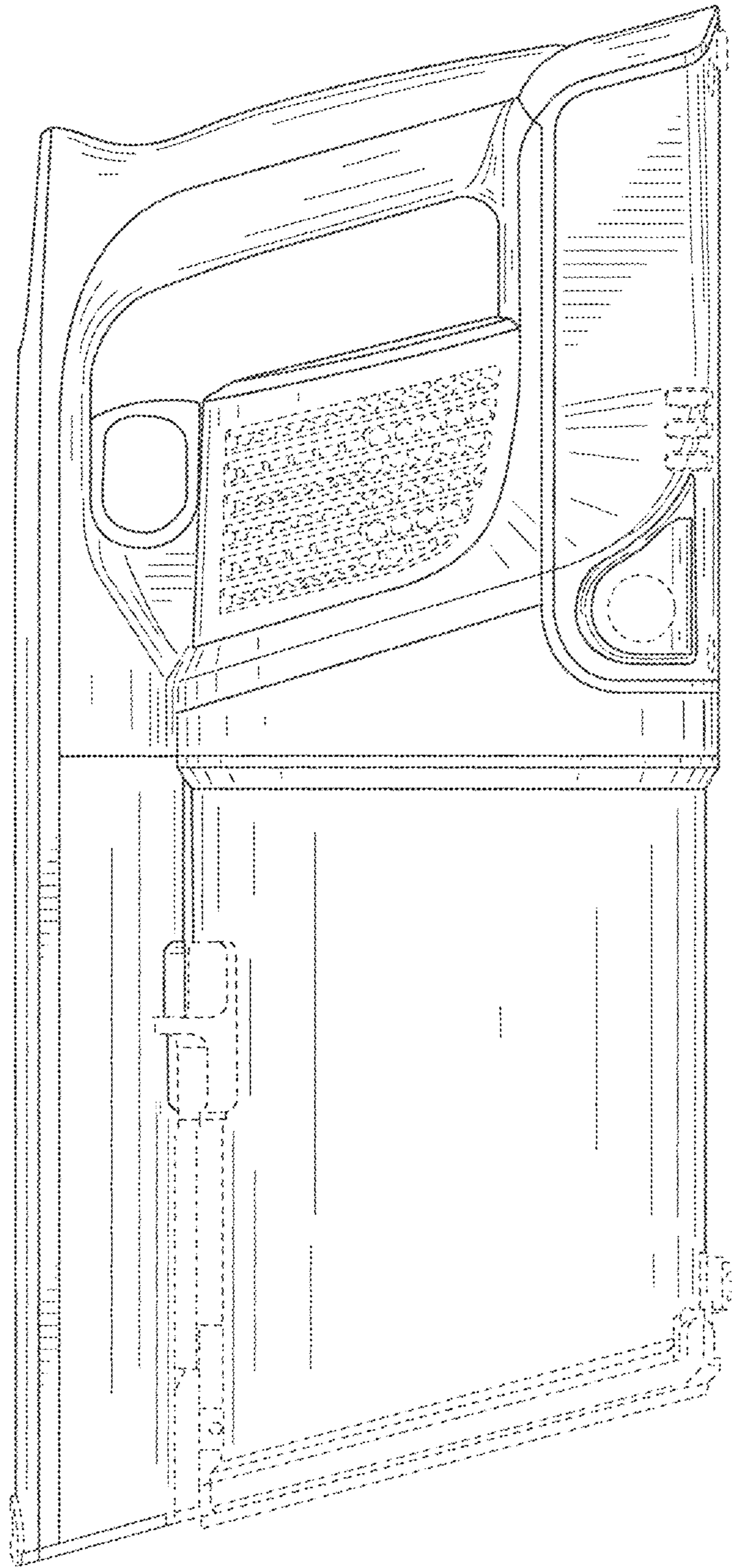


FIG. 11

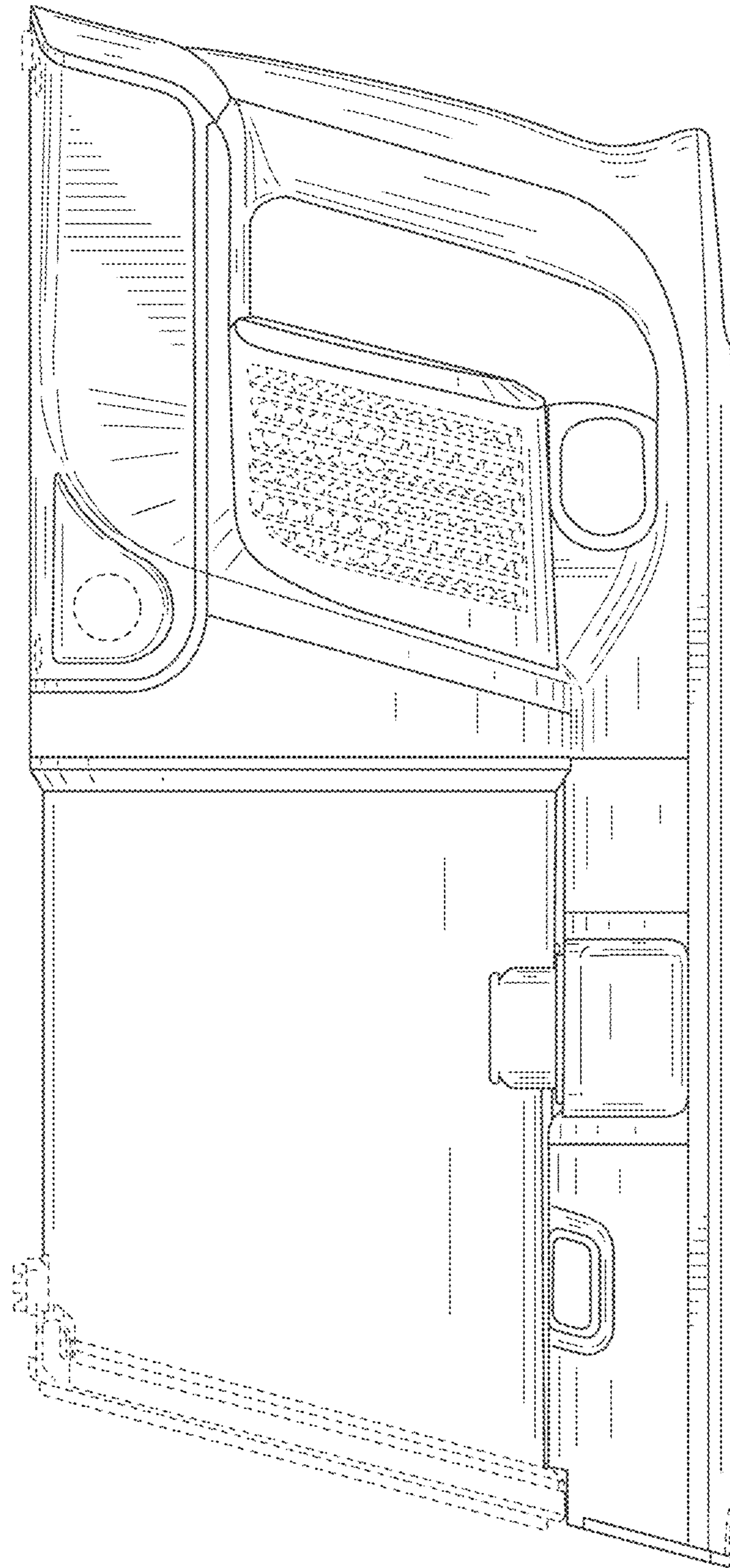


FIG. 12

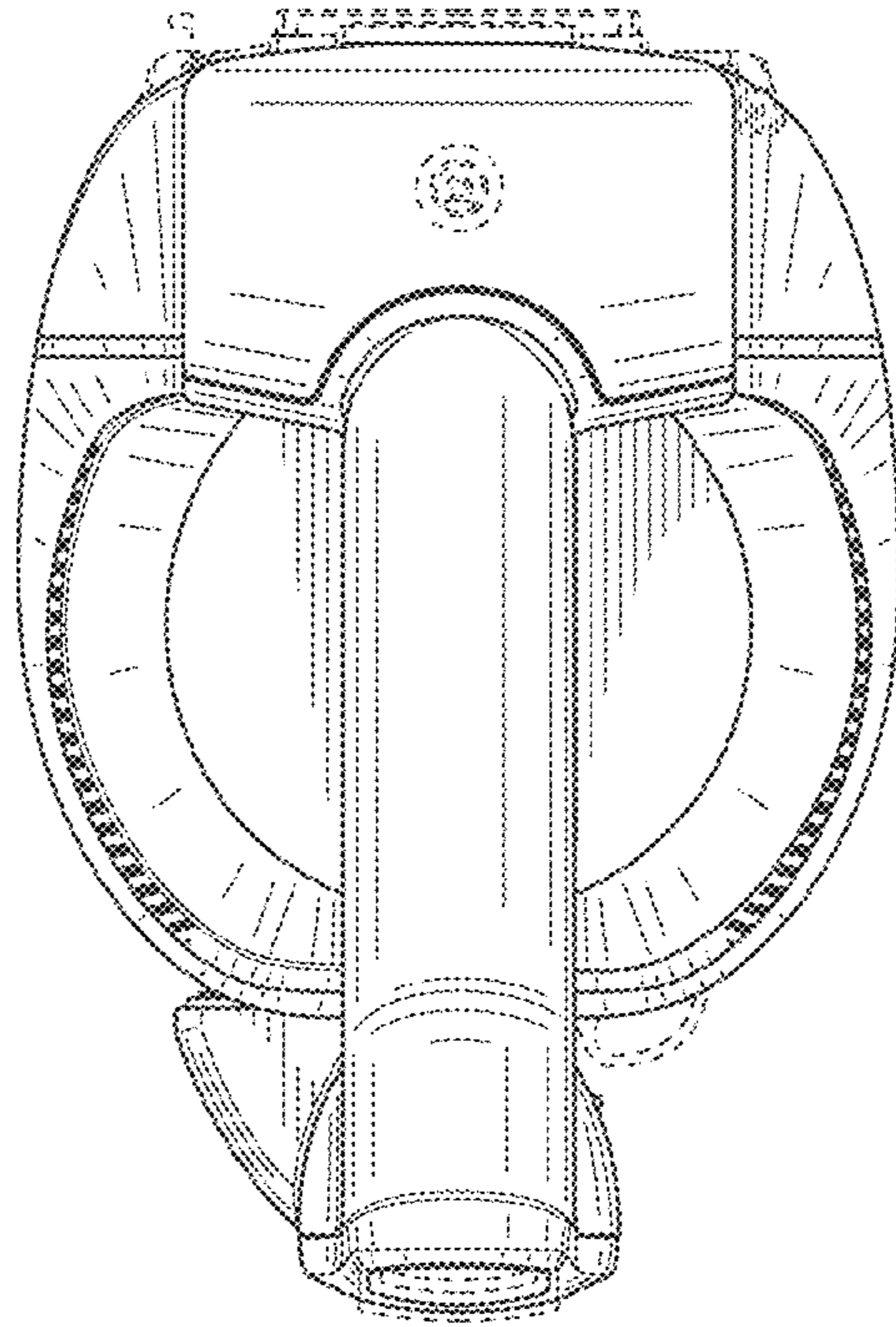


FIG. 13

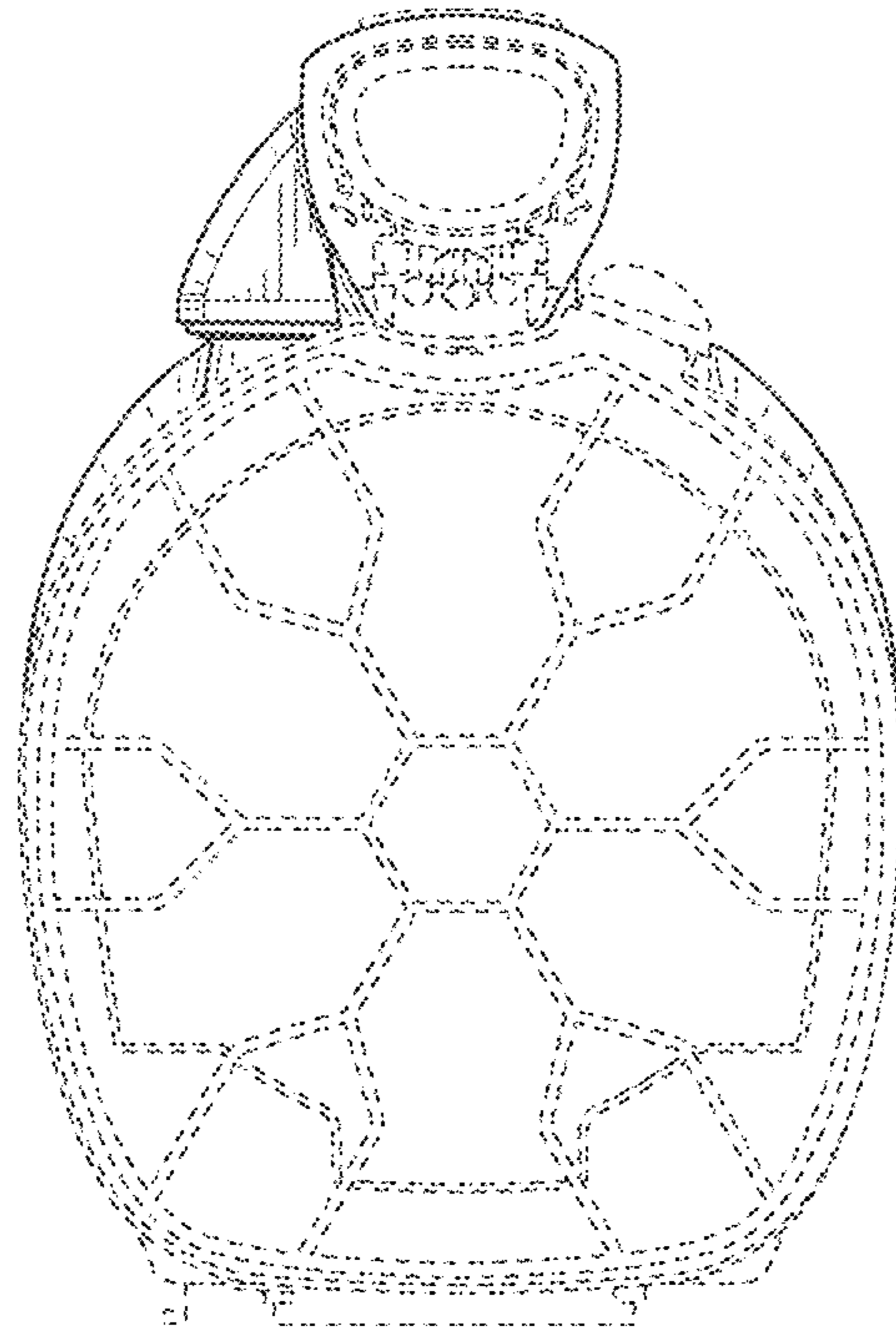


FIG. 14

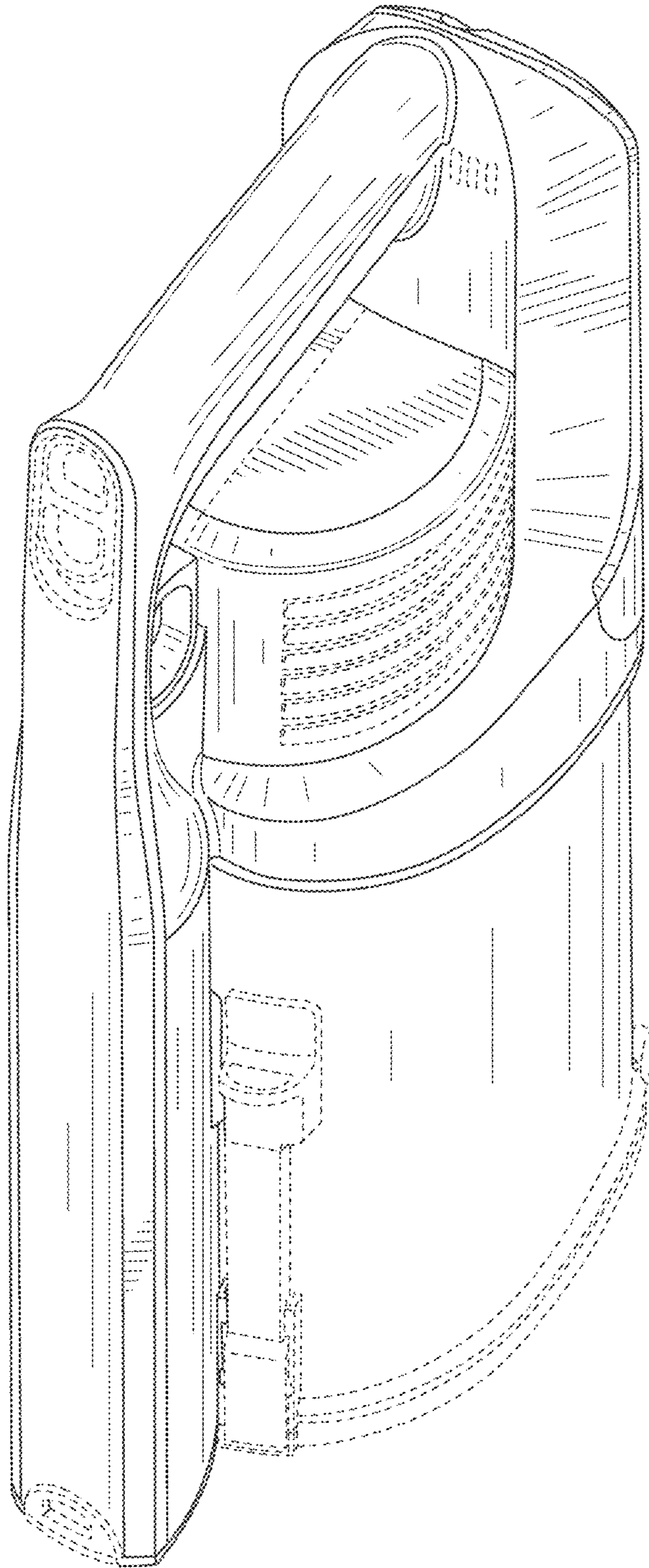


FIG. 15

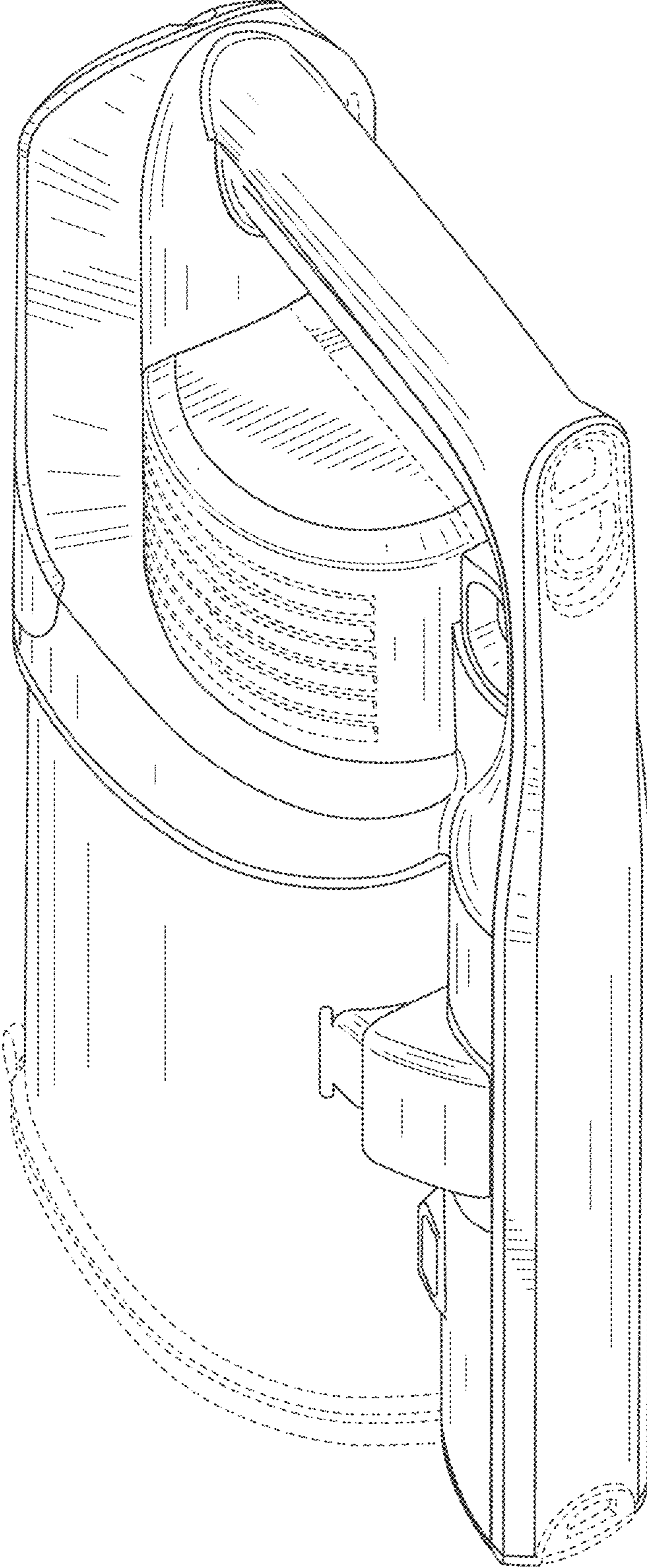


FIG. 16

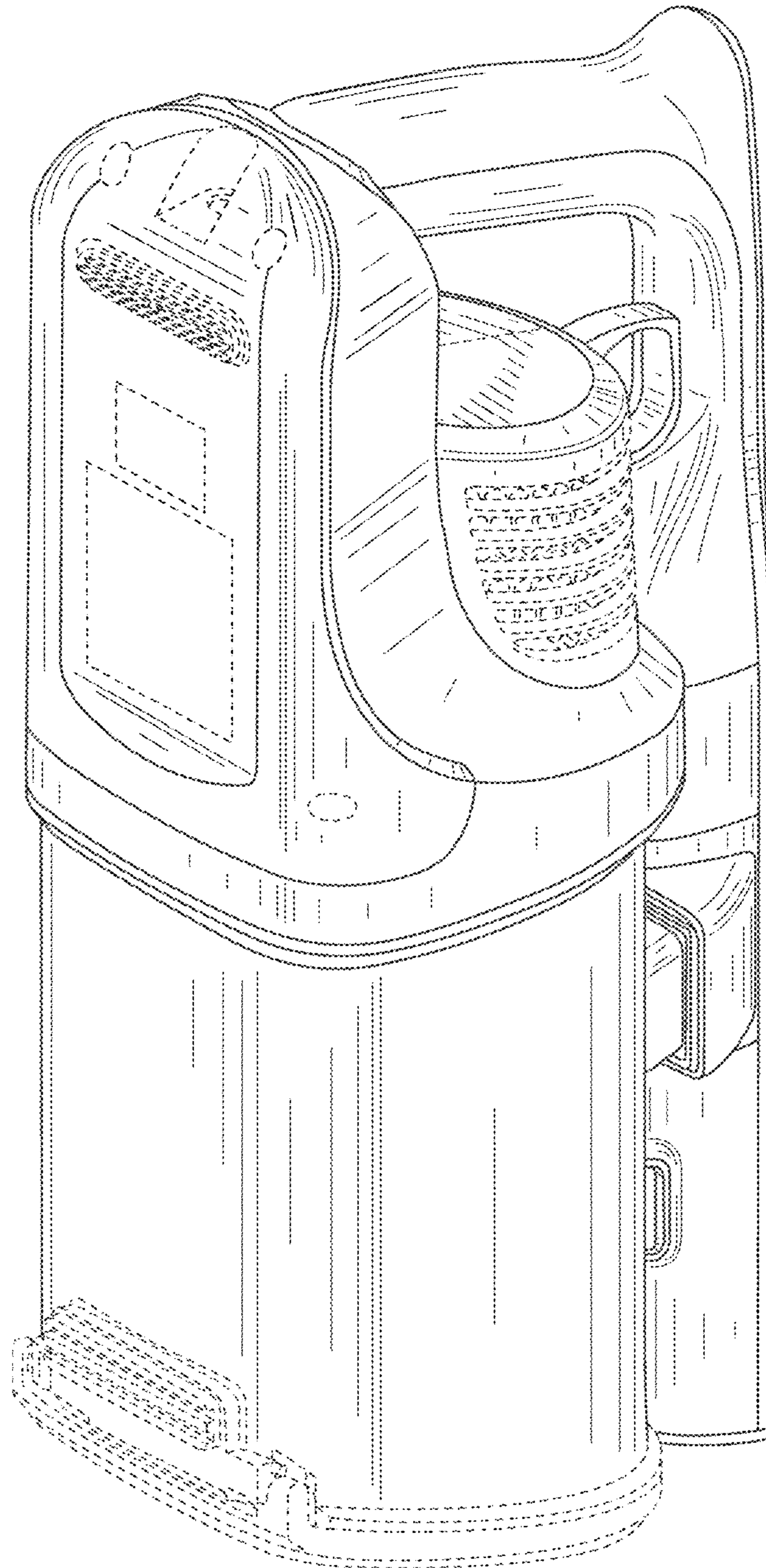


FIG. 17

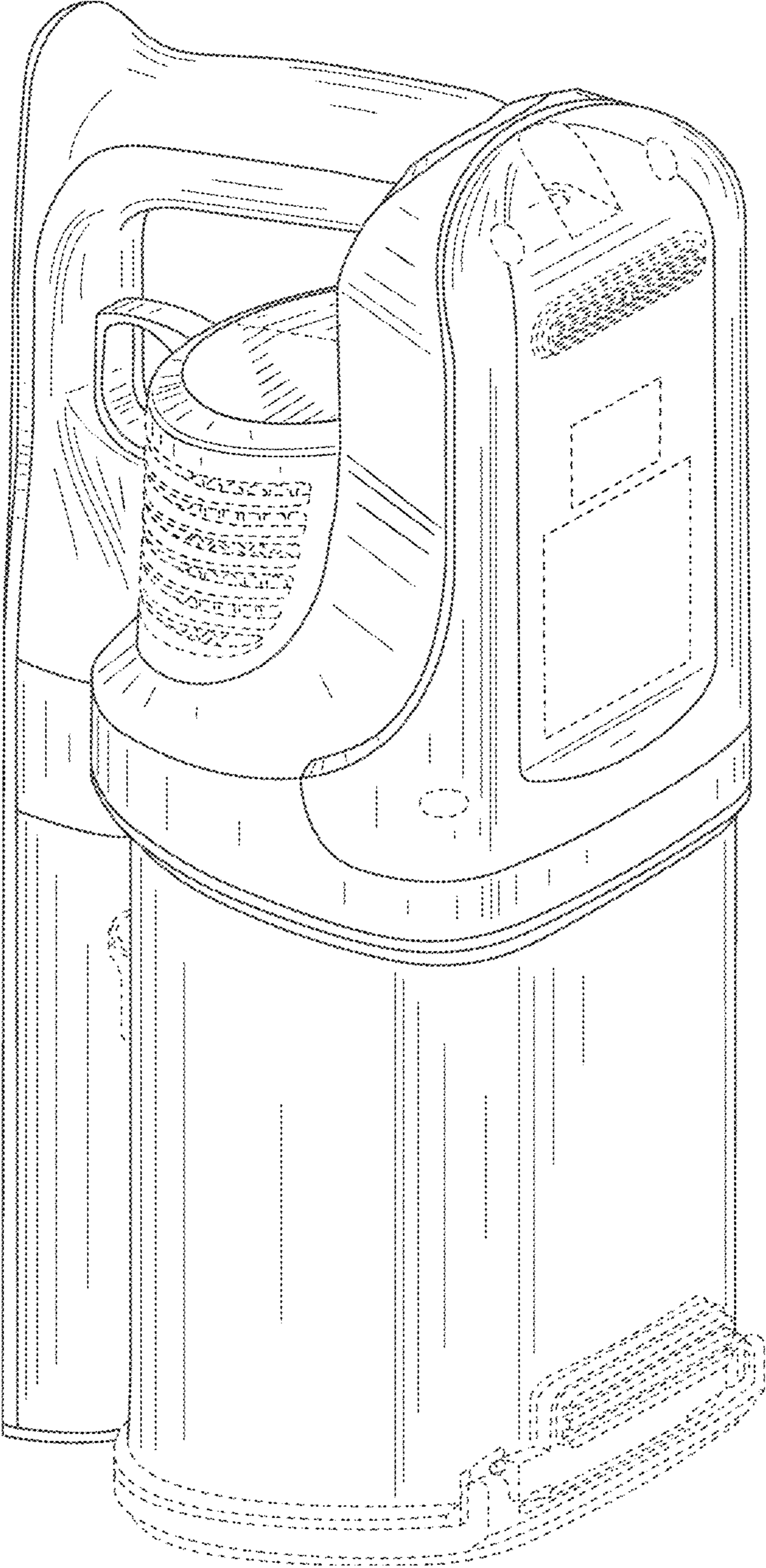


FIG. 18

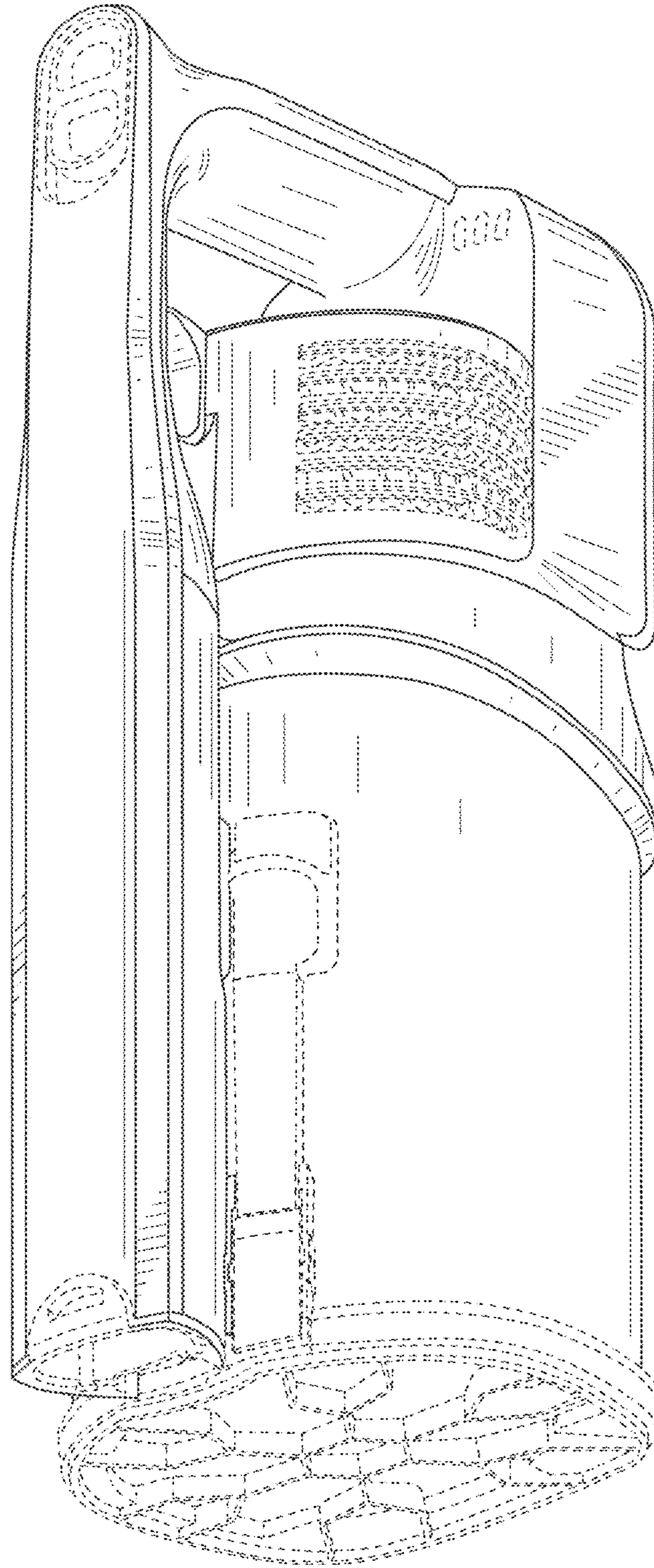


FIG. 19

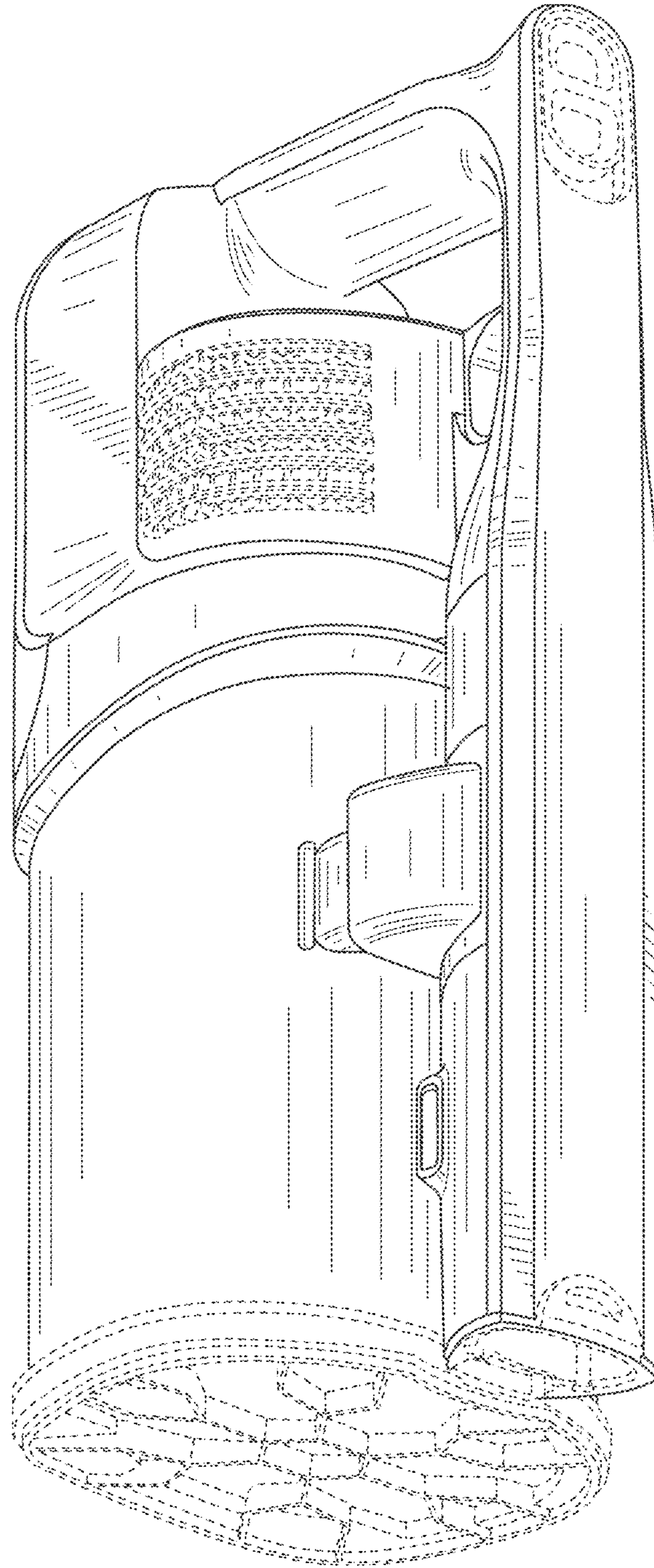


FIG. 20

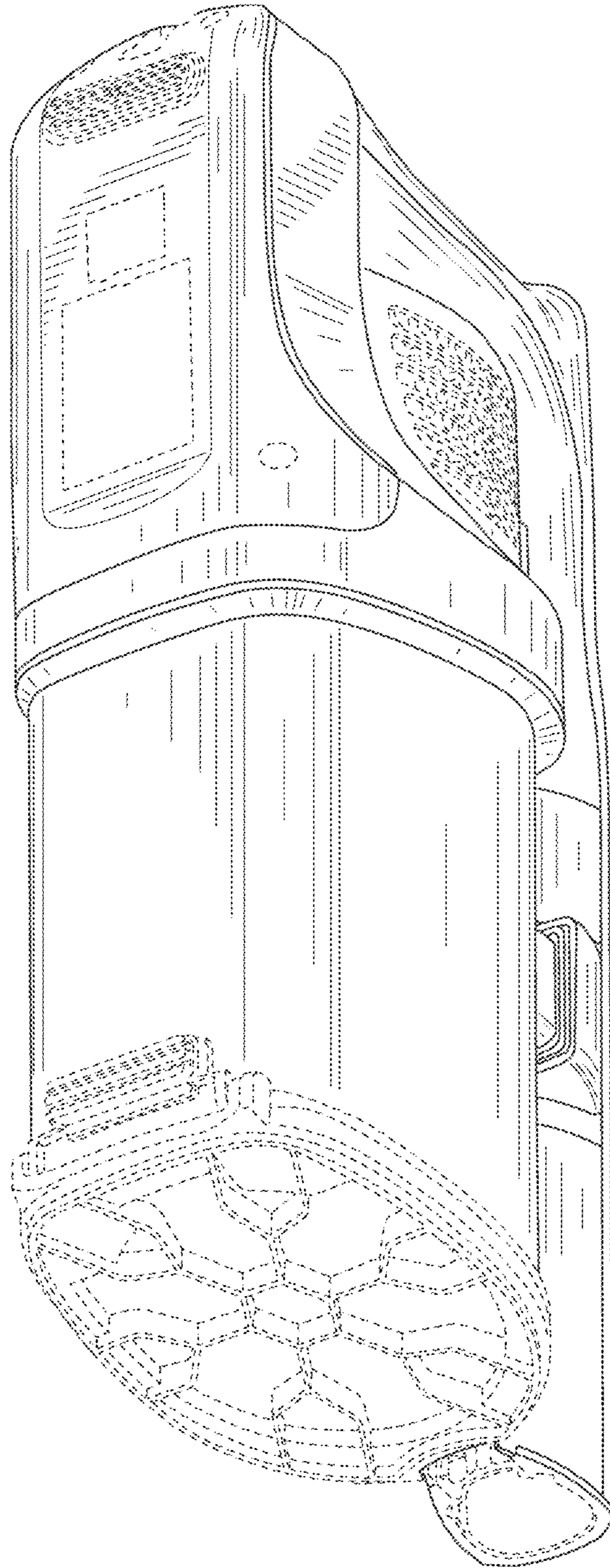


FIG. 21

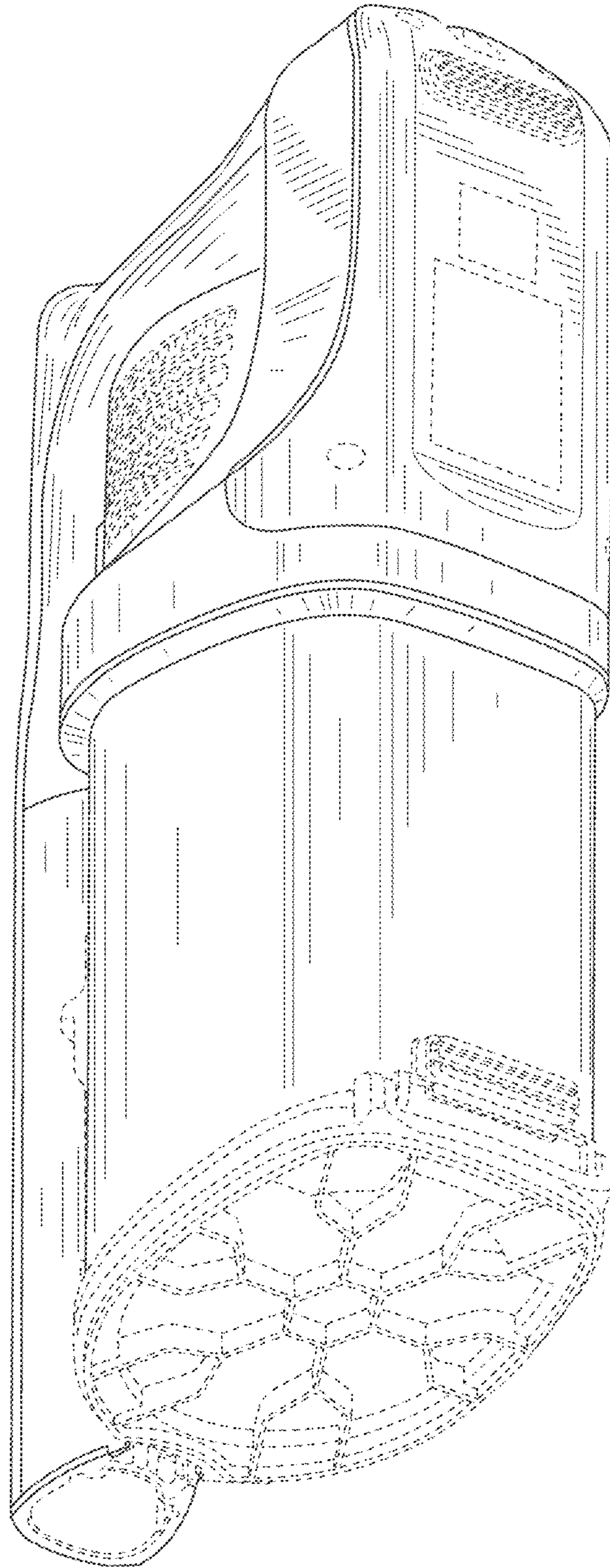


FIG. 22

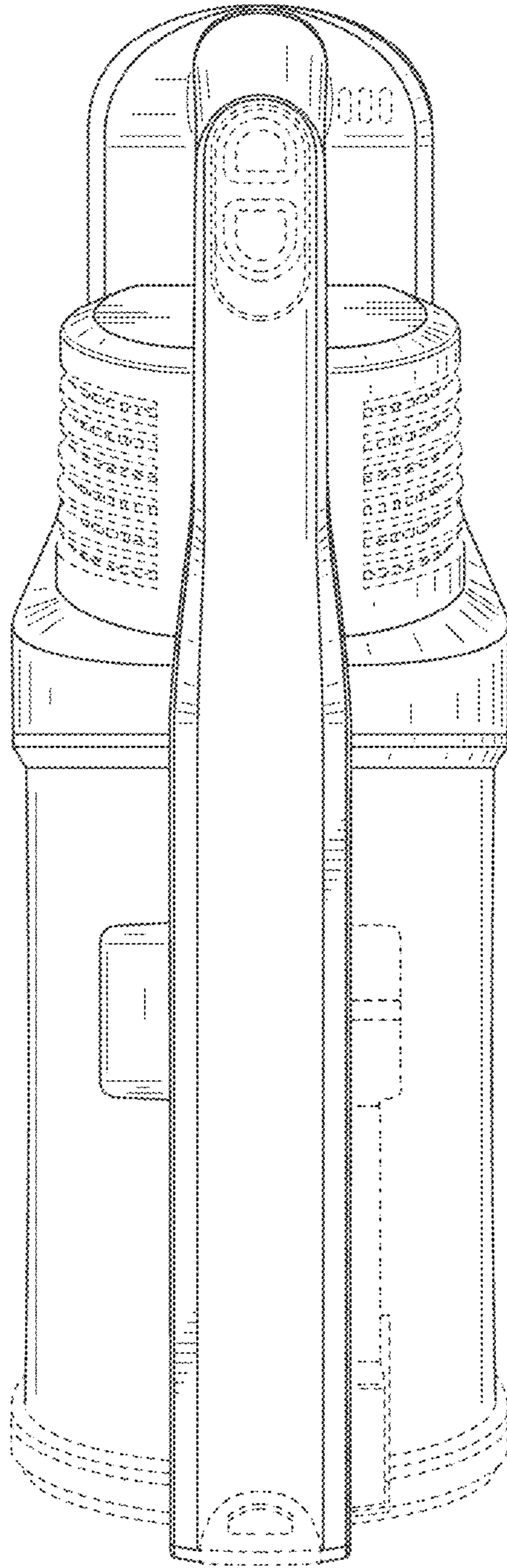


FIG. 23

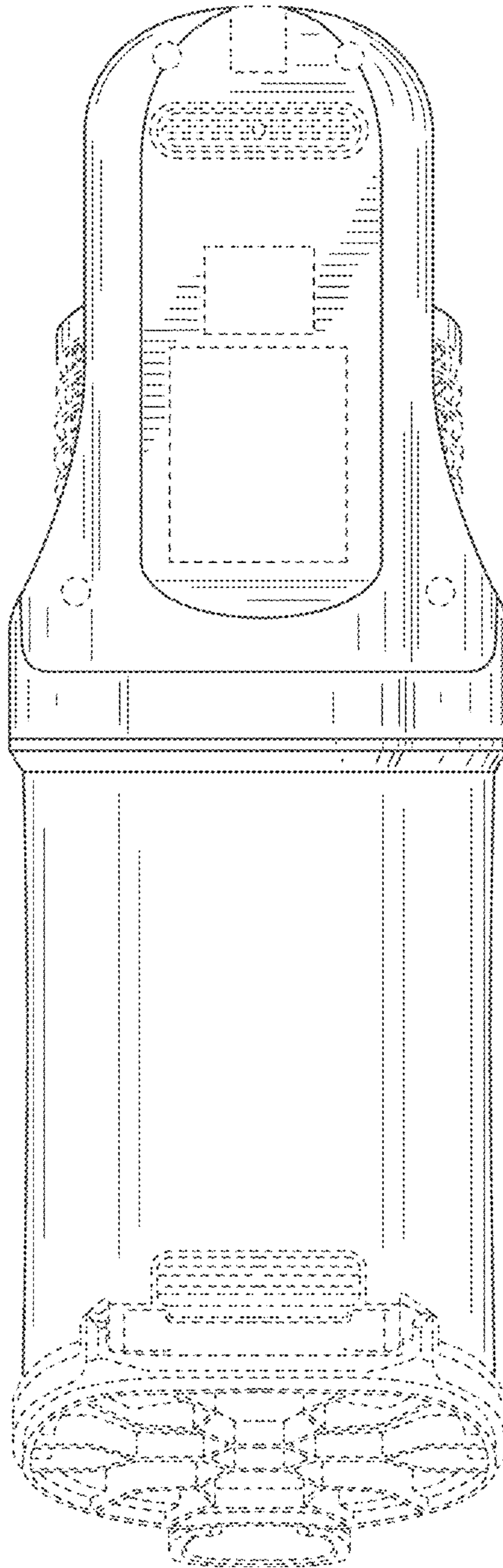


FIG. 24

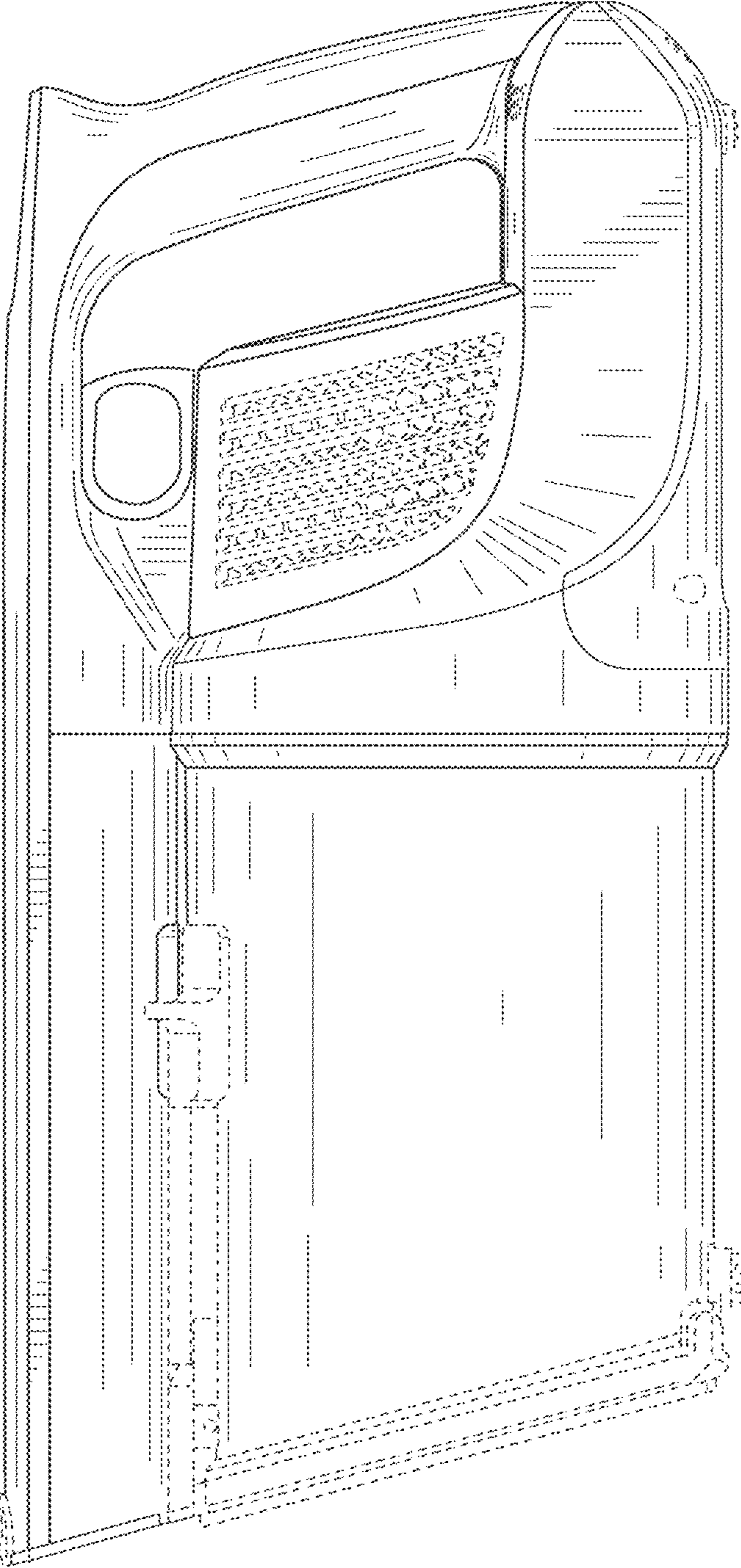


FIG. 25

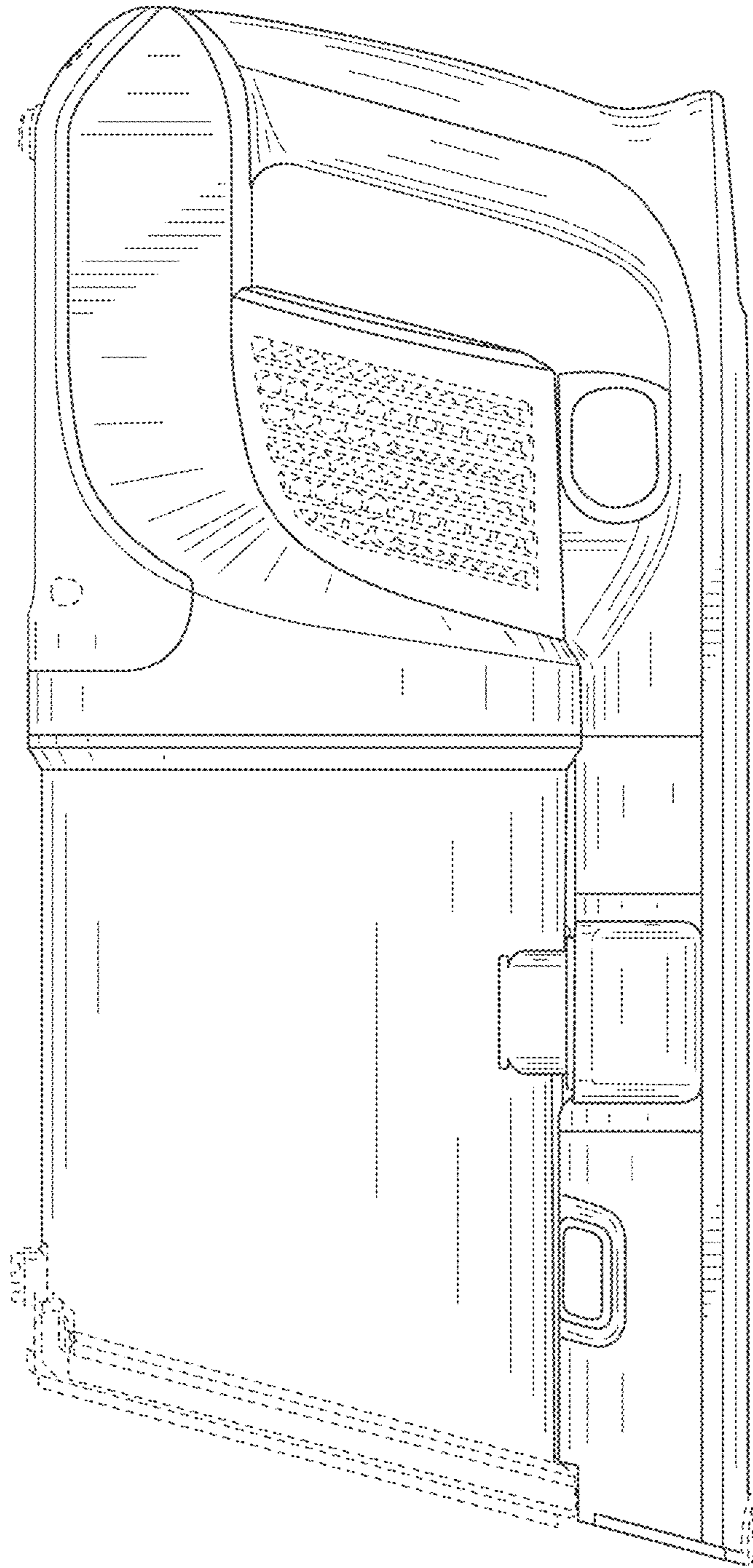


FIG. 26

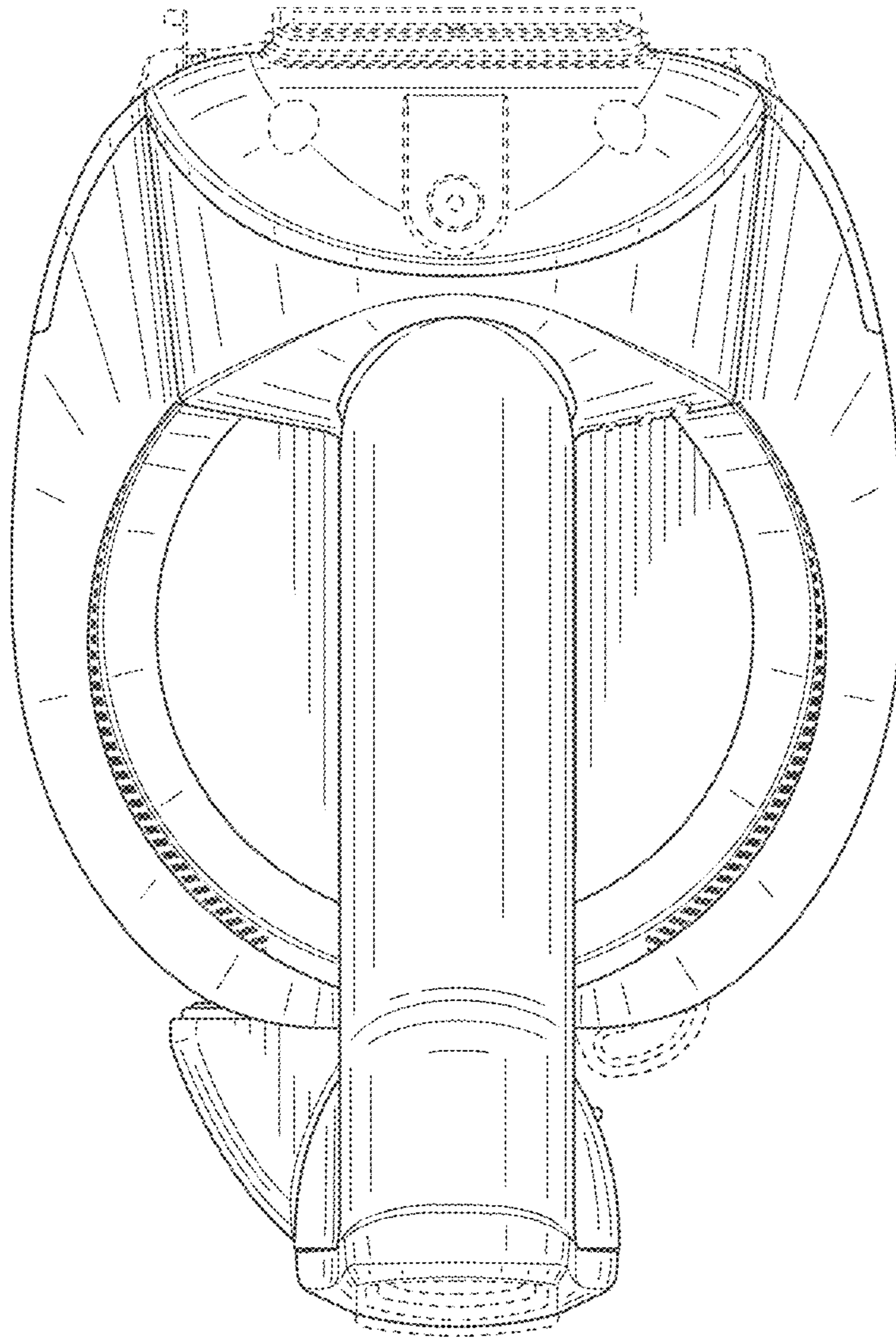


FIG. 27

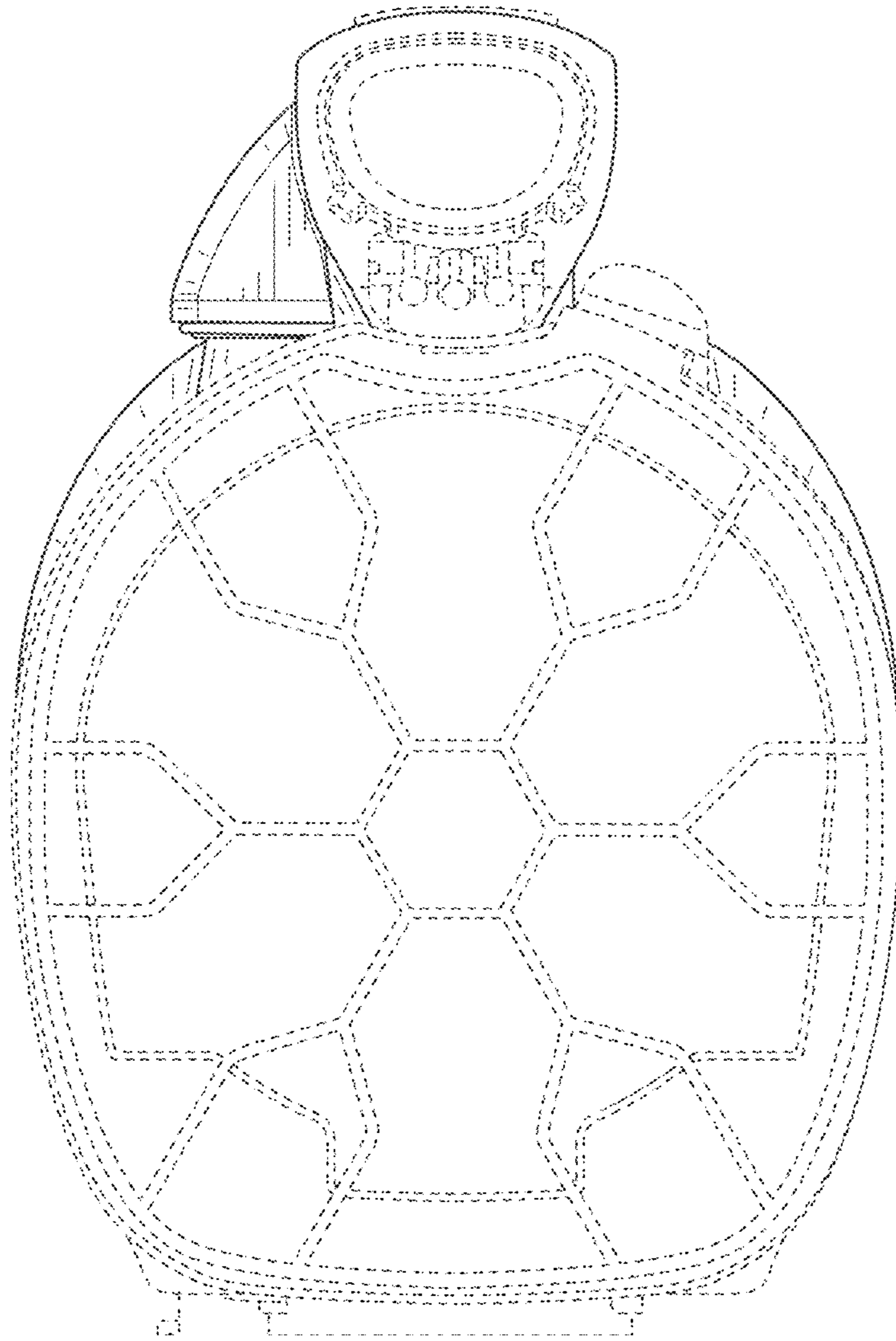


FIG. 28