

US00D979163S

(12) **United States Design Patent** (10) **Patent No.:** **US D979,163 S**
Chan (45) **Date of Patent:** **** Feb. 21, 2023**

(54) **FLOOR CLEANER**

FOREIGN PATENT DOCUMENTS

(71) Applicant: **Techtronic Cordless GP**, Anderson, SC
(US)

CN 203693501 U 7/2014
CN 203693502 U 7/2017

(Continued)

(72) Inventor: **Somnanritha Chan**, Matthews, NC
(US)

(73) Assignee: **Techtronic Floor Care Technology Limited**, Tortola (VG)

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

(21) Appl. No.: **29/770,195**

(22) Filed: **Feb. 10, 2021**

(30) **Foreign Application Priority Data**

Aug. 20, 2020 (CN) 202030479629.5

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

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

(58) **Field of Classification Search**

USPC D32/15, 17-24, 31-34

CPC .. A47L 5/24; A47L 11/04; A47L 11/22; A47L

5/28; A47L 9/106; A47L 11/30; A47L

5/225; A47L 5/32; A47L 5/36; A47L

9/00; A47L 9/0063; A47L 9/32; A47L

9/322; A47L 9/0018; A47L 9/0488; A47L

9/0027; A47L 9/0036; A47L 11/00; A47L

11/24; A47L 11/32; A47L 11/4075; A47L

11/4094; A47L 11/20; A47L 11/34; A47L

11/40; B04C 5/185

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D386,842 S * 11/1997 Hoshino D32/23
6,101,669 A * 8/2000 Martin A47L 5/24
15/327.2

D467,694 S * 12/2002 Kitts D32/21
7,073,226 B1 7/2006 Lenkiewicz et al.

(Continued)

OTHER PUBLICATIONS

The Hoover Cleanslate Is a Carpet Cleaning Beast (on-line), dated Dec. 2, 2021. Retrieved from Internet May 26, 2022, URL: https://www.youtube.com/watch?v=_zG6NTQzNvQ (1 page) (Year: 2021).*

Primary Examiner — Kimberly Barnes

(74) *Attorney, Agent, or Firm* — Michael Best & Friedrich LLP

(57) **CLAIM**

I claim the ornamental design for a floor cleaner, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a floor cleaner showing my new design.

FIG. 2 is a second perspective view of the floor cleaner of FIG. 1.

FIG. 3 is a first side view of the floor cleaner of FIG. 1.

FIG. 4 is a second side view of the floor cleaner of FIG. 1.

FIG. 5 is a third side view of the floor cleaner of FIG. 1.

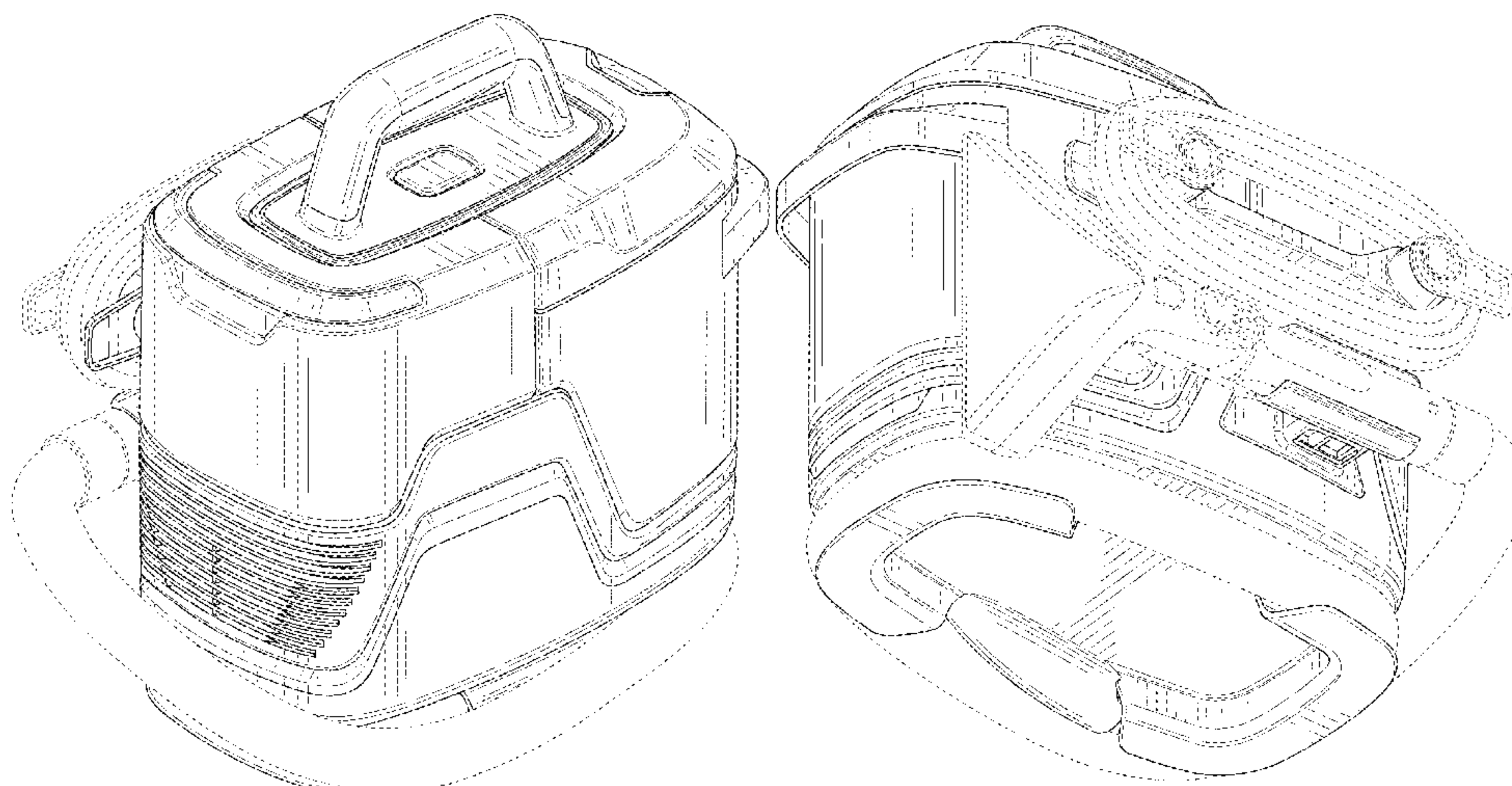
FIG. 6 is a fourth side view of the floor cleaner of FIG. 1.

FIG. 7 is a top side view of the floor cleaner of FIG. 1; and,

FIG. 8 is a bottom side view of the floor cleaner of FIG. 1.

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

1 Claim, 8 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

7,228,589 B2 6/2007 Miner et al.
7,234,197 B2 * 6/2007 Tran A47L 11/4038
15/346
7,578,025 B2 * 8/2009 Kostreba A47L 11/4088
315/320
7,779,505 B2 8/2010 Krebs et al.
D647,260 S * 10/2011 Hollis D32/18
D647,261 S * 10/2011 Schultz D32/18
8,117,713 B2 2/2012 Kasper et al.
D672,102 S * 12/2012 Schouten D32/18
8,397,343 B2 3/2013 Williams
8,485,003 B2 * 7/2013 Krebs D06F 75/12
285/11
8,528,142 B1 9/2013 Pedlar et al.
8,601,641 B2 * 12/2013 Conrad A47L 9/2842
15/327.2
8,683,644 B2 * 4/2014 Conrad A47L 9/26
242/400.1
9,015,898 B2 4/2015 Nguyen
9,532,693 B1 1/2017 Tran et al.
9,788,700 B2 10/2017 Wall et al.
D806,330 S * 12/2017 Moriya D32/15
10,327,616 B2 6/2019 Moyher, Jr. et al.
10,342,402 B2 7/2019 Lenkiewicz et al.

10,426,304 B2 10/2019 Betcher et al.
D880,087 S * 3/2020 Knight D32/24
10,674,881 B2 6/2020 Chavana, Jr. et al.
10,893,786 B2 * 1/2021 Quintero A47L 11/4083
10,986,975 B2 * 4/2021 Rukavina A47L 11/4094
11,172,799 B2 * 11/2021 Rukavina A47L 7/0014
D939,794 S * 12/2021 Irfan D32/18
D940,414 S * 1/2022 Austin D32/21
D948,813 S * 4/2022 Dexter A47L 7/0009
D30/158
11,311,157 B2 * 4/2022 Shinma A47L 9/2884
D956,374 S * 6/2022 Suzuki D32/18
11,357,369 B2 * 6/2022 Conrad A47L 9/122
2006/0156498 A1 7/2006 Venard et al.
2015/0135473 A1 5/2015 Simon et al.
2017/0127900 A1 * 5/2017 Wright A47L 11/30
2018/0103611 A1 4/2018 Mainini et al.
2018/0110201 A1 4/2018 Moyher, Jr. et al.
2019/0269291 A1 9/2019 Royale
2019/0274509 A1 9/2019 Moyher, Jr. et al.
2019/0313865 A1 10/2019 Lenkiewicz et al.
2020/0029770 A1 1/2020 Tran et al.

FOREIGN PATENT DOCUMENTS

CN 210277079 U 4/2020
CN 306249519 * 12/2020

* cited by examiner

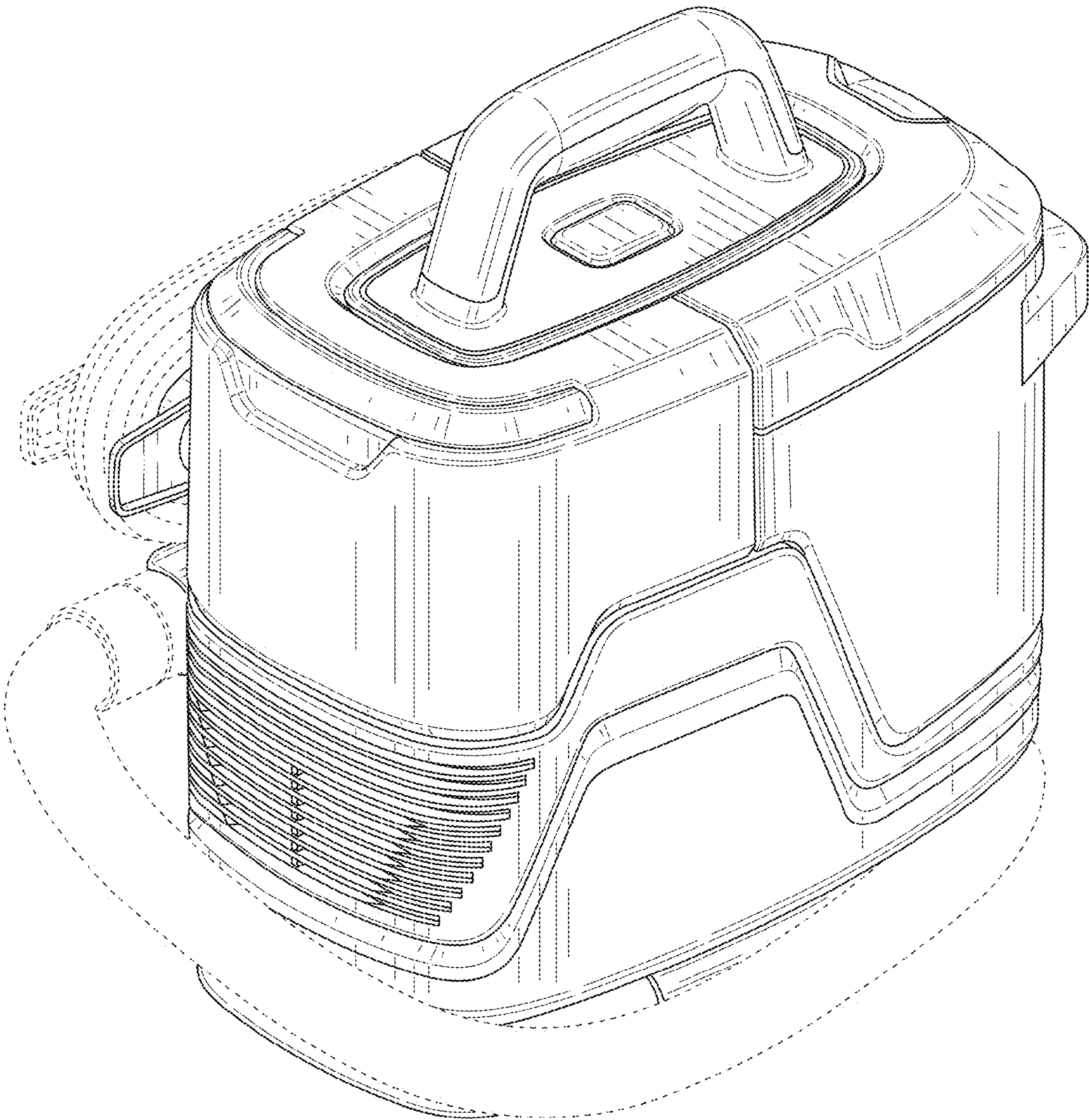


FIG. 1

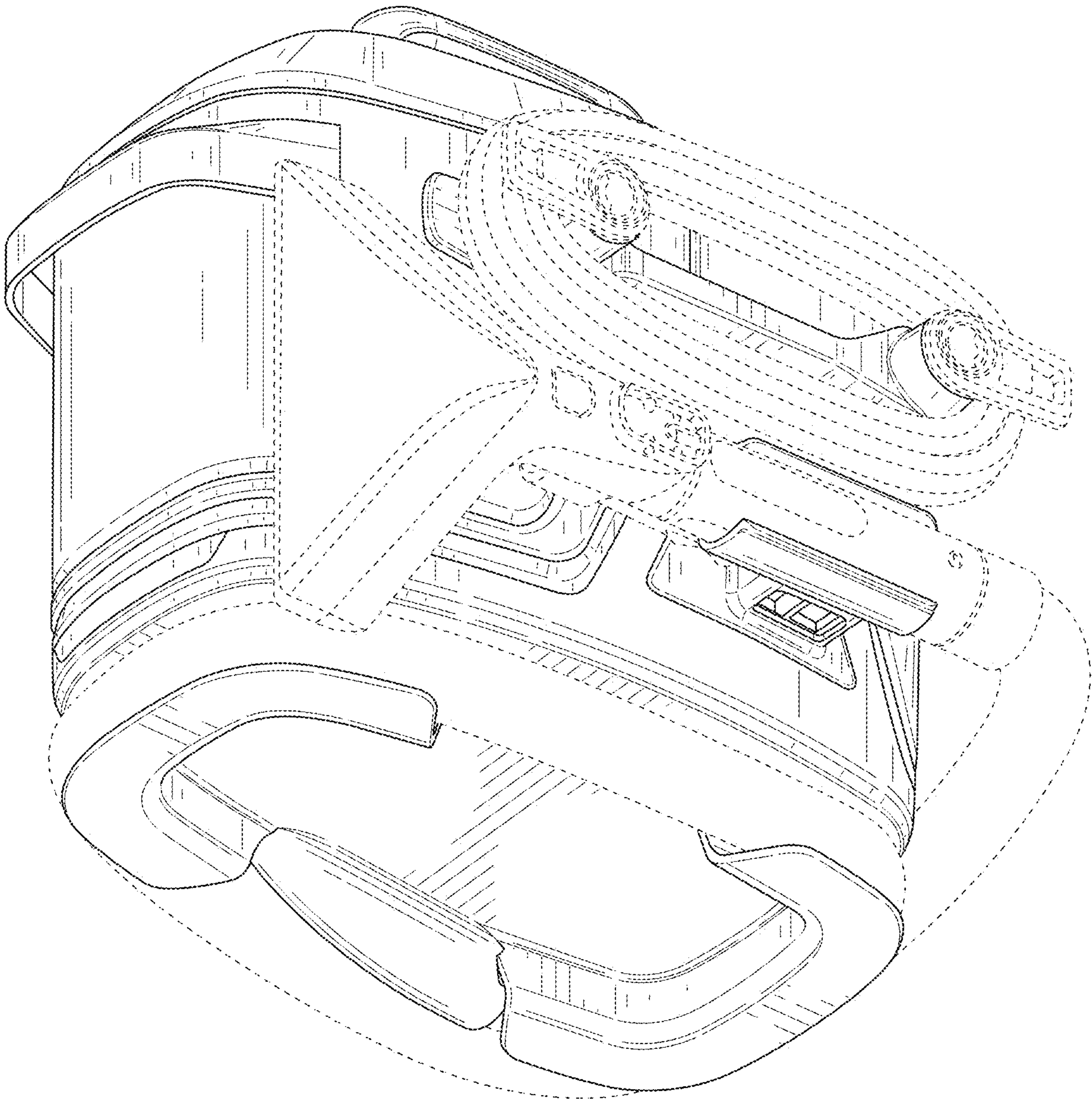


FIG. 2

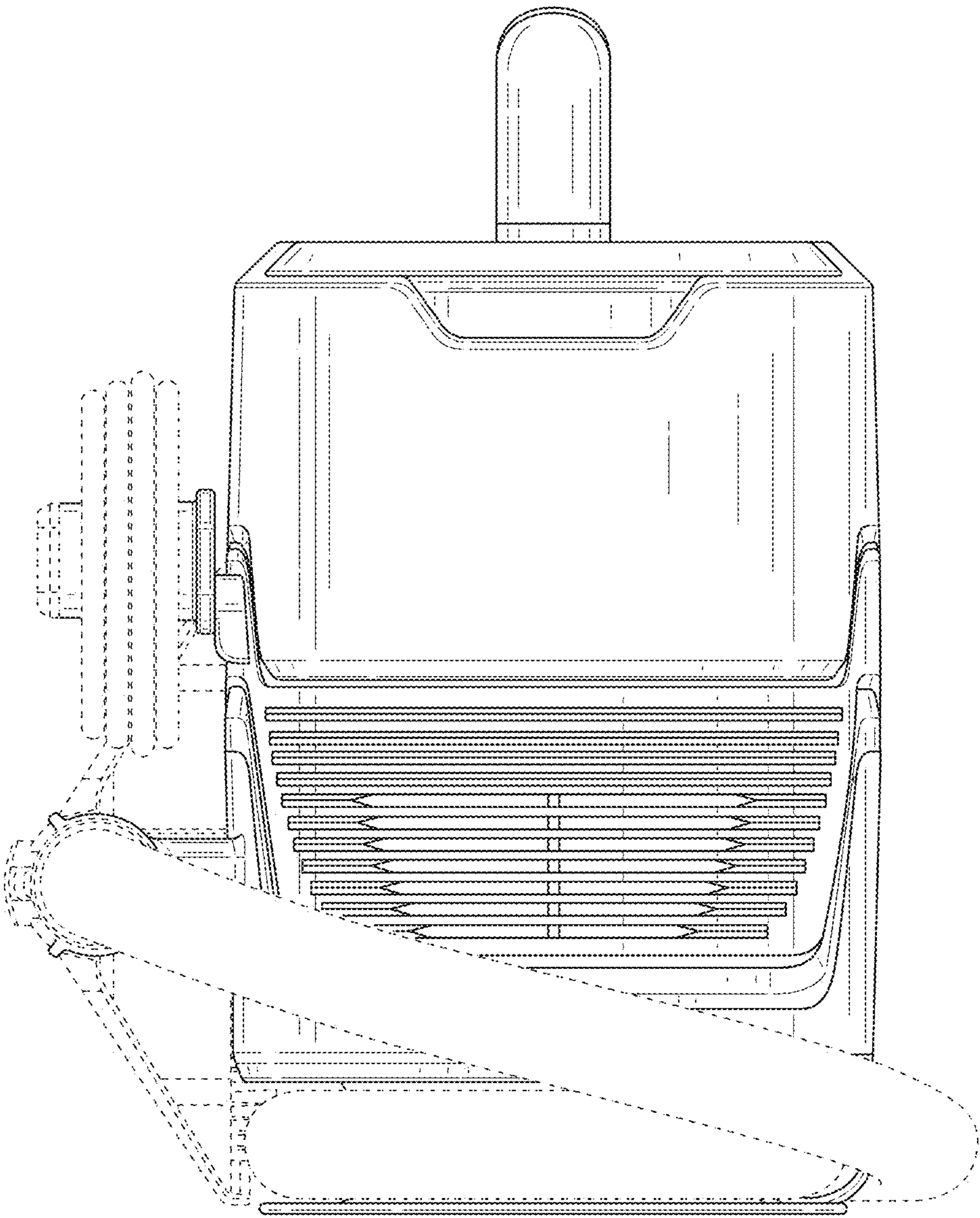


FIG. 3

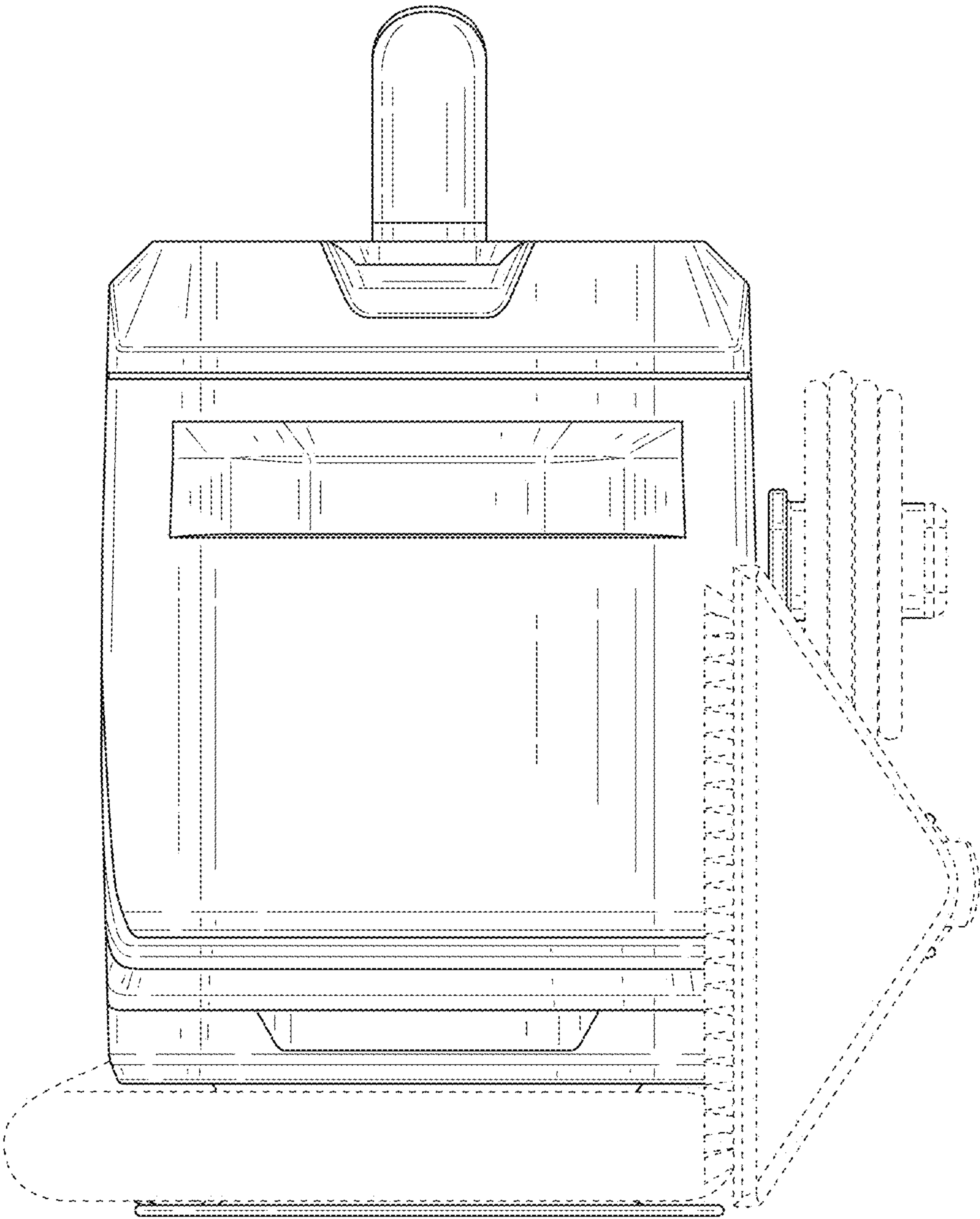
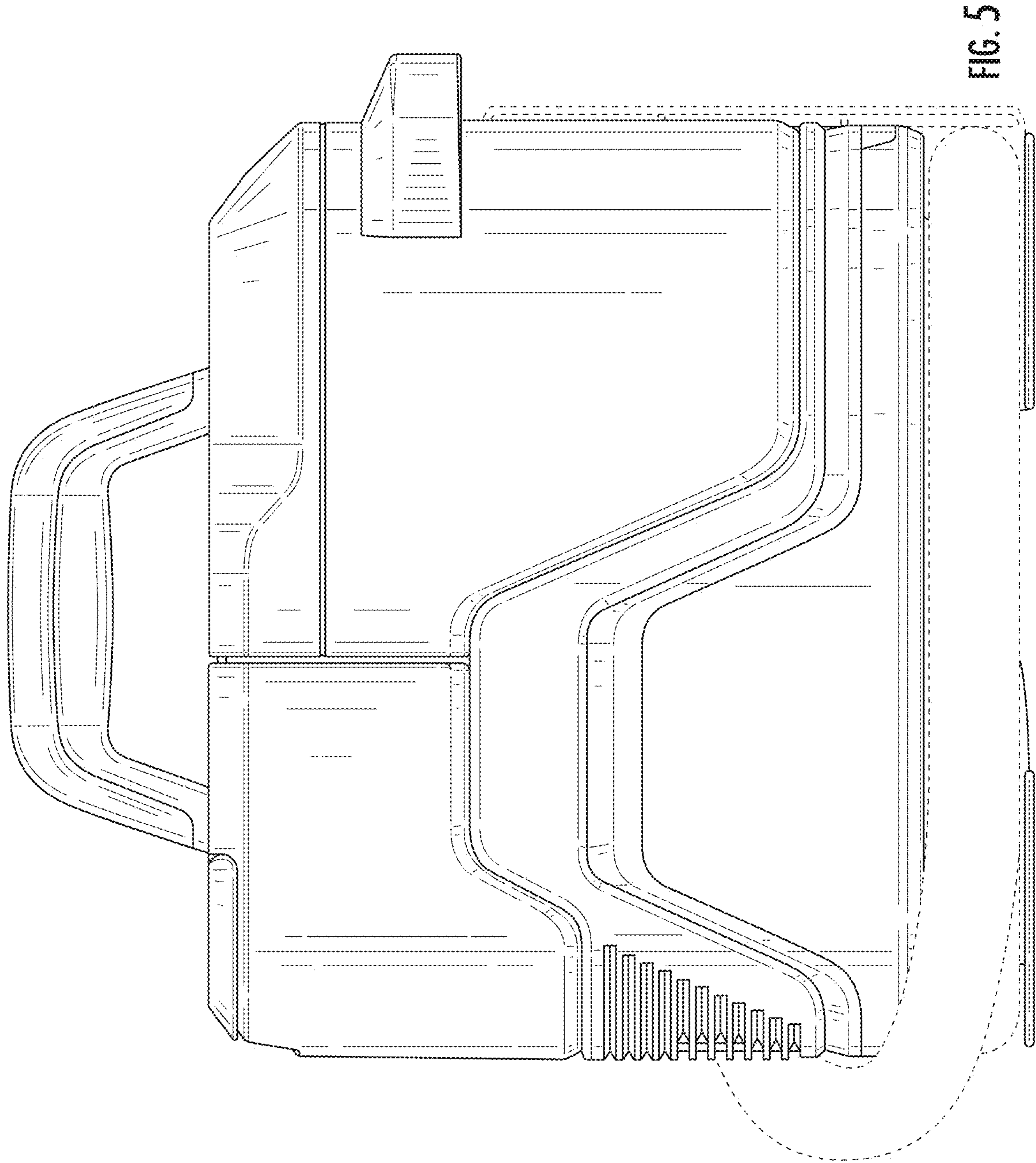


FIG. 4



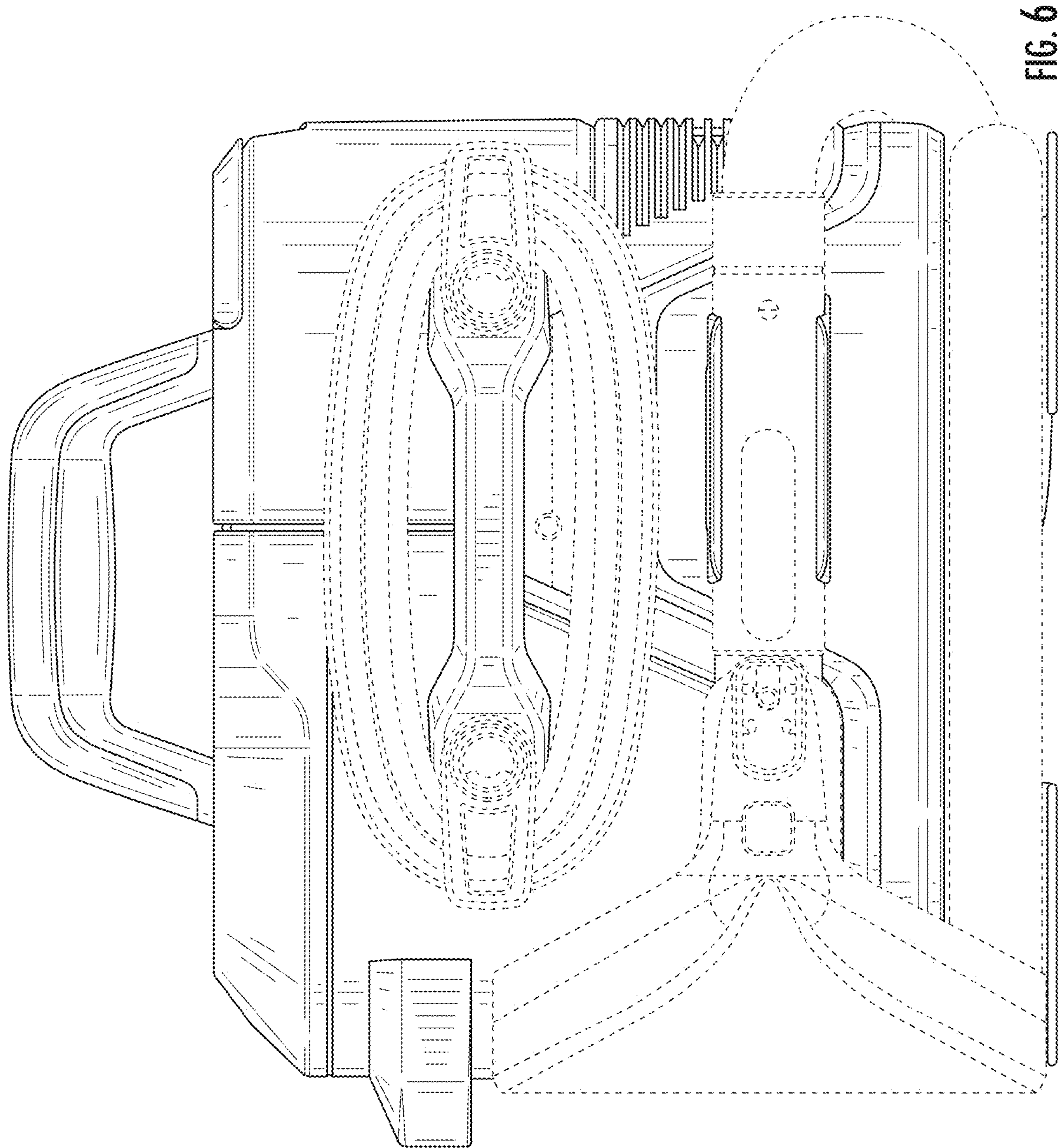


FIG. 6

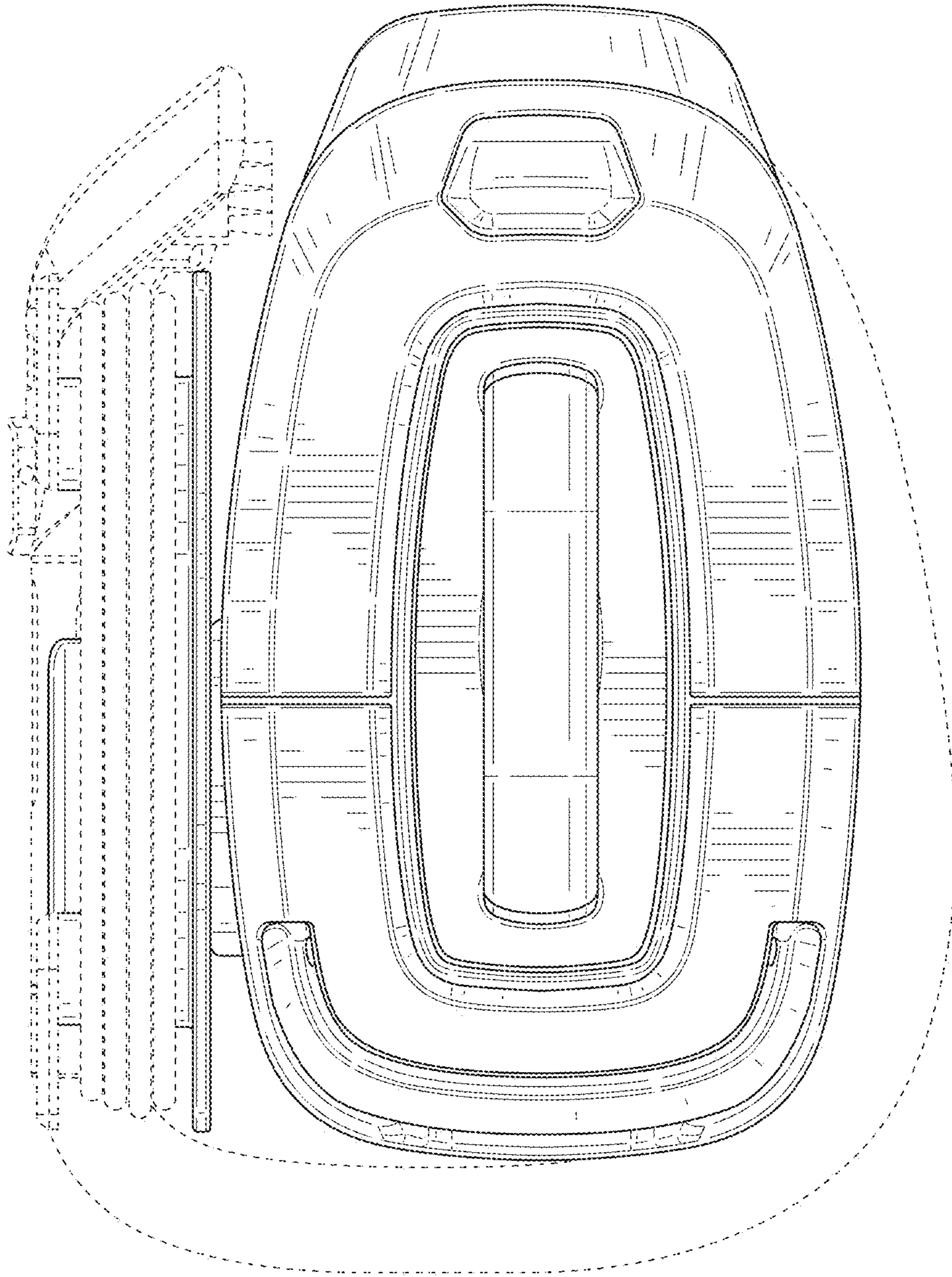


FIG. 7

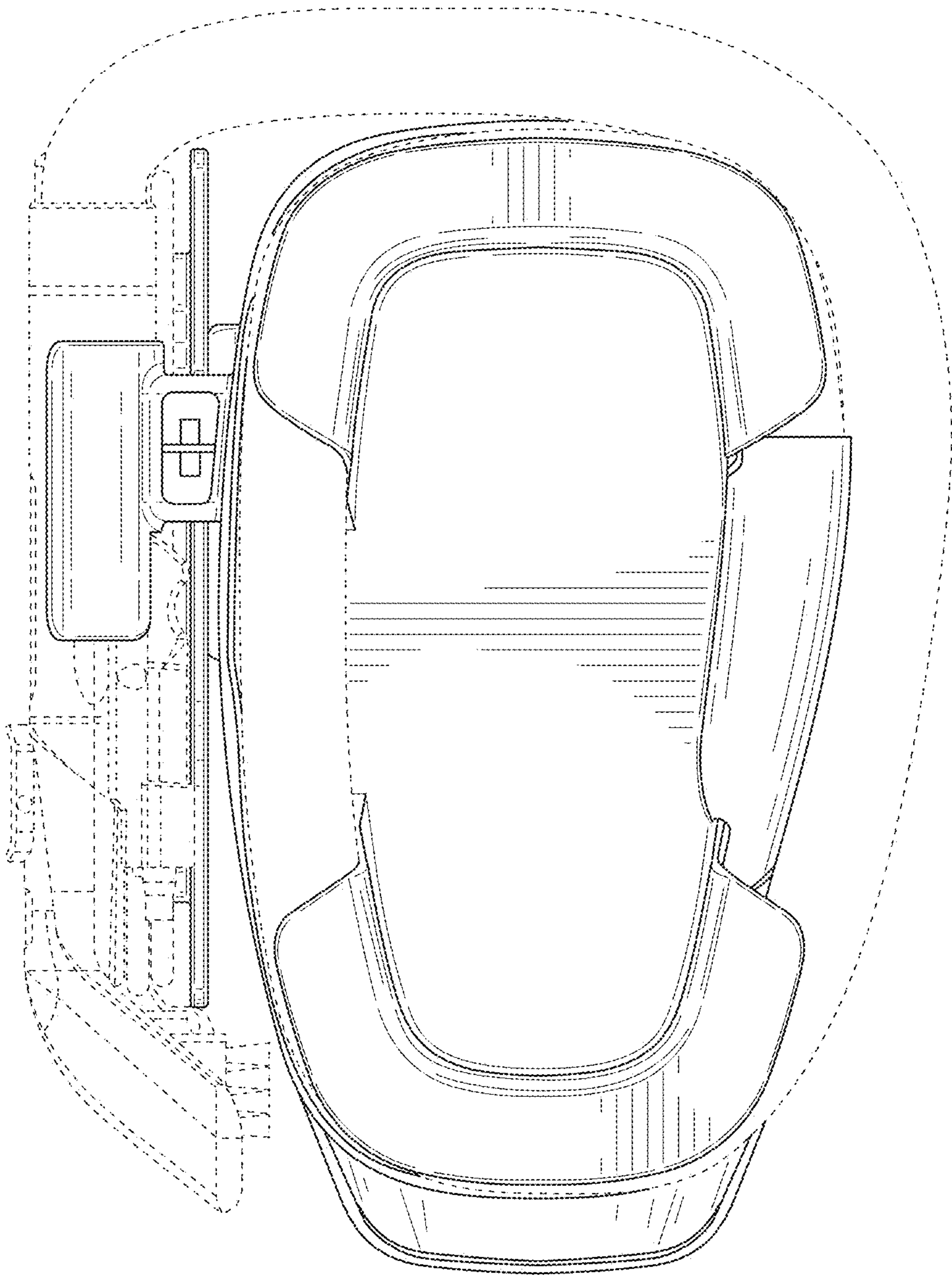


FIG. 8