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(12) **United States Design Patent** (10) **Patent No.:** **US D965,240 S**  
**Chen** (45) **Date of Patent:** **\*\* Sep. 27, 2022**

(54) **VACUUM CLEANER**  
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(72) Inventor: **Liang Jun Chen**, Dongguan (CN)  
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(21) Appl. No.: **29/814,039**

D812,829 S \* 3/2018 Shin ..... D06F 87/00  
D32/25  
D830,013 S 10/2018 Lee et al.  
D835,867 S \* 12/2018 Jang ..... D32/18  
D887,657 S 6/2020 Palladino et al.  
D891,014 S \* 7/2020 Chu ..... D32/18  
D923,888 S \* 6/2021 Liu ..... D32/21  
D937,514 S \* 11/2021 Zou ..... D32/18  
D938,675 S \* 12/2021 Burgess ..... D32/18

(Continued)

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(51) **LOC (13) Cl.** ..... **15-05**  
(52) **U.S. Cl.**  
USPC ..... **D32/18**  
(58) **Field of Classification Search**  
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CPC ..... A47L 11/24; A47L 11/33; A47L 11/32;  
A47L 9/1666; A47L 9/1608; A47L 11/00;  
A47L 11/38; A47L 5/24; Y10S 55/03  
See application file for complete search history.

FOREIGN PATENT DOCUMENTS

EM 008745046-0001 \* 11/2021  
FR 2686010 A1 \* 7/1993 ..... A47L 5/24

OTHER PUBLICATIONS

Newegg.com Black+Decker Dustbuster Cordless Handheld Vacuum  
<https://www.newegg.com/black-decker-dustbuster-quickclean-cordless-hand-vacuum/p/0G1-0024-00039> (Year: 2022).\*

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*Assistant Examiner* — Richard E Yenchesky

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,542,557 A \* 9/1985 Levine ..... A47L 5/24  
15/353  
4,603,448 A \* 8/1986 Middleton ..... A61C 17/349  
15/23  
D287,657 S \* 1/1987 Yuen ..... D32/18  
D290,417 S \* 6/1987 Leung ..... D32/18  
D298,874 S \* 12/1988 Nakamura ..... D32/18  
D303,025 S \* 8/1989 Yamamoto ..... D32/18  
D318,152 S \* 7/1991 Pudwill ..... D32/18  
D355,058 S \* 1/1995 Phelan ..... D32/18  
D527,501 S \* 8/2006 Tai ..... D32/18  
D533,692 S \* 12/2006 Snowball ..... D32/18  
D564,149 S \* 3/2008 Fjellman ..... D32/18  
D564,152 S \* 3/2008 Fjellman ..... D32/18  
D566,349 S \* 4/2008 Agren ..... D32/18  
D648,496 S \* 11/2011 Luyckx ..... D32/18  
D773,130 S \* 11/2016 Gray ..... D32/18  
D803,492 S \* 11/2017 Jang ..... D32/18  
D807,598 S \* 1/2018 Houghton ..... D32/18  
9,903,133 B2 \* 2/2018 Bruneel ..... C02F 1/00

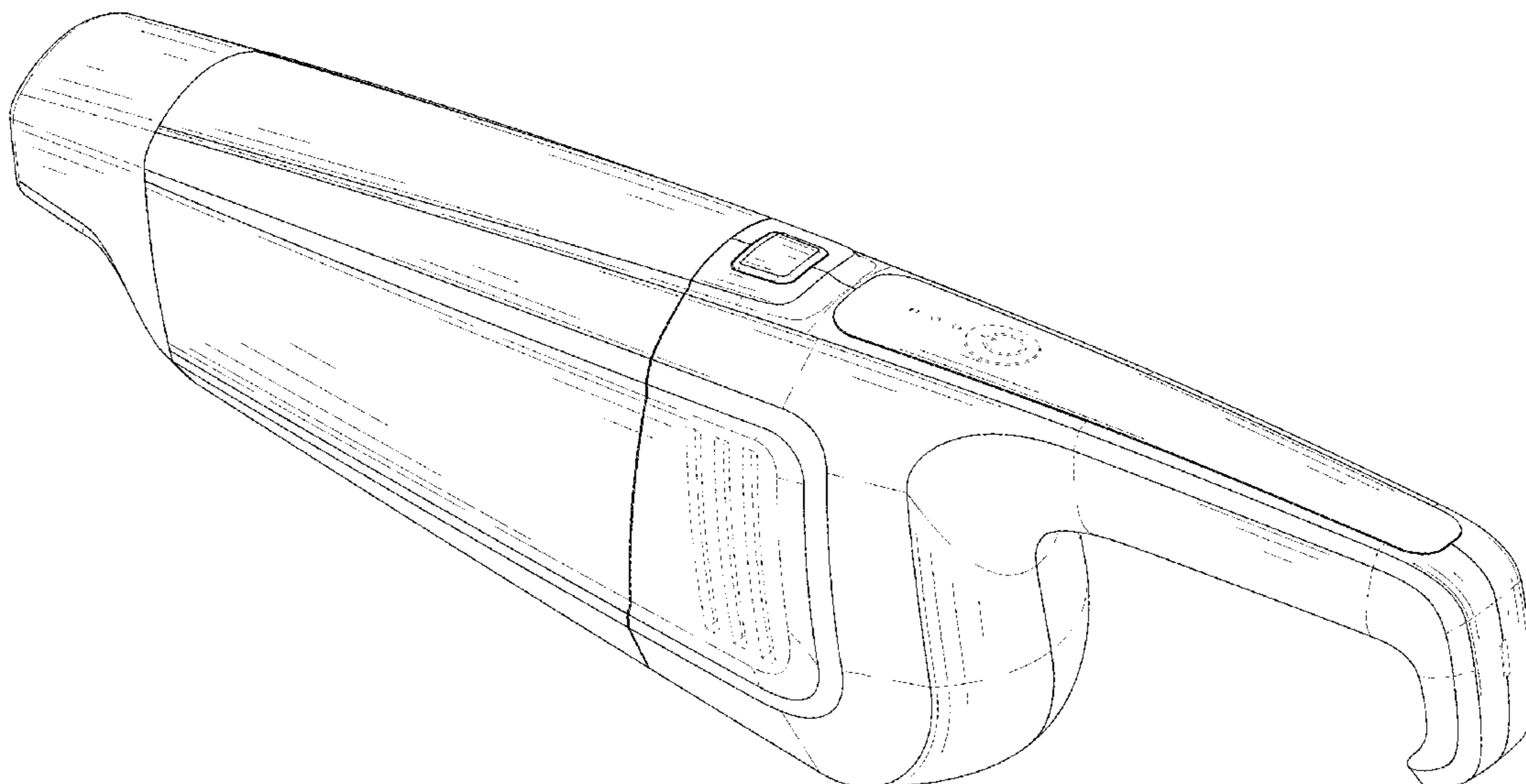
(57) **CLAIM**

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

**DESCRIPTION**

FIG. 1 is a perspective view of a vacuum cleaner showing my new design;  
FIG. 2 is another perspective view thereof;  
FIG. 3 is a front elevational view thereof;  
FIG. 4 is a rear elevational view thereof;  
FIG. 5 is a left side elevational view thereof;  
FIG. 6 is a right side 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 depict portions of the vacuum cleaner that form no part of the claimed design.

**1 Claim, 8 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

D943,848 S \* 2/2022 Liu ..... D32/18  
2021/0204770 A1\* 7/2021 Terry ..... A47L 5/28

\* cited by examiner

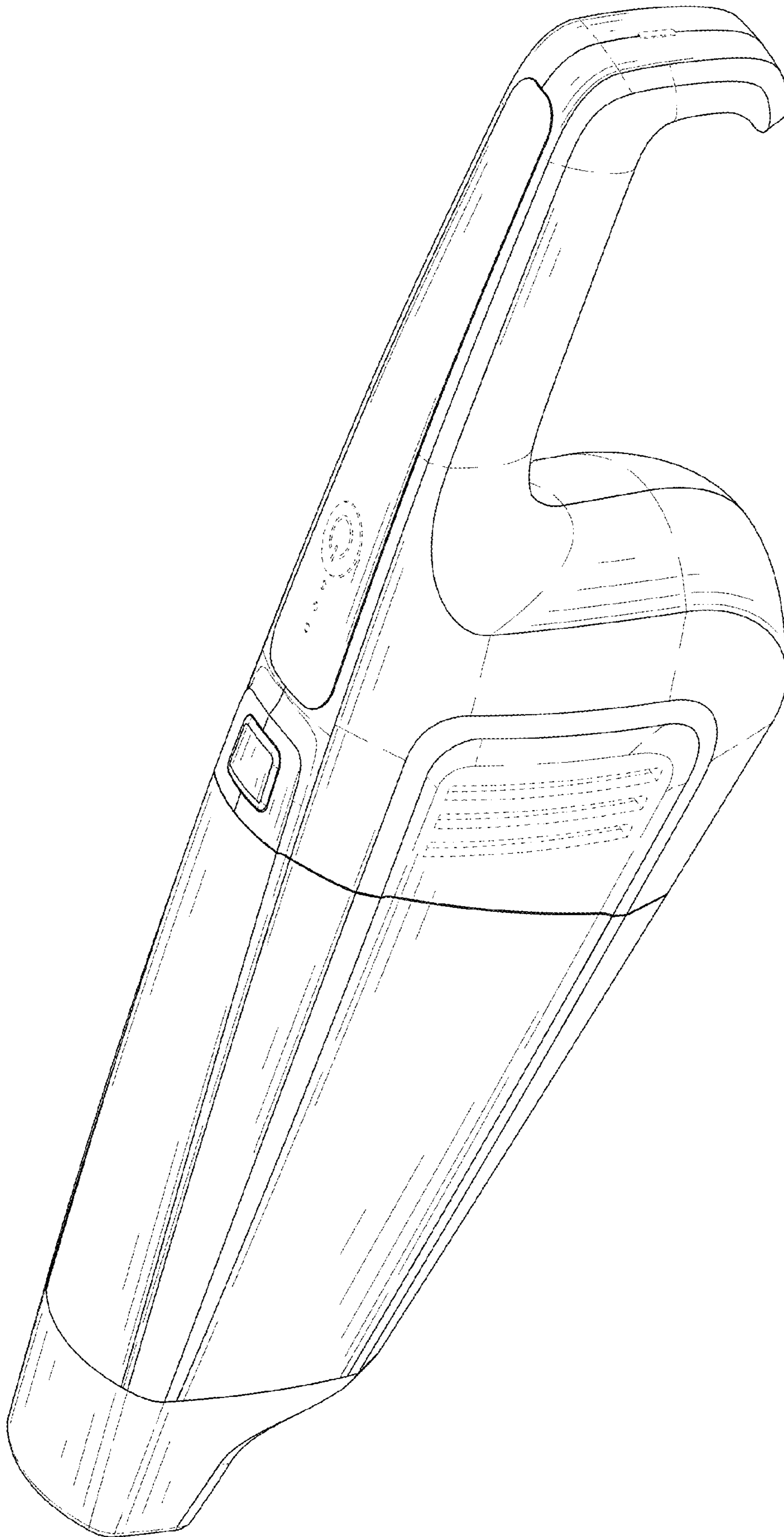


FIG. 1

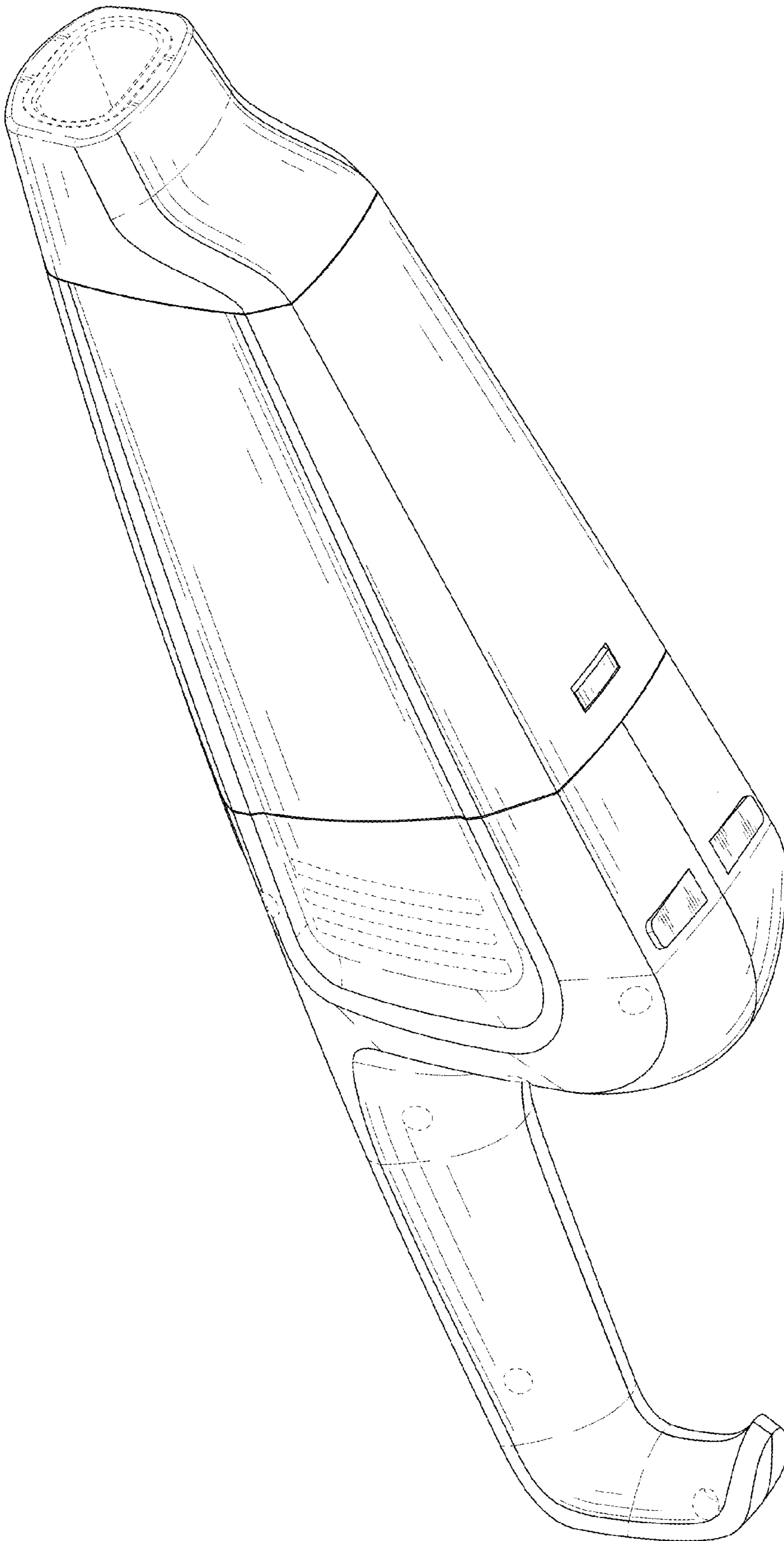


FIG. 2



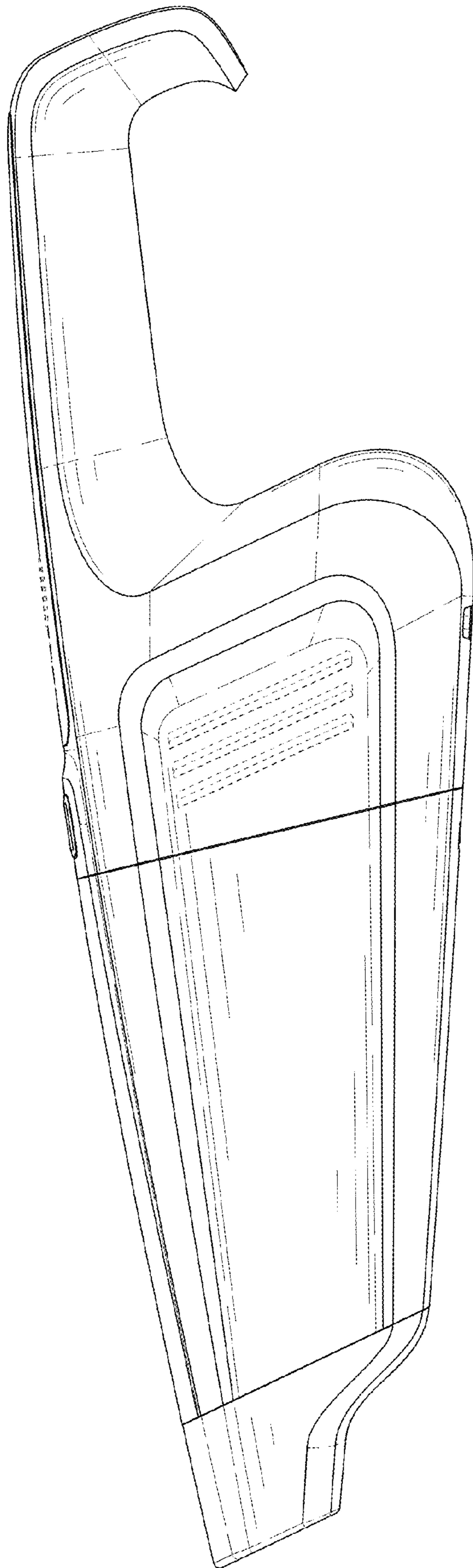


FIG. 3

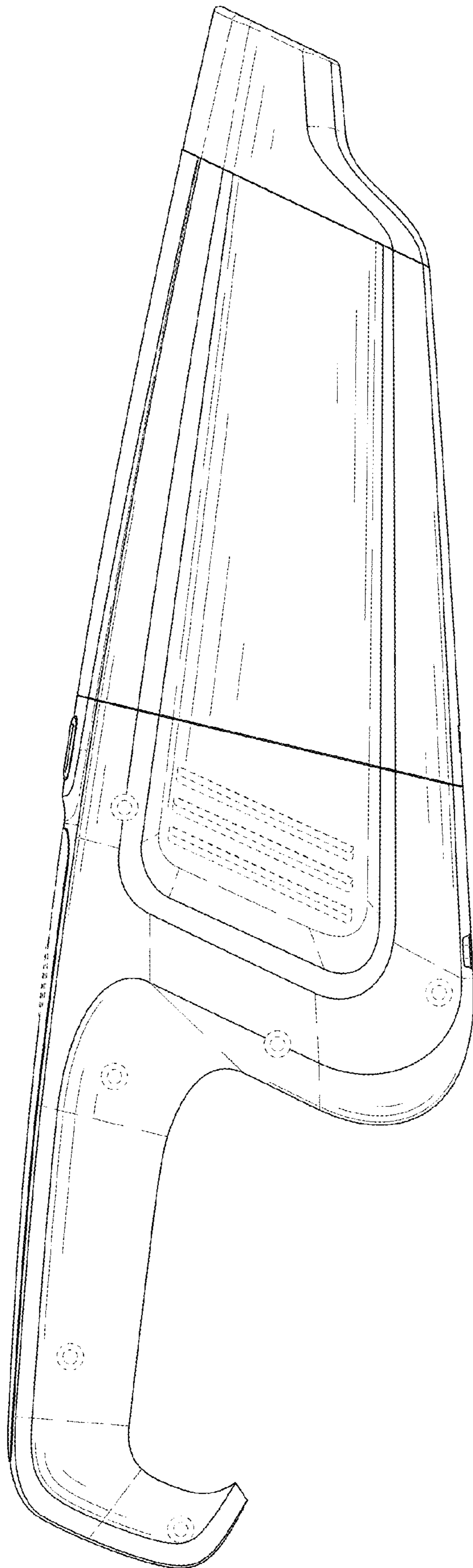


FIG. 4

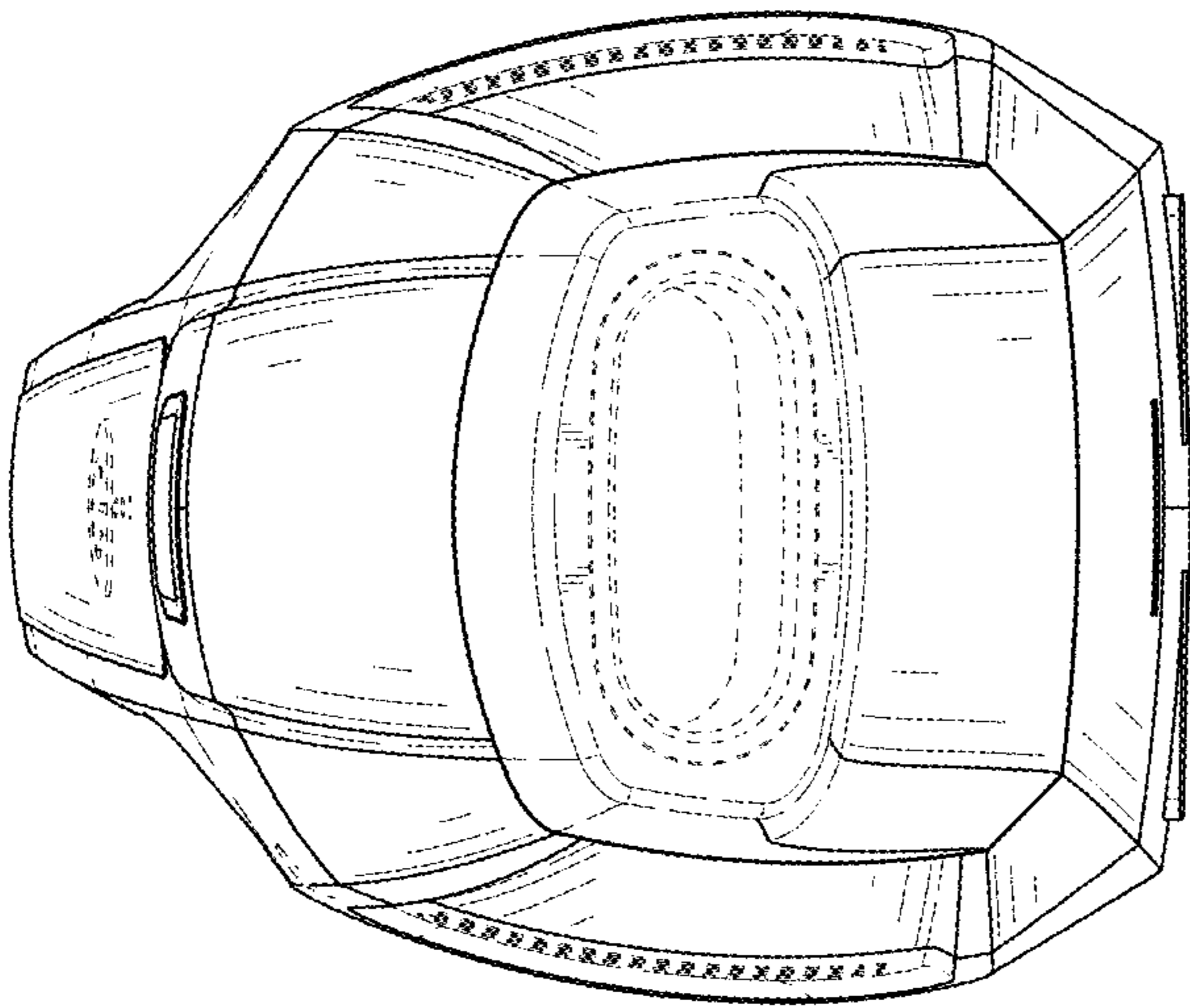


FIG. 5

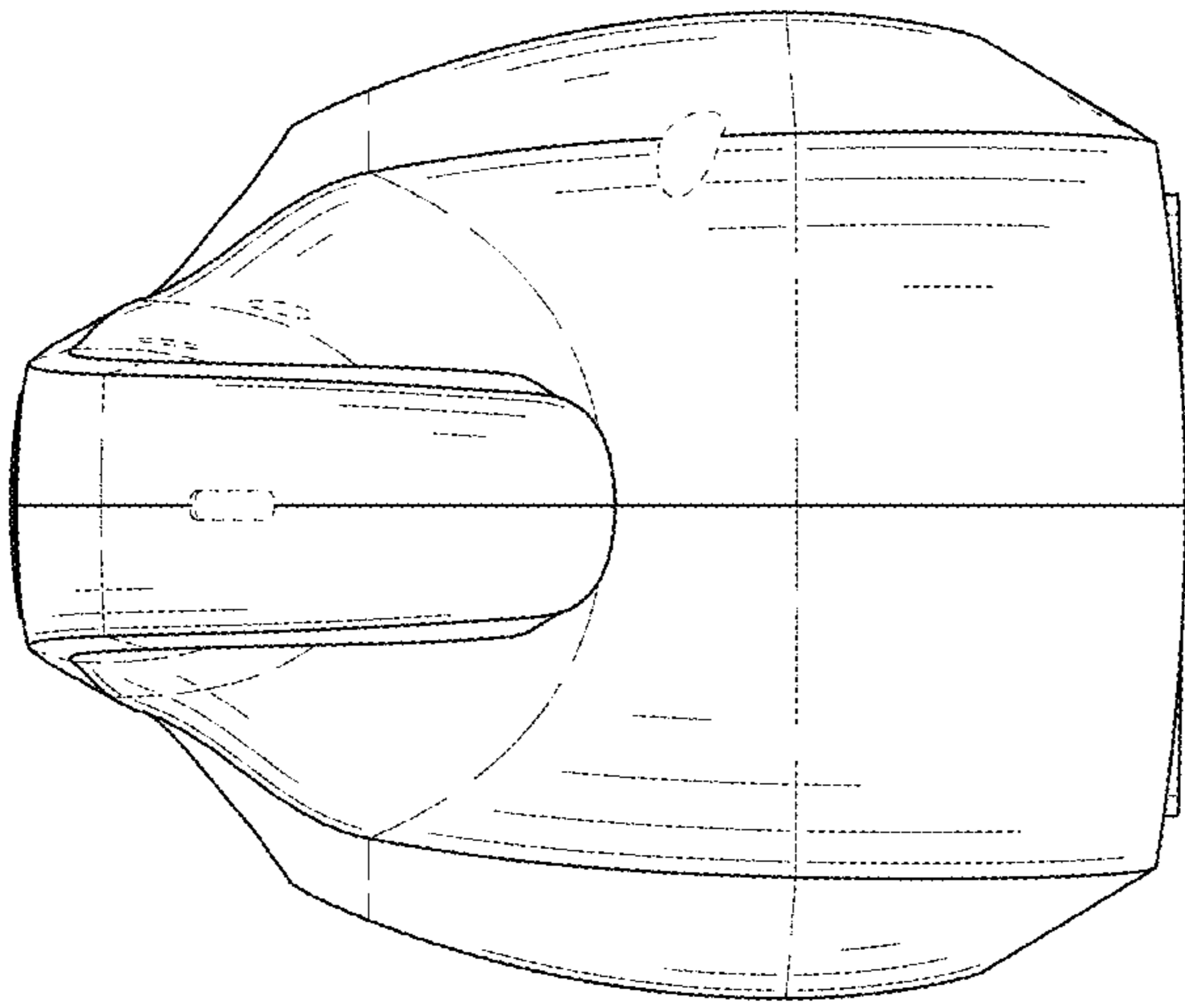


FIG. 6



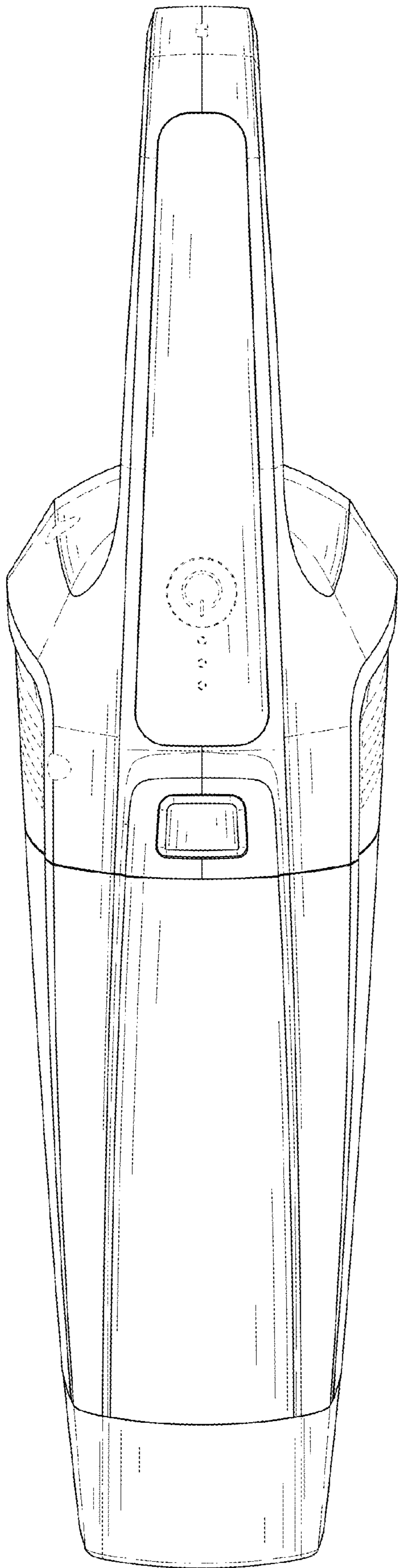


FIG. 7

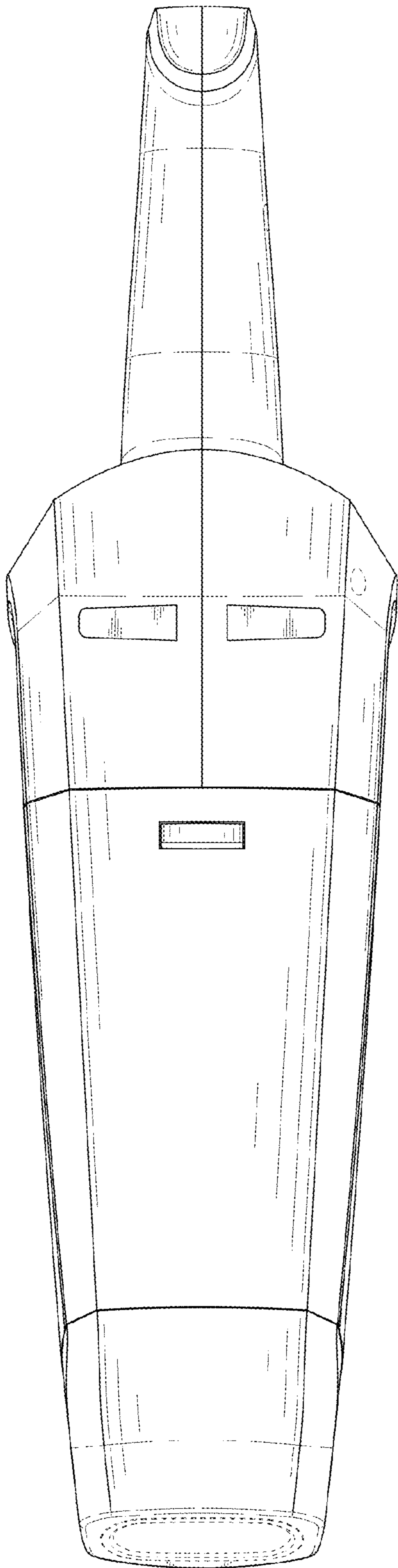


FIG. 8