



US00D814723S

(12) **United States Design Patent**  
**Palladino et al.**

(10) **Patent No.:** **US D814,723 S**  
(45) **Date of Patent:** **\*\* Apr. 3, 2018**

(54) **VACUUM CLEANER**

(71) Applicant: **SHARKNINJA OPERATING LLC**,  
Newton, MA (US)

(72) Inventors: **Gary V. Palladino**, Somerville, MA  
(US); **Owen Rhys Alban Johnson**,  
Needham, MA (US); **Junghwan Chei**,  
Chestnut Hill, MA (US)

(73) Assignee: **SharkNinja Operating LLC**,  
Needham, MA (US)

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

(21) Appl. No.: **29/606,025**

(22) Filed: **Jun. 1, 2017**

**Related U.S. Application Data**

(63) Continuation of application No. 29/559,436, filed on  
Mar. 28, 2016.

(51) **LOC (11) Cl.** ..... **15-05**

(52) **U.S. Cl.**  
USPC ..... **D32/31**

(58) **Field of Classification Search**  
USPC ..... D32/31-34, 22, 18  
CPC ..... A47L 5/24; A47L 5/28; A47L 5/38; A47L  
11/4044; A47L 11/34; A47L 7/0038;  
A47L 9/325; A47L 9/02; A47L 1/08;  
D01H 11/006; B60S 1/64; B08B 3/026;  
B08B 3/028

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

4,138,762 A 2/1979 Jost et al.  
4,372,004 A 2/1983 Vermillion  
4,627,127 A 12/1986 Dupre  
D348,548 S 7/1994 Pino  
5,960,514 A 10/1999 Miller et al.

6,237,188 B1 5/2001 Takemoto et al.  
D473,687 S \* 4/2003 Kaffenberger ..... D32/33  
D524,498 S \* 7/2006 Luebbering ..... D32/32  
7,171,723 B2 2/2007 Kobayashi et al.  
7,328,479 B2 2/2008 Willenbring

(Continued)

**FOREIGN PATENT DOCUMENTS**

DE 102010017211 A1 12/2011  
DE 102010017258 A1 12/2011

(Continued)

**OTHER PUBLICATIONS**

International Search Report and Written Opinion issued on Mar. 17,  
2017 in corresponding PCT Patent Application No. PCT/US  
16/58155, 12 pgs.

(Continued)

*Primary Examiner* — Ruth McInroy

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

(57) **CLAIM**

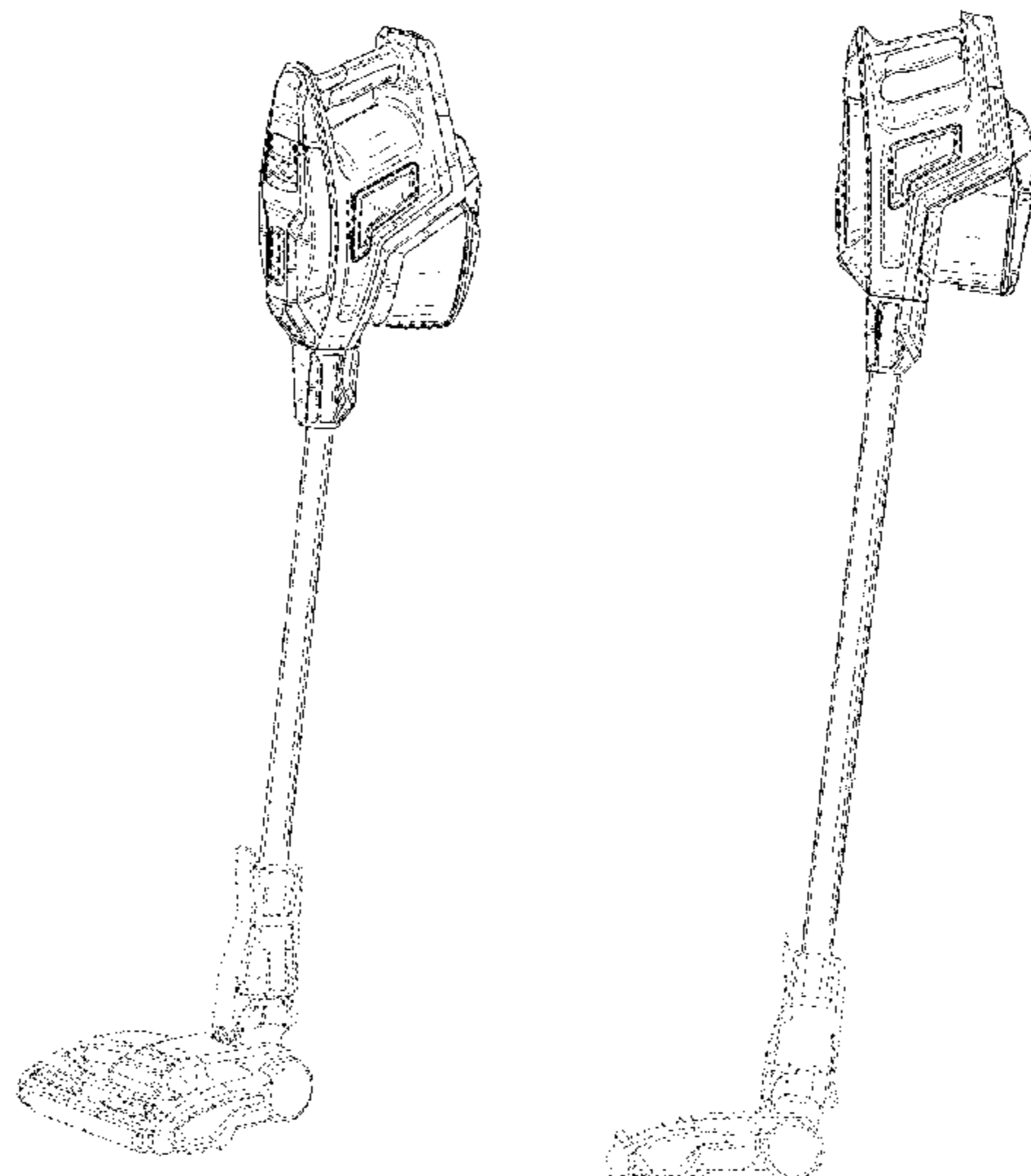
The ornamental design of a vacuum cleaner, as shown and  
described.

**DESCRIPTION**

FIG. 1 is a top perspective view of a vacuum cleaner  
showing our new design;  
FIG. 2 is a front view thereof;  
FIG. 3 is a rear view thereof;  
FIG. 4 is a left side view thereof;  
FIG. 5 is a right side view thereof;  
FIG. 6 is a top view thereof; and,  
FIG. 7 is a bottom view thereof.

The broken lines are included for the purpose of illustrating  
the unclaimed portions of the article and form no part of the  
claim.

**1 Claim, 6 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

D566,356 S \* 4/2008 Medema ..... D32/32  
 D569,564 S \* 5/2008 Labarbera ..... D32/32  
 D594,612 S \* 6/2009 Umeda ..... D32/32  
 D597,268 S \* 7/2009 Santiago ..... D32/32  
 D635,728 S \* 4/2011 Fjellman ..... D32/22  
 7,979,952 B2 7/2011 Beskow et al.  
 D668,010 S 9/2012 Stickney et al.  
 8,402,600 B2 3/2013 Beskow et al.  
 8,745,818 B2 6/2014 Iles et al.  
 D720,104 S \* 12/2014 Santiago ..... D32/32  
 9,027,198 B2 5/2015 Conrad  
 D731,130 S 6/2015 Dyson et al.  
 D731,134 S 6/2015 Dyson et al.  
 D731,136 S 6/2015 Yun et al.  
 D731,720 S 6/2015 Gidwell et al.  
 D731,724 S \* 6/2015 Cheon ..... D32/22  
 9,066,640 B2 6/2015 Iles et al.  
 D738,584 S \* 9/2015 Niedzwecki ..... D32/18  
 9,144,356 B2 9/2015 Yun  
 D741,558 S 10/2015 Kerr  
 D742,083 S 10/2015 Gidwell et al.  
 D743,123 S 11/2015 Chu  
 D745,231 S 12/2015 Niedzwecki  
 D747,571 S 1/2016 Dyson  
 D747,572 S 1/2016 Kerr  
 D762,031 S \* 7/2016 Niedzwecki ..... D32/32  
 9,451,853 B2 9/2016 Conrad et al.  
 D770,111 S \* 10/2016 Lee ..... D32/34  
 D771,890 S \* 11/2016 Kim ..... D32/34  
 D772,512 S \* 11/2016 Yoon ..... D32/34  
 D774,260 S 12/2016 Manning  
 D774,264 S \* 12/2016 Bartram ..... D32/33  
 D779,751 S \* 2/2017 Chu ..... D32/32  
 D779,752 S \* 2/2017 Johnson ..... D32/32  
 D781,014 S \* 3/2017 Wu ..... D32/32  
 D788,393 S \* 5/2017 Canas ..... D32/32  
 D792,665 S 7/2017 Salagnac  
 D796,136 S \* 8/2017 Reynolds ..... D32/33

2002/0124334 A1 9/2002 Worwag  
 2005/0172447 A1 8/2005 Roney et al.  
 2006/0191097 A1 8/2006 Baumhakil  
 2009/0229075 A1 9/2009 Eriksson  
 2012/0311813 A1 12/2012 Gilbert, Jr. et al.  
 2013/0139349 A1 6/2013 Iles et al.  
 2014/0060577 A1 3/2014 Bruders et al.  
 2014/0196247 A1 7/2014 Kasper et al.  
 2014/0237760 A1 8/2014 Conrad  
 2015/0033498 A1 2/2015 McVey  
 2015/0359396 A1 12/2015 Yun  
 2016/0058257 A1 3/2016 Ventress et al.  
 2016/0345795 A1 12/2016 Manning

FOREIGN PATENT DOCUMENTS

EP 1994869 11/2008  
 EP 2543301 9/2013  
 GB 2109224 6/1983  
 GB 2476811 7/2011  
 GB 2529819 9/2016  
 JP 03228721 A 10/1991  
 JP 05228083 A 9/1993  
 JP 2639155 B2 8/1997  
 JP 2004222912 A 8/2004  
 JP 2006312066 A 11/2006  
 KR 100593324 B1 6/2006  
 WO 9210967 A1 7/1992  
 WO 2009117383 9/2009  
 WO 2014177216 11/2014  
 WO 2015015166 2/2015  
 WO 2015015167 2/2015  
 WO 2016034848 3/2016

OTHER PUBLICATIONS

International Search Report and Written Opinion issued on Mar. 24, 2017 in corresponding PCT Patent Application No. PCT/US 16/58148, 14 pgs.

\* cited by examiner

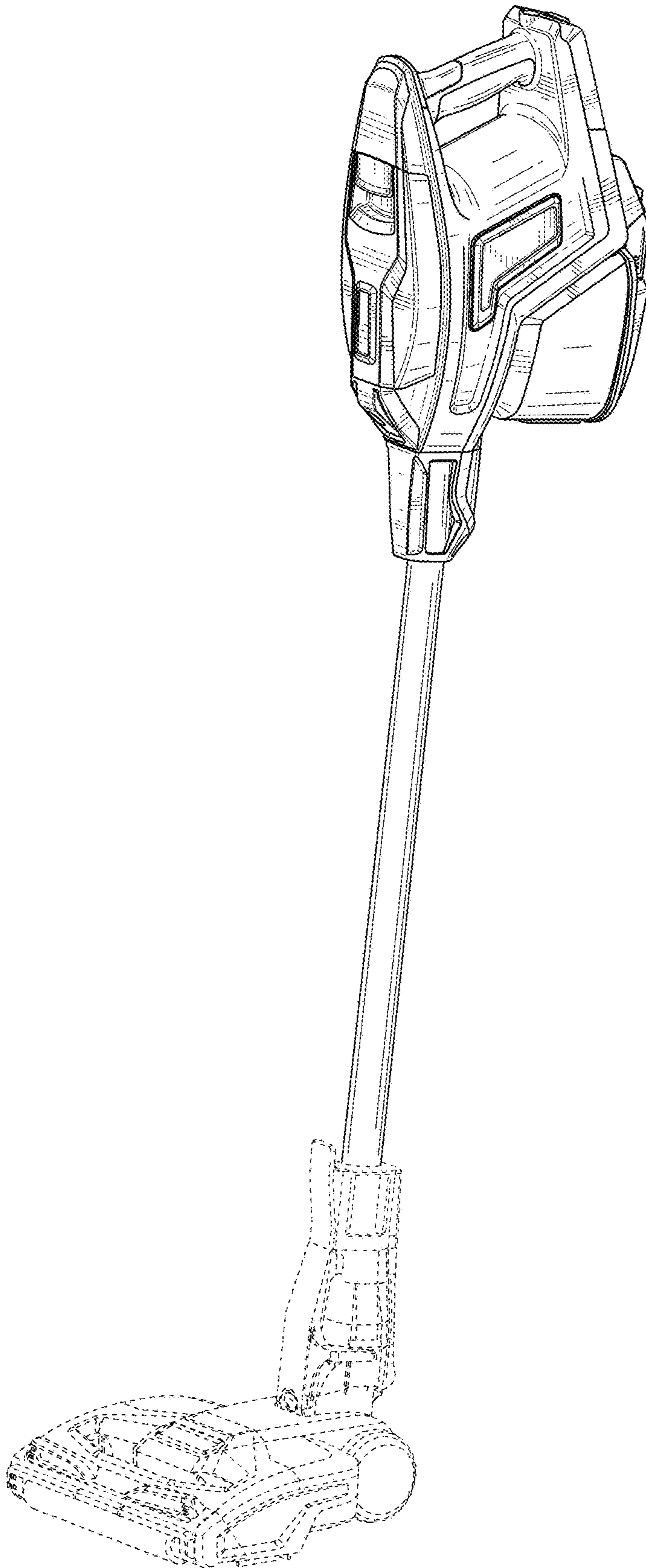


FIG. 1

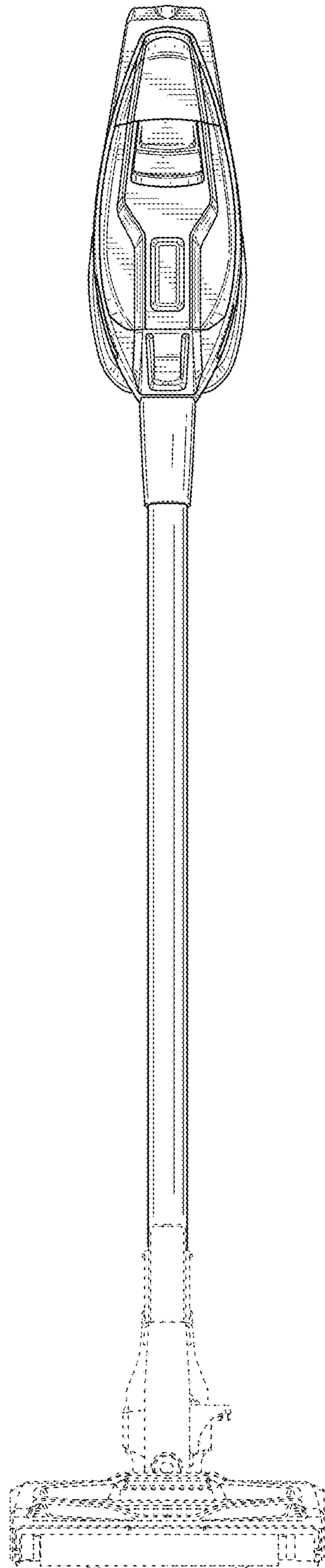


FIG. 2

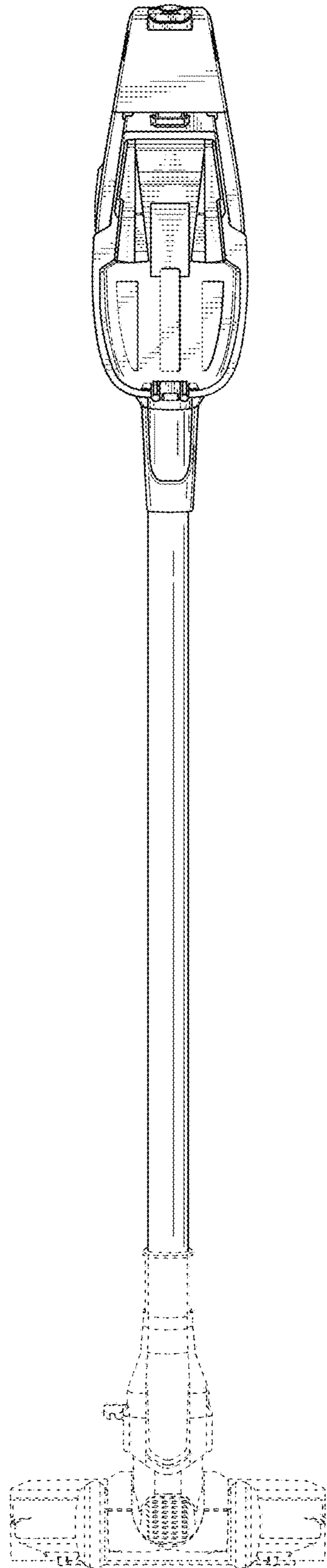


FIG. 3

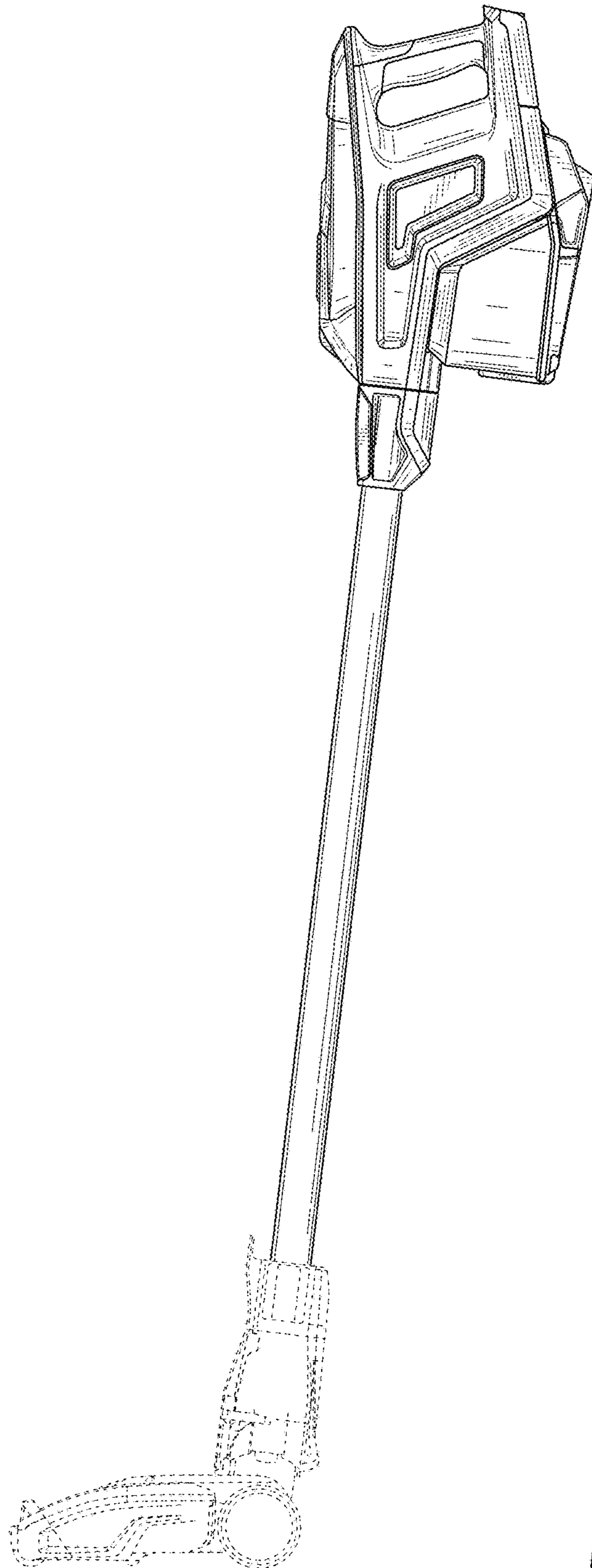


FIG. 4

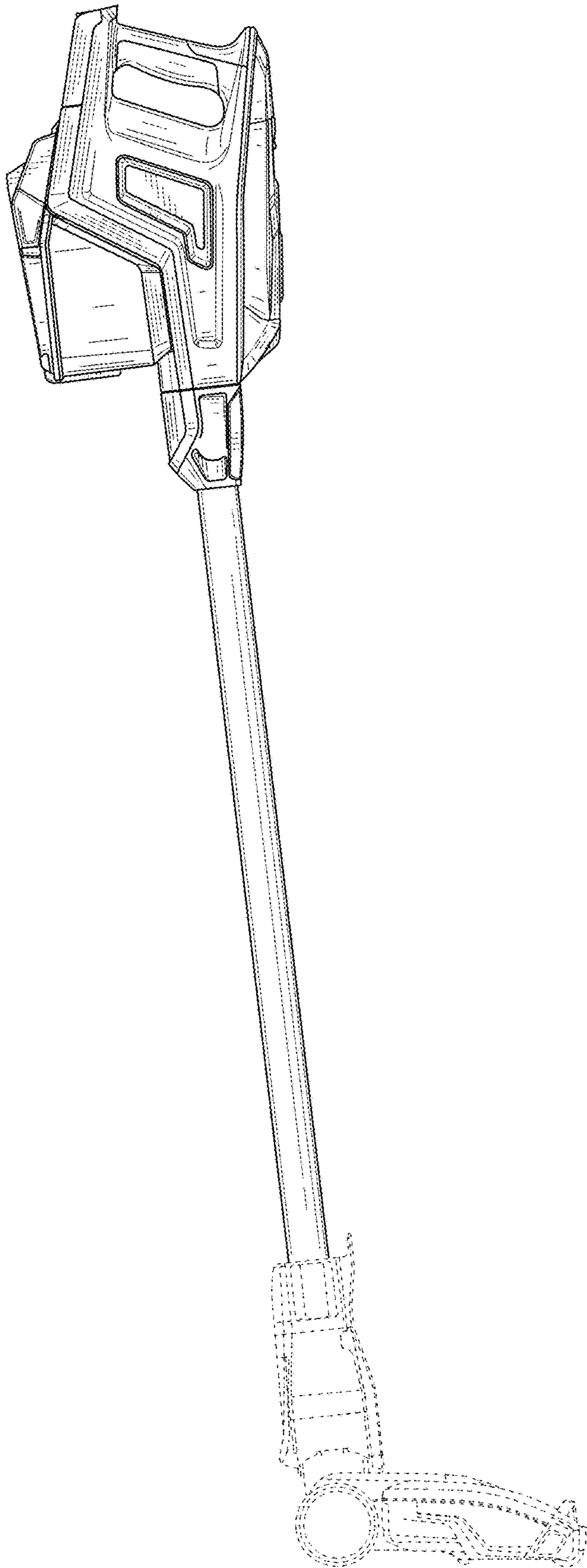


FIG. 5

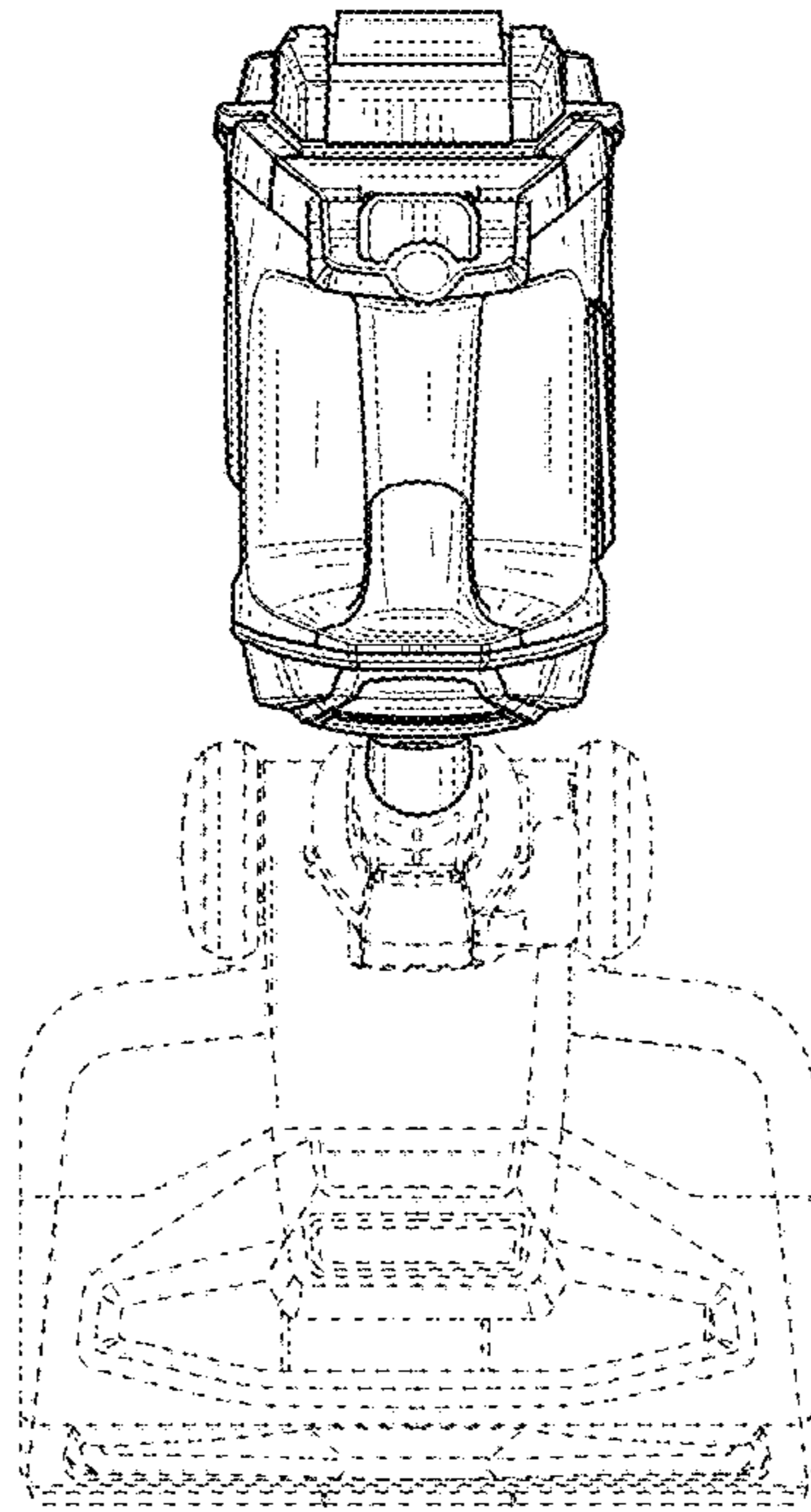


FIG. 6

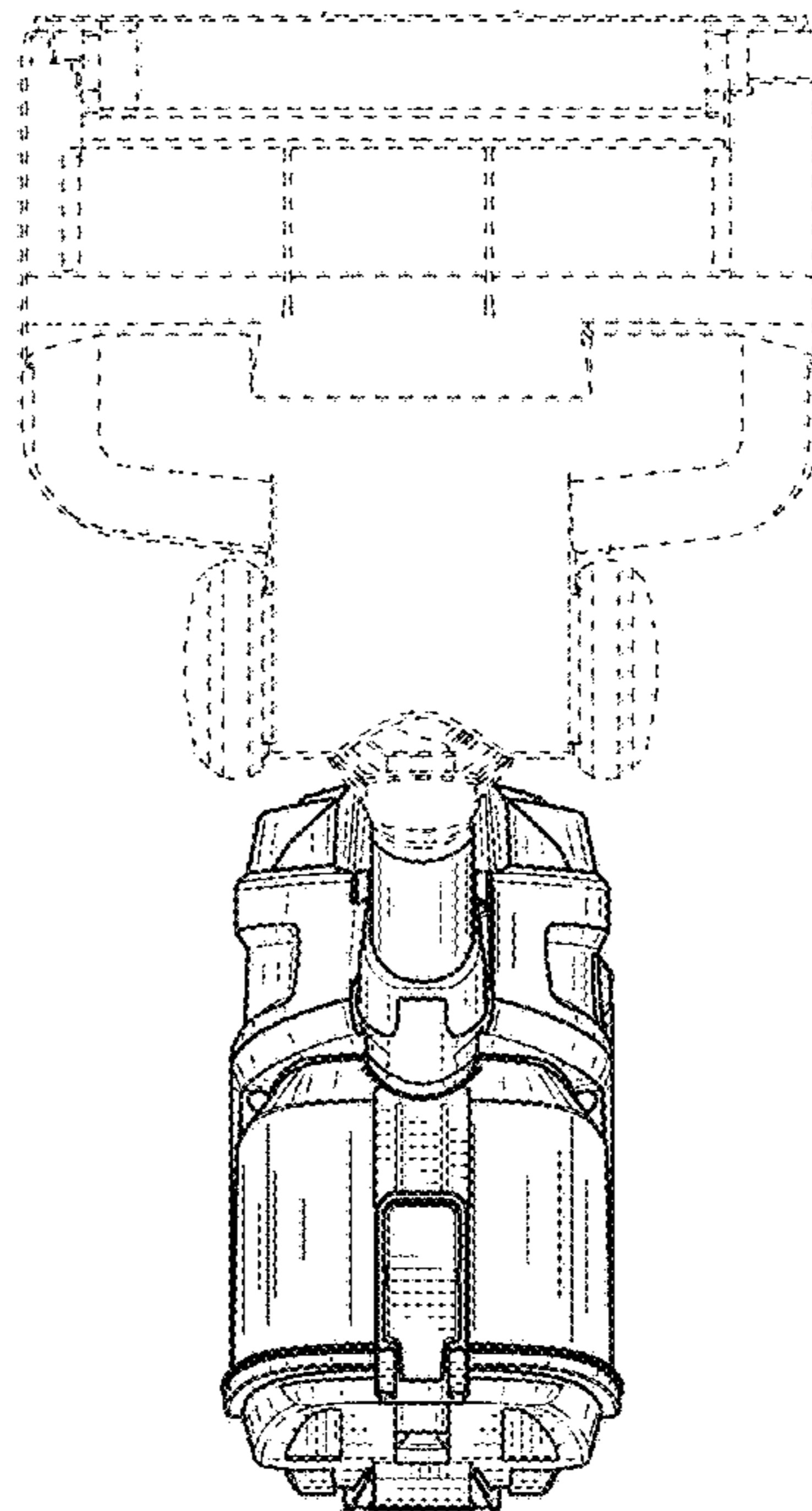


FIG. 7