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(12) **United States Design Patent** (10) **Patent No.:** **US D944,475 S**
Niedzwecki et al. (45) **Date of Patent:** **** Feb. 22, 2022**

(54) **HAND VACUUM CLEANER**

FOREIGN PATENT DOCUMENTS

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

(Continued)

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OTHER PUBLICATIONS

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

(Continued)

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

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(21) Appl. No.: **29/669,500**

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(51) **LOC (13) Cl.** **15-05**

(57) **CLAIM**

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

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

(58) **Field of Classification Search**
USPC D32/17–18, 22, 31–34; D8/61–62, 66;
15/302, 321
CPC ... A47L 5/24; A47L 5/225; A47L 5/36; A47L
9/327; A47L 9/244; A47L 5/28; A47L
9/32; A47L 9/325

DESCRIPTION

See application file for complete search history.

FIG. 1 is a front, top, left perspective view of a hand vacuum cleaner, showing a new design;
FIG. 2 is a front, top, right perspective view thereof;
FIG. 3 is a rear, top, left perspective view thereof;
FIG. 4 is a rear, top, right perspective view thereof;
FIG. 5 is a rear, bottom, left perspective view thereof;
FIG. 6 is a rear, bottom, right perspective view thereof;
FIG. 7 is a front, bottom, right perspective view thereof;
FIG. 8 is a front, bottom, left perspective view thereof;
FIG. 9 is a top view thereof;
FIG. 10 is a bottom view thereof;
FIG. 11 is a left view thereof;
FIG. 12 is a right view thereof;
FIG. 13 is a rear view thereof; and,
FIG. 14 is a front view thereof.

(56) **References Cited**

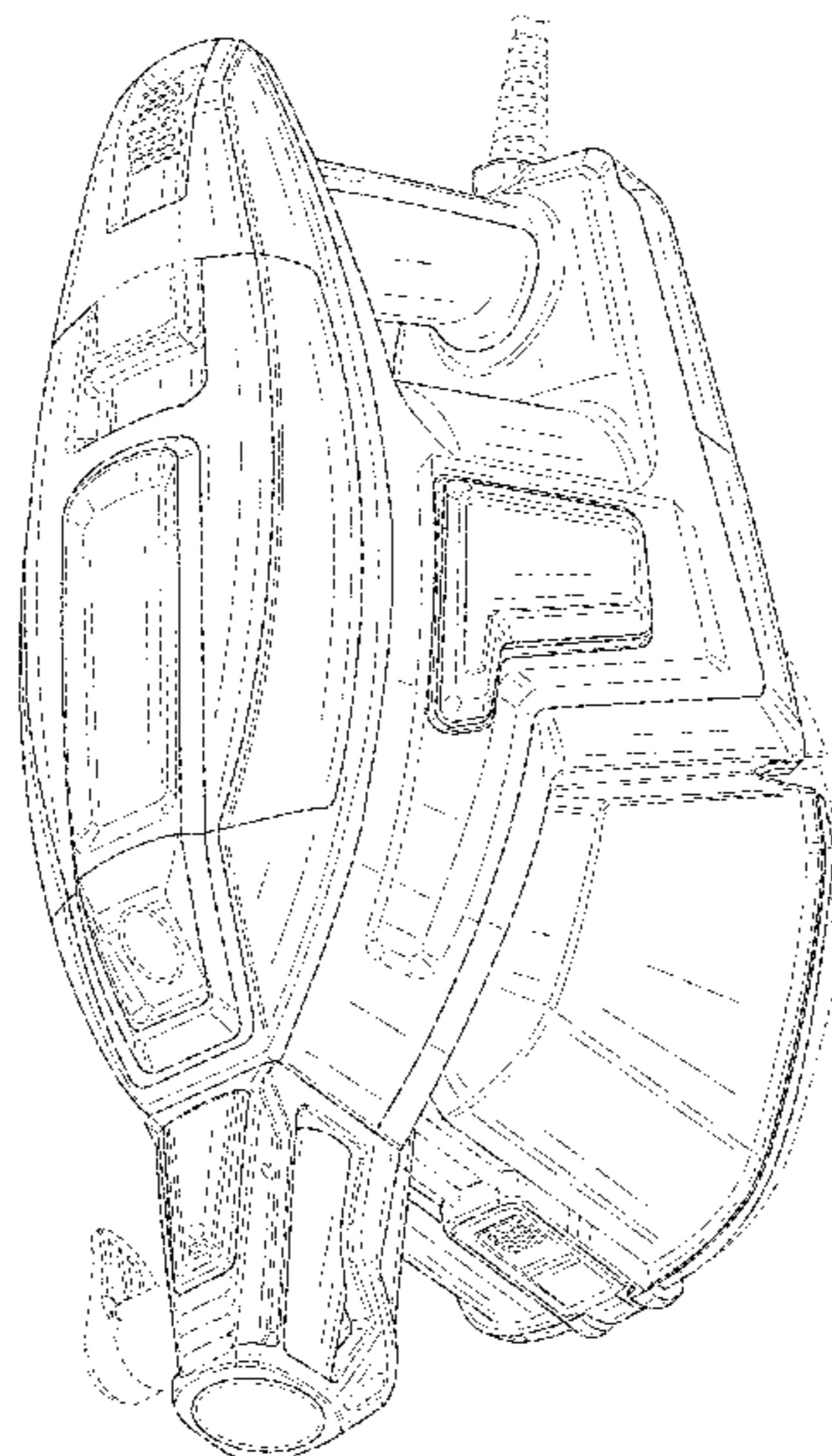
U.S. PATENT DOCUMENTS

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.
6,101,669 A 8/2000 Martin et al.
D440,019 S 4/2001 Mehaffey et al.
6,209,925 B1 4/2001 Edin
6,237,188 B1 5/2001 Takemoto et al.
D453,866 S 2/2002 Nighy et al.

The broken lines shown in the hand vacuum cleaner are for
portions that forms no part of the claimed design.

(Continued)

1 Claim, 13 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D473,687 S 4/2003 Kaffenberger
 D480,848 S 10/2003 Smith et al.
 D502,578 S 3/2005 Roschi
 D524,498 S 7/2006 Luebbering et al.
 7,171,723 B2 2/2007 Kobayashi et al.
 D561,415 S 2/2008 Tavano
 7,328,479 B2 2/2008 Willenbring
 D566,356 S 4/2008 Medema
 D569,564 S 5/2008 Labarbera
 D577,163 S 9/2008 Dyson et al.
 D581,609 S 11/2008 Conrad et al.
 D585,608 S 1/2009 Conrad et al.
 D594,612 S 6/2009 Umeda
 D597,268 S 7/2009 Santiago et al.
 D619,315 S 7/2010 Ayers
 7,886,954 B2* 2/2011 Mochizuki B23K 3/08
 228/8
 D635,728 S 4/2011 Jellman
 7,931,716 B2 4/2011 Oakham
 7,945,988 B2 5/2011 Gordon
 7,979,952 B2 7/2011 Beskow et al.
 D642,754 S 8/2011 Fjellman
 D644,384 S 8/2011 Santiago et al.
 D655,468 S 3/2012 Karsan
 8,146,201 B2 4/2012 Conrad
 D668,010 S 9/2012 Stickney et al.
 D668,823 S 10/2012 Stickney et al.
 D674,158 S 1/2013 Kim et al.
 8,402,600 B2 3/2013 Beskow et al.
 D681,291 S 4/2013 Morgan et al.
 D693,977 S 11/2013 Chu et al.
 8,689,395 B2 4/2014 Conrad
 8,745,818 B2 6/2014 Iles et al.
 8,887,352 B2 11/2014 Muhlenkamp
 D720,104 S 12/2014 Santiago et al.
 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 et al.
 9,066,640 B2 6/2015 Iles et al.
 D738,583 S 9/2015 Gidwell et al.
 D738,584 S* 9/2015 Niedzwecki D32/22
 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
 D744,180 S 11/2015 Yun et al.
 D745,231 S 12/2015 Niedzwecki
 D747,571 S 1/2016 Dyson
 D747,572 S 1/2016 Kerr
 9,314,140 B2 4/2016 Eriksson
 9,351,621 B2 5/2016 Cordes et al.
 D761,507 S 7/2016 Heck et al.
 D762,031 S 7/2016 Niedzwecki
 9,451,853 B2 9/2016 Conrad et al.
 D770,111 S 10/2016 Lee et al.
 D770,113 S 10/2016 Yoon et al.
 9,468,346 B1 10/2016 Rzepka
 D771,890 S 11/2016 Kim
 D772,512 S 11/2016 Yoon et al.
 D773,139 S 11/2016 Palladino
 D774,260 S 12/2016 Manning
 D774,264 S 12/2016 Bartram et al.
 D775,772 S 1/2017 Lee et al.
 D776,381 S* 1/2017 Manning D32/34
 D779,751 S 2/2017 Chu
 D779,752 S 2/2017 Johnson

D781,014 S 3/2017 Wu et al.
 D788,393 S 5/2017 Canas et al.
 D789,007 S 6/2017 Jang et al.
 D789,633 S* 6/2017 Meyer D32/31
 D790,785 S 6/2017 Courtney et al.
 D792,665 S 7/2017 Salagnac
 D796,132 S 8/2017 Yoon et al.
 D796,134 S 8/2017 Labarbera
 D796,136 S 8/2017 Reynolds et al.
 D798,009 S 9/2017 Salagnac
 D799,767 S* 10/2017 Palladino D32/22
 D800,980 S 10/2017 Carter et al.
 D811,031 S* 2/2018 Palladino D32/31
 D814,723 S* 4/2018 Palladino D32/31
 D825,121 S* 8/2018 Kahn D32/21
 D827,955 S* 9/2018 Palladino D32/18
 D827,956 S* 9/2018 Spratt D32/21
 D844,913 S* 4/2019 Palladino D32/18
 D854,264 S* 7/2019 Tucker D32/15
 D870,993 S* 12/2019 Fry D32/21
 2002/0124334 A1 9/2002 Worwag
 2005/0172447 A1 8/2005 Roney et al.
 2006/0191097 A1 8/2006 Baumhake
 2009/0229075 A1 9/2009 Eriksson
 2010/0229328 A1 9/2010 Conrad
 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
 2019/0357741 A1* 11/2019 Conrad A47L 5/24
 2019/0365179 A1* 12/2019 Hwang A47L 9/28
 2019/0374080 A1* 12/2019 Conrad A47L 9/2857
 2020/0113399 A1* 4/2020 Nam A47L 5/24

FOREIGN PATENT DOCUMENTS

EM 003404540-0001 10/2016
 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 dated Mar. 24, 2017 in corresponding PCT Patent Application No. PCT/US 16/58148, 14 pgs.
 "Shark Rocket Ultra-Light Upright (HV301)", <https://www.amazon.com/Shark-Rocket-Ultra-Light-Upright-HV301>, Oct. 31, 2018.
 "Shark HV322 TruePat Rocket Ultra-Lightweight Upright Vacuum", <https://www.amazon.com/Shark-HV322-TruePat-Ultra-Lightweight-Upright>, Oct. 31, 2018.

* cited by examiner

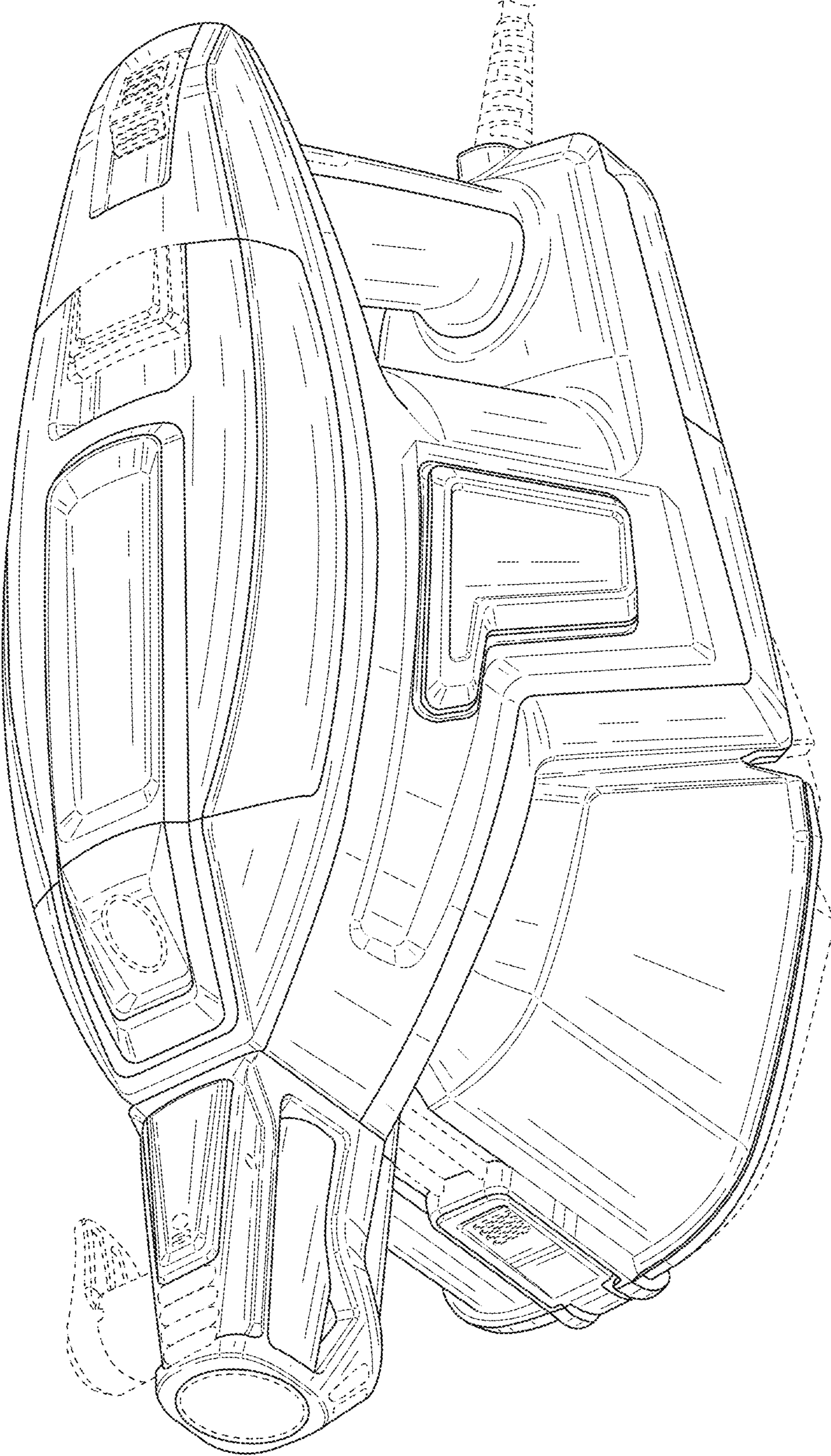


FIG. 1

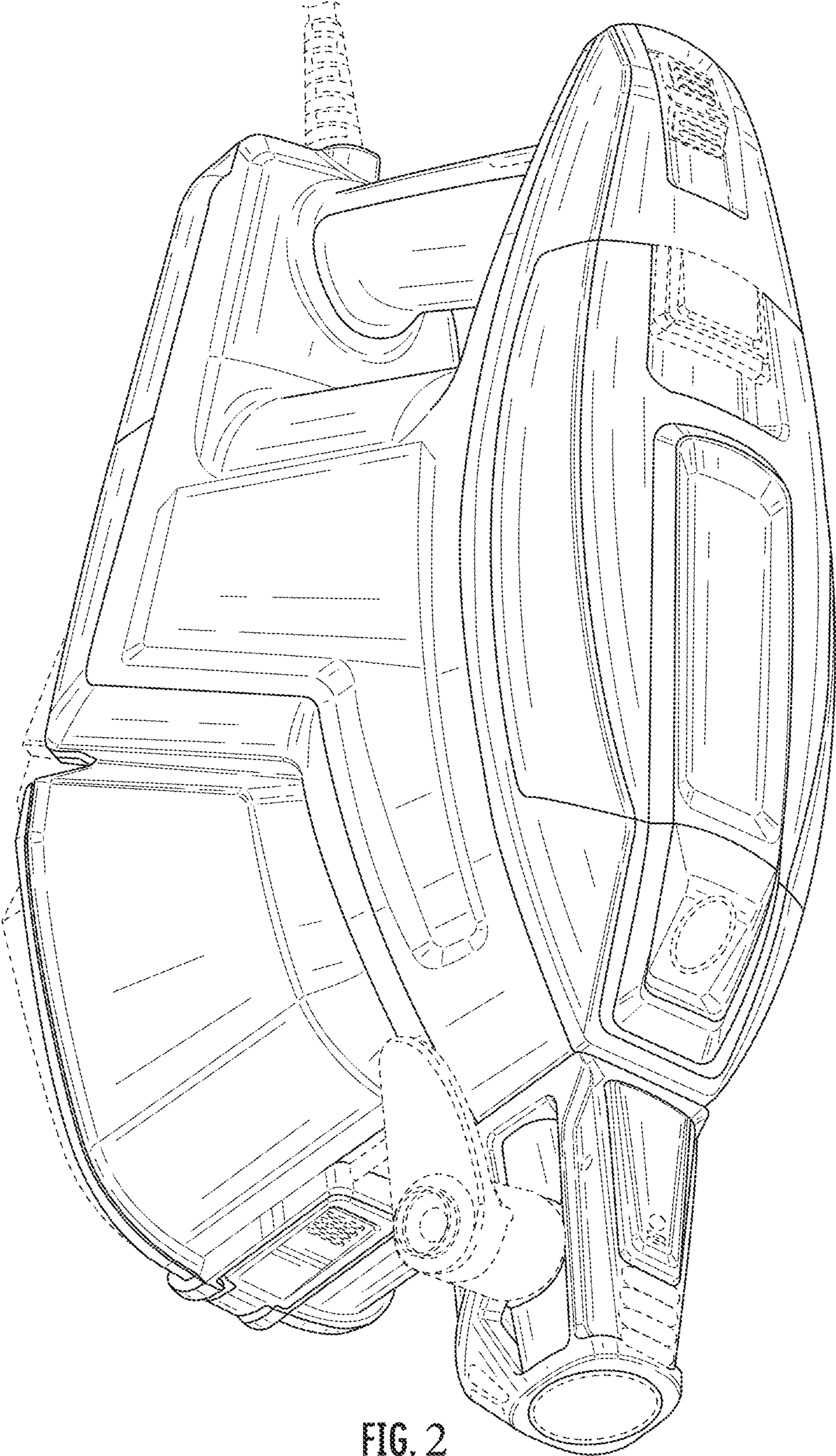


FIG. 2

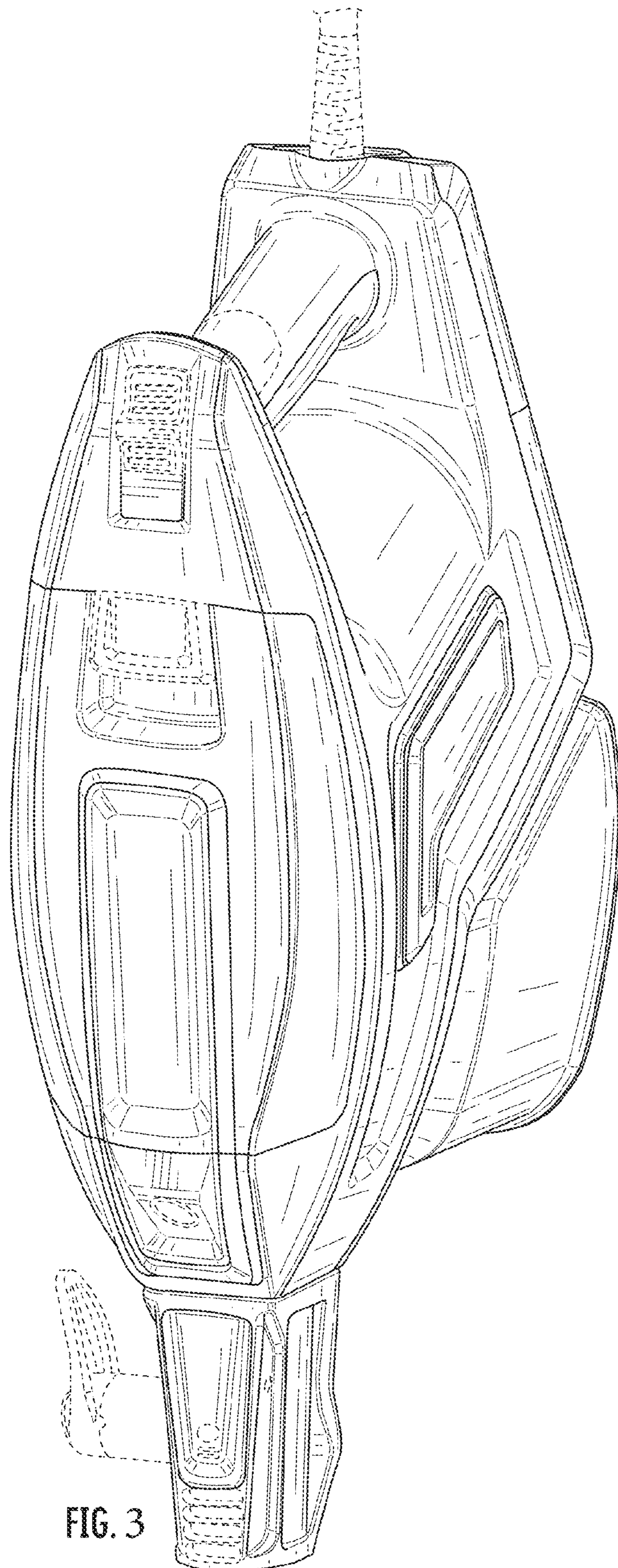


FIG. 3

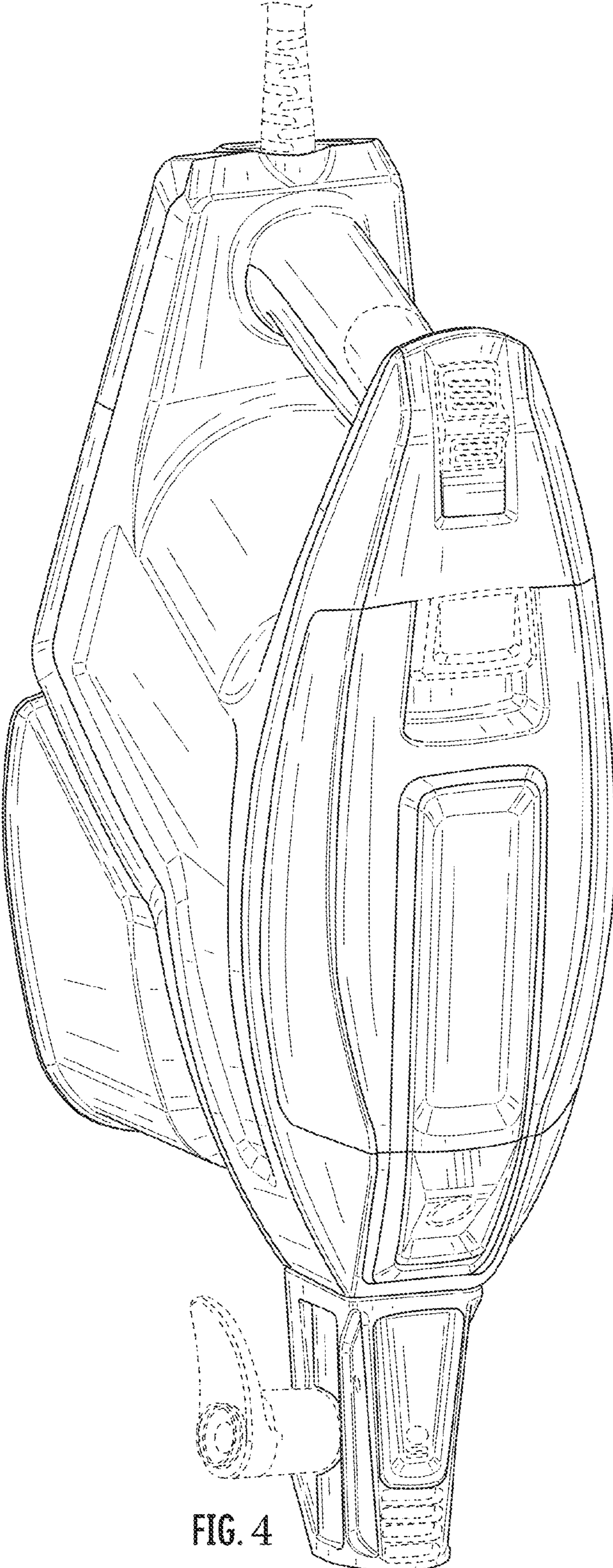


FIG. 4

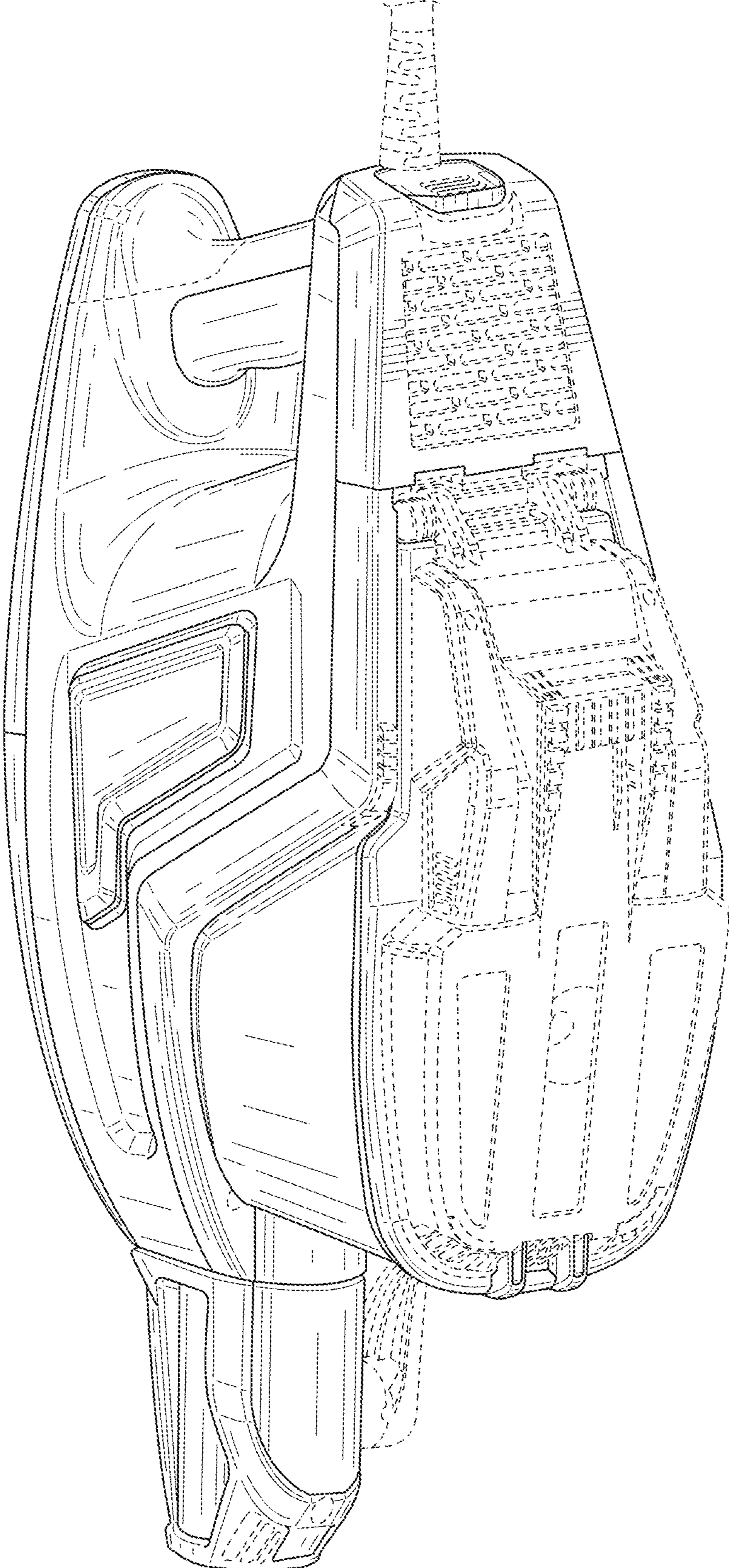


FIG. 5

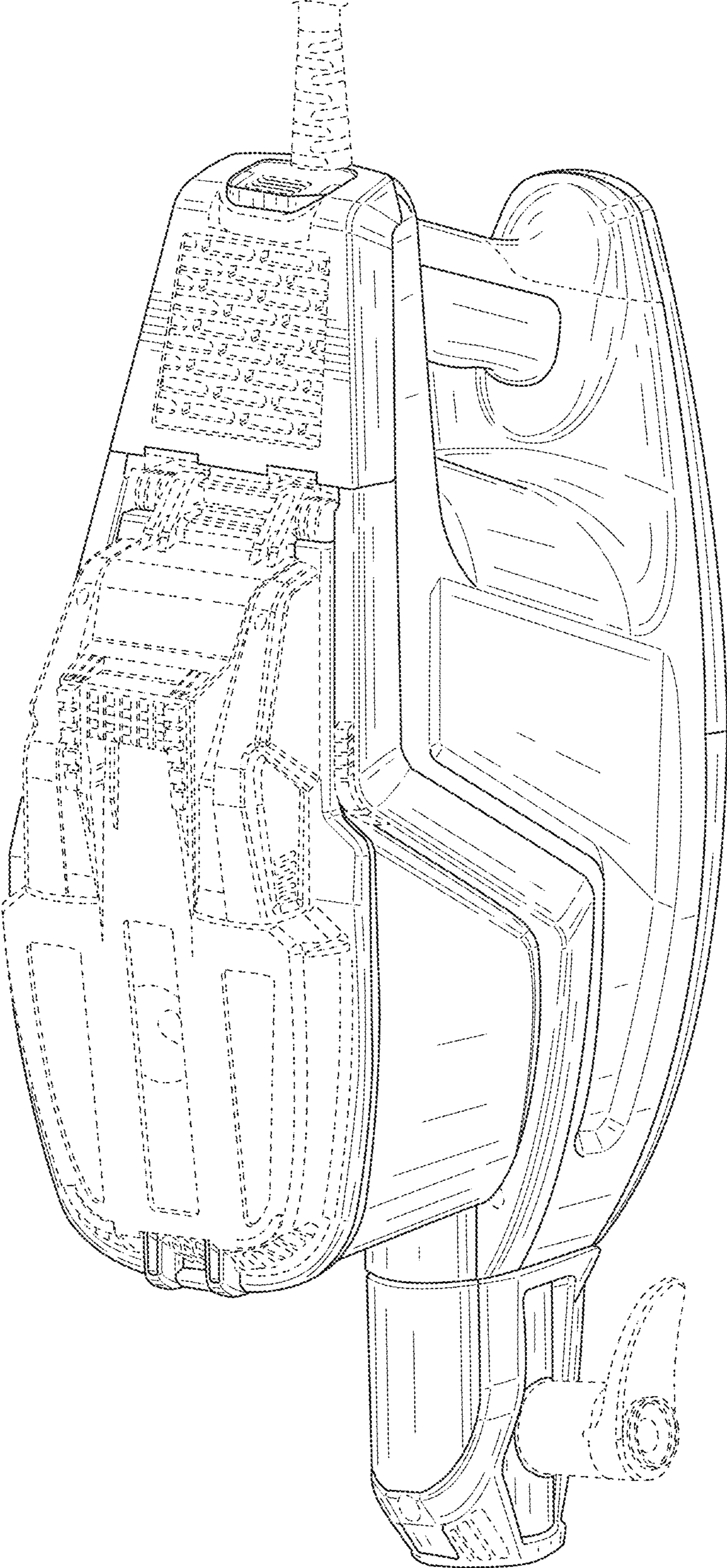


FIG. 6

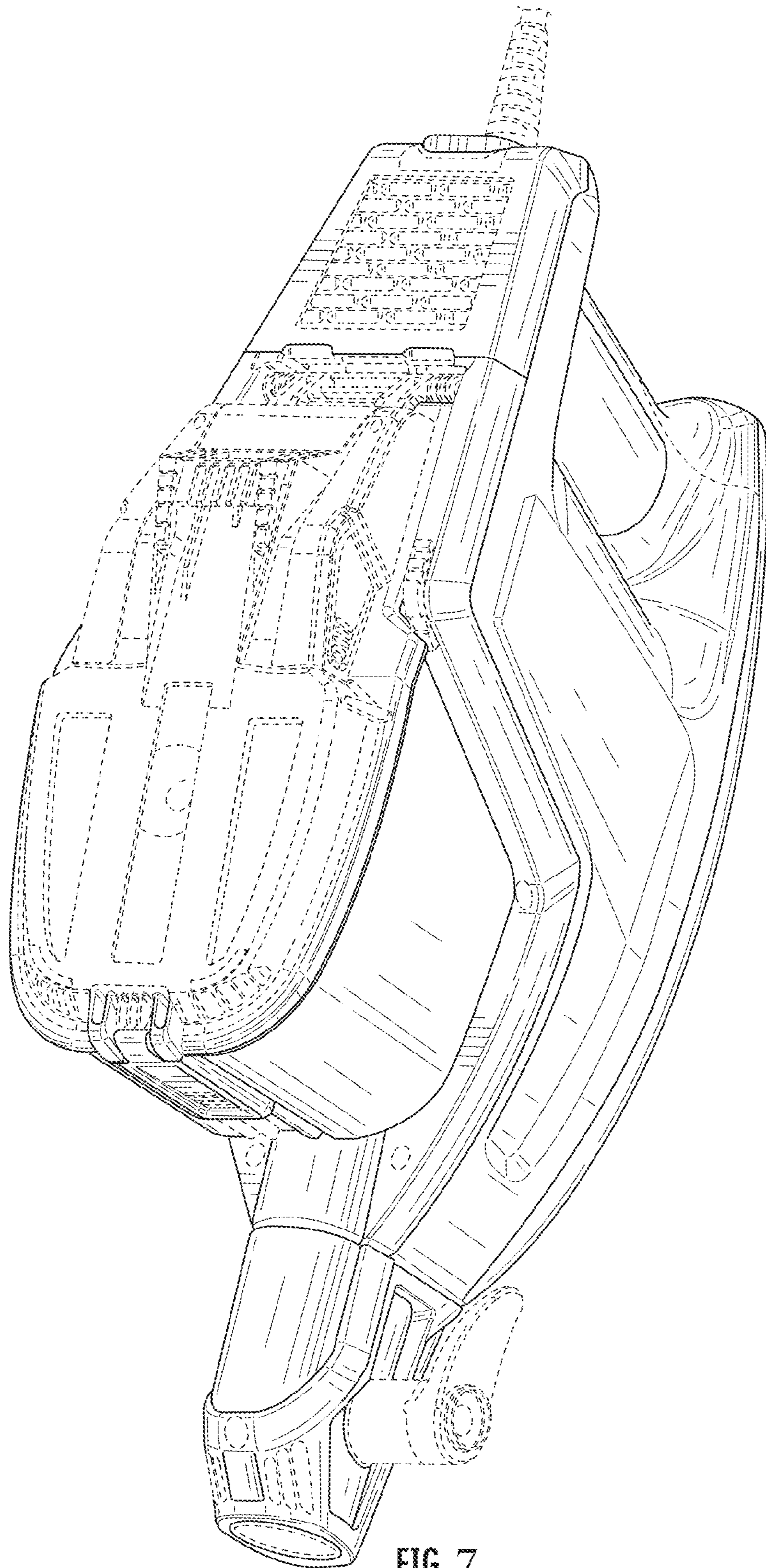


FIG. 7

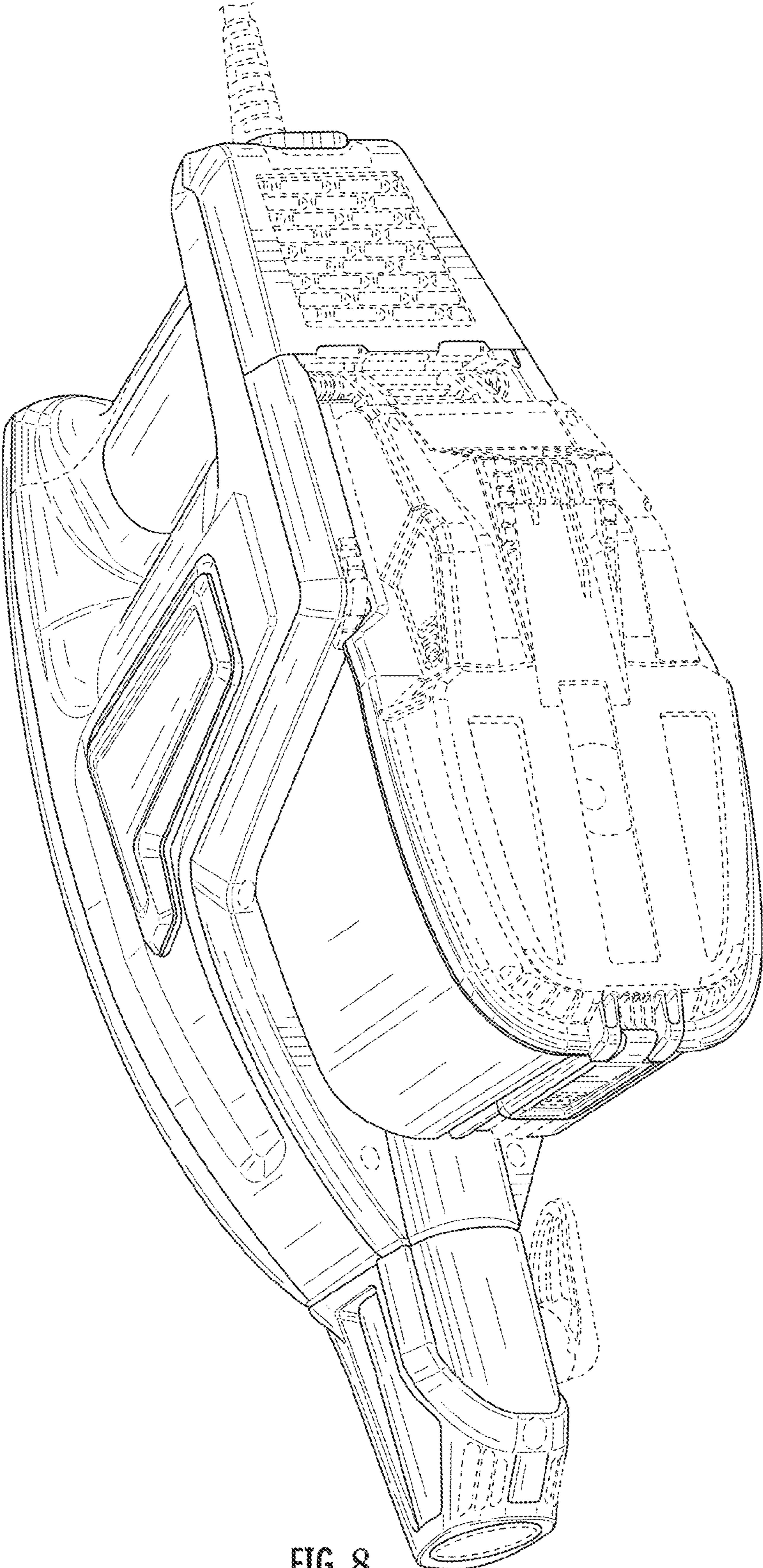


FIG. 8

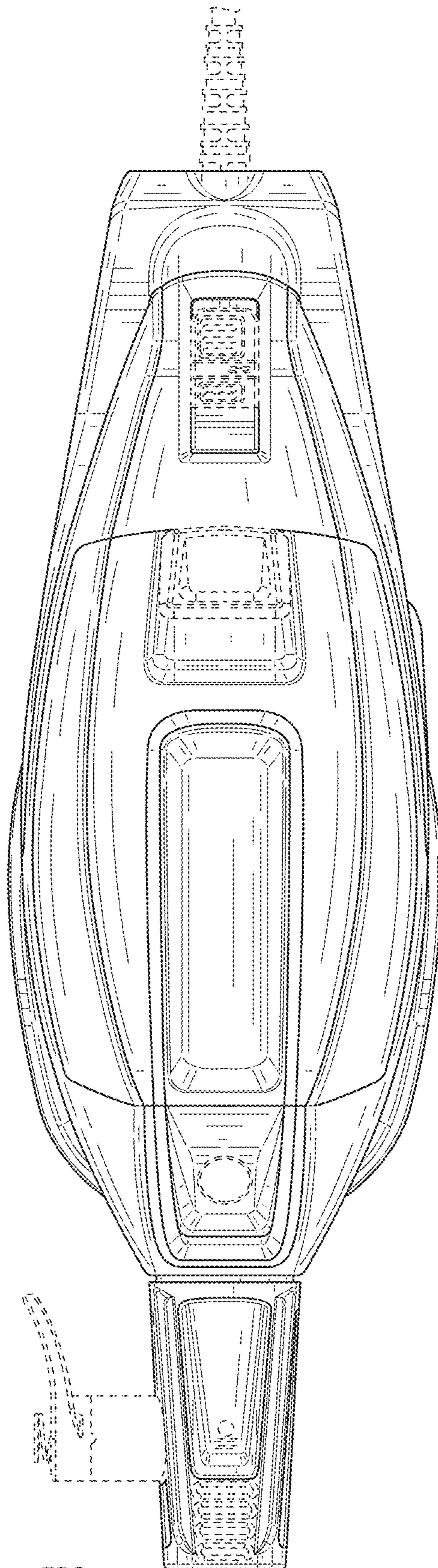


FIG. 9

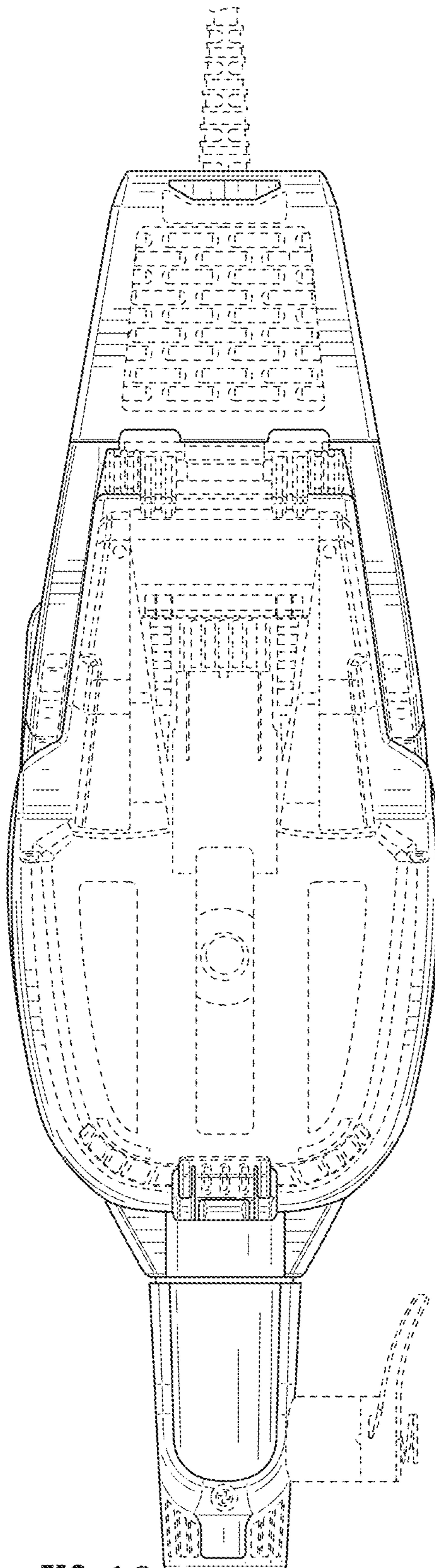


FIG. 10

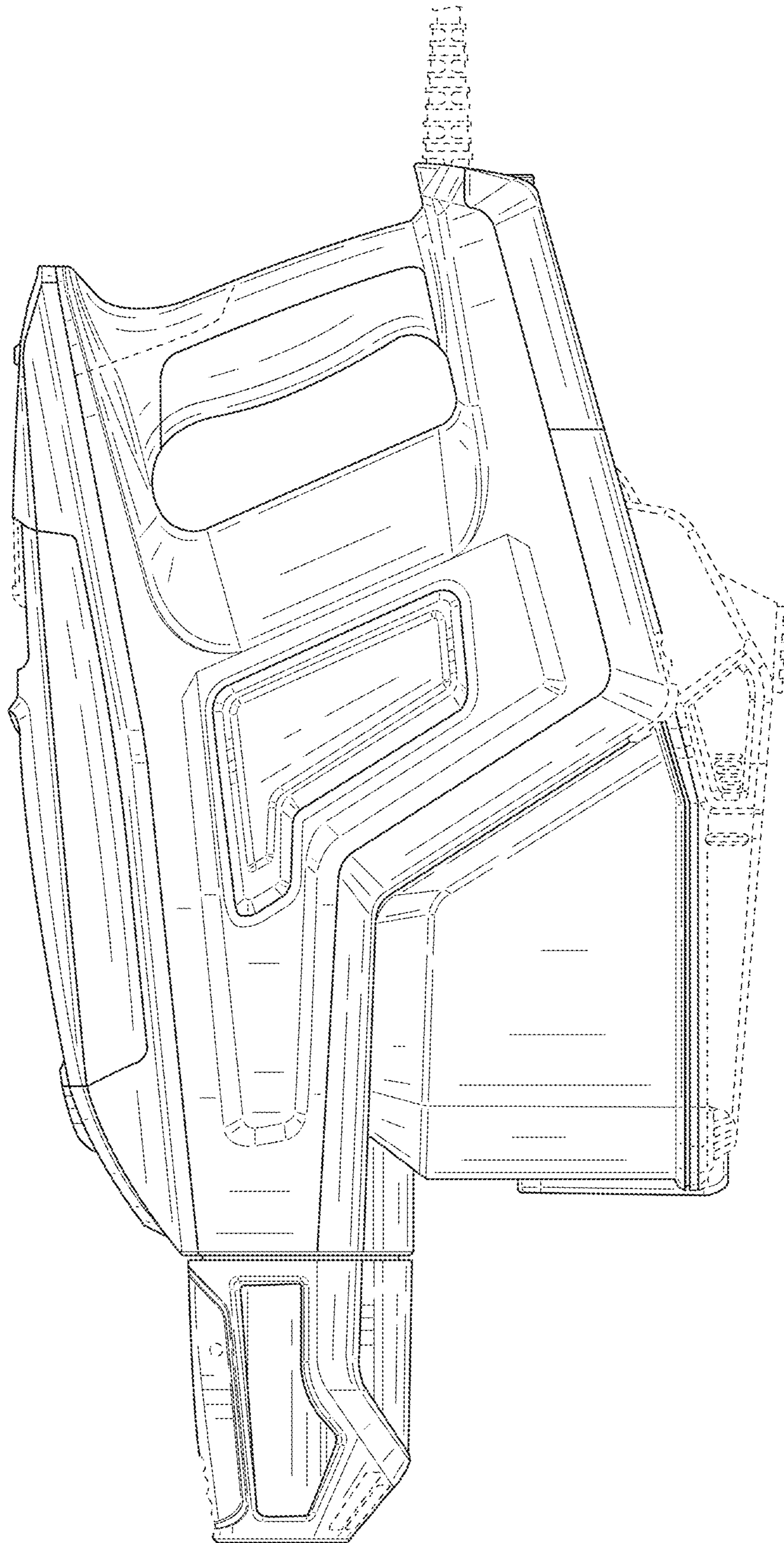


FIG. 11

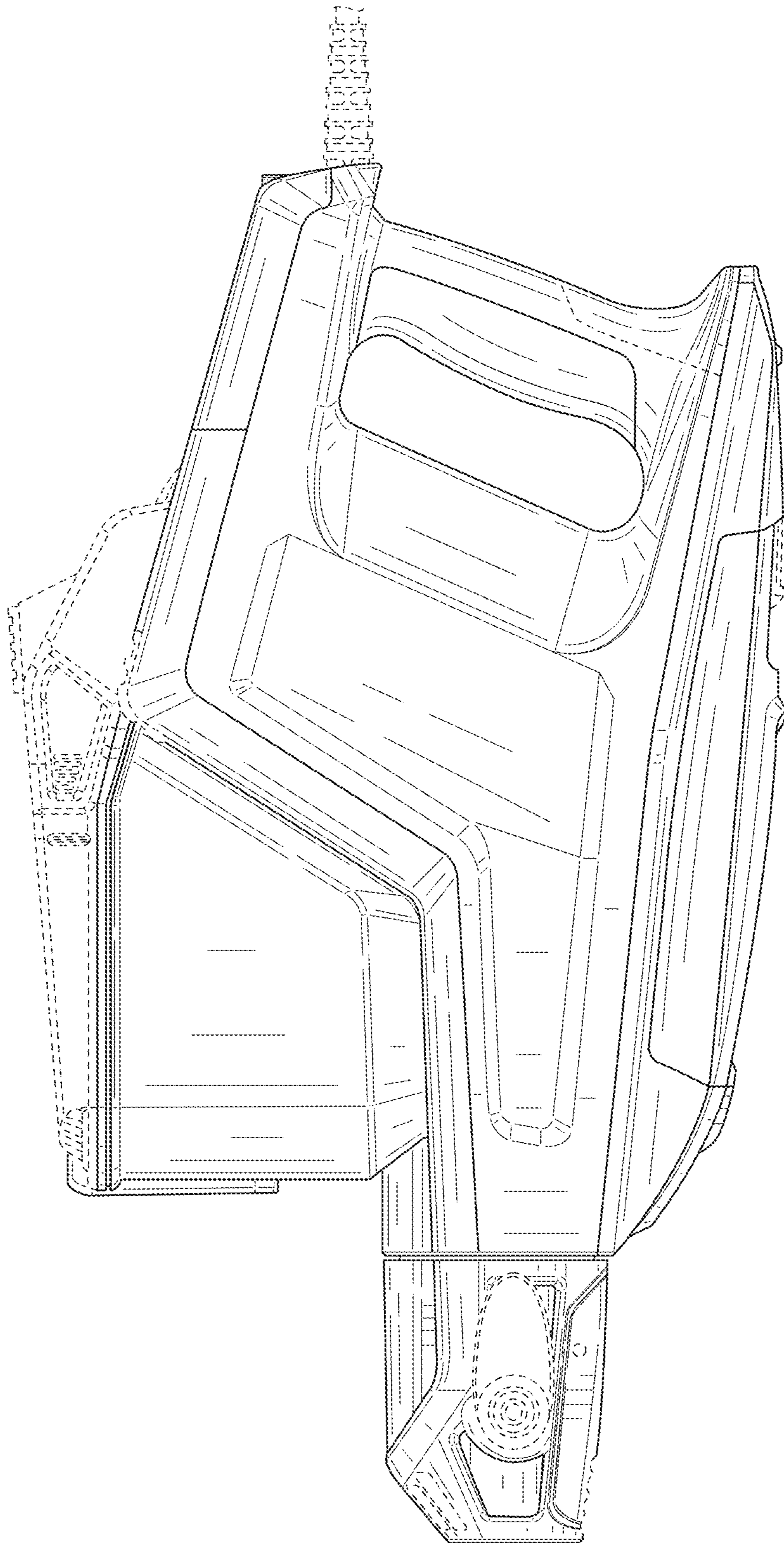


FIG. 12

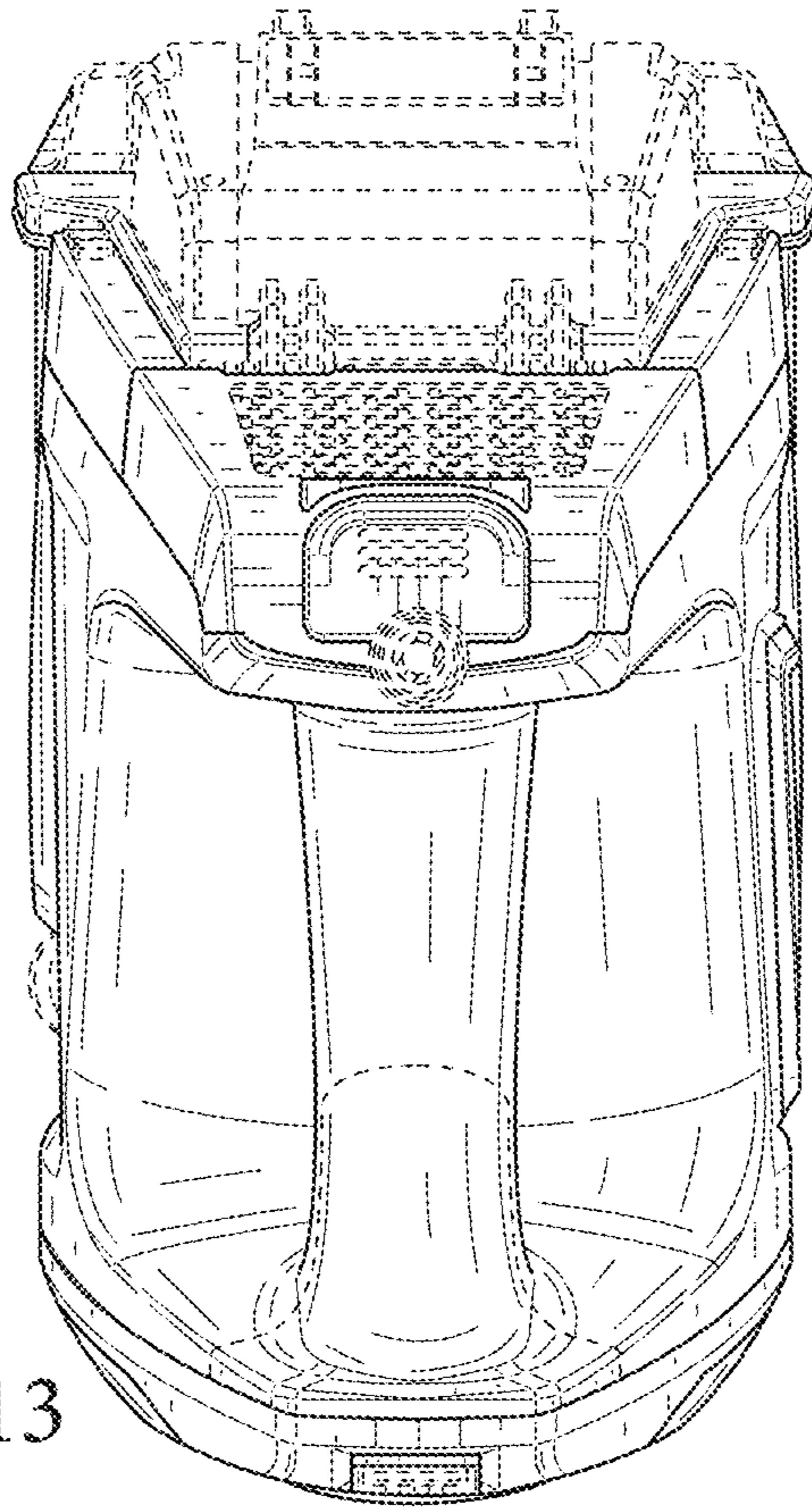


FIG. 13

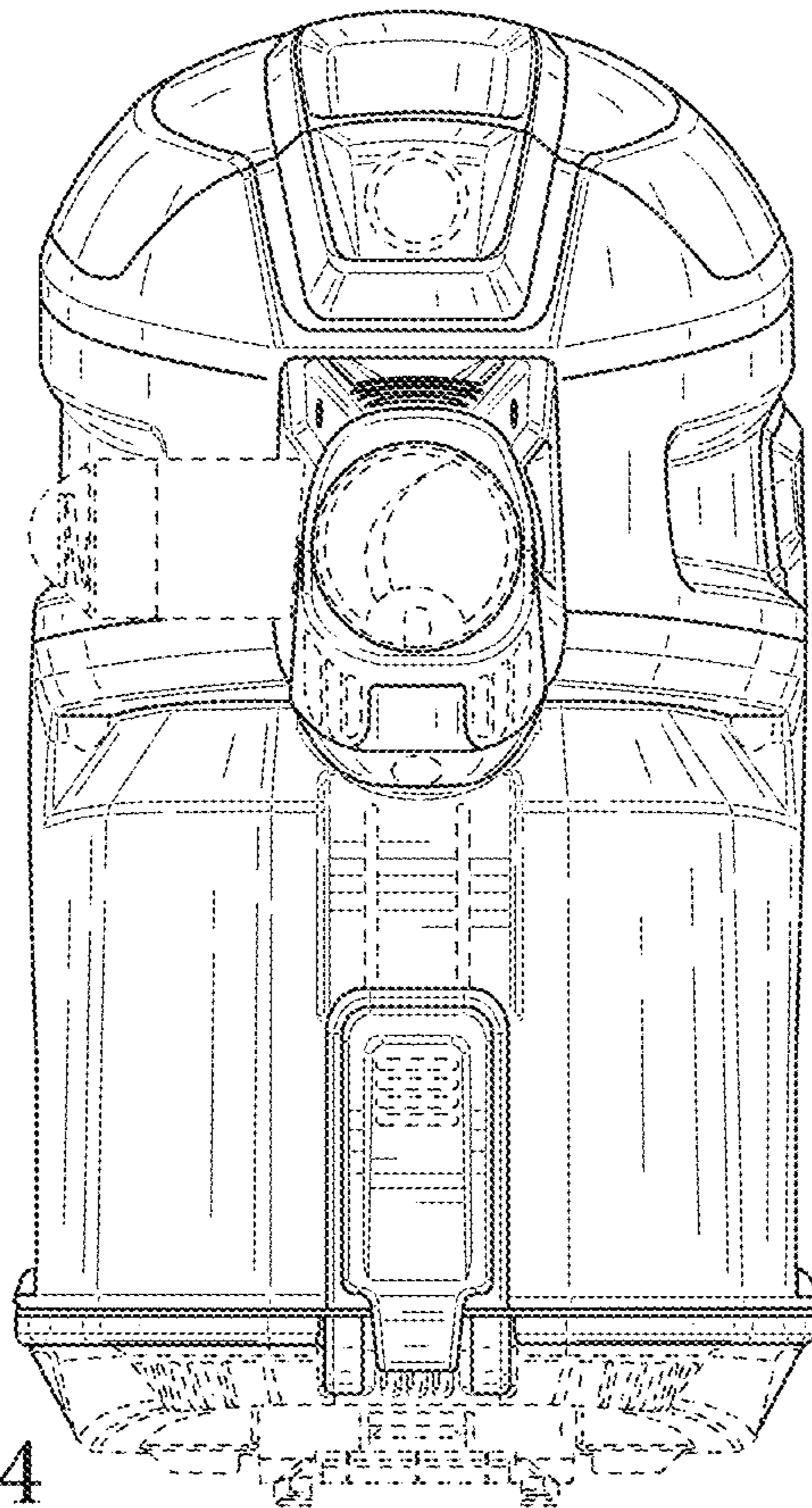


FIG. 14