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Lee et al.

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- (54) **HANDHELD VACUUM CLEANER**
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Brookfield, WI (US)
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(**) Term: **15 Years**

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

(58) **Field of Classification Search**
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CPC A47L 5/24; A47L 5/28; A47L 7/0038
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,209,875 A	7/1980	Pugh et al.
4,536,914 A	8/1985	Levine
4,542,557 A	9/1985	Levine
4,573,234 A	3/1986	Kochte et al.
4,682,384 A	7/1987	Prahl et al.
4,704,765 A	11/1987	Ataka
4,745,654 A	5/1988	Yamamoto et al.
RE33,074 E	10/1989	Levine
4,894,882 A	1/1990	Toya
4,899,418 A	2/1990	Steiner et al.
4,920,606 A	5/1990	Gerke, Jr. et al.
4,920,608 A	5/1990	Hult et al.
4,924,548 A	5/1990	Touya et al.
4,934,020 A	6/1990	Jackson
4,939,810 A	7/1990	Ataka

4,967,443 A	11/1990	Krasznai et al.
4,993,106 A	2/1991	Hult et al.
5,005,252 A	4/1991	Steiner et al.
5,020,187 A	6/1991	Kosten et al.
5,025,529 A	6/1991	Hult et al.
5,065,473 A	11/1991	Krasznai et al.
5,599,401 A	2/1997	Brosky et al.
5,893,396 A	4/1999	Vagle
6,108,864 A	8/2000	Thomas et al.
6,122,796 A	9/2000	Downham et al.
6,493,903 B1	12/2002	Super
D480,845 S	10/2003	Ki
D483,533 S	12/2003	Ki

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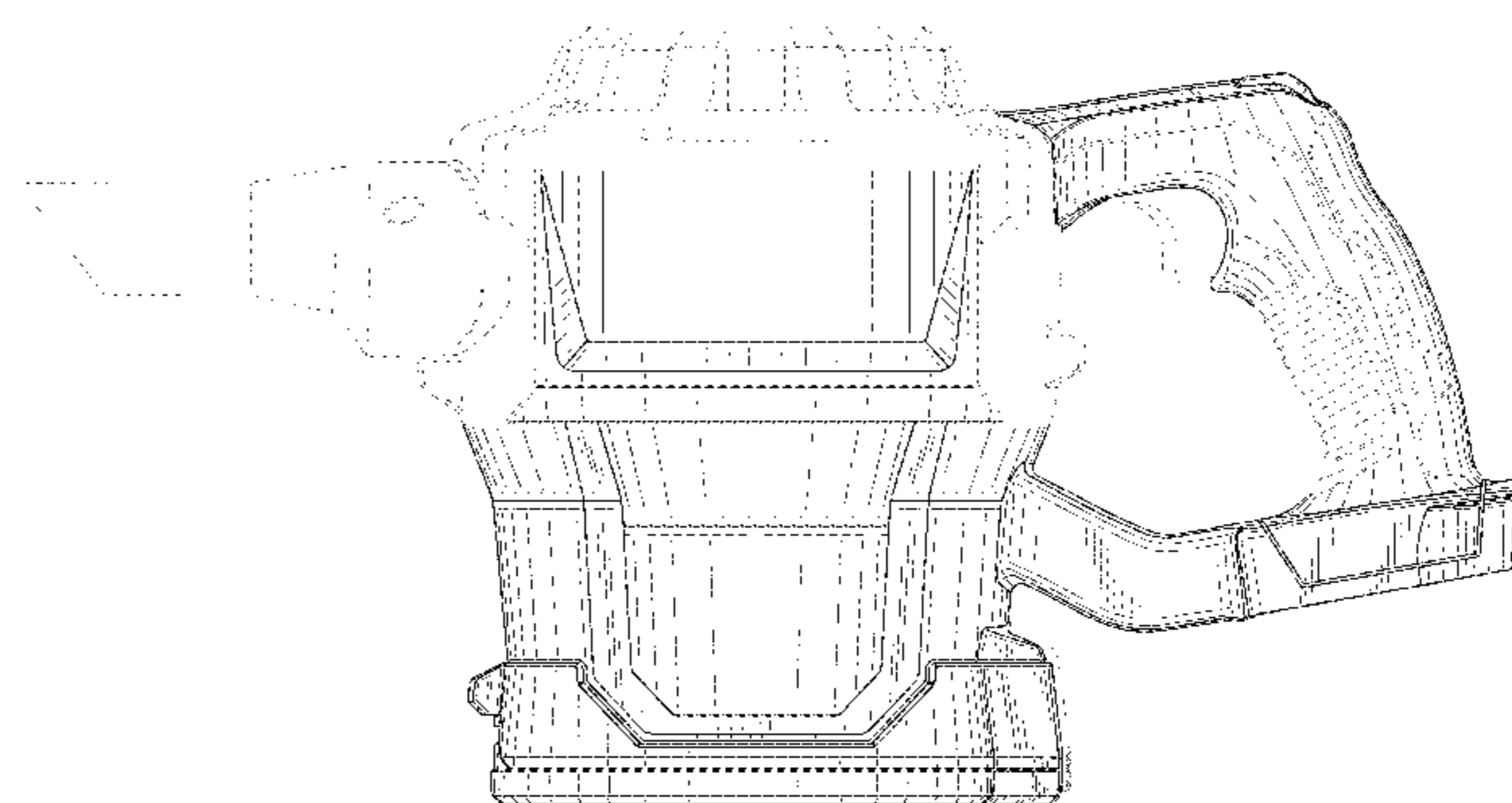
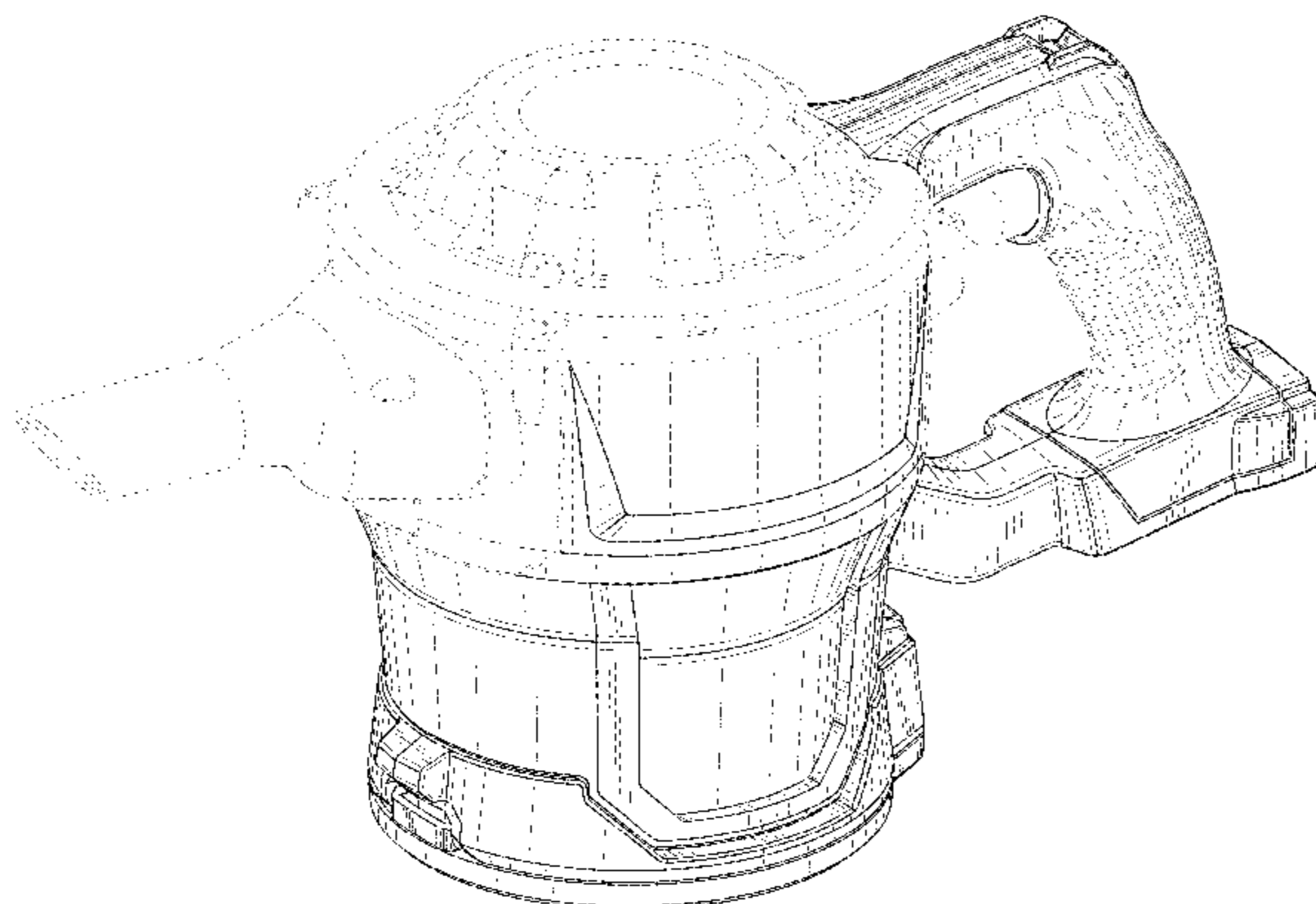
(57) **CLAIM**

We claim the ornamental design for a handheld vacuum cleaner, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a handheld vacuum cleaner showing our new design;
 FIG. 2 is a left side view of the handheld vacuum cleaner shown in FIG. 1.
 FIG. 3 is a right side view of the handheld vacuum cleaner shown in FIG. 1.
 FIG. 4 is a front side view of the handheld vacuum cleaner shown in FIG. 1.
 FIG. 5 is a rear side view of the handheld vacuum cleaner shown in FIG. 1.
 FIG. 6 is a top side view of the handheld vacuum cleaner shown in FIG. 1; and,
 FIG. 7 is a bottom side view of the handheld vacuum cleaner shown in FIG. 1.
 The details shown in broken lines form no part of the claimed design.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D489,849 S	5/2004	Ki	8,409,335 B2	4/2013	Dyson et al.
6,835,222 B2	12/2004	Gammack	8,424,157 B2	4/2013	Gell et al.
D509,931 S	9/2005	Ma	8,425,642 B2	4/2013	Worker et al.
6,974,488 B2	12/2005	Dyson	8,429,791 B2	4/2013	White
6,991,666 B2	1/2006	Organ	8,429,792 B2	4/2013	Genn et al.
D514,758 S	2/2006	Lau	8,432,114 B2	4/2013	Clothier
7,018,439 B2	3/2006	Vuijk	8,434,193 B2	5/2013	Sunderland et al.
D528,253 S	9/2006	Wu et al.	8,438,699 B2	5/2013	Dyson et al.
D529,671 S	10/2006	Yung	8,444,731 B2	5/2013	Gomiciaga-Pereda et al.
D537,578 S	2/2007	Crevling, Jr. et al.	8,448,294 B2	5/2013	Forbes et al.
7,291,190 B2	11/2007	Dummelow et al.	8,448,534 B2	5/2013	Davidson et al.
D569,055 S	5/2008	Bochmann et al.	8,465,574 B2	6/2013	Home
7,370,387 B2	5/2008	Walker et al.	8,468,647 B2	6/2013	Lambourn
7,412,749 B2	8/2008	Thomas et al.	8,474,091 B2	7/2013	Dyson et al.
D577,163 S *	9/2008	Dyson D32/21	8,474,094 B2	7/2013	Maguire et al.
D585,608 S	1/2009	Conrad et al.	8,474,095 B2	7/2013	Clothier et al.
7,513,009 B1	4/2009	Strawn	8,484,800 B2	7/2013	Forbes et al.
D595,463 S	6/2009	Tirane et al.	8,487,569 B2	7/2013	Dawe et al.
7,618,470 B2	11/2009	Eddington et al.	8,495,789 B2	7/2013	Nicolaou et al.
7,637,991 B2	12/2009	Eddington et al.	8,495,790 B2	7/2013	Forbes et al.
7,725,985 B2	6/2010	Krebs	8,510,908 B2	8/2013	Maguire et al.
D620,652 S	7/2010	Butts et al.	8,516,652 B2	8/2013	Sunderland et al.
7,845,046 B2	12/2010	Milligan et al.	8,522,396 B2	9/2013	Worker et al.
7,867,307 B2	1/2011	Bates et al.	8,528,158 B2	9/2013	Maguire et al.
7,931,716 B2	4/2011	Oakham	8,539,636 B2	9/2013	White et al.
D640,021 S	6/2011	Houghton	8,544,145 B2	10/2013	Arthey et al.
RE42,873 E	11/2011	Walker et al.	8,551,227 B2	10/2013	Horne
8,100,999 B2	1/2012	Ashbee et al.	8,555,462 B2	10/2013	Maguire et al.
8,117,712 B2	2/2012	Dyson et al.	8,561,253 B2	10/2013	Clothier et al.
8,122,562 B2	2/2012	Krebs	8,562,705 B2	10/2013	Courtney et al.
8,156,609 B2 *	4/2012	Milne A47L 5/24 15/344	8,567,003 B2	10/2013	McLeod et al.
D659,309 S	5/2012	Benaquisto et al.	8,567,789 B2	11/2013	Horne
8,167,964 B2	5/2012	Wai	8,572,789 B2	11/2013	Dyson et al.
8,225,456 B2	7/2012	Håkan et al.	8,572,802 B2	11/2013	Inge et al.
8,230,550 B2	7/2012	Krebs et al.	8,572,803 B2	11/2013	Inge et al.
8,236,077 B2	8/2012	Gomiciaga-Prerda et al.	8,604,729 B2	12/2013	Clothier et al.
D668,010 S	9/2012	Stickney et al.	D731,134 S *	6/2015	Dyson D32/31
D668,823 S	10/2012	Stickney et al.	D731,720 S *	6/2015	Gidwell D32/18
RE43,804 E	11/2012	Walker et al.	D741,558 S *	10/2015	Kerr D32/18
8,302,250 B2	11/2012	Dyson et al.	D742,083 S *	10/2015	Gidwell D32/31
8,302,251 B2	11/2012	Beskow et al.	D743,123 S *	11/2015	Chu D32/18
D673,743 S	1/2013	Dyson et al.	D745,231 S *	12/2015	Niedzwecki D32/18
D674,159 S	1/2013	Dyson et al.	D747,571 S *	1/2016	Dyson D32/18
D674,972 S	1/2013	Dyson et al.	D781,011 S *	3/2017	Bu D32/18
D674,977 S	1/2013	Dyson et al.	9,661,964 B2 *	5/2017	Conrad A47L 5/24
D675,390 S	1/2013	Dyson et al.	2005/0210627 A1	9/2005	Luebbering et al.
8,343,654 B2	1/2013	Churchill	2006/0090290 A1	5/2006	Lau
8,347,454 B2	1/2013	Ashbee et al.	2006/0156508 A1	7/2006	Khalil
8,347,455 B2	1/2013	Dyson et al.	2007/0209144 A1	9/2007	Fester et al.
8,347,456 B2	1/2013	Sweeby et al.	2007/0245514 A1	10/2007	Luebbering et al.
8,347,457 B2	1/2013	Dyson et al.	2008/0209668 A1	9/2008	Luebbering et al.
8,348,629 B2	1/2013	Fitton et al.	2008/0256744 A1	10/2008	Rowntreer et al.
8,350,508 B2	1/2013	Celik	2009/0307864 A1	12/2009	Dyson
8,353,077 B2	1/2013	Dyson et al.	2010/0045215 A1	2/2010	Hawker et al.
D675,798 S	2/2013	Dyson et al.	2010/0050368 A1	3/2010	Curien
D676,206 S	2/2013	Dyson et al.	2010/0229321 A1	9/2010	Dyson et al.
D677,027 S	2/2013	Dyson et al.	2010/0229325 A1	9/2010	Conrad
D677,028 S	2/2013	Dyson et al.	2010/0229328 A1	9/2010	Conrad
8,373,371 B2	2/2013	Clothier et al.	2010/0242208 A1	9/2010	Gammack et al.
8,375,509 B2	2/2013	Bates et al.	2011/0219566 A1	9/2011	Dyson et al.
8,375,510 B2	2/2013	Dyson et al.	2011/0219571 A1	9/2011	Dyson et al.
8,375,511 B2	2/2013	Dyson et al.	2011/0289719 A1	12/2011	Han et al.
8,375,512 B2	2/2013	Ashbee	2011/0289720 A1	12/2011	Han et al.
D677,442 S	3/2013	Dyson et al.	2011/0314630 A1	12/2011	Conrad
D677,845 S	3/2013	Dyson et al.	2012/0079671 A1	4/2012	Stickney et al.
D677,846 S	3/2013	Dyson et al.	2013/0007980 A1	1/2013	Worker et al.
D678,635 S	3/2013	Gammack et al.	2013/0031745 A1	2/2013	Ventress et al.
8,387,204 B2	3/2013	Dyson	2013/0036573 A1	2/2013	Ventress et al.
8,387,206 B2	3/2013	Arthey et al.	2013/0061415 A1	3/2013	Samuels et al.
8,387,207 B2	3/2013	Dimbylow et al.	2013/0061416 A1	3/2013	Dyson et al.
8,395,340 B2	3/2013	Marvelly	2013/0061417 A1	3/2013	Vanderstegen-Drake et al.
8,397,344 B2	3/2013	Liddell	2013/0061420 A1	3/2013	Vanderstegen-Drake et al.
8,403,650 B2	3/2013	Gammack et al.	2013/0081222 A1	4/2013	Wills et al.
D679,878 S	4/2013	Chudleigh et al.	2013/0081225 A1	4/2013	Mcluckie et al.
			2013/0081226 A1	4/2013	Mcluckie et al.
			2013/0086769 A1	4/2013	Iles et al.
			2013/0087393 A1	4/2013	Vanderstegen-Drake et al.
			2013/0097803 A1	4/2013	Tweedie
			2013/0106240 A1	5/2013	Tweedie
			2013/0139349 A1	6/2013	Iles et al.

(56)

References Cited

U.S. PATENT DOCUMENTS

2013/0149755	A1	6/2013	Reed et al.
2013/0152336	A1	6/2013	Courtney et al.
2013/0154563	A1	6/2013	Churchill
2013/0160232	A1	6/2013	Peace
2013/0160233	A1	6/2013	Peace et al.
2013/0174373	A1	6/2013	Genn et al.
2013/0174372	A1	7/2013	Guder et al.
2013/0174374	A1	7/2013	Guder et al.
2013/0178822	A1	7/2013	Hickingbotham et al.
2013/0196802	A1	8/2013	Wilkinson et al.
2013/0205538	A1	8/2013	Thompson
2013/0205539	A1	8/2013	Dyson et al.
2013/0207615	A1	8/2013	Sunderland et al.
2013/0212831	A1	8/2013	Follows et al.
2013/0212832	A1	8/2013	Genn et al.
2013/0305483	A1	11/2013	Dyson et al.
2013/0305484	A1	11/2013	Dyson et al.
2013/0305485	A1	11/2013	Moloney et al.
2013/0312216	A1	11/2013	Palmer et al.

* cited by examiner

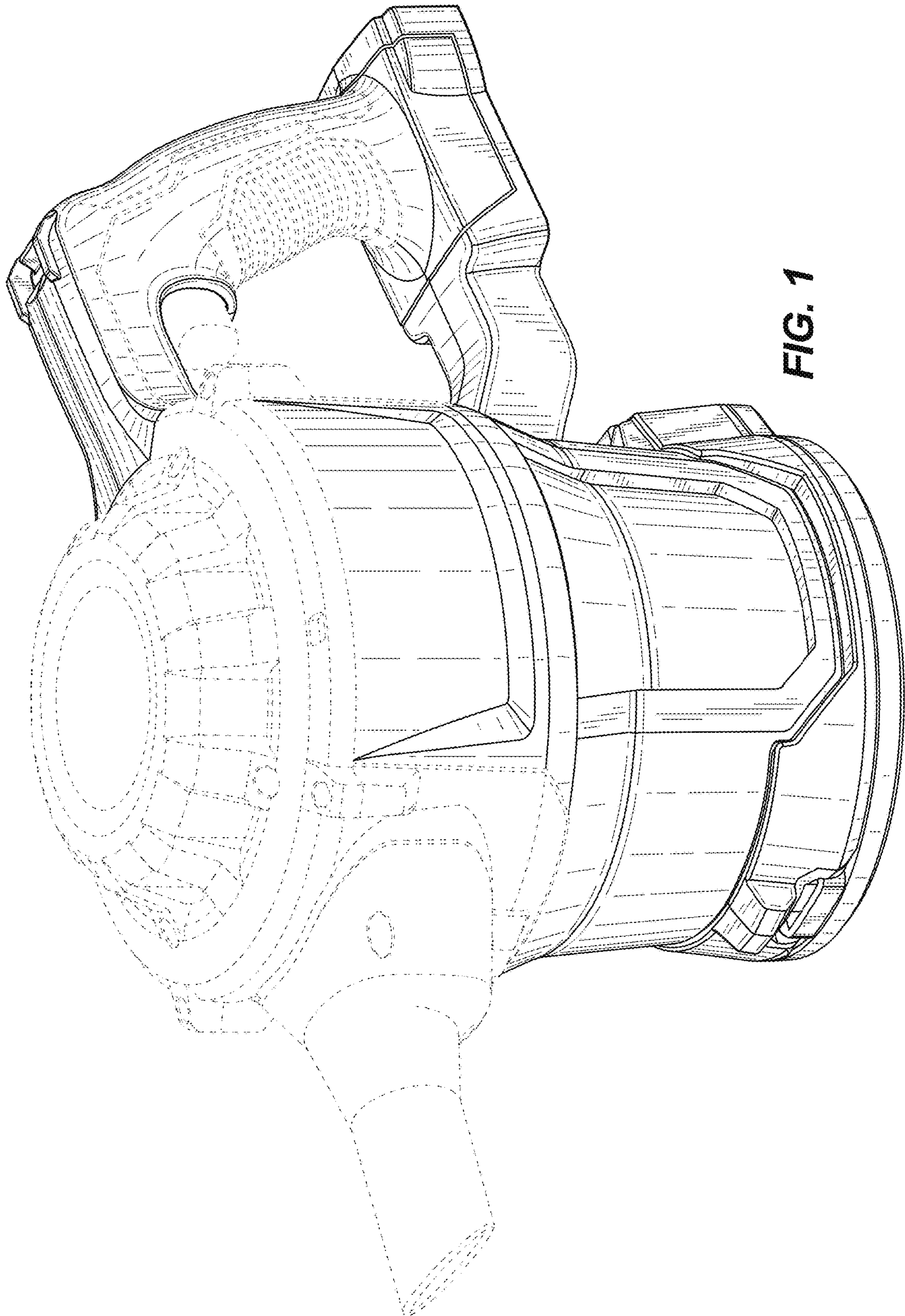


FIG. 1

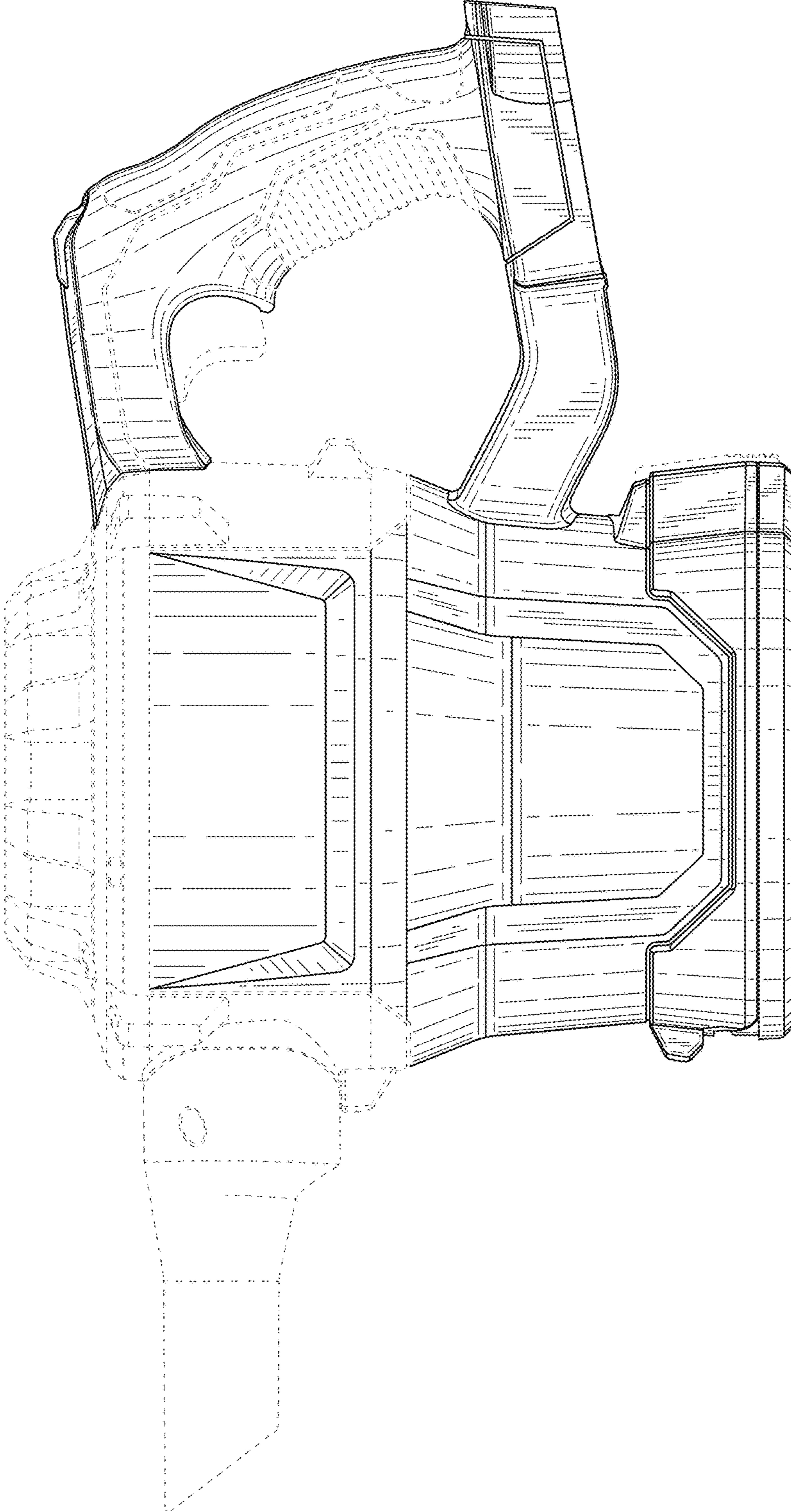


FIG. 2

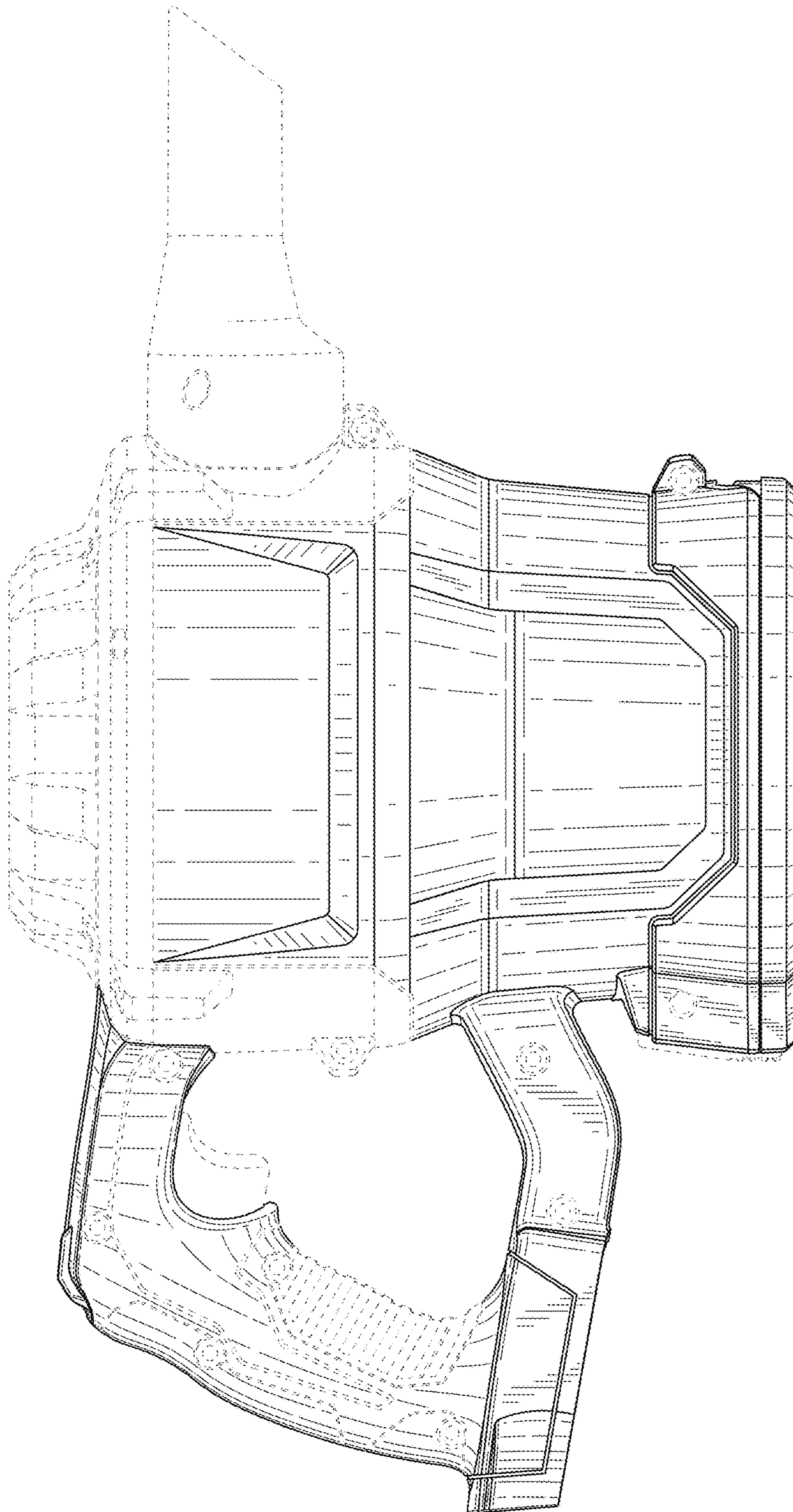


FIG. 3

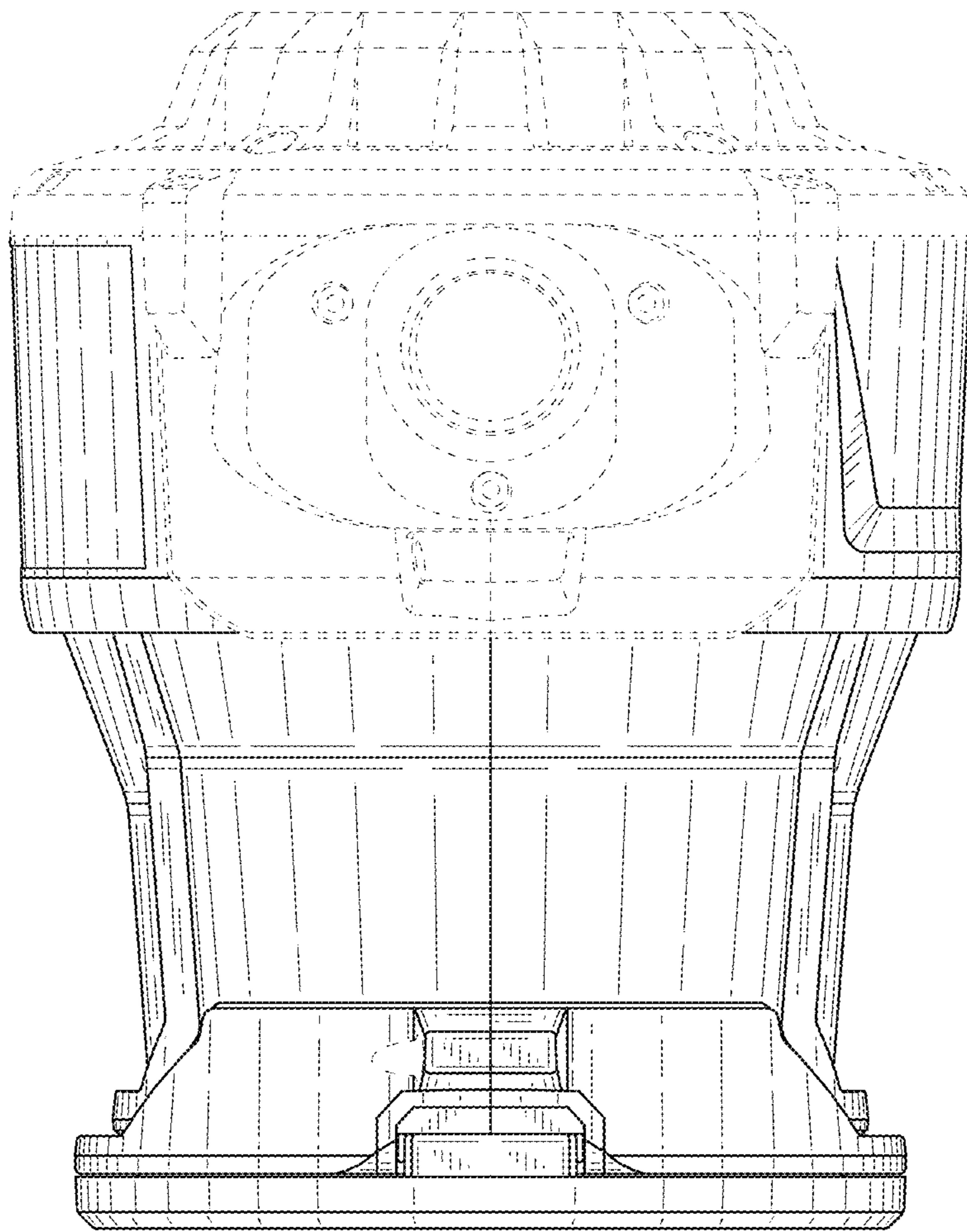


FIG. 4

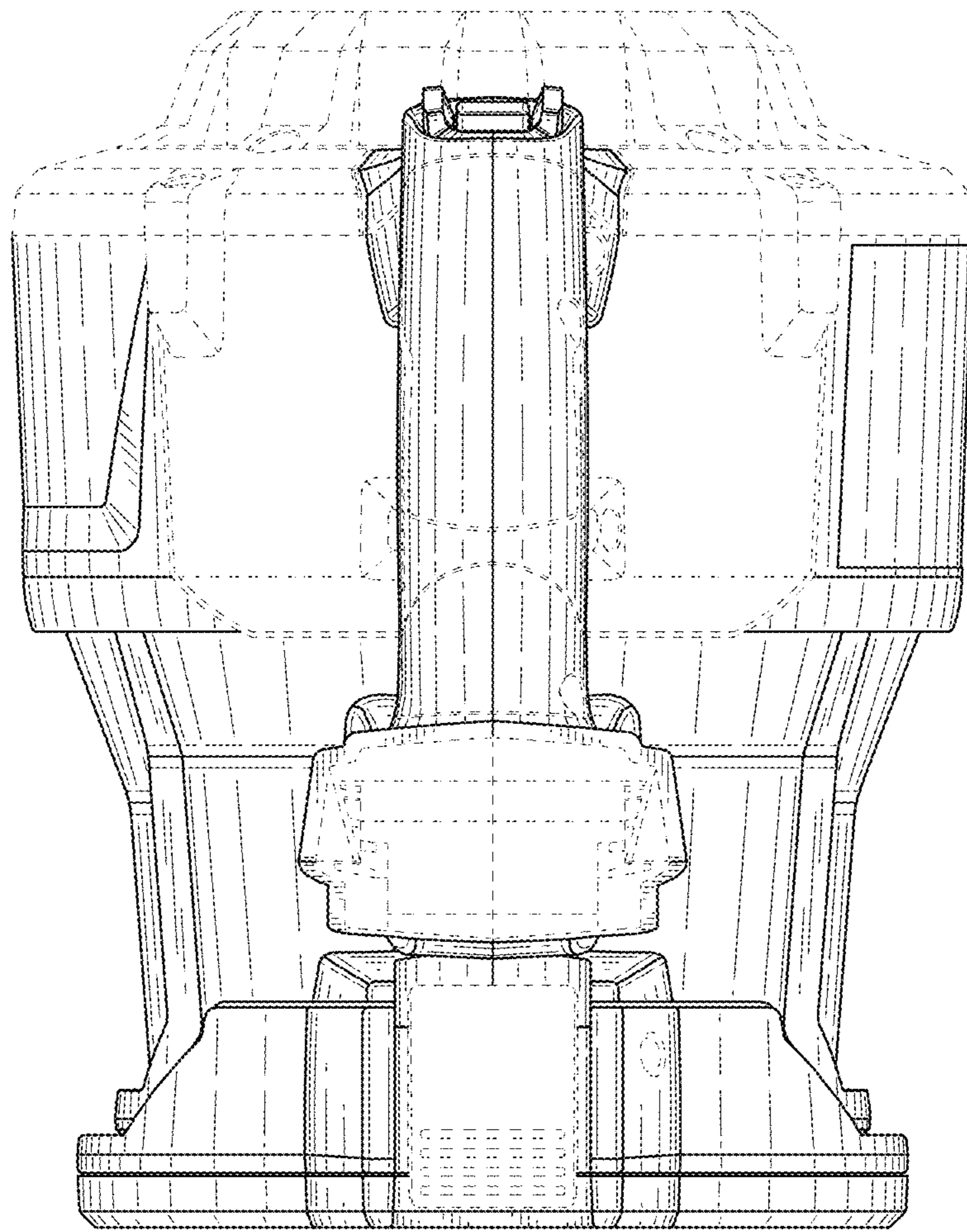


FIG. 5

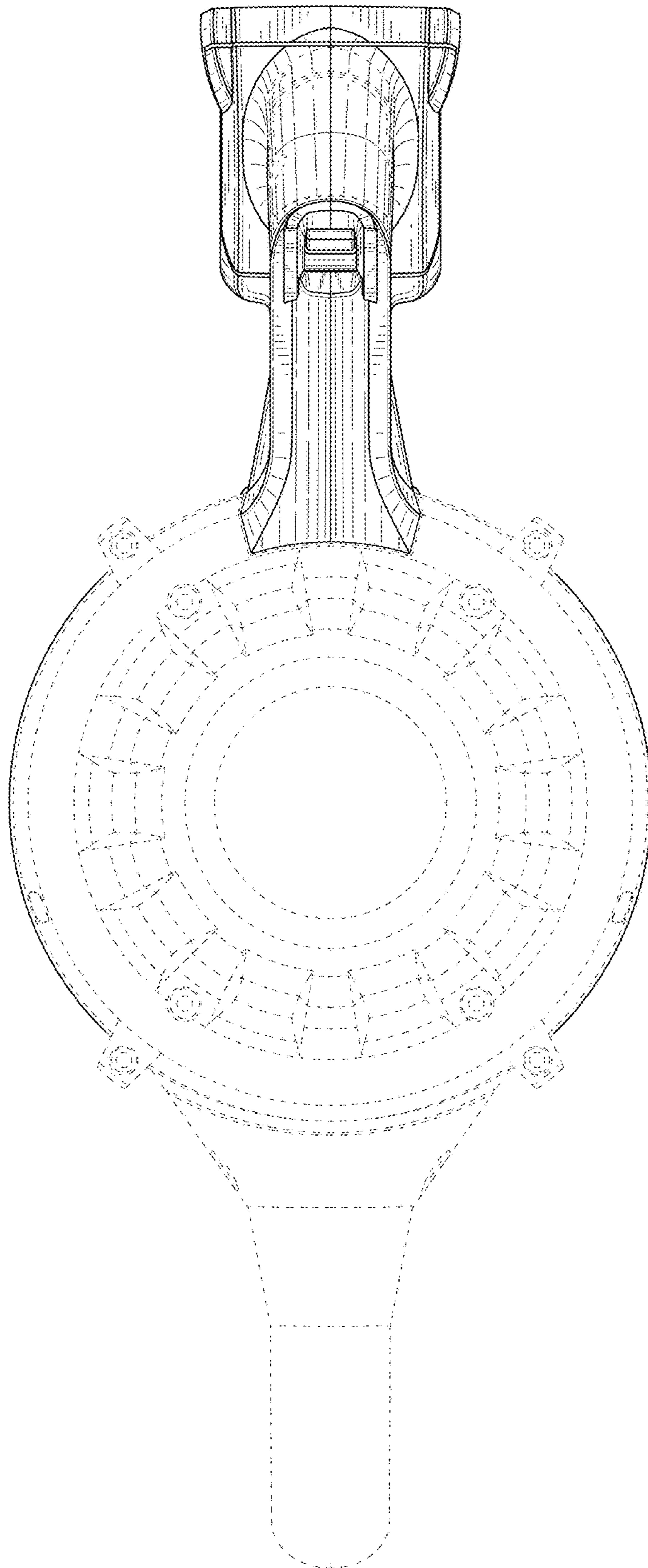


FIG. 6

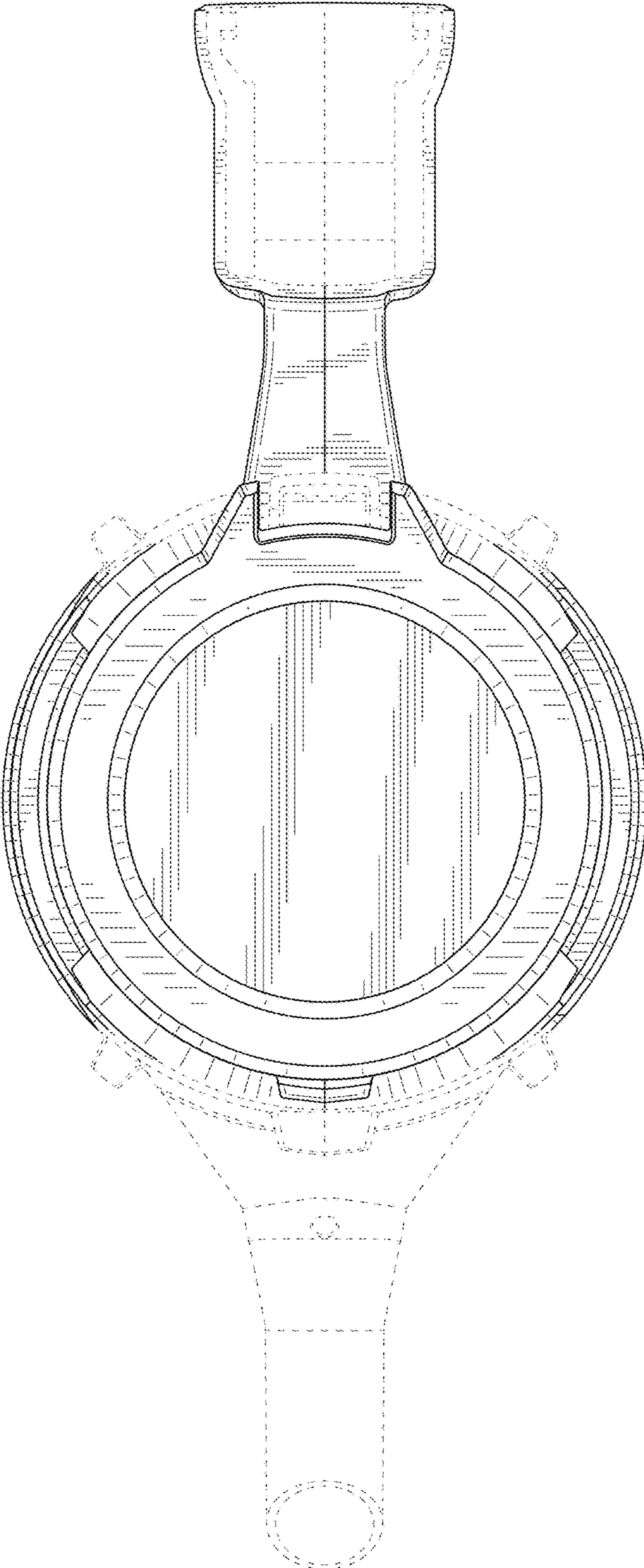


FIG. 7