



US00D922313S

(12) **United States Design Patent** (10) **Patent No.:** **US D922,313 S**
Altenburger (45) **Date of Patent:** **** Jun. 15, 2021**

(54) **BATTERY PACK**

FOREIGN PATENT DOCUMENTS

(71) Applicant: **TECHTRONIC CORDLESS GP,**
Anderson, SC (US)

EP 000683503-0001 6/2007
EP 000849468-0001 2/2008

(Continued)

(72) Inventor: **Ryan Altenburger,** Greenville, SC
(US)

OTHER PUBLICATIONS

(73) Assignee: **TECHTRONIC CORDLESS GP,**
Anderson, SC (US)

Ryboi, 18-Volt ONE+ Lithium-Ion 4.0 Ah Lithium+ HP High Capacity Battery, reviewed on Apr. 8, 2018, retrieved on Jun. 24, 2020, retrieved from the Internet URL: <https://www.homedepot.com/p/RYOBI-18-Volt-ONE-Lithium-Ion-4-0-Ah-LITHIUM-HP-High-Capacity-Battery-P192/301913865>.*

(Continued)

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

(21) Appl. No.: **29/702,817**

(22) Filed: **Aug. 22, 2019**

Related U.S. Application Data

Primary Examiner — Catherine S Posthauer
Assistant Examiner — Alison M Ofstun

(62) Division of application No. 29/578,157, filed on Sep. 19, 2016, now Pat. No. Des. 862,382.

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

(30) **Foreign Application Priority Data**

Mar. 17, 2016 (CN) 201630076764.9

(57) **CLAIM**

(51) **LOC (13) Cl.** **13-02**

I claim the ornamental design for a battery pack, as shown and described.

(52) **U.S. Cl.**
USPC **D13/103**

(58) **Field of Classification Search**
USPC D13/102-106, 110, 118-119, 184
CPC Y02E 60/12; Y02E 60/122; Y02E 60/124;
Y02E 60/50; H01M 2/02; H01M 2/022;
H01M 2/0202; H01M 2/0207; H01M
2/0212; H01M 2/1061; H01M 2/1022;
H01M 2/1055; H01M 2/1066; H01M
2/105; H01M 2/204; H01M 10/4257;
H01M 10/0436; H01M 10/48

DESCRIPTION

See application file for complete search history.

FIG. 1 is a top, left side perspective view of a battery pack, showing my new design;
FIG. 2 is a top, right side perspective view of the battery pack of FIG. 1;
FIG. 3 is a front view of the battery pack of FIG. 1;
FIG. 4 is a rear view of the battery pack of FIG. 1;
FIG. 5 is a left side of the battery pack of FIG. 1;
FIG. 6 is a right side of the battery pack of FIG. 1;
FIG. 7 is a top view of the battery pack of FIG. 1; and,
FIG. 8 is a bottom view of the battery pack of FIG. 1.
The broken lines illustrate portions of the article that form no part of the claimed design.

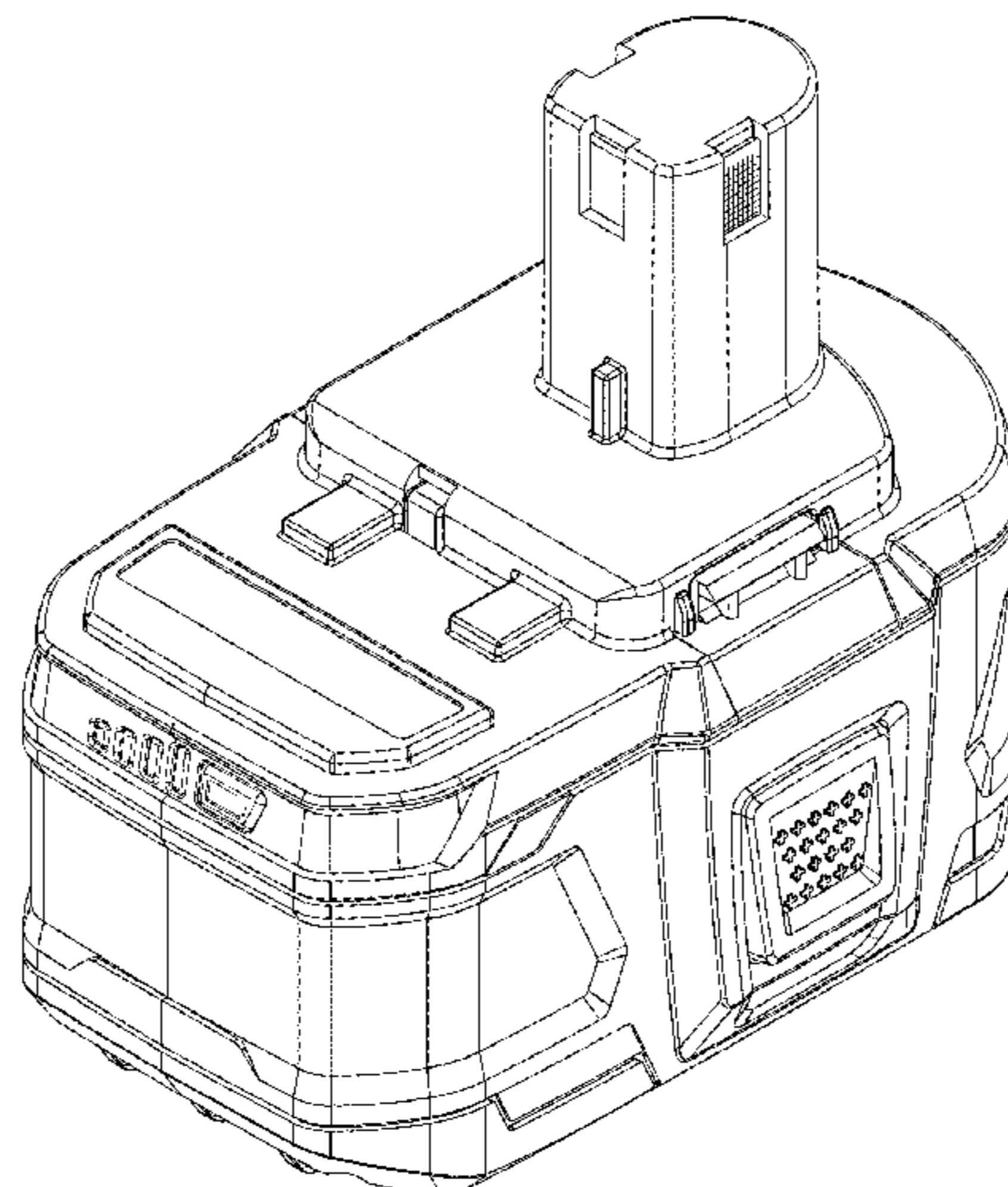
(56) **References Cited**

U.S. PATENT DOCUMENTS

D306,573 S 3/1990 Schultz
D306,574 S 3/1990 Schultz
D320,918 S 10/1991 Mochida

(Continued)

1 Claim, 6 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D321,338 S	11/1991	Sakamoto et al.	D586,639 S	2/2009	Yamamoto et al.
D323,642 S	2/1992	Liao	D587,547 S	3/2009	Aglassinger
D342,479 S	12/1993	Kimata	7,508,171 B2	3/2009	Carrier et al.
D345,727 S	4/1994	Flowers et al.	D590,333 S	4/2009	Price et al.
D350,111 S	8/1994	Okumura	D592,028 S	5/2009	Taniguchi et al.
D378,654 S	4/1997	Matsuoka et al.	D593,944 S *	6/2009	Smith D13/119
D383,435 S	9/1997	Svetlik	D595,101 S	6/2009	Bast
D384,639 S	10/1997	Kawakami et al.	D597,482 S	8/2009	Kondo et al.
5,783,998 A	7/1998	Nakajou et al.	D597,931 S	8/2009	Aglassinger
D397,991 S	9/1998	Kawakami et al.	D597,932 S	8/2009	Aglassinger
D412,485 S	8/1999	Kato et al.	D597,933 S	8/2009	Aglassinger
D417,648 S	12/1999	Clowers et al.	D597,934 S	8/2009	Aglassinger
6,007,939 A	12/1999	Clowers	D597,935 S	8/2009	Aglassinger
D432,077 S	10/2000	Zurwelle et al.	D598,373 S	8/2009	Aglassinger
D435,013 S	12/2000	Clowers et al.	D598,844 S	8/2009	Harrison et al.
D436,917 S	1/2001	Hayakawa et al.	D603,331 S	11/2009	Schupp
D442,452 S	5/2001	Stirm et al.	D604,583 S	11/2009	Yamamoto et al.
6,357,533 B1	3/2002	Buchholz et al.	D604,694 S	11/2009	Aglassinger
D456,002 S	4/2002	Kato et al.	D604,695 S	11/2009	Aglassinger
D466,777 S	12/2002	Watson	D606,935 S	12/2009	Murayama et al.
D466,779 S	12/2002	Shibata et al.	D607,814 S	1/2010	Tsuzuki et al.
D466,781 S	12/2002	Matsuoka et al.	D610,082 S	2/2010	Sweeney
D466,863 S	12/2002	Zurwelle et al.	D610,478 S	2/2010	Bast
D471,865 S	3/2003	Garvis et al.	7,719,234 B2	5/2010	Carrier et al.
D474,445 S	5/2003	Matsuoka et al.	7,723,952 B2	5/2010	Phillips et al.
D477,811 S	7/2003	Niwa et al.	D622,660 S *	8/2010	Taniguchi D13/103
D481,672 S	11/2003	Niwa et al.	D622,661 S	8/2010	Yamada et al.
D483,012 S	12/2003	Hsu	7,799,448 B2	9/2010	Cruise et al.
D484,458 S	12/2003	Garvis et al.	7,801,651 B2	9/2010	Iwers
D484,850 S	1/2004	Johnson	D628,454 S	12/2010	Misaki
D487,426 S	3/2004	Johnson	7,868,591 B2	1/2011	Phillips et al.
D488,774 S	4/2004	Zufall et al.	D633,036 S	2/2011	Murray
D491,438 S	6/2004	Cheung et al.	7,953,965 B2	5/2011	Qin et al.
D502,377 S	3/2005	Aglassinger	D639,730 S	6/2011	Kawase
D504,111 S	4/2005	Ozawa et al.	D640,196 S	6/2011	Shuang et al.
D504,394 S	4/2005	Cheung et al.	D640,197 S	6/2011	Park et al.
6,913,087 B1	7/2005	Brotto et al.	D640,975 S	7/2011	Okuda et al.
D508,643 S	8/2005	Concari et al.	D642,037 S	7/2011	Miller et al.
D510,317 S	10/2005	Sun	D646,136 S	10/2011	Aglassinger
D511,744 S	11/2005	Hsu et al.	D646,947 S	10/2011	Lopano
D512,373 S	12/2005	Tsai et al.	D651,560 S	1/2012	Park et al.
D512,961 S	12/2005	Okuda et al.	8,129,955 B2	3/2012	White et al.
6,971,456 B2	12/2005	Yamada et al.	D657,307 S	4/2012	Zhao et al.
D513,730 S	1/2006	Johnson	D658,578 S	5/2012	Davis
D514,060 S	1/2006	Wong et al.	D663,183 S	7/2012	Sell
D515,377 S	2/2006	Chung et al.	D670,989 S	11/2012	Kawase et al.
D516,504 S	3/2006	Okuda et al.	8,319,475 B2	11/2012	Choski et al.
D523,807 S	6/2006	Murayama et al.	D675,500 S	2/2013	Taniguchi et al.
D525,848 S	8/2006	Kokawa	D676,731 S	2/2013	Aglassinger
D527,971 S	9/2006	Kokawa	8,383,263 B2	2/2013	Cruise et al.
D528,975 S	9/2006	Chi et al.	D678,025 S	3/2013	Naksen et al.
D530,270 S	10/2006	Ozawa et al.	D678,744 S	3/2013	Aoki et al.
D535,537 S	1/2007	Aglassinger	D679,161 S	4/2013	Kawase et al.
D536,944 S	2/2007	Tsai et al.	D679,651 S	4/2013	Stratford
D539,221 S	3/2007	Johnson et al.	D682,192 S	5/2013	Corbin
D544,436 S *	6/2007	Kawahara D13/103	D682,193 S	5/2013	Corbin
D545,759 S	7/2007	Ino et al.	D682,194 S	5/2013	Jiang et al.
D547,264 S	7/2007	Kondo	D682,195 S	5/2013	Aglassinger
D550,152 S	9/2007	Okuda et al.	8,436,584 B2	5/2013	Johnson et al.
7,270,910 B2	9/2007	Yahnker et al.	D684,028 S	6/2013	Costoli
D553,562 S	10/2007	Okada et al.	D684,528 S	6/2013	Murray
D555,086 S	11/2007	Zhang	D685,246 S	7/2013	Tatic
D555,451 S	11/2007	Okuda et al.	D685,730 S	7/2013	Hamm et al.
D556,002 S	11/2007	Ino	D691,011 S	10/2013	Walz et al.
D558,670 S	1/2008	Ritterling et al.	D692,380 S	10/2013	Tirone
D562,228 S	2/2008	Okada et al.	D699,670 S	2/2014	Cooper
D565,374 S	4/2008	Zhang	D699,672 S	2/2014	Kosugi et al.
D568,239 S	5/2008	Okada et al.	D700,821 S	3/2014	Tschopp
D574,688 S	8/2008	Yamamoto	D706,603 S	6/2014	Kokawa et al.
D575,224 S	8/2008	Taniguchi et al.	D708,496 S	7/2014	Zhou
D575,606 S	8/2008	Okouchi et al.	D710,794 S	8/2014	Busschaert et al.
D579,868 S *	11/2008	Harrison D13/103	D716,626 S	11/2014	Sell et al.
D580,351 S	11/2008	Elsmark et al.	D718,705 S	12/2014	Naksen
D580,353 S *	11/2008	Harrison D13/103	D722,016 S	2/2015	Beukema
D581,235 S	11/2008	Aglassinger	9,014,866 B2	4/2015	Moriai et al.
			9,112,248 B2	8/2015	Johnson et al.
			D800,656 S *	10/2017	Marino D13/119
			9,871,370 B2	1/2018	Friedman et al.
			D817,869 S	5/2018	Lee et al.

(56)

References Cited

U.S. PATENT DOCUMENTS

D818,949 S 5/2018 Dunkin et al.
 D823,247 S 7/2018 Lemelson et al.
 D858,432 S * 9/2019 Altenburger D13/103
 D862,382 S * 10/2019 Altenburger D13/103
 D867,279 S * 11/2019 Altenburger D13/103
 2003/0096158 A1 5/2003 Takano et al.
 2005/0073282 A1 4/2005 Carrier et al.
 2008/0150474 A1 * 6/2008 Ball G01R 31/3646
 320/106
 2010/0176766 A1 7/2010 Brandner et al.
 2012/0037385 A1 2/2012 Suzuki et al.
 2012/0292070 A1 11/2012 Ito et al.
 2013/0026983 A1 1/2013 Yamamoto et al.
 2014/0107853 A1 4/2014 Ashinghurst et al.
 2014/0159919 A1 6/2014 Furui et al.
 2014/0159920 A1 6/2014 Furui et al.
 2014/0210265 A1 7/2014 Thorsøe
 2014/0368168 A1 12/2014 Beckman
 2015/0041164 A1 2/2015 Sergyeyenko et al.
 2015/0097518 A1 4/2015 Bishop et al.
 2015/0127186 A1 5/2015 Moriai et al.
 2015/0185289 A1 7/2015 Yang et al.
 2015/0214758 A1 7/2015 Toya et al.
 2015/0280457 A1 10/2015 Jung et al.
 2017/0271632 A1 * 9/2017 Jenkins H01M 2/1061
 2017/0271645 A1 * 9/2017 Brush H01M 2/32
 2019/0280262 A1 * 9/2019 Willey H01M 2/204
 2020/0042753 A1 * 2/2020 Huggins H02J 7/00
 2020/0044209 A1 * 2/2020 Huggins H01M 2/1055

FOREIGN PATENT DOCUMENTS

EP 001065411-0001 1/2009
 EP 001074371-0004 4/2009

EP 001193213-0001 2/2010
 EP 001250559-0001 12/2010
 EP 001916305-0001 9/2011
 EP 002229716-0001 5/2013
 EP 002239004-0001 5/2013
 EP 002239004-0002 5/2013
 EP 001392856-0001 1/2014
 EP 002551820-0001 12/2014
 EP 002674523-0001 4/2015
 EP 002728105-0001 7/2015
 EP 002513614-0001 9/2015
 EP 002513614-0004 9/2015
 EP 002773457-0001 10/2015
 EP 002779694-0001 10/2015
 EP 003027432-0001 3/2016
 EP 003073840-0001 5/2016
 EP 003073840-0002 5/2016
 EP 003119973-0004 5/2016
 EP 003119973-0005 5/2016
 WO 2015061370 4/2015

OTHER PUBLICATIONS

Ryobi 18 Volt Compact Lithium Ion 1.5 Ah Battery, <https://www.amazon.com/Ryobi-P107-Compact-Lithium-Battery/dp/B00AV250JS/ref=sr_1_4?s=power-hand-tool&ie=UTF8&qid=1511132965&sr=1-4&keywords=ryobi+18v+batt> Ryobi, first available on amazon.com Dec. 31, 2012.

Ryobi 130224054 Drill Battery Pack 18-volt, Ryobi, first available on Amazon.com on Mar. 26, 2013, retrieved on Apr. 16, 2018, retrieved from the Internet URL: https://www.amazon.com/Ryobi-130224054-Original-Equipment-Manufacturer/dp.B00C1KULDS/ref=sr_1_19?s=hi&ie=UTF8&qid=1523902511&sr=1-19&keywords=ruobi+battery+pack.

* cited by examiner

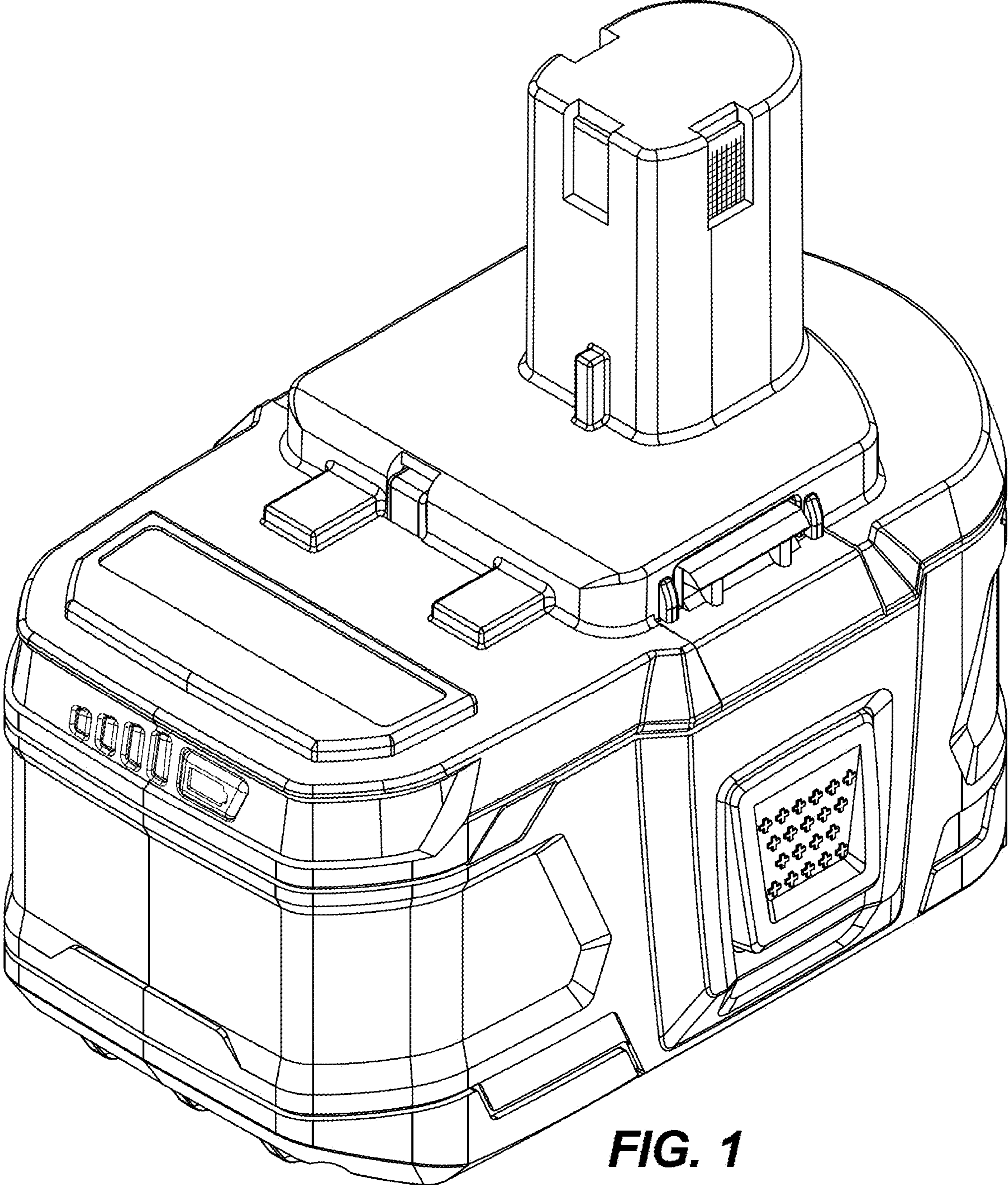


FIG. 1

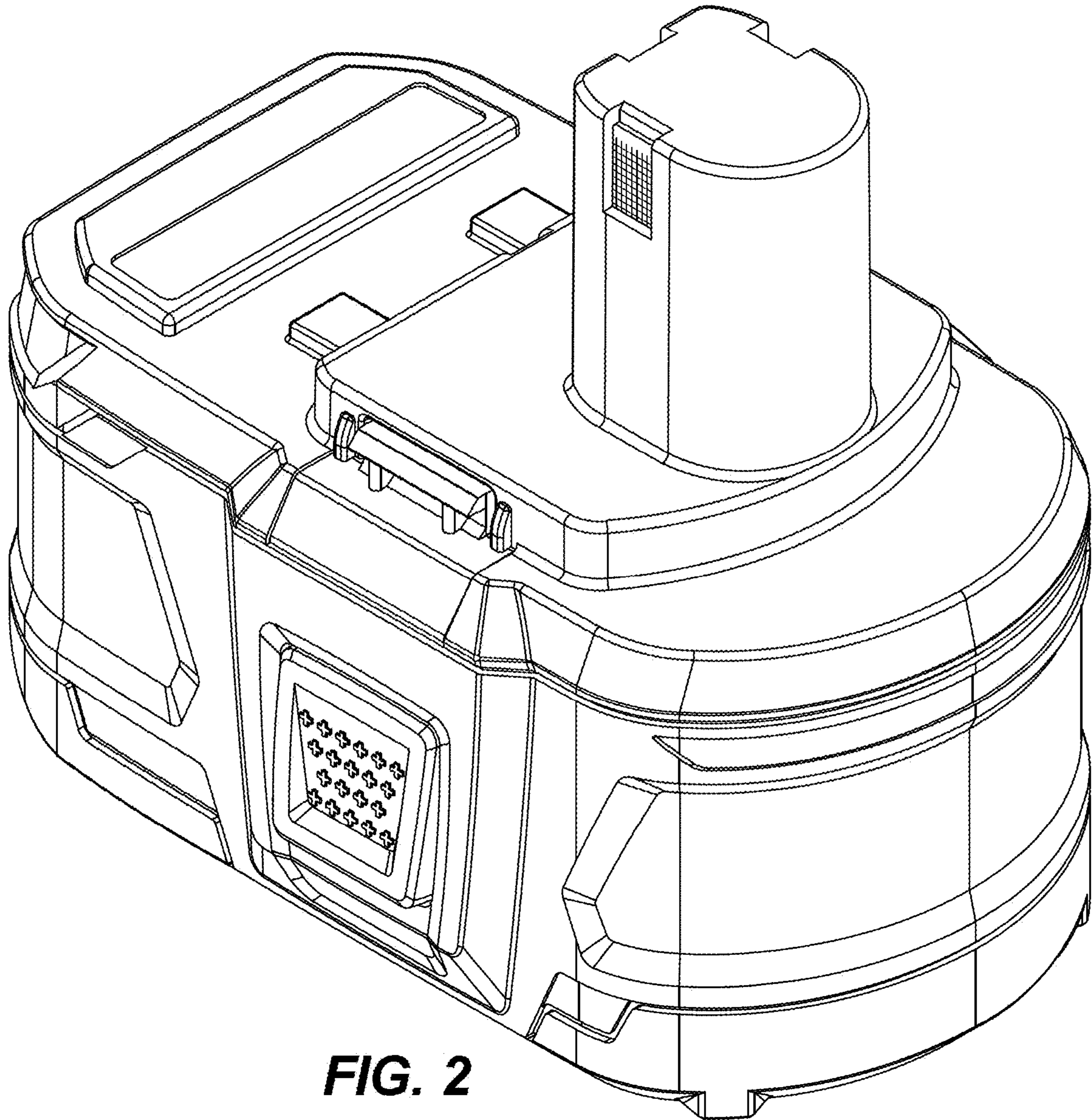


FIG. 2

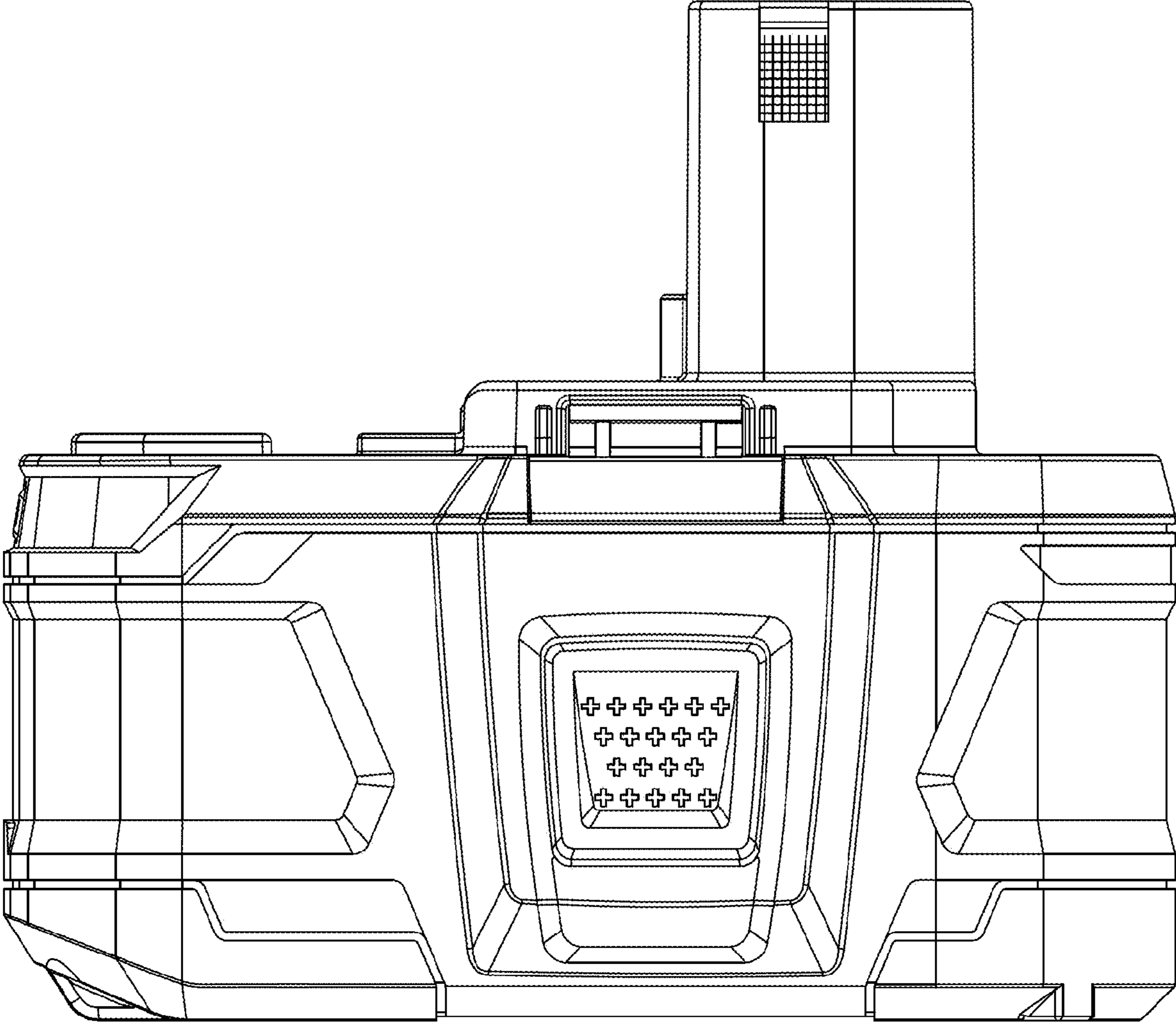


FIG. 3

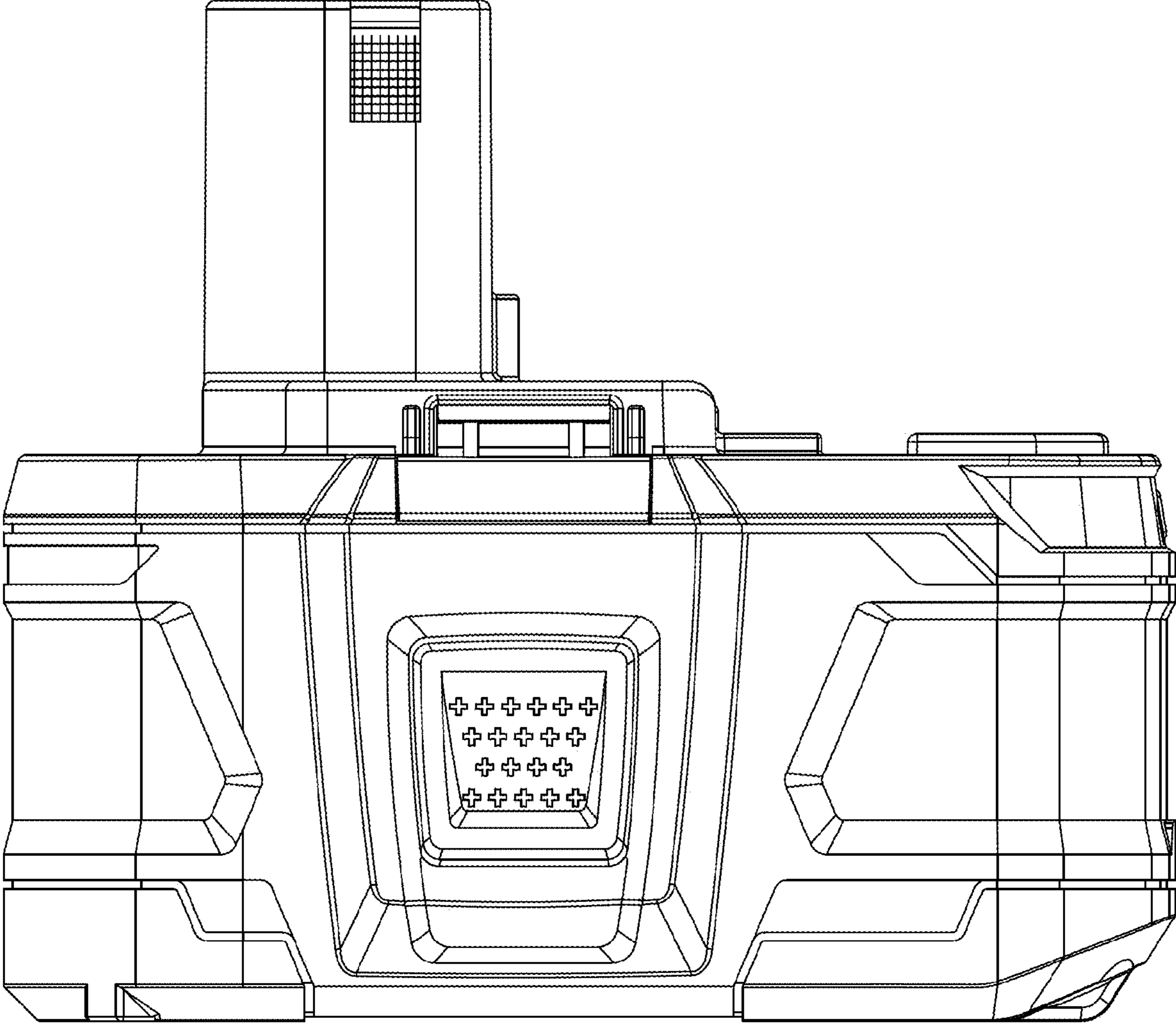


FIG. 4

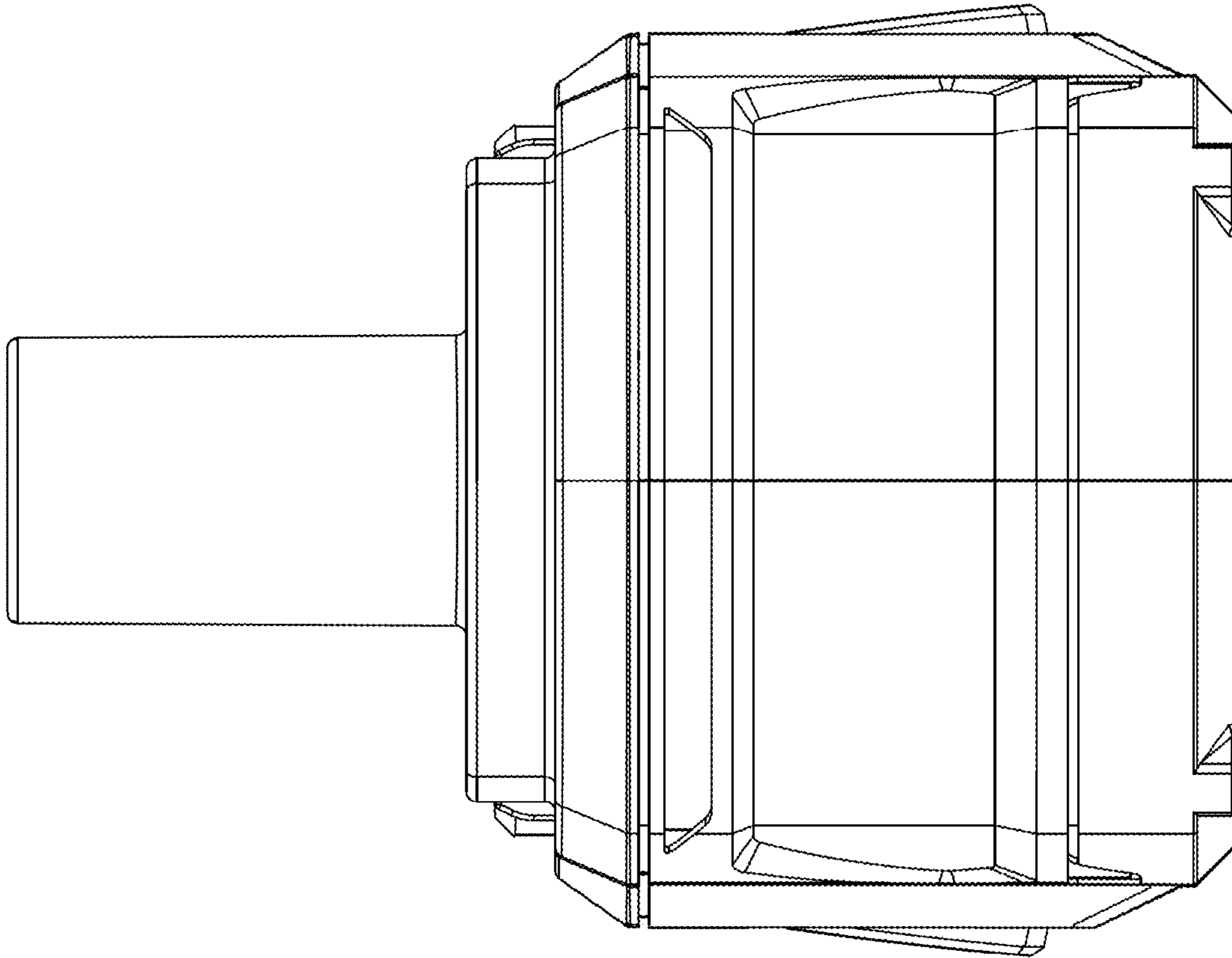


FIG. 6

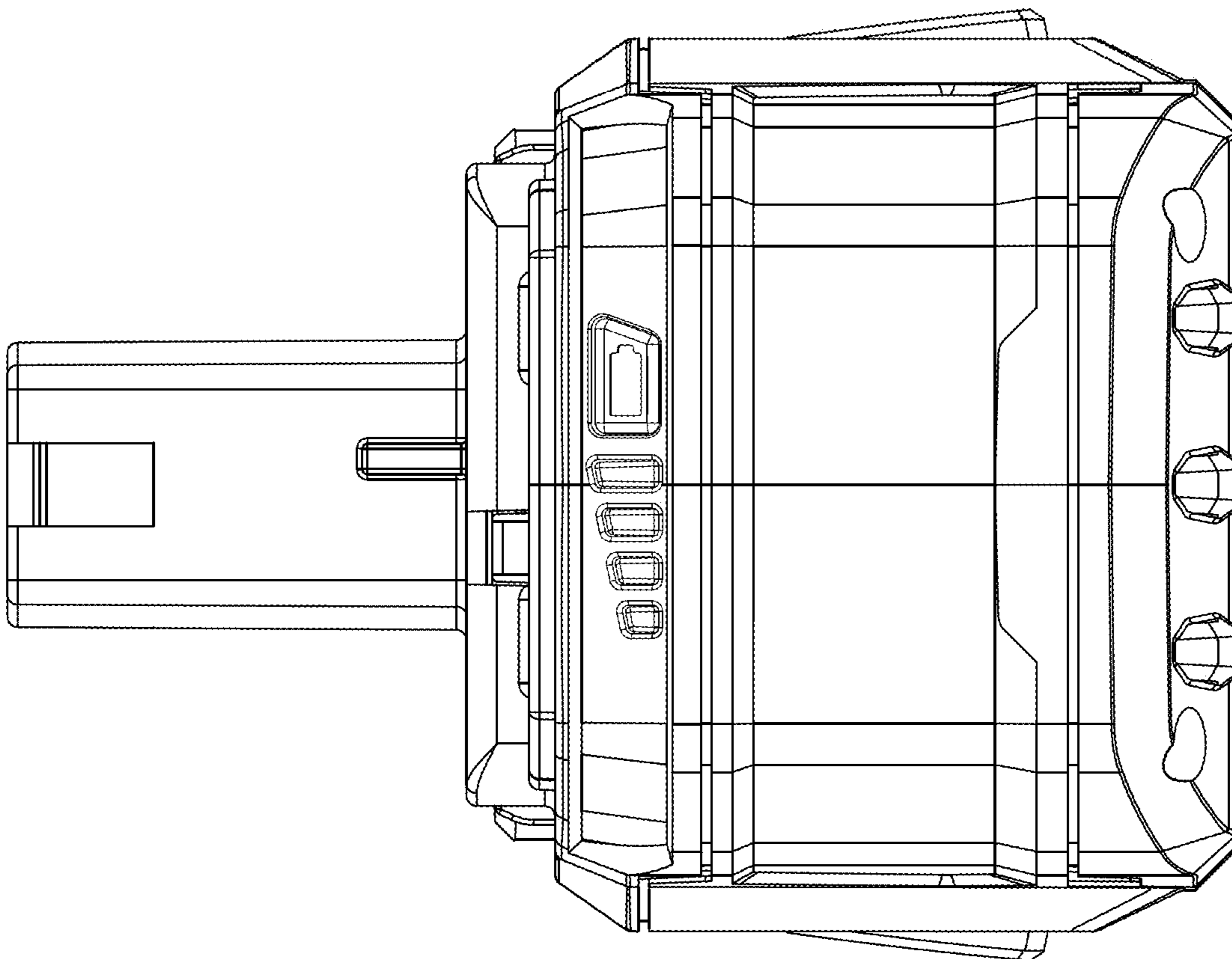


FIG. 5

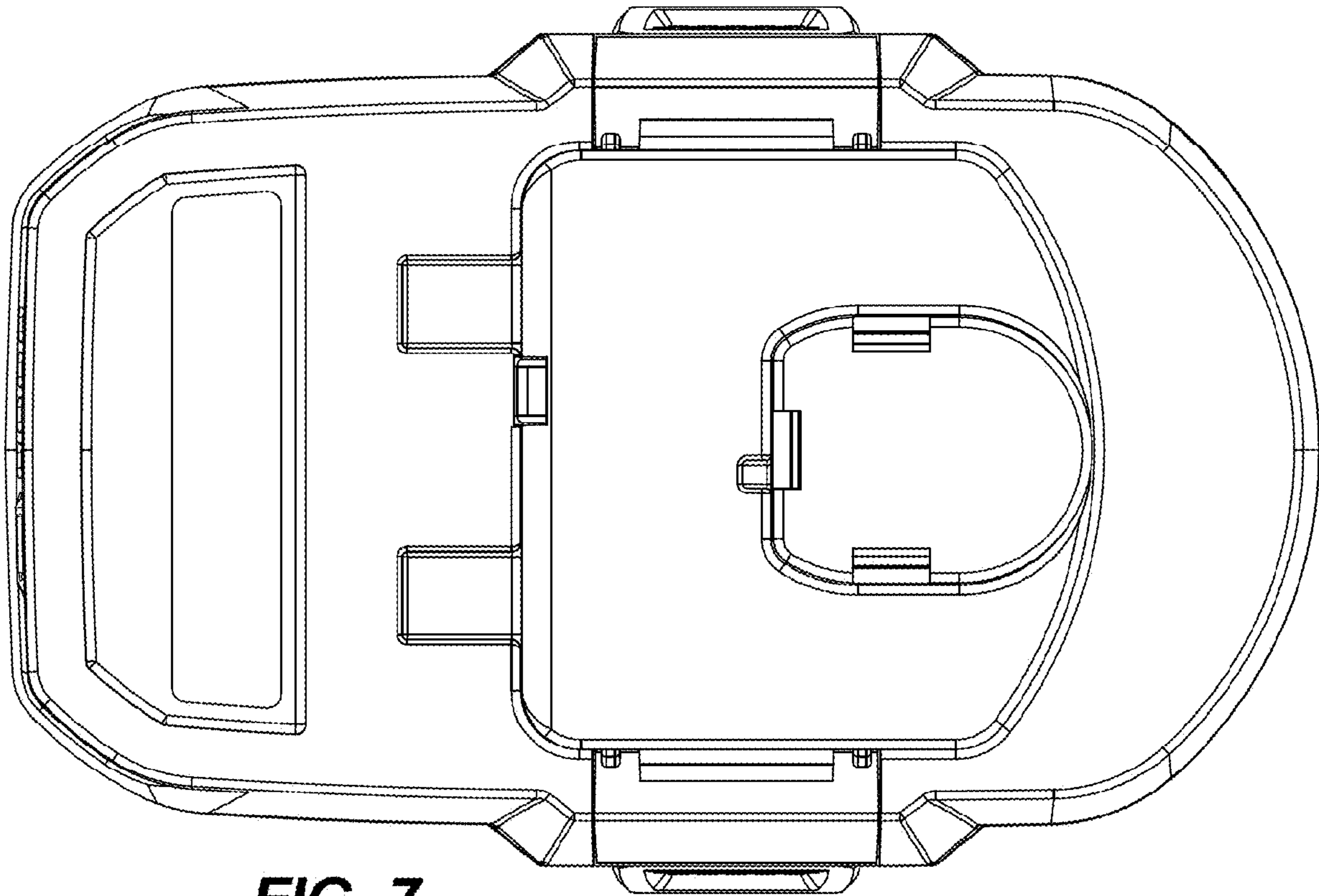


FIG. 7

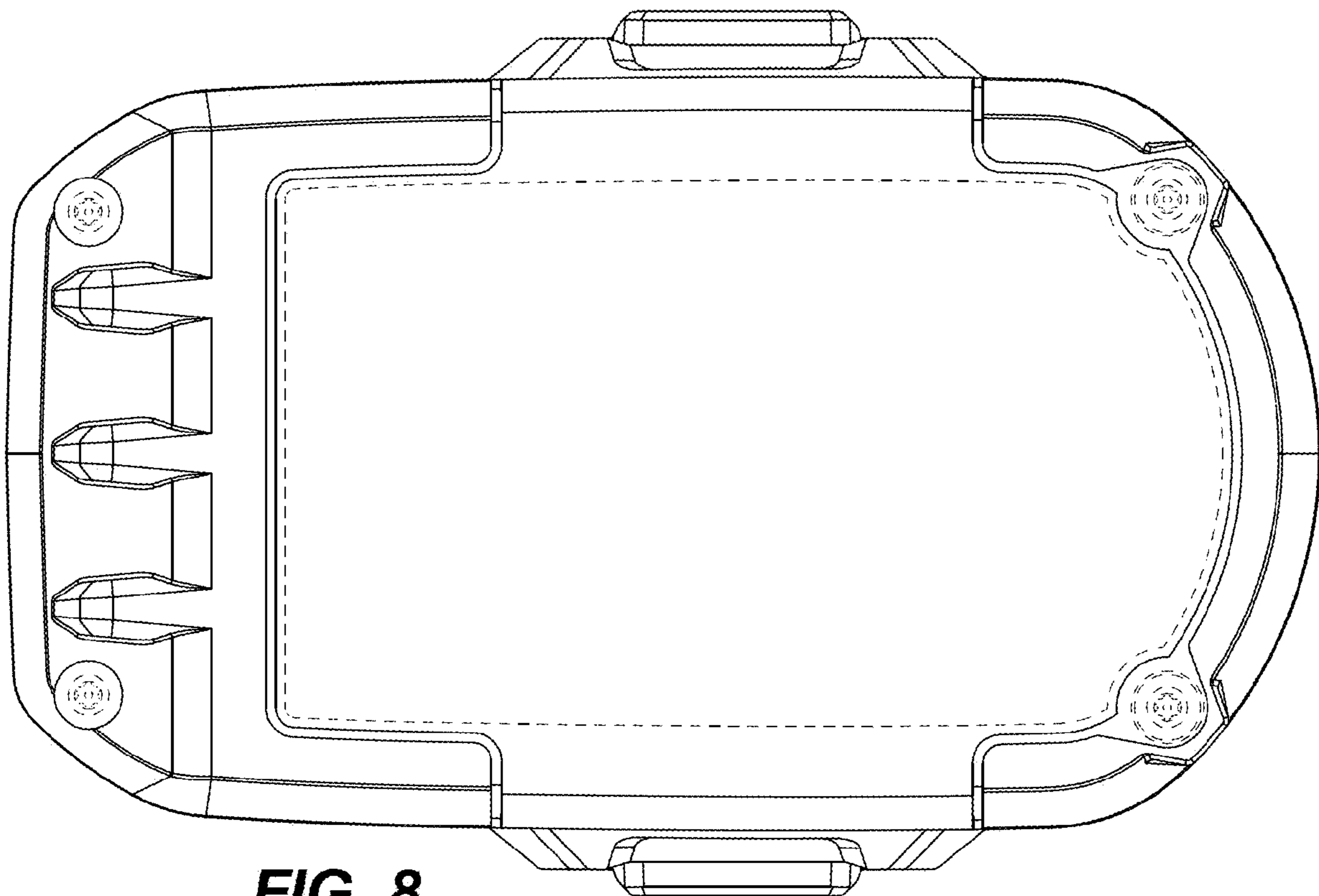


FIG. 8