



US00D867279S

(12) **United States Design Patent** (10) **Patent No.:** **US D867,279 S**
Altenburger (45) **Date of Patent:** **** Nov. 19, 2019**

(54) **BATTERY PACK**

- (71) Applicant: **TTI (MACAO COMMERCIAL OFFSHORE) LIMITED**, Macau (MO)
- (72) Inventor: **Ryan Altenburger**, Greenville, SC (US)
- (73) Assignee: **TTI (MACAO COMMERCIAL OFFSHORE) LIMITED**, Macau (MO)
- (**) Term: **15 Years**
- (21) Appl. No.: **29/578,158**
- (22) Filed: **Sep. 19, 2016**
- (30) **Foreign Application Priority Data**

Mar. 17, 2016 (CN) 2016 3 0076779

- (51) **LOC (12) Cl.** **13-02**
- (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;

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

- D306,573 S * 3/1990 Schultz D13/103
- D306,574 S * 3/1990 Schultz D13/103

(Continued)

FOREIGN PATENT DOCUMENTS

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

(Continued)

OTHER PUBLICATIONS

Ryobi 18 Volt Compact Lithium Ion 1.5 Ah Battery, Ryobi, first available on amazon.com on Dec. 31, 2012, retrieved on Nov. 19, 2017, retrieved from the Internet URL: https://www.amazon.com/Ryobi-P107-Compact-Lithium-Battery/dp/B00AV250JS/ref=sr_1_4?s=power-hand-tools&ie=UTF8&qid=1511132965&sr=1-4&keywords=ryobi+18v+batt.*

Primary Examiner — Jennifer Rivard

Assistant Examiner — Alison M Ofstun

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

(57) **CLAIM**

The ornamental design for a battery pack, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a battery pack showing my new design;

FIG. 2 is another perspective view of the battery pack of FIG. 1;

FIG. 3 is a right side view of the battery pack of FIG. 1;

FIG. 4 is a left side view of the battery pack of FIG. 1;

FIG. 5 is a rear view of the battery pack of FIG. 1;

FIG. 6 is a front view of the battery pack of FIG. 1;

FIG. 7 is a top view of the battery pack of FIG. 1;

FIG. 8 is a bottom view of the battery pack of FIG. 1;

FIG. 9 is a perspective view of another embodiment of a battery pack;

FIG. 10 is a right side view of the battery pack of FIG. 9;

FIG. 11 is a left side view of the battery pack of FIG. 9;

FIG. 12 is a rear view of the battery pack of FIG. 9;

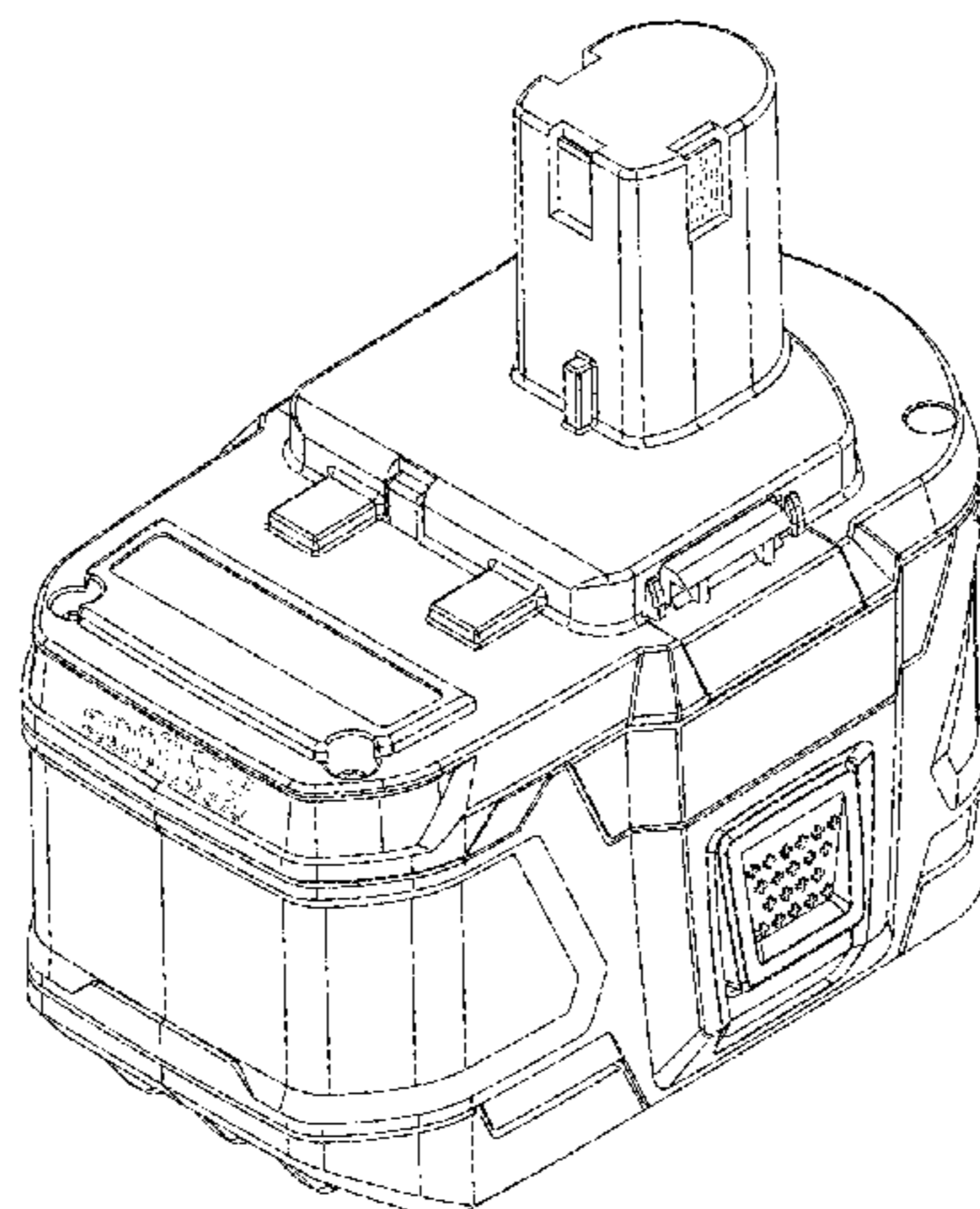
FIG. 13 is a front view of the battery pack of FIG. 9;

FIG. 14 is a top view of the battery pack of FIG. 9; and,

FIG. 15 is a bottom view of the battery pack of FIG. 9.

In the drawings, the evenly-spaced broken lines represent portions of the article which form no part of the claimed design. The dash-dot broken lines represent a boundary to the claimed design and form no part thereof.

1 Claim, 9 Drawing Sheets



(58) **Field of Classification Search**
 CPC H01M 2/204; H01M 10/4257; H01M
 10/0436; H01M 10/48
 See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D320,918 S 10/1991 Mochida
 D342,479 S * 12/1993 Kimata D13/103
 D350,111 S * 8/1994 Okumura D13/103
 D378,654 S 4/1997 Matsuoka et al.
 5,783,998 A 7/1998 Nakajou et al.
 D397,991 S * 9/1998 Kawakami D13/103
 D412,485 S * 8/1999 Kato D13/103
 D432,077 S * 10/2000 Zurwelle D13/103
 D435,013 S 12/2000 Clowers et al.
 D436,917 S 1/2001 Hayakawa et al.
 D442,452 S 5/2001 Stirm et al.
 6,357,533 B1 3/2002 Buchholz et al.
 D456,002 S 4/2002 Kato et al.
 D466,777 S 12/2002 Watson
 D466,779 S 12/2002 Shibata et al.
 D466,781 S 12/2002 Matsuoka et al.
 D466,863 S * 12/2002 Zurwelle D13/119
 D471,865 S 3/2003 Garvis et al.
 D474,445 S * 5/2003 Matsuoka D13/103
 D477,811 S 7/2003 Niwa et al.
 D481,672 S 11/2003 Niwa et al.
 D483,012 S 12/2003 Hsu
 D484,458 S 12/2003 Garvis et al.
 D484,850 S 1/2004 Johnson
 D487,426 S 3/2004 Johnson
 D491,438 S 6/2004 Cheung et al.
 D502,377 S 3/2005 Aglassinger
 D504,111 S 4/2005 Ozawa et al.
 D504,394 S 4/2005 Cheung et al.
 6,913,087 B1 7/2005 Brotto et al.
 D508,643 S 8/2005 Concari et al.
 D510,317 S 10/2005 Sun
 D511,744 S 11/2005 Hsu et al.
 D512,373 S 12/2005 Tsai et al.
 D512,961 S 12/2005 Okuda et al.
 6,971,456 B2 12/2005 Yamada et al.
 D513,730 S 1/2006 Johnson
 D514,060 S 1/2006 Wong et al.
 D515,377 S 2/2006 Chung et al.
 D516,504 S 3/2006 Okuda et al.
 D523,807 S 6/2006 Murayama et al.
 D525,848 S 8/2006 Kokawa
 D527,971 S 9/2006 Kokawa
 D530,270 S 10/2006 Ozawa et al.
 D535,537 S 1/2007 Aglassinger
 D536,944 S 2/2007 Tsai et al.
 D539,221 S 3/2007 Johnson et al.
 D544,436 S 6/2007 Kawahara et al.
 D545,759 S 7/2007 Ino et al.
 D550,152 S 9/2007 Okuda et al.
 7,270,910 B2 9/2007 Yahnker et al.
 D553,562 S 10/2007 Okada et al.
 D555,086 S 11/2007 Zhang
 D555,451 S 11/2007 Okuda et al.
 D556,002 S 11/2007 Ino
 D558,670 S 1/2008 Ritterling et al.
 D562,228 S 2/2008 Okada et al.
 D565,374 S 4/2008 Zhang
 D568,239 S 5/2008 Okada et al.
 D574,688 S 8/2008 Yamamoto
 D575,224 S 8/2008 Taniguchi et al.
 D575,606 S 8/2008 Okouchi et al.
 D579,868 S * 11/2008 Harrison D13/103
 D580,351 S 11/2008 Elsmark et al.
 D580,353 S * 11/2008 Harrison D13/103
 D581,235 S 11/2008 Aglassinger
 D586,639 S 2/2009 Yamamoto et al.
 D587,547 S 3/2009 Aglassinger
 7,508,171 B2 3/2009 Carrier et al.

D590,333 S 4/2009 Price et al.
 D592,028 S 5/2009 Taniguchi et al.
 D593,944 S * 6/2009 Smith D13/119
 D595,101 S 6/2009 Bast
 D597,931 S 8/2009 Aglassinger
 D597,932 S 8/2009 Aglassinger
 D597,933 S 8/2009 Aglassinger
 D597,934 S 8/2009 Aglassinger
 D597,935 S 8/2009 Aglassinger
 D598,373 S 8/2009 Aglassinger
 D604,583 S 11/2009 Yamamoto et al.
 D604,694 S 11/2009 Aglassinger
 D604,695 S 11/2009 Aglassinger
 D606,935 S 12/2009 Murayama et al.
 D607,814 S 1/2010 Tsuzuki et al.
 D610,082 S 2/2010 Sweeney
 D610,478 S 2/2010 Bast
 7,719,234 B2 5/2010 Carrier et al.
 7,723,952 B2 5/2010 Phillips et al.
 D622,660 S 8/2010 Taniguchi et al.
 D622,661 S 8/2010 Yamada et al.
 7,801,651 B2 9/2010 Iwers
 D628,454 S 12/2010 Misaki
 7,868,591 B2 1/2011 Phillips et al.
 D633,036 S 2/2011 Murray
 D639,730 S 6/2011 Kawase
 D640,196 S 6/2011 Shuang et al.
 D640,197 S 6/2011 Park et al.
 D640,975 S 7/2011 Okuda et al.
 D642,037 S 7/2011 Miller et al.
 D646,136 S 10/2011 Aglassinger
 D646,947 S 10/2011 Lopano
 D651,560 S 1/2012 Park et al.
 8,129,955 B2 3/2012 White et al.
 D657,307 S 4/2012 Zhao et al.
 D658,578 S 5/2012 Davis
 D663,183 S 7/2012 Sell
 D670,989 S 11/2012 Kawase et al.
 8,319,475 B2 11/2012 Choksi et al.
 D675,500 S 2/2013 Taniguchi et al.
 D676,731 S 2/2013 Aglassinger
 D678,025 S 3/2013 Naksen et al.
 D678,744 S 3/2013 Aoki et al.
 D679,161 S 4/2013 Kawase et al.
 D679,651 S 4/2013 Stratford
 D682,192 S 5/2013 Corbin
 D682,193 S 5/2013 Corbin
 D682,194 S 5/2013 Jiang et al.
 8,436,584 B2 5/2013 Johnson et al.
 D684,028 S 6/2013 Costoli
 D684,528 S 6/2013 Murray
 D685,246 S 7/2013 Tatic
 D685,730 S 7/2013 Hamm et al.
 D691,011 S 10/2013 Walz et al.
 D692,380 S 10/2013 Tirone
 D699,670 S 2/2014 Cooper
 D700,821 S 3/2014 Tschopp
 D706,603 S 6/2014 Kokawa et al.
 D708,496 S 7/2014 Zhou
 D710,794 S 8/2014 Busschaert et al.
 D716,626 S 11/2014 Sell et al.
 D718,705 S 12/2014 Naksen
 D722,016 S 2/2015 Beukema
 9,014,866 B2 4/2015 Moriai et al.
 9,112,248 B2 8/2015 Johnson et al.
 2003/0096158 A1 5/2003 Takano et al.
 2005/0073282 A1 4/2005 Carrier et al.
 2008/0150474 A1 6/2008 Ball et al.
 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.

(56)

References Cited

U.S. PATENT DOCUMENTS

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 B25F 5/02

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 WO 2015061370 4/2015

* cited by examiner

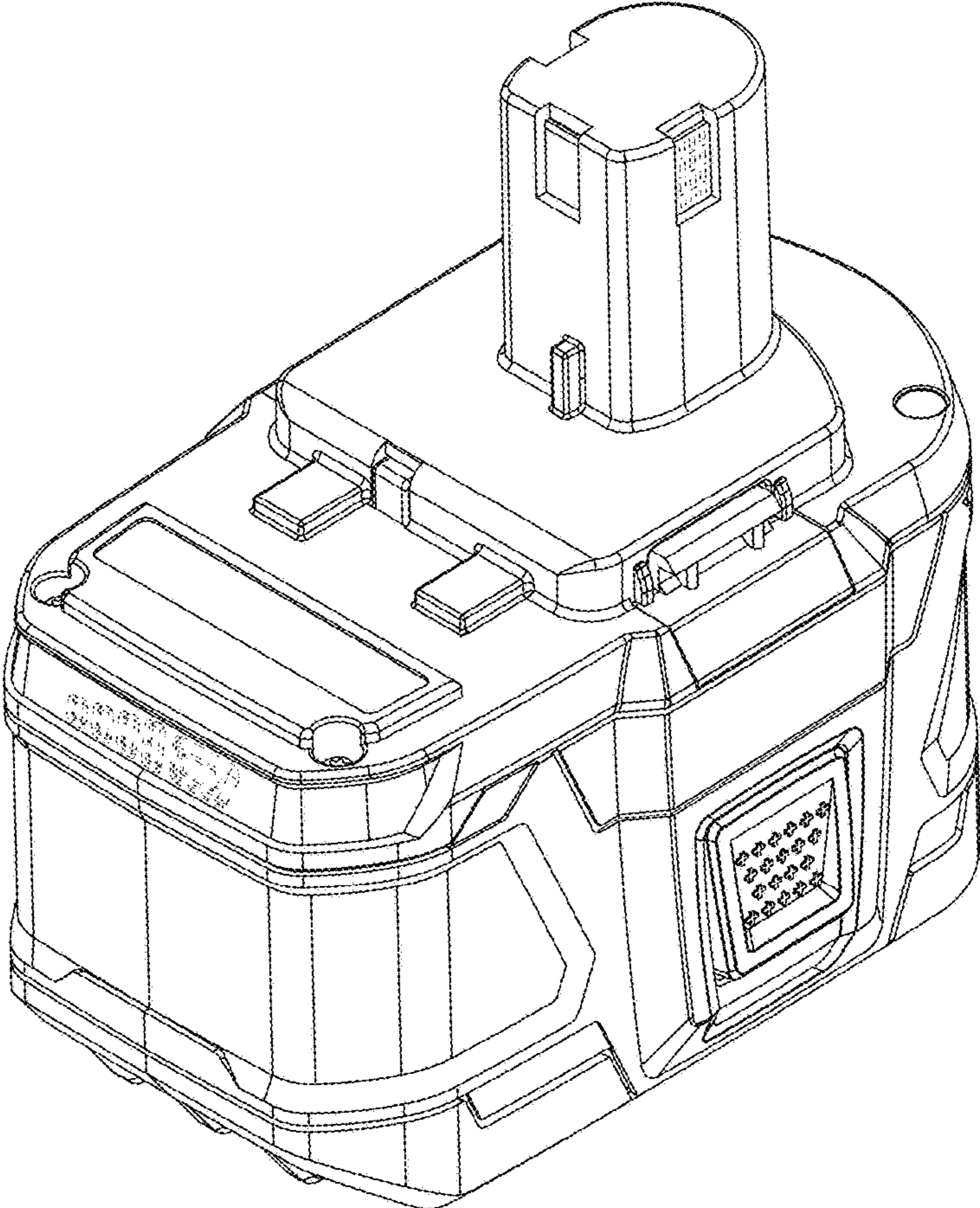


FIG. 1

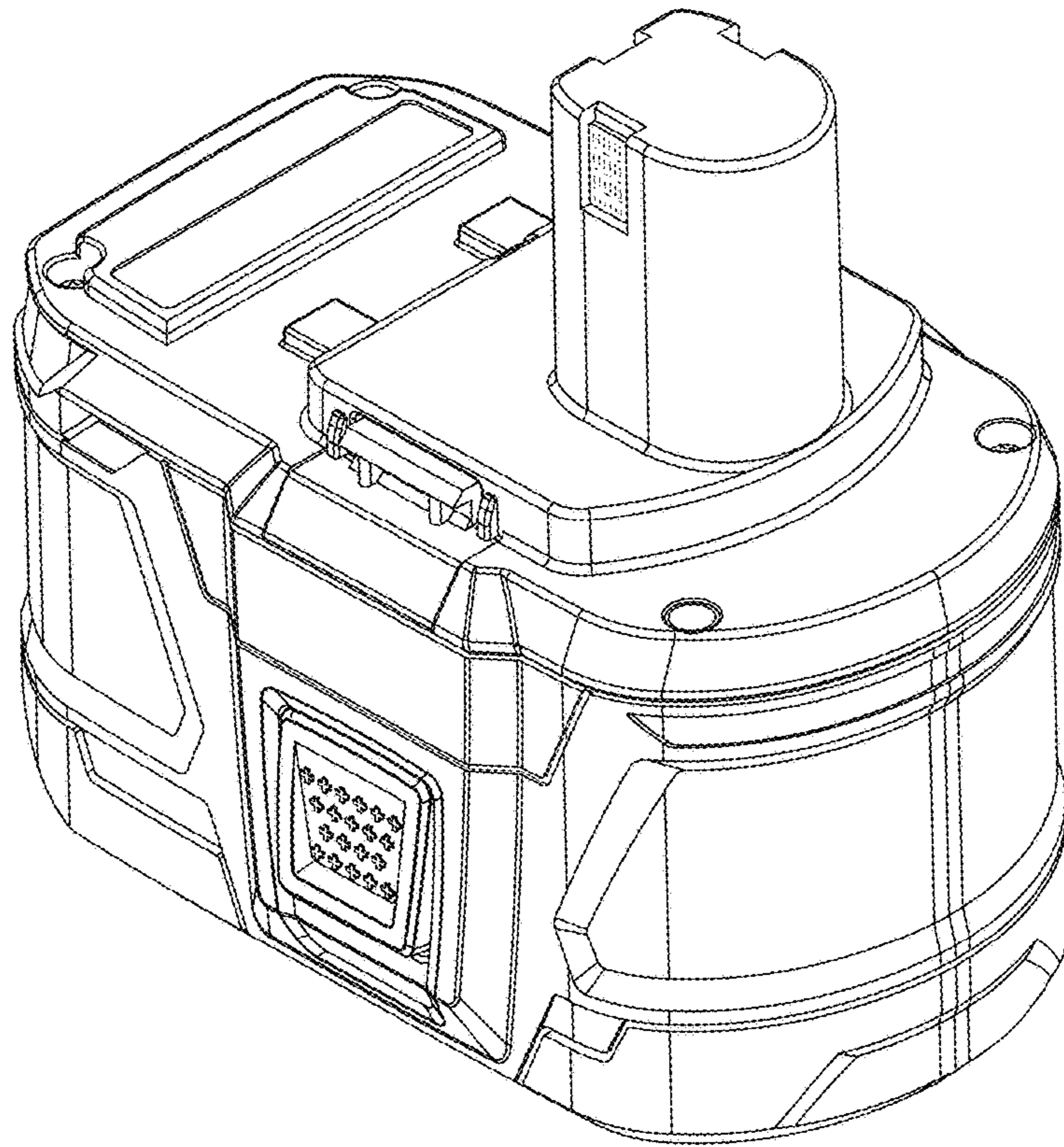


FIG. 2

FIG. 3

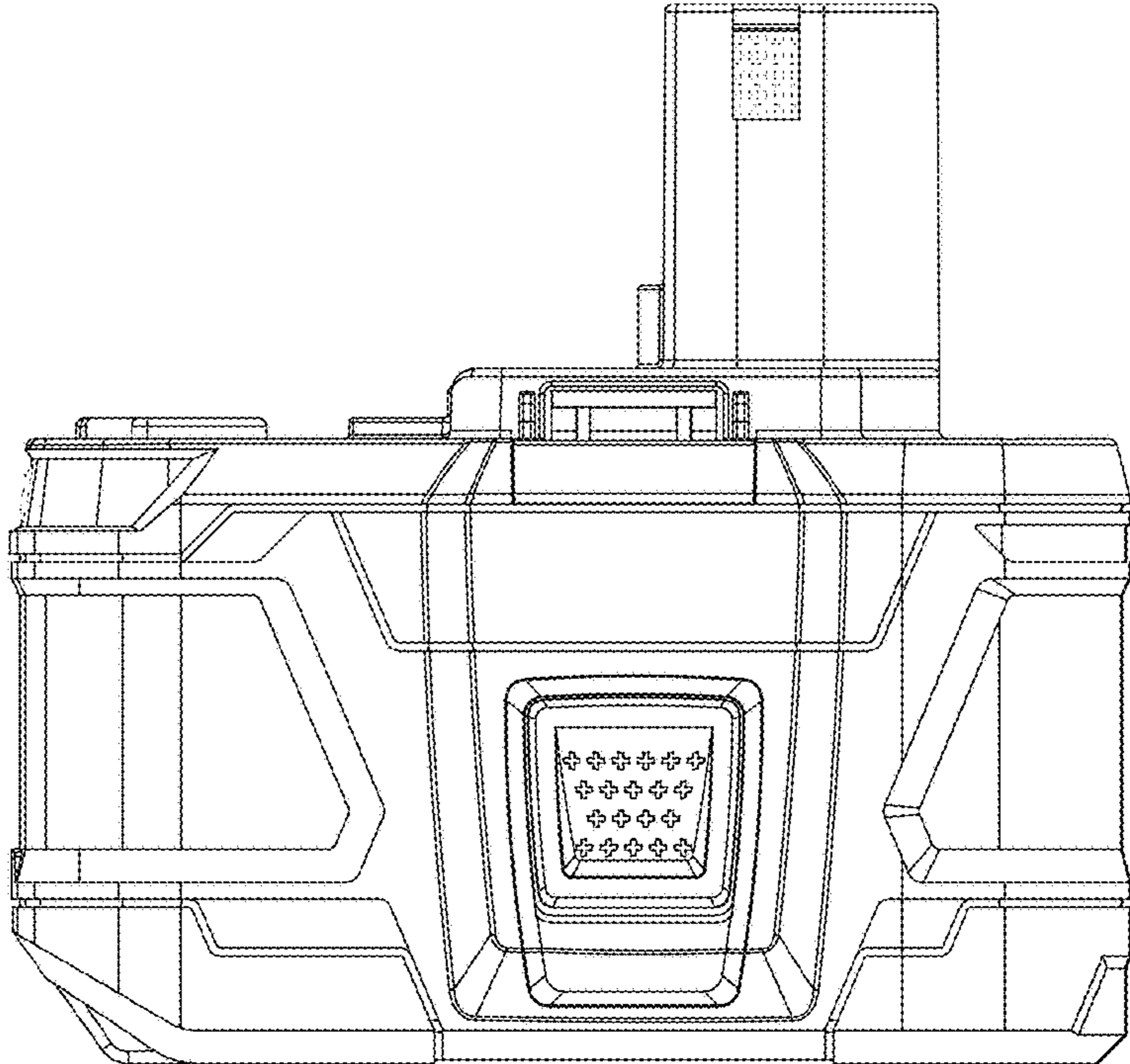
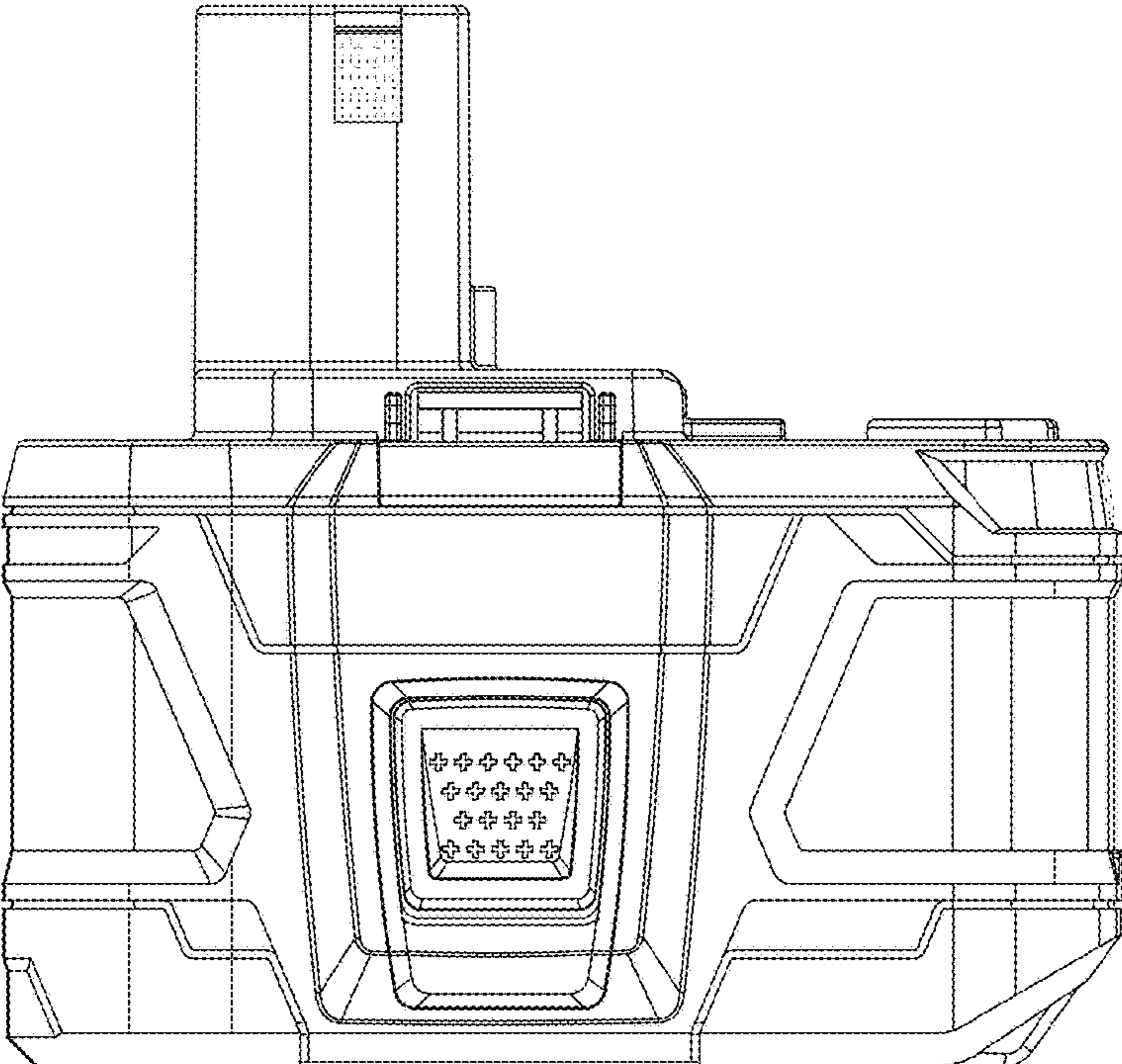


FIG. 4



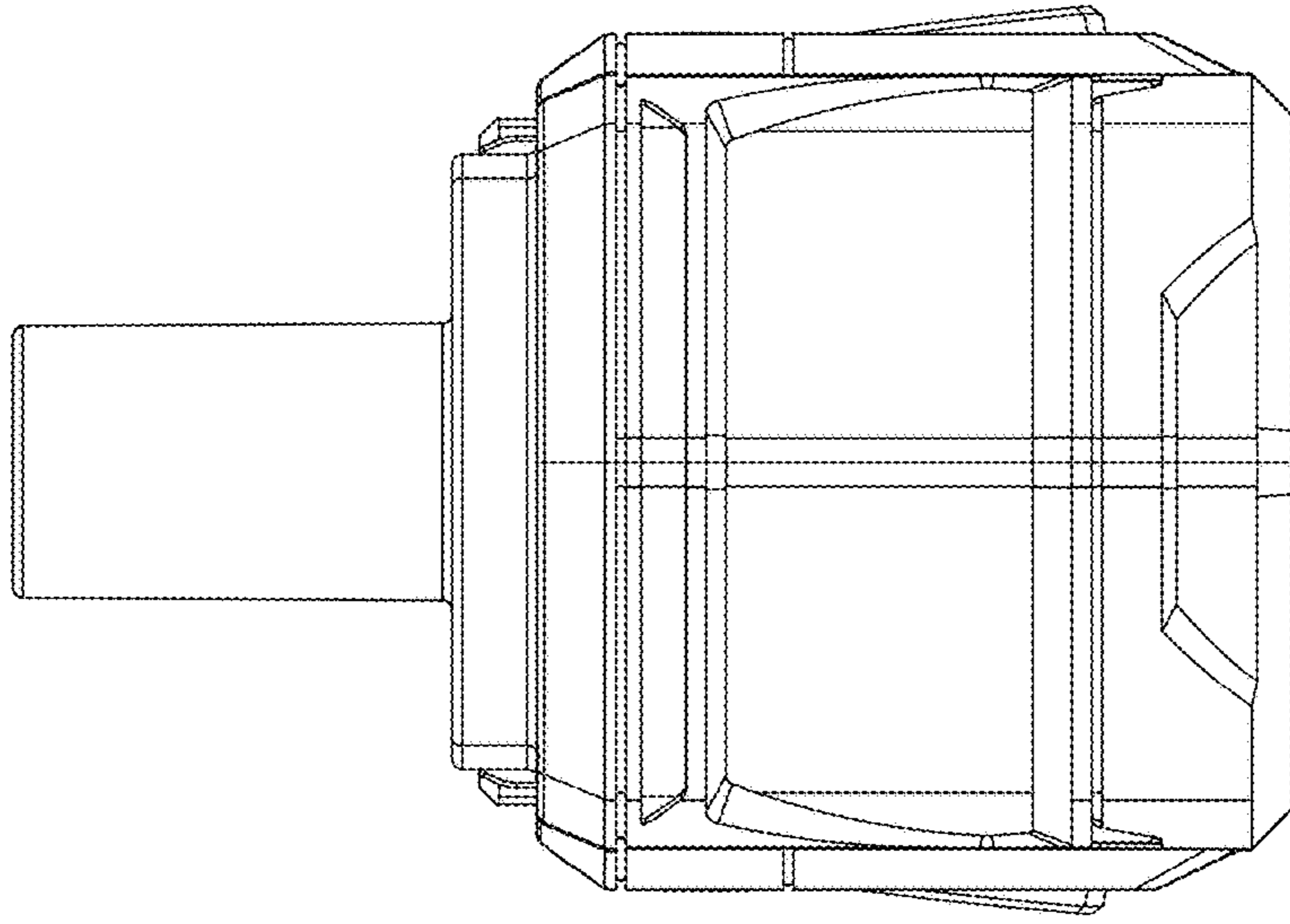


FIG. 6

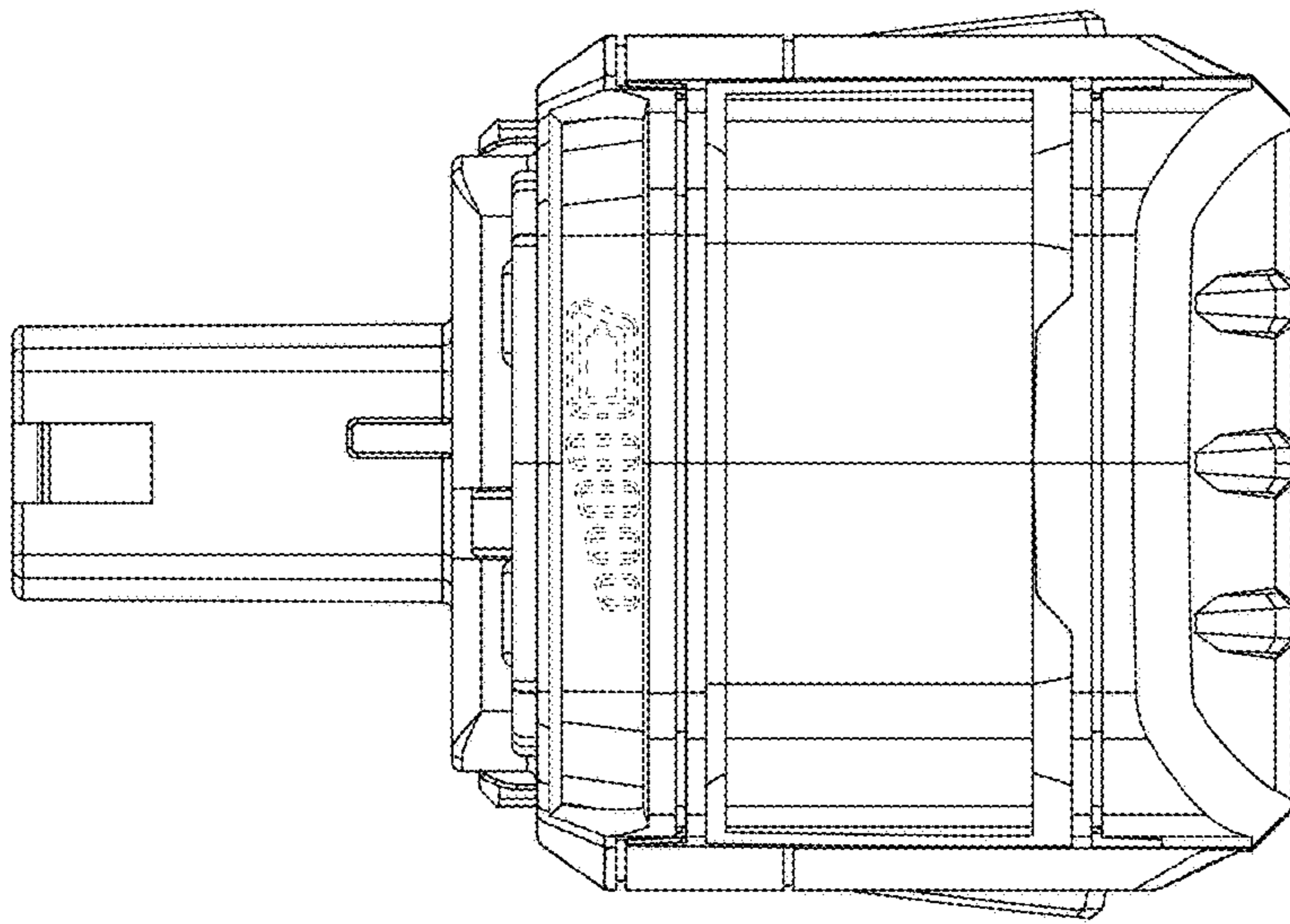


FIG. 5

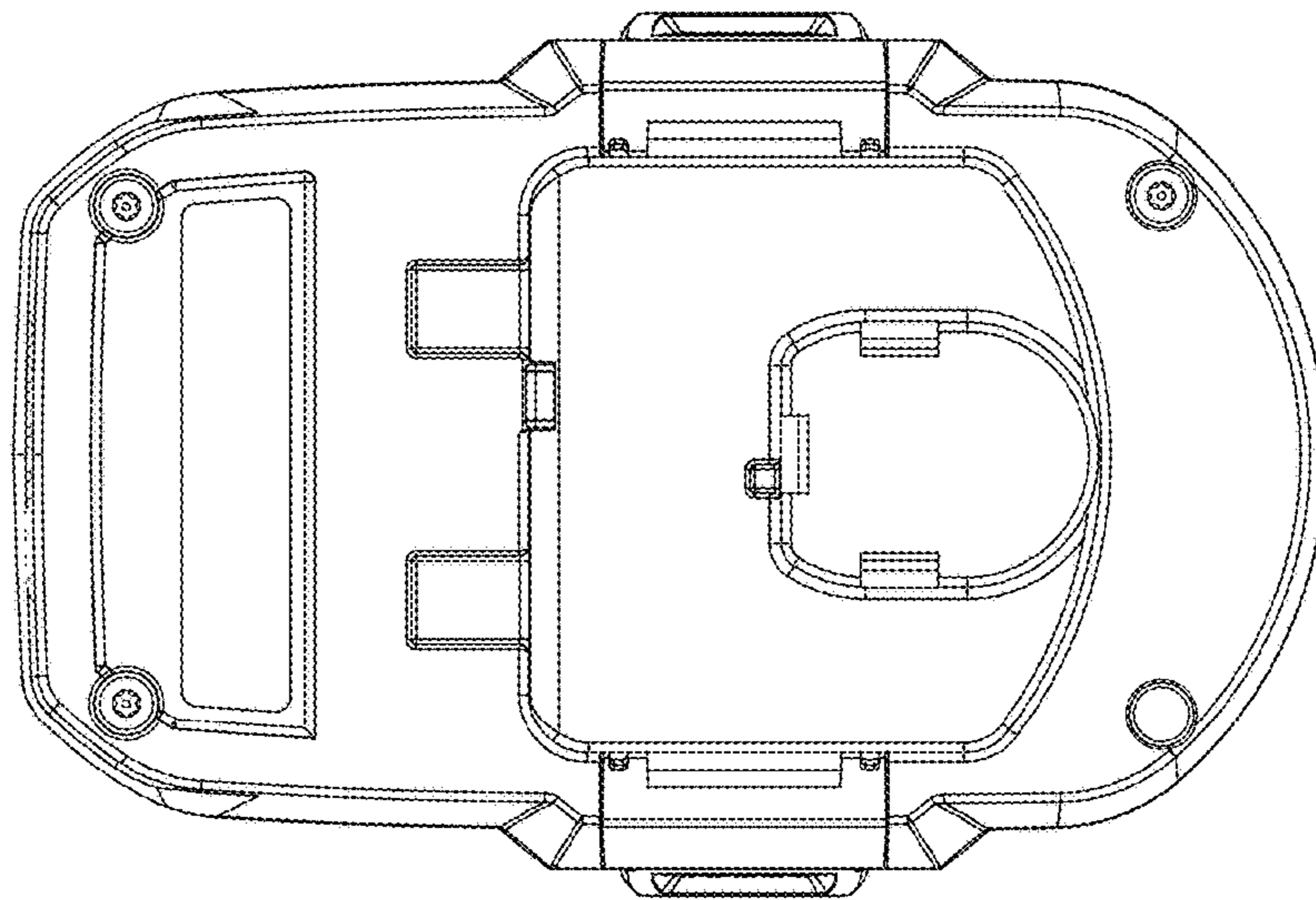


FIG. 7

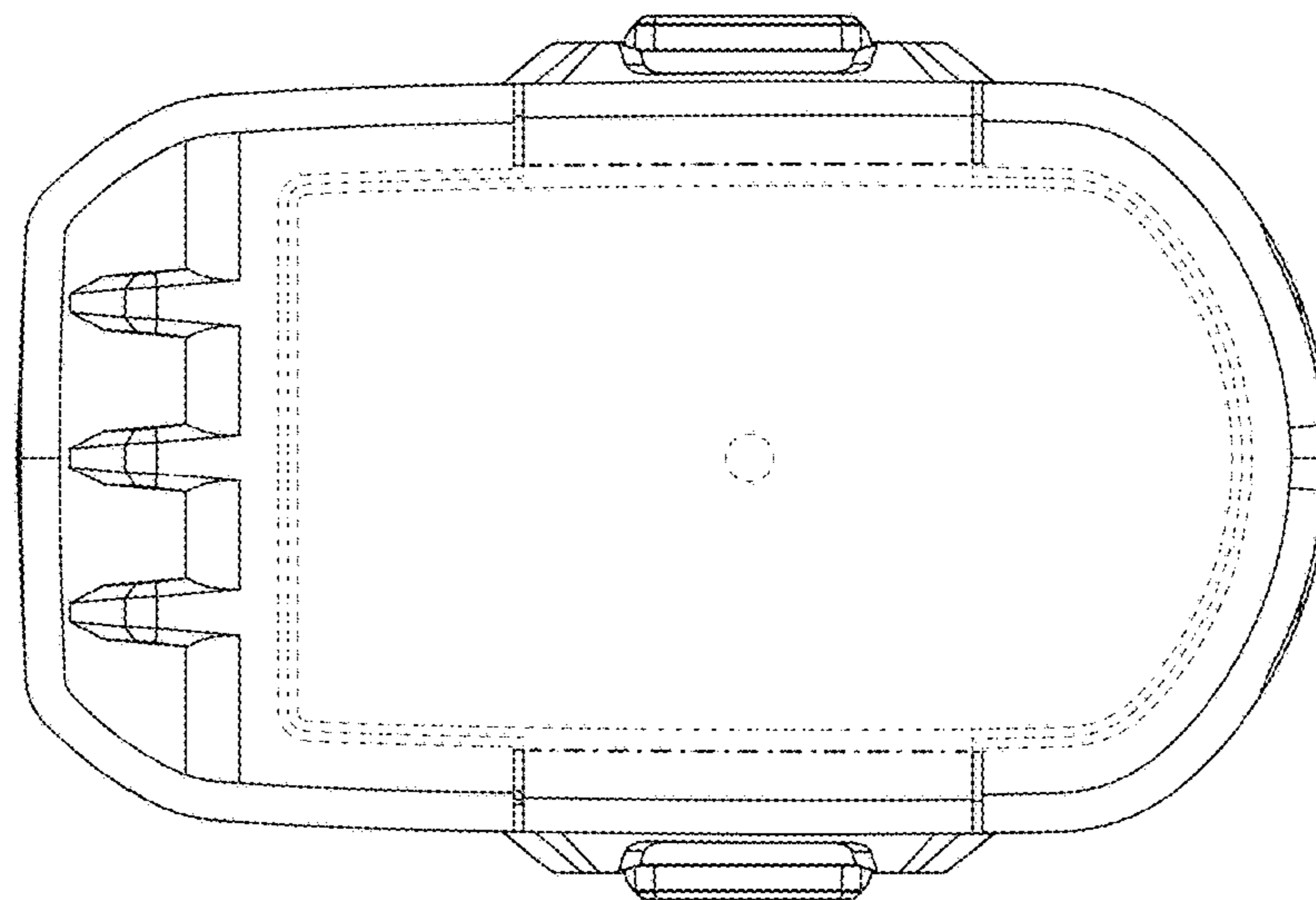


FIG. 8

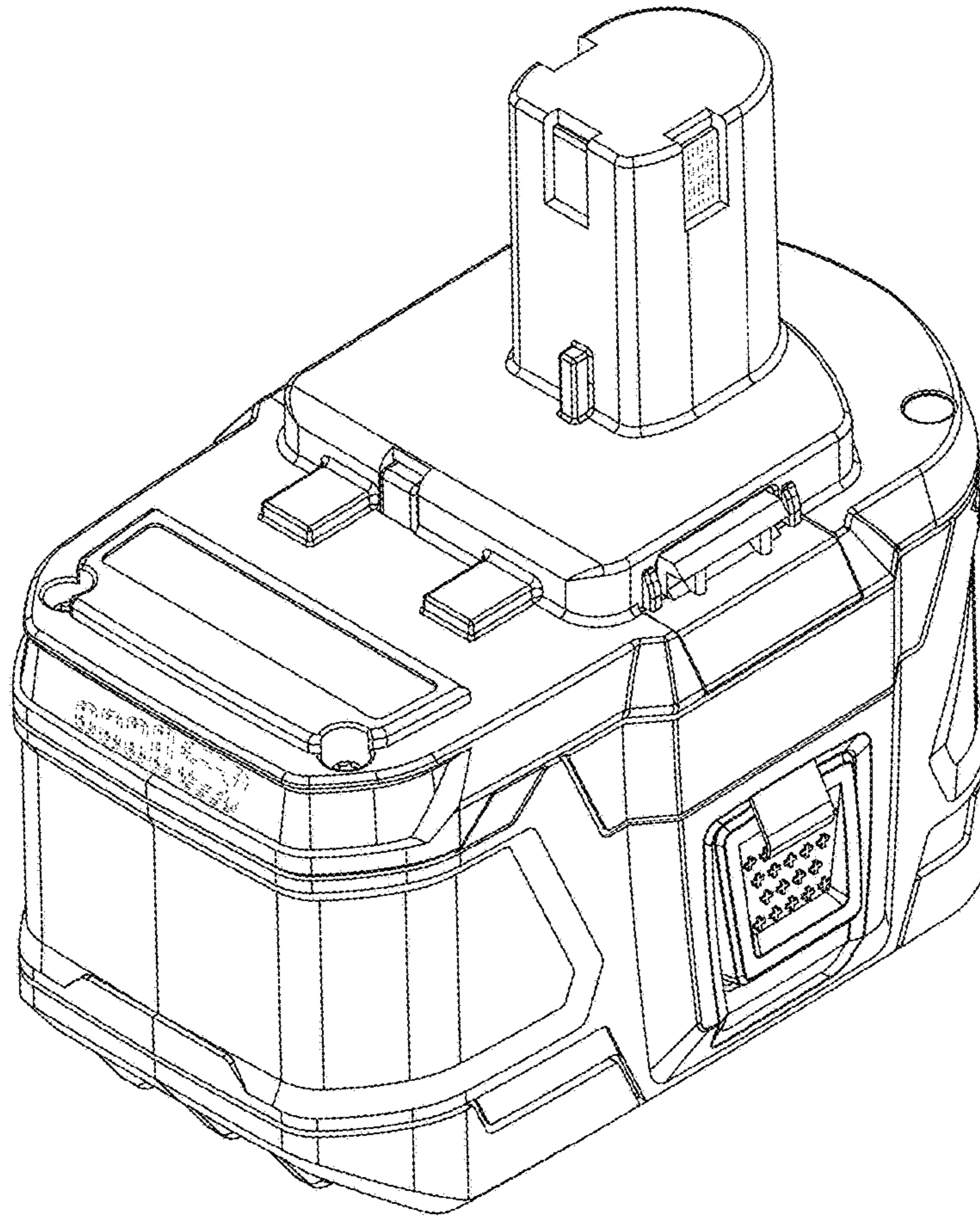


FIG. 9

FIG. 10

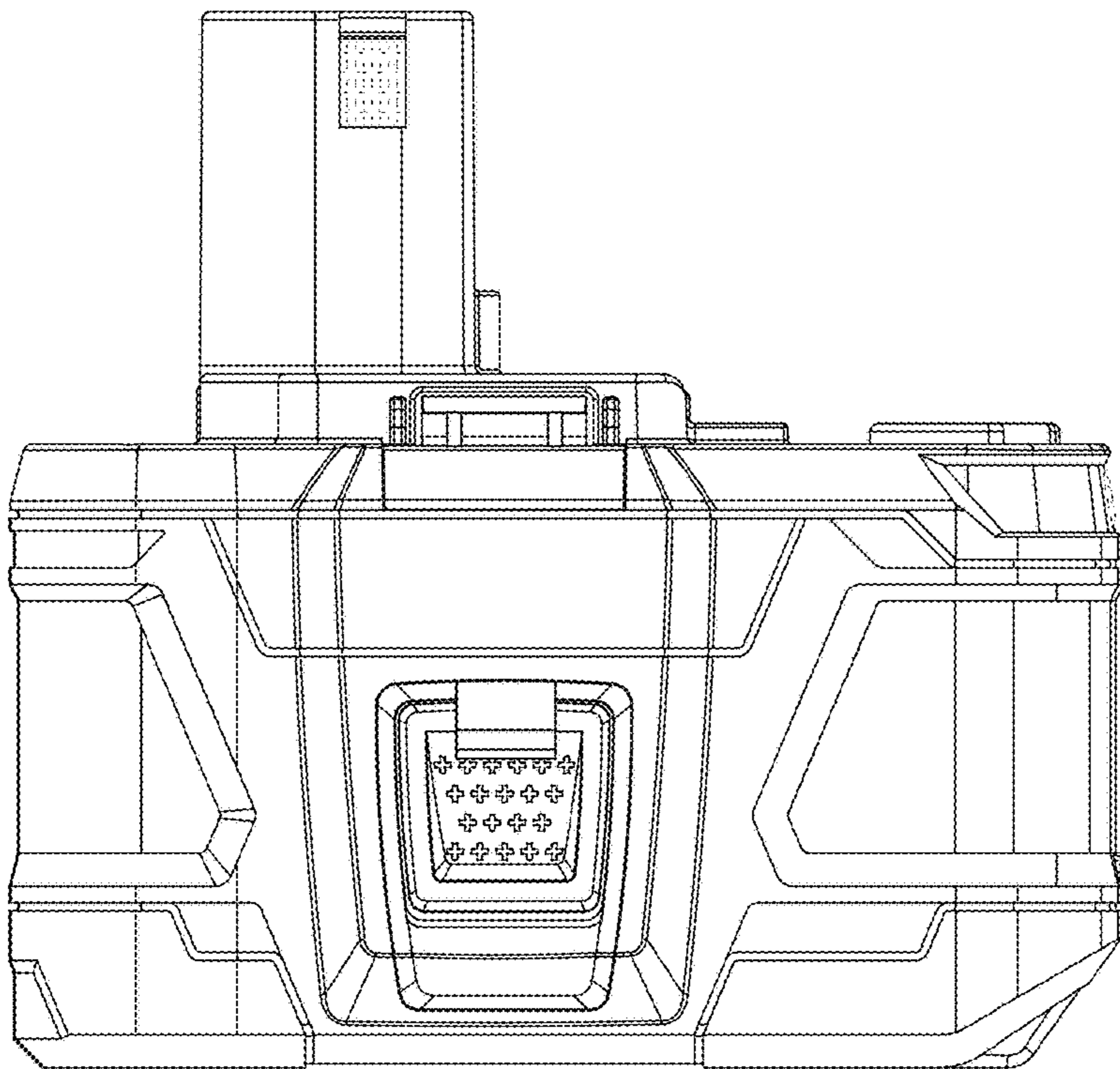
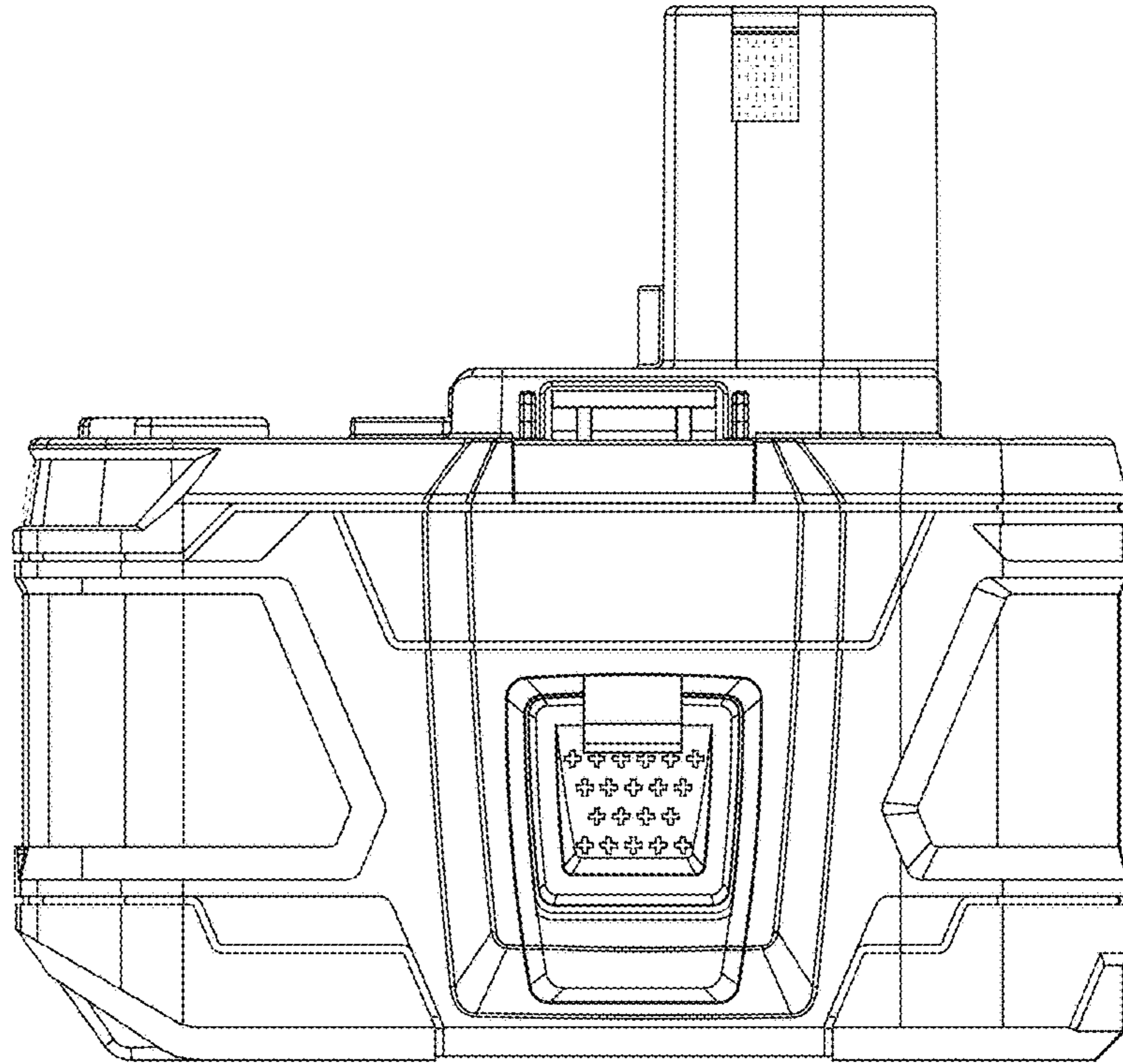


FIG. 11

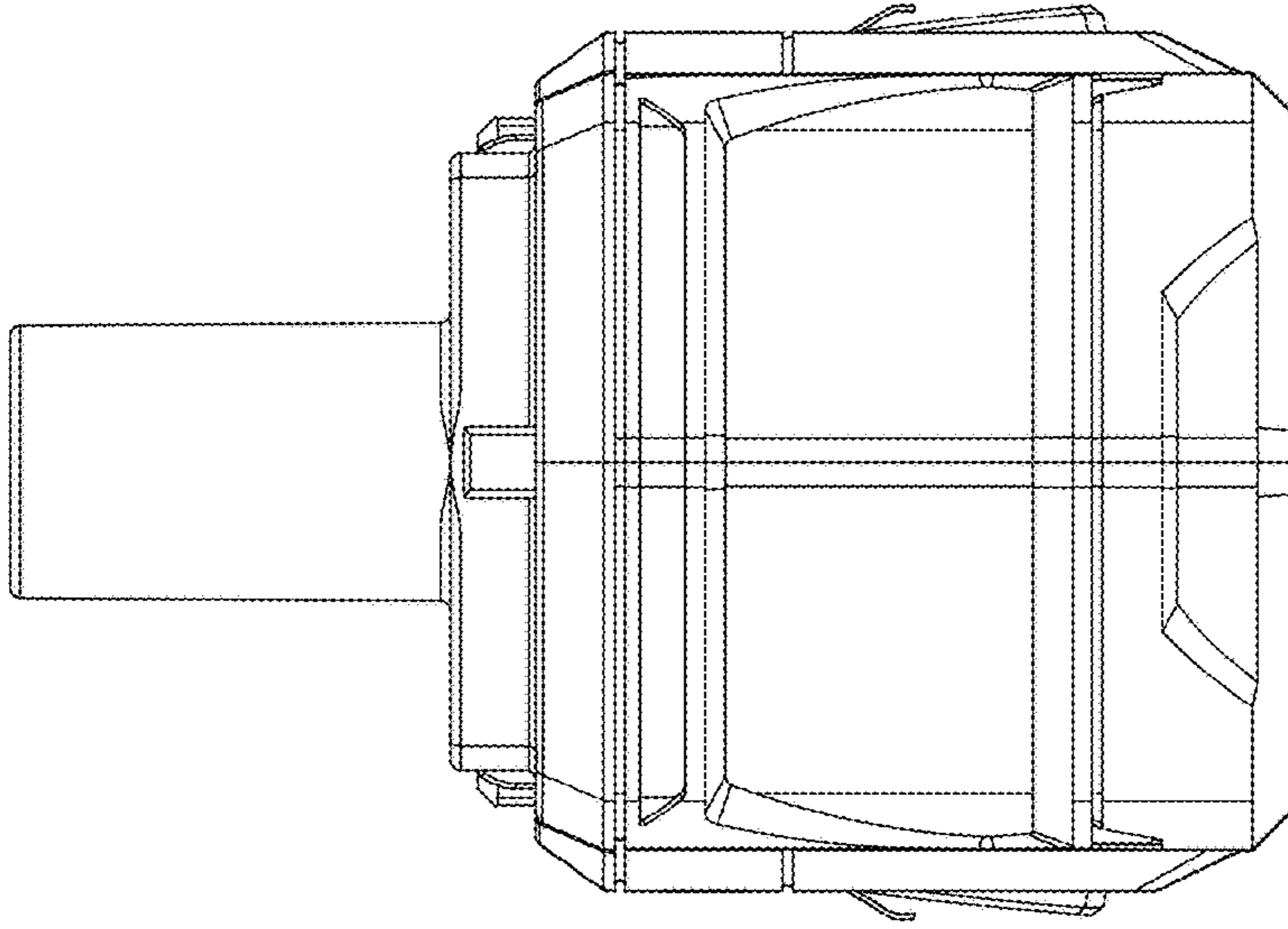


FIG. 13

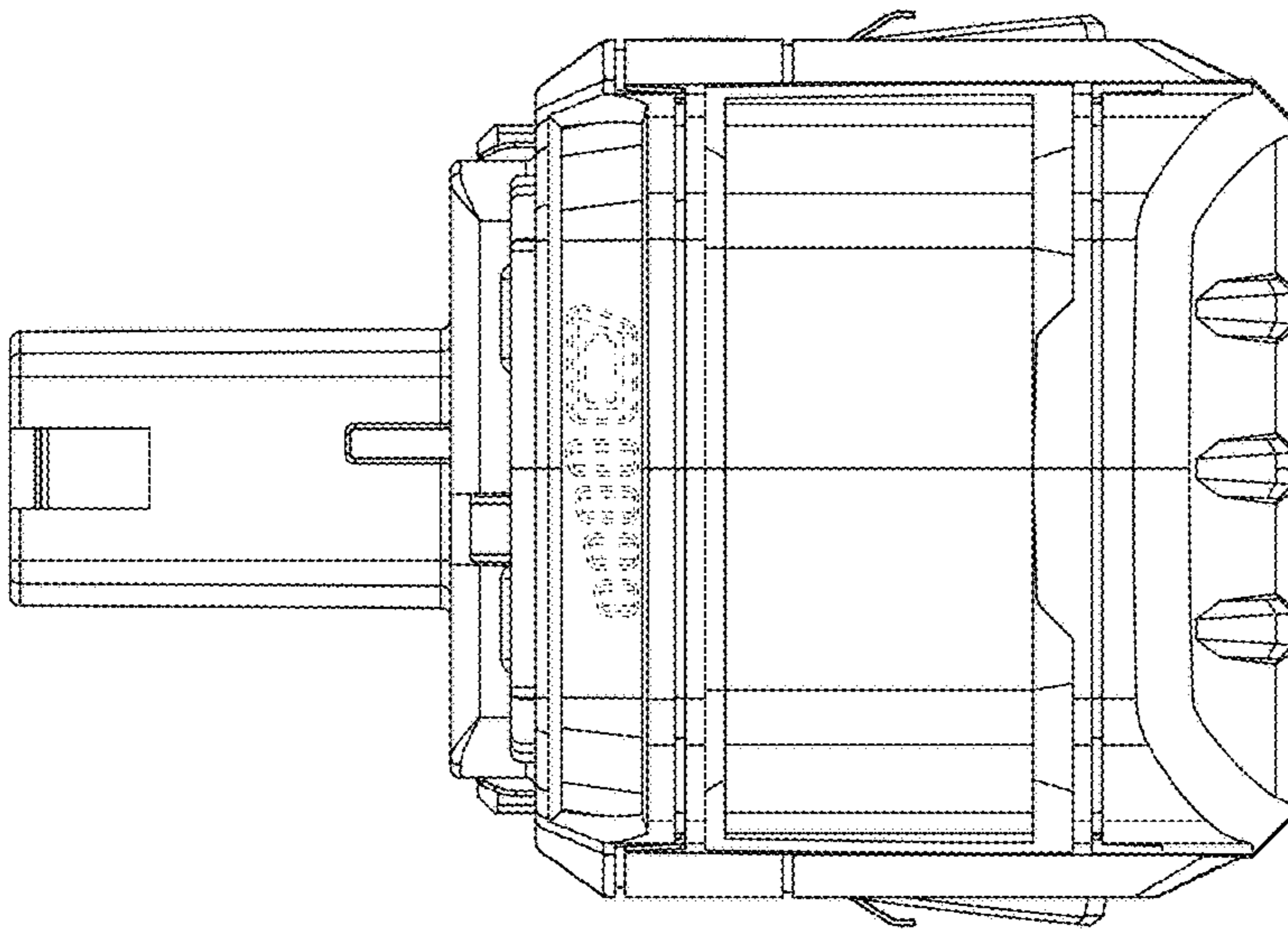


FIG. 12

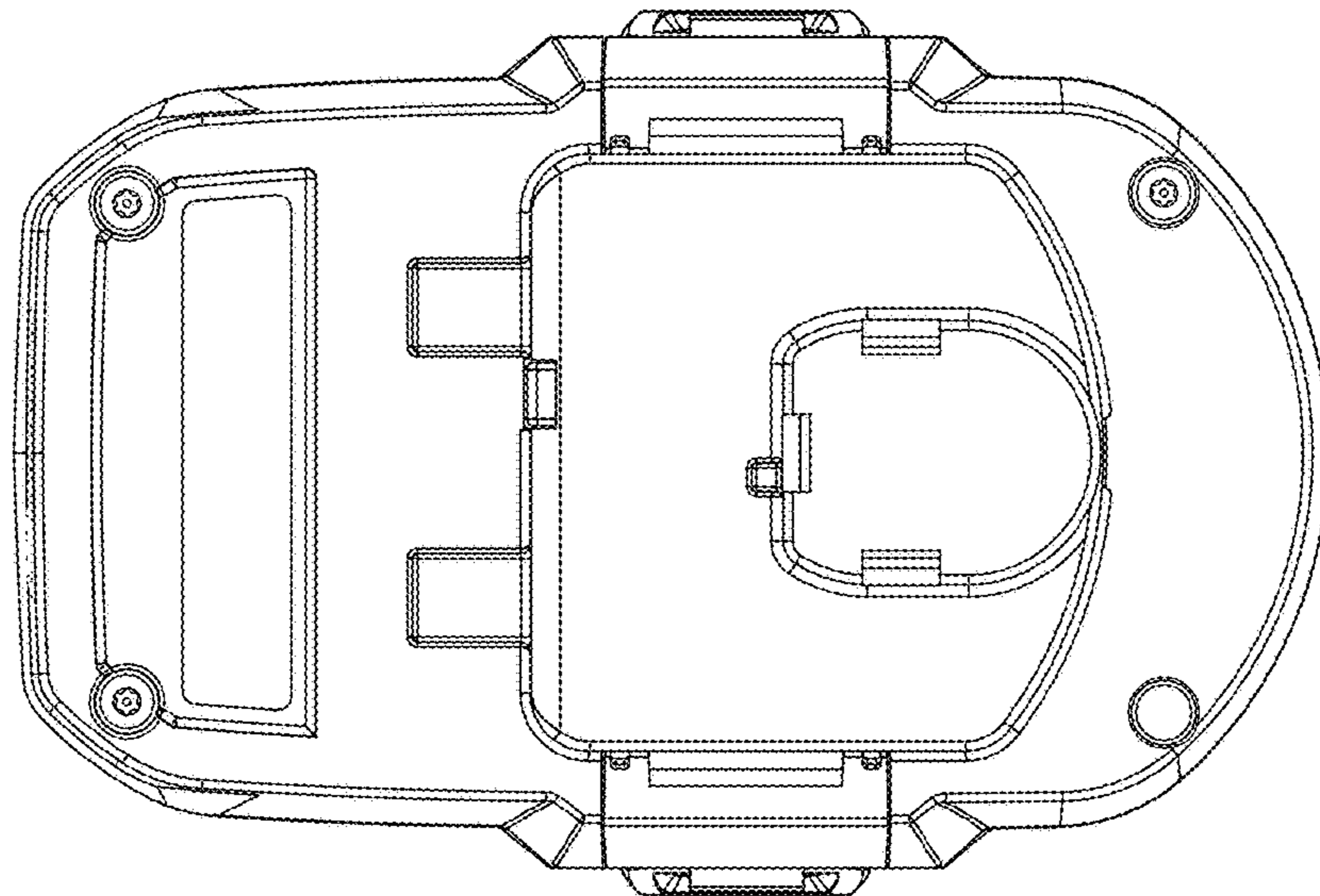


FIG. 14

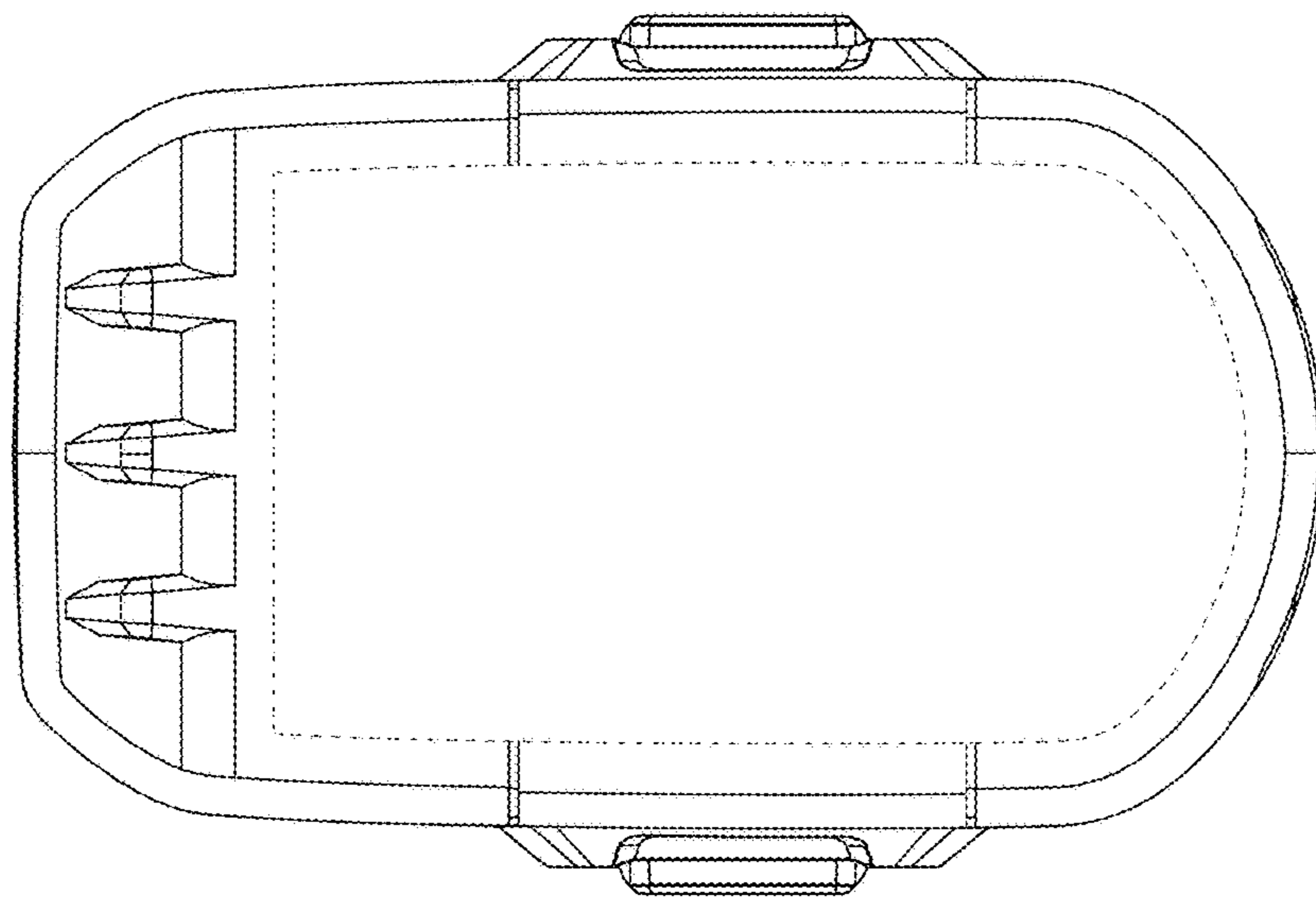


FIG. 15