



US00D862382S

(12) **United States Design Patent** (10) **Patent No.:** **US D862,382 S**
Altenburger (45) **Date of Patent:** **** Oct. 8, 2019**

(54) **BATTERY PACK**

FOREIGN PATENT DOCUMENTS

(71) Applicant: **TTI (MACAO COMMERCIAL OFFSHORE) LIMITED**, Macau (MO)

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

(Continued)

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

OTHER PUBLICATIONS

(73) Assignee: **TTI (MACAO COMMERCIAL OFFSHORE) LIMITED**, Macau (MO)

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=ryobi+battery+pack.*

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

(21) Appl. No.: **29/578,157**

(Continued)

(22) Filed: **Sep. 19, 2016**

(30) **Foreign Application Priority Data**

Primary Examiner — Jennifer Rivard

Assistant Examiner — Alison M Ofstun

Mar. 17, 2016 (CN) 2016 3 0076764

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

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

Friedrich LLP

(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 10/4257; H01M 10/0436;
H01M 10/48

See application file for complete search history.

(57) **CLAIM**

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

(56) **References Cited**

DESCRIPTION

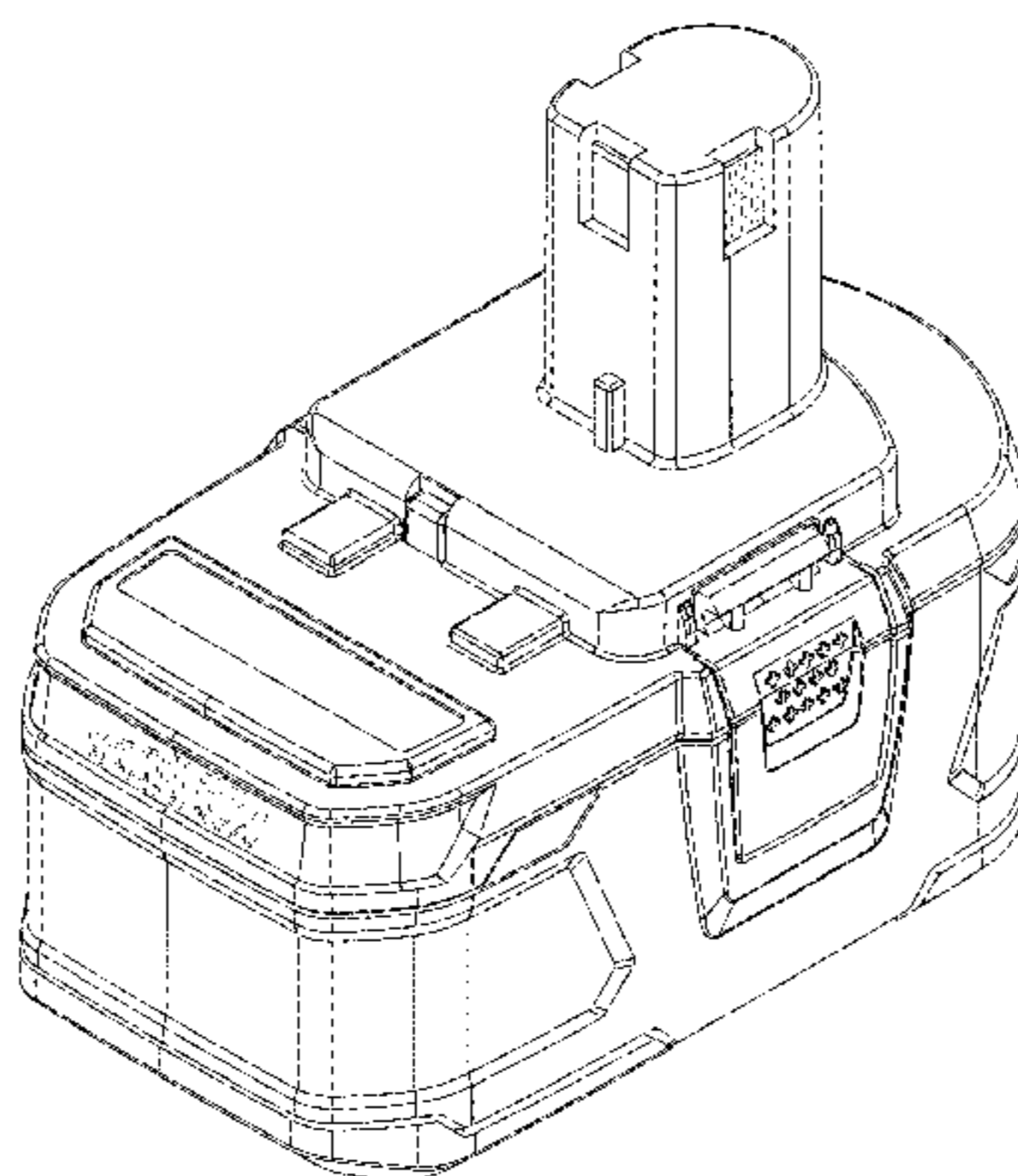
U.S. PATENT DOCUMENTS

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

FIG. 1 is a perspective view of a battery pack showing my new design;
FIG. 2 is a right side view of the battery pack of FIG. 1;
FIG. 3 is a left side 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 front view of the battery pack of FIG. 1;
FIG. 6 is a top view of the battery pack of FIG. 1; and,
FIG. 7 is a bottom view of the battery pack of FIG. 1.
The evenly spaced broken lines illustrate portions of the article that form no part of the claimed design. The dot-dash broken lines illustrate a boundary to the claimed design and form no part thereof.

(Continued)

1 Claim, 4 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

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 Bucholz 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 Thorsoe
 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 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

(56)

References Cited

FOREIGN PATENT DOCUMENTS

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	WO2015061370	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.

* cited by examiner

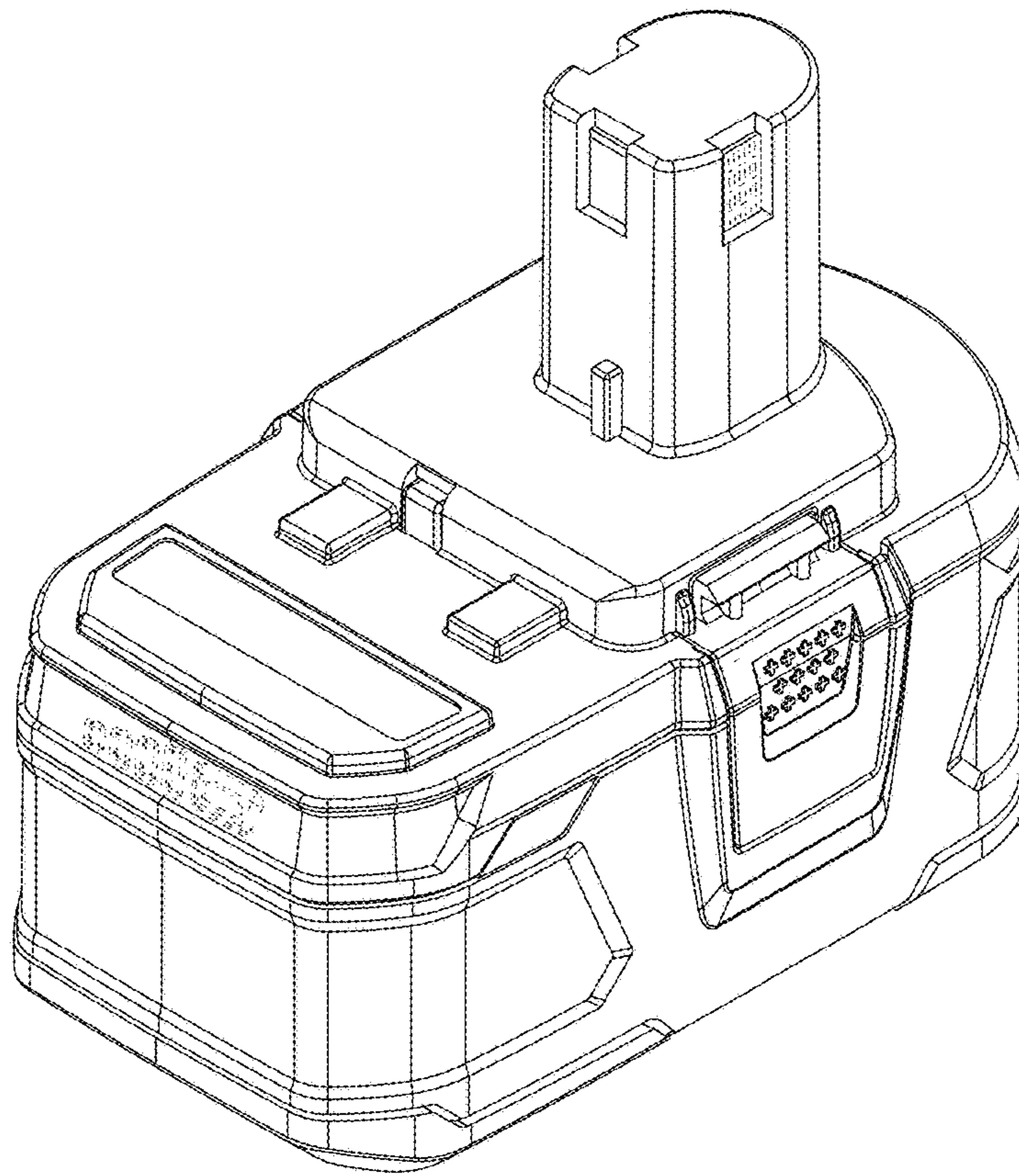


FIG. 1

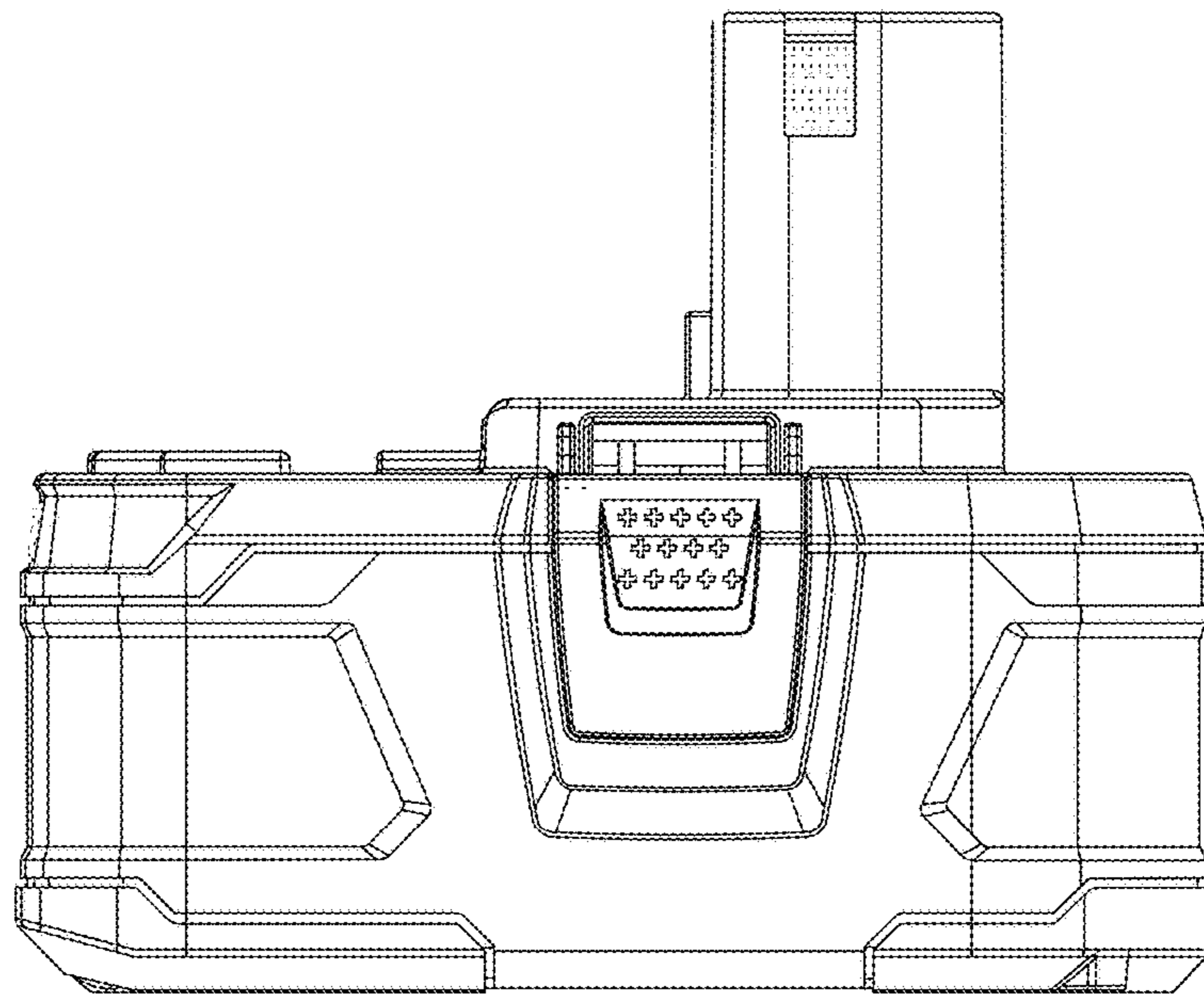


FIG. 2

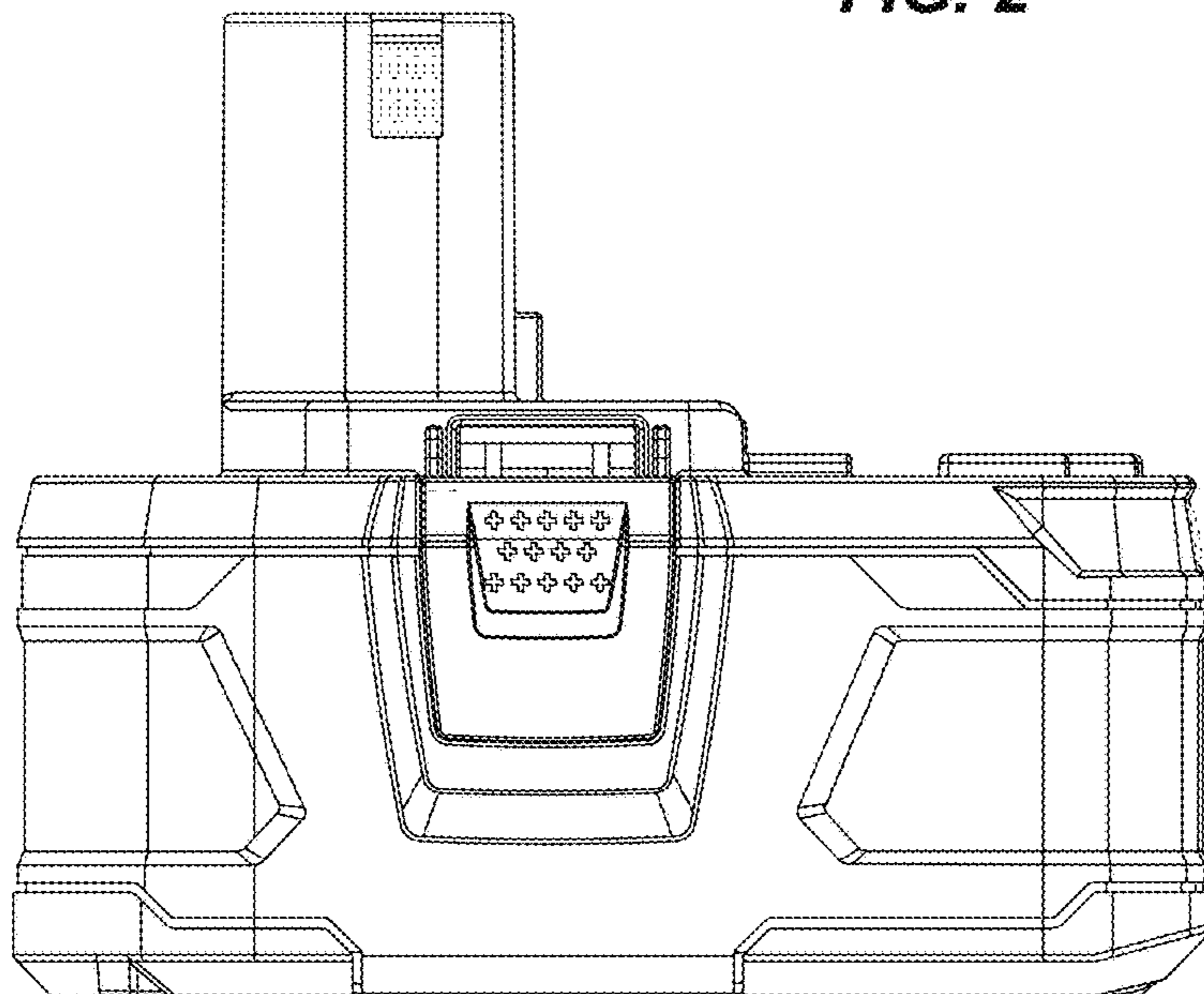


FIG. 3

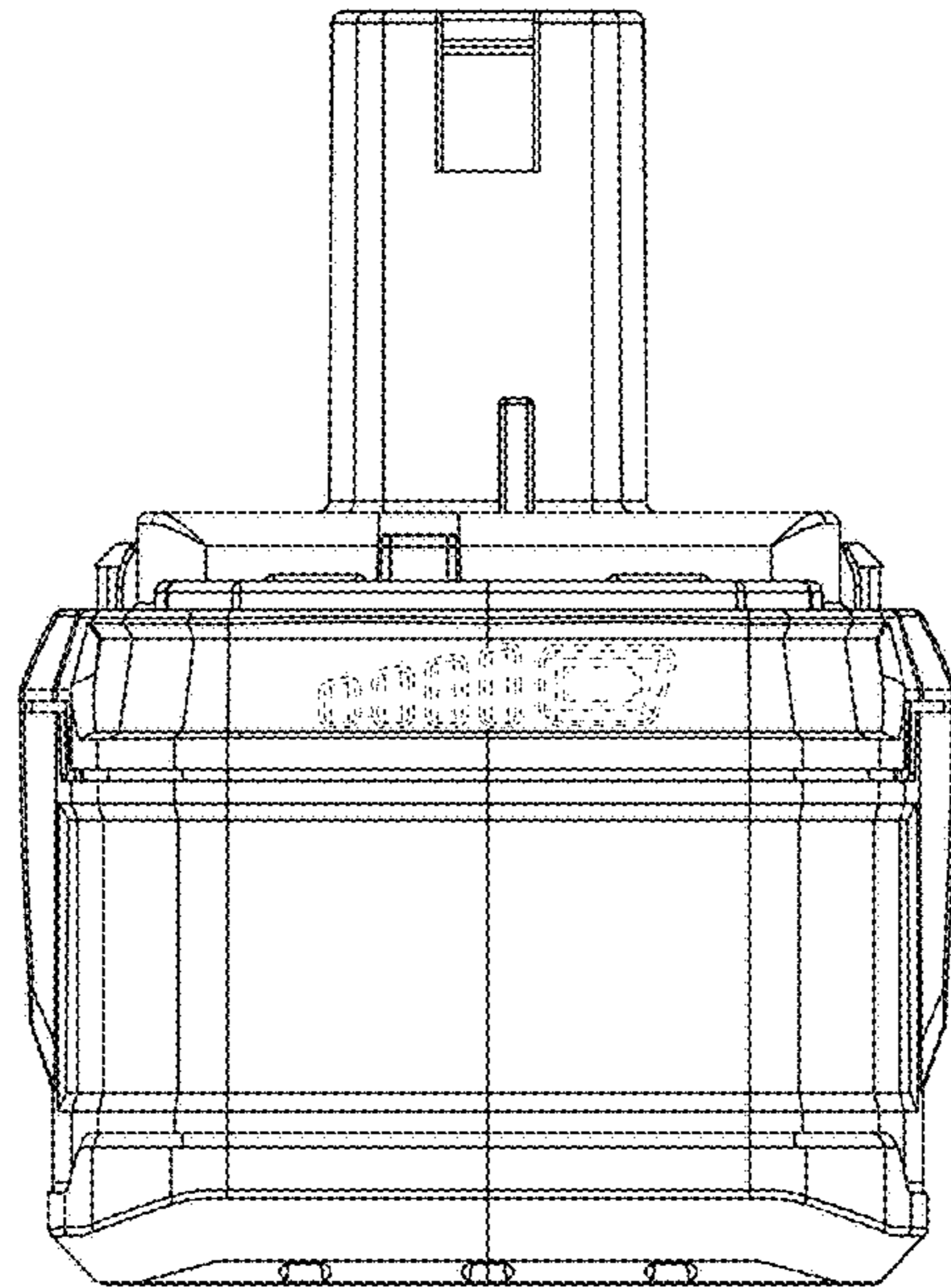


FIG. 4

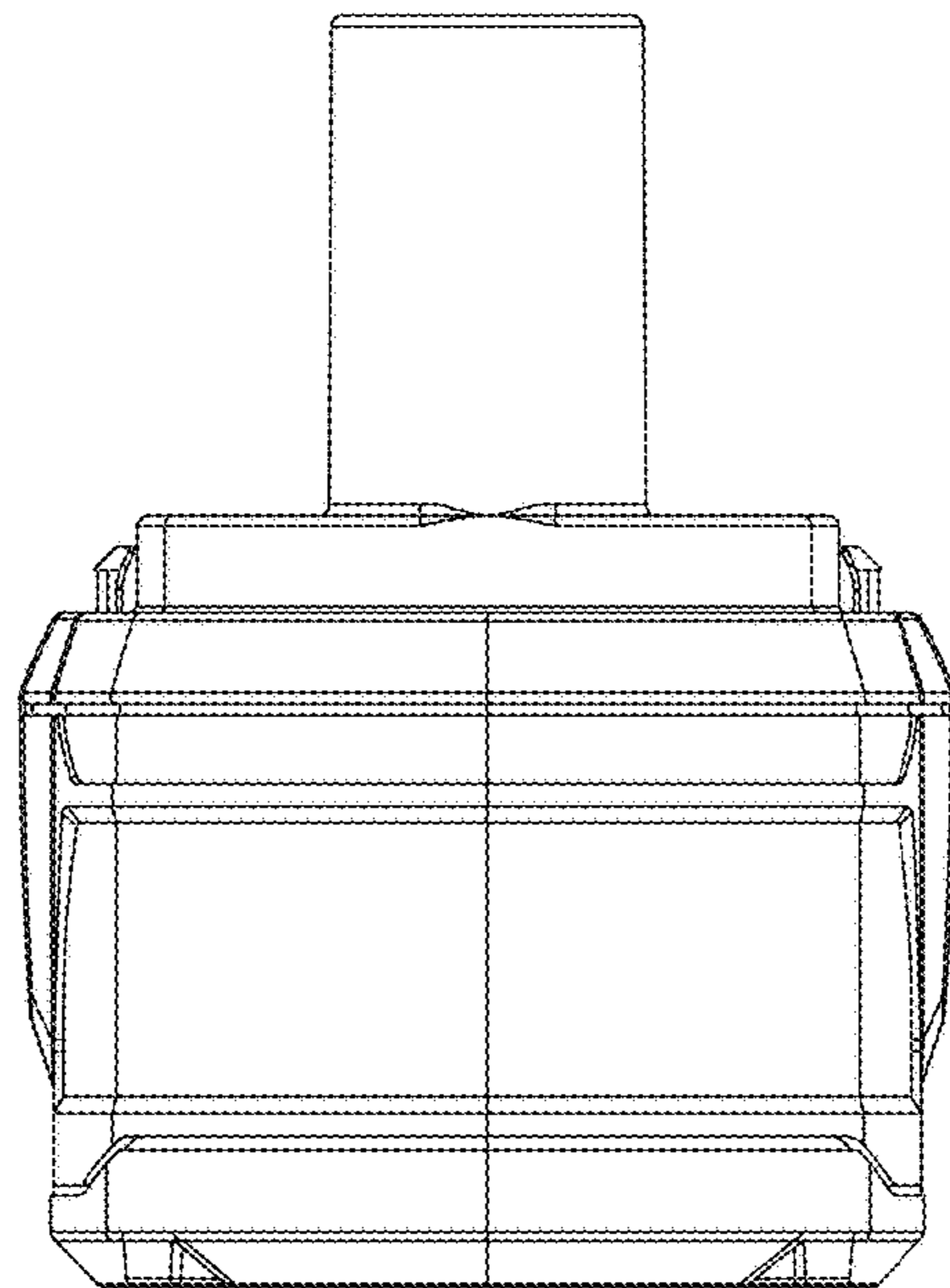


FIG. 5

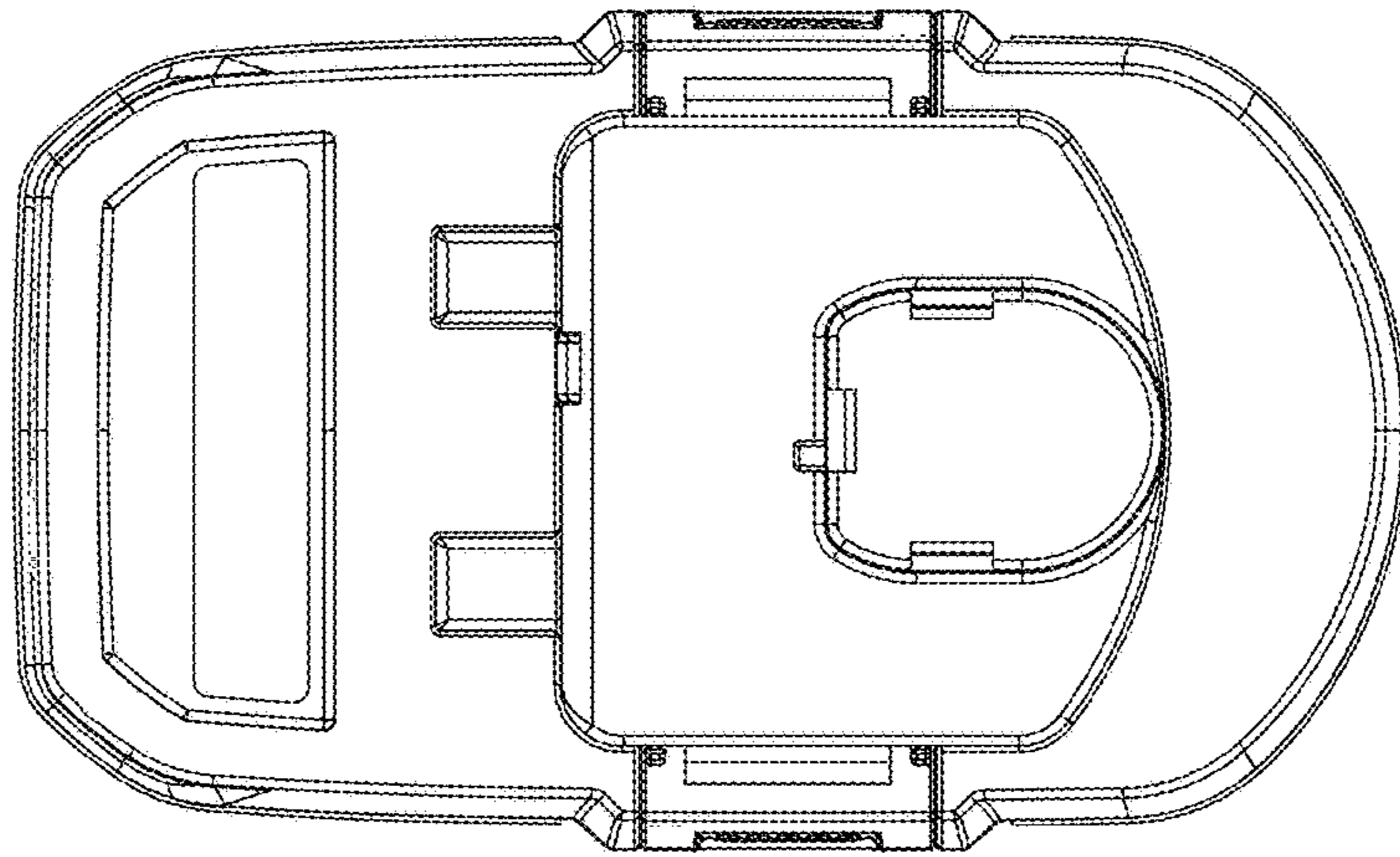


FIG. 6

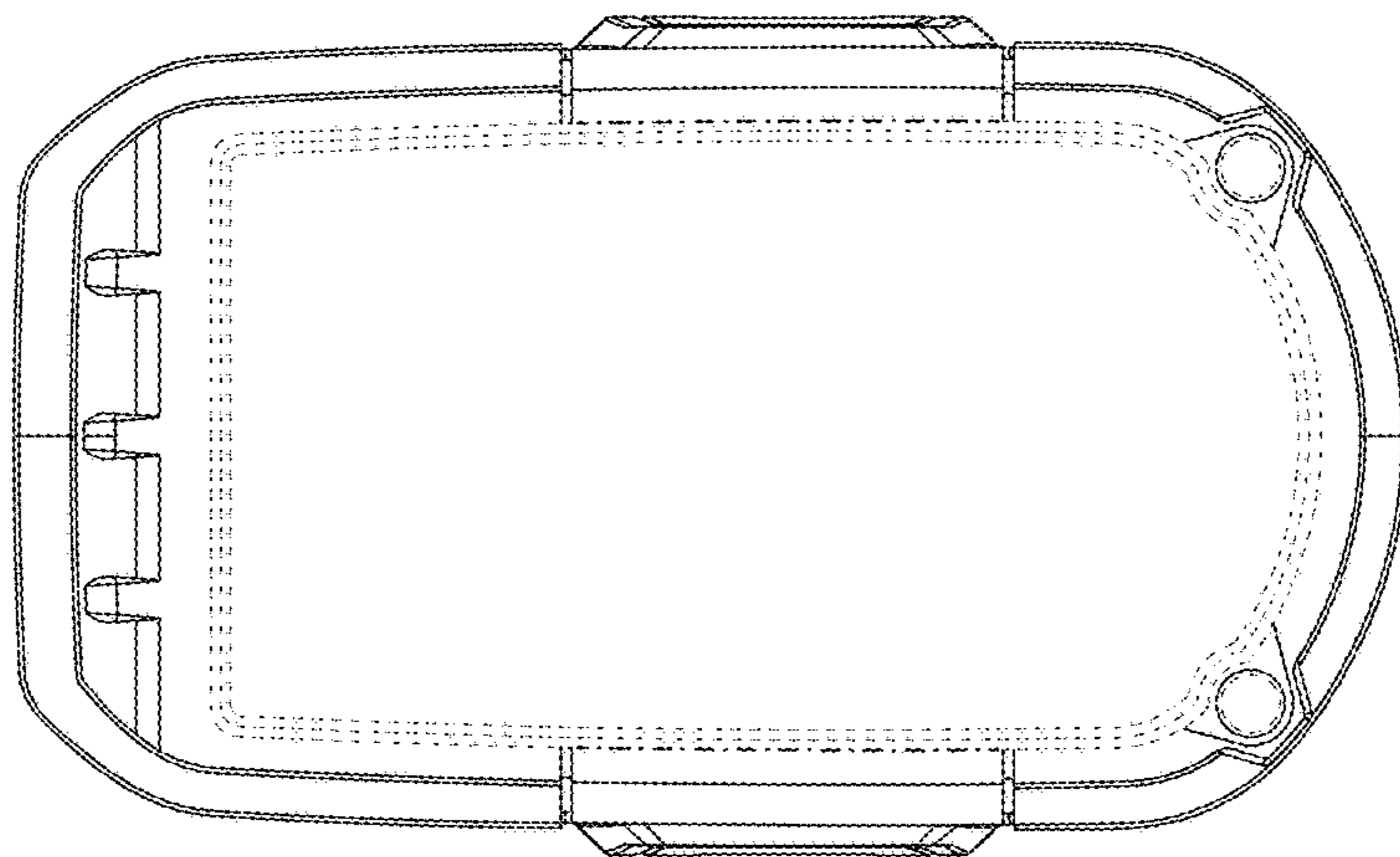


FIG. 7