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(12) **United States Design Patent**  
**Iacovitti et al.**

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(54) **OPTICAL SCANNER**

(56) **References Cited**

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

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(30) **Foreign Application Priority Data**

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(51) **LOC (12) Cl.** ..... **14-02**

(52) **U.S. Cl.**  
USPC ..... **D14/420**

(58) **Field of Classification Search**

USPC ..... D14/420, 426-430, 453; 235/462.01, 235/462.11, 462.43, 462.45, 462.49, 235/472.01, 385, 454, 435, 439-441, 375, 235/444, 456, 459, 462.14, 462.17, 462.2, 235/462.21, 490, 494, 476, 462.22, 235/462.32, 462.35; 382/313, 321, 318; 358/473; 250/215, 216, 566, 239, 221; D26/37-50, 24; 362/157, 158, 171-174, 362/183-208; 396/427; D24/158; D10/46; D16/219, 208, 202  
CPC .. G06K 7/1417; G06K 7/1408; G06K 7/1413; G06K 7/1495; G06K 7/10722; G06K 7/10752; G06K 7/10732; G06K 7/10544; G06K 7/10574; G06K 7/10742; G06K 7/10831; G06K 7/10584; G06K 7/10881; G06K 7/109; G06K 7/10693; G06K 7/10871; G06K 7/1096; G06K 7/10;

(Continued)

U.S. PATENT DOCUMENTS

5,479,016 A \* 12/1995 Curry ..... G01J 5/02  
250/332  
6,518,565 B1 \* 2/2003 Wu ..... G01D 11/245  
250/239

(Continued)

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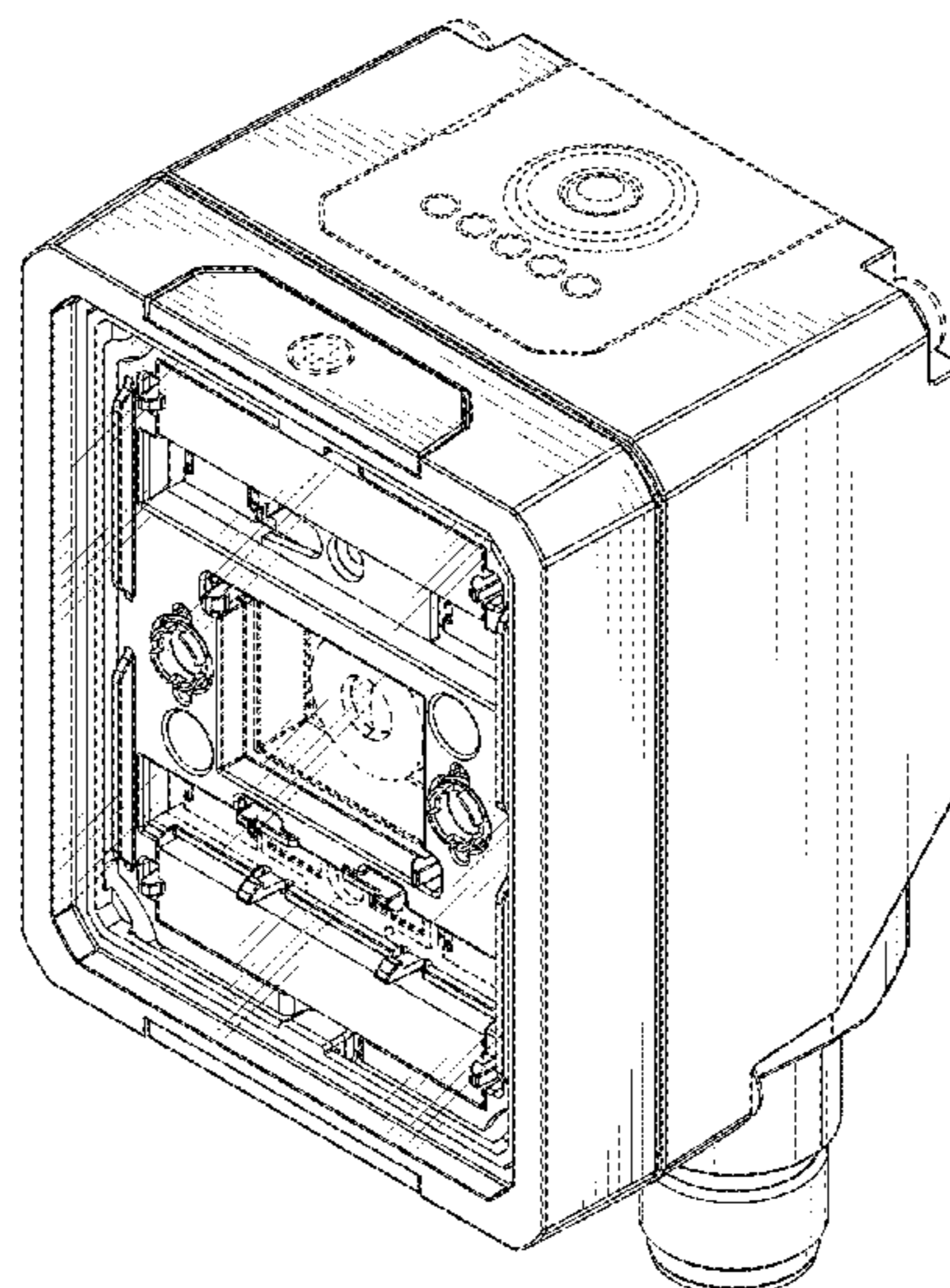
(57) **CLAIM**

The ornamental design for an optical scanner, as shown and described.

**DESCRIPTION**

FIG. 1 is a front perspective view of an optical scanner showing our design according to a first embodiment; FIG. 2 is a front view thereof; FIG. 3 is a rear view thereof; FIG. 4 is a top view thereof; FIG. 5 is a bottom view thereof; FIG. 6 is a first side view thereof; FIG. 7 is a second side view thereof; FIG. 8 is a rear perspective view thereof; FIG. 9 is a front perspective view of an optical scanner showing our design according to a second embodiment; FIG. 10 is a front view thereof; FIG. 11 is a rear view thereof; FIG. 12 is a top view thereof; FIG. 13 is a bottom view thereof; FIG. 14 is a first side view thereof; FIG. 15 is a second side view thereof; and, FIG. 16 is a rear perspective view thereof. The broken lines, as well as the unshaded portions depicted with broken lines, are directed to environment, represent unclaimed subject matter, and form no part of the claimed design.

**1 Claim, 16 Drawing Sheets**



(58) **Field of Classification Search**

CPC ..... G06K 7/10564; G06K 7/10594; G06K 7/10603; G06K 7/10663; G06K 7/10673; G06K 7/10702; G06K 7/10792; G06K 7/10633; G06K 7/10653; G06K 7/10891; G06K 7/14; G06K 7/1443; G06K 7/10801; G06K 7/10811; G06K 7/10851; G06K 7/10861; G06K 2207/1011; G06K 2207/1012; G06K 2207/1013; G06K 2207/1016; G06K 2207/1017; G06K 2207/1018; G06K 2207/10534; G06K 17/0022; G06K 7/1404; G06K 7/10821; G06K 7/10613; G06K 7/04; G06K 7/1447; G06K 7/10623; G06K 7/10683; A47F 9/046; A47F 9/047; G07G 1/0045; G04N 5/23238; G04N 5/2252; G04N 5/2251; G03B 17/02; B25H 5/00; B66F 7/28; G02B 26/10; G02B 26/106; G02B 1/08; G02B 19/0095; G02B 19/0028; G02B 19/0076; G07F 11/002; G07F 11/02; G06Q 20/343; G06Q 10/08; G06F 2203/0331; G01V 8/10; G01D 11/245; G01D 11/28

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,794,639 B2 \* 9/2004 Lautenschlager .... G01D 11/245 235/462.43  
 6,911,648 B2 \* 6/2005 Wu ..... G01D 11/245 250/239  
 7,102,078 B2 \* 9/2006 Weber ..... G01D 11/245 174/50  
 D565,973 S \* 4/2008 Huang ..... D10/46  
 D570,232 S \* 6/2008 Kaluza ..... D10/46  
 D573,903 S \* 7/2008 Gatz ..... D10/46  
 D578,906 S \* 10/2008 Gatz ..... D10/46

D612,751 S \* 3/2010 Bach ..... D10/46  
 D613,191 S \* 4/2010 Crawford ..... D10/46  
 D616,481 S \* 5/2010 Wampler ..... D16/208  
 D617,214 S \* 6/2010 Siegler ..... D10/46  
 D621,727 S \* 8/2010 Siegler ..... D10/46  
 D643,452 S \* 8/2011 Alm ..... D16/200  
 D654,383 S \* 2/2012 Pfrengle ..... D10/46  
 D671,584 S \* 11/2012 Ohno ..... D16/202  
 8,427,540 B2 \* 4/2013 Nakajima ..... G03B 17/02 348/151  
 D696,707 S \* 12/2013 Guastadini ..... D16/202  
 D743,815 S \* 11/2015 Janu ..... D10/46  
 9,430,690 B2 \* 8/2016 Nagata ..... G06K 7/1404  
 D765,755 S \* 9/2016 Pellegrino ..... D16/202  
 9,542,583 B2 \* 1/2017 Nagata ..... G06K 7/10732  
 9,754,146 B2 \* 9/2017 Izaki ..... G06K 7/10841  
 9,946,910 B2 \* 4/2018 Nagata ..... G06K 7/10732  
 10,146,977 B2 \* 12/2018 Nagata ..... G06K 7/10732  
 10,262,177 B2 \* 4/2019 Nagata ..... G06K 7/1417  
 10,268,853 B2 \* 4/2019 Nagata ..... G06K 7/1408  
 D852,194 S \* 6/2019 Ciabattoni ..... D14/420  
 10,515,249 B2 \* 12/2019 Nagata ..... G06K 7/1417  
 2007/0125864 A1 \* 6/2007 Hayakawa ..... G06K 7/10881 235/462.43  
 2008/0225368 A1 \* 9/2008 Ciabattoni ..... G02B 26/121 359/216.1  
 2008/0245982 A1 \* 10/2008 Vonmetz ..... G06K 7/10613 250/566  
 2009/0095074 A1 \* 4/2009 Vinshtok ..... G01D 11/245 73/431  
 2010/0277330 A1 \* 11/2010 Gentilini ..... G06K 7/10881 340/679  
 2013/0341495 A1 \* 12/2013 Fabbri ..... G01S 7/493 250/214.1  
 2016/0034734 A1 \* 2/2016 Nagata ..... G06K 7/10732 235/455  
 2016/0034736 A1 \* 2/2016 Nagata ..... G06K 7/1404 235/454  
 2017/0083733 A1 \* 3/2017 Nagata ..... G06K 7/10732  
 2018/0239937 A1 \* 8/2018 Nagata ..... G06K 7/1408  
 2018/0239938 A1 \* 8/2018 Nagata ..... G06K 7/10722  
 2019/0250255 A1 \* 8/2019 Frucht ..... G01S 7/4808

\* cited by examiner



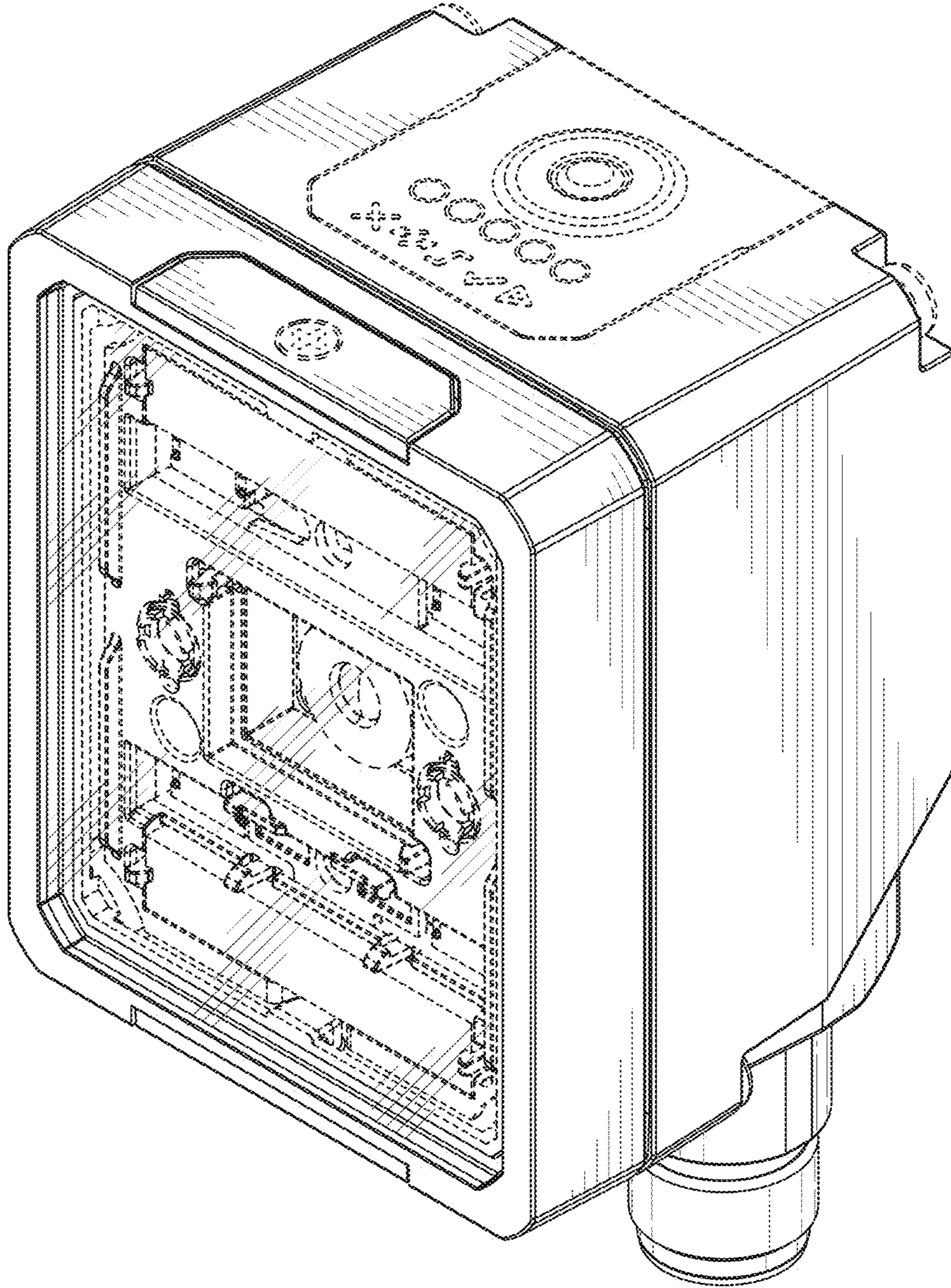


FIG. 1

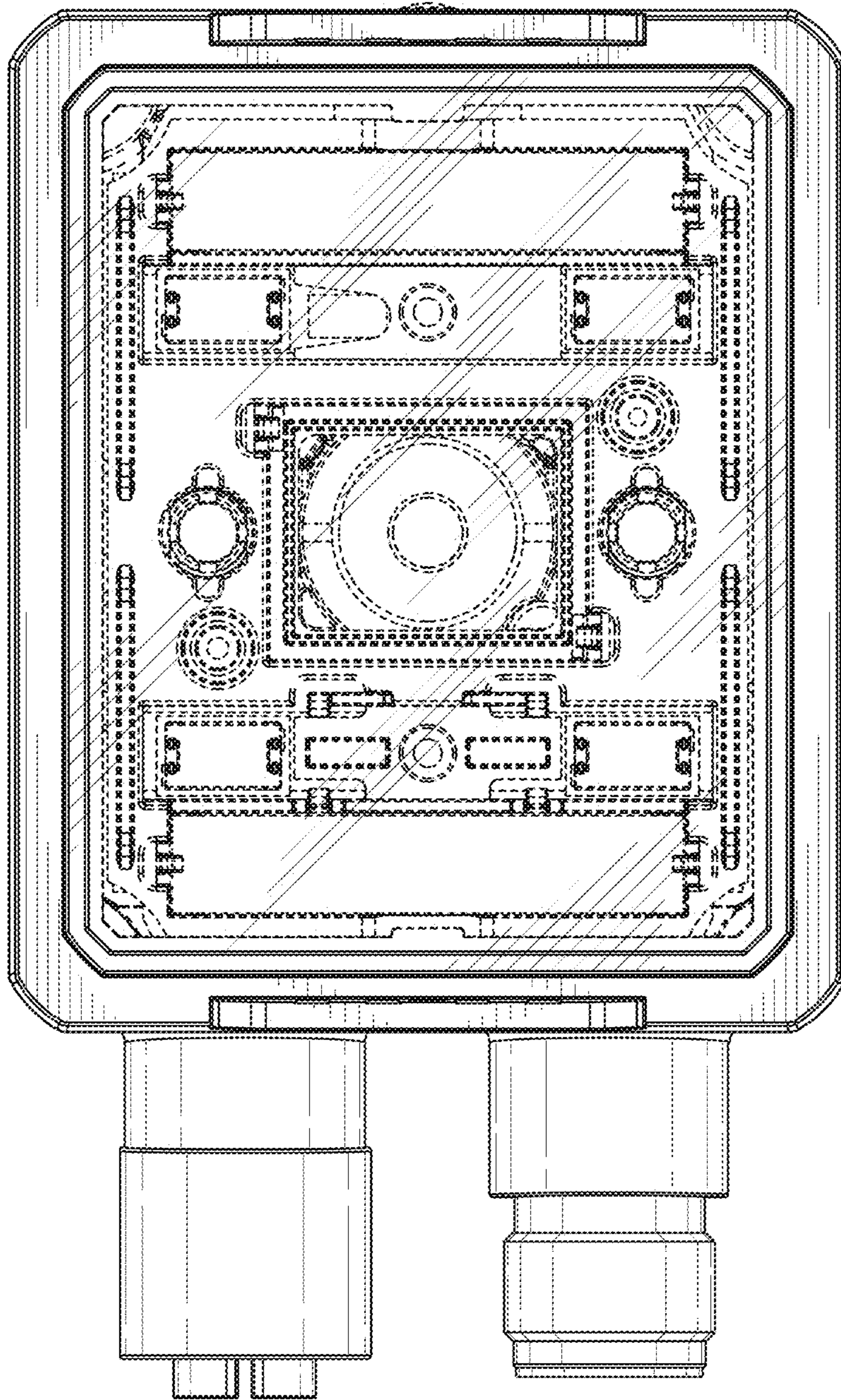


FIG. 2



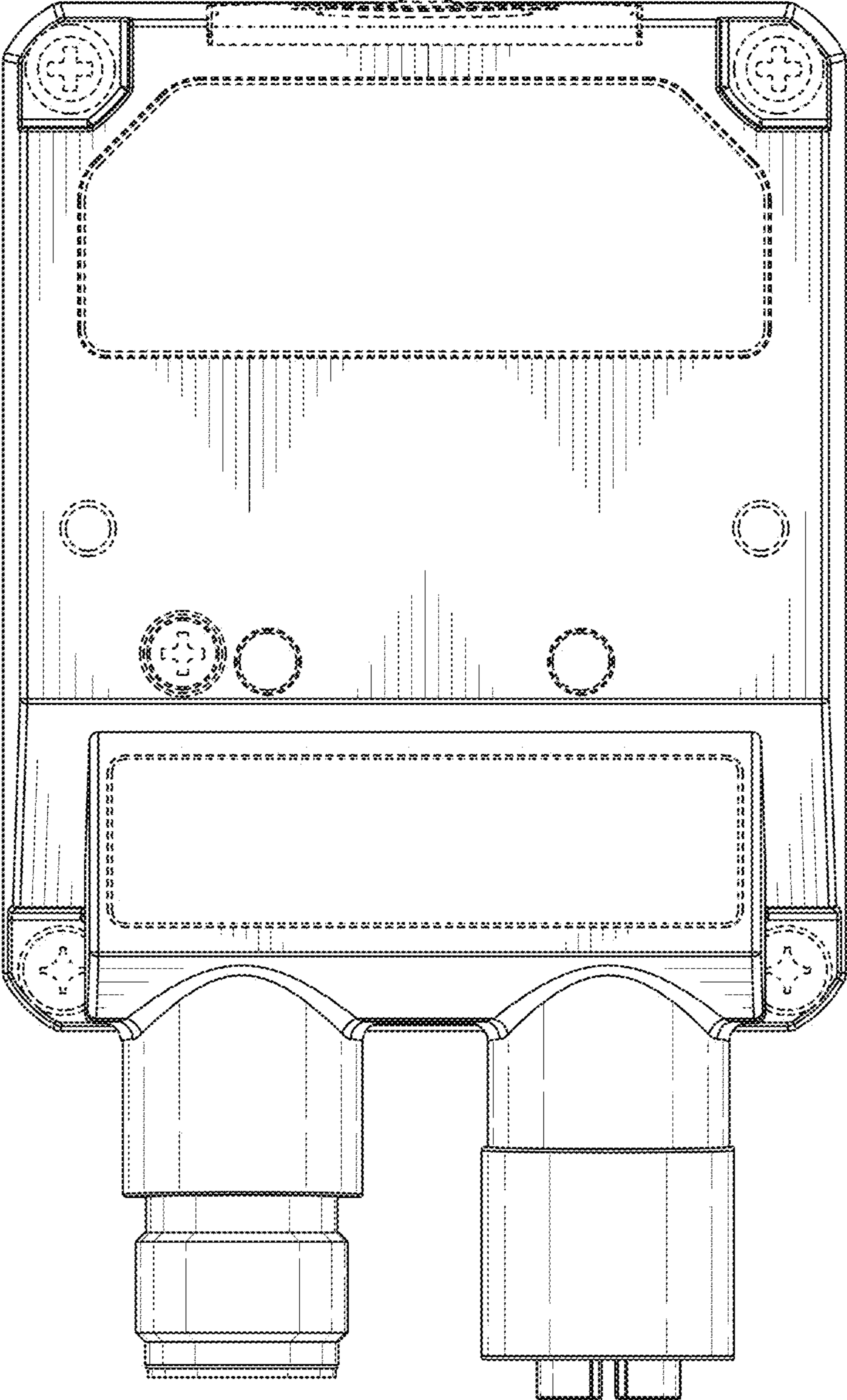


FIG. 3

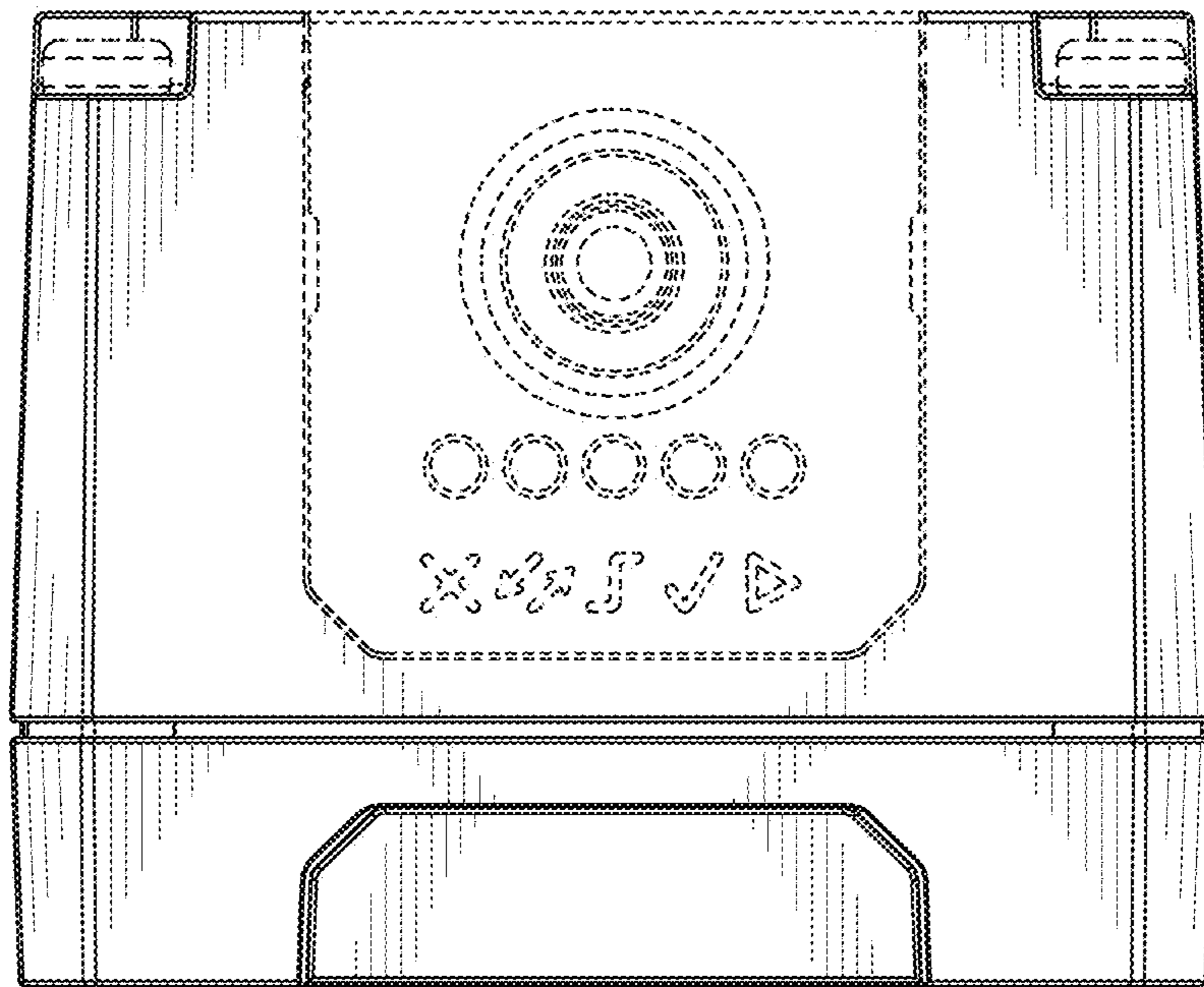


FIG. 4

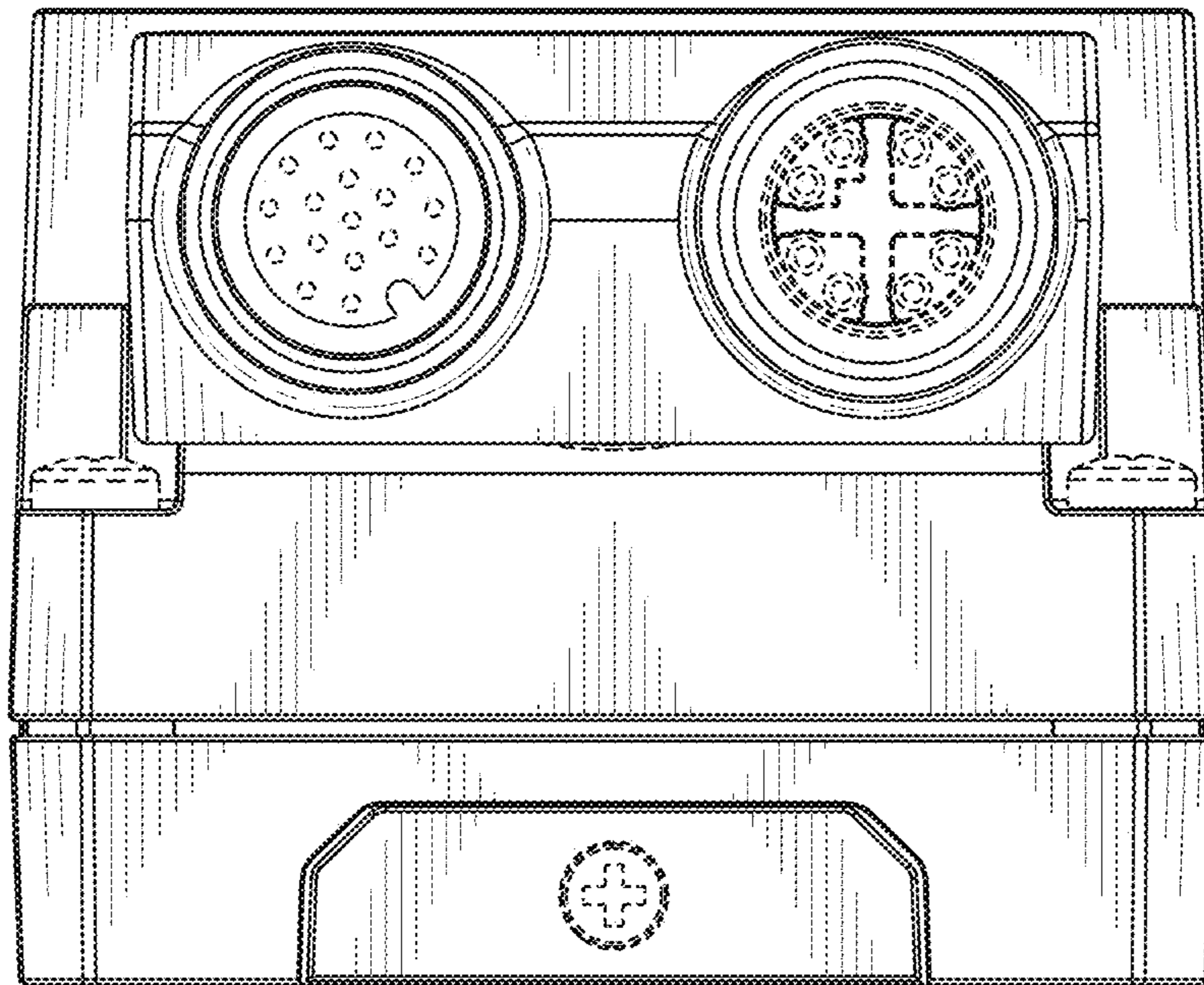


FIG. 5

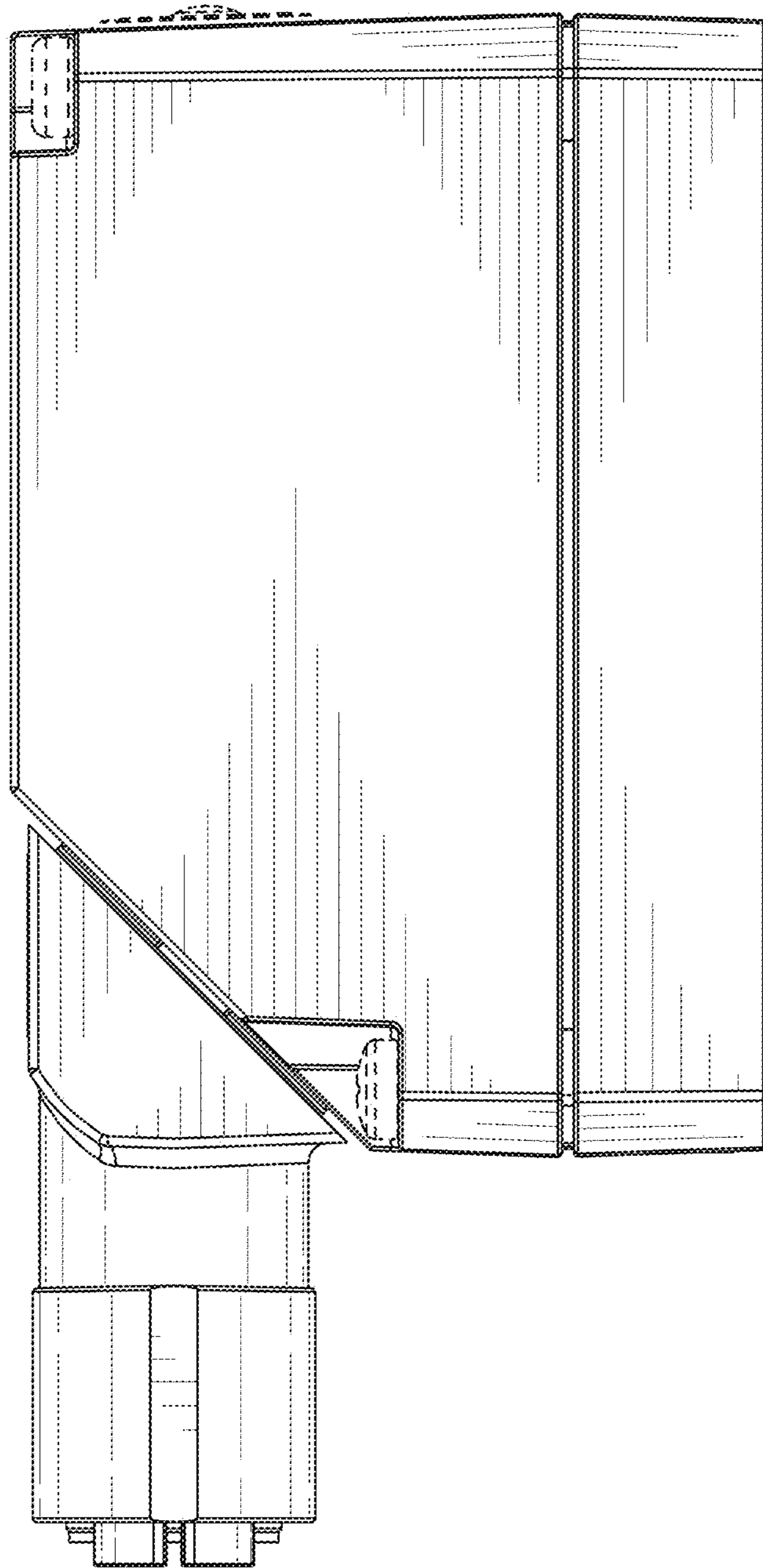


FIG. 6



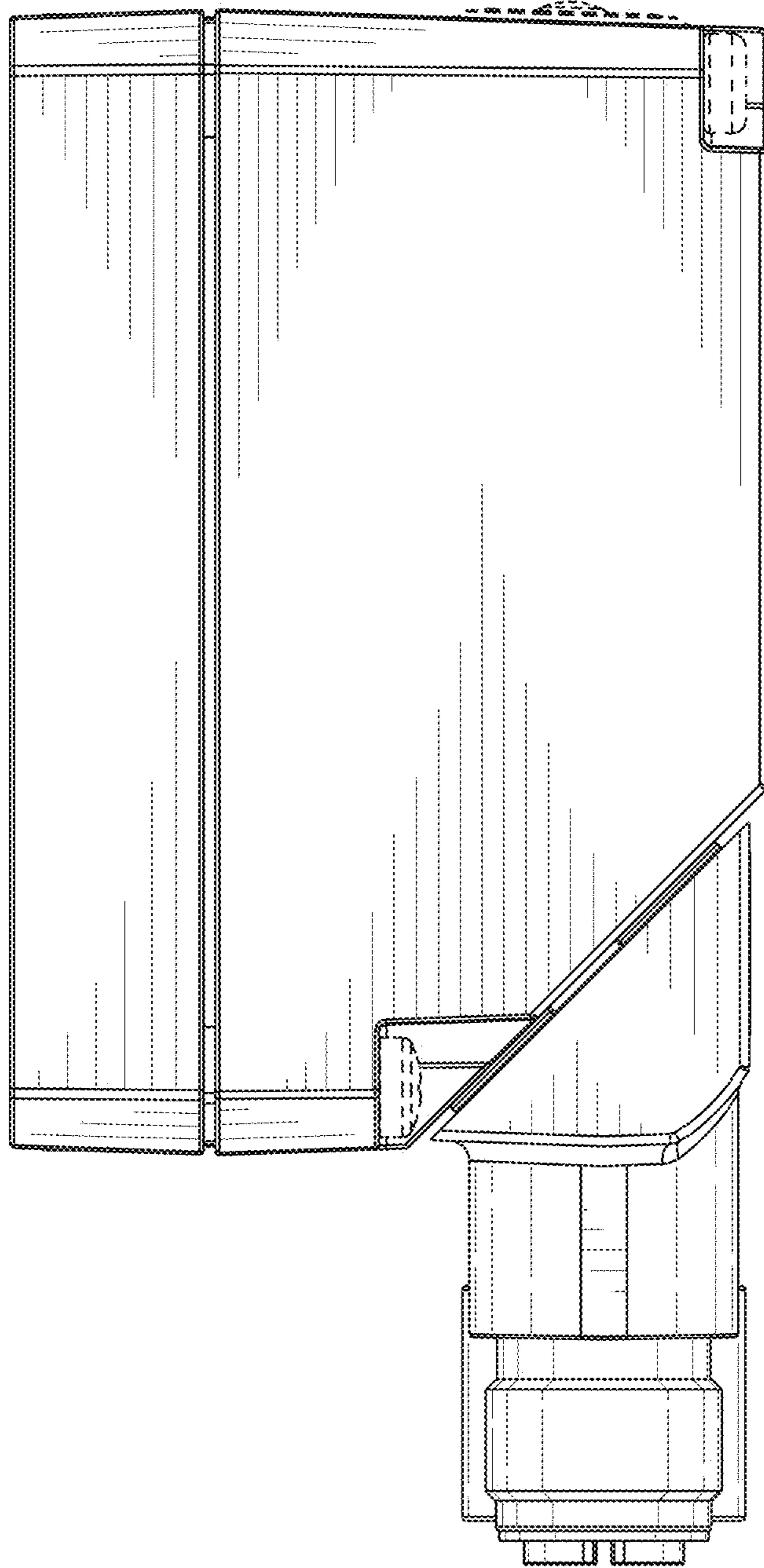


FIG. 7

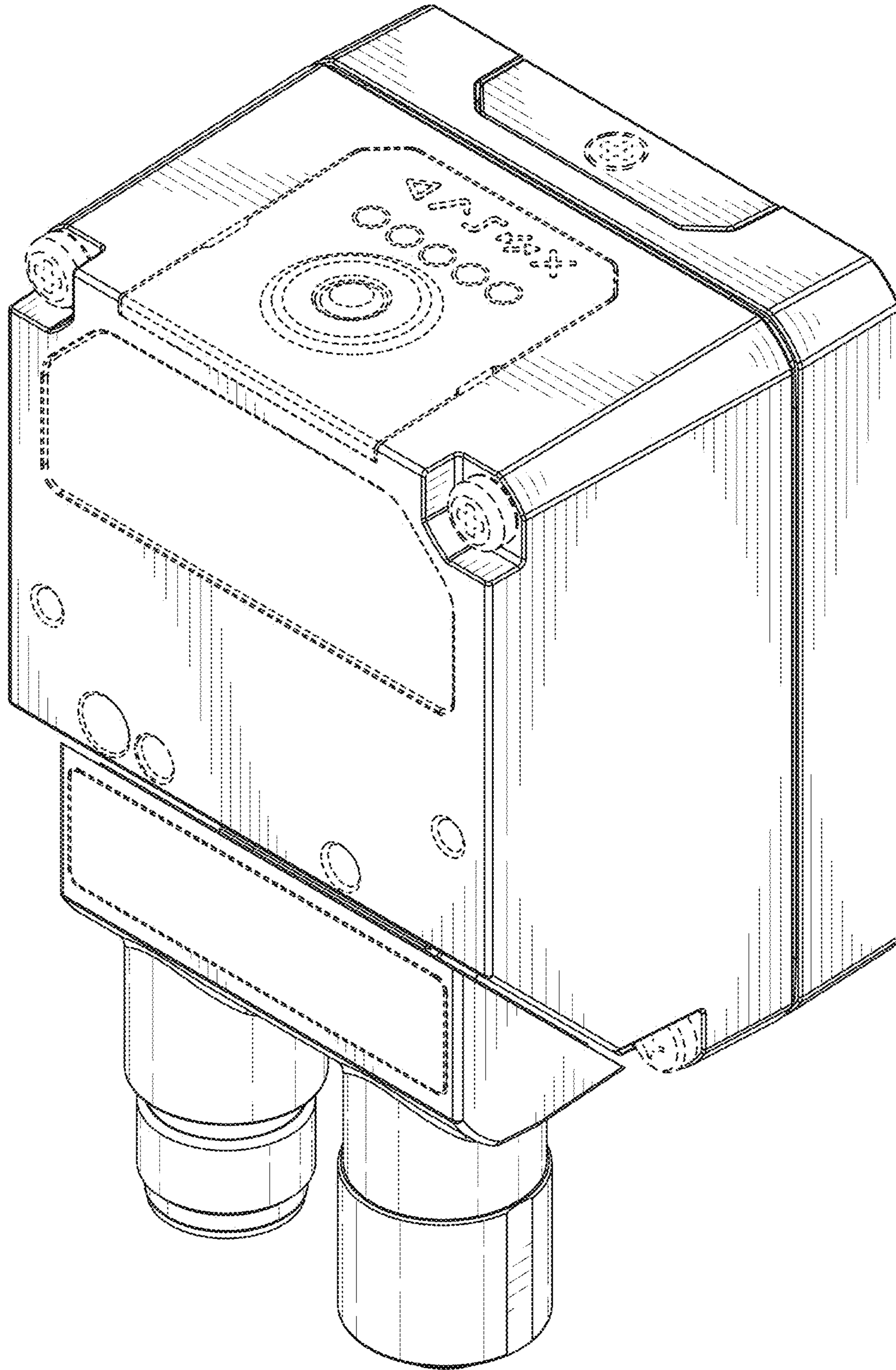


FIG. 8



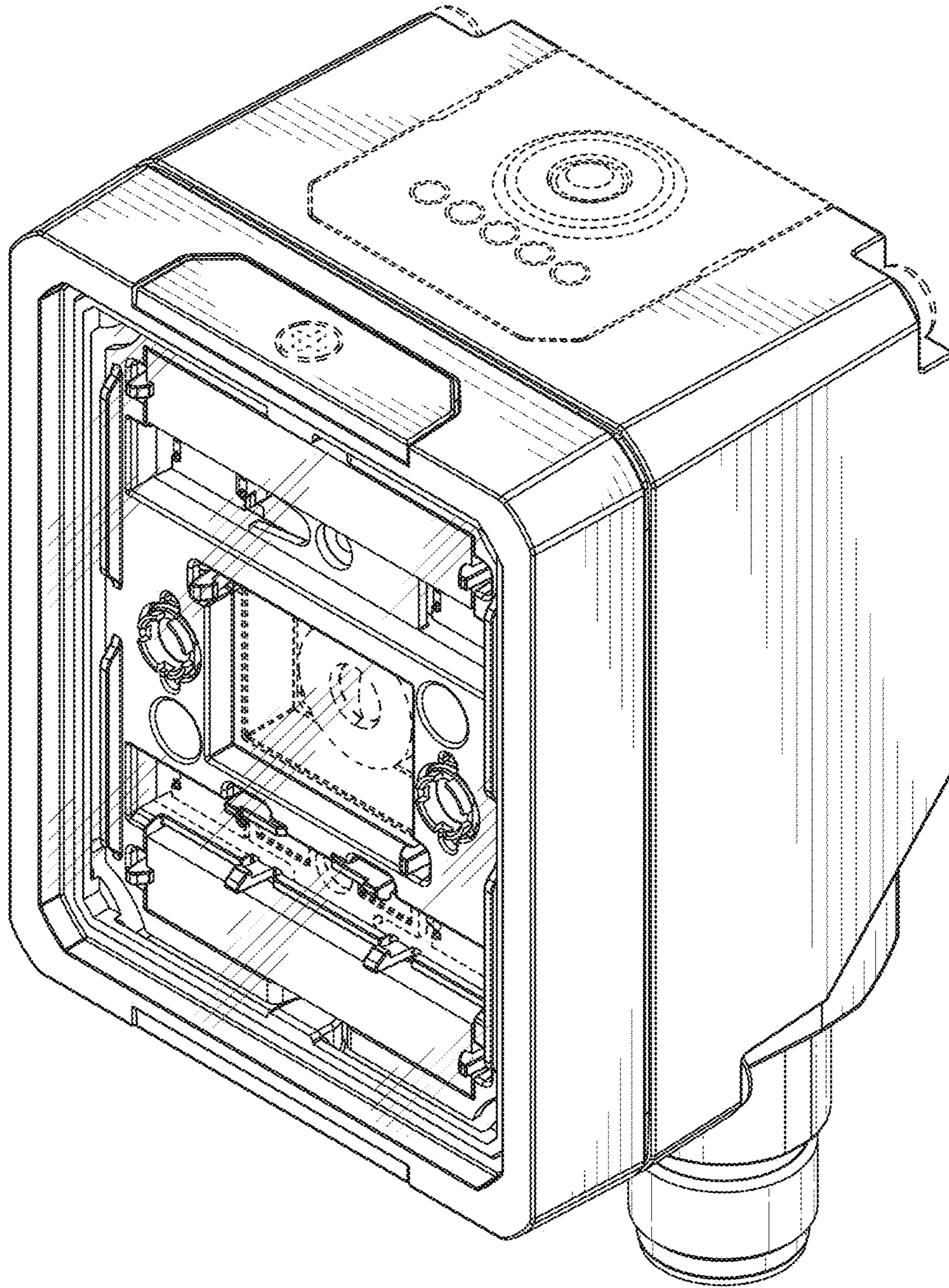


FIG. 9



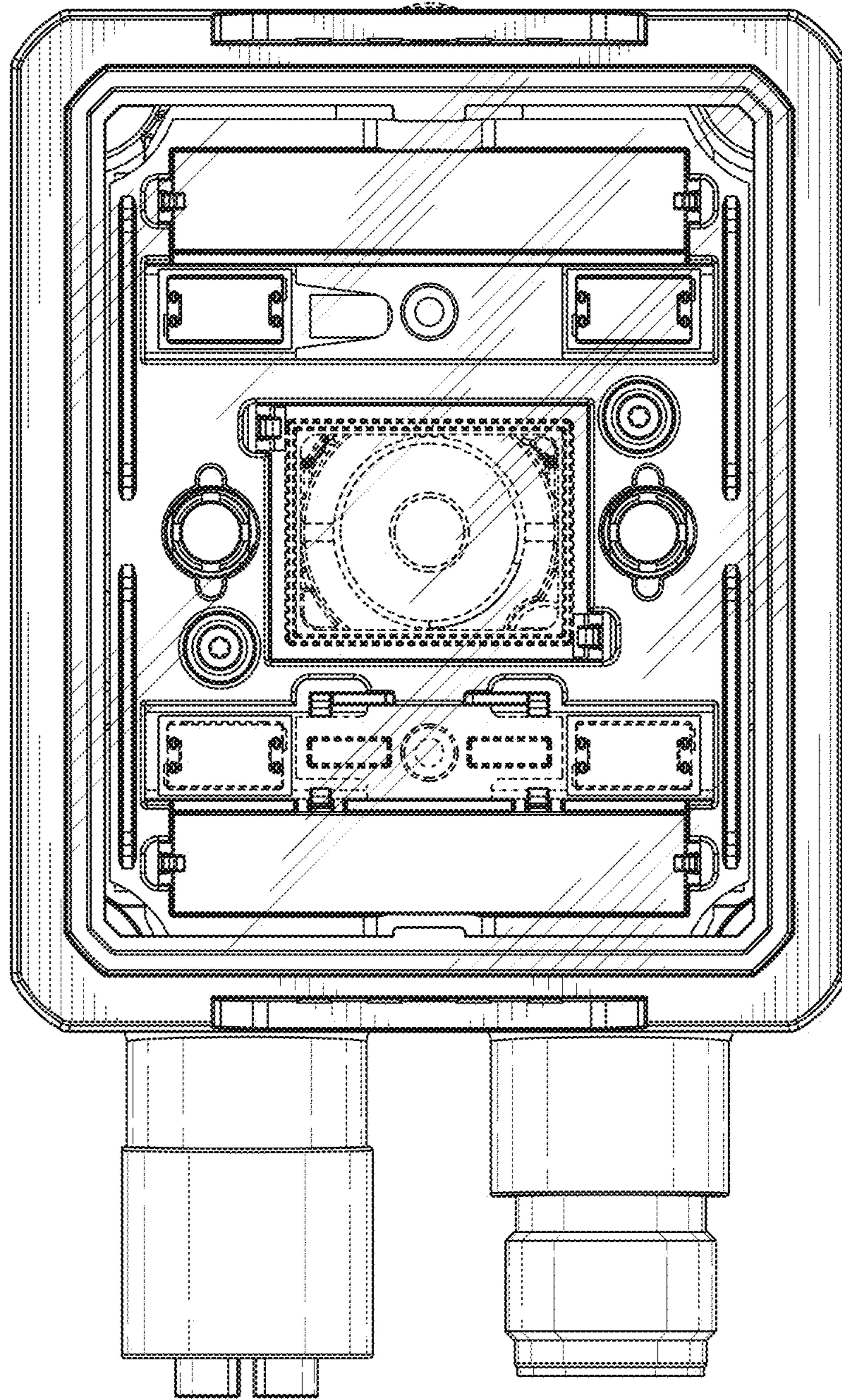


FIG. 10

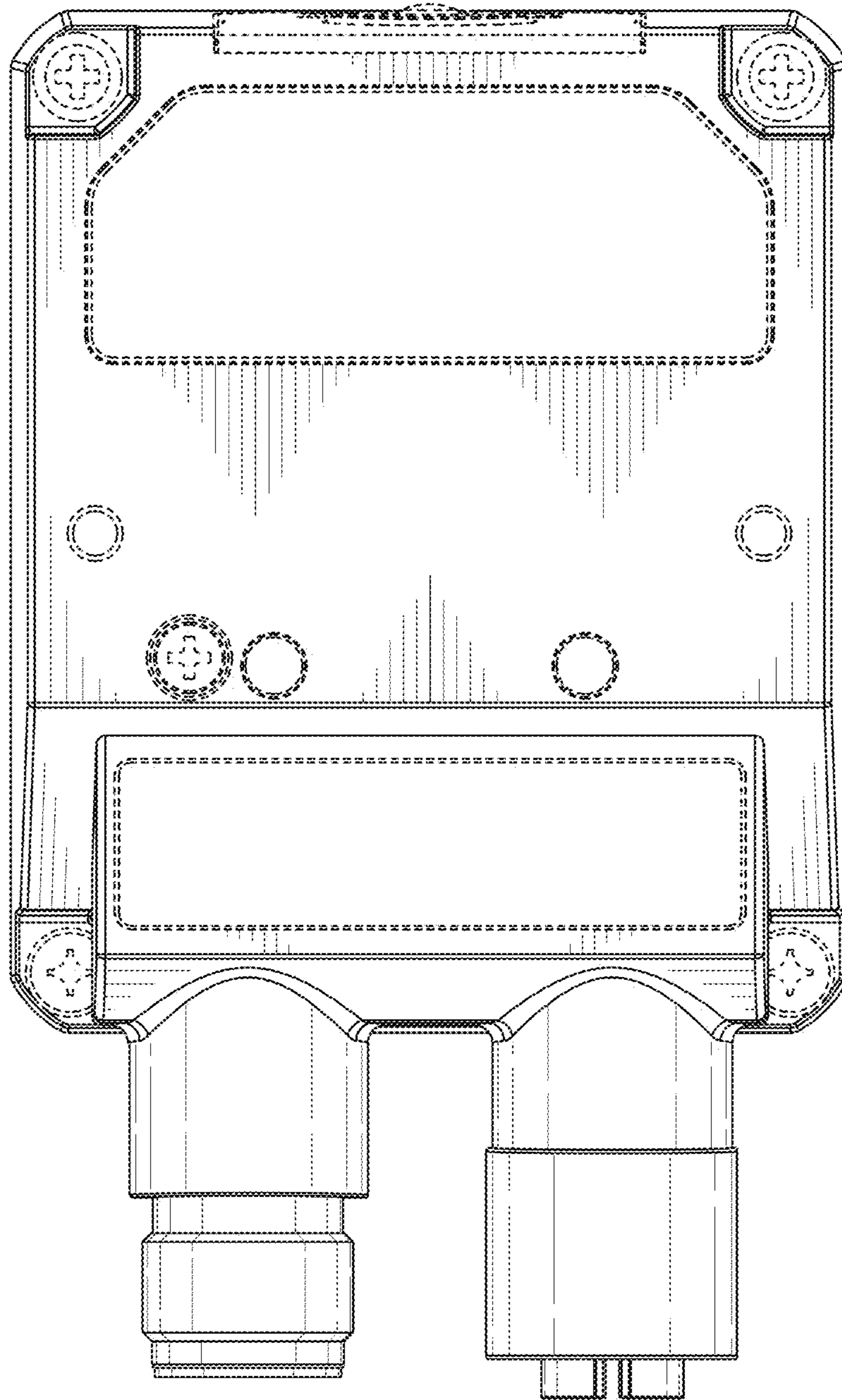


FIG. 11

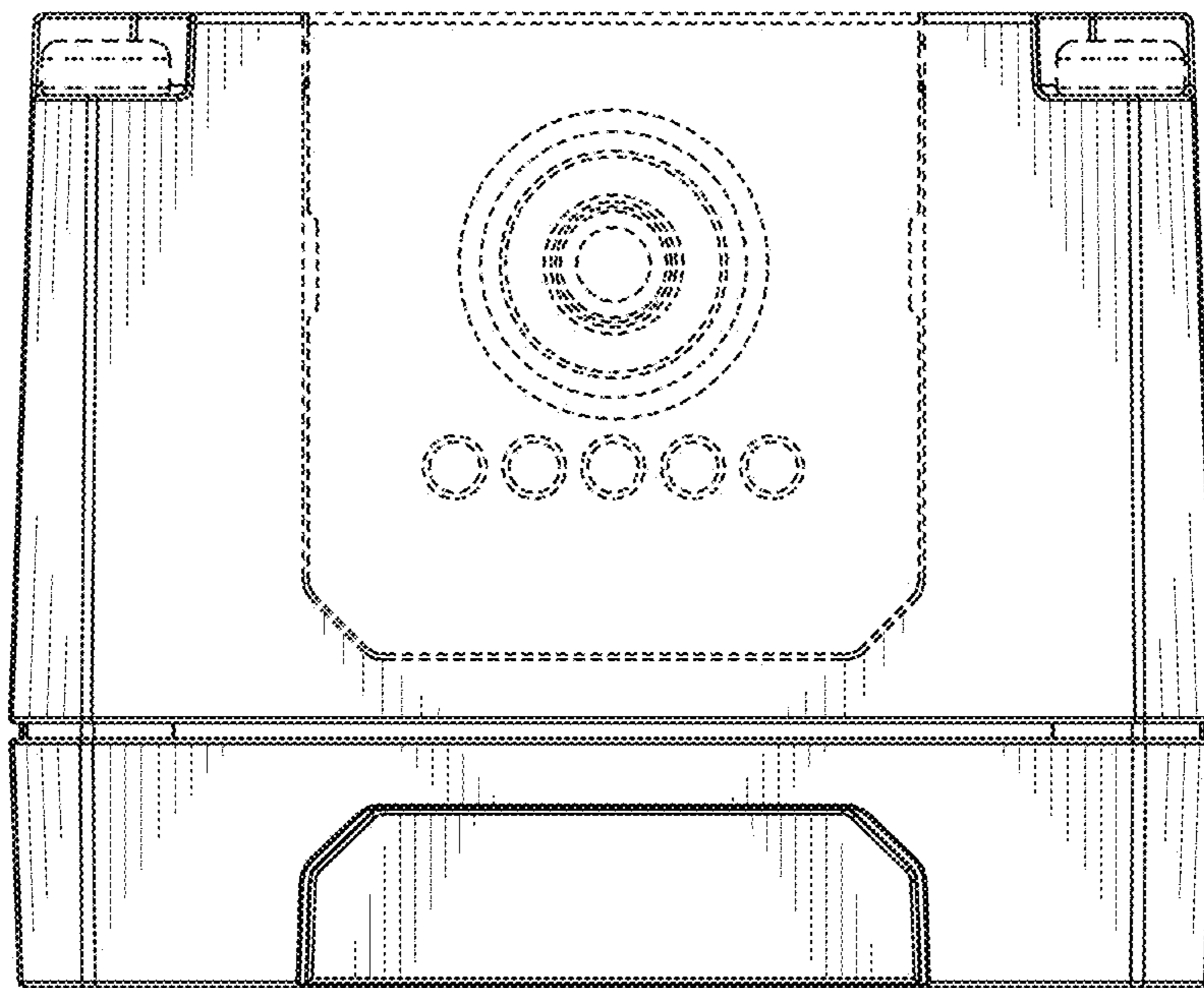


FIG. 12



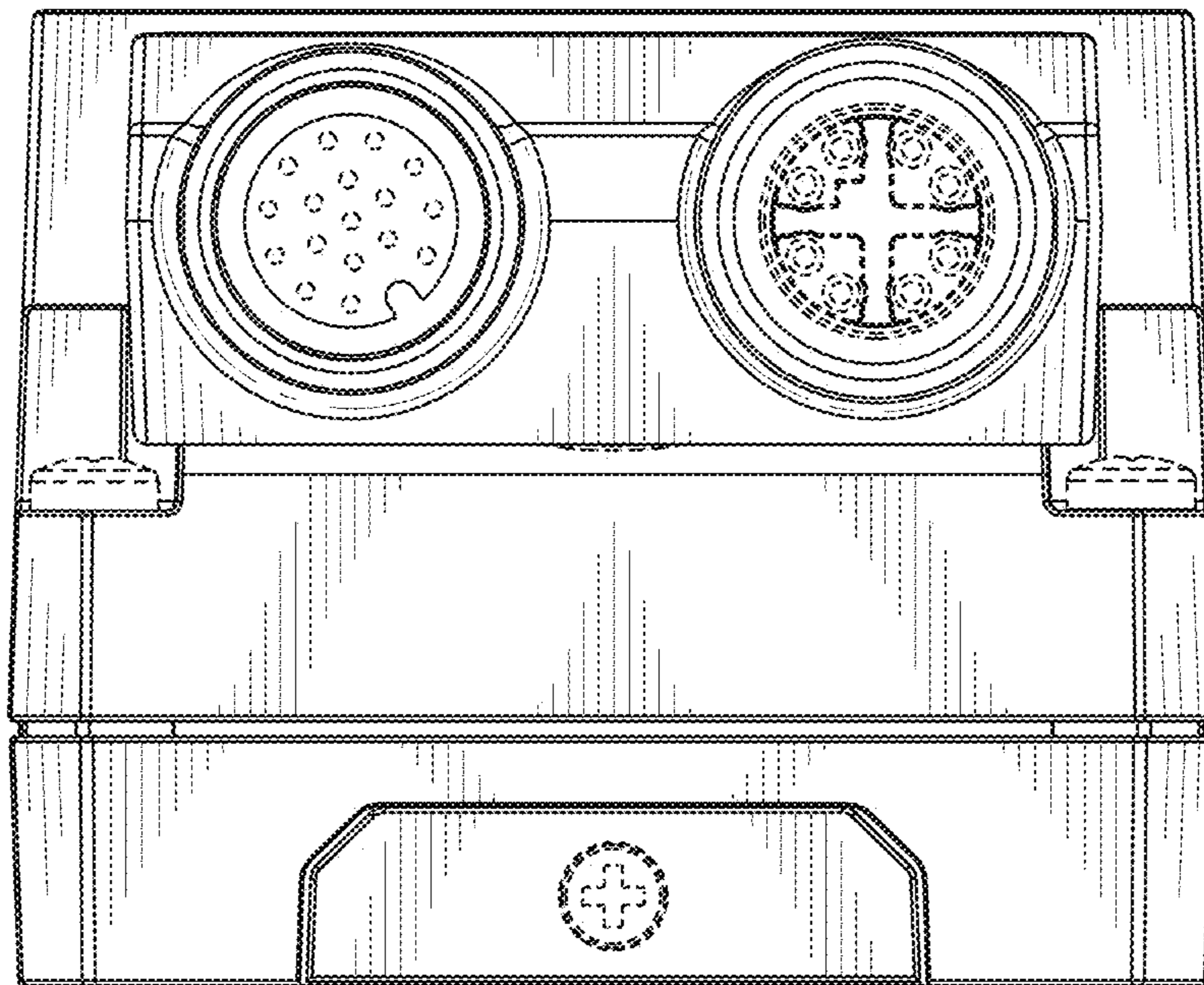


FIG. 13

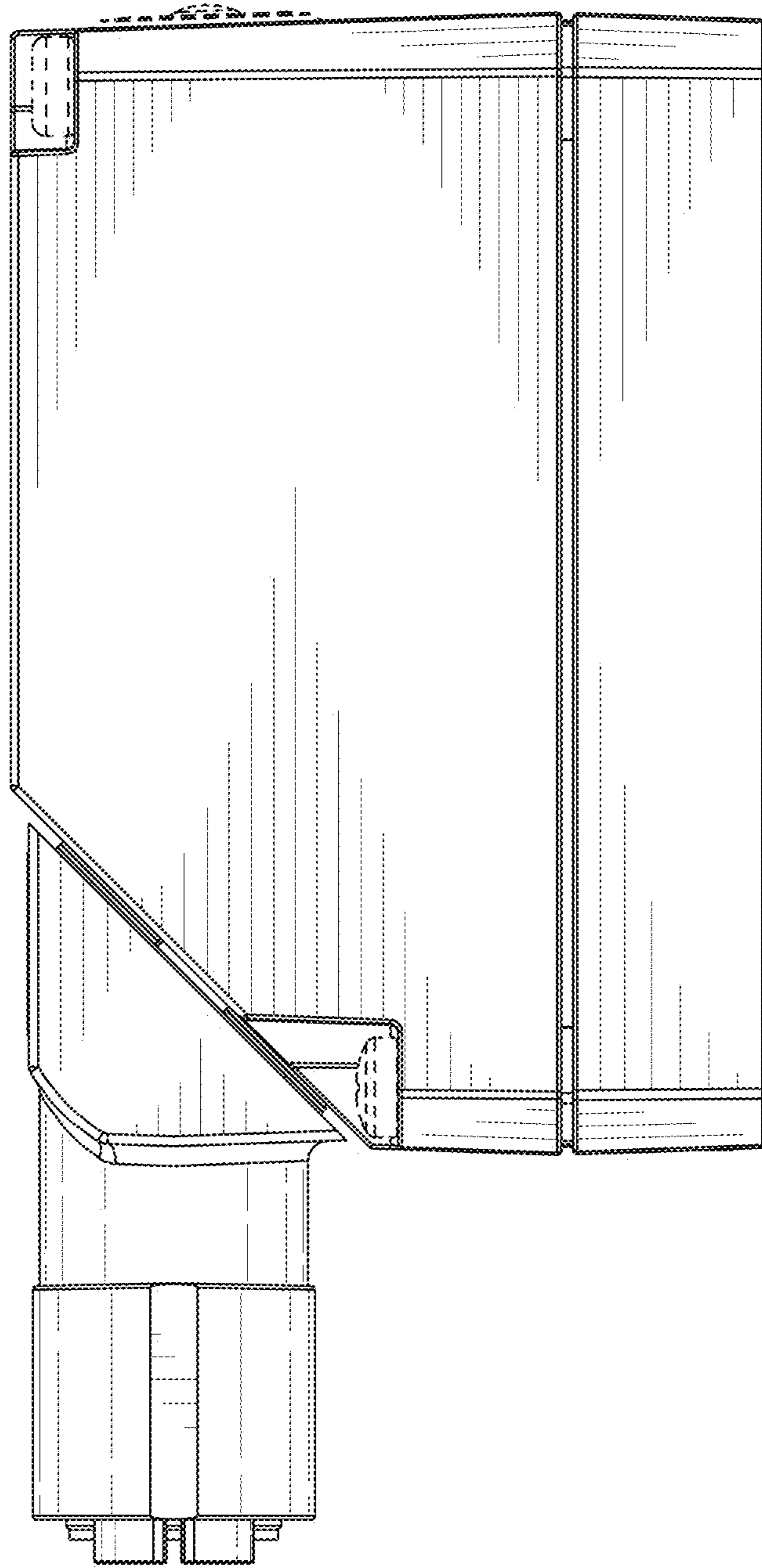


FIG. 14

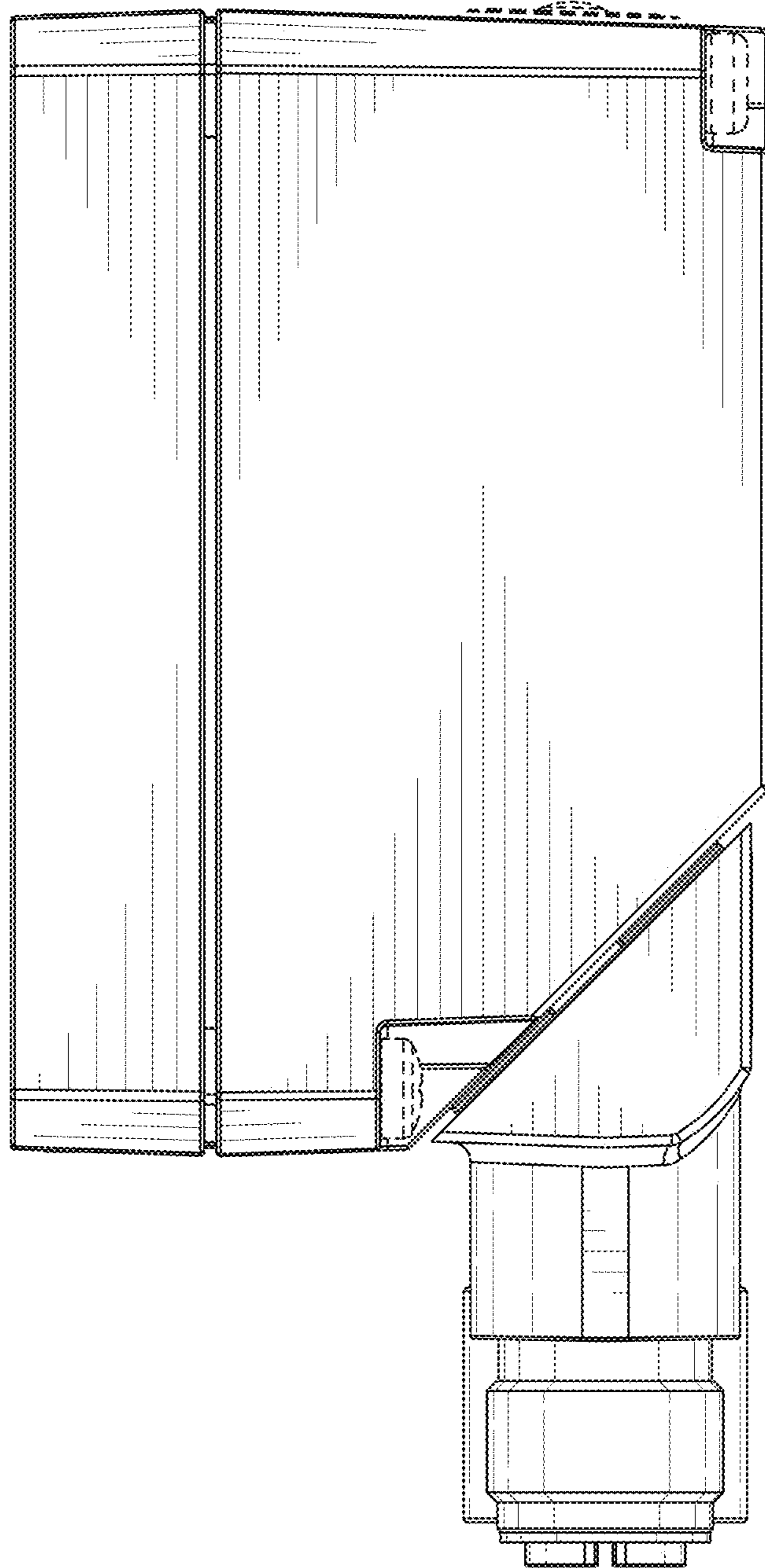


FIG. 15



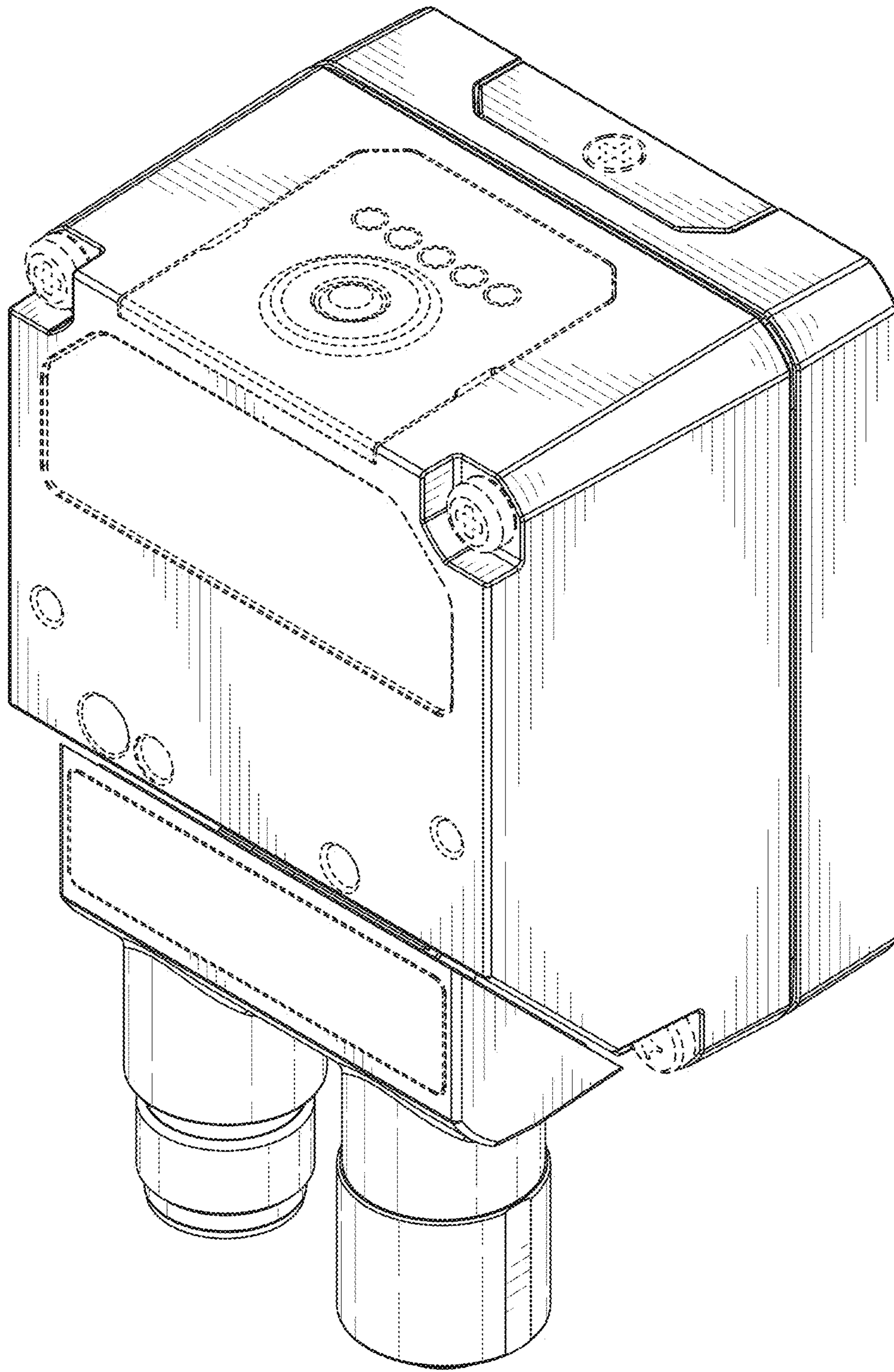


FIG. 16