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(12) **United States Design Patent** (10) **Patent No.:** **US D898,089 S**
Fretz et al. (45) **Date of Patent:** **** Oct. 6, 2020**

(54) **TRANSMISSION END HOUSING**
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D490,828 S * 6/2004 Lindsay D15/149
8,413,545 B1 * 4/2013 Reid F16H 57/0452
74/606 R
D795,296 S * 8/2017 Luft D15/5
D800,196 S * 10/2017 Hannet D15/149
D800,197 S * 10/2017 Hannet D15/149
D802,640 S * 11/2017 Hannet D15/149
D866,625 S * 11/2019 Born D15/149
D881,960 S * 4/2020 Haines D15/148
D886,878 S * 6/2020 Jumper D15/148
2005/0097984 A1 * 5/2005 Davis F16H 57/033
74/606 R
2007/0107545 A1 * 5/2007 Seipold F16D 13/683
74/606 R

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(Continued)

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

Primary Examiner — Patricia A Palasik
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(21) Appl. No.: **29/693,474**

(57) **CLAIM**

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The ornamental design for a transmission end housing, as shown and described herein.

(51) **LOC (12) Cl.** **15-09**

(52) **U.S. Cl.**
USPC **D15/149**

DESCRIPTION

(58) **Field of Classification Search**
USPC D15/5, 7, 9, 9.1, 148, 149
CPC B25D 17/00; B25D 2250/065; B25D 2250/121; B25F 5/02; F16D 2300/26; F16H 57/02; F16H 63/3026; F16H 2057/087; F16H 2057/02047
See application file for complete search history.

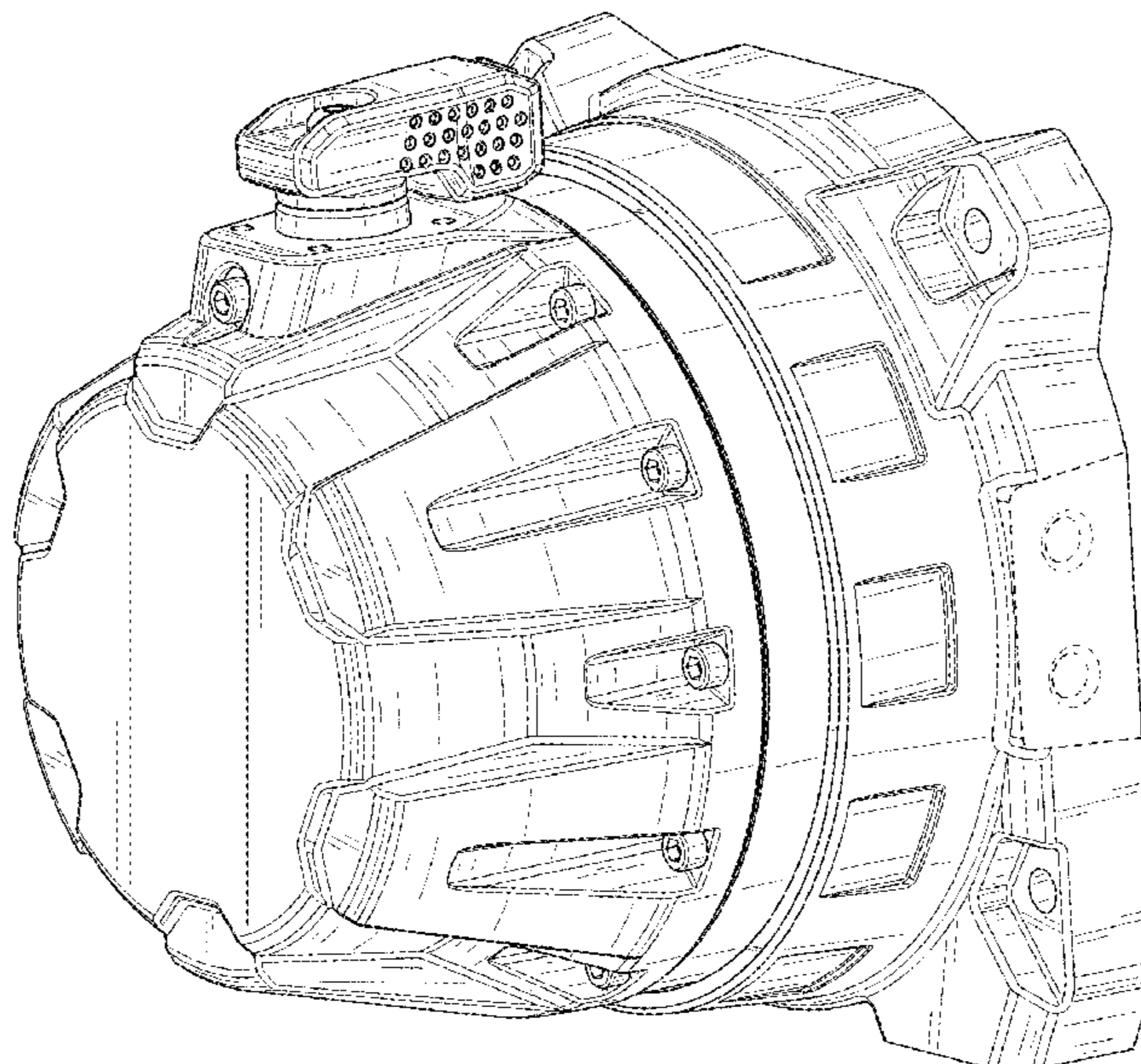
FIG. 1 illustrates a perspective view of a transmission end housing embodying the invention.
FIG. 2 illustrates a front view of the transmission end housing shown in FIG. 1.
FIG. 3 illustrates a rear view of the transmission end housing shown in FIG. 1.
FIG. 4 illustrates a left side view of the transmission end housing shown in FIG. 1.
FIG. 5 illustrates a right side view of the transmission end housing shown in FIG. 1.
FIG. 6 illustrates a top view of the transmission end housing shown in FIG. 1; and,
FIG. 7 illustrates a bottom view of the transmission end housing shown in FIG. 1.
In some embodiments, elements shown in phantom lines do not form any part of the claimed design.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D214,758 S * 7/1969 Fawick D15/148
D215,183 S * 9/1969 Mayland D15/149
D245,610 S * 8/1977 Jones D15/149
D253,111 S * 10/1979 Hauser D15/149
D264,724 S * 6/1982 Borgersen D15/149
D377,657 S * 1/1997 Winters, Sr. 74/606 R
D403,004 S * 12/1998 Kaye D15/149
D481,745 S * 11/2003 Yasui D15/149

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

2007/0155572 A1* 7/2007 Sugano F16H 57/037
475/205
2012/0157258 A1* 6/2012 Meyer F16H 63/3026
475/269
2013/0139643 A1* 6/2013 Reid F16H 57/0452
74/606 R
2013/0315707 A1* 11/2013 Spanel F04D 25/163
415/67
2013/0333908 A1* 12/2013 Lennartz B25F 5/02
173/90
2018/0306305 A1* 10/2018 Braun F16H 57/021

* cited by examiner

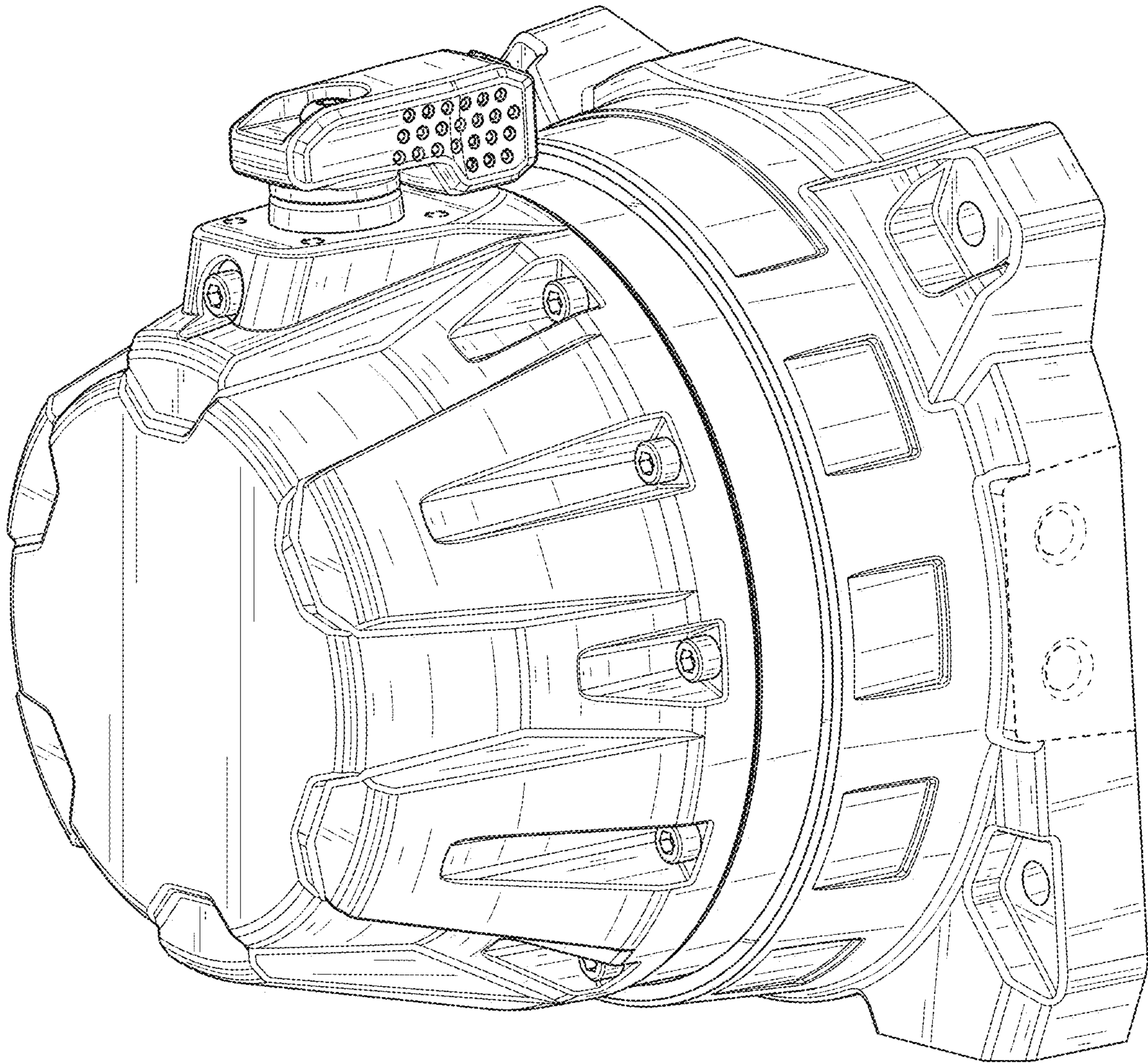


FIG. 1

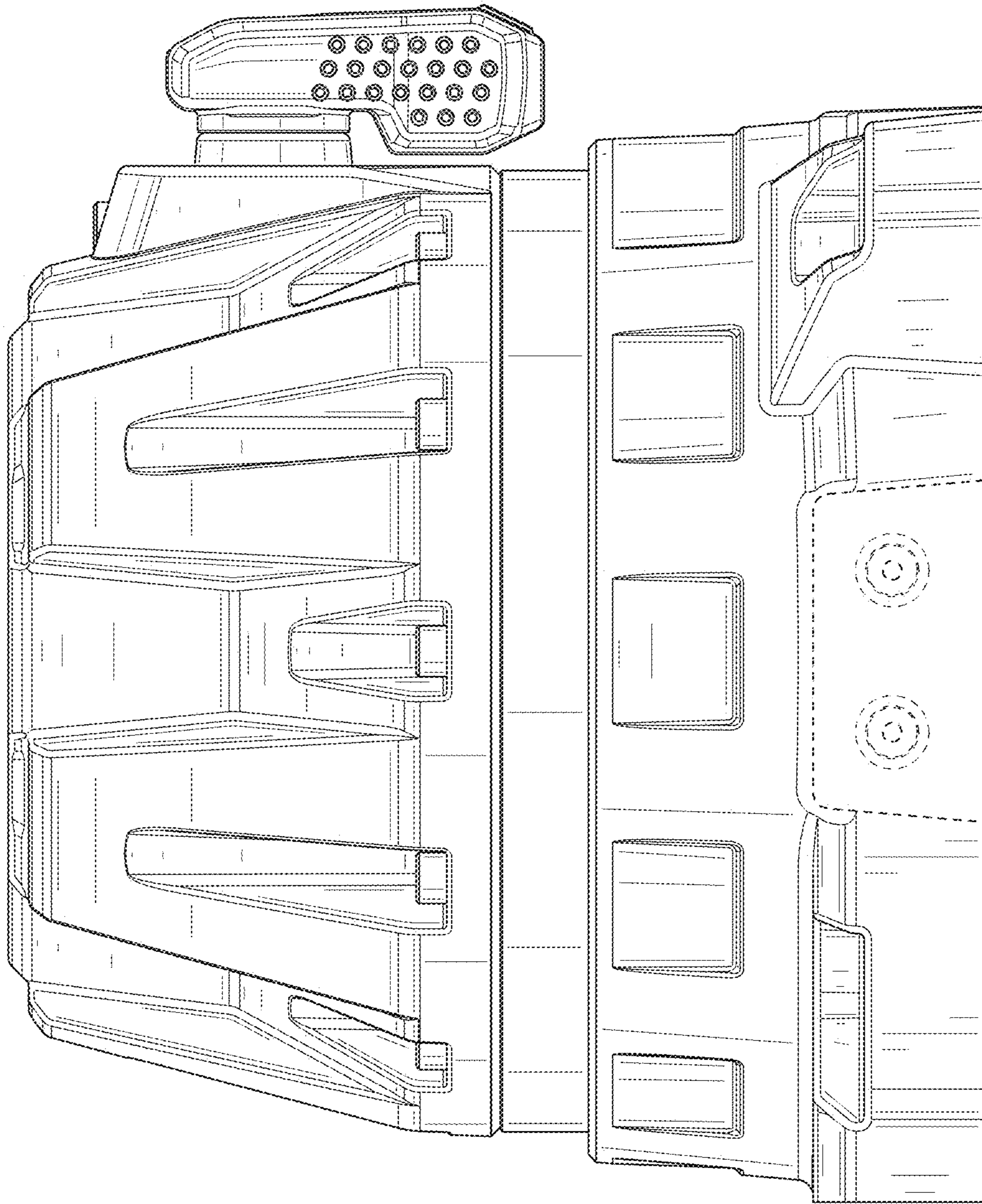


FIG. 2

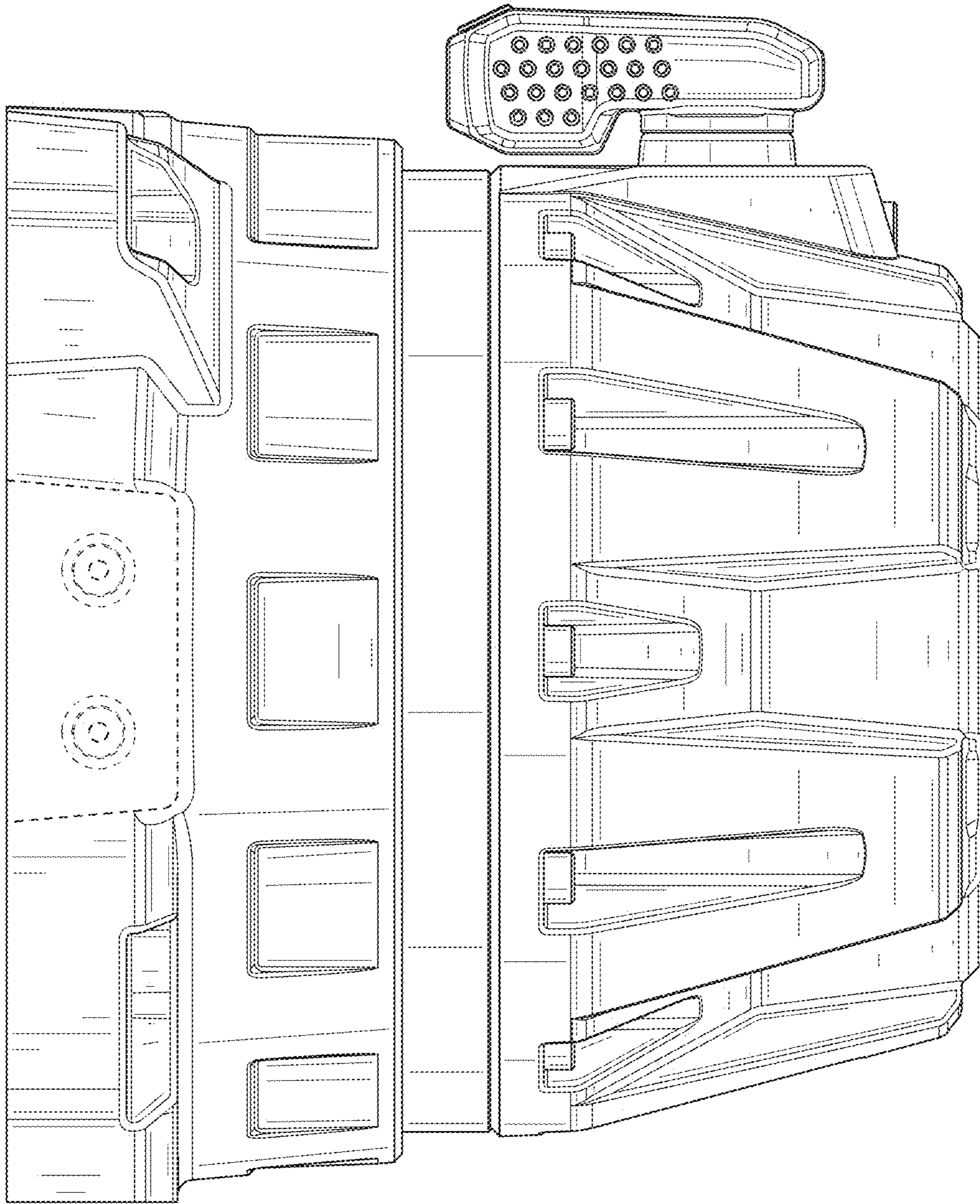


FIG. 3

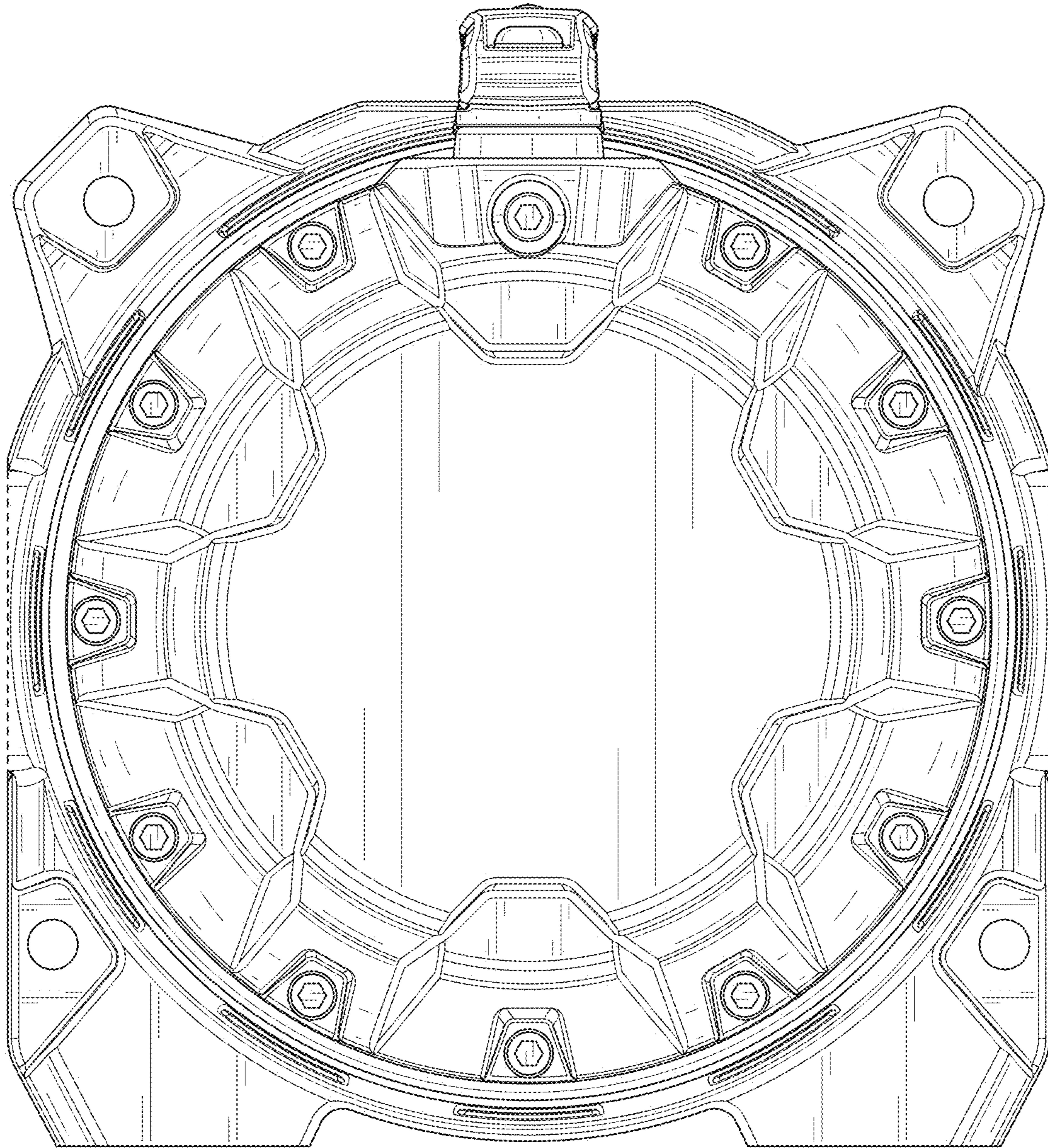


FIG. 4

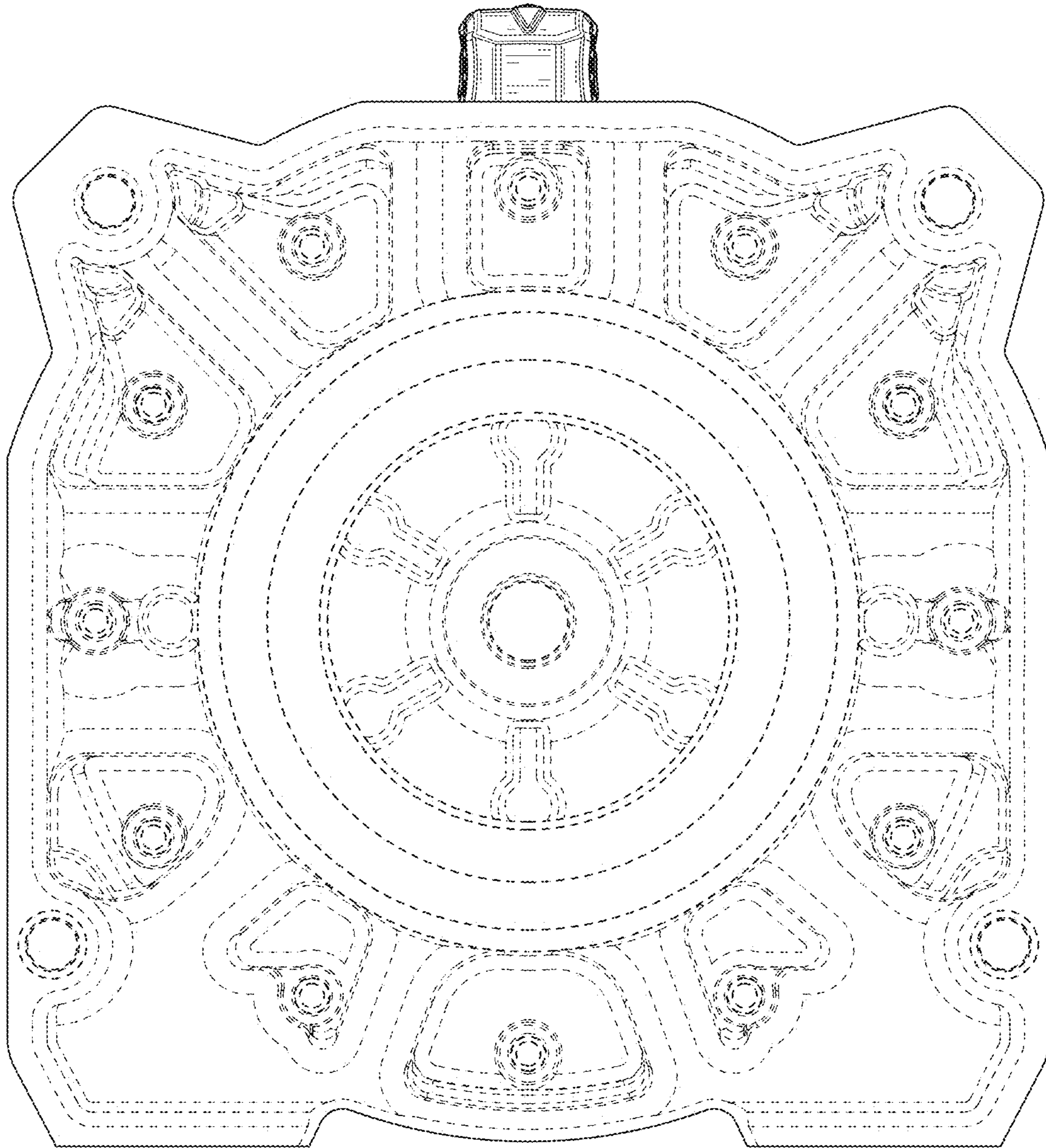


FIG. 5

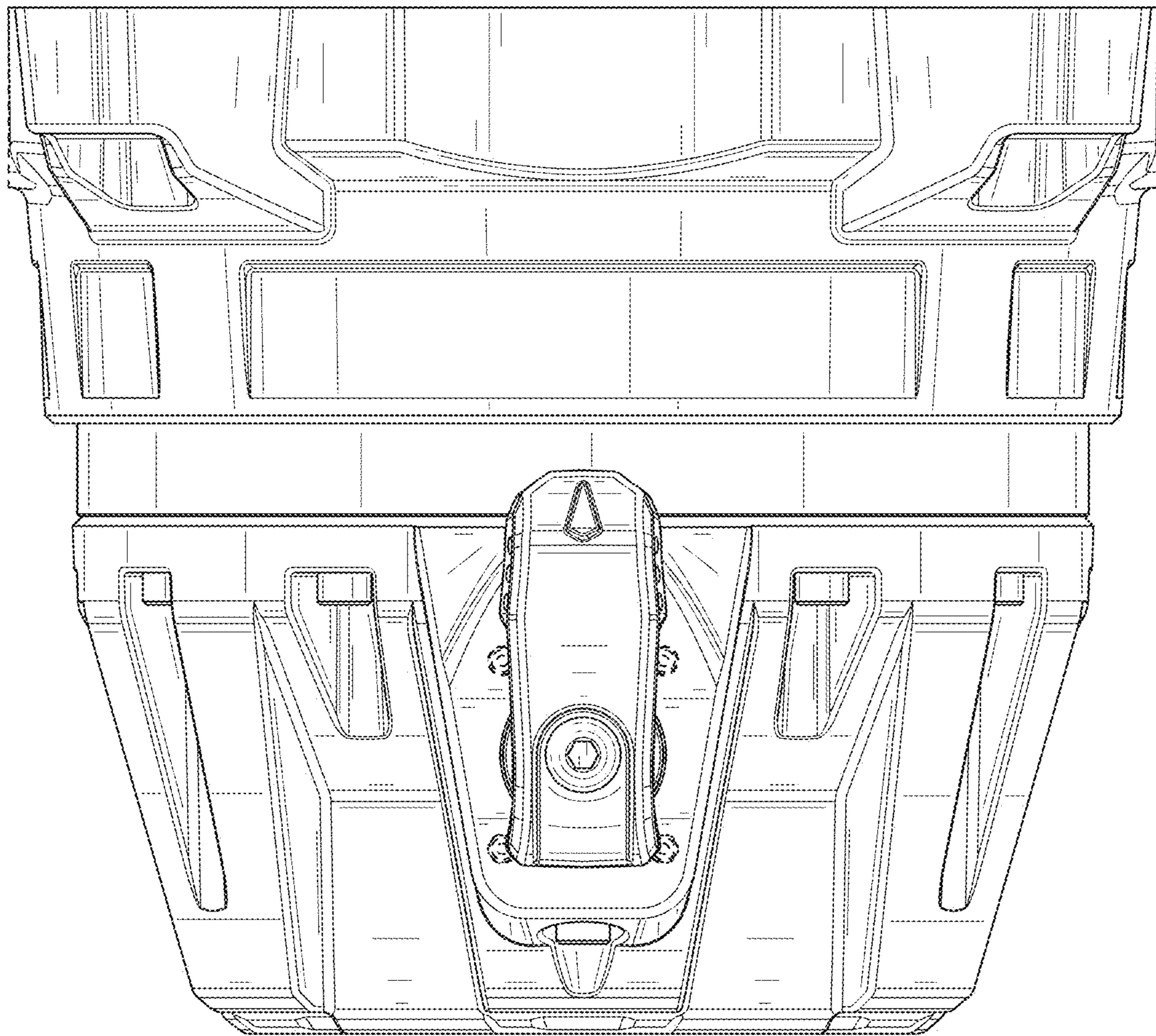


FIG. 6

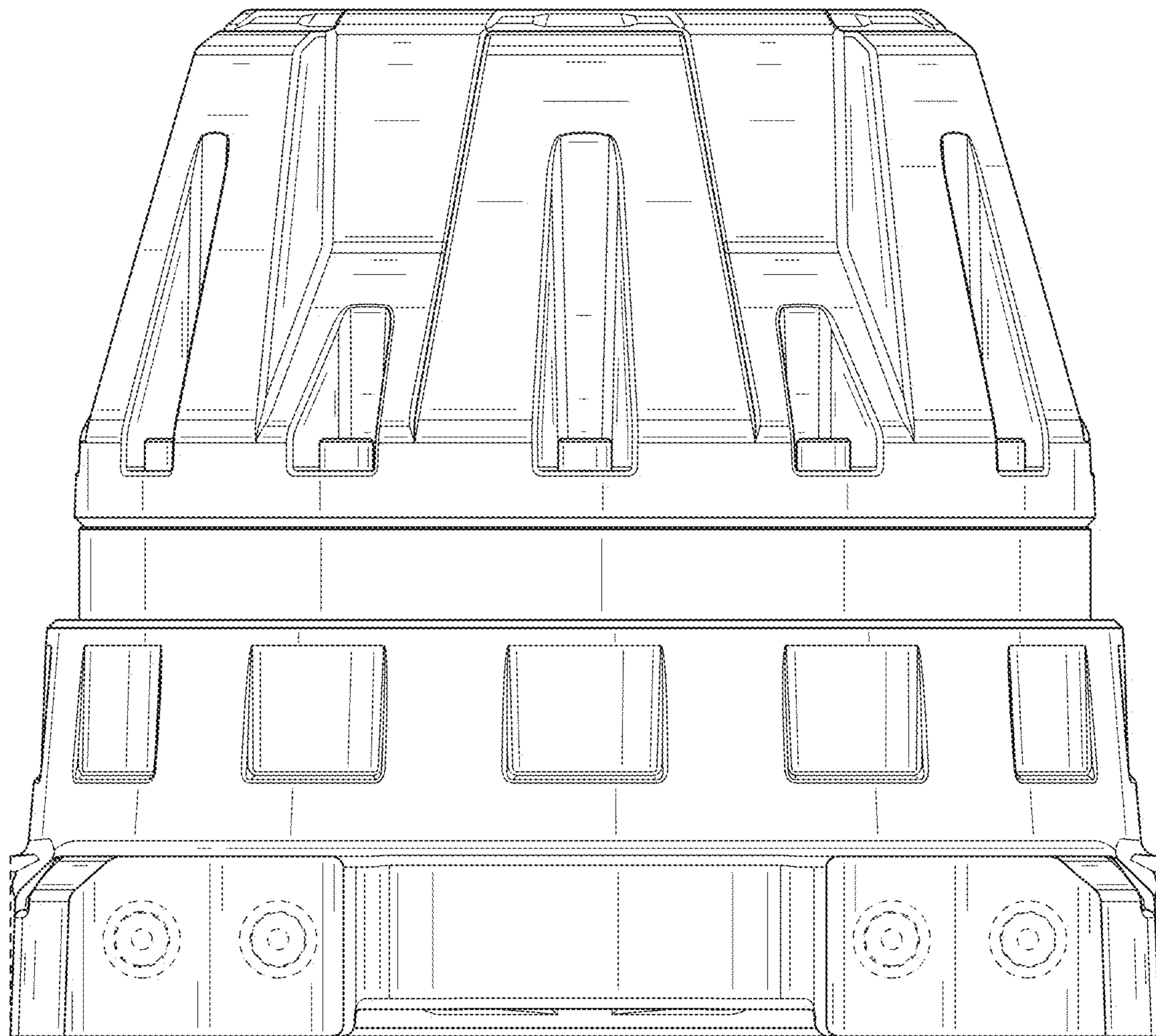


FIG. 7