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(12) **United States Design Patent** (10) **Patent No.:** **US D869,259 S**  
**Hulstein et al.** (45) **Date of Patent:** **\*\* Dec. 10, 2019**

- (54) **VALVE COMPONENT**
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- (\*\*) Term: **15 Years**
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- (52) **U.S. Cl.**  
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- (58) **Field of Classification Search**  
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D23/250-254  
CPC .... F16F 9/34; F16F 9/512; F16F 9/465; F16F  
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9/446; F16F 2230/186; F16F 2238/04;  
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See application file for complete search history.

- 3,127,664 A 4/1964 Zurick
- 3,140,130 A 7/1964 Barr
- 3,225,420 A 12/1965 Sullivan, Jr.
- 3,499,201 A 3/1970 Roos
- 3,546,762 A 12/1970 Martin
- 3,586,396 A 6/1971 Barr

(Continued)

**FOREIGN PATENT DOCUMENTS**

- JP 3821463 B2 9/2006
- WO 2016088536 A1 6/2016

(Continued)

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(57) **CLAIM**

The ornamental design for a valve component, as shown and described.

**DESCRIPTION**

FIG. 1 is a front isometric view of a valve component; FIG. 2 is a front view thereof; FIG. 3 is a rear view thereof; FIG. 4 is right side view thereof; FIG. 5 is a left side view thereof; FIG. 6 is a top view thereof; FIG. 7 is a bottom view thereof; and, FIG. 8 is a cross sectional view taken along line 8-8 shown in FIG. 2.

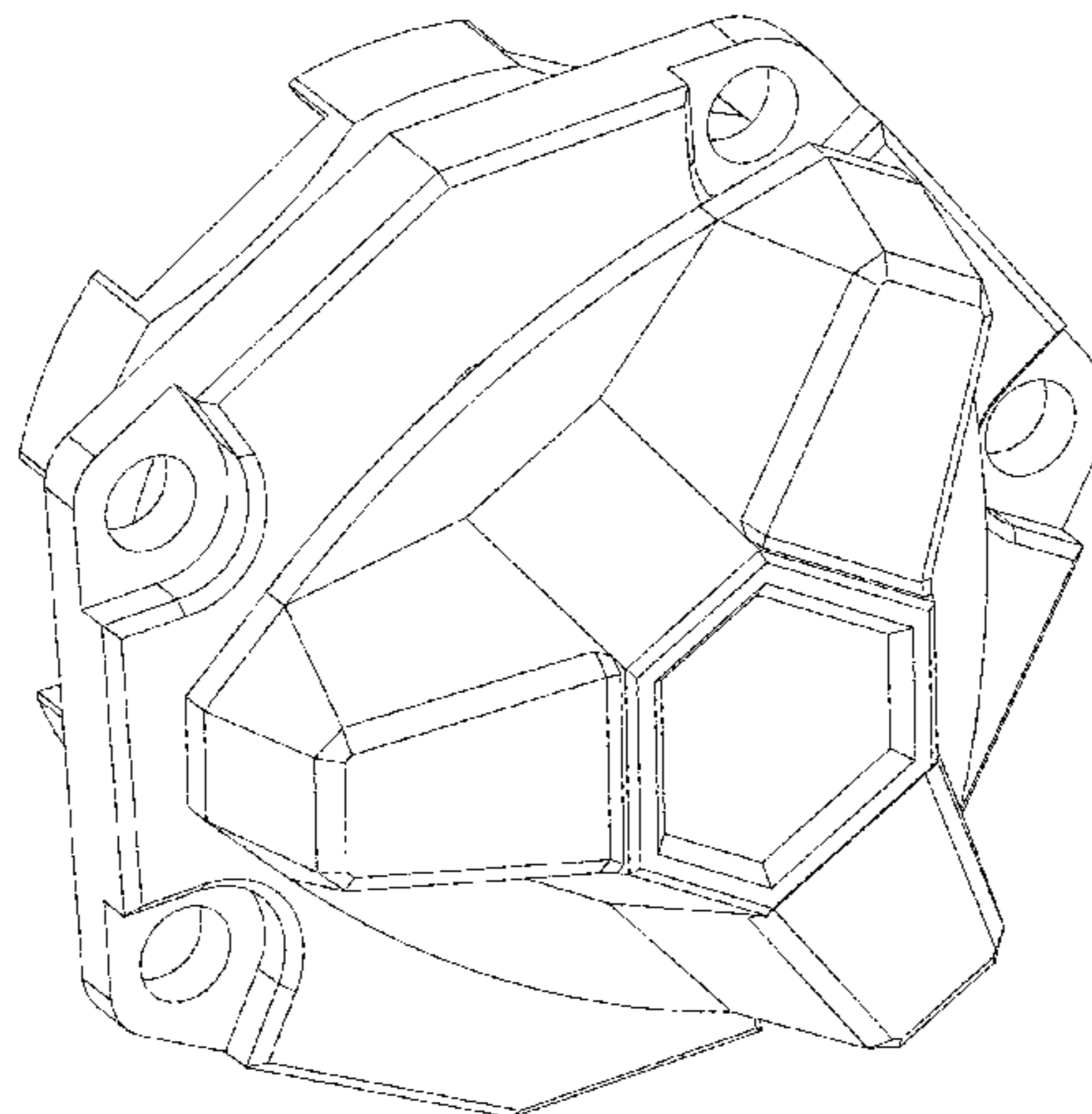
The short dash-long dash broken lines shown in FIG. 2 represents the plane upon which the cross sectional view is taken and forms no part of the claimed design. The evenly spaced broken lines in the drawings represent portions of the valve component that form no part of the claimed design. The dot dash broken lines in the drawings represent a boundary of the claimed design. A non-limiting example application of the valve component is for use in a hydraulic valve of a shock absorber.

**1 Claim, 6 Drawing Sheets**

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

- 1,675,728 A 7/1928 Pierce, Jr.
- 1,903,377 A 4/1933 Moorhouse
- 2,624,645 A 1/1953 Virtue
- 2,648,578 A 8/1953 Stearns et al.
- 2,672,952 A 3/1954 Smith
- D175,538 S \* 9/1955 Dawson ..... D23/250
- 2,758,365 A 8/1956 Ricefield
- 2,767,034 A 10/1956 McCloskey
- D189,534 S \* 1/1961 Boldt ..... D8/311
- D191,191 S \* 8/1961 Kawolics ..... D23/250



(56)

References Cited

U.S. PATENT DOCUMENTS

3,592,519 A 7/1971 Martin  
 3,623,781 A 11/1971 Roos  
 3,666,331 A 5/1972 Curtis et al.  
 3,709,573 A 1/1973 Orkin et al.  
 3,834,772 A 9/1974 Bowen  
 3,871,093 A 3/1975 Ladin  
 3,884,406 A 5/1975 Bowen  
 3,909,084 A 9/1975 Snidar et al.  
 3,988,818 A 11/1976 Allison  
 3,999,872 A 12/1976 Allison  
 4,028,784 A 6/1977 Allison  
 4,057,355 A 11/1977 Allison  
 4,059,361 A 11/1977 Allison  
 4,240,682 A 12/1980 Benson  
 4,298,102 A 11/1981 Nishikawa et al.  
 4,412,372 A 11/1983 Olschewski et al.  
 4,541,157 A 9/1985 Tsushima et al.  
 4,643,595 A 2/1987 Weavers  
 4,684,267 A 8/1987 Fetouh  
 4,732,244 A 3/1988 Verkuynen  
 4,821,386 A 4/1989 Simon et al.  
 4,860,419 A 8/1989 Hekman  
 4,884,900 A 12/1989 Pirault et al.  
 5,208,979 A 5/1993 Schmidt  
 5,423,615 A 6/1995 Hara et al.  
 5,460,355 A 10/1995 Danek  
 5,536,089 A 7/1996 Weber et al.  
 5,551,782 A 9/1996 Arnhold et al.  
 5,711,074 A 1/1998 Harimoto et al.  
 5,733,049 A 3/1998 Shimmell  
 5,735,048 A 4/1998 Peters  
 5,775,817 A 7/1998 Gottemoller et al.  
 6,105,740 A 8/2000 Marzocchi et al.  
 6,146,471 A 11/2000 Hartl et al.  
 6,217,222 B1 4/2001 Mattson et al.  
 6,287,011 B1 9/2001 Hartl et al.  
 6,609,299 B2 8/2003 Adachi  
 6,659,241 B2 12/2003 Sendrea  
 6,961,997 B2 11/2005 Kubota et al.  
 7,484,603 B2 2/2009 Fox  
 7,743,896 B2 6/2010 Vanhees et al.  
 7,766,138 B2 8/2010 Sintorn  
 D628,679 S \* 12/2010 Holmgren ..... D23/252  
 7,946,163 B2 5/2011 Gartner  
 D644,085 S \* 8/2011 Jungen ..... D8/307  
 8,251,590 B2 8/2012 Gibby et al.  
 D670,307 S \* 11/2012 Shimozaki ..... D14/483  
 8,403,115 B2 3/2013 Gartner  
 8,561,714 B2 10/2013 Storm et al.

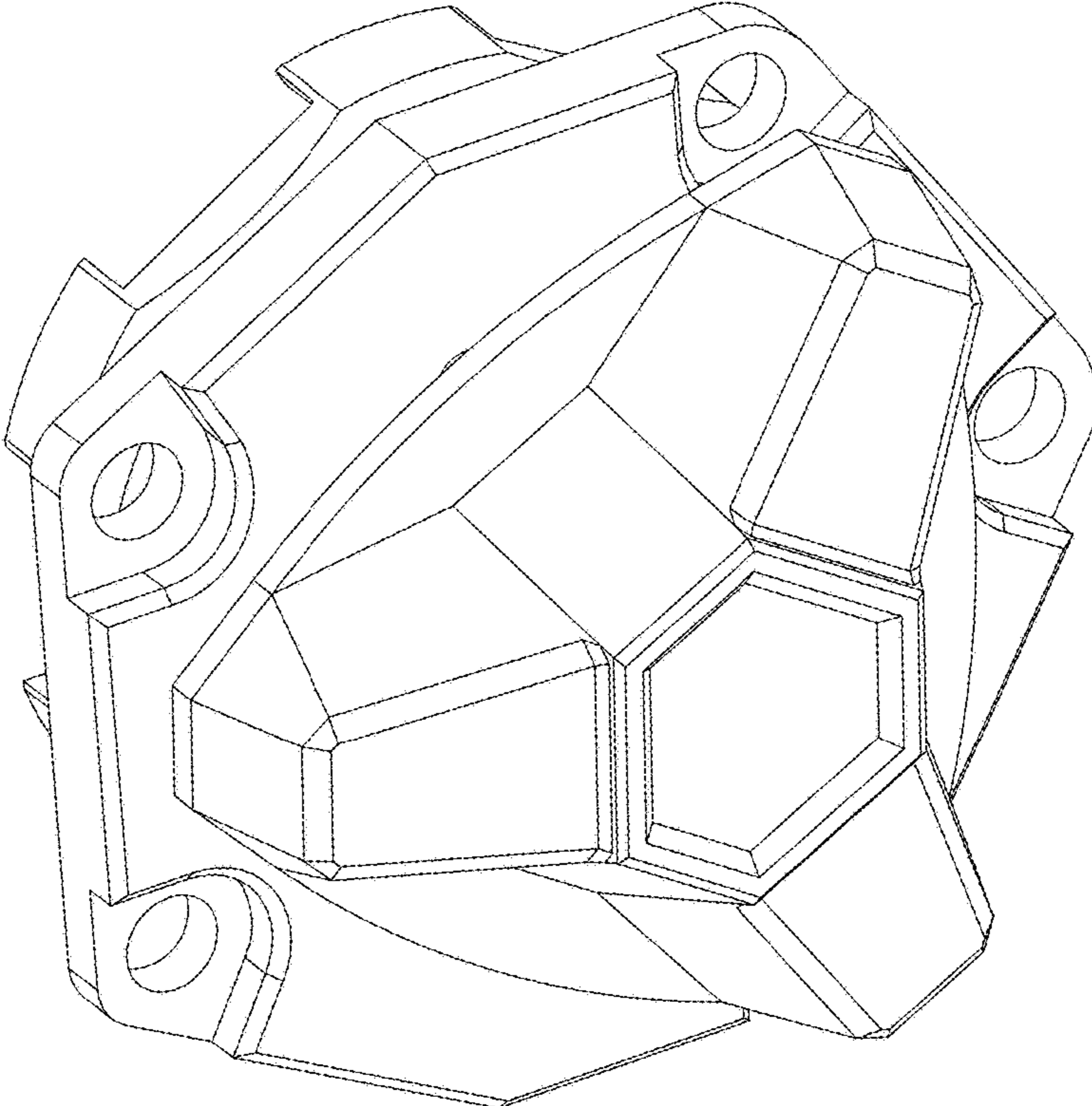
8,695,765 B2 4/2014 Danek et al.  
 8,721,184 B2 5/2014 Voisine et al.  
 8,770,594 B2 7/2014 Tominaga et al.  
 8,807,302 B2 8/2014 Nygren et al.  
 8,819,939 B2 9/2014 Pohlman et al.  
 8,838,335 B2 9/2014 Galasso et al.  
 D720,198 S \* 12/2014 Sabbag ..... D8/307  
 8,925,933 B2 1/2015 Haugen  
 8,955,654 B2 2/2015 Nygren et al.  
 9,010,504 B2 4/2015 Janes  
 9,027,719 B2 5/2015 Ito  
 9,038,791 B2 5/2015 Marking  
 9,091,319 B2 7/2015 Ishii et al.  
 9,091,320 B1 7/2015 Smith et al.  
 9,103,401 B2 8/2015 Fox  
 D747,641 S \* 1/2016 Reynolds ..... D8/354  
 9,228,630 B2 1/2016 Coaplen  
 9,303,712 B2 4/2016 Cox  
 9,333,829 B2 5/2016 King et al.  
 9,341,226 B2 5/2016 Marking  
 D762,098 S \* 7/2016 Bertani ..... D8/307  
 9,447,835 B2 9/2016 Kim  
 9,528,565 B2 12/2016 Marking  
 9,695,900 B2 7/2017 Roessle et al.  
 D796,293 S \* 9/2017 Alliss ..... D8/310  
 D813,639 S \* 3/2018 Osanai ..... D8/307  
 2005/0145466 A1 \* 7/2005 Wang ..... H01H 19/11  
 200/11 R  
 2006/0104559 A1 5/2006 Wingett et al.  
 2007/0269150 A1 11/2007 Guilford  
 2009/0277166 A1 \* 11/2009 Walz ..... F02D 9/08  
 60/324  
 2012/0325046 A1 12/2012 Luchner et al.  
 2013/0084035 A1 4/2013 Williams et al.  
 2013/0228404 A1 9/2013 Marking  
 2015/0290991 A1 10/2015 Cox  
 2015/0375787 A1 \* 12/2015 Adachi ..... B60R 16/027  
 464/23  
 2016/0031285 A1 \* 2/2016 Tucker ..... F15B 13/0444  
 188/266.2  
 2016/0075204 A1 3/2016 Marking et al.  
 2016/0319897 A1 11/2016 Mochizuki et al.  
 2016/0363184 A1 12/2016 Noguchi et al.  
 2017/0167562 A1 6/2017 King et al.  
 2018/0119768 A1 \* 5/2018 Cox ..... F16F 9/3214  
 2018/0202576 A1 \* 7/2018 Mouton ..... F16K 31/60

FOREIGN PATENT DOCUMENTS

WO 2016088629 A1 6/2016  
 WO 2016151015 A1 9/2016

\* cited by examiner

FIG. 1



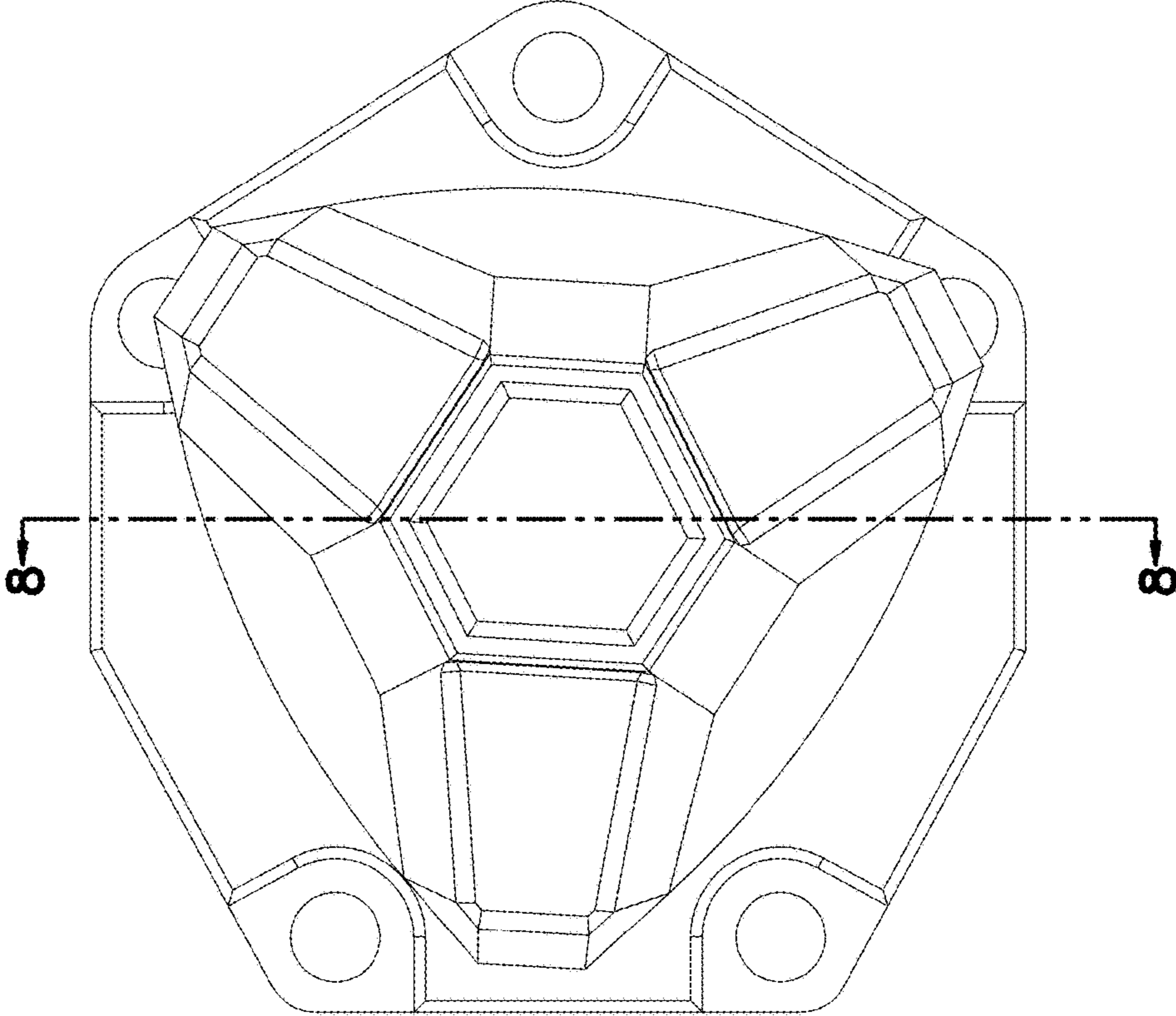


FIG. 2

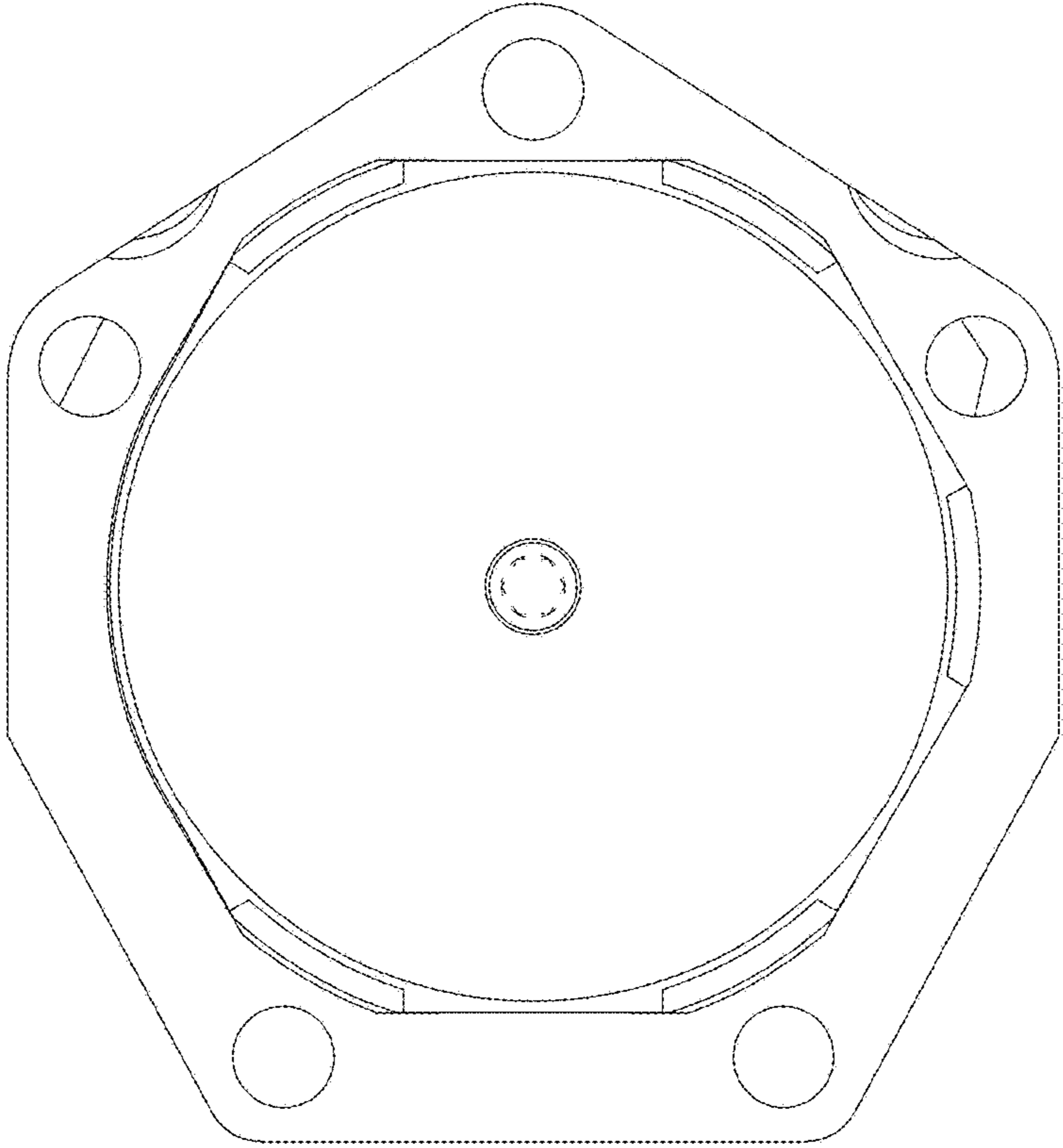


FIG. 3

FIG. 5

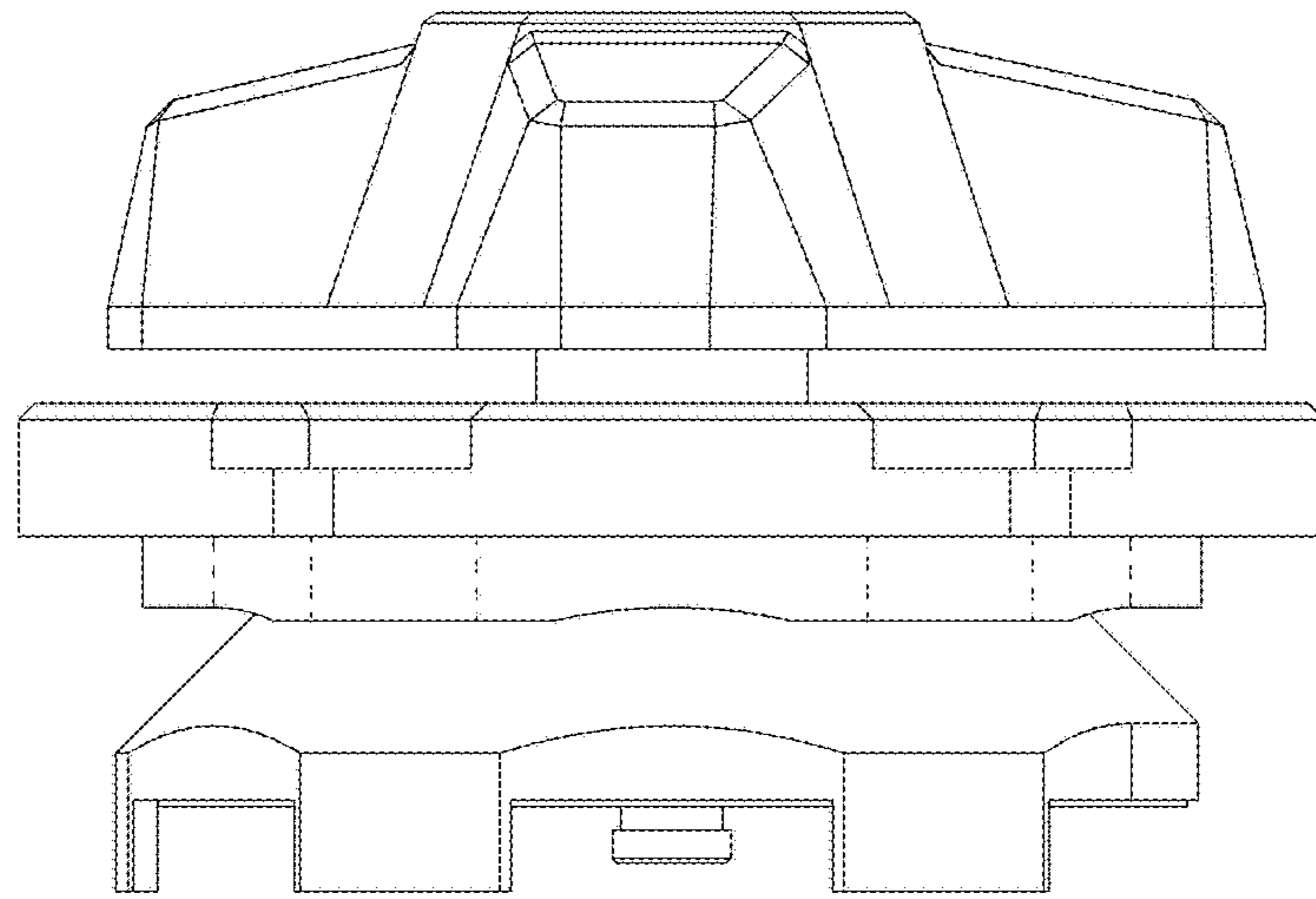


FIG. 4

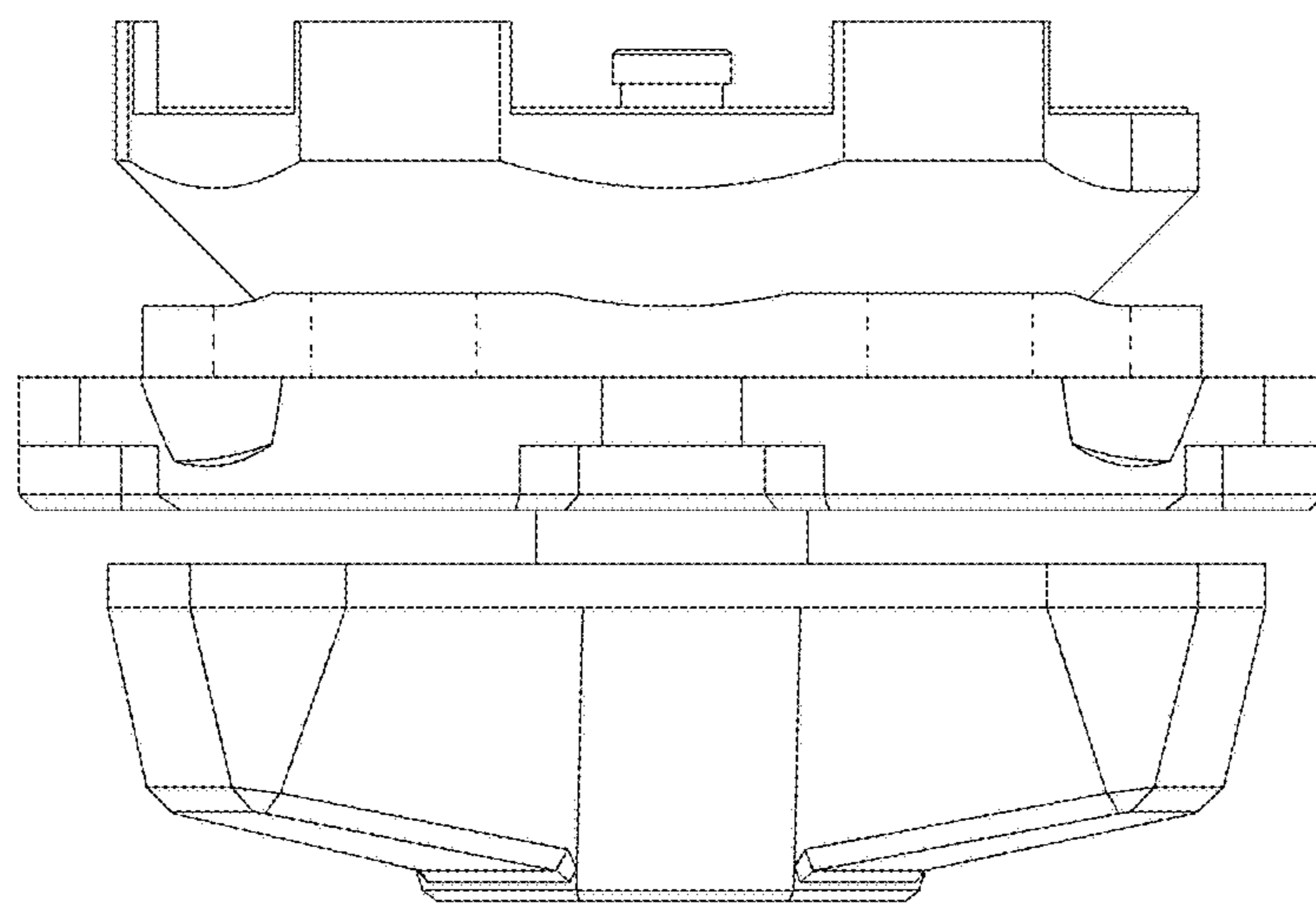


FIG. 6

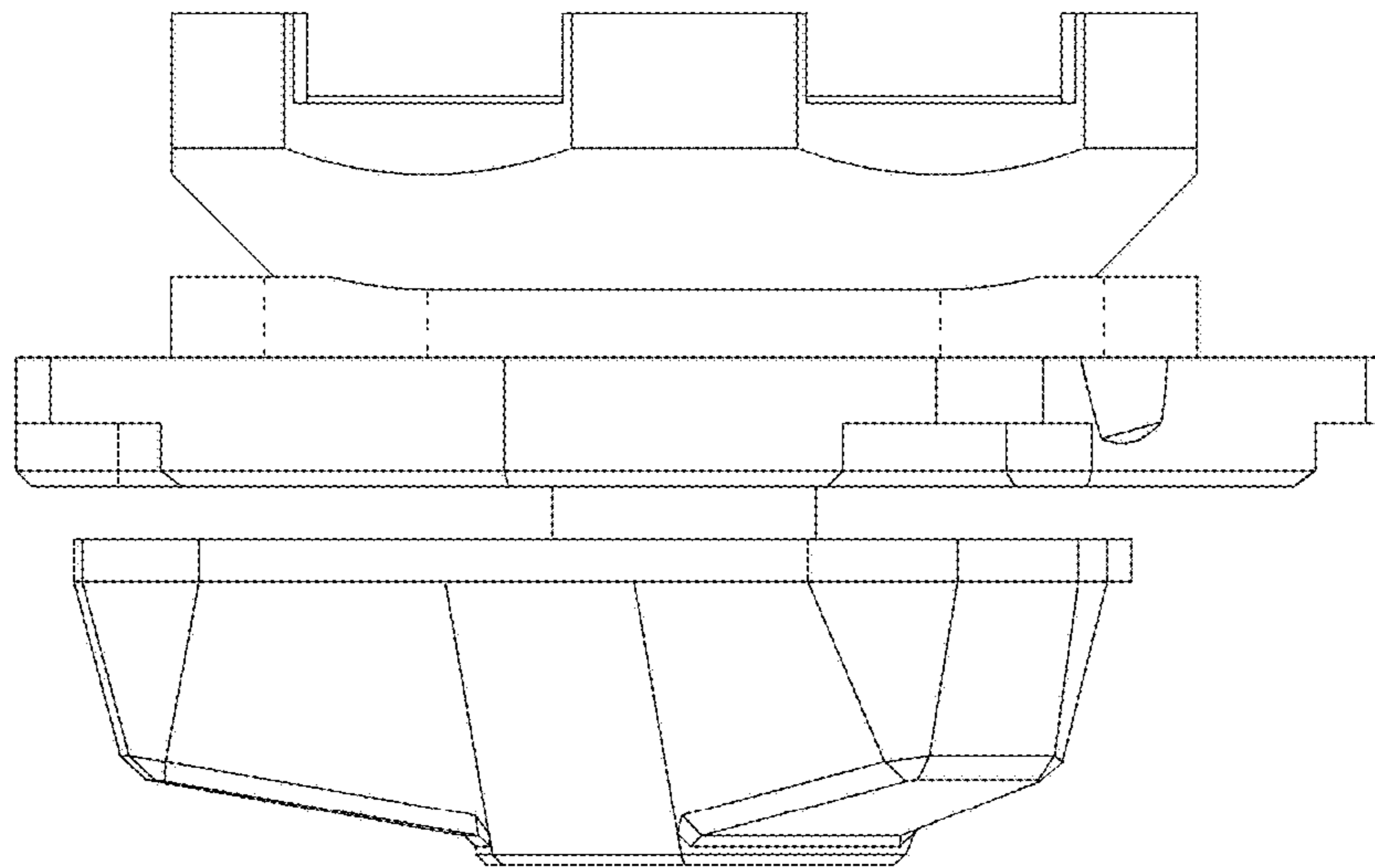


FIG. 7

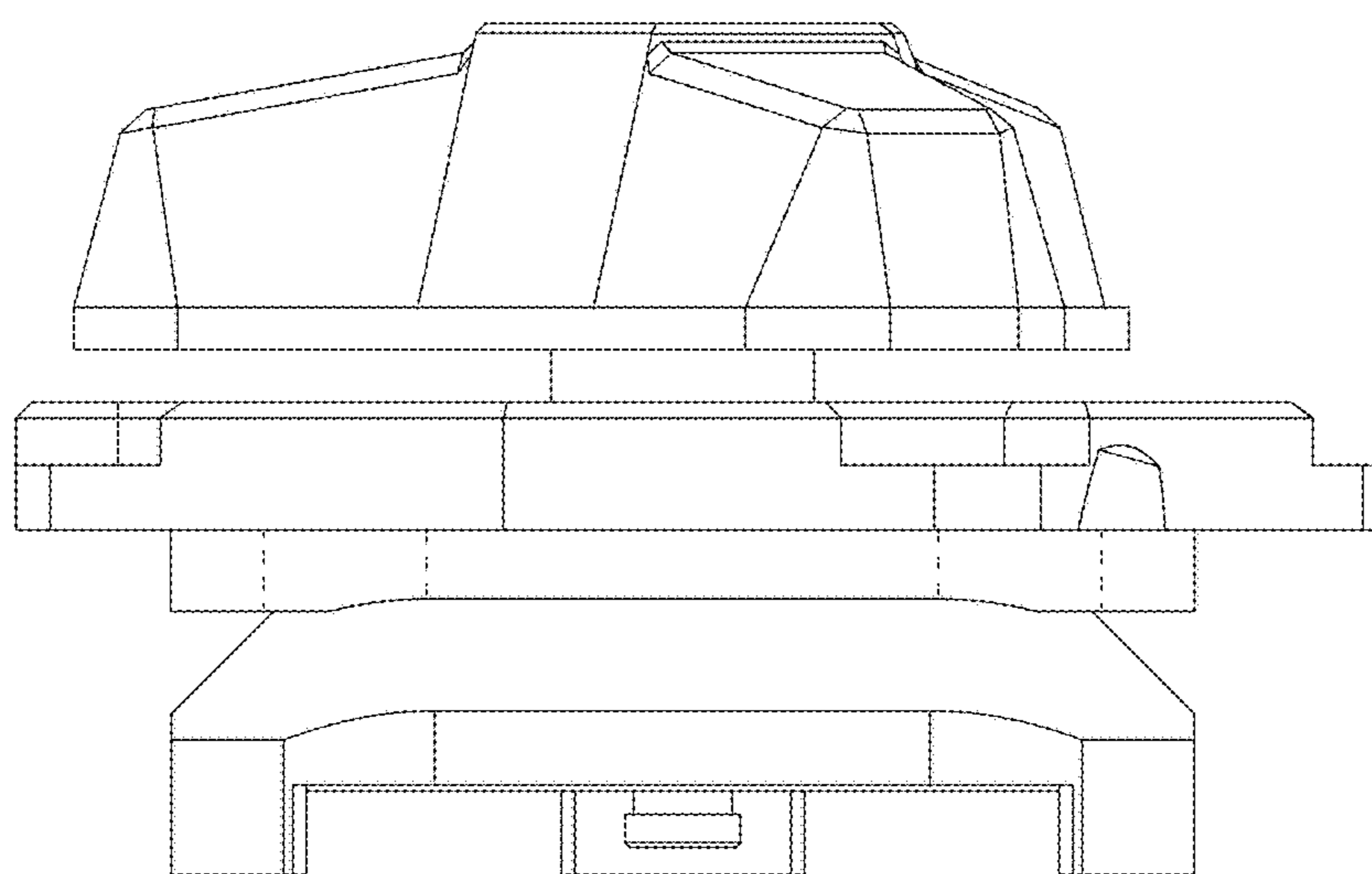


FIG. 8

