



US00D686650S

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

(10) **Patent No.:** **US D686,650 S**  
(45) **Date of Patent:** **\*\* Jul. 23, 2013**

(54) **HYDRAULIC AXIAL PISTON MACHINE**

(74) *Attorney, Agent, or Firm* — Maginot, Moore & Beck

(71) Applicants: **Martin Schultheiss**, Schwabisch Gmund (DE); **Christain Spielvogel**, Horb (DE)

(57) **CLAIM**

The ornamental design for a hydraulic axial piston machine, as shown and described.

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(73) Assignee: **Bosch Rexroth AG**, Lohr am Main (DE)

(\*\*) Term: **14 Years**

**DESCRIPTION**

(21) Appl. No.: **29/438,223**

FIG. 1 is a front left perspective view of a first embodiment of the hydraulic axial piston machine showing our new design; FIG. 2 is a front elevational view showing the design for the hydraulic axial piston machine of FIG. 1; FIG. 3 is a rear elevational view showing the design for the hydraulic axial piston machine of FIG. 1; FIG. 4 is a bottom plan view showing the design for the hydraulic axial piston machine of FIG. 1; FIG. 5 is a top plan view showing the design for the hydraulic axial piston machine of FIG. 1; FIG. 6 is a left side elevational view showing the design for the hydraulic axial piston machine of FIG. 1; and FIG. 7 is a right side elevational view showing the design for the hydraulic axial piston machine of FIG. 1. FIG. 8 is a front left perspective view of a second embodiment of the hydraulic axial piston machine showing our new design; FIG. 9 is a front elevational view showing the design for the hydraulic axial piston machine of FIG. 8; FIG. 10 is a rear elevational view showing the design for the hydraulic axial piston machine of FIG. 8; FIG. 11 is a bottom plan view showing the design for the hydraulic axial piston machine of FIG. 8; FIG. 12 is a top plan view showing the design for the hydraulic axial piston machine of FIG. 8; FIG. 13 is a left side elevational view showing the design for the hydraulic axial piston machine of FIG. 8; and, FIG. 14 is a right side elevational view showing the design for the hydraulic axial piston machine of FIG. 8. The broken lines in the drawings depict unclaimed environmental subject matter.

(22) Filed: **Nov. 27, 2012**

**Related U.S. Application Data**

(62) Division of application No. 29/371,087, filed on Oct. 15, 2010, now Pat. No. Des. 673,596.

(30) **Foreign Application Priority Data**

Apr. 16, 2010 (EM) ..... 001696717

(51) **LOC (9) Cl.** ..... **15-99**

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

(58) **Field of Classification Search**  
USPC ..... D15/1, 3, 5, 7-9, 148, 149; 91/476,  
91/499, 505; 92/12.2, 19, 20, 71; 417/212,  
417/218, 269, 319

See application file for complete search history.

(56) **References Cited**

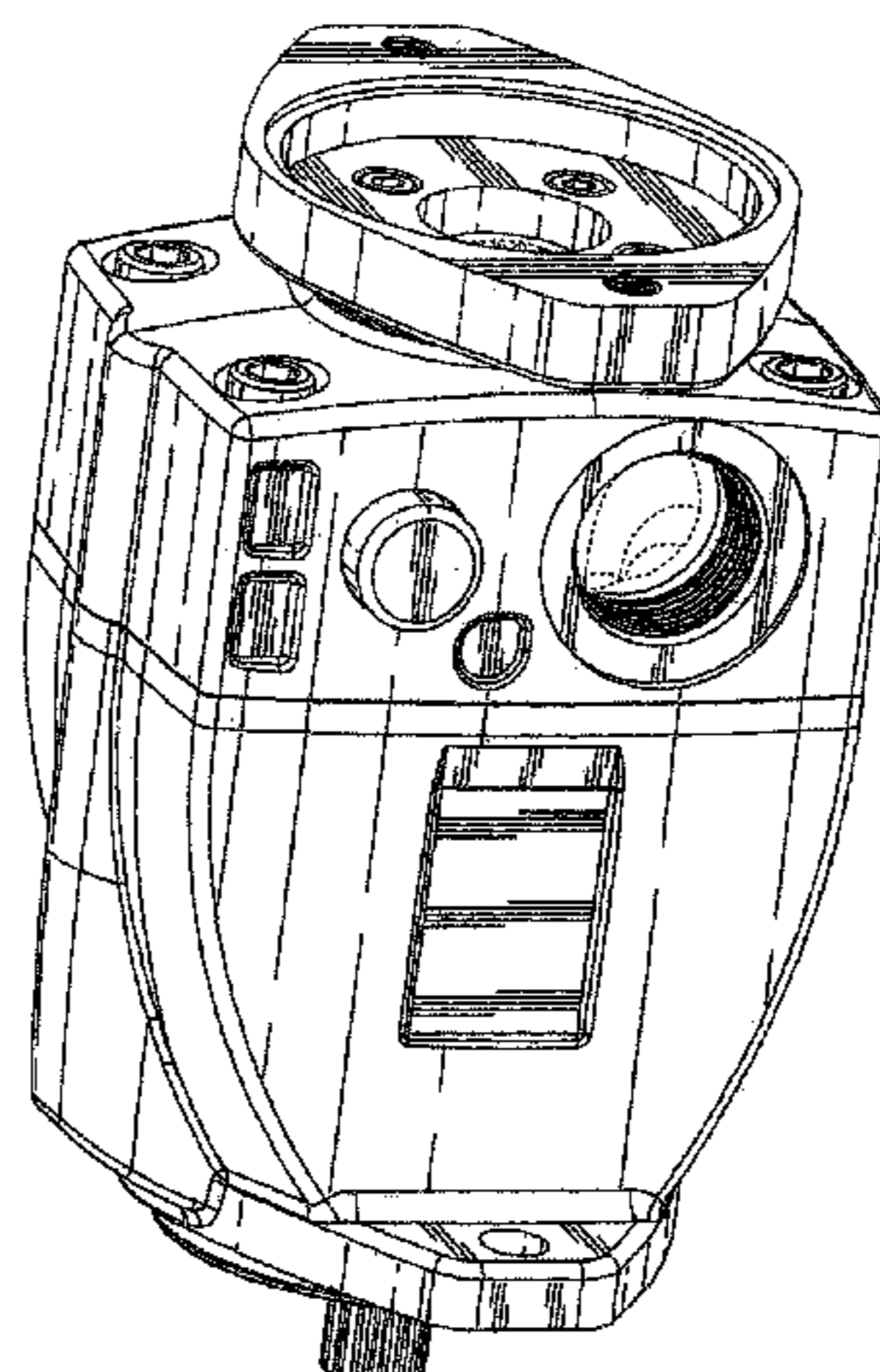
**U.S. PATENT DOCUMENTS**

|           |    |         |                  |
|-----------|----|---------|------------------|
| 6,405,634 | B1 | 6/2002  | Hansen           |
| 6,595,886 | B1 | 7/2003  | Forster          |
| 6,663,354 | B2 | 12/2003 | Forster          |
| 6,701,824 | B2 | 3/2004  | Forster          |
| D501,860  | S  | 2/2005  | Wanschura et al. |
| D502,717  | S  | 3/2005  | Wanschura et al. |
| D533,205  | S  | 12/2006 | Sinz             |

(Continued)

*Primary Examiner* — Patricia Palasik

**1 Claim, 14 Drawing Sheets**



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## U.S. PATENT DOCUMENTS

|                   |         |                 |               |                 |         |                   |
|-------------------|---------|-----------------|---------------|-----------------|---------|-------------------|
| D543,565 S        | 5/2007  | Kopecki         |               | 2006/0169072 A1 | 8/2006  | Beck              |
| 7,263,925 B1      | 9/2007  | Hansen et al.   |               | 2006/0201323 A1 | 9/2006  | Forster           |
| D553,654 S        | 10/2007 | Betz            |               | 2006/0269421 A1 | 11/2006 | Sakikawa et al.   |
| D613,770 S *      | 4/2010  | Kitamura et al. | ..... D15/7   | 2007/0186764 A1 | 8/2007  | Hansen et al.     |
| D674,828 S *      | 1/2013  | Andersson       | ..... D15/148 | 2010/0269687 A1 | 10/2010 | Krogh et al.      |
| 2004/0166986 A1 * | 8/2004  | Bayer et al.    | ..... 475/331 | 2011/0252958 A1 | 10/2011 | Spielvogel et al. |

\* cited by examiner

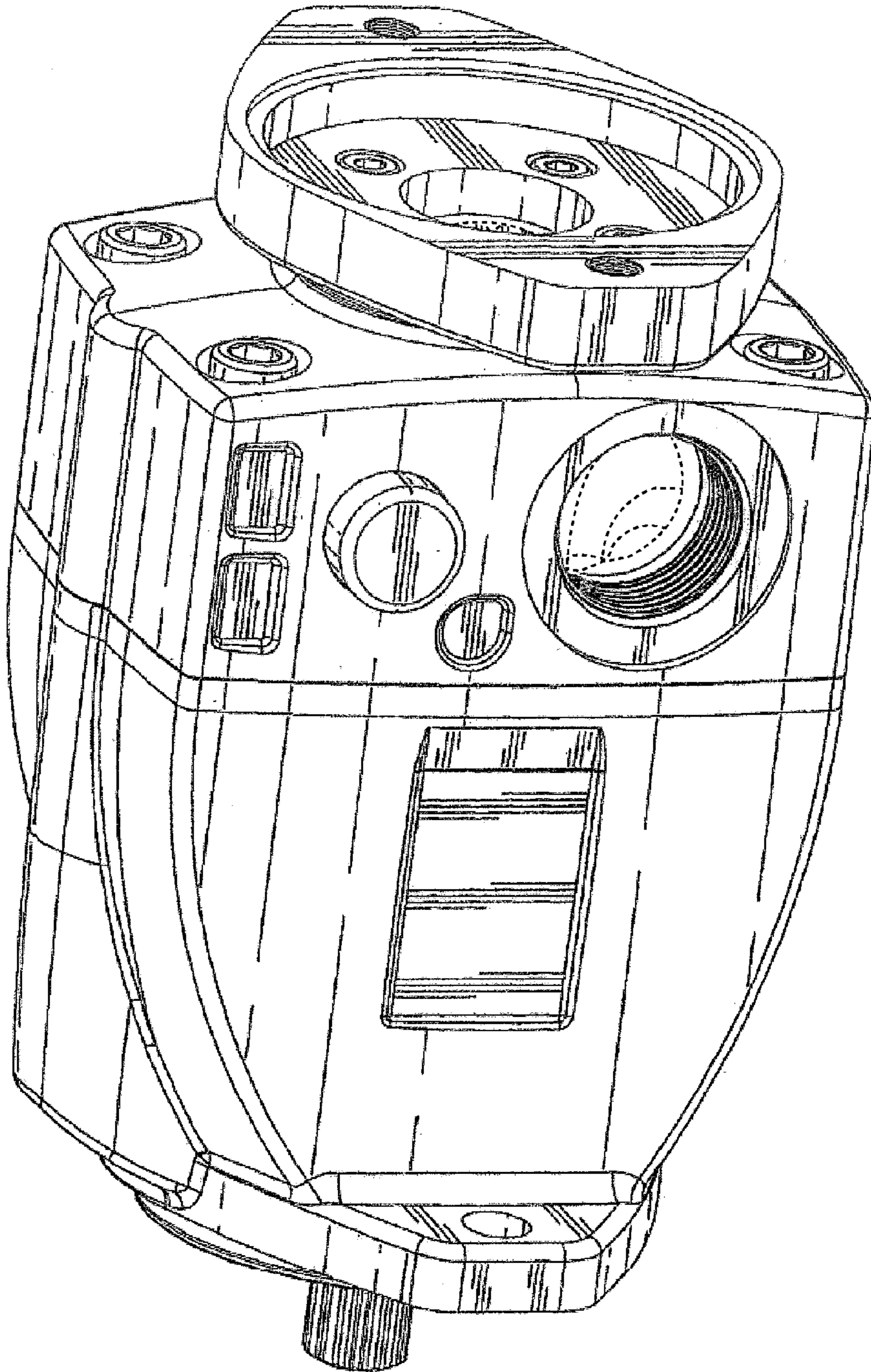


Figure 1

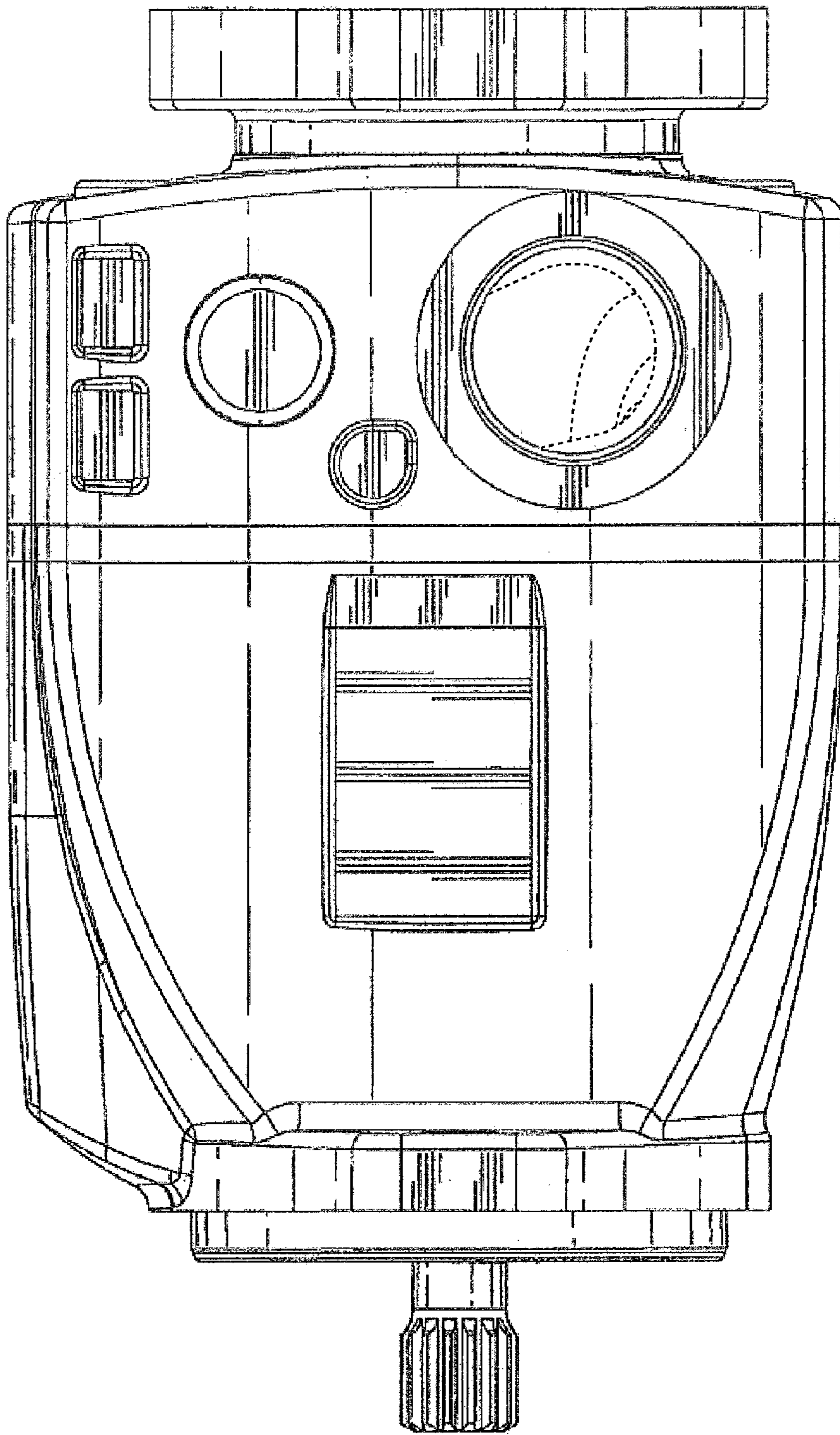


Figure 2

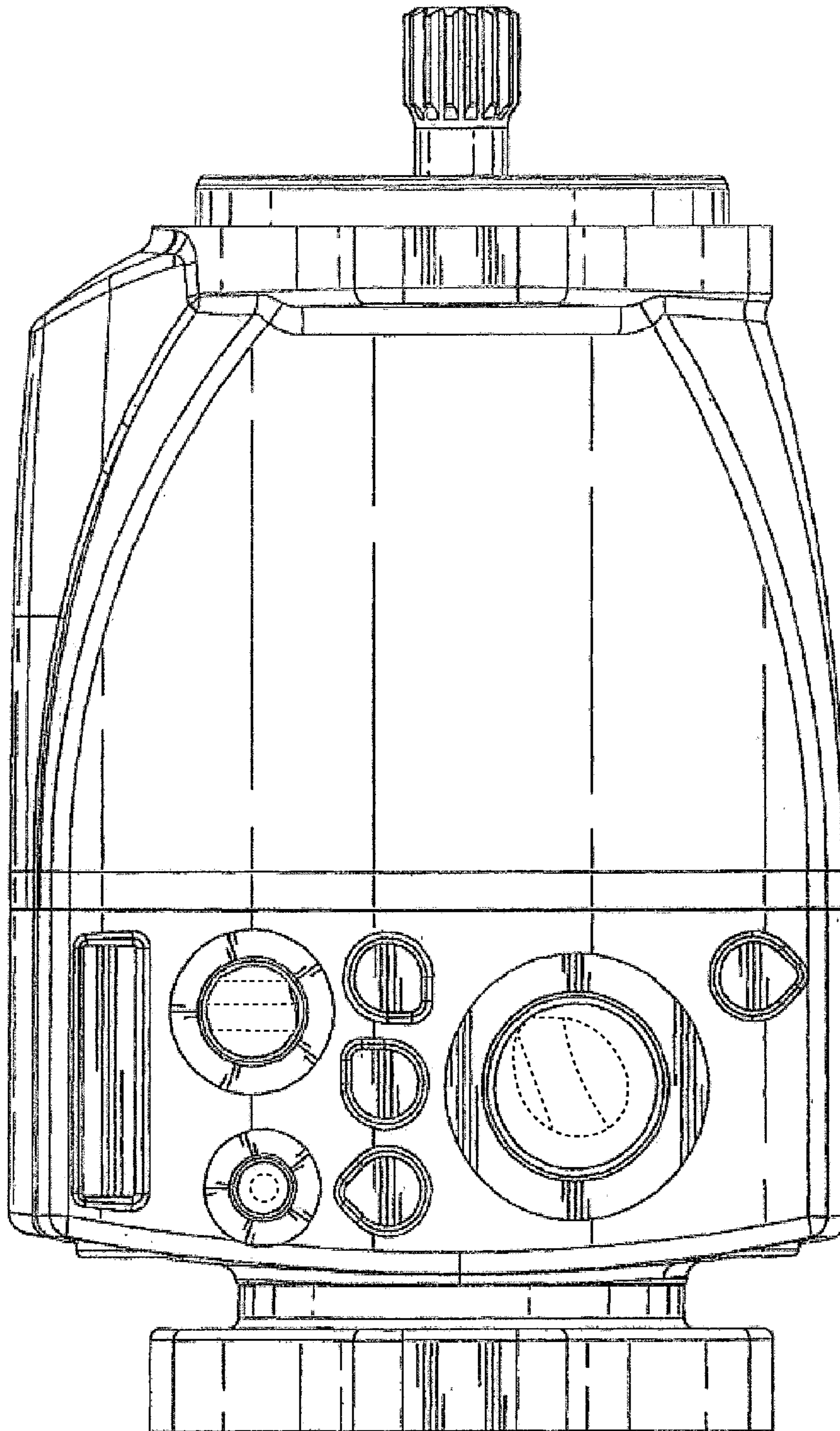


Figure 3

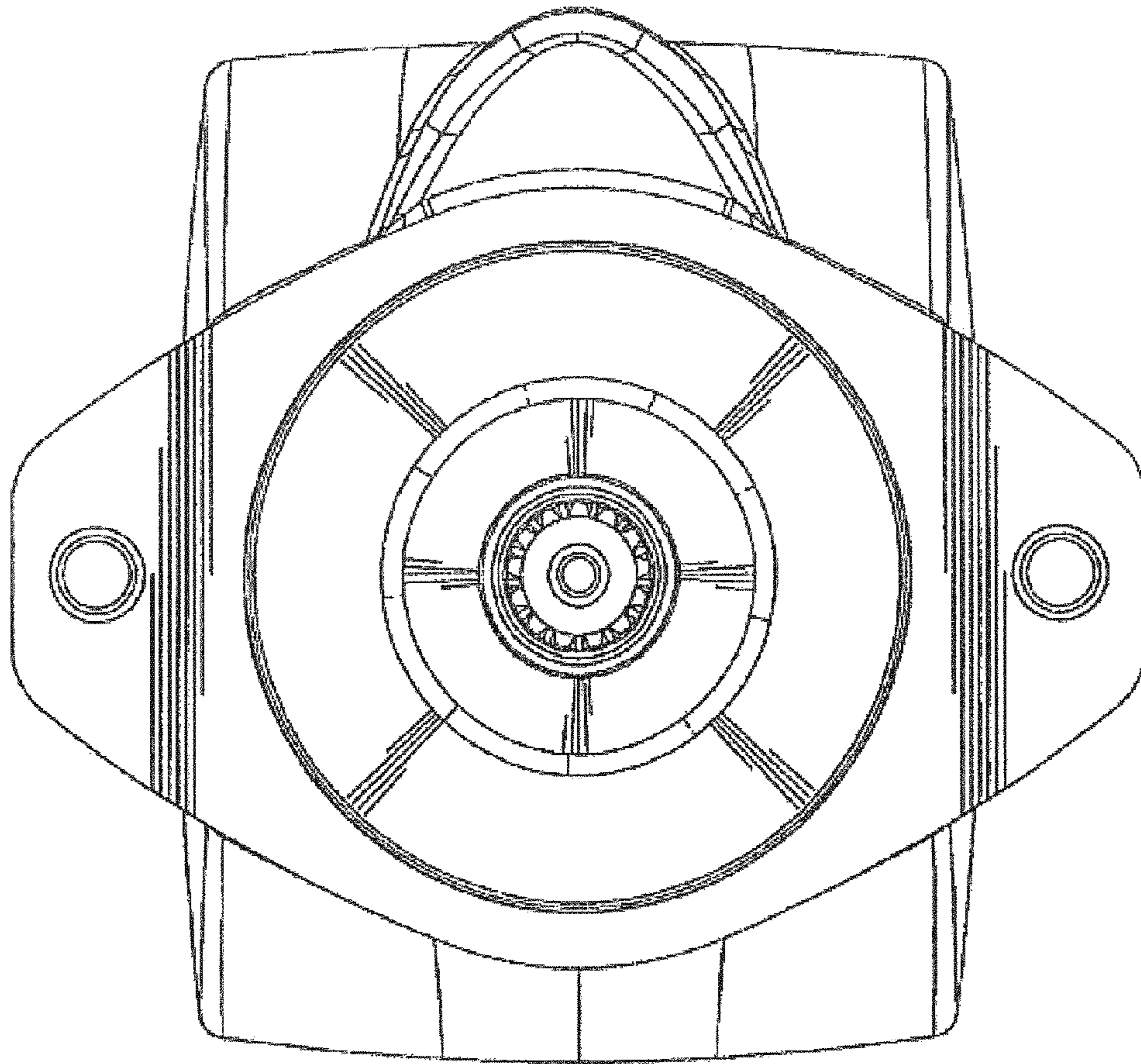


Figure 4

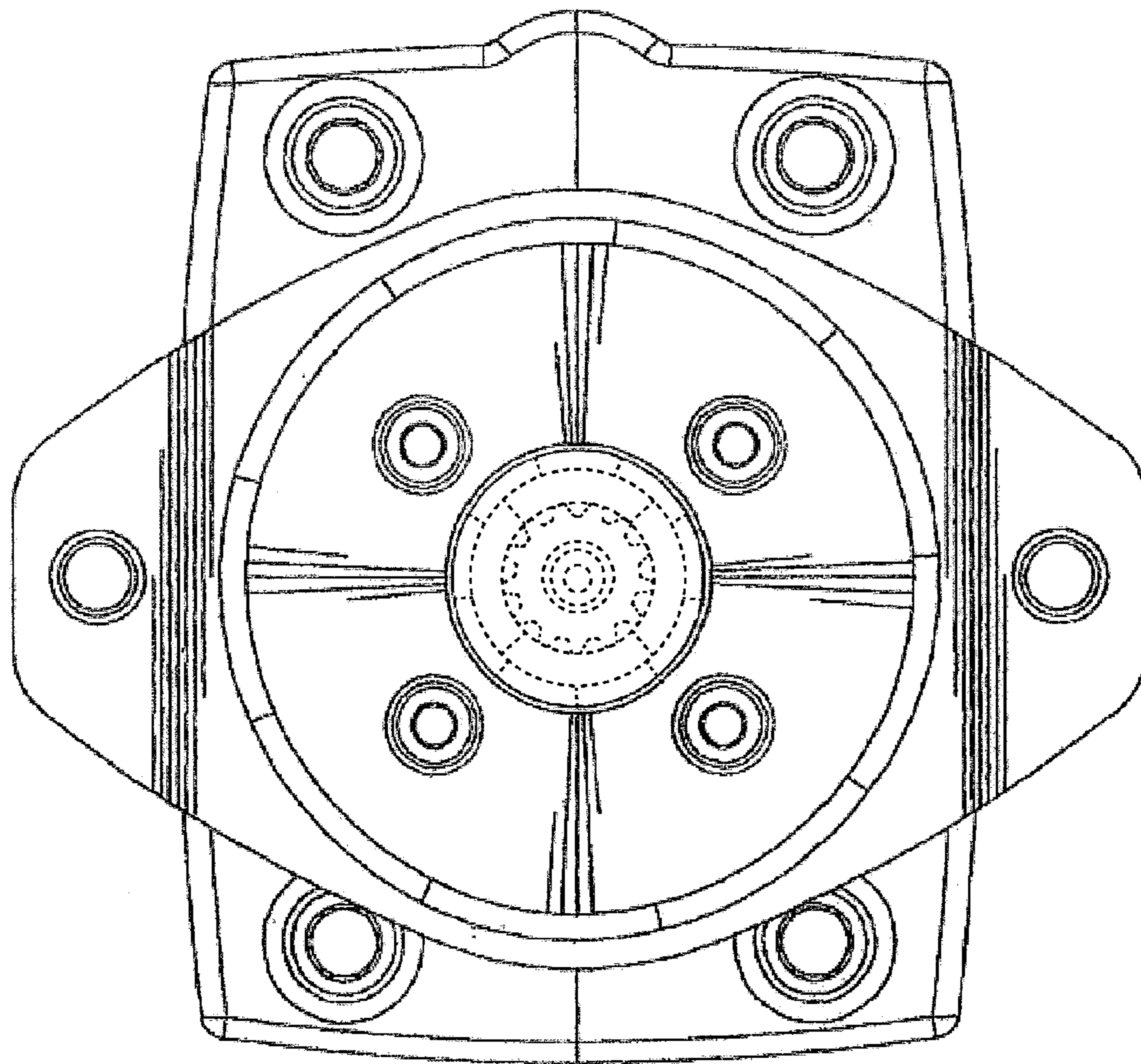


Figure 5

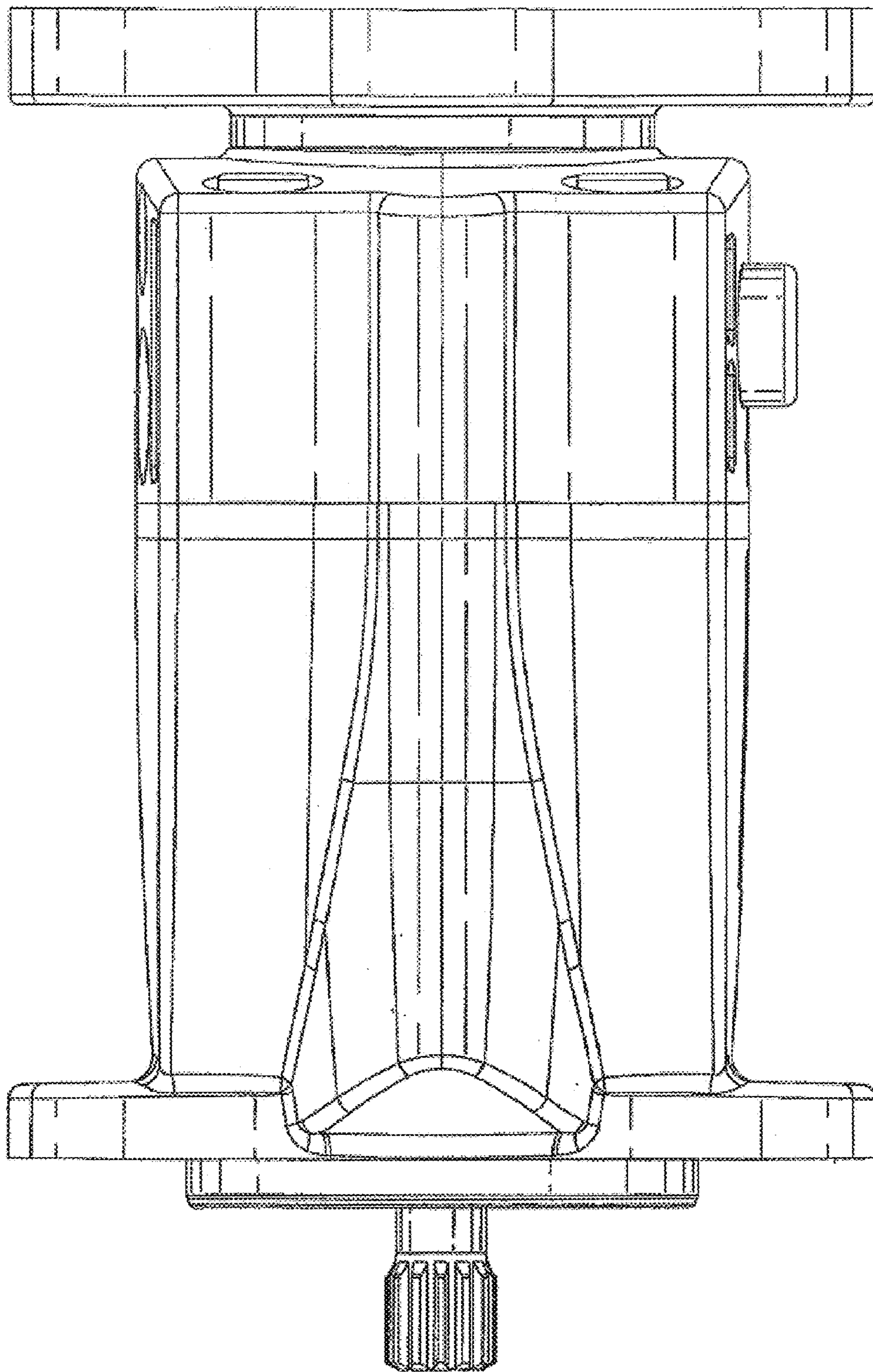


Figure 6



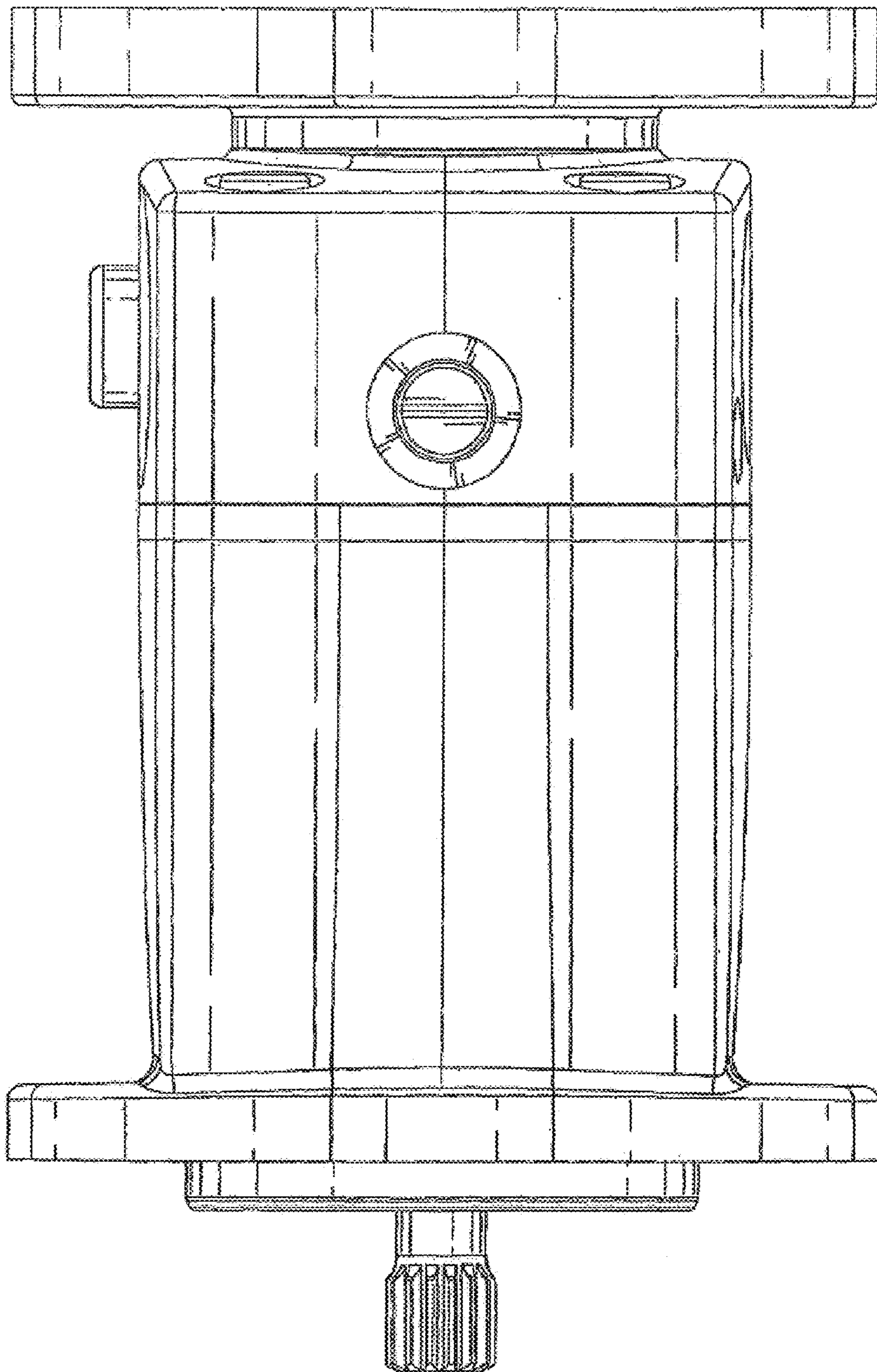


Figure 7

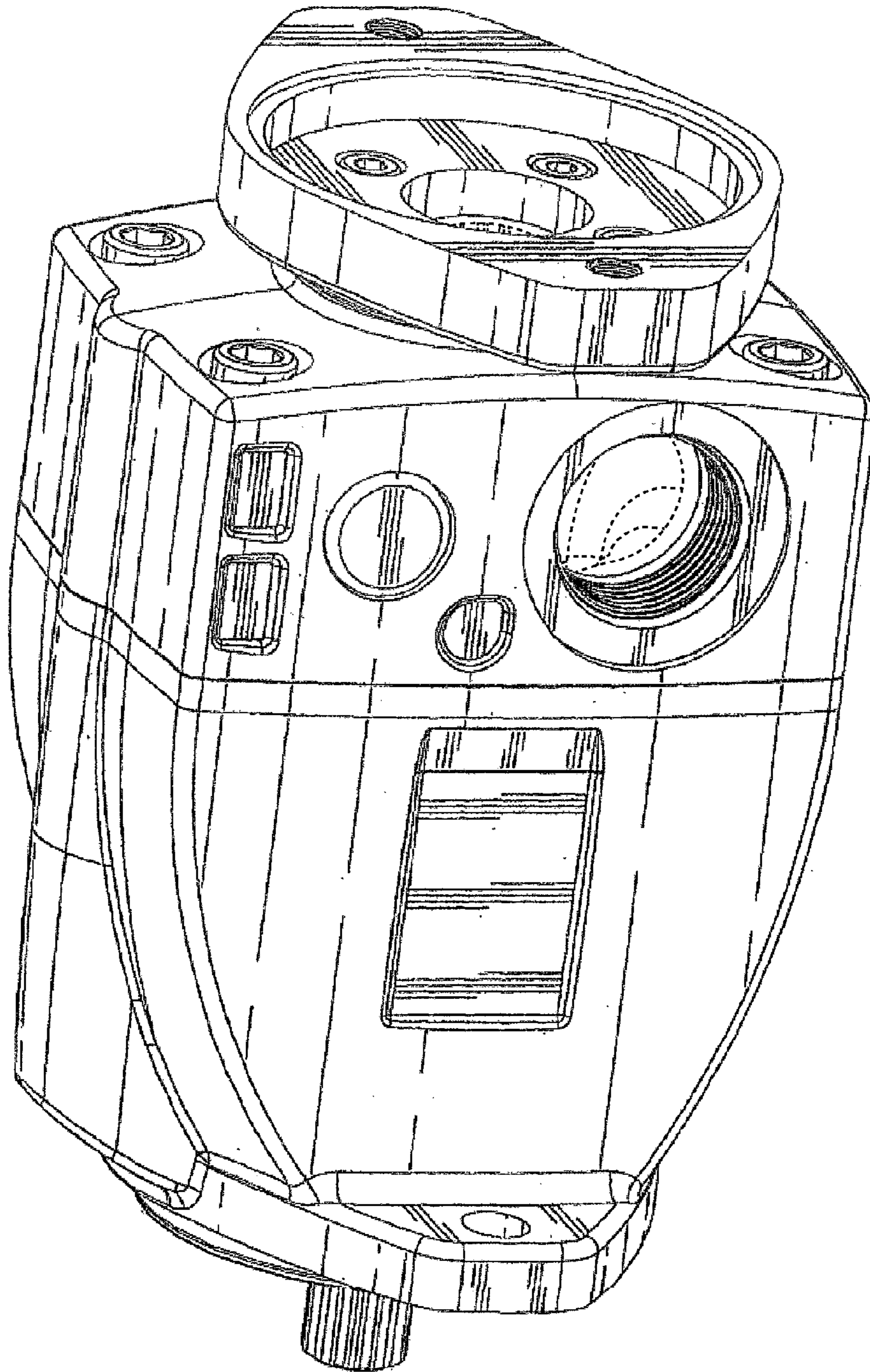


Figure 8

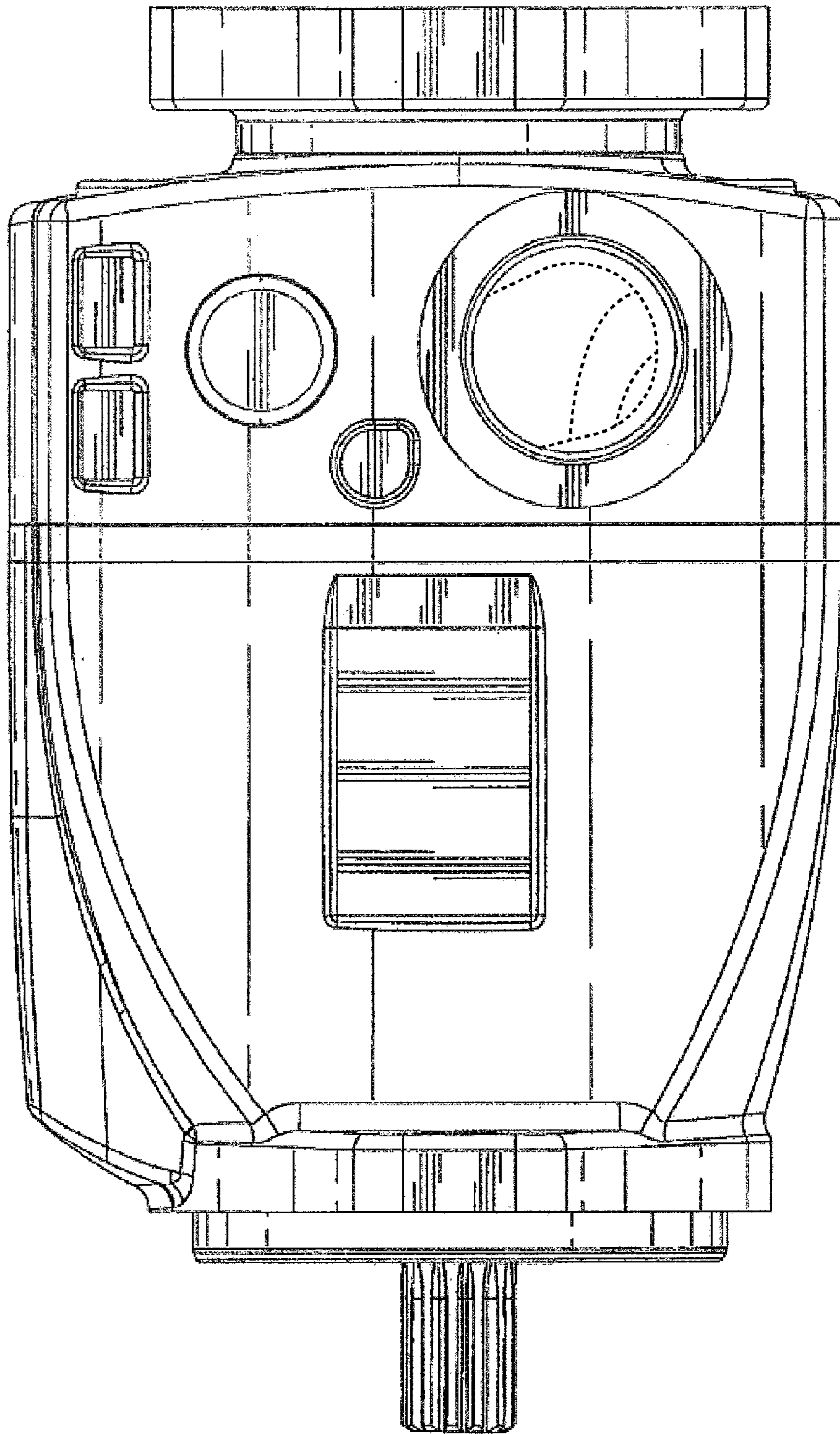


Figure 9

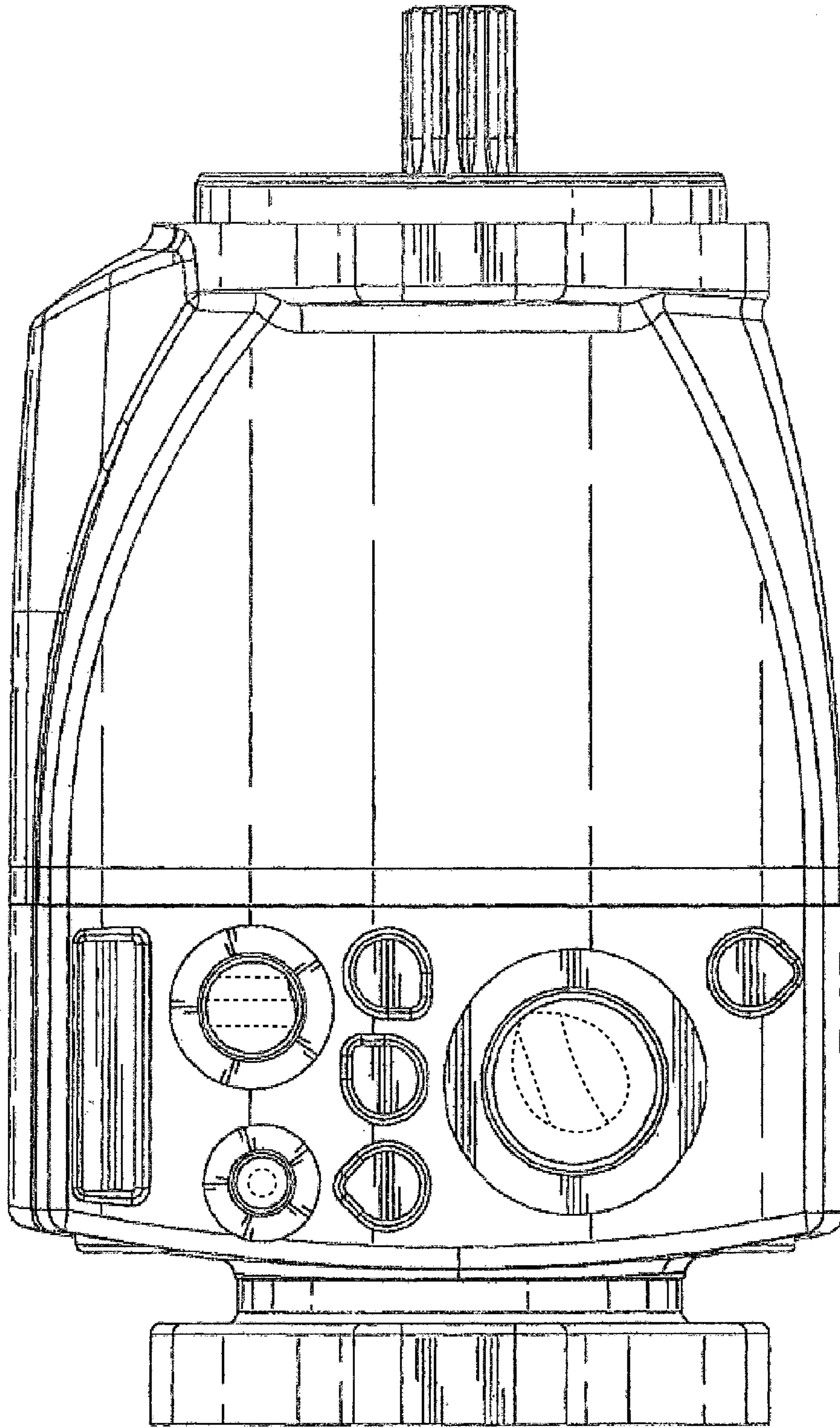


Figure 10

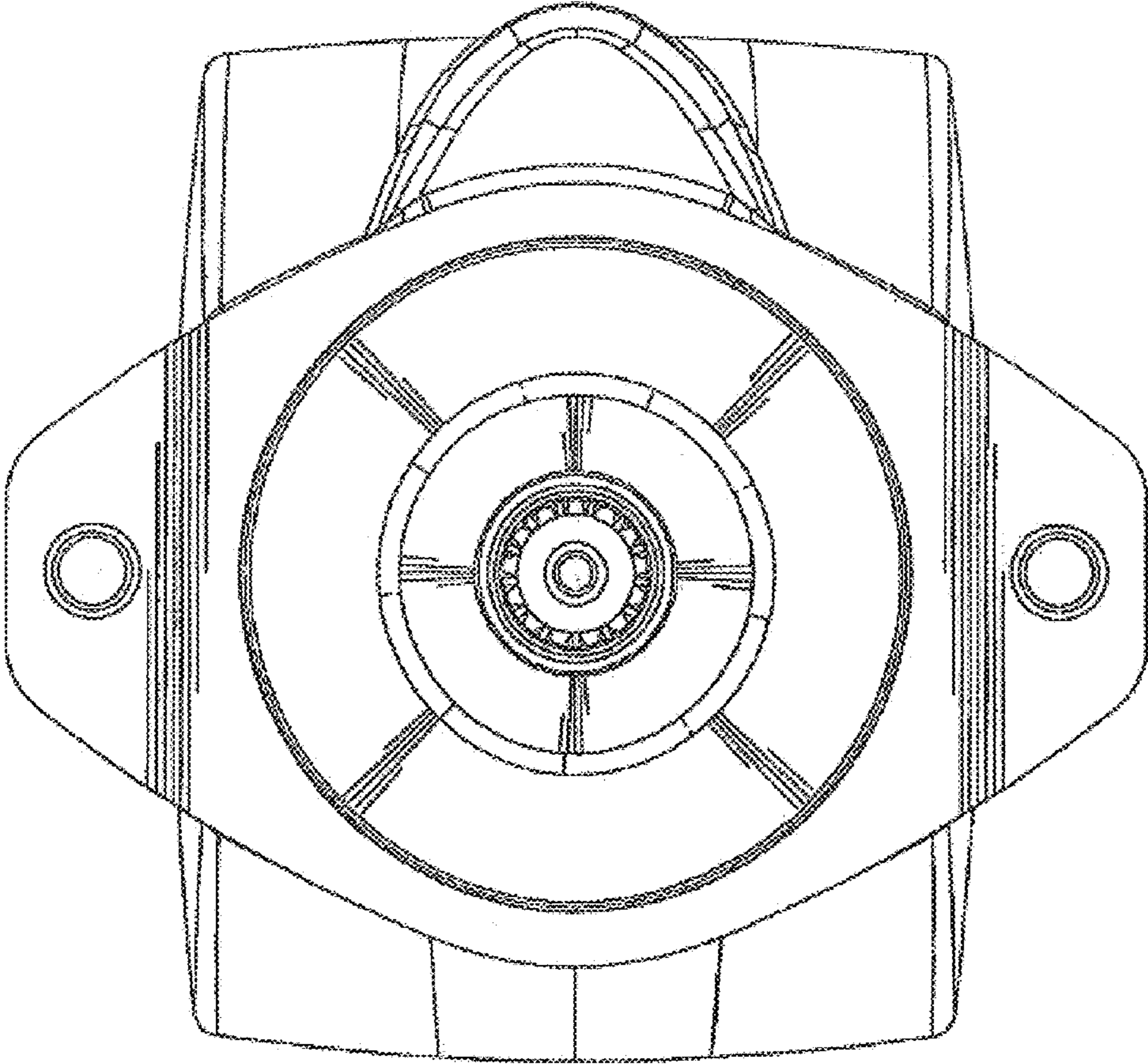


Figure 11

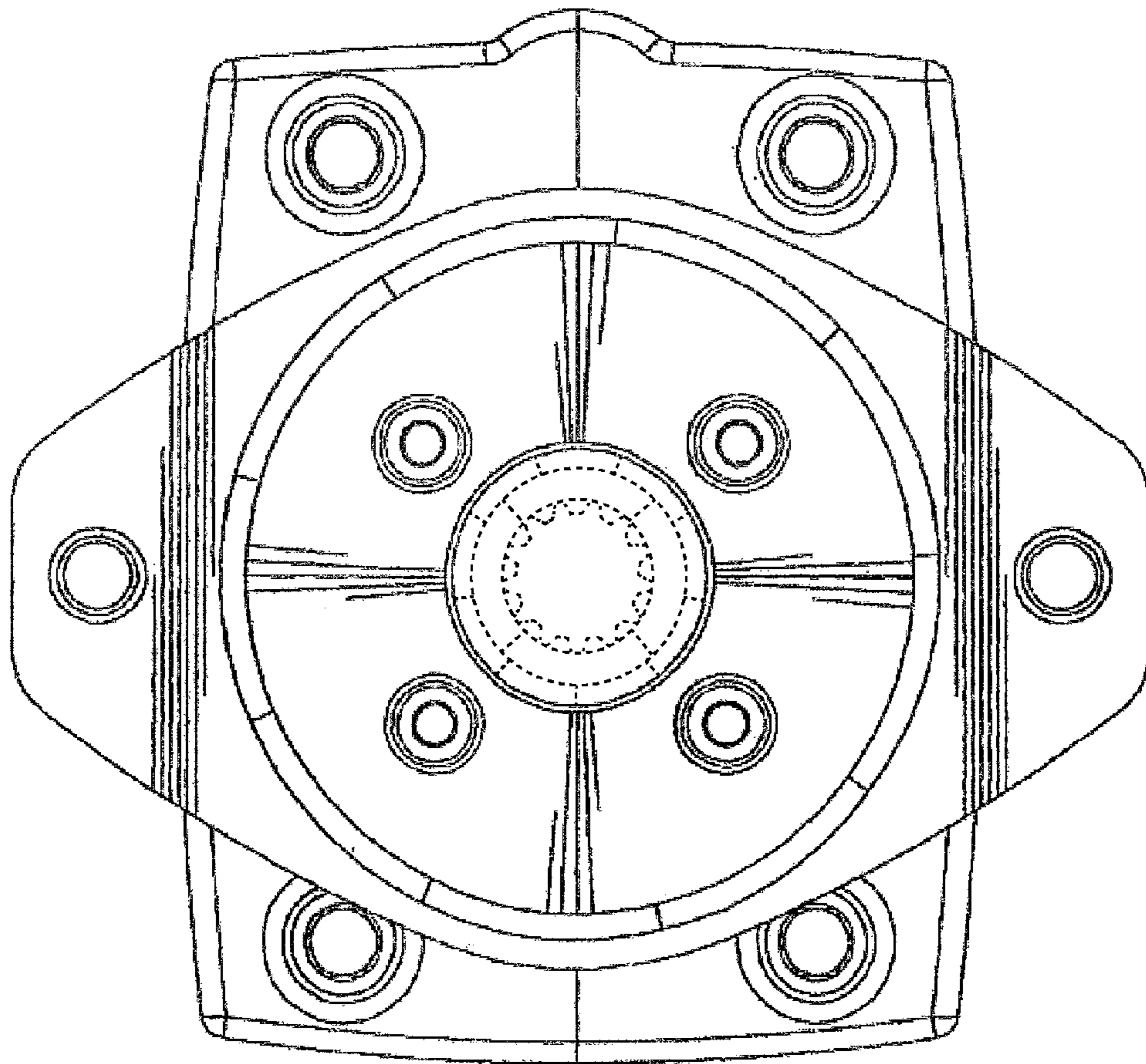


Figure 12

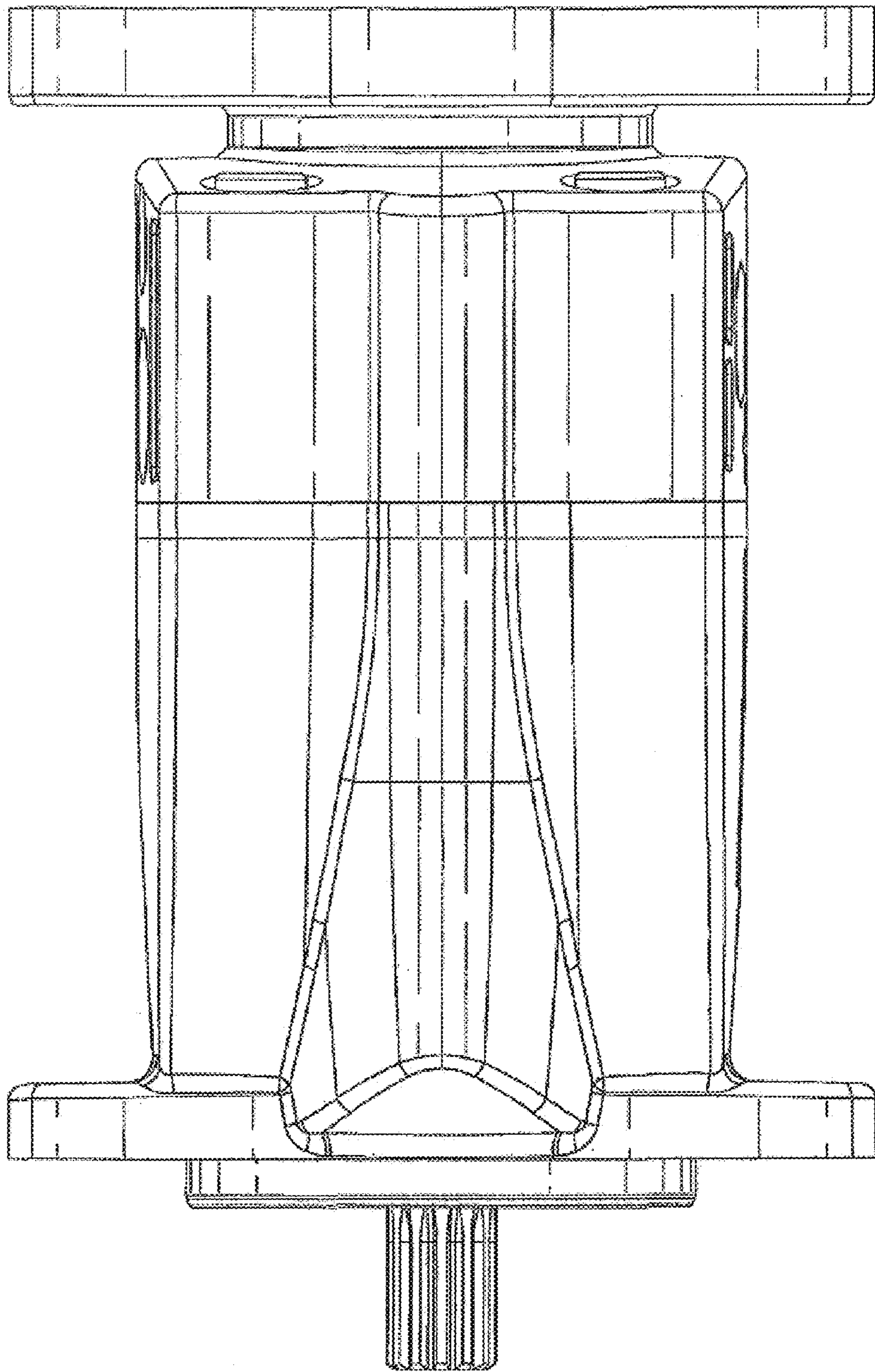


Figure 13

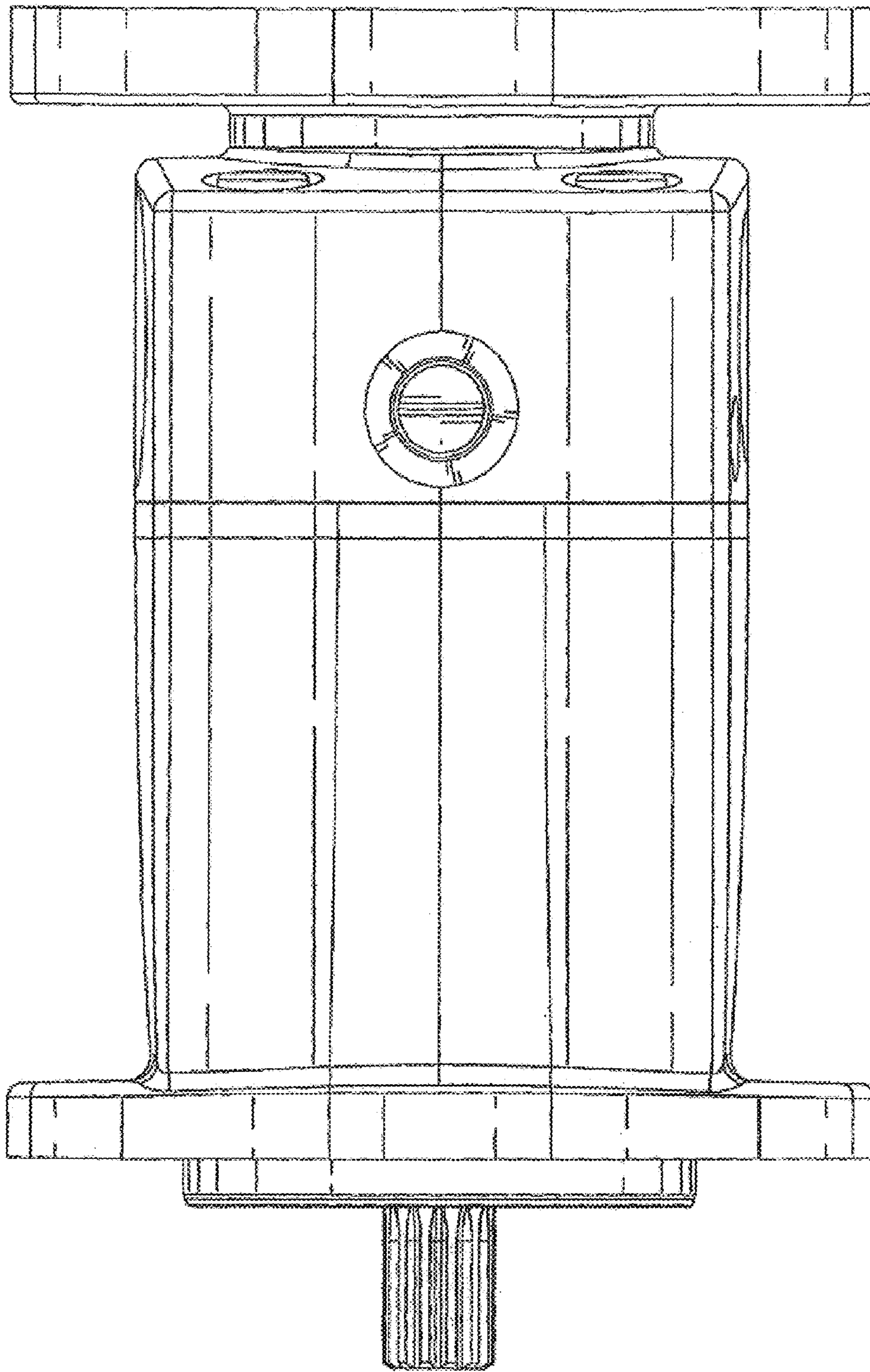


Figure 14



UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : D686,650 S  
APPLICATION NO. : 29/438223  
DATED : July 23, 2013  
INVENTOR(S) : Schultheiss et al.

Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On Title Page Item (71) Applicant

Please delete "Christain Spielvogel" and insert --Christian Spielvogel-- in its place.

On Title Page Item (72) Inventor

Please delete "Christain Spielvogel" and insert --Christian Spielvogel-- in its place.

Signed and Sealed this  
Twenty-eighth Day of January, 2014



Michelle K. Lee  
*Deputy Director of the United States Patent and Trademark Office*