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(12) **United States Design Patent**  
**Little, III et al.**

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(54) **FLOW CELL**

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(US)

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(US)

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

(21) Appl. No.: **29/562,317**

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(51) **LOC (11) Cl.** ..... **10-04**

(52) **U.S. Cl.**  
USPC ..... **D10/96**

(58) **Field of Classification Search**  
USPC ..... D10/46, 96  
CPC ..... G01N 21/85; G01N 21/8507; G01N  
2021/855; G01N 33/28; G01N 33/2835;  
G01N 33/2841; G01N 33/2847; G01N  
21/01; G01N 2021/0112; G01N  
2021/0118; G01N 2021/0193; G01N  
21/03; G01N 2021/0378; G01N 21/05;  
G01N 2021/052

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

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D800,590 S \* 10/2017 Kuppi ..... D10/96

\* cited by examiner

*Primary Examiner* — Antoine Duval Davis

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(57) **CLAIM**

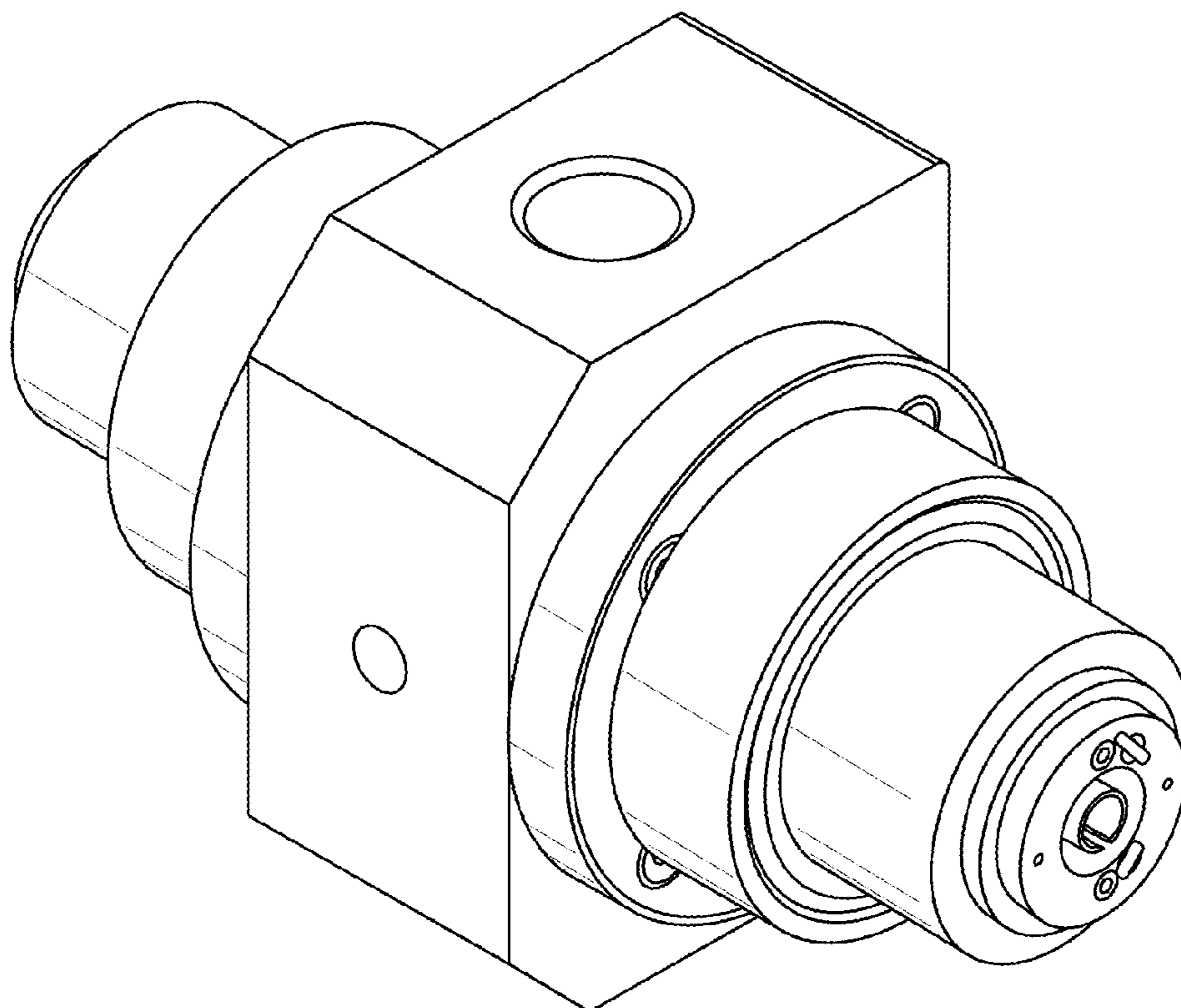
The ornamental design for a flow cell, as shown and  
described.

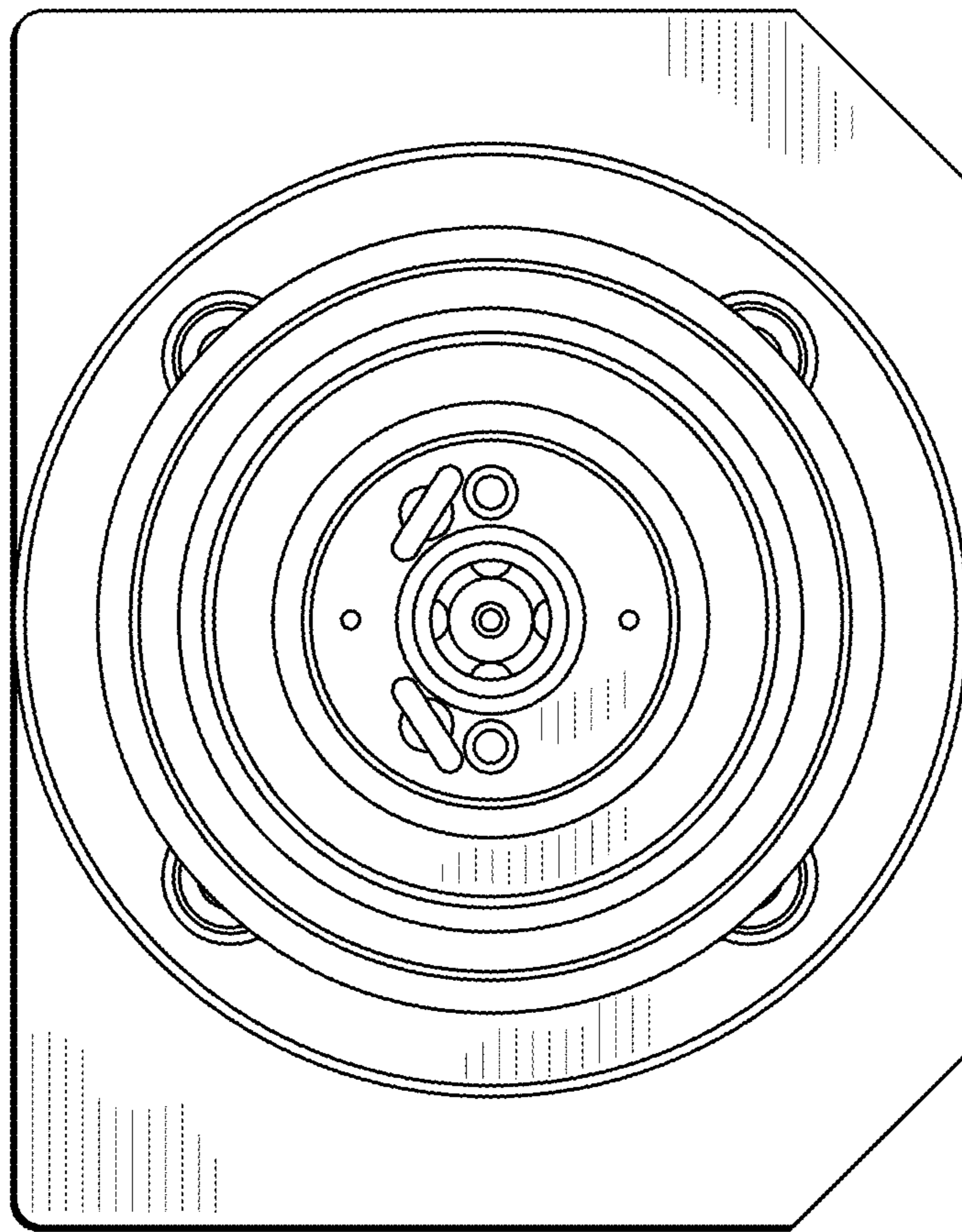
**DESCRIPTION**

FIG. 1 is a left view of the flow cell of the present invention;  
FIG. 2 is a front view thereof;  
FIG. 3 is a right view thereof;  
FIG. 4 is a top view thereof; and,  
FIG. 5 is an isometric view thereof.

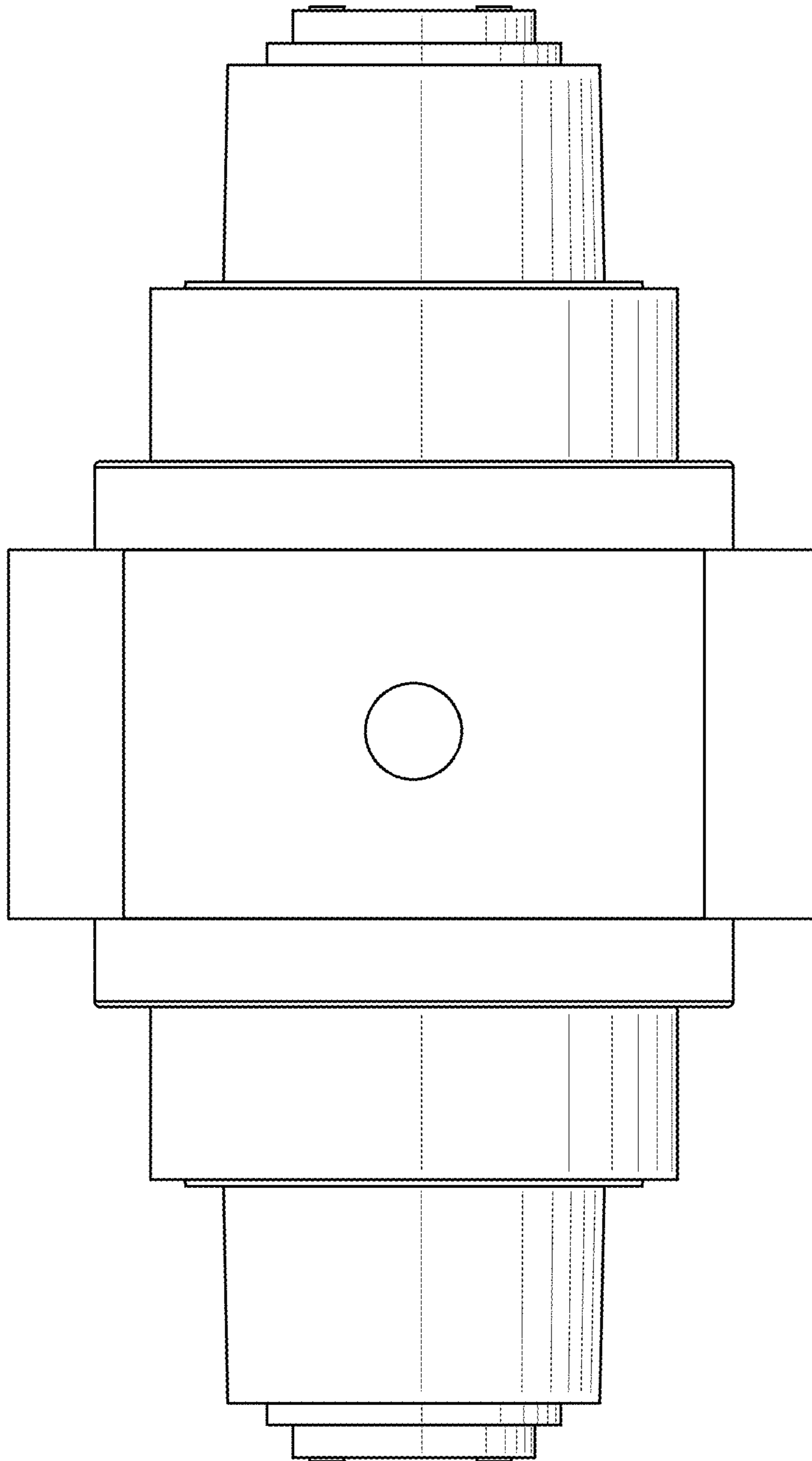
The optical flow cell of the present invention is installed in  
an oil and gas infrastructure, such as a pipeline, and provides  
an in-line measurement of hydrocarbon composition, API  
gravity, vapor pressure, BTU and other properties of natural  
gas, natural gas, condensate and crude oil in the infrastruc-  
ture. The optical flow cell is installed directly in a flow  
stream at operating pressure and temperature.

**1 Claim, 5 Drawing Sheets**

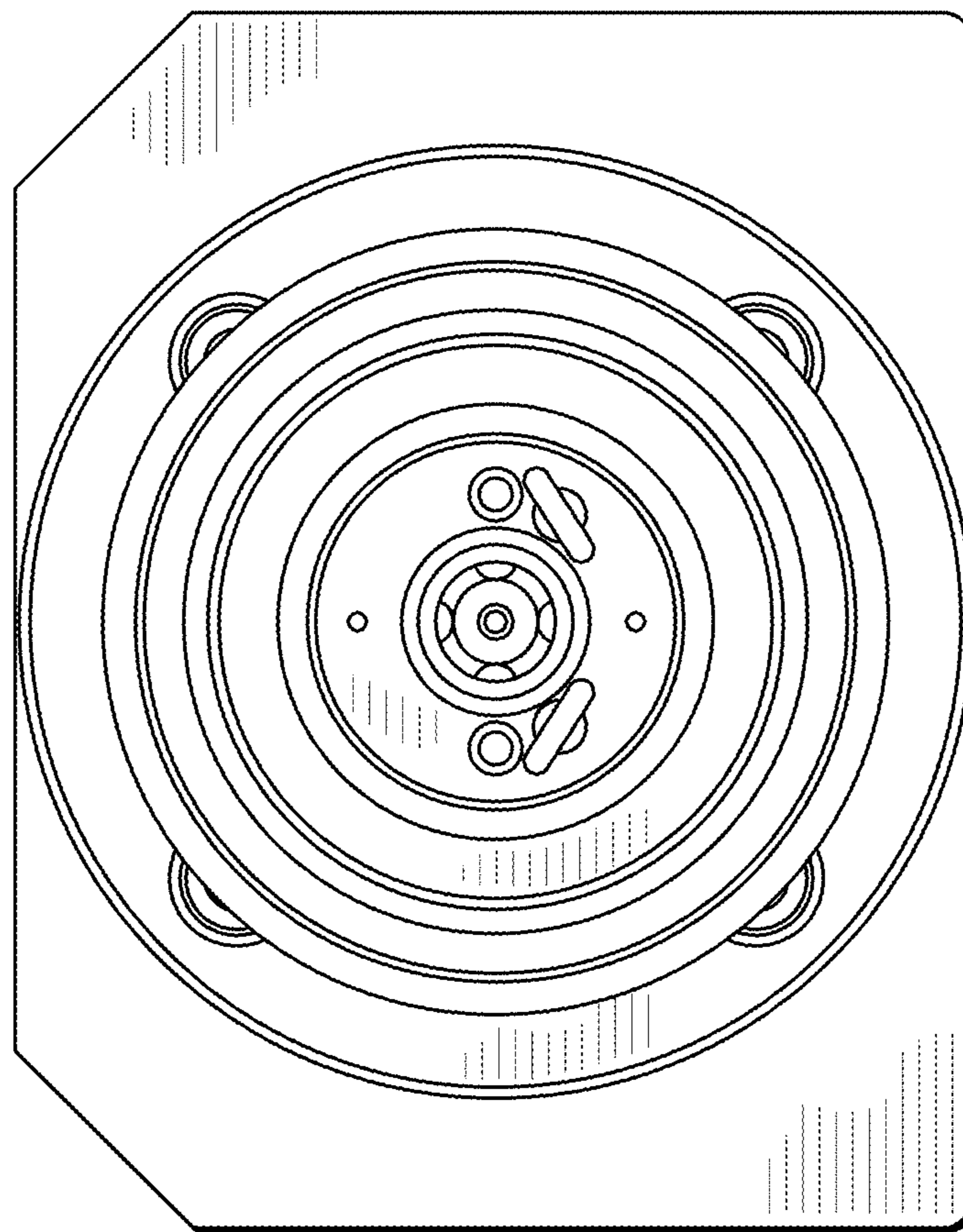




*FIG. 1*



*FIG. 2*



*FIG. 3*

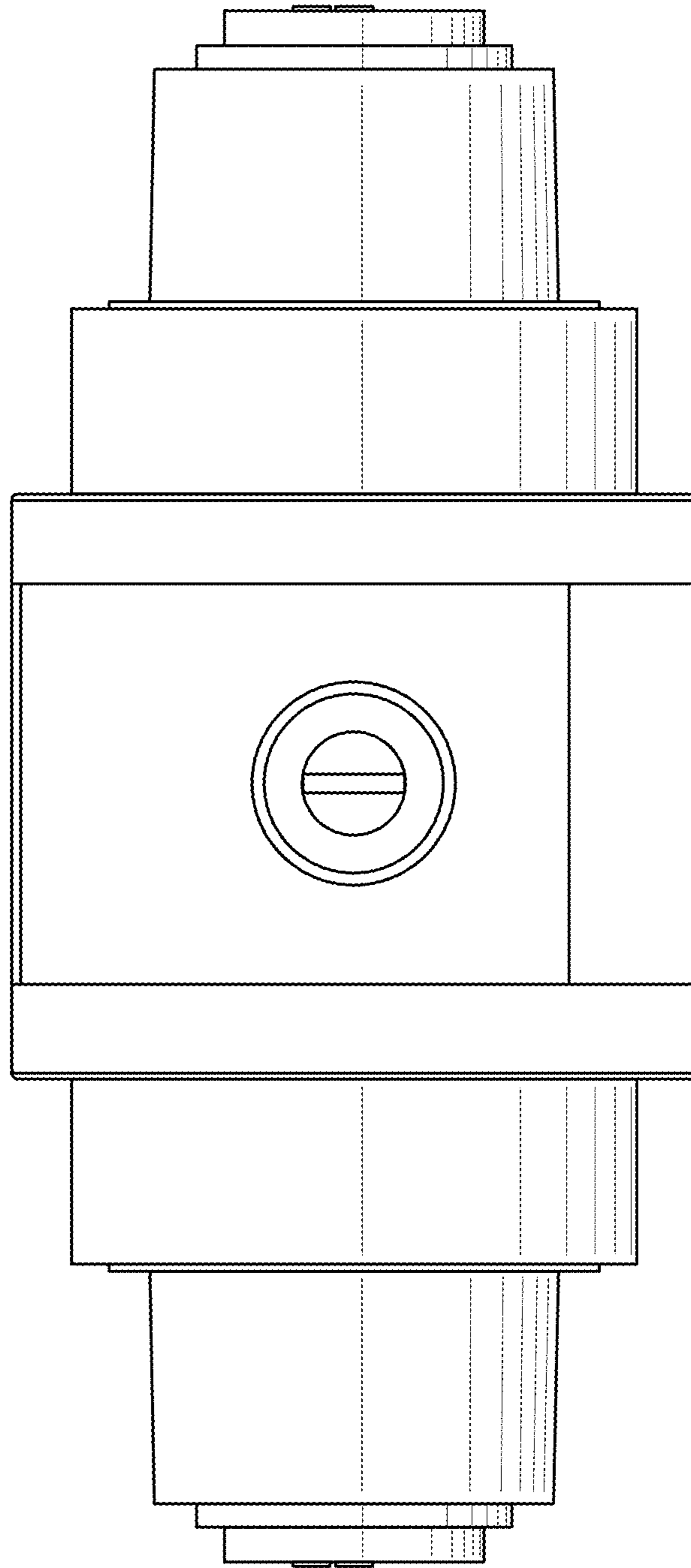


FIG. 4

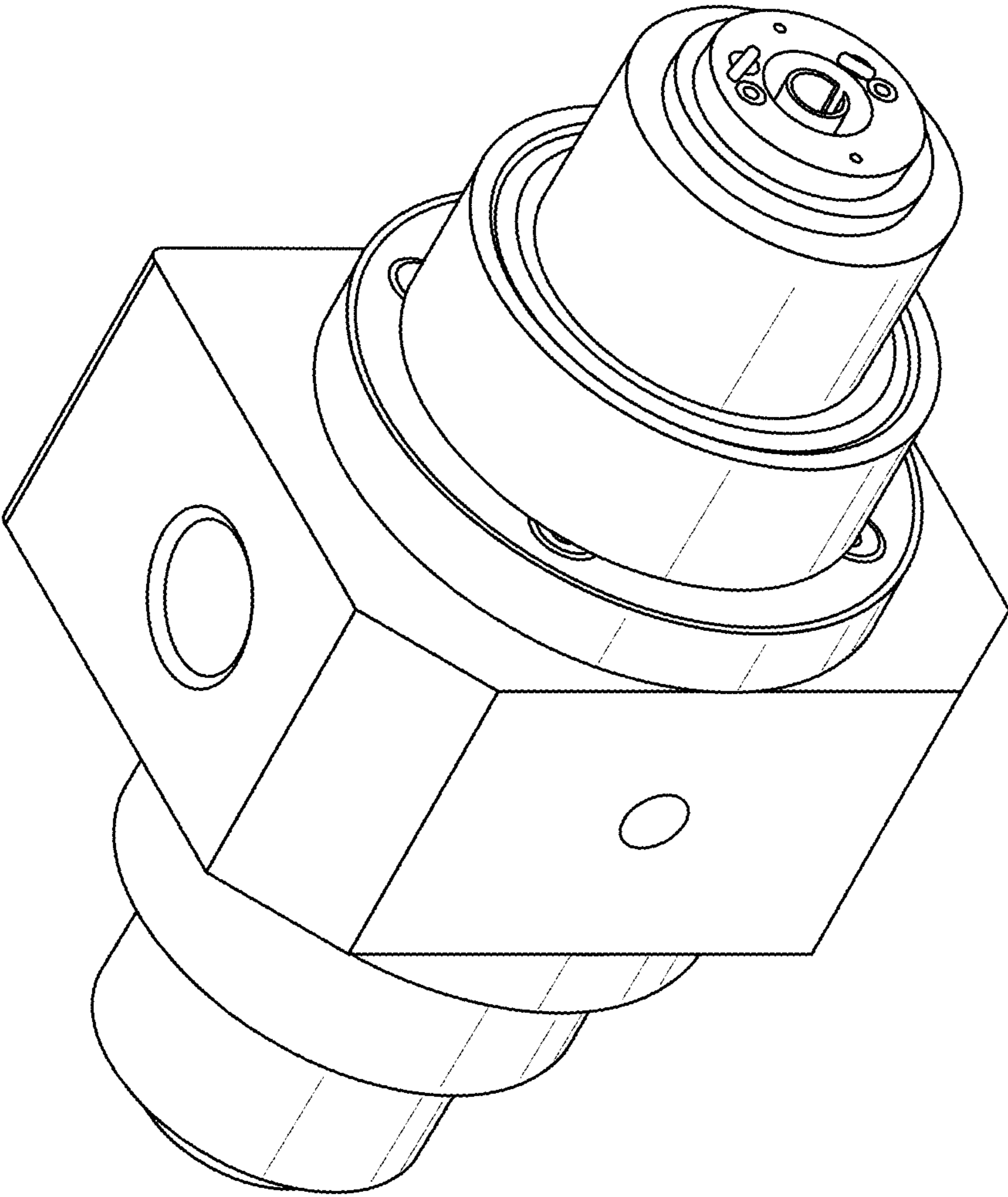


FIG. 5