



US00D471562S

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

(10) **Patent No.:** **US D471,562 S**

(45) **Date of Patent:** **** Mar. 11, 2003**

(54) **DIAPHRAM-TYPE PROCESS PUMP FOR TRANSFERRING VARIOUS FLUIDS BY MOVING A DIAPHRAGM WITH COMPRESSED AIR**

D426,553 S * 6/2000 Jack et al. D15/7
D428,422 S * 7/2000 Wang D15/8
D436,360 S * 1/2001 Murayama D15/7
D448,778 S * 10/2001 Iwata D15/7
D454,885 S * 3/2002 Murayama et al. D15/7

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Tomoyuki Iwata, Yawara-mura (JP)

* cited by examiner

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Primary Examiner—Ralf Seifert

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

(74) *Attorney, Agent, or Firm*—Baker Botts LLP

(21) Appl. No.: **29/150,513**

(22) Filed: **Jan. 31, 2002**

(57) **CLAIM**

An ornamental design for a diaphragm-type process pump for transferring various fluids by moving a diaphragm with compressed air, as shown and described.

(30) **Foreign Application Priority Data**

May 28, 2001 (JP) 2001-015251

DESCRIPTION

(51) **LOC (7) Cl.** **15-02**

FIG. 1 is a front view.

(52) **U.S. Cl.** **D15/7**

FIG. 2 is a rear view.

(58) **Field of Search** D15/7-9; D24/111;
417/40, 410.1, 413.1, 423.3; 200/84 B

FIG. 3 is a plan view.

FIG. 4 is a right-hand side view.

FIG. 5 is a left-hand side view.

FIG. 6 is a sectional view taken along the line 6—6 of FIG. 1; and,

FIG. 7 is a reference perspective view.

A bottom view is omitted because it is in symmetry with the plan view.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D338,018 S * 8/1993 Willinger et al. D15/8

D374,075 S * 9/1996 Lee D24/111

1 Claim, 3 Drawing Sheets

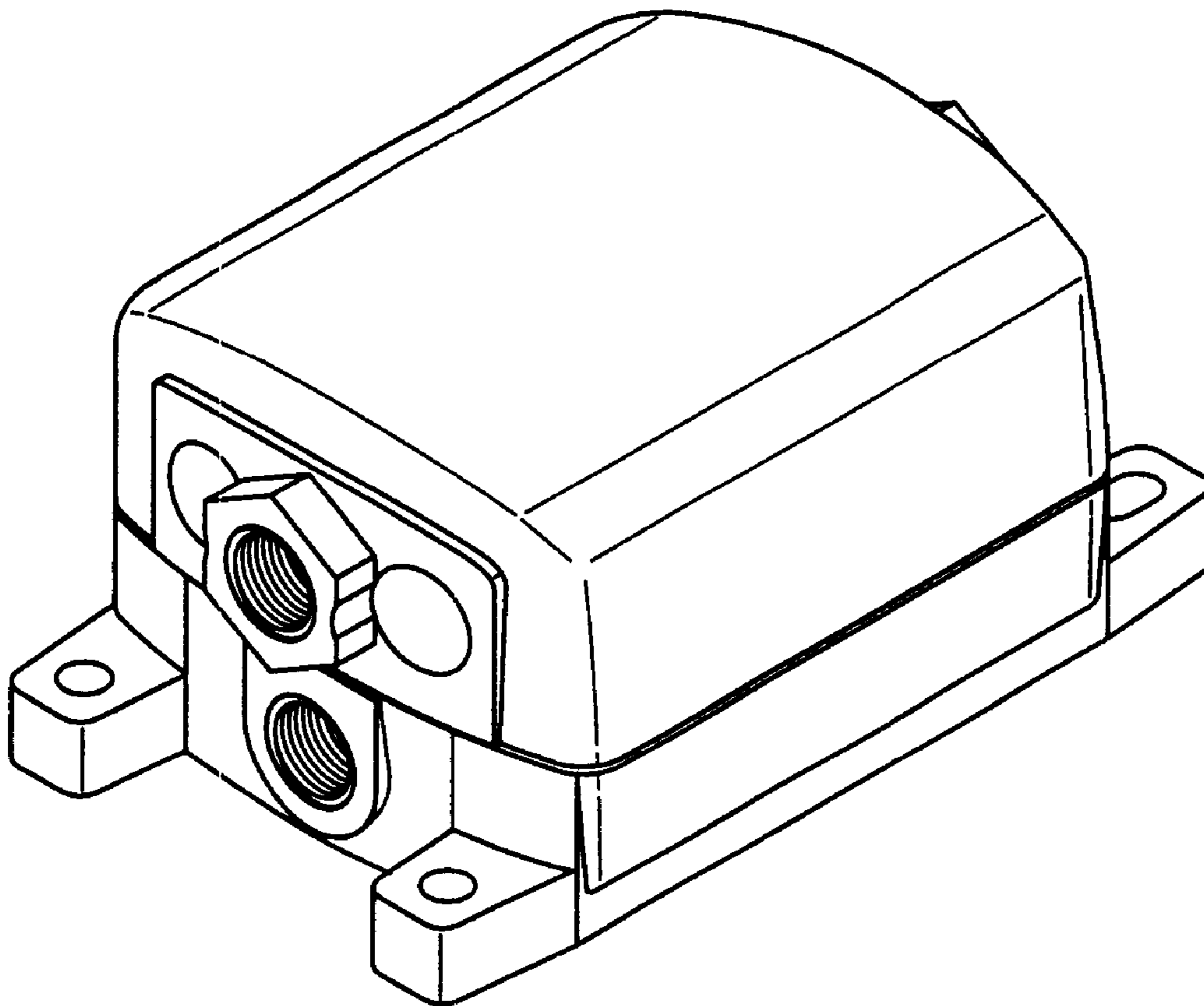


FIG.1

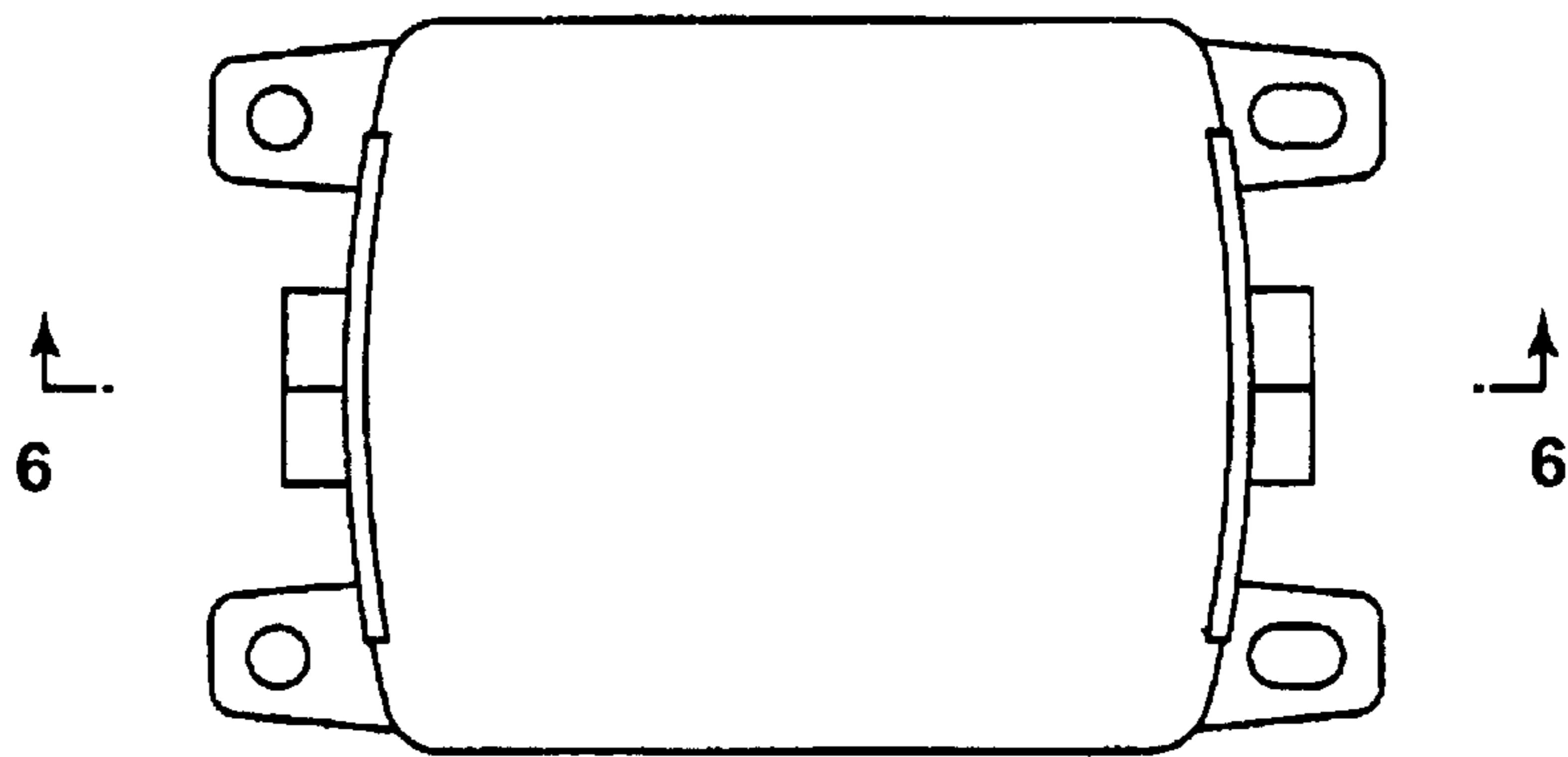


FIG.2

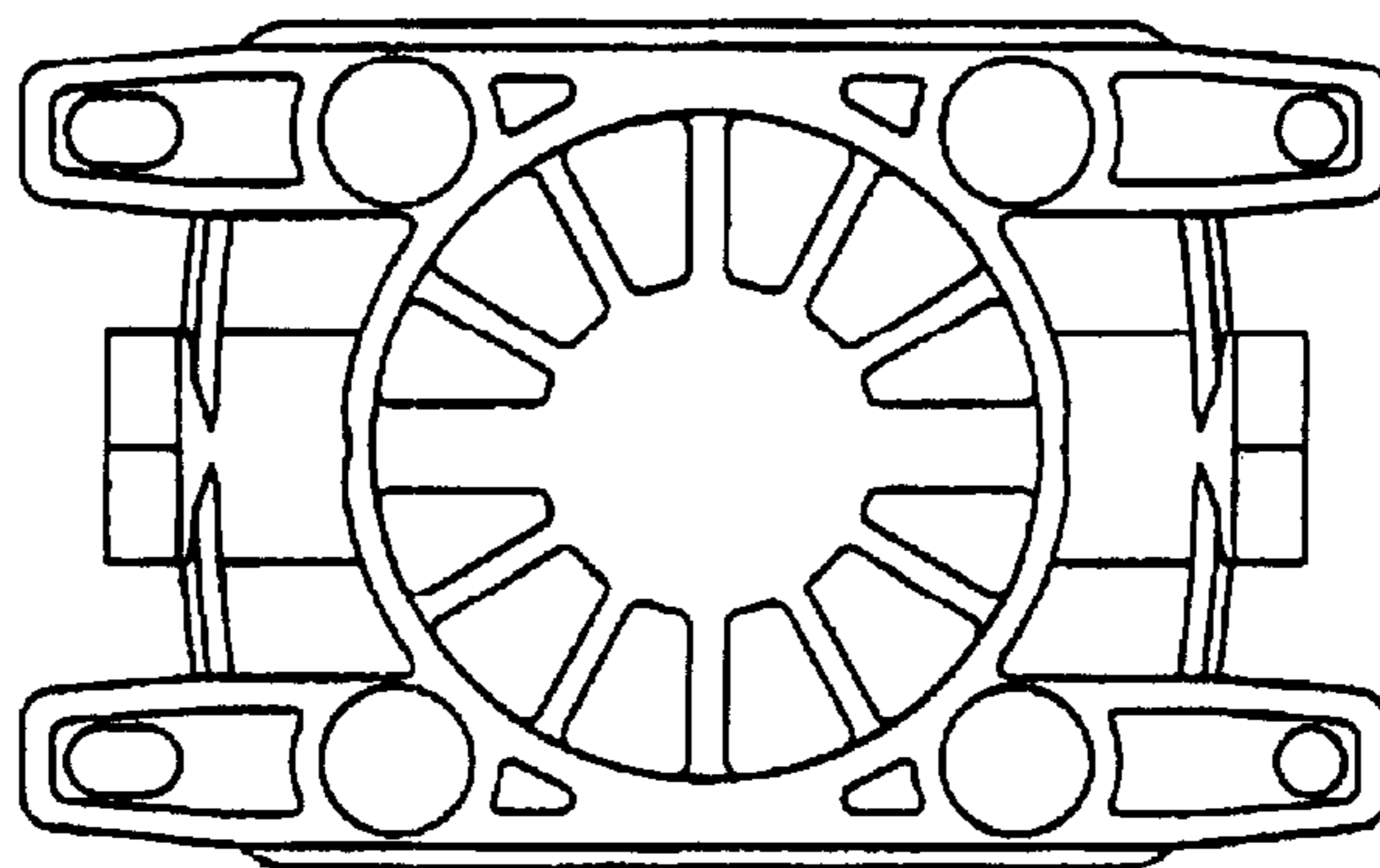


FIG.3

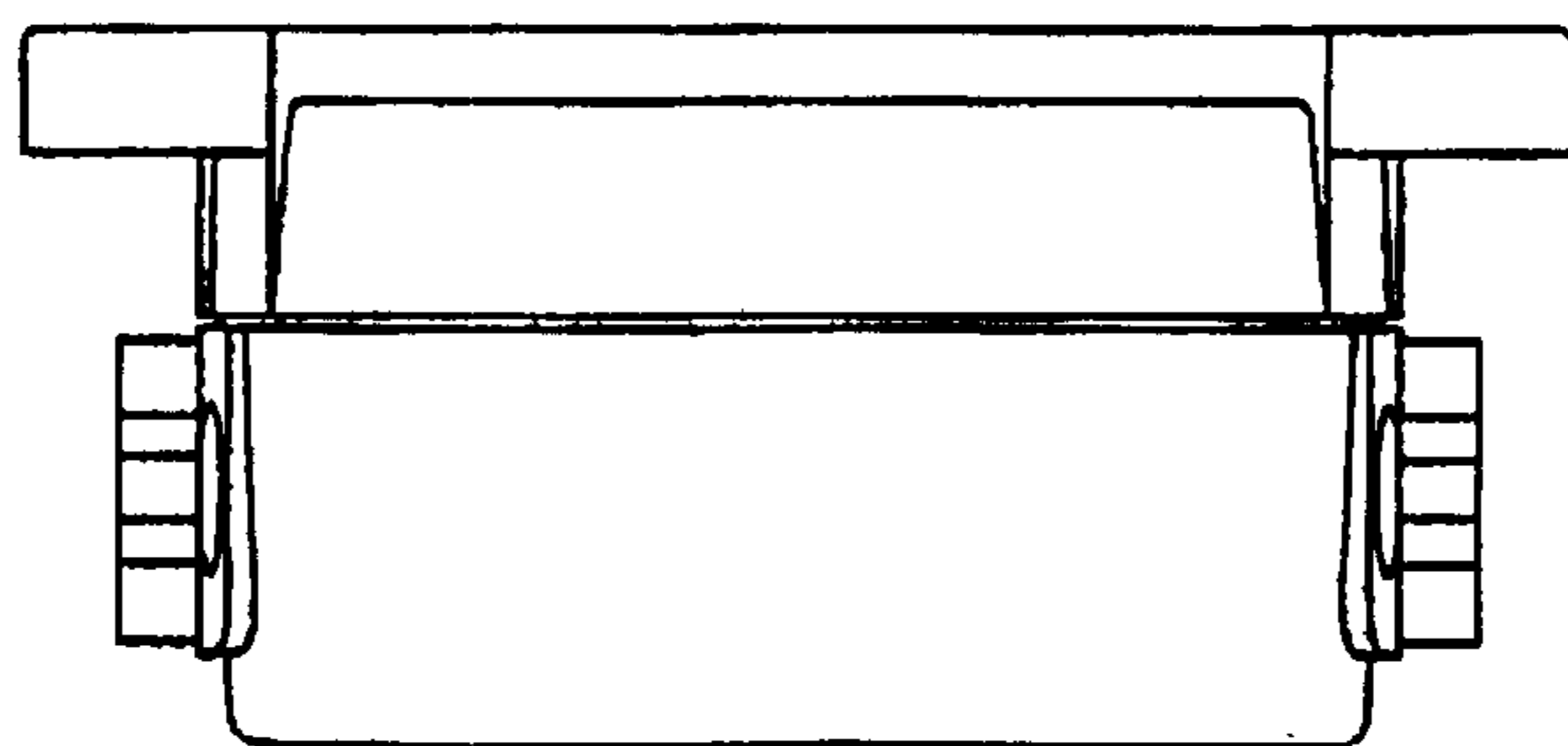


FIG.4

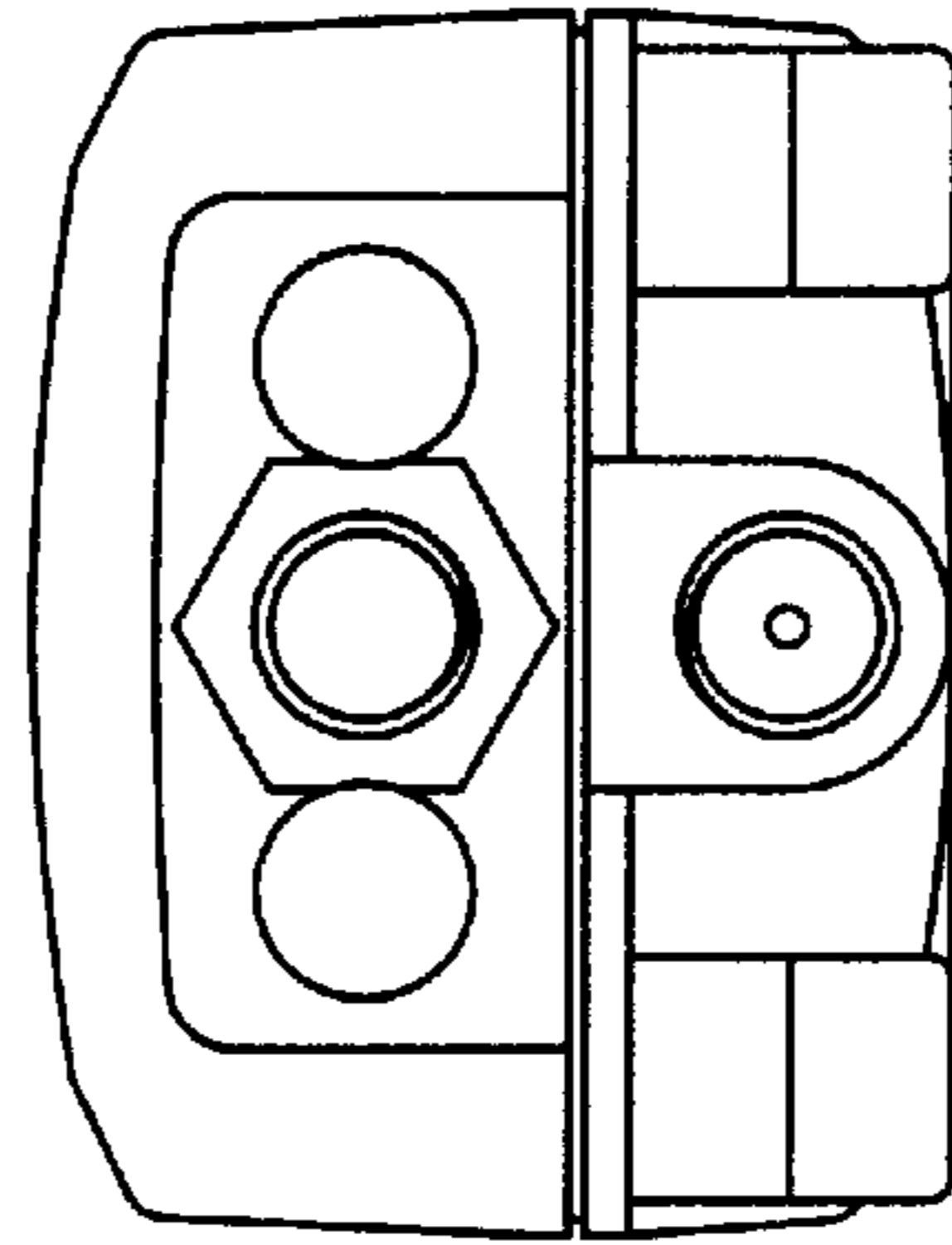


FIG.5

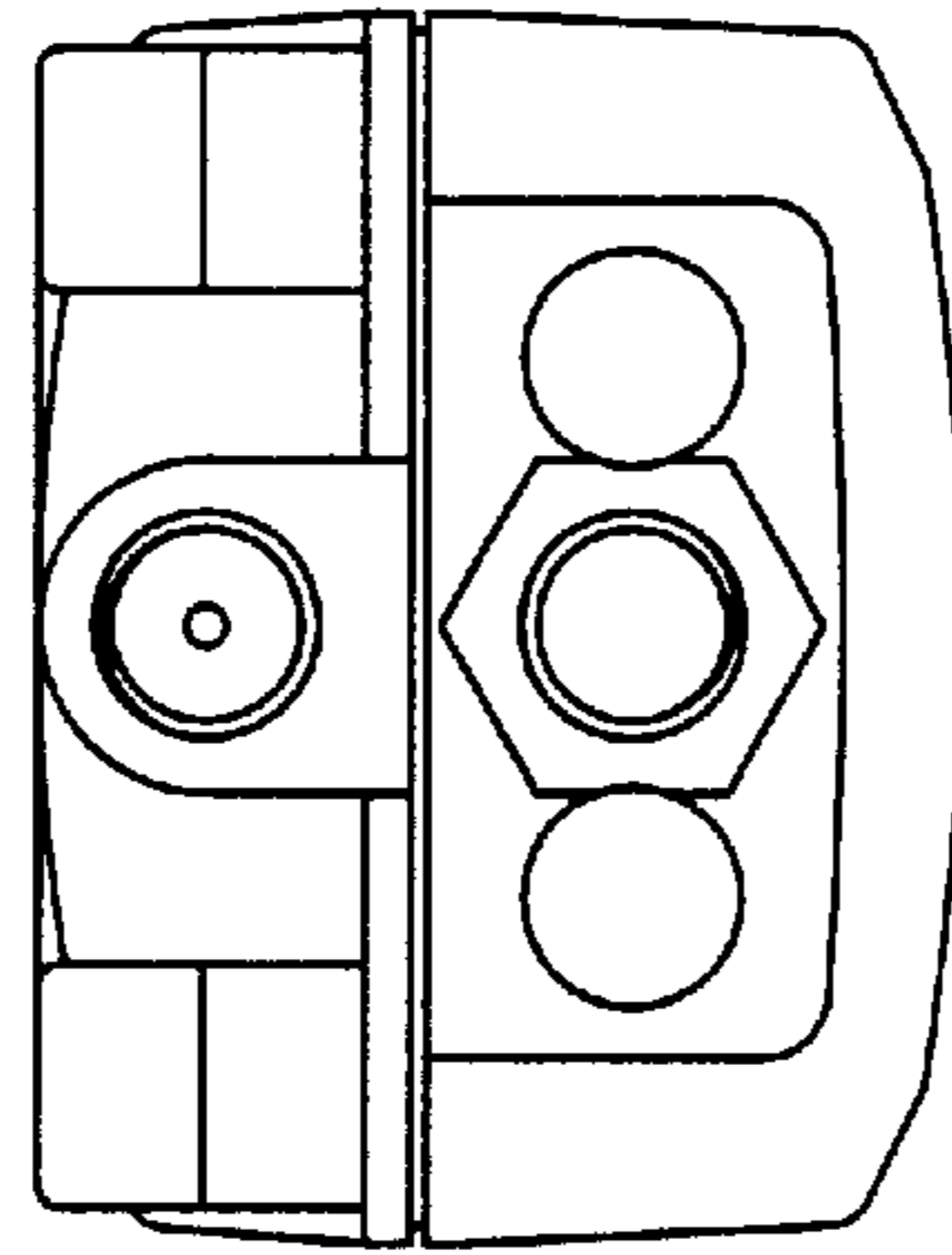


FIG.6

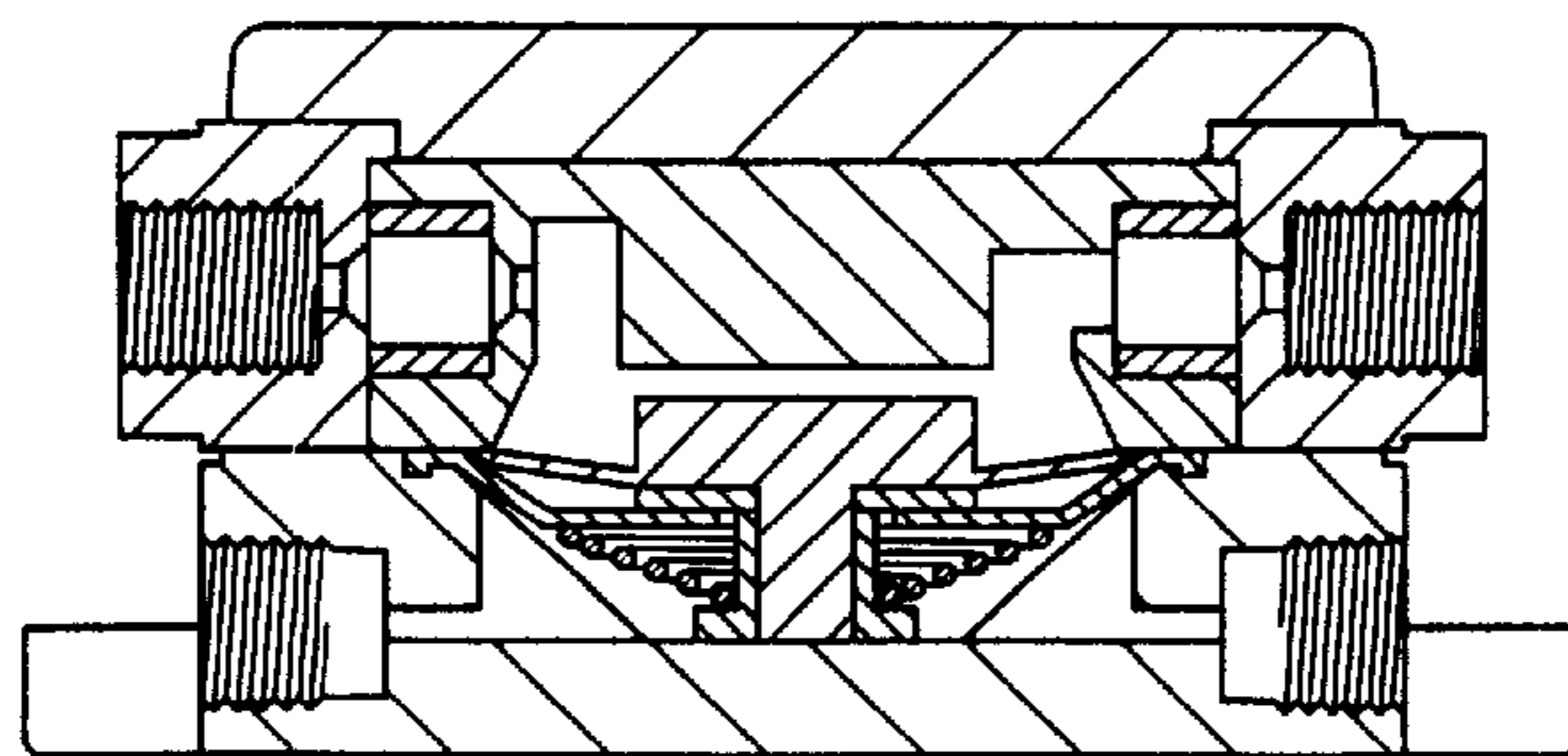
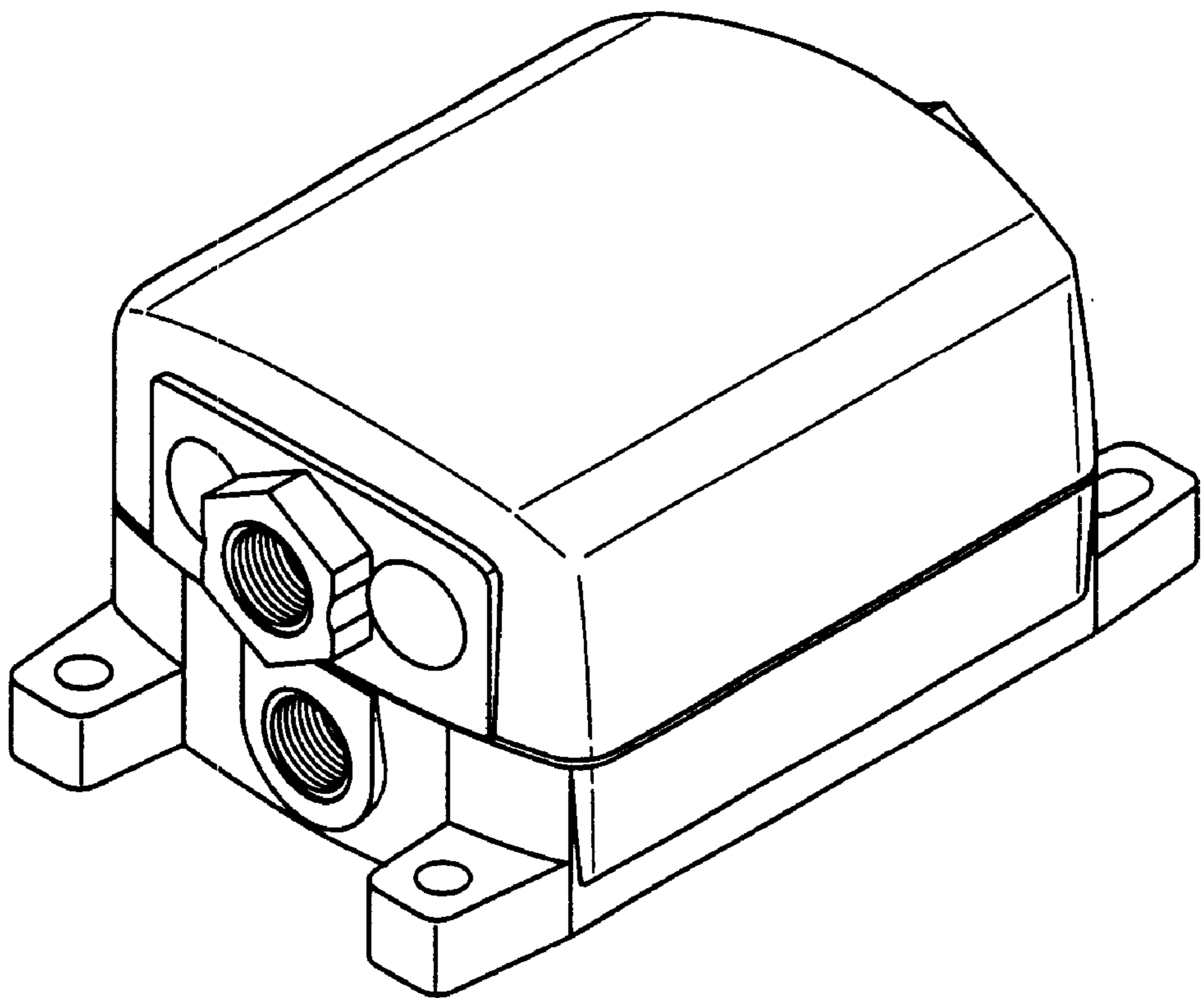


FIG. 7



UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : Des. 471,562 S
DATED : March 11, 2003
INVENTOR(S) : Kagami 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:

Title page,

Item [22], Filed: "**Jan. 31, 2002**" should read -- **Nov. 14, 2001** --

Signed and Sealed this

Twenty-sixth Day of August, 2003

A handwritten signature in black ink, appearing to read "James E. Rogan", written over a horizontal line.

JAMES E. ROGAN
Director of the United States Patent and Trademark Office