



US00D748798S

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

(10) **Patent No.:** **US D748,798 S**

(45) **Date of Patent:** **\*\* Feb. 2, 2016**

(54) **X-RAY APPARATUS FOR MEDICAL TREATMENT**

(71) Applicants: **Kabushiki Kaisha Toshiba**, Minato-ku, Tokyo (JP); **Toshiba Medical Systems Corporation**, Otawara-shi, Tochigi-ken (JP)

(72) Inventors: **Shinya Ohmukai**, Tokyo (JP); **Kentaro Ichise**, Tokyo (JP)

(73) Assignees: **Kabushiki Kaisha Toshiba**, Minato-ku, Tokyo (JP); **Toshiba Medical Systems Corporation**, Otawara-shi, Tochigi-ken (JP)

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

(21) Appl. No.: **29/525,377**

(22) Filed: **Apr. 29, 2015**

(30) **Foreign Application Priority Data**

Oct. 29, 2014 (JP) ..... 2014-024207

(51) **LOC (10) Cl.** ..... **24-01**

(52) **U.S. Cl.**  
USPC ..... **D24/158**

(58) **Field of Classification Search**  
USPC ..... D24/158-161, 185, 186, 107  
CPC ..... A61B 6/06; A61B 6/4405; A61B 6/4411;  
A61B 6/032; A61B 5/055; A61B 6/4441;  
A61B 6/4435; G01N 2223/1016; G01N  
2223/301; G01N 23/046; G01N 2223/031;  
G01N 2223/419; G01R 33/48  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D378,133 S \* 2/1997 Murakami ..... D24/158

6,222,906 B1 \* 4/2001 Sakaguchi ..... A61B 6/06  
257/E27.132  
D480,142 S \* 9/2003 Chikuma ..... D24/158  
D553,748 S \* 10/2007 Ogiwara ..... D24/158  
D554,257 S \* 10/2007 Ogiwara ..... D24/158

(Continued)

**FOREIGN PATENT DOCUMENTS**

JP D1003753 2/1998

*Primary Examiner* — Anhdao Doan

(74) *Attorney, Agent, or Firm* — Banner & Witcoff, Ltd.

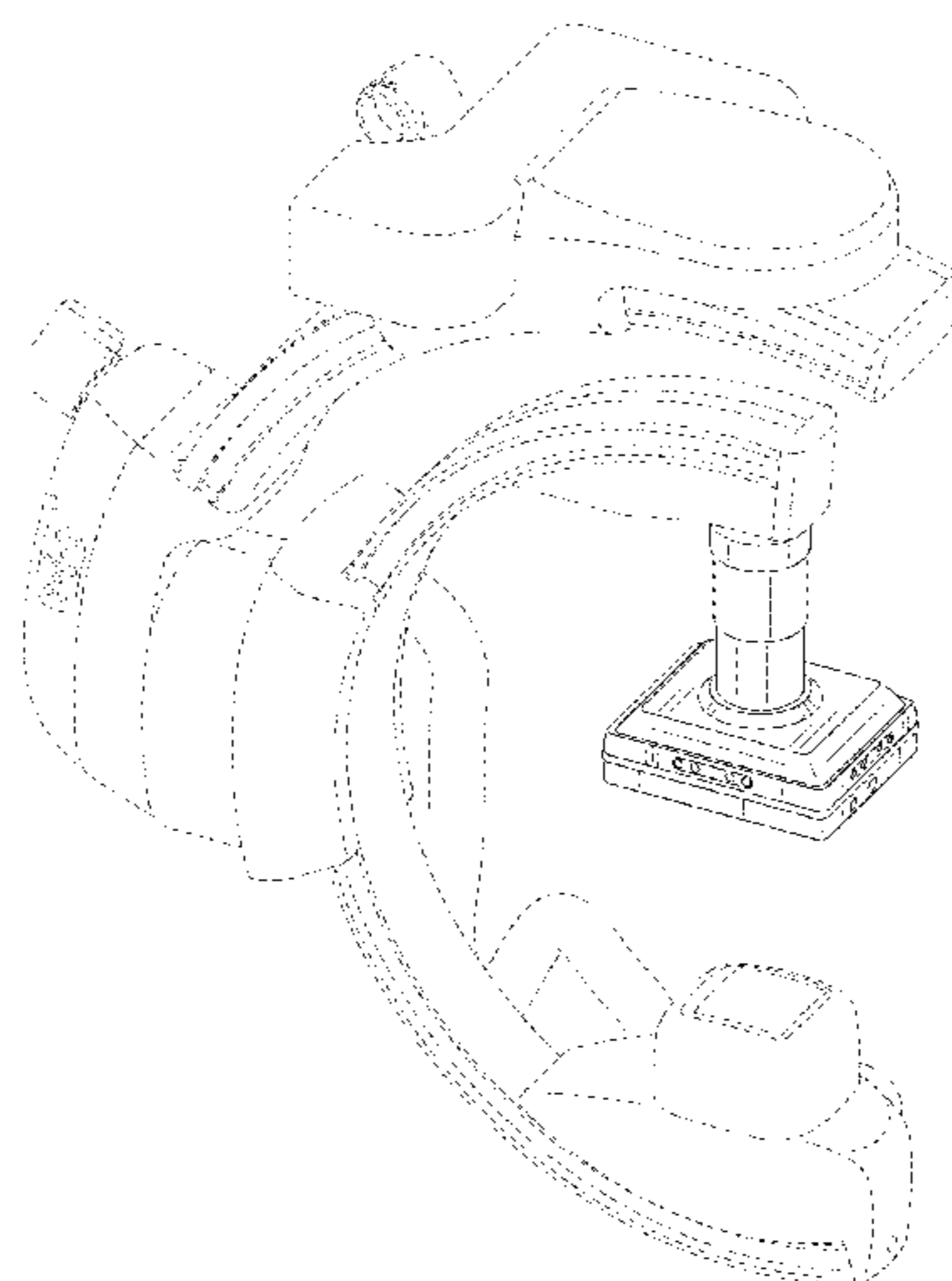
(57) **CLAIM**

The ornamental design for a X-ray apparatus for medical treatment, as shown and described.

**DESCRIPTION**

FIG. 1 is a front, top and right side perspective view of a X-ray apparatus for medical treatment, showing our new design; FIG. 2 is a rear, top and left side perspective view thereof; FIG. 3 is a front view thereof; FIG. 4 is a rear view thereof; FIG. 5 is a top view thereof; FIG. 6 is a bottom view thereof; FIG. 7 is a left side view thereof; FIG. 8 is a right side view thereof; FIG. 9 is a cross sectional view thereof, taken along the line 9-9 in FIG. 3 with its internal mechanisms omitted; FIG. 10 is a cross sectional view thereof, taken along the line 10-10 in FIG. 3 with its internal mechanisms omitted; FIG. 11 is an enlarged view thereof, taken along the line 11-11 in FIG. 9; and, FIG. 12 is a front view thereof, showing the state of the FPD detector, which is lifted up. The broken lines are for illustrative purpose only and form no part of the claimed design. The broken lines in FIG. 9 are included to indicate the point at which the magnified view is cut off. The uneven spaced broken lines define the bounds of the claimed designs and form no part thereof.

**1 Claim, 12 Drawing Sheets**



# US D748,798 S

Page 2

---

(56)

## References Cited

### U.S. PATENT DOCUMENTS

D558,877 S *	1/2008	Ogiwara .....	D24/158	2011/0179895 A1*	7/2011	Mueller .....	A61B 6/4441
2007/0121790 A1*	5/2007	Grady .....	A61B 6/4405				74/29
			378/198	2015/0023470 A1*	1/2015	Baumann .....	A61B 6/4441
							378/62

\* cited by examiner

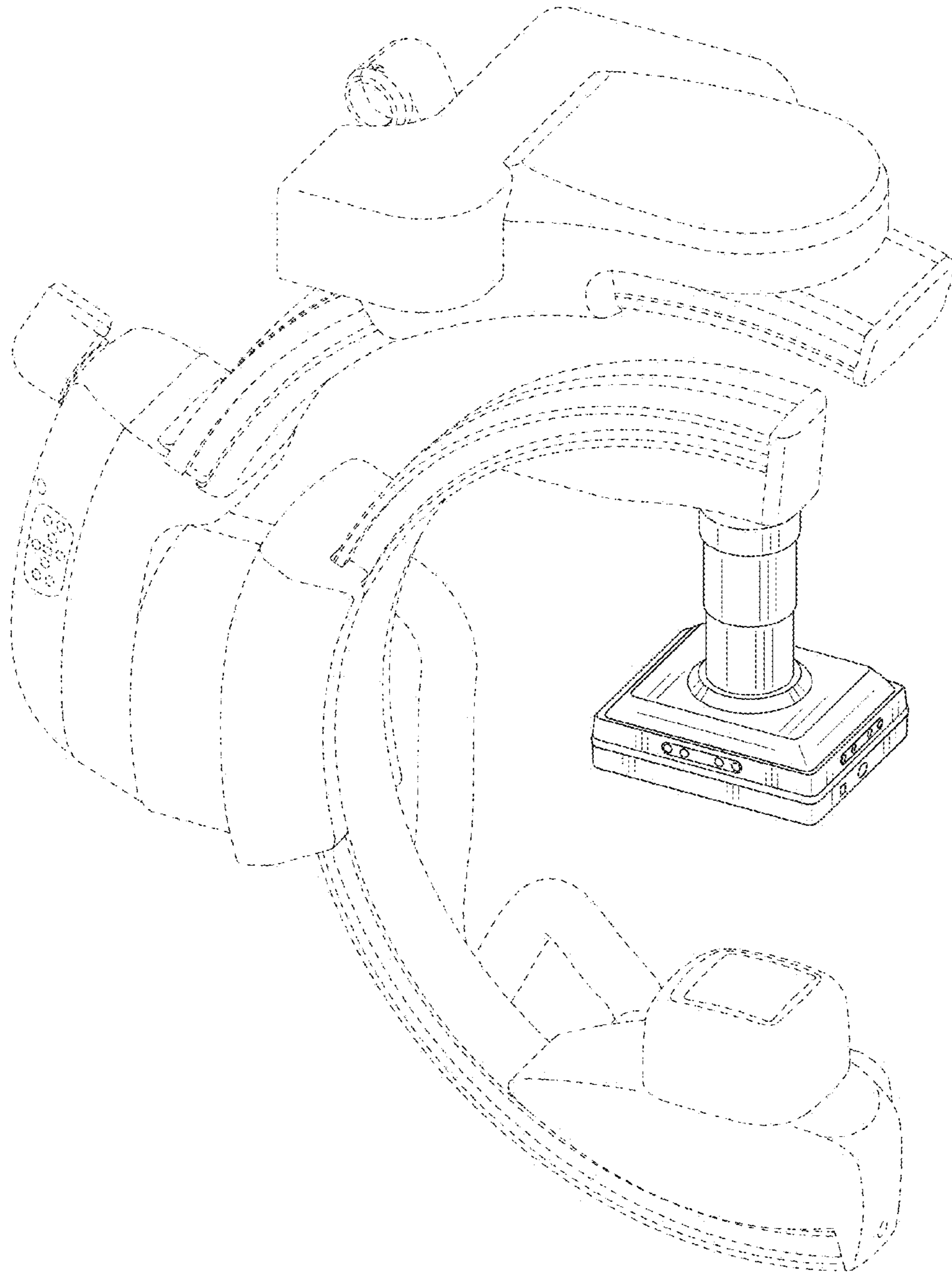


Fig. 1

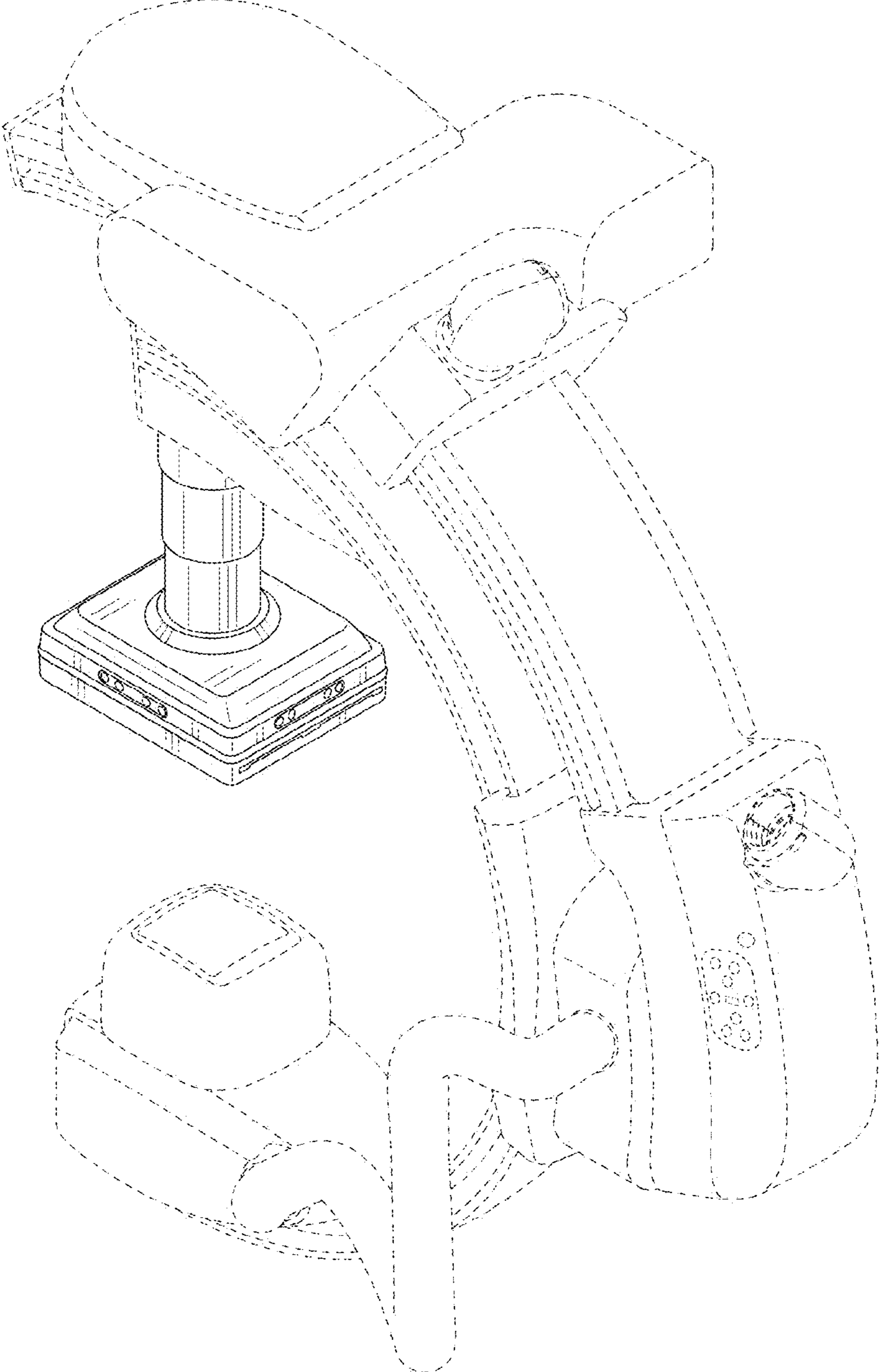


Fig. 2

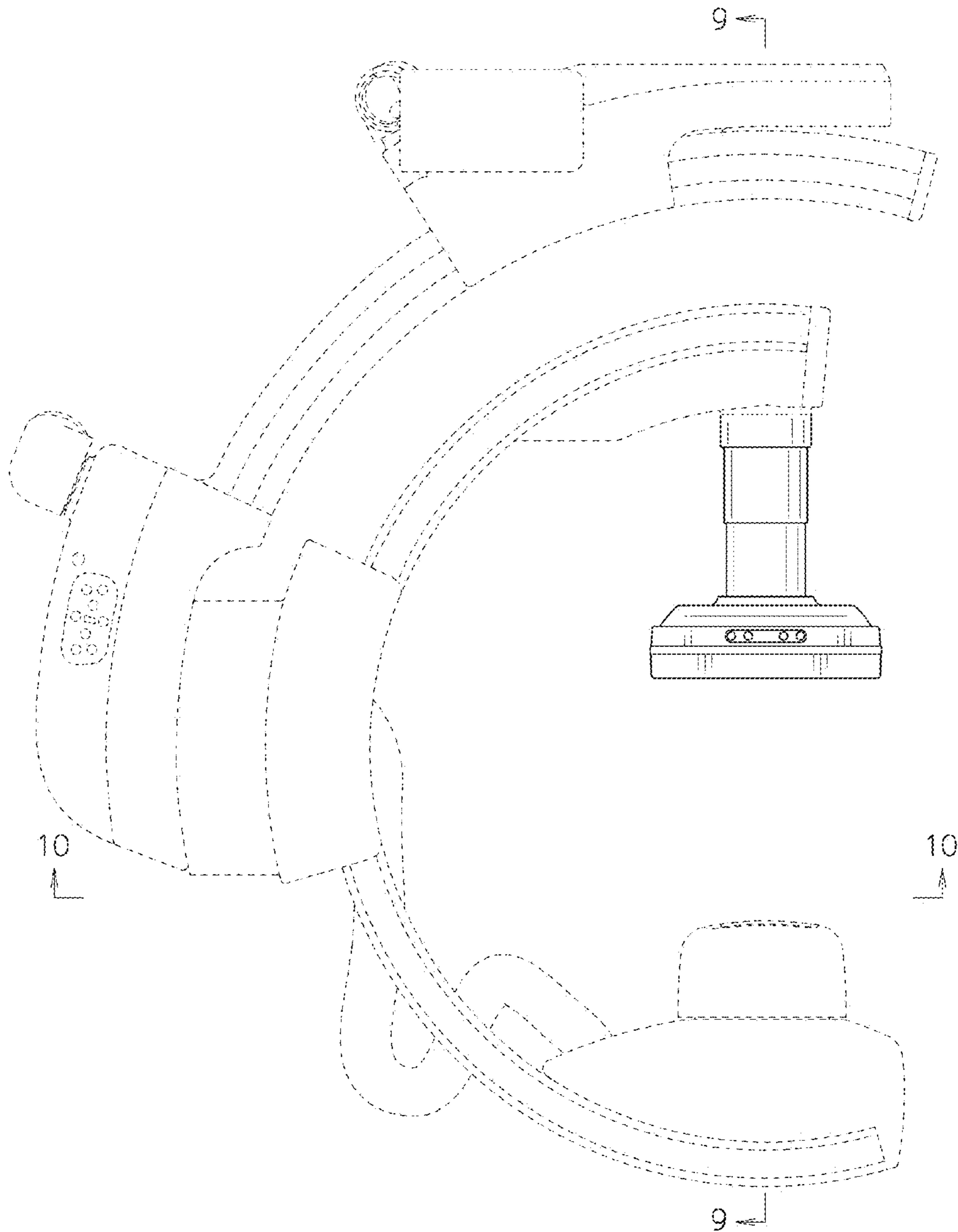


Fig. 3



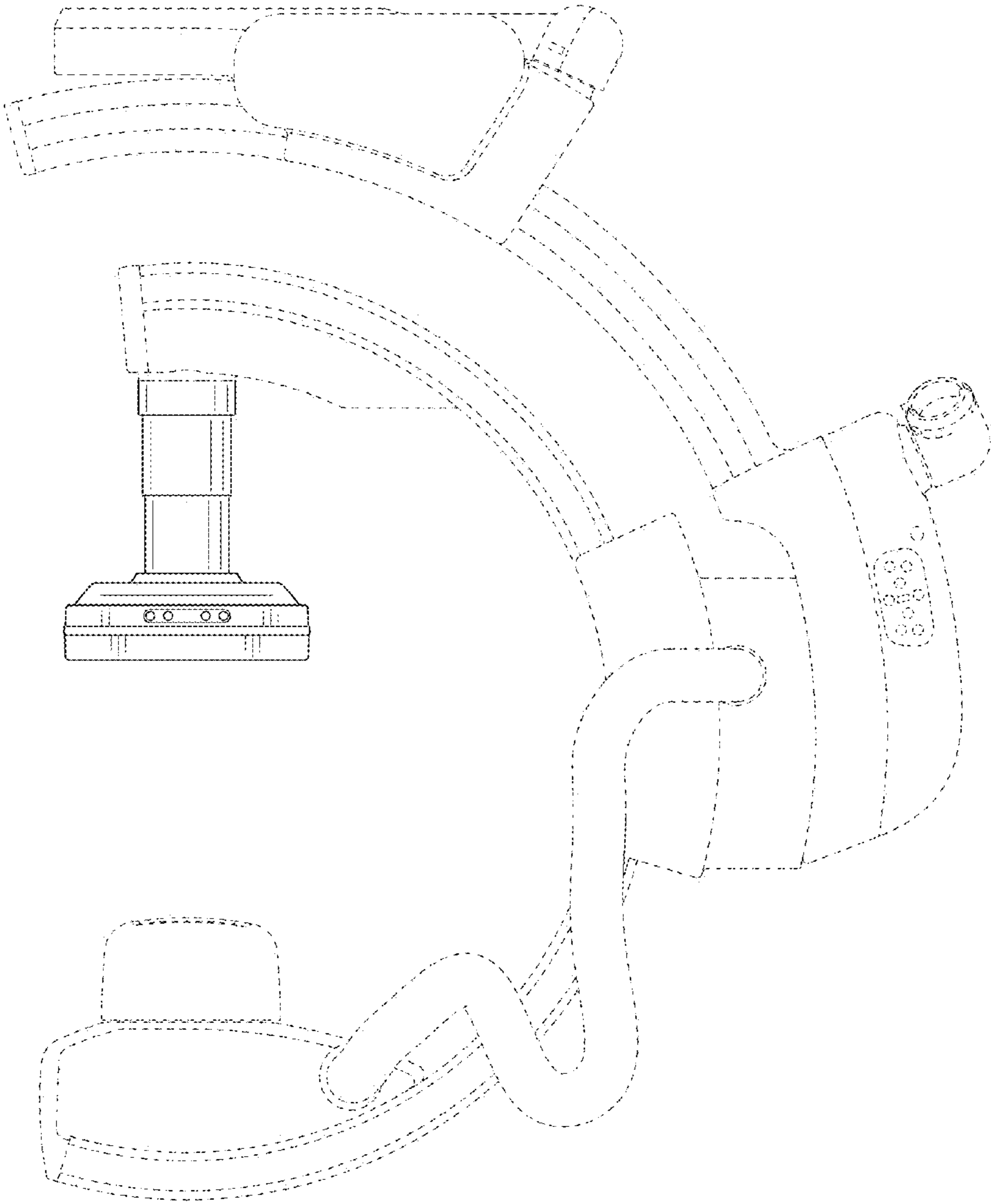


Fig. 4

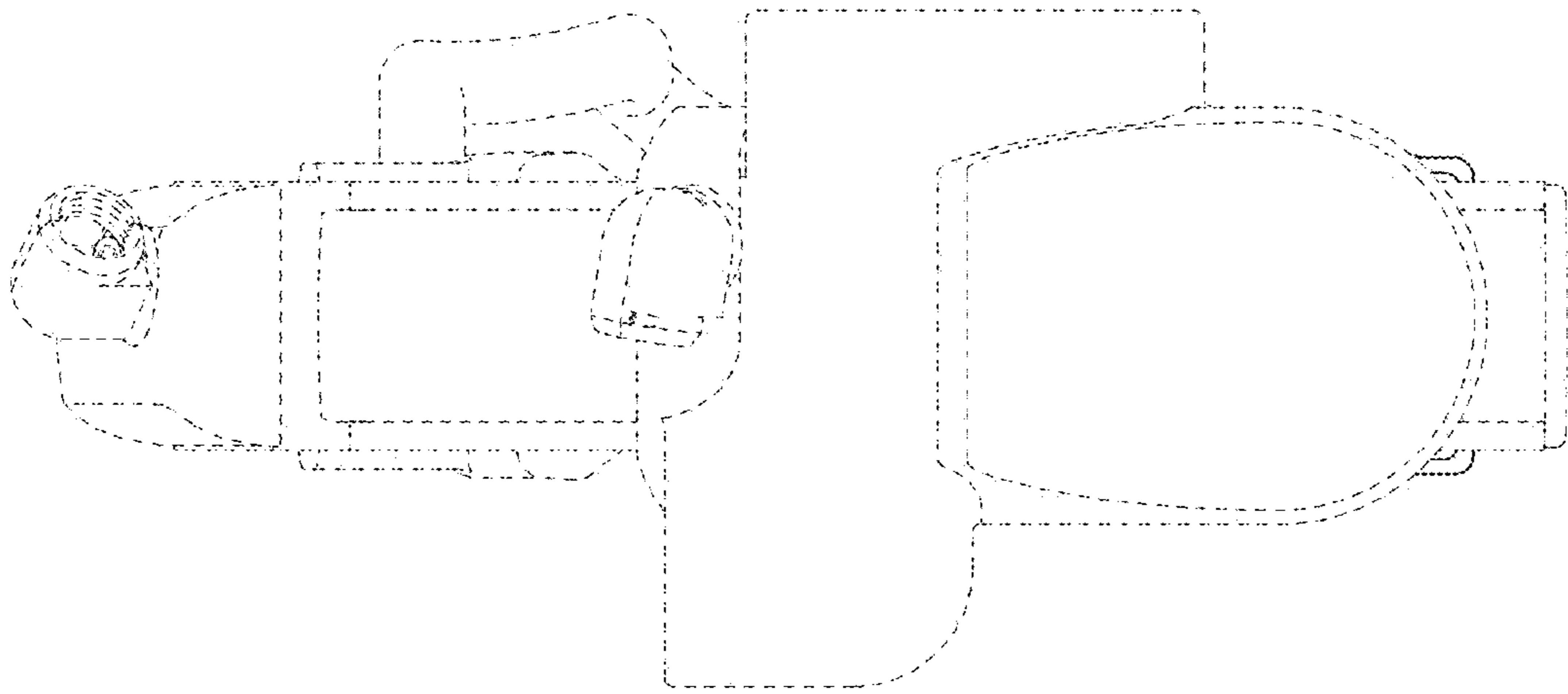


Fig. 5

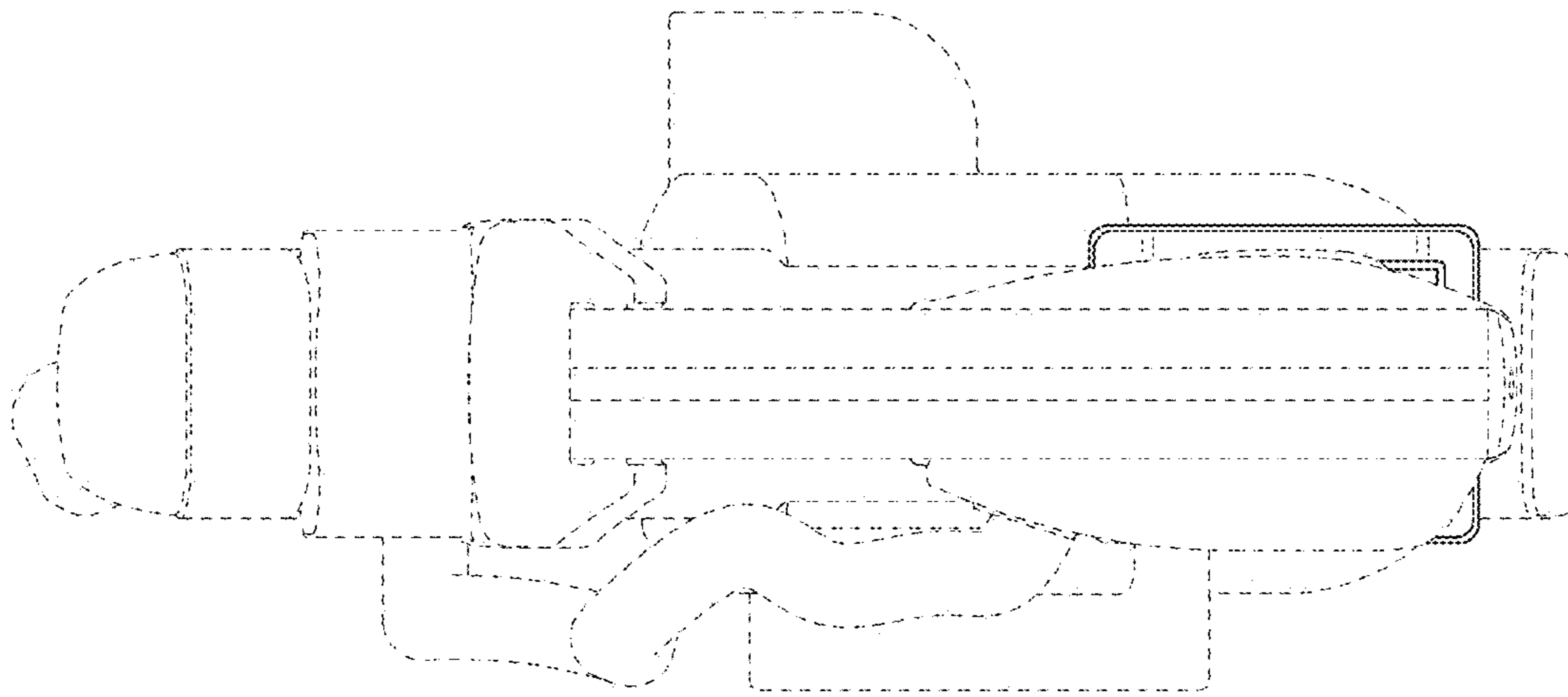


Fig. 6



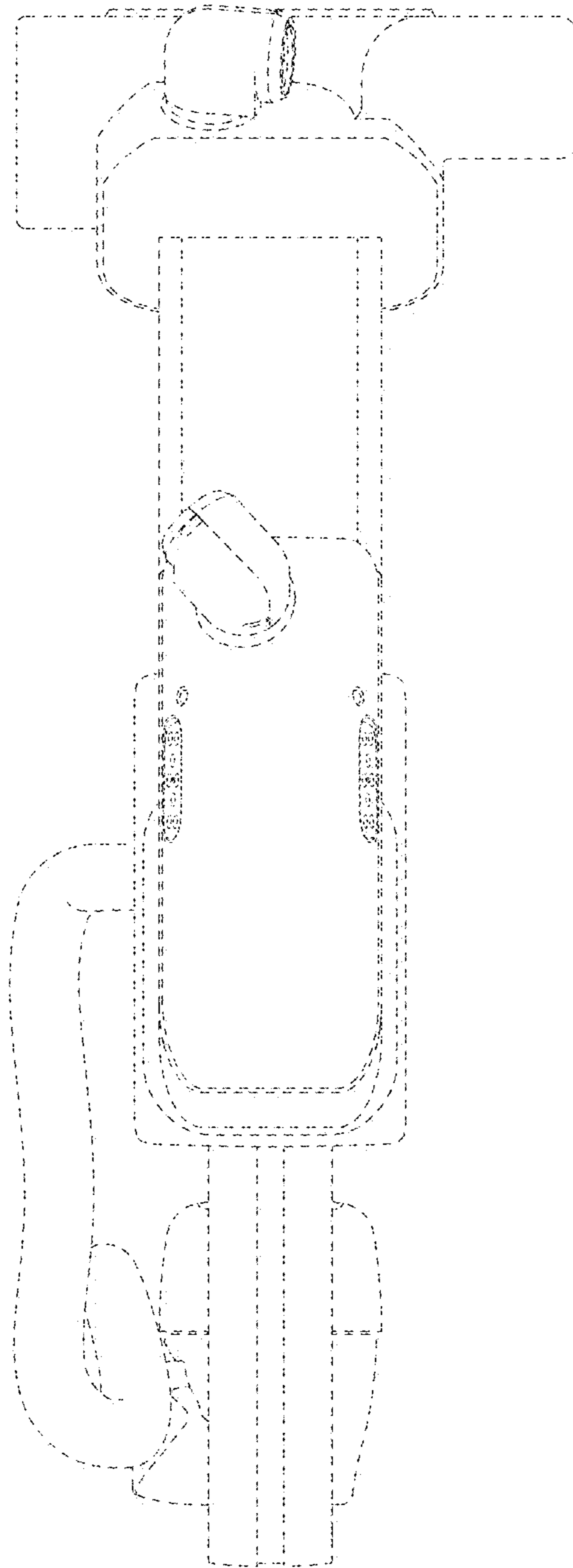


Fig. 7

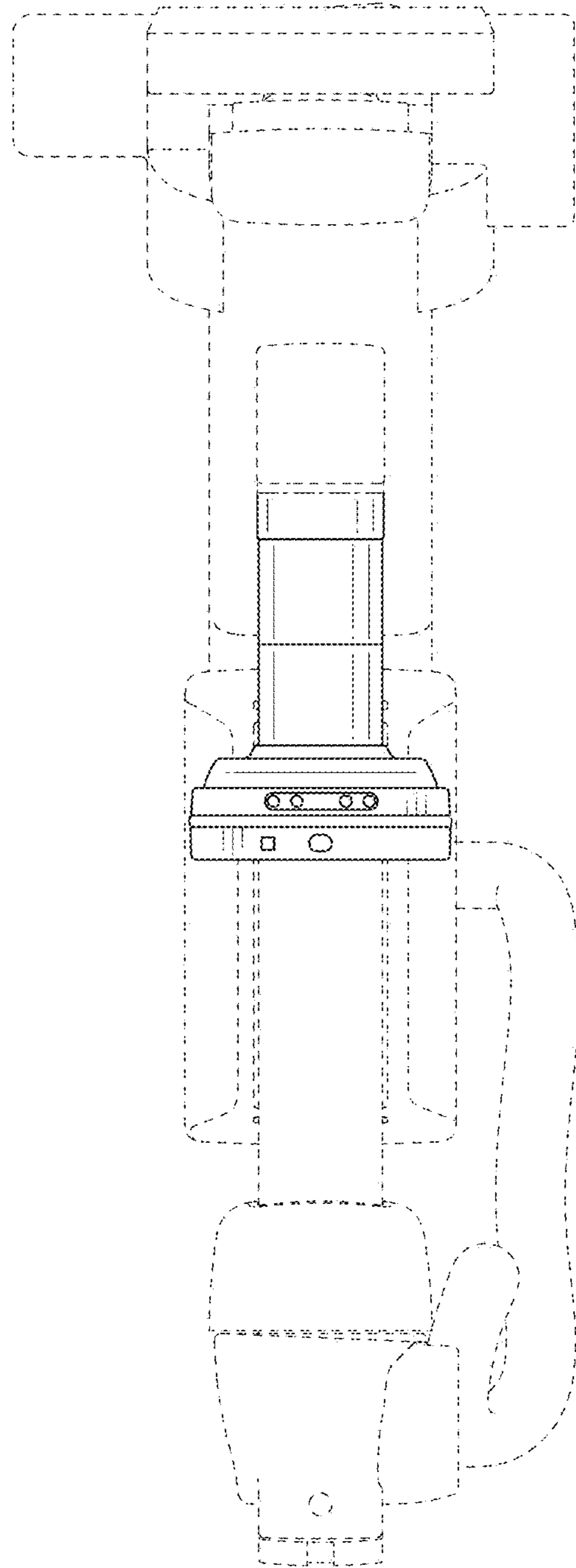


Fig. 8

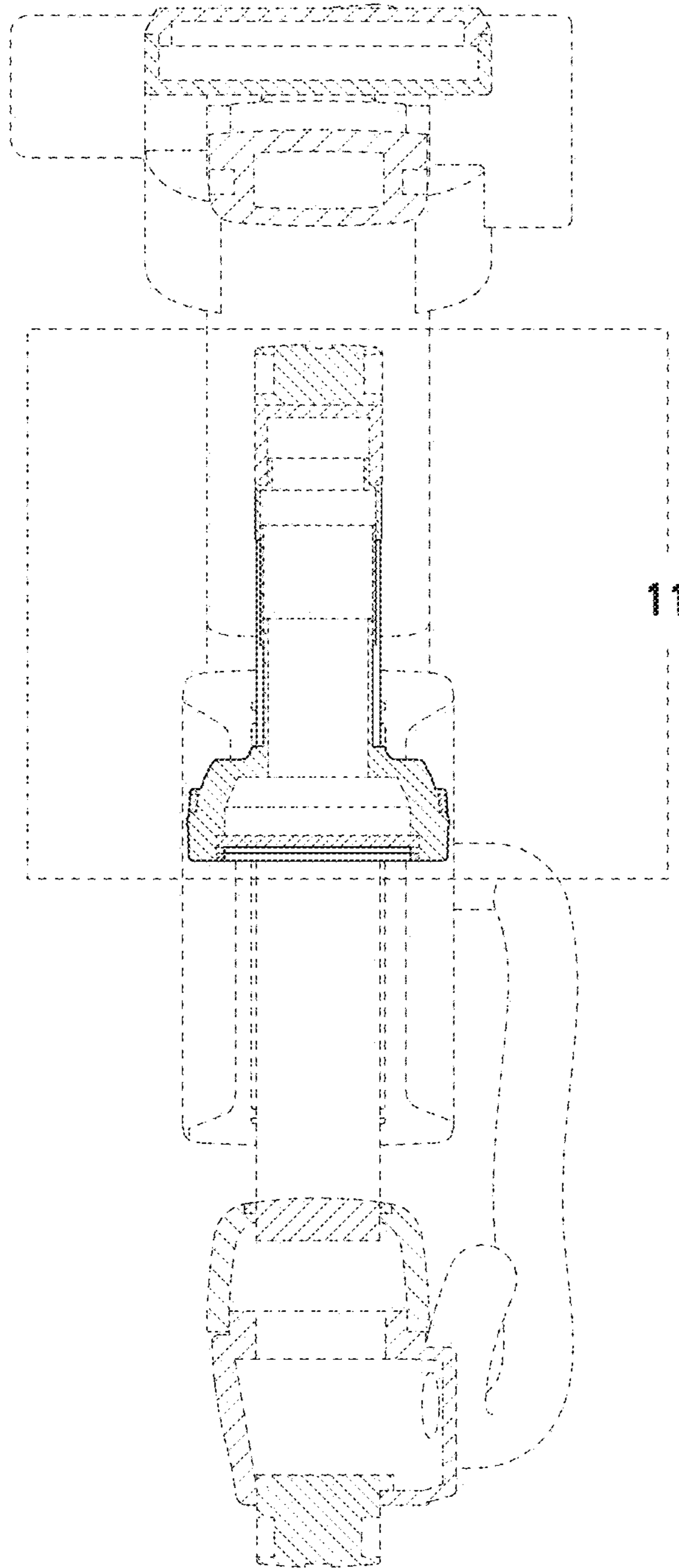


Fig. 9

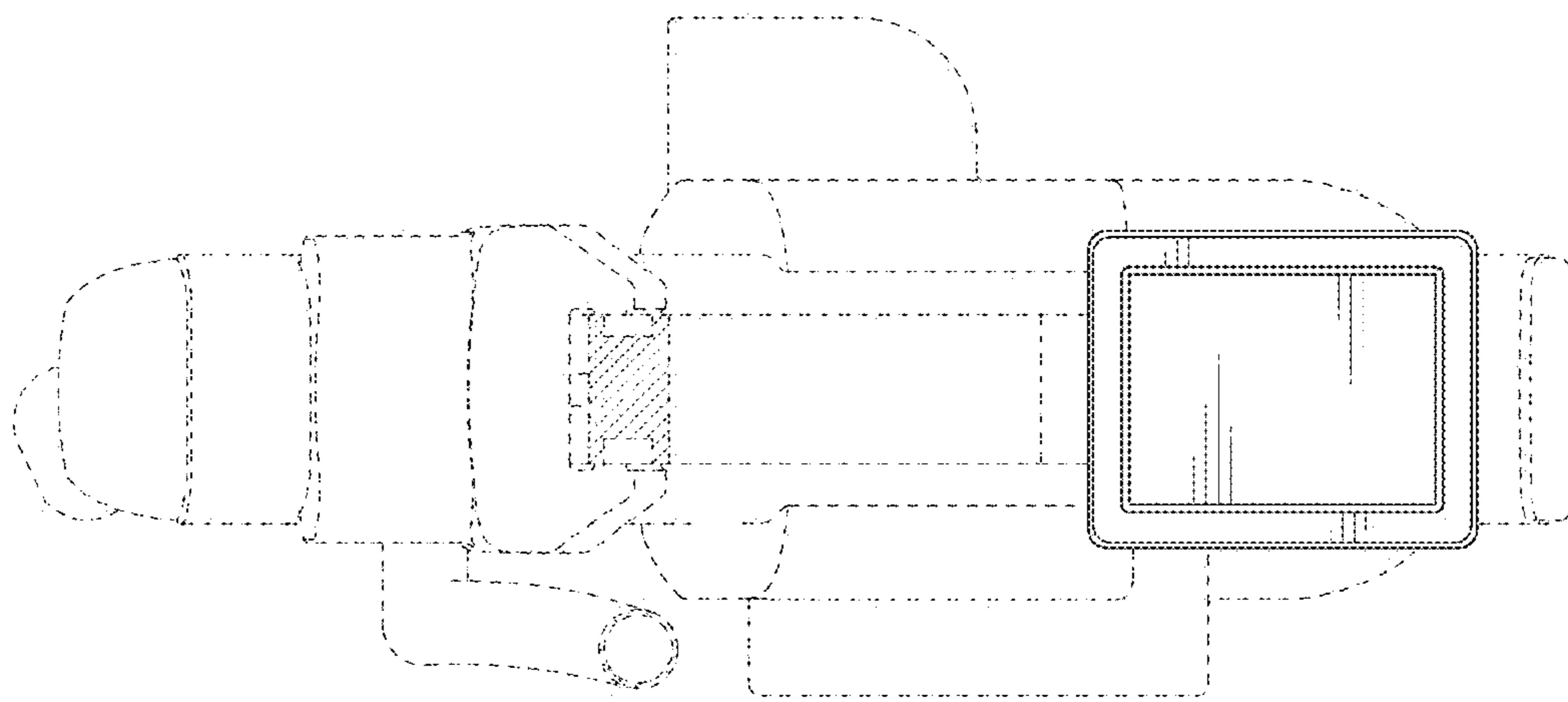


Fig. 10

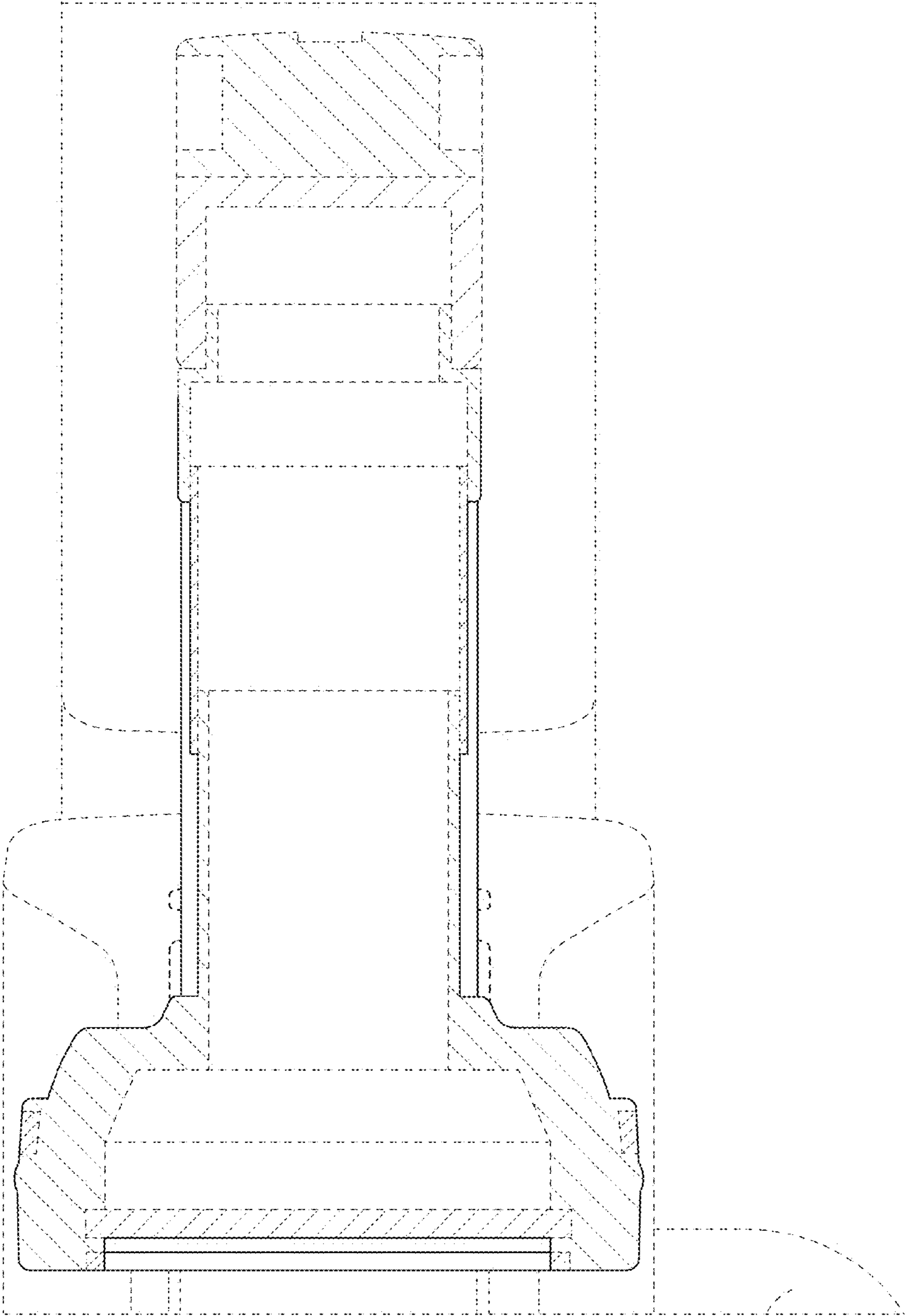


Fig. 11

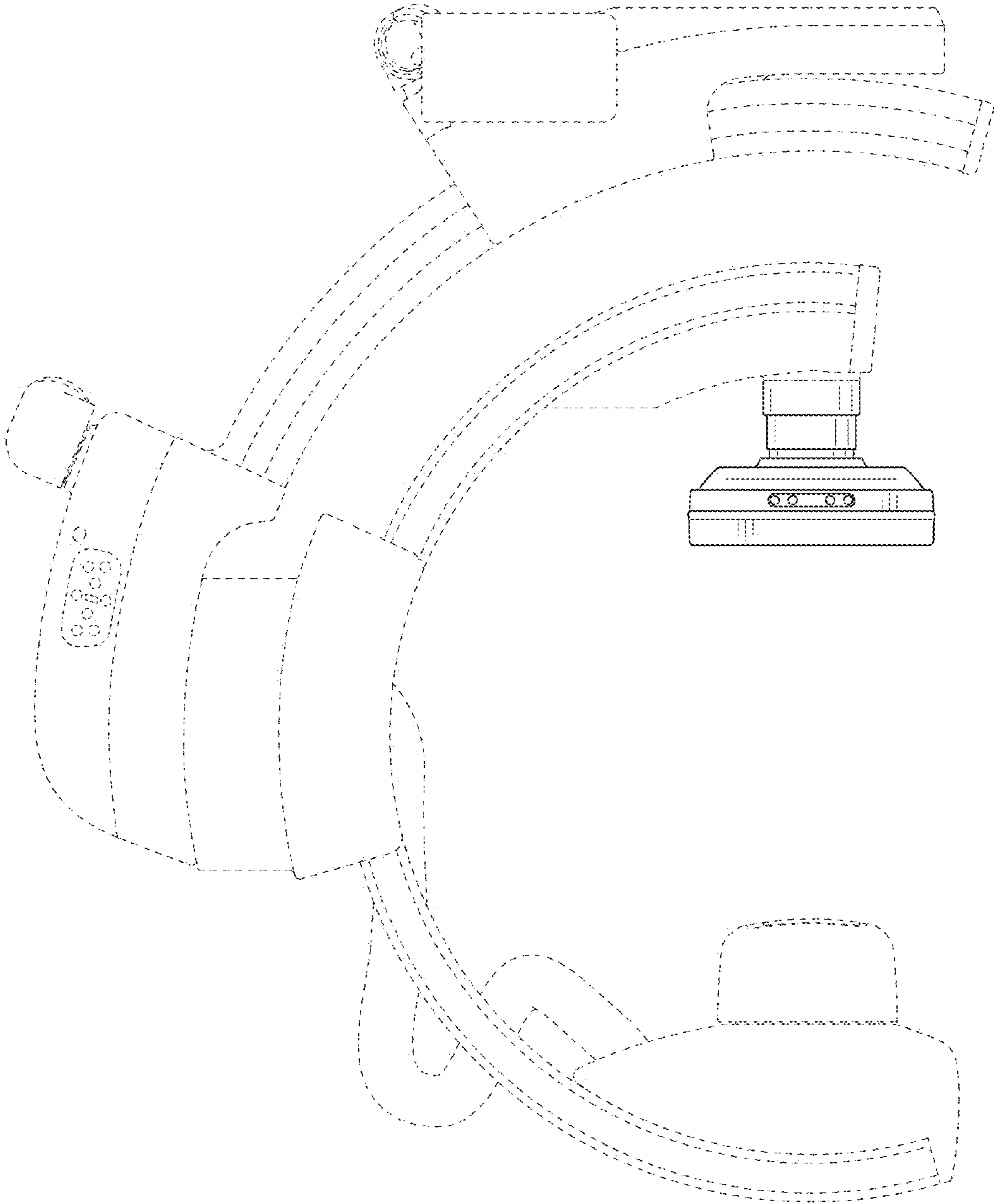


Fig. 12