



US00D592616S

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

(10) **Patent No.:** **US D592,616 S**
(45) **Date of Patent:** **** May 19, 2009**

(54) **LIGHT EMITTING DIODE**

(57) **CLAIM**

(75) Inventors: **Tsuyoshi Yasuoka**, Anan (JP); **Keiji Funamoto**, Tokushima (JP)

The ornamental design for a light emitting diode, as shown and described.

(73) Assignee: **Nichia Corporation**, Anan-shi (JP)

DESCRIPTION

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

(21) Appl. No.: **29/323,929**

(22) Filed: **Sep. 3, 2008**

Related U.S. Application Data

(62) Division of application No. 29/318,447, filed on May 20, 2008, now Pat. No. Des. 578,970, which is a division of application No. 29/273,596, filed on Mar. 9, 2007, now Pat. No. Des. 577,689.

FIG. 1 is a front side perspective view of a light emitting diode in accordance with our new design;

FIG. 2 is a rear side perspective view of a light emitting diode in accordance with our new design;

FIG. 3 is a top plan view of the light emitting diode in accordance with our new design;

FIG. 4 is a bottom plan view of the light emitting diode in accordance with our new design;

FIG. 5 is a front elevational view of the light emitting diode in accordance with our new design;

FIG. 6 is a rear elevational view of the light emitting diode in accordance with our new design;

FIG. 7 is a right side end elevational view of the light emitting diode in accordance with our new design;

FIG. 8 is a left side end elevational view of the light emitting diode in accordance with our new design;

FIG. 9 is a top plan view of the light emitting diode in accordance with the embodiment of our new design with environment shown in broken lines; and,

FIG. 10 is a cross sectional view of the light emitting diode in accordance with the embodiment of our new design as seen along section line 10—10 of FIG. 9.

The broken line showing of environment (the remaining structure of the light emitting diode) in the FIG. 9 is for illustrative purposes only and forms no part of the claimed design.

The opaque line shading illustrates that the light emitting diode chip is translucent and that the lens is transparent.

The cross sectional view illustrated in FIG. 10 is presented solely for the purpose of clarifying the shape of exterior surface of the claimed design.

(30) **Foreign Application Priority Data**

Sep. 15, 2006	(JP)	.....	2006-024861
Sep. 15, 2006	(JP)	.....	2006-024884
Sep. 15, 2006	(JP)	.....	2006-024885
Sep. 15, 2006	(JP)	.....	2006-024886
Sep. 15, 2006	(JP)	.....	2006-024887
Sep. 15, 2006	(JP)	.....	2006-024889
Sep. 15, 2006	(JP)	.....	2006-024890
Sep. 15, 2006	(JP)	.....	2006-024891

(51) **LOC (9) Cl.** **13-03**

(52) **U.S. Cl.** **D13/180**

(58) **Field of Classification Search** D13/180;
D26/2; 257/79, 80, 81, 88, 89, 95, 98, 99,
257/100; 313/483, 498, 500; 362/555, 800
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

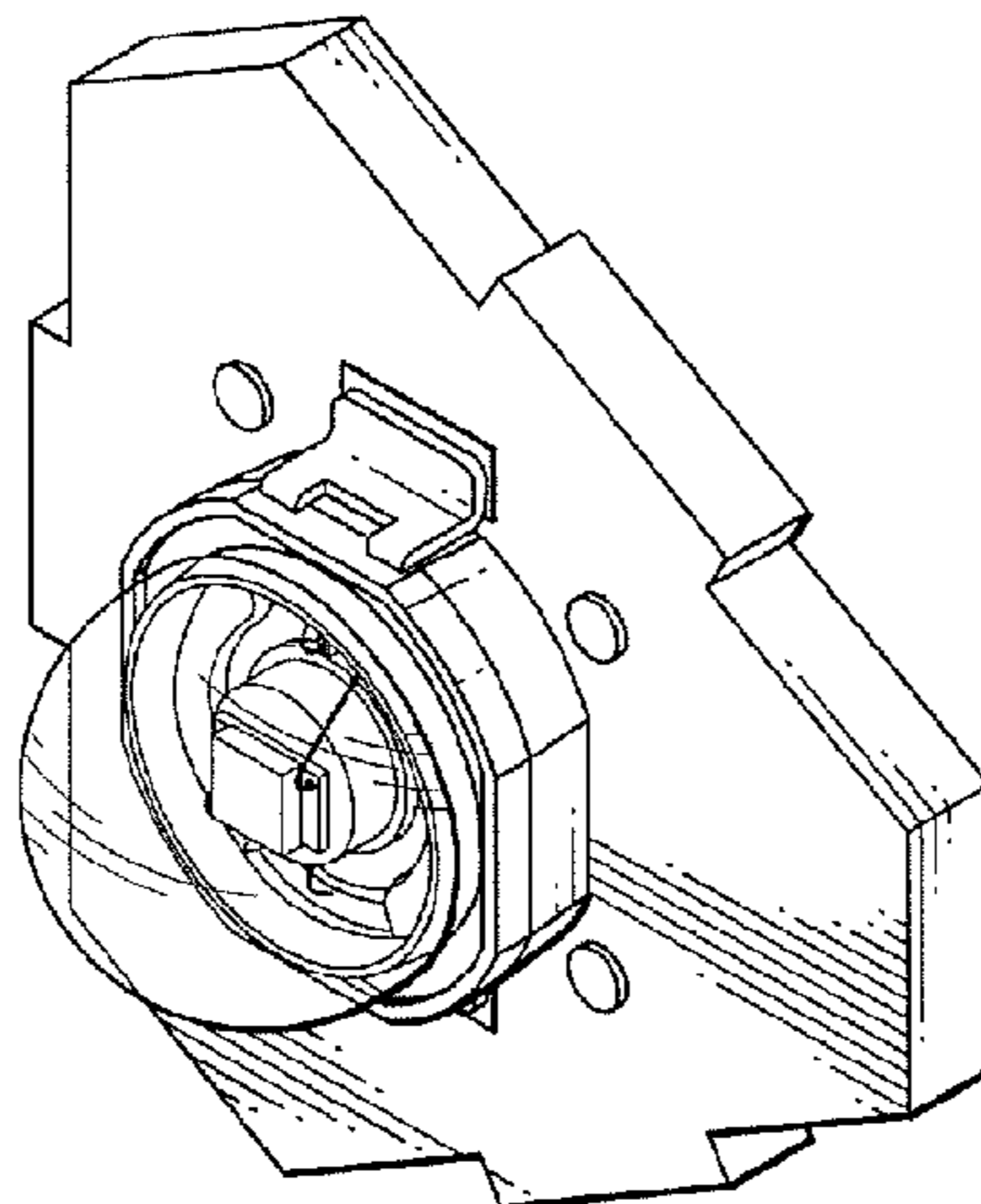
6,429,464 B1 8/2002 Lin

(Continued)

Primary Examiner—Selina Sikder

(74) *Attorney, Agent, or Firm*—Global IP Counselors, LLP

1 Claim, 3 Drawing Sheets



US D592,616 S

Page 2

U.S. PATENT DOCUMENTS					
			D587,220 S *	2/2009	Yasuoka et al. D13/180
D489,692 S	5/2004	Ishida	2004/0041222 A1	3/2004	Loh
D495,668 S	9/2004	Kim et al.	2004/0126913 A1	7/2004	Loh
D500,292 S	12/2004	Ishida	2004/0201987 A1	10/2004	Omata
D500,294 S	12/2004	Ishida	2006/0001361 A1	1/2006	Imai et al.
D503,690 S	4/2005	Kamada	2006/0023451 A1	2/2006	Han et al.
6,953,952 B2	10/2005	Asakawa	2006/0054914 A1	3/2006	Hsian Yi
D512,693 S	12/2005	Kim et al.	2006/0267036 A1	11/2006	Lee et al.
D524,260 S	7/2006	Ishizaka et al.	2006/0273338 A1	12/2006	Lee et al.
7,078,728 B2	7/2006	Ishii et al.	2006/0284203 A1	12/2006	Han et al.
D528,998 S	9/2006	Song et al.	2007/0029564 A1	2/2007	Han et al.
7,153,000 B2	12/2006	Park et al.	2007/0063321 A1	3/2007	Han et al.
D577,689 S *	9/2008	Yasuoka et al. D13/180	2007/0114559 A1	5/2007	Sayers et al.
D578,970 S *	10/2008	Yasuoka et al. D13/180			

* cited by examiner

FIG. 1

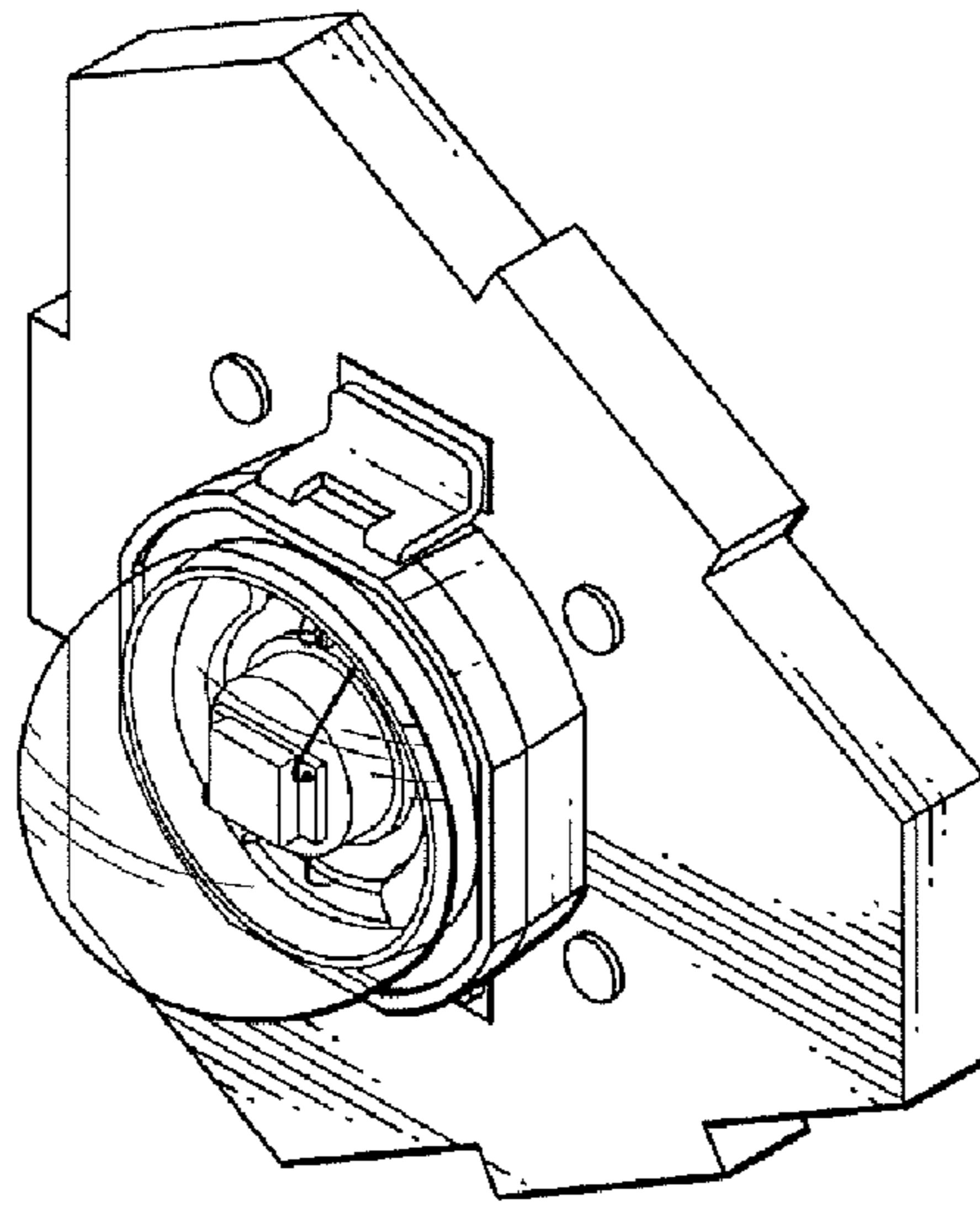


FIG. 2

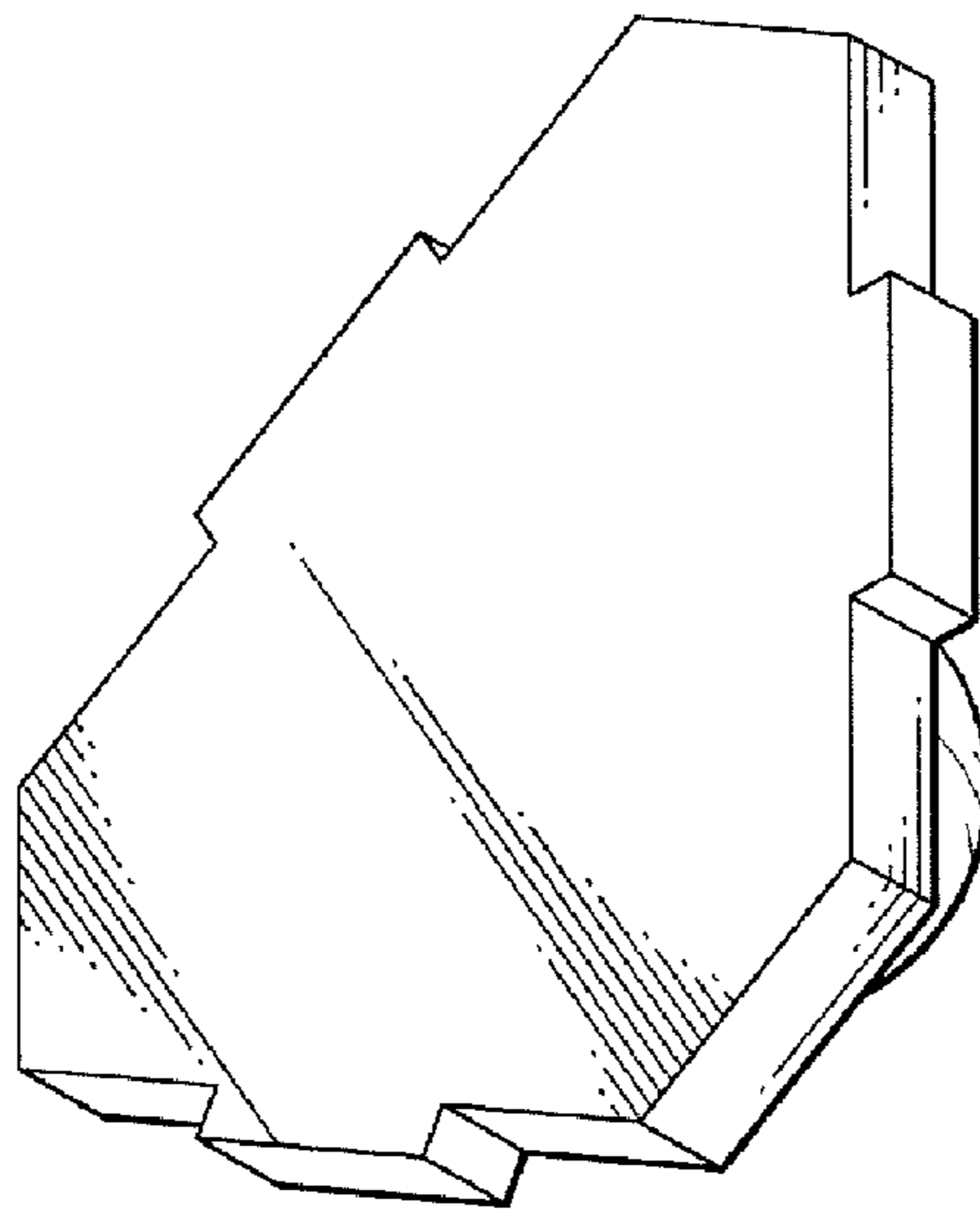


FIG. 3

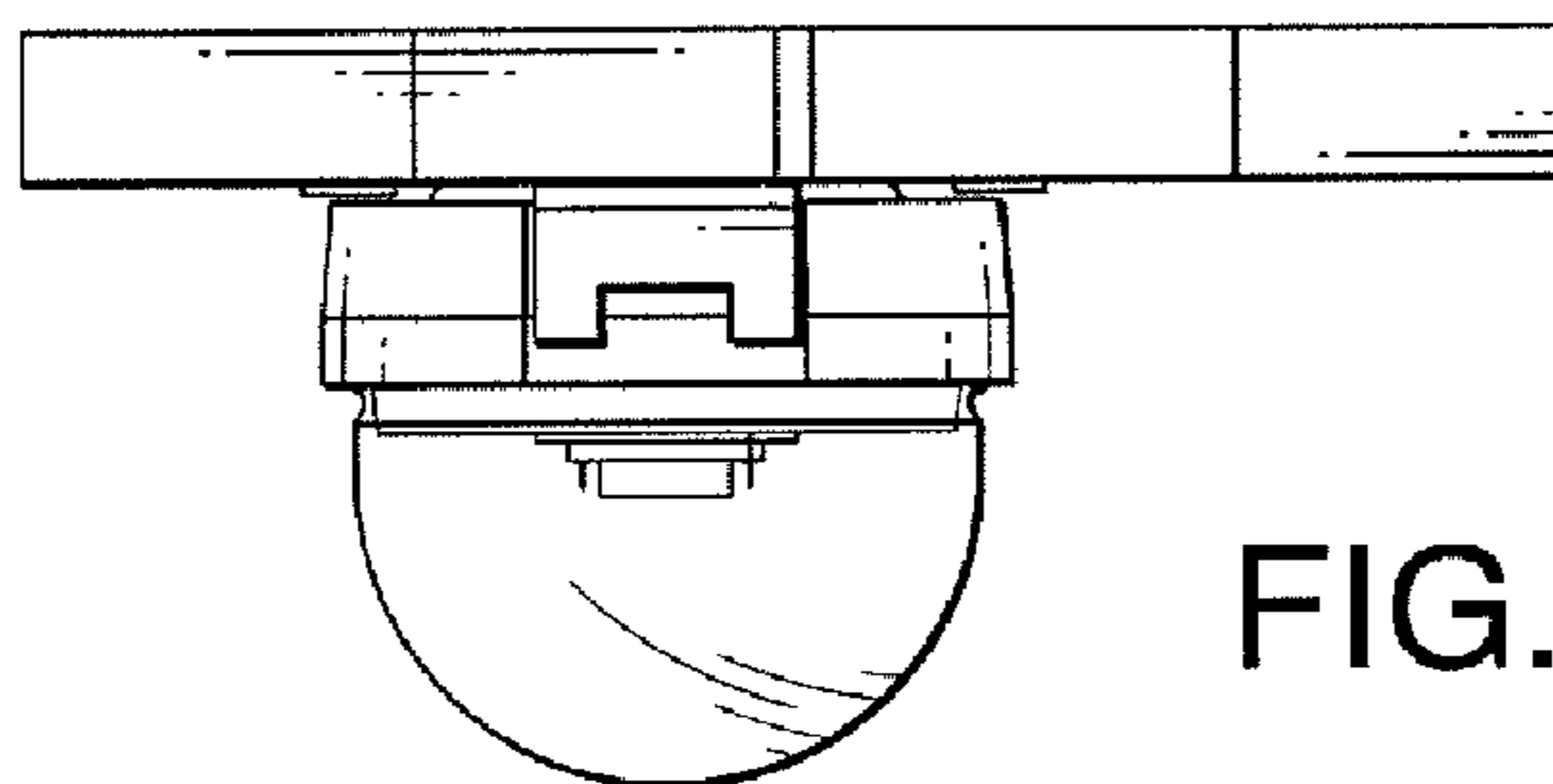


FIG. 4

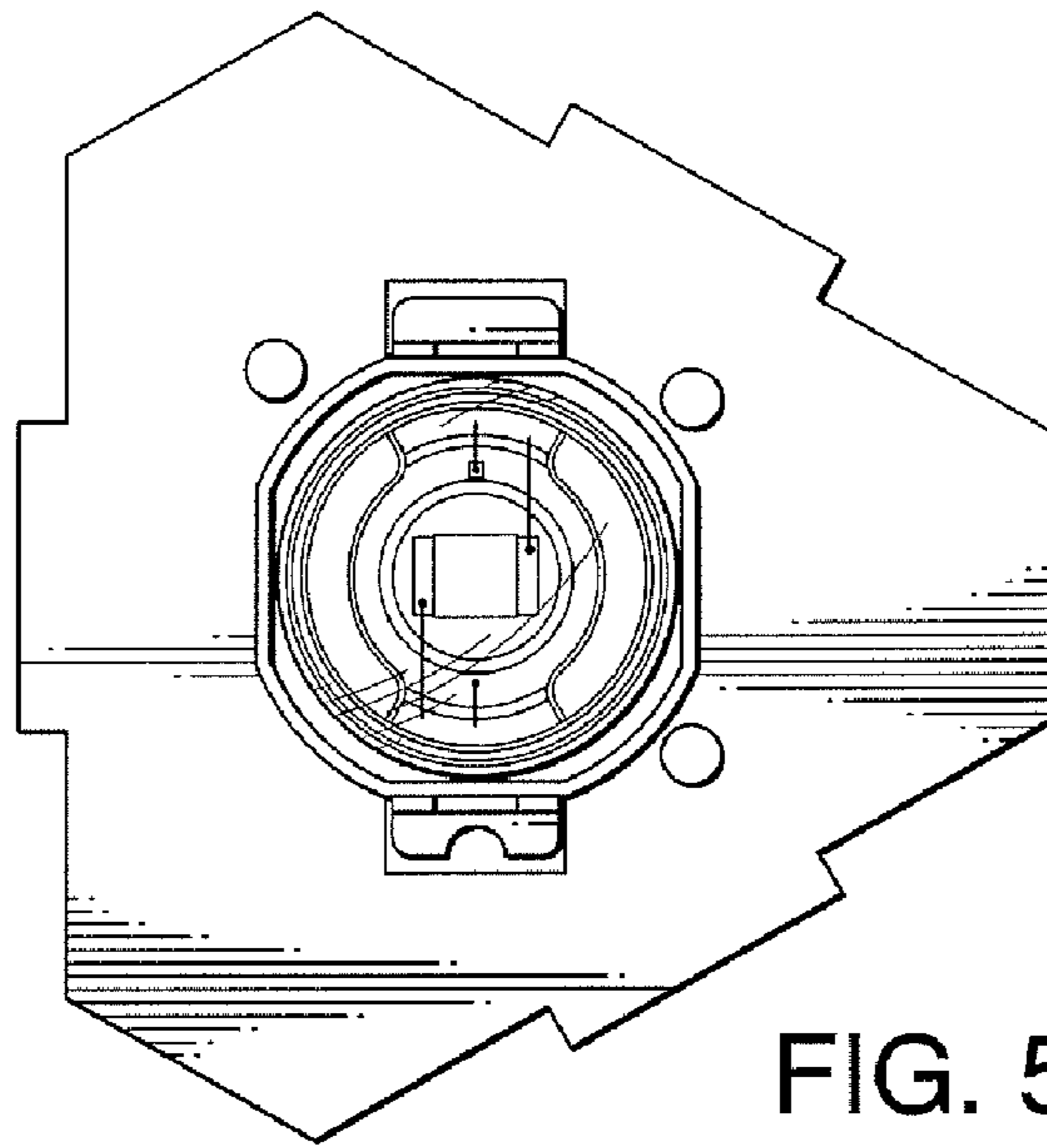
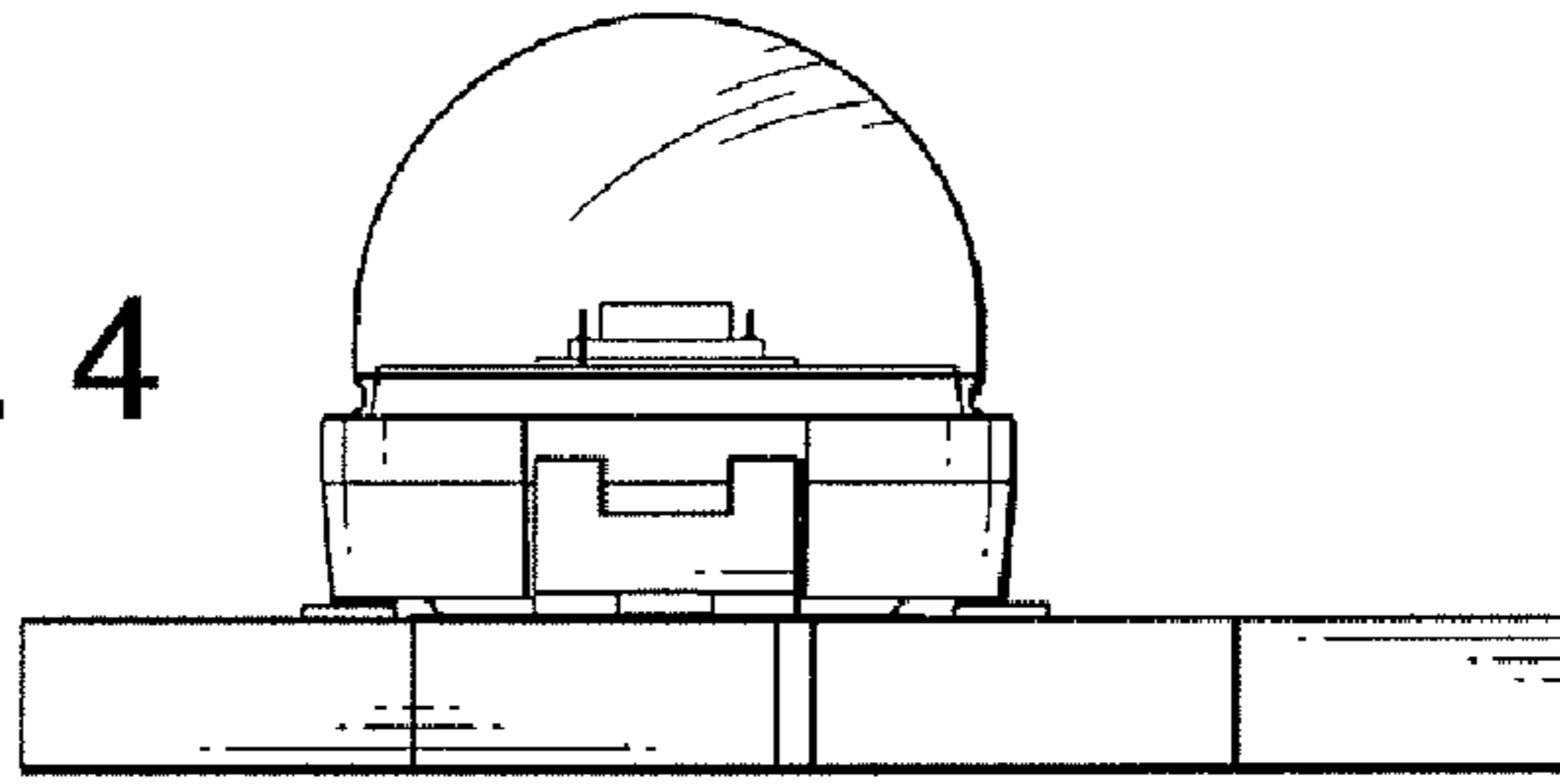


FIG. 5

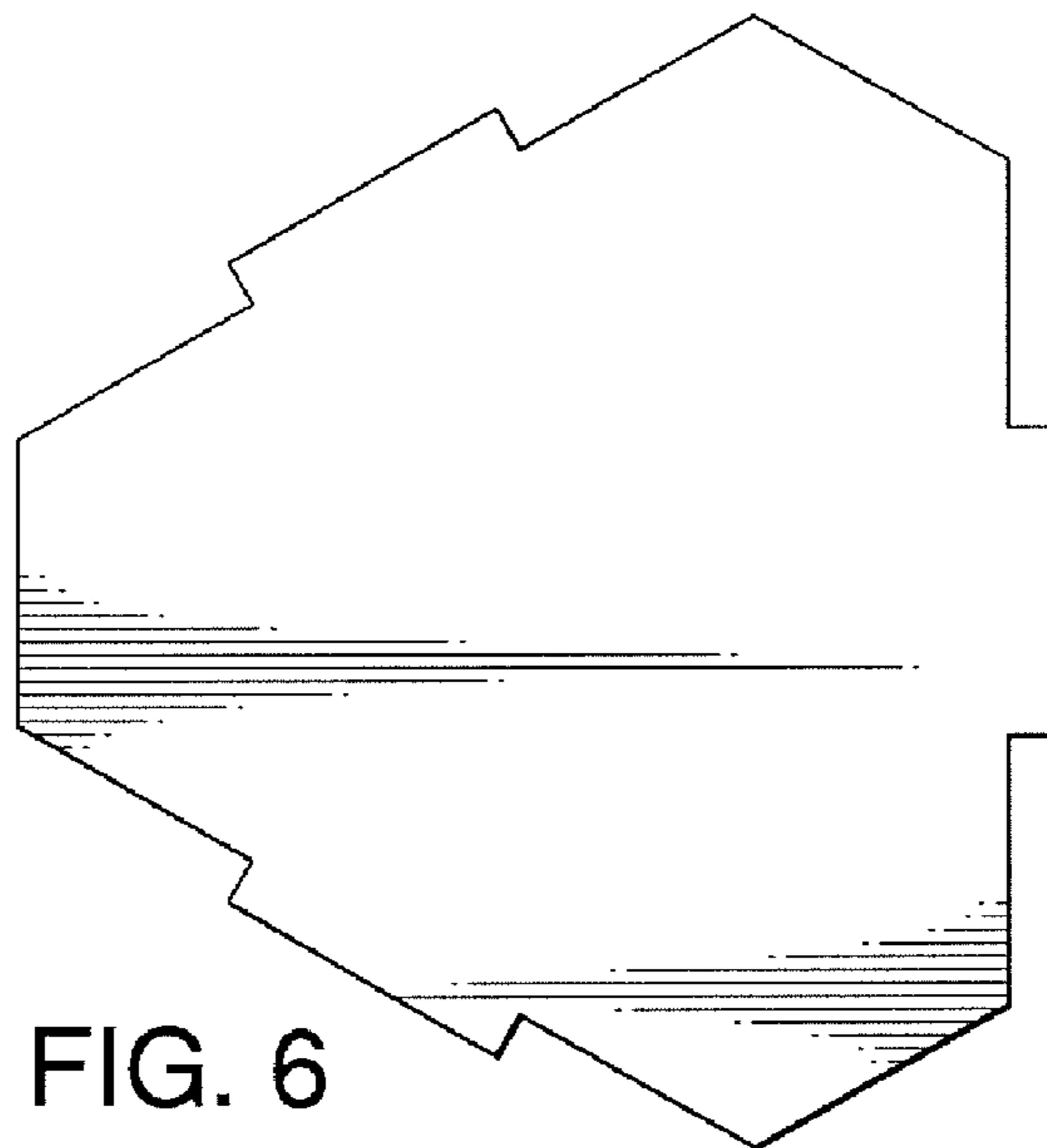


FIG. 6

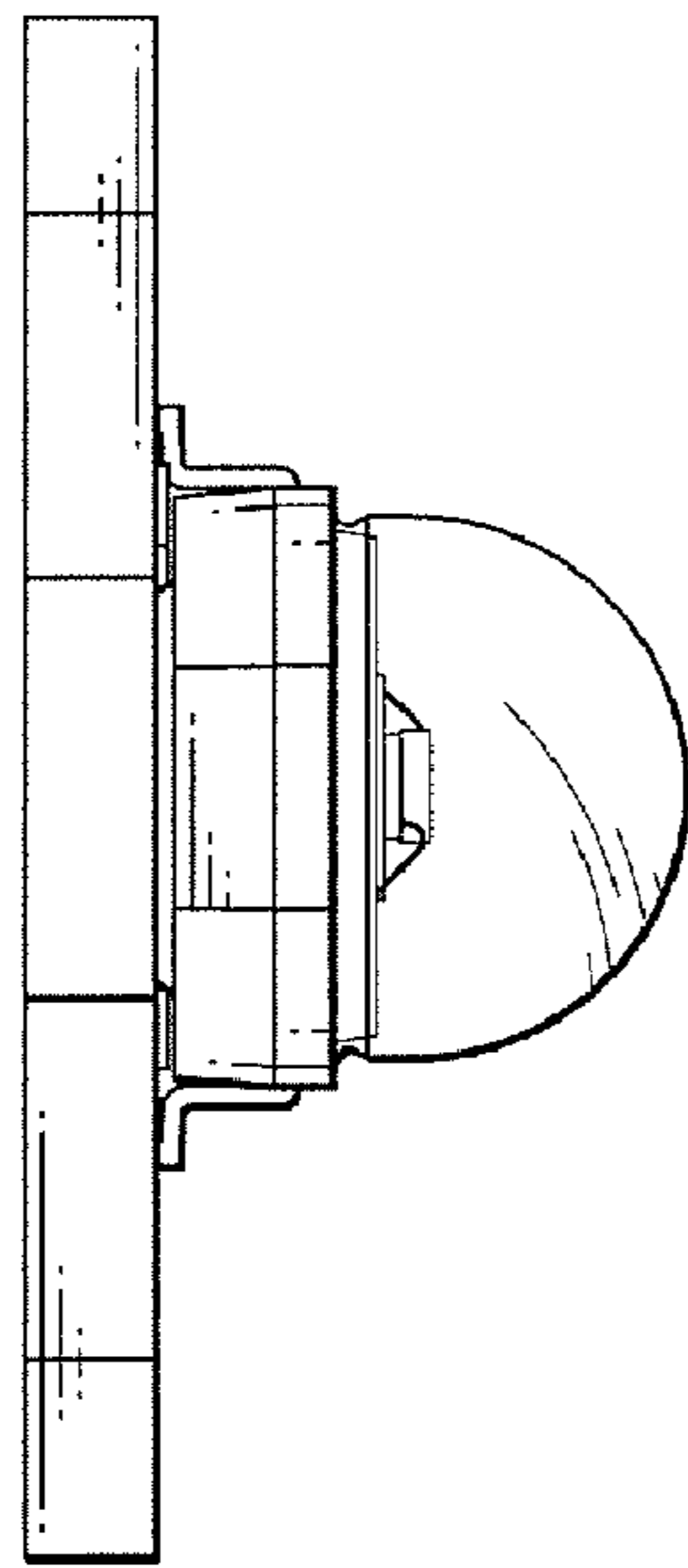


FIG. 7

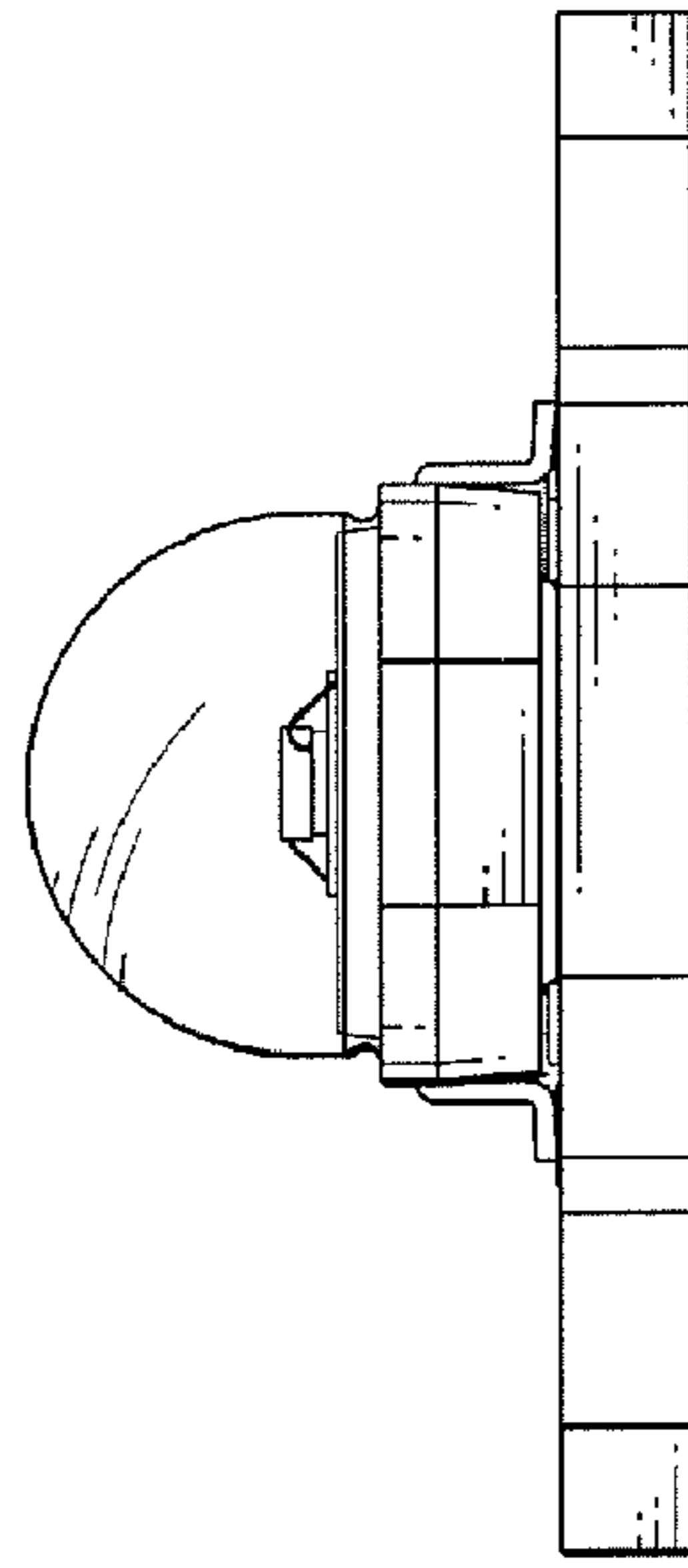


FIG. 8

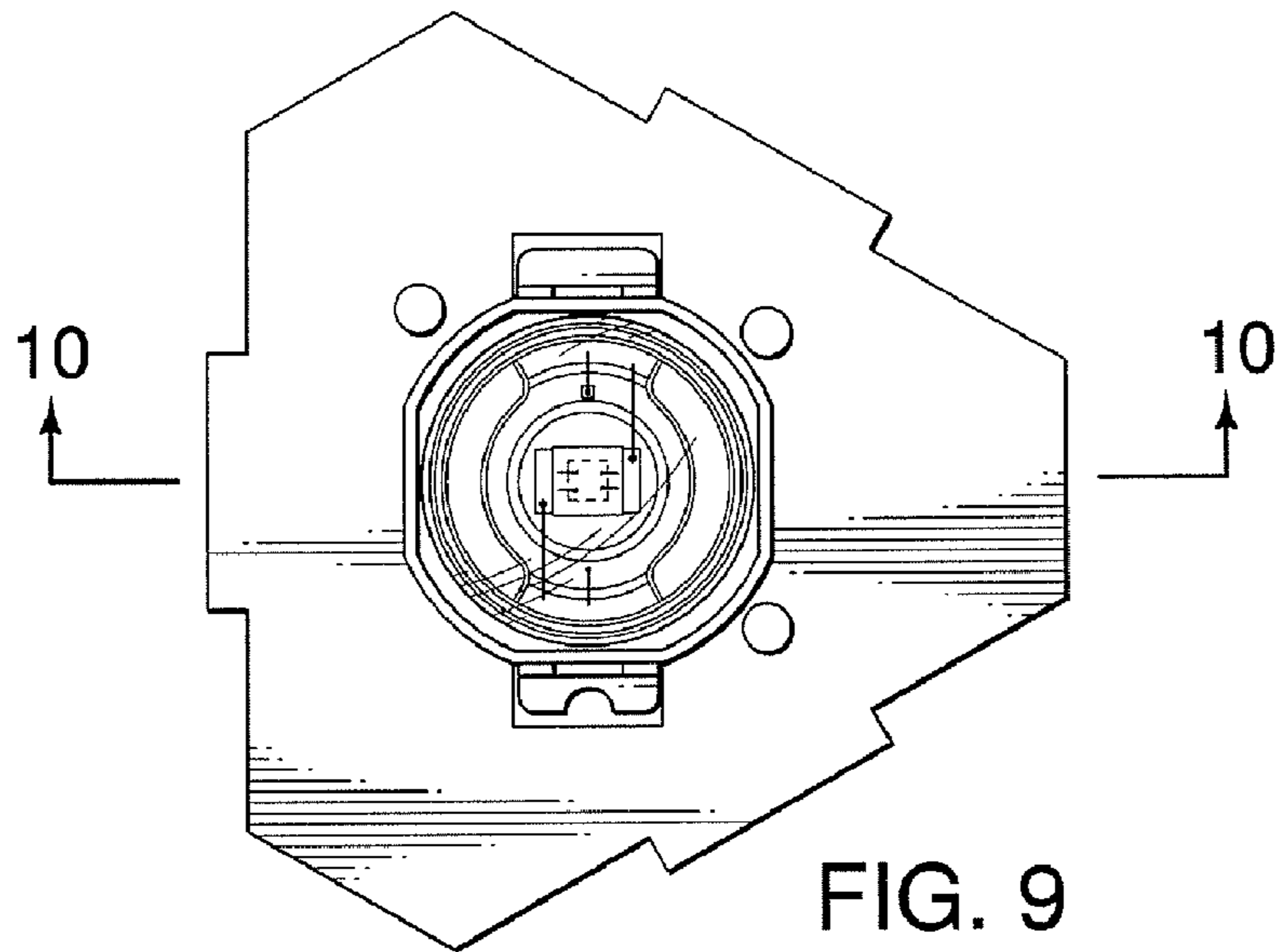


FIG. 9

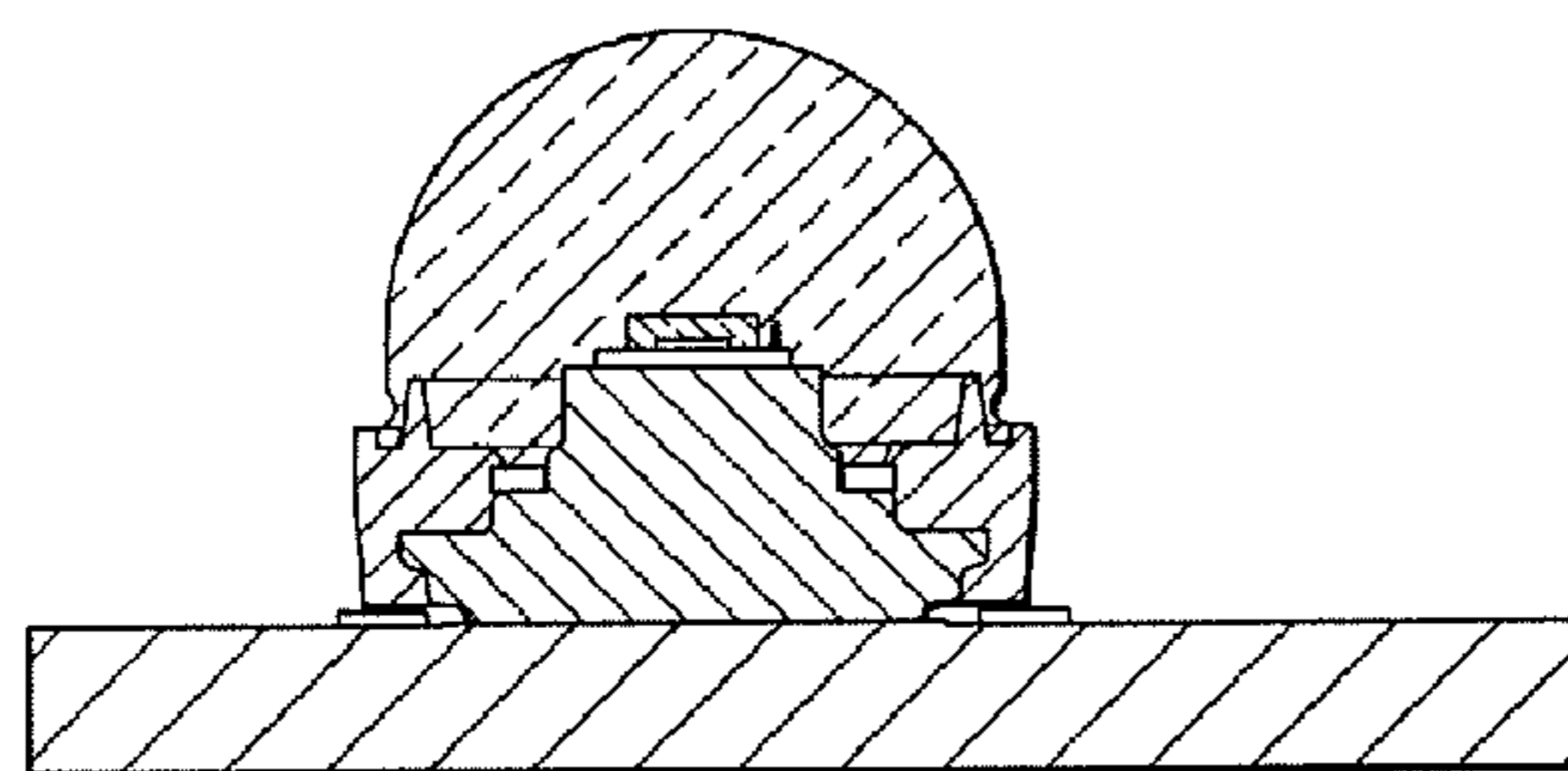


FIG. 10