

#### US00D592617S

# (12) United States Design Patent

#### Bando

# (10) Patent No.:

# US D592,617 S

## (45) **Date of Patent:**

\*\* May 19, 2009

#### 54) LIGHT EMITTING DIODE

(75)	Inventor:	Yoshitaka Bando,	Tokushima	(JP)
------	-----------	------------------	-----------	------

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

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

(21) Appl. No.: 29/328,945

(22) Filed: **Dec. 4, 2008** 

#### Related U.S. Application Data

(62) Division of application No. 29/325,171, filed on Sep. 26, 2008, now Pat. No. Des. 584,699, which is a division of application No. 29/318,364, filed on May 19, 2008, now Pat. No. Des. 580,381, which is a division of application No. 29/259,849, filed on May 17, 2006, now Pat. No. Des. 573,113.

# (30) Foreign Application Priority Data

Dec.	9, 2005	(JP)	•••••	. 2005-036420
Dec.	9, 2005	(JP)	•••••	. 2005-036424
Dec.	9, 2005	(JP)	•••••	2005-036425
Dec.	9, 2005	(JP)	•••••	. 2005-036426
Dec.	9, 2005	(JP)	•••••	2005-036427
Dec.	9, 2005	(JP)	•••••	. 2005-036428
Dec.	9, 2005	(JP)	•••••	2005-036429
Dec.	9, 2005	(JP)	•••••	2005-036430
Dec.	9, 2005	(JP)	•••••	2005-036431
(51)	LOC (9) Cl	• •••••		13-03
(52)	U.S. Cl	• • • • • • • • • • • •		D13/180
(58)	Field of Cla	ssificat	ion Search	D13/180;
	Ι	)26/2; 2	257/79, 80, 81, 88,	89, 95, 98, 99,
257/100; 313/483, 498, 500; 362/555, 800				
,	See applicat	ion file	for complete searc	h history.

# (56) References Cited

#### U.S. PATENT DOCUMENTS

6,376,902	B1*	4/2002	Arndt	257/678
D471,166	S *	3/2003	Oshio et al	D13/182
6,586,721	B2*	7/2003	Estevez-Garcia	250/221

D486,801	S *	2/2004	Suenaga D13/182
D491,899	S *	6/2004	Yagi D13/180
D505,398	S *	5/2005	Nakashima D13/180
D512,029	S *	11/2005	Kim et al D13/180
D551,180	S *	9/2007	Song et al D13/180
D573,113	S *	7/2008	Bando D13/180
D573,114	S *	7/2008	Min et al D13/180
D580,381	S *	11/2008	Bando D13/180
004/0041222	A1*	3/2004	Loh 257/433
004/0126913	A1*	7/2004	Loh 438/26
005/0127816	A1*	6/2005	Sumitani

### \* cited by examiner

Primary Examiner—Selina Sikder (74) Attorney, Agent, or Firm—Global IP Counselors, LLP

## (57) CLAIM

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

#### **DESCRIPTION**

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

FIG. 2 is a rear side perspective view of the light emitting diode in accordance with the first embodiment of my new design;

FIG. 3 is a front elevational view of the light emitting diode in accordance with the first embodiment of my new design;

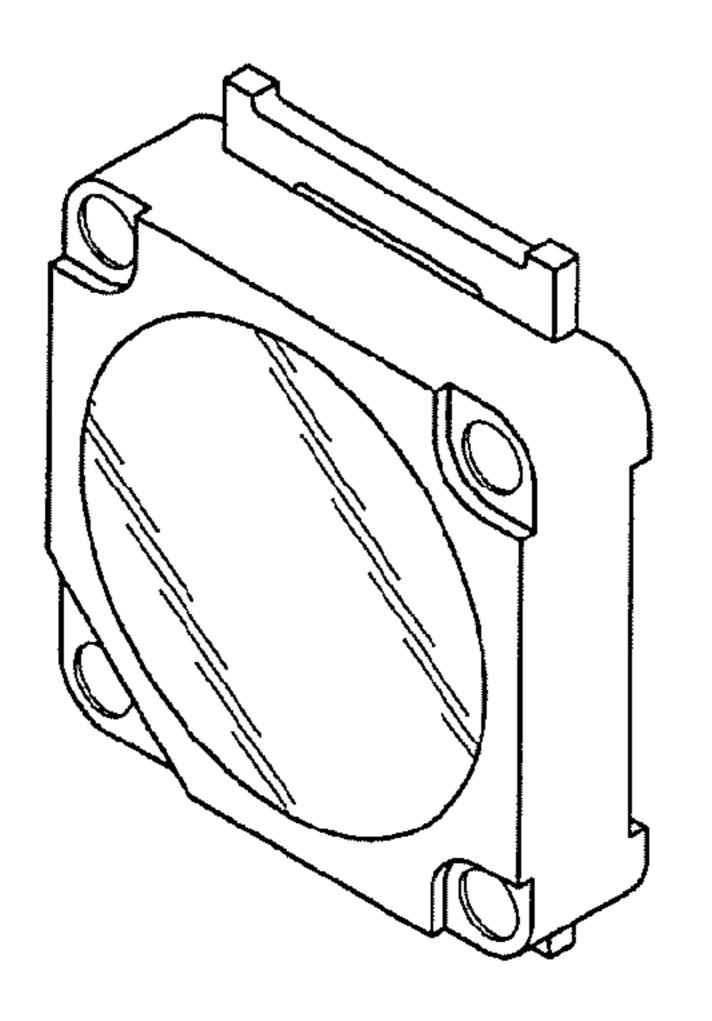
FIG. 4 is a rear elevational view of the light emitting diode in accordance with the first embodiment of my new design;

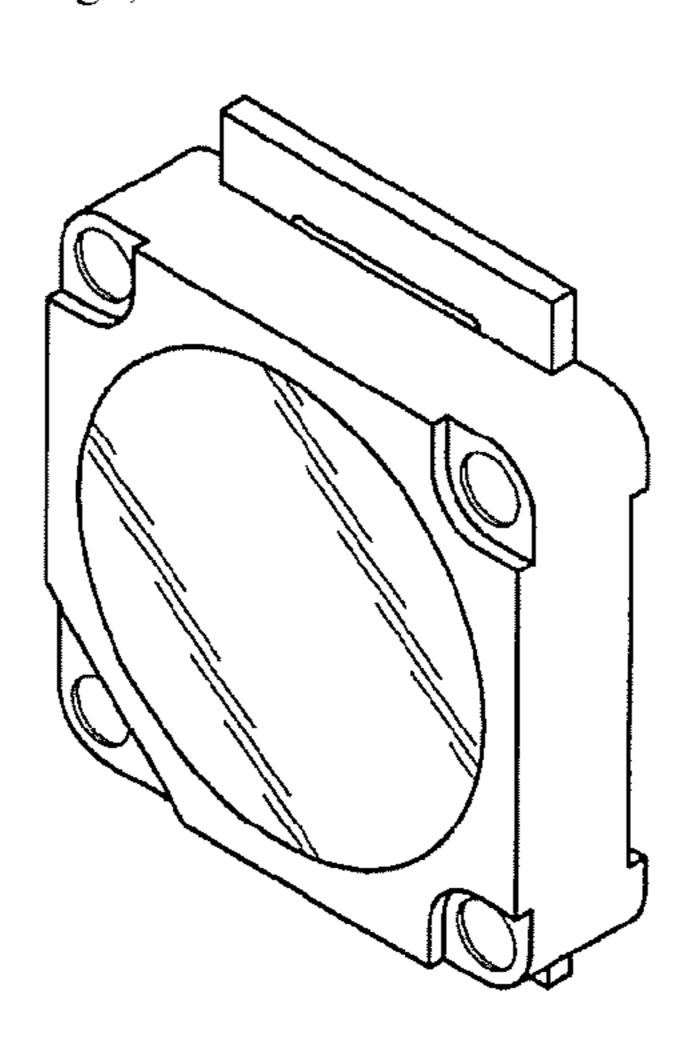
FIG. 5 is a top plan view of the light emitting diode in accordance with the first embodiment of my new design;

FIG. 6 is a bottom plan view of the light emitting diode in accordance with the first embodiment of my new design;

FIG. 7 is a left side end elevational view of the light emitting diode in accordance with the first embodiment of my new design;

FIG. 8 is a right side end elevational view of the light emitting diode in accordance with the first embodiment of my new design;





- FIG. 9 is a front elevational view of the light emitting diode in accordance with the first embodiment of my new design with environment shown in broken lines;
- FIG. 10 is a front side perspective view of a light emitting diode in accordance with a second embodiment of my new design;
- FIG. 11 is a rear side perspective view of the light emitting diode in accordance with the second embodiment of my new design;
- FIG. 12 is a front elevational view of the light emitting diode in accordance with the second embodiment of my new design;
- FIG. 13 is a rear elevational view of the light emitting diode in accordance with the second embodiment of my new design;
- FIG. 14 is a top plan view of the light emitting diode in accordance with the second embodiment of my new design;

- FIG. 15 is a bottom plan view of the light emitting diode in accordance with the second embodiment of my new design;
- FIG. 16 is a left side end elevational view of the light emitting diode in accordance with the second embodiment of my new design;
- FIG. 17 is a right side end elevational view of the light emitting diode in accordance with the second embodiment of my new design; and,
- FIG. 18 is a front elevational view of the light emitting diode in accordance with the second embodiment of my new design with environment shown in broken lines.

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

1 Claim, 10 Drawing Sheets

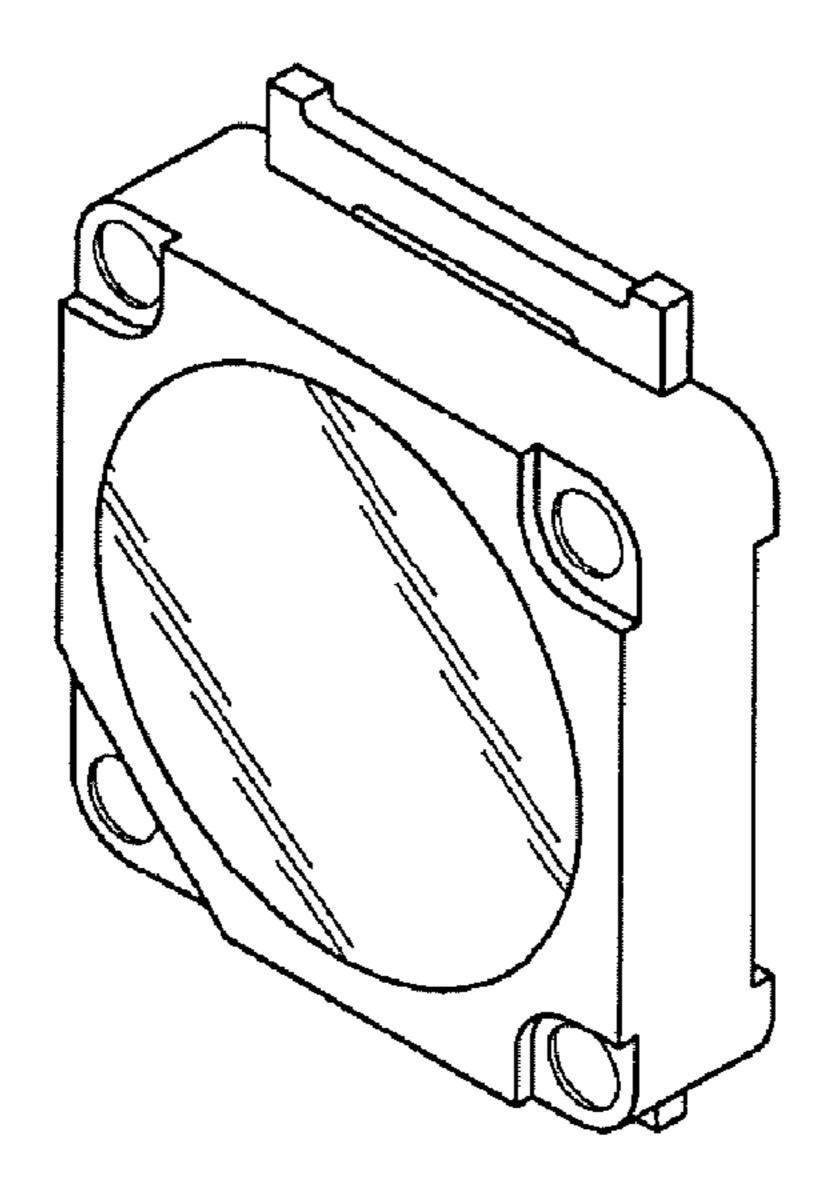
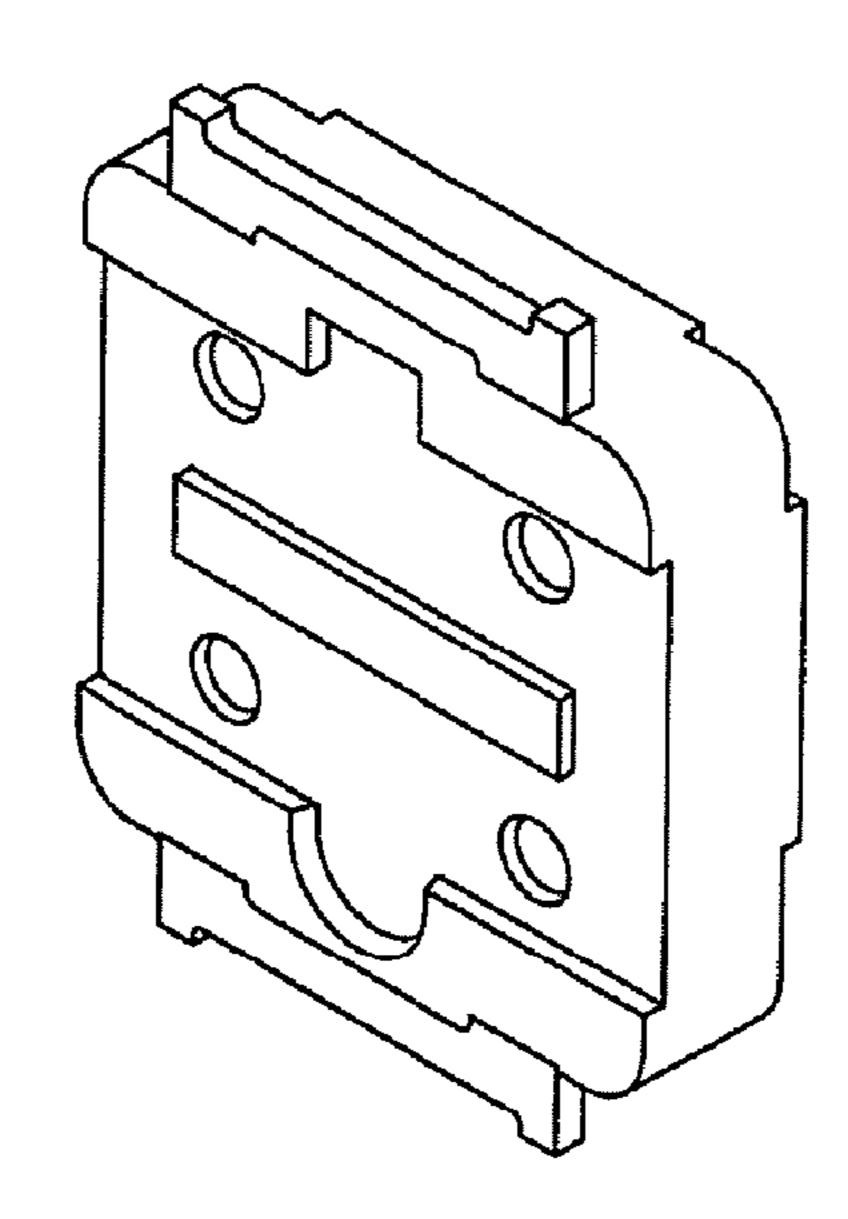


FIG. 1



F I G. 2

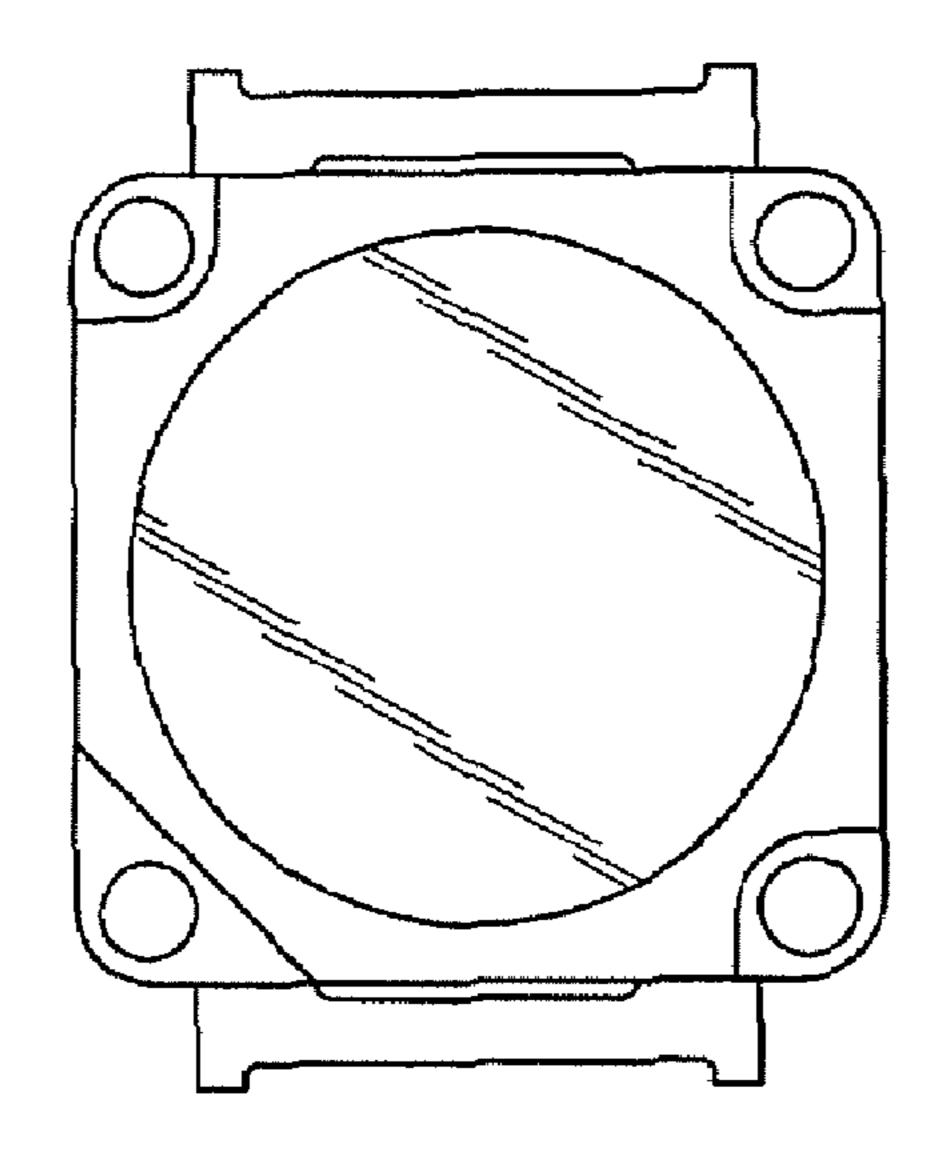


FIG. 3

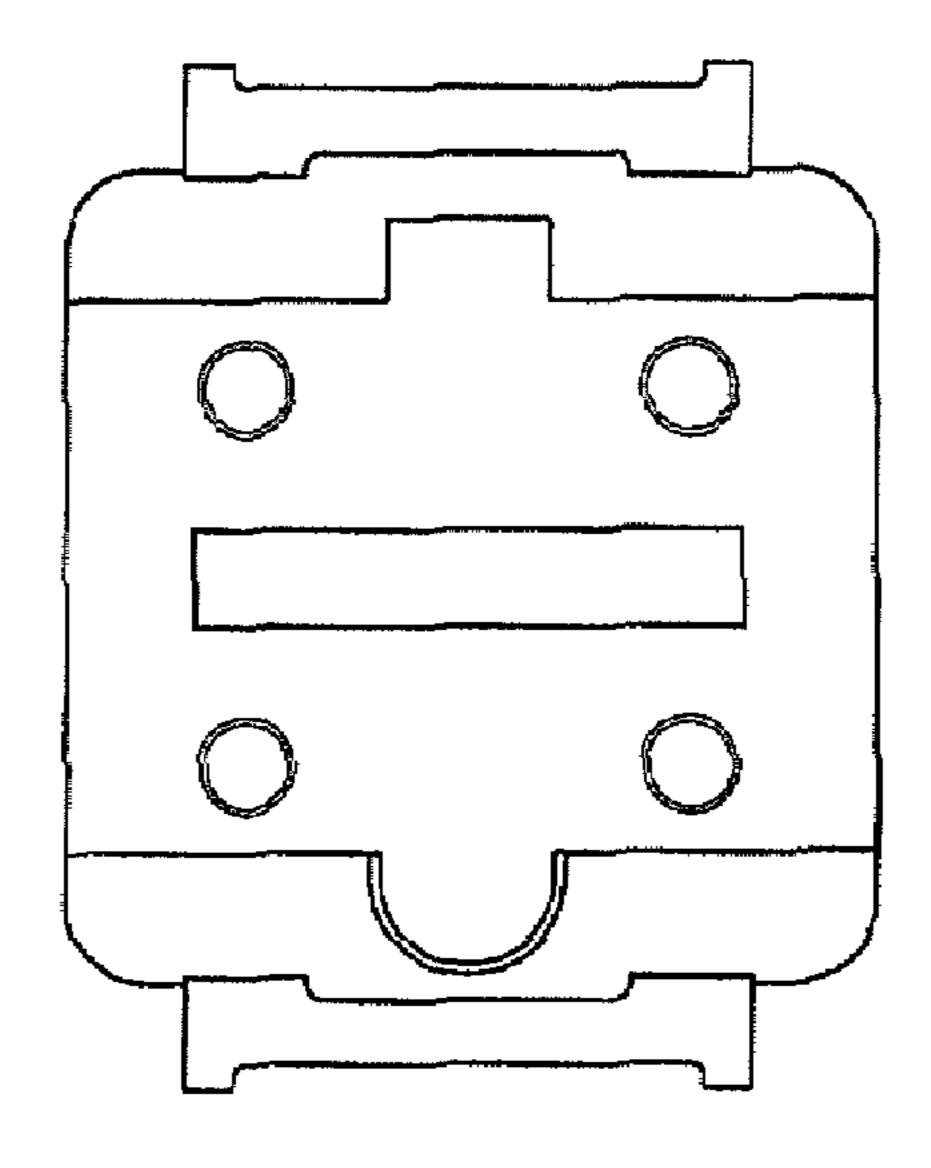


FIG.4

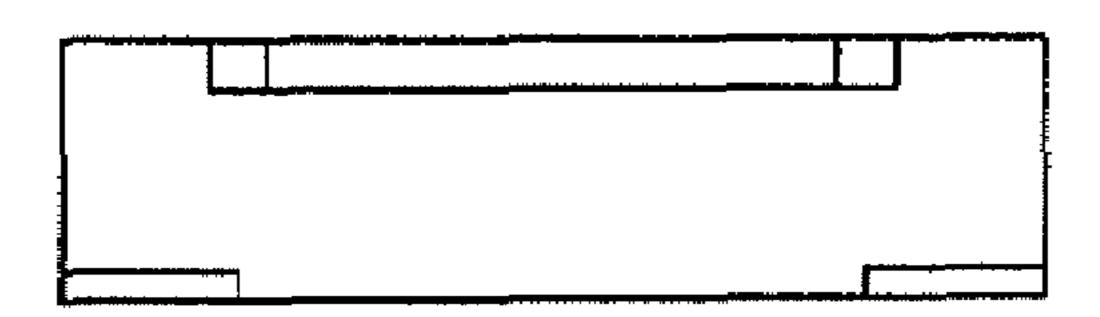


FIG. 5

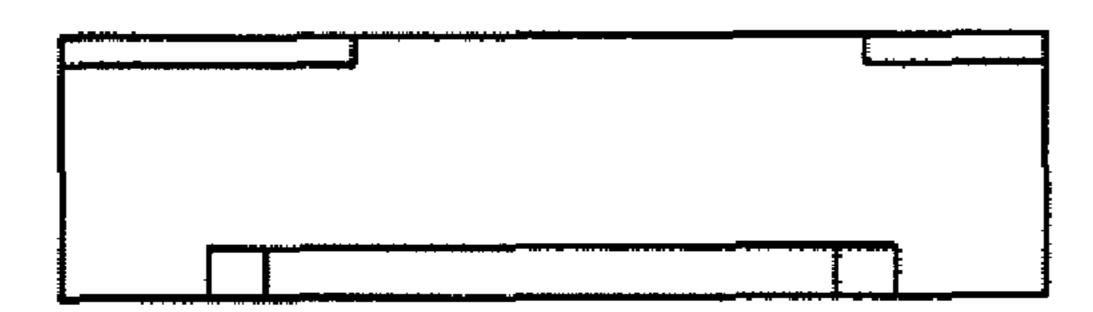


FIG. 6

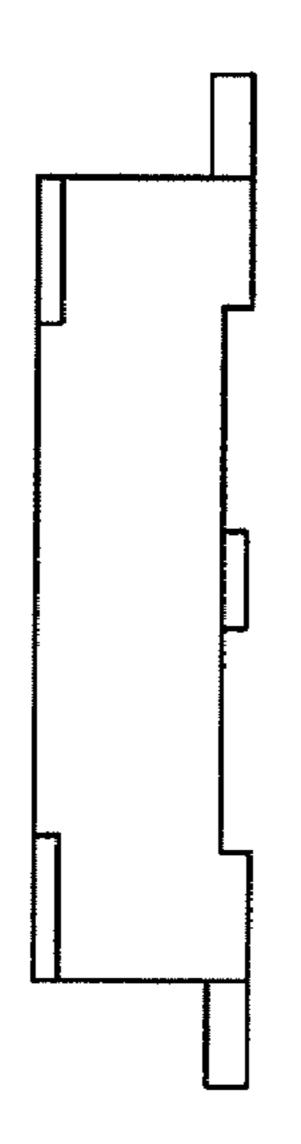


FIG. 7

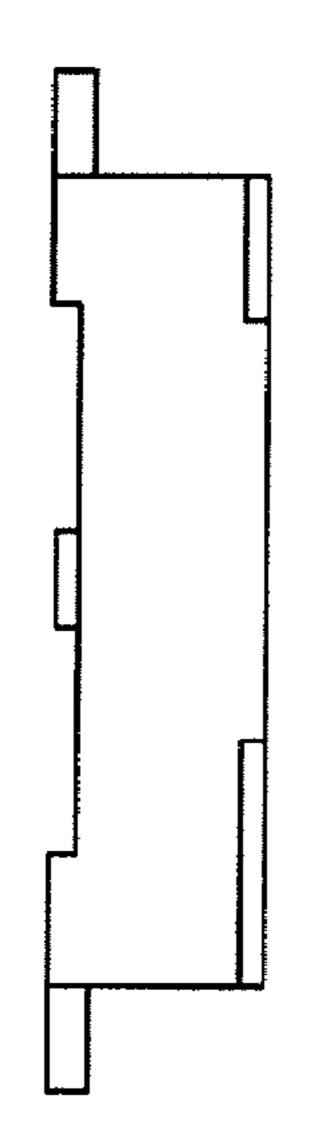
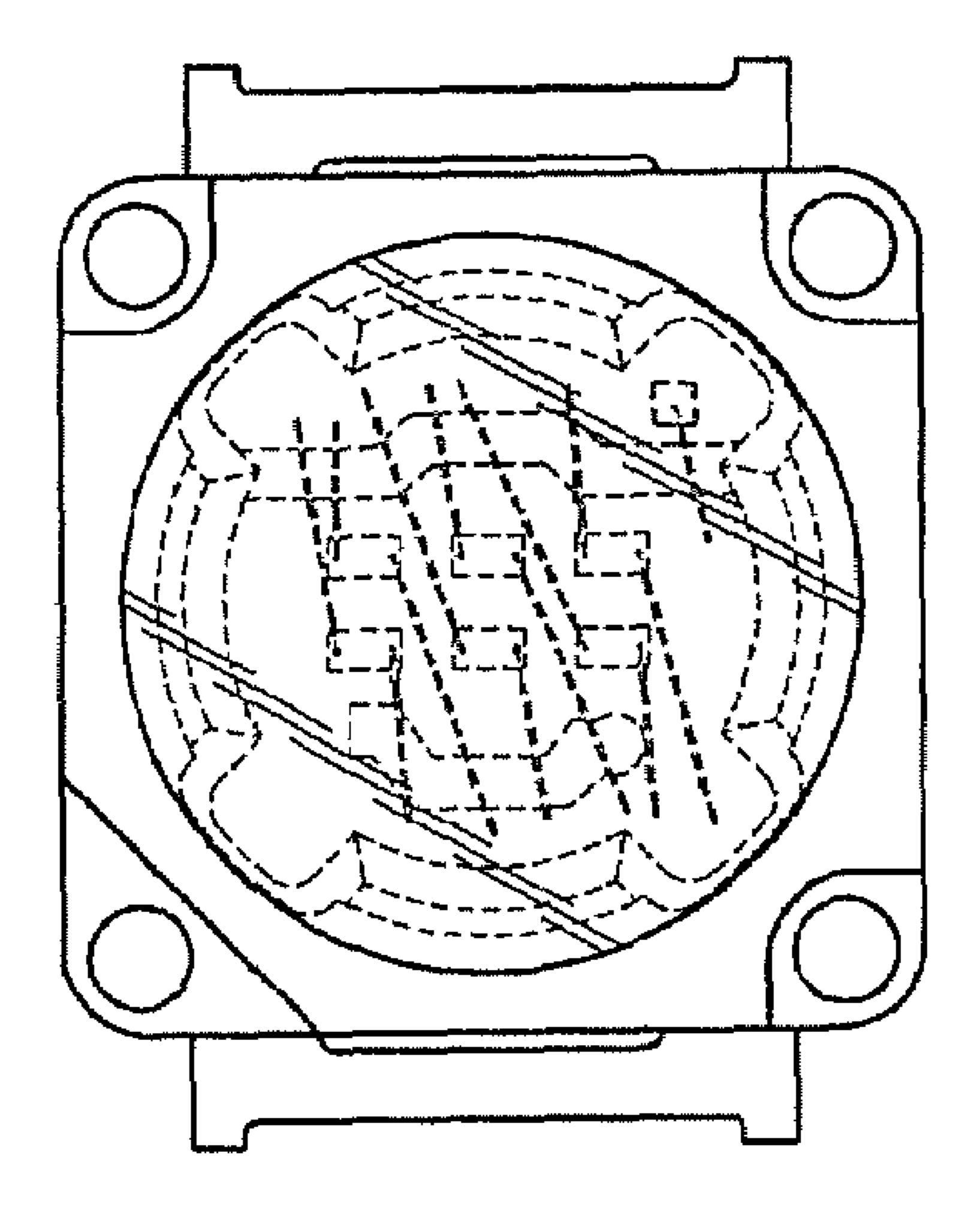
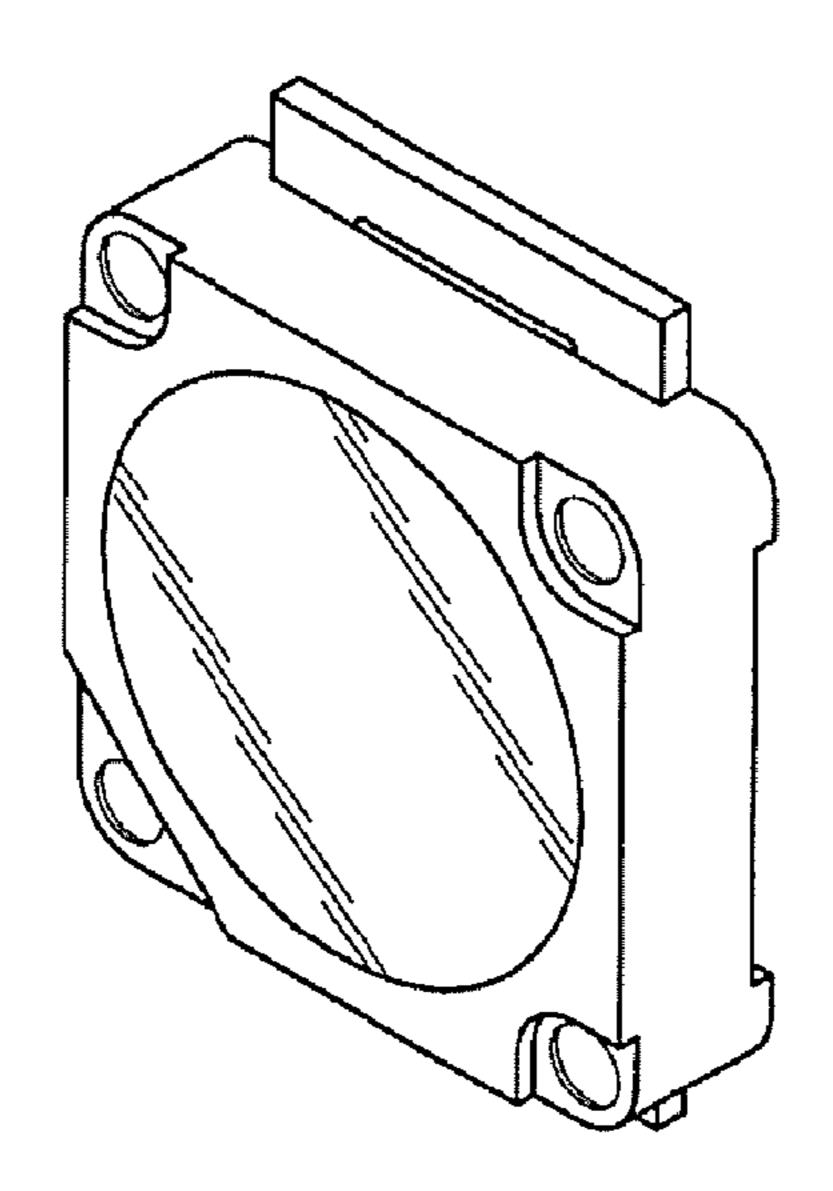


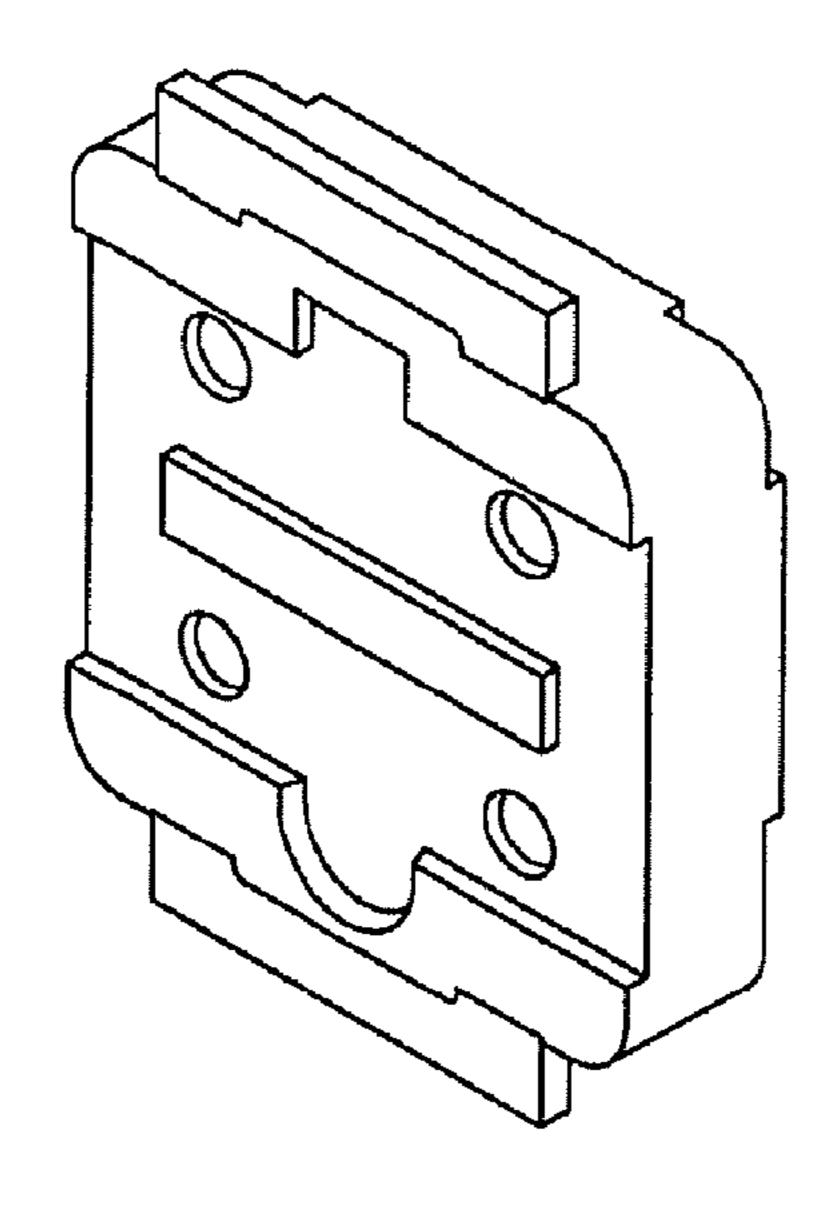
FIG. 8



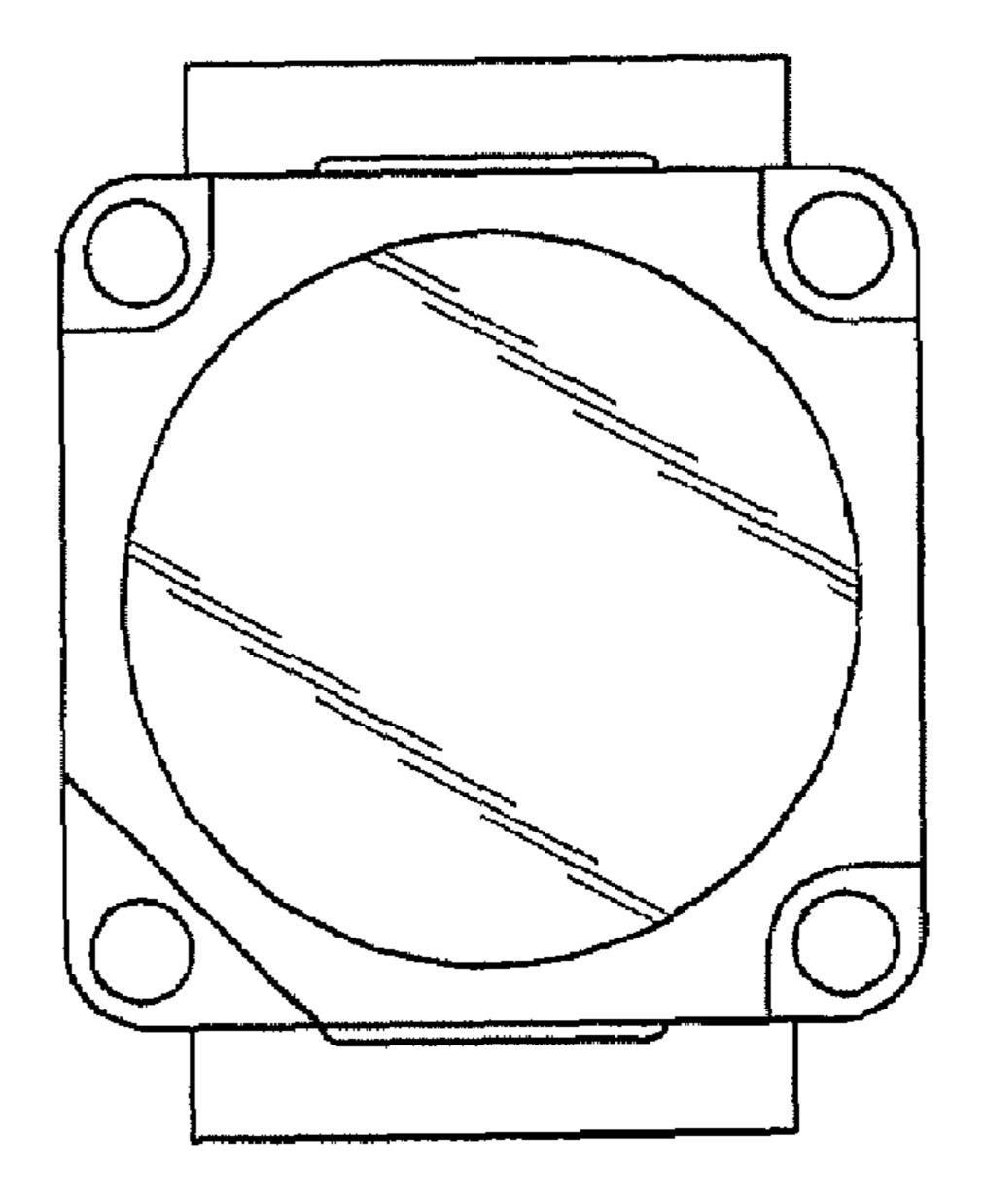
F (G. 9)



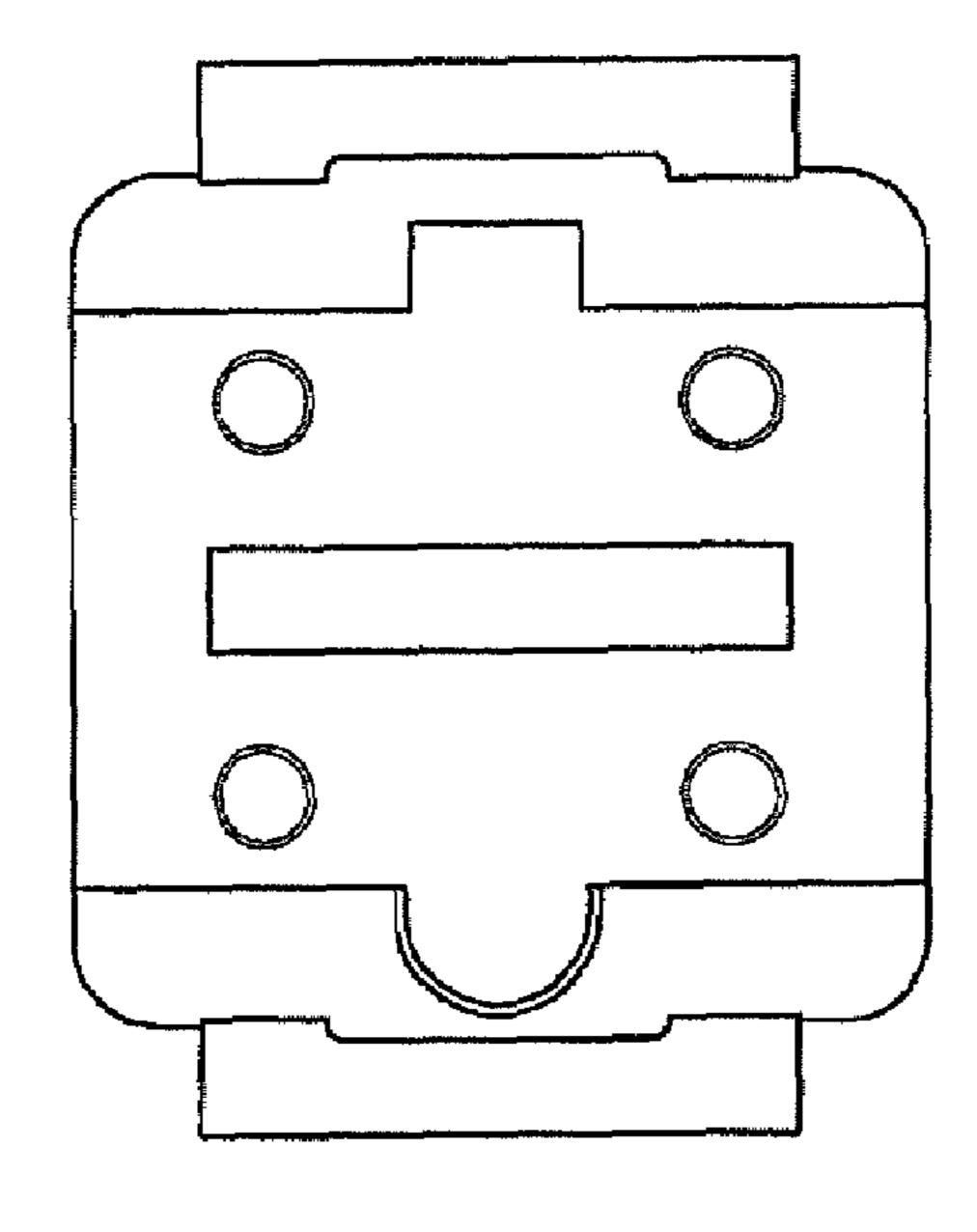
F I G. 10



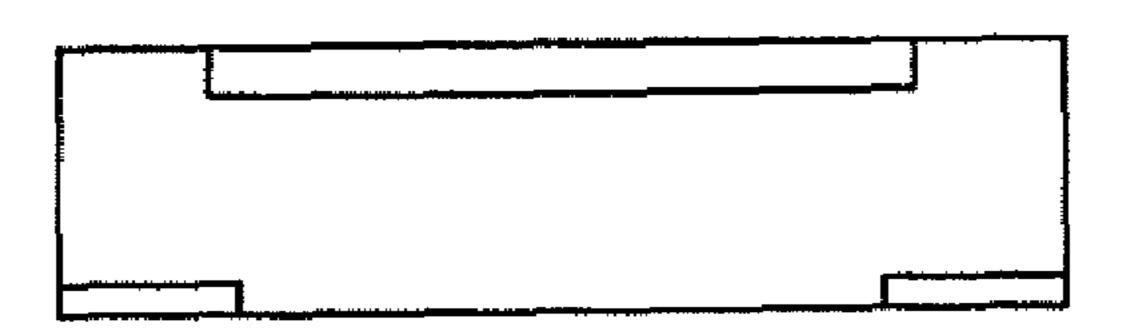
F I G. 11



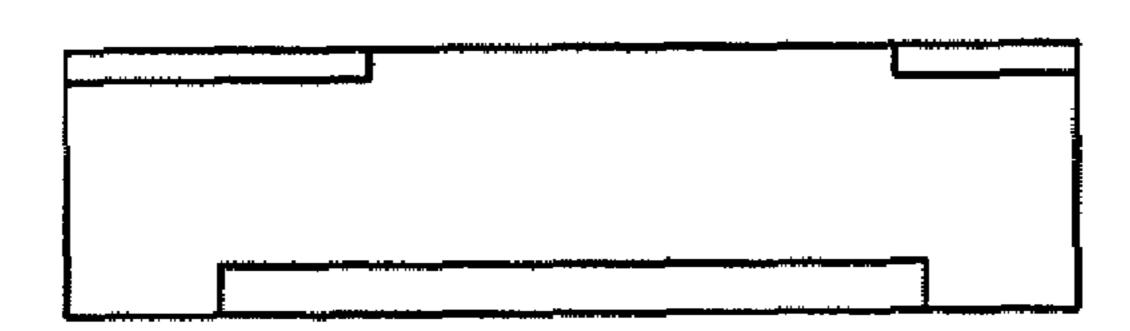
F I G. 12



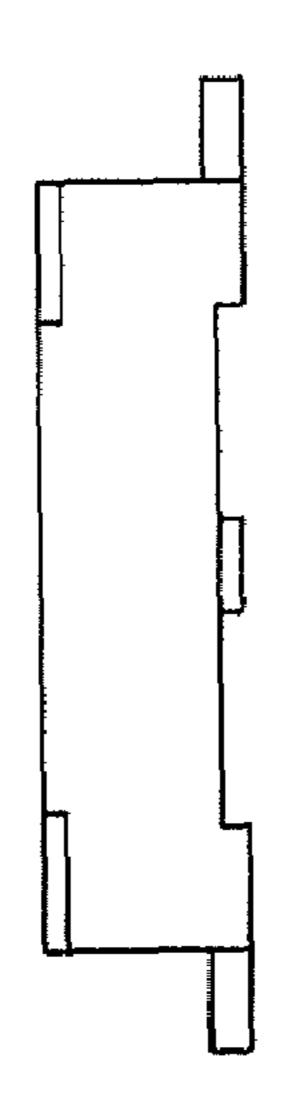
F I G. 13



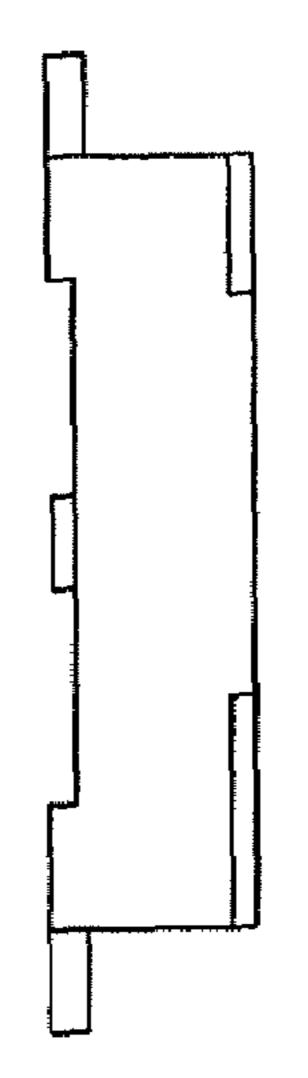
F I G. 14



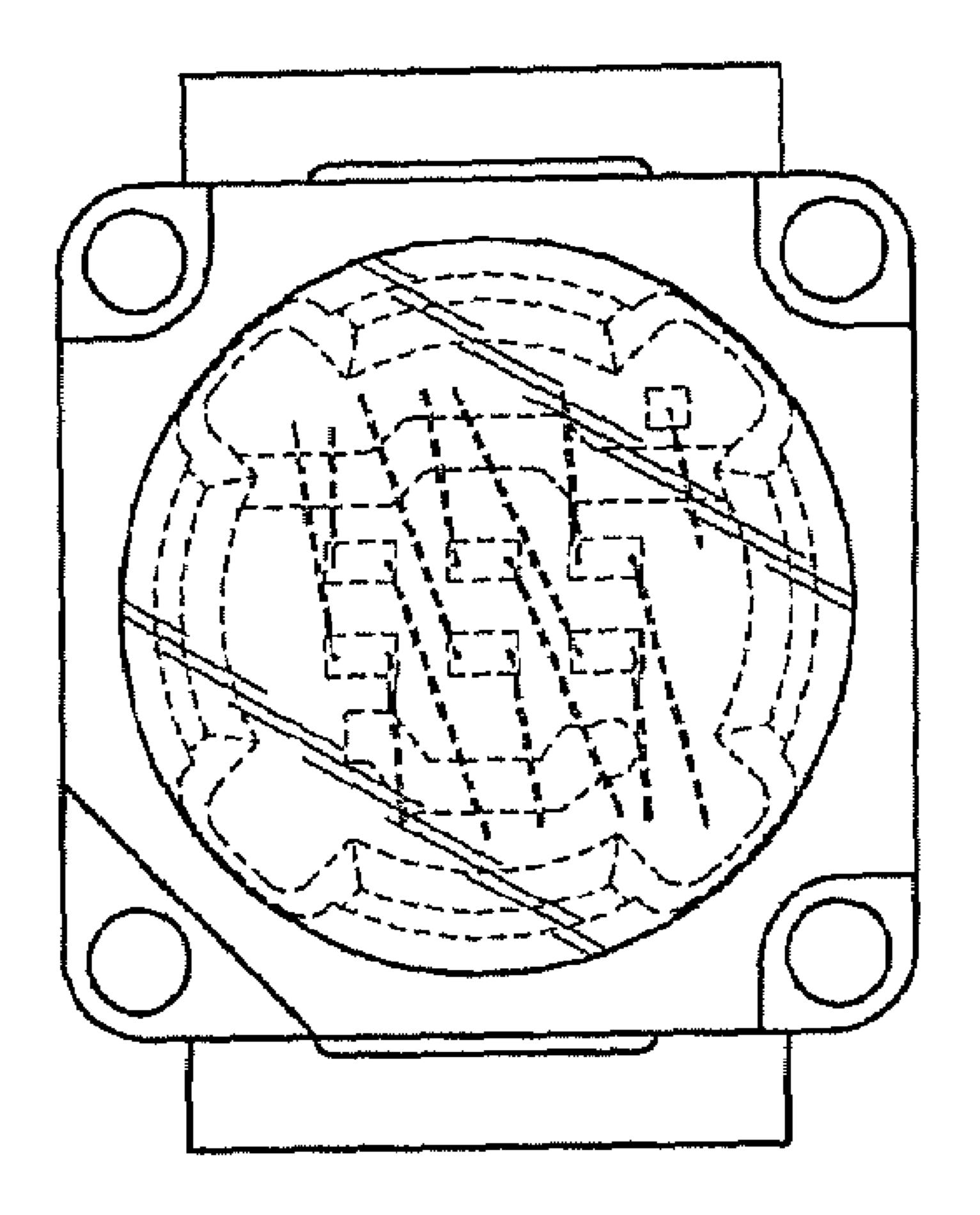
F I G. 15



F I G. 16



F I G. 17



F1G. 18