



US00D514073S

(12) **United States Design Patent**
Suenaga

(10) **Patent No.:** **US D514,073 S**
(45) **Date of Patent:** **** Jan. 31, 2006**

(54) **LIGHT EMITTING DIODE**

(75) **Inventor:** **Ryoma Suenaga, Tokushima-Ken (JP)**

(73) **Assignee:** **Nichai Corporation (JP)**

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

(21) **Appl. No.:** **29/222,761**

(22) **Filed:** **Feb. 3, 2005**

| | | | | |
|--------------|---|---------|-----------------|---------|
| 4,791,648 A | * | 12/1988 | Vojak et al. | 372/46 |
| 6,355,946 B1 | * | 3/2002 | Ishinaga | 257/98 |
| 6,393,698 B1 | * | 5/2002 | Kuriyama et al. | 29/883 |
| 6,483,623 B1 | * | 11/2002 | Maruyama | 398/182 |
| 6,495,861 B1 | * | 12/2002 | Ishinaga | 257/99 |
| 6,518,601 B2 | * | 2/2003 | Wirth | 257/98 |
| D476,961 S | * | 7/2003 | Horiuchi et al. | D13/182 |
| 6,586,721 B2 | * | 7/2003 | Estevez-Garcia | 250/221 |
| 6,610,563 B1 | * | 8/2003 | Waitl et al. | 438/166 |
| 6,624,491 B2 | * | 9/2003 | Waitl et al. | 257/434 |
| 6,707,069 B2 | * | 3/2004 | Song et al. | 257/79 |
| D491,899 S | * | 6/2004 | Yagi | D13/180 |

Related U.S. Application Data

(62) Division of application No. 29/193,793, filed on Nov. 14, 2003.

(30) **Foreign Application Priority Data**

| | | |
|--------------|------|-------------|
| Jul. 9, 2003 | (JP) | 2003-019861 |
| Jul. 9, 2003 | (JP) | 2003-019862 |
| Jul. 9, 2003 | (JP) | 2003-019863 |
| Jul. 9, 2003 | (JP) | 2003-019865 |
| Jul. 9, 2003 | (JP) | 2003-019866 |
| Jul. 9, 2003 | (JP) | 2003-019867 |
| Jul. 9, 2003 | (JP) | 2003-019868 |
| Jul. 9, 2003 | (JP) | 2003-019869 |
| Jul. 9, 2003 | (JP) | 2003-019870 |

(51) **LOC (8) Cl.** **13-03**

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

(58) **Field of Classification Search** D13/180,
D13/182; 257/76, 79, 88, 89, 93-99, 434,
257/676, 678, 687, 690, 698, 787; 313/498,
313/499, 500; 361/760, 820; 362/226, 241,
362/249, 250, 307, 555, 800

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,214,251 A * 7/1980 Schairer 257/99

* cited by examiner

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Assistant Examiner—Selina Sikder

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(57) **CLAIM**

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

DESCRIPTION

FIG. 1 shows a front view of the design according to a first embodiment.

FIG. 2 shows a rear view of the design thereof.

FIG. 3 shows a plan view of the design thereof.

FIG. 4 shows a right side view of the design thereof.

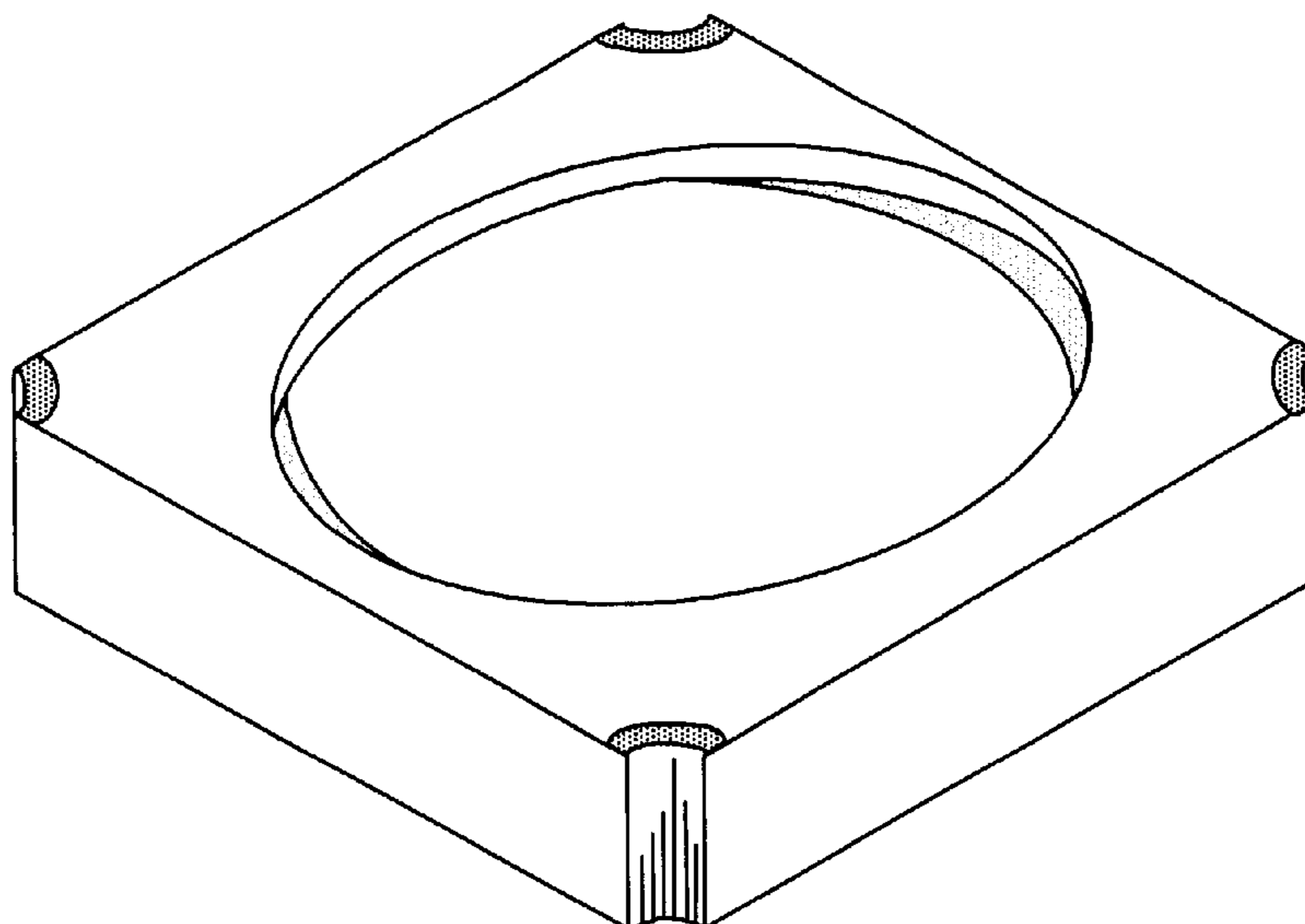
FIG. 5 shows a perspective view of the design thereof; and, FIG. 6 shows a perspective view of a second embodiment of FIG. 1.

The left side view is a mirror image of its corresponding right side view.

The bottom view is a mirror image of its corresponding plan view.

The different types of stippling show a contrast in materials.

1 Claim, 3 Drawing Sheets



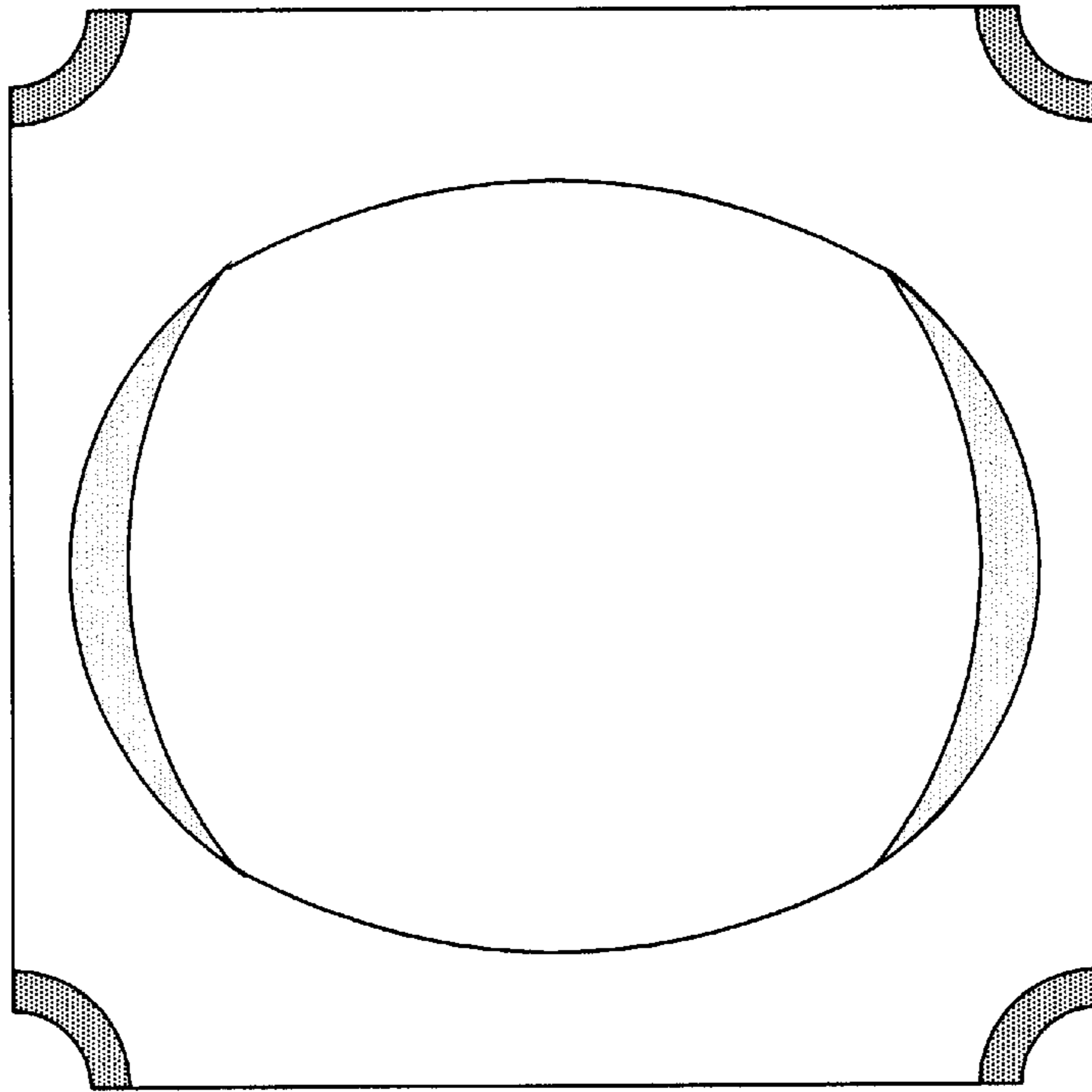


FIGURE 1

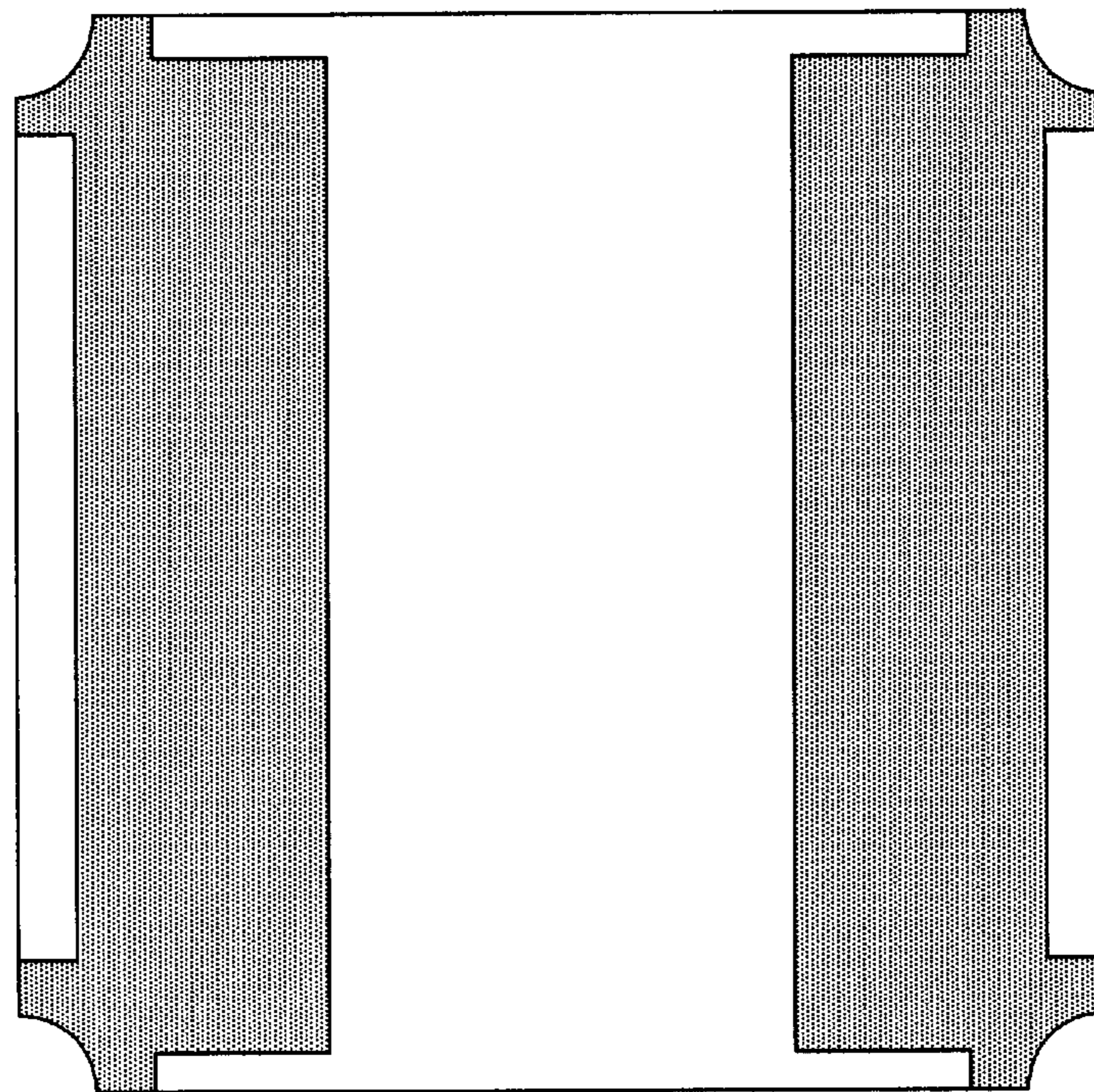


FIGURE 2

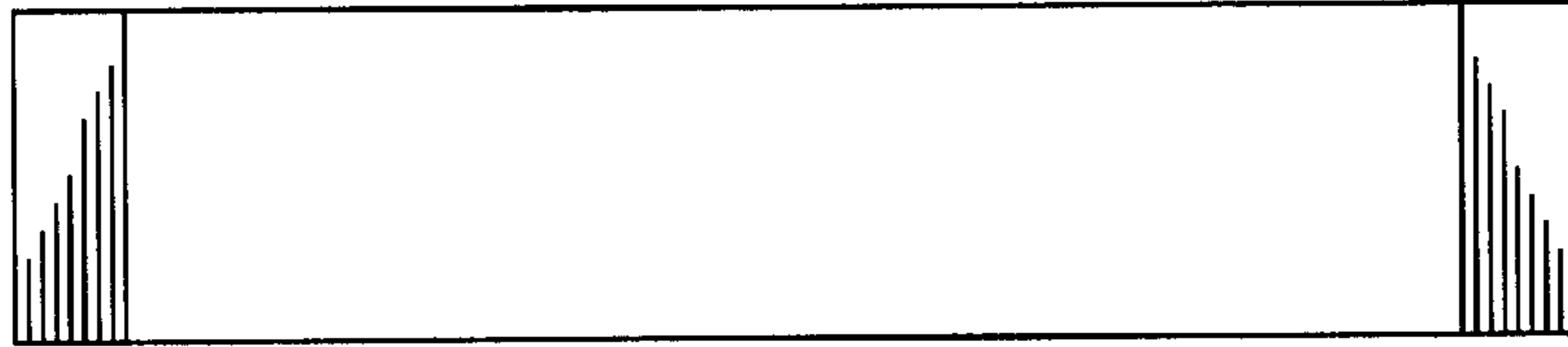


FIGURE 3

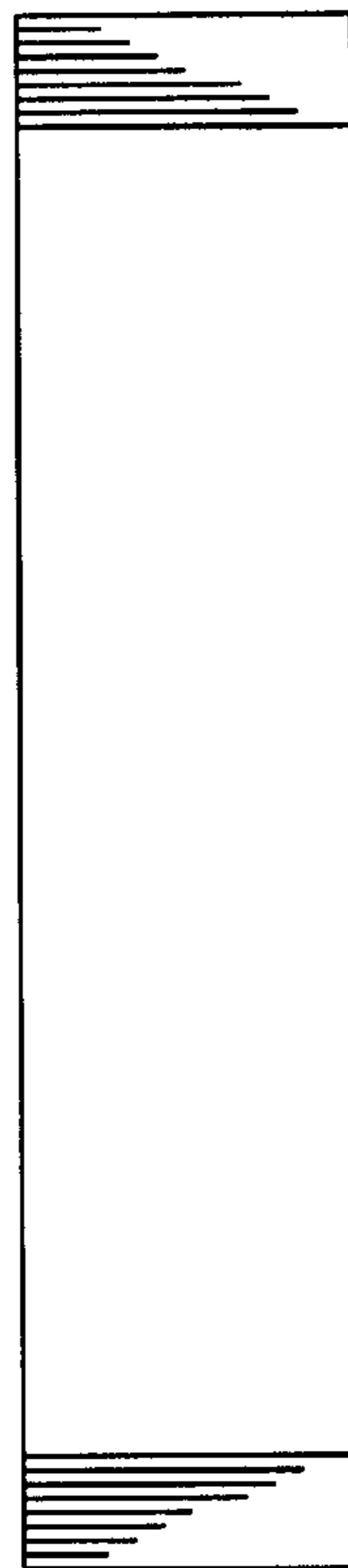


FIGURE 4

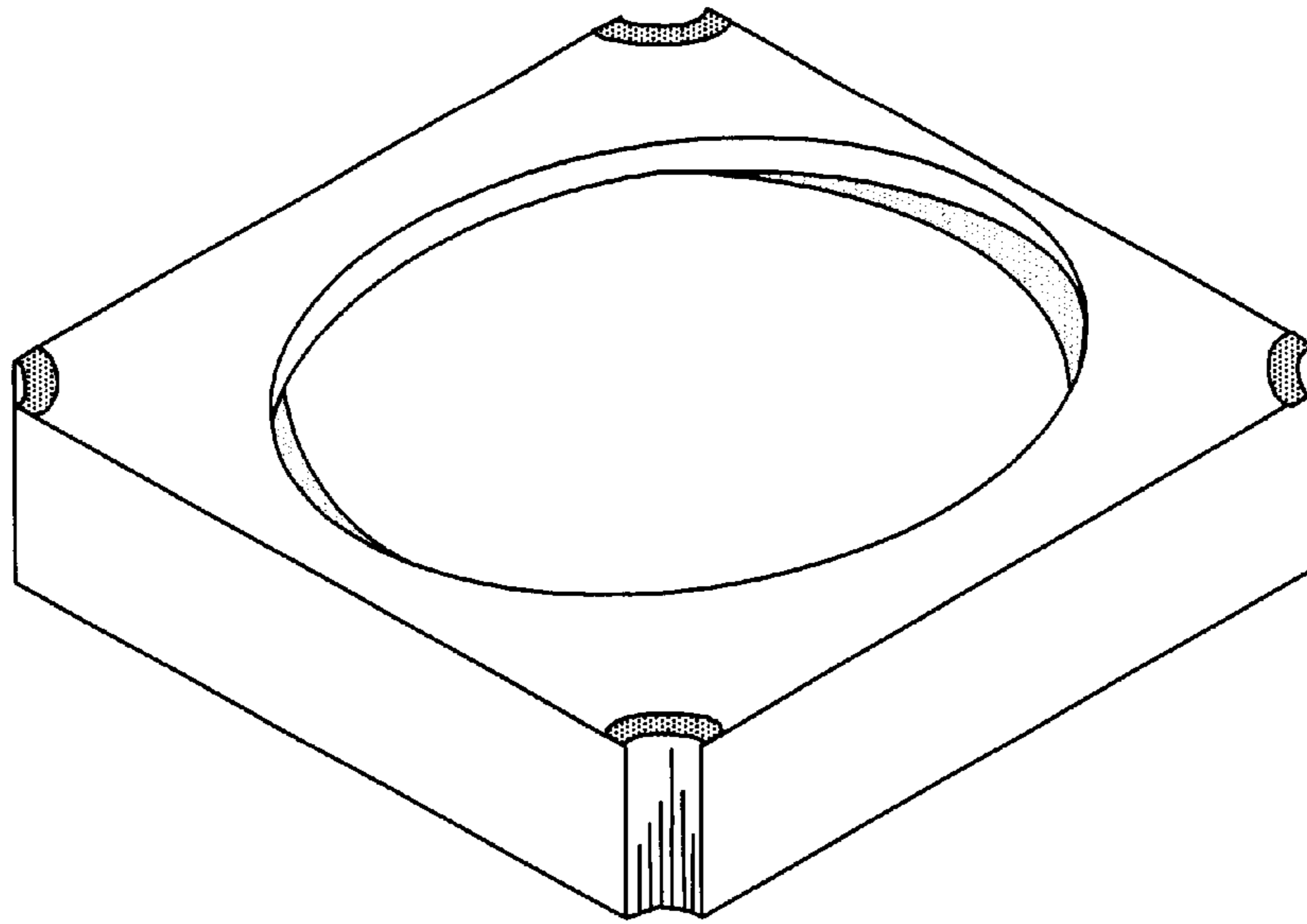


Figure 5

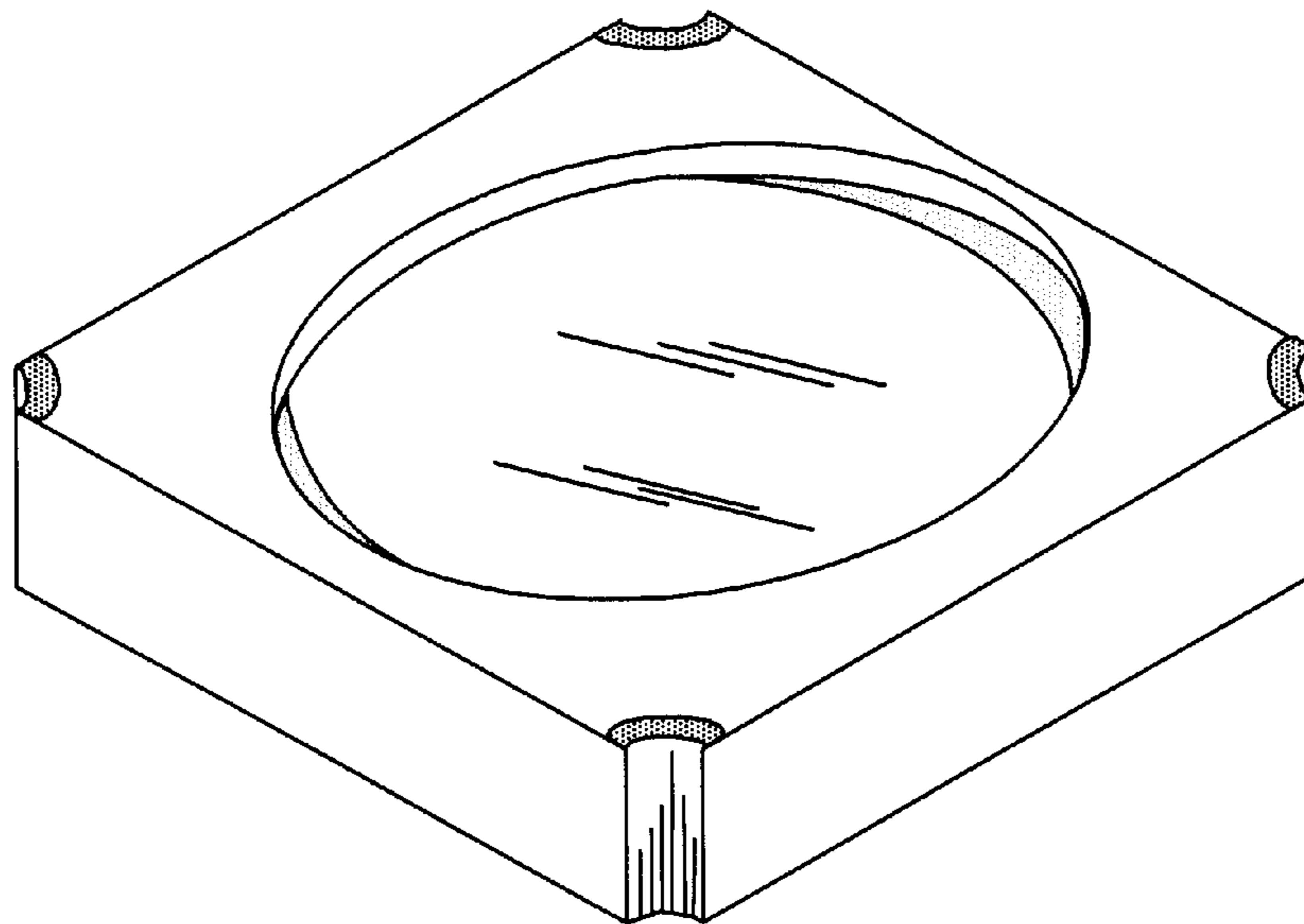


Figure 6

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : Des. 514,073 S
APPLICATION NO. : 29/222761
DATED : January 31, 2006
INVENTOR(S) : Ryoma Suenaga

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:

On the front cover of the patent under Section 73, Assignee, please replace
“Nichai Corporation (JP)” with --**Nichia Corporation (JP)**--.

Signed and Sealed this

First Day of August, 2006

A handwritten signature in black ink on a dotted background. The signature reads "Jon W. Dudas" in a cursive style.

JON W. DUDAS

Director of the United States Patent and Trademark Office