



US00D532758S

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

(10) **Patent No.:** **US D532,758 S**

(45) **Date of Patent:** **** Nov. 28, 2006**

(54) **OSCILLATOR**

(75) Inventors: **Kazuhiko Shimodaira**, Minowa-machi (JP); **Juichiro Matsuzawa**, Minowa-machi (JP); **Yugo Koyama**, Ina (JP)

(73) Assignee: **Seiko Epson Corporation** (JP)

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

(21) Appl. No.: **29/197,365**

(22) Filed: **Jan. 14, 2004**

(30) **Foreign Application Priority Data**

Aug. 5, 2003 (JP) 2003-022727

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

(52) **U.S. Cl.** **D13/184; D13/182**

(58) **Field of Classification Search** D13/182, D13/184, 199; 257/666, 684, 690, 692, 696, 257/730; 331/67, 68, 158; 310/311, 340, 310/344, 348

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,608,359 A * 3/1997 Knecht et al. 331/68
5,745,012 A * 4/1998 Oka et al. 331/68
5,886,405 A * 3/1999 Kim et al. 257/692

5,912,592 A * 6/1999 Kikushima 331/68
6,040,626 A * 3/2000 Cheah et al. 257/735
D428,604 S * 7/2000 Shiraishi et al. D13/184
6,190,944 B1 * 2/2001 Choi 438/109
D449,271 S * 10/2001 Tong et al. D13/110
6,396,127 B1 * 5/2002 Munoz et al. 257/666
D467,231 S * 12/2002 Harnden et al. D13/182
2004/0245895 A1 * 12/2004 Shimodaira et al. 310/348

* cited by examiner

Primary Examiner—Selina Sikder

(74) *Attorney, Agent, or Firm*—Harness, Dickey & Pierce, P.L.C.

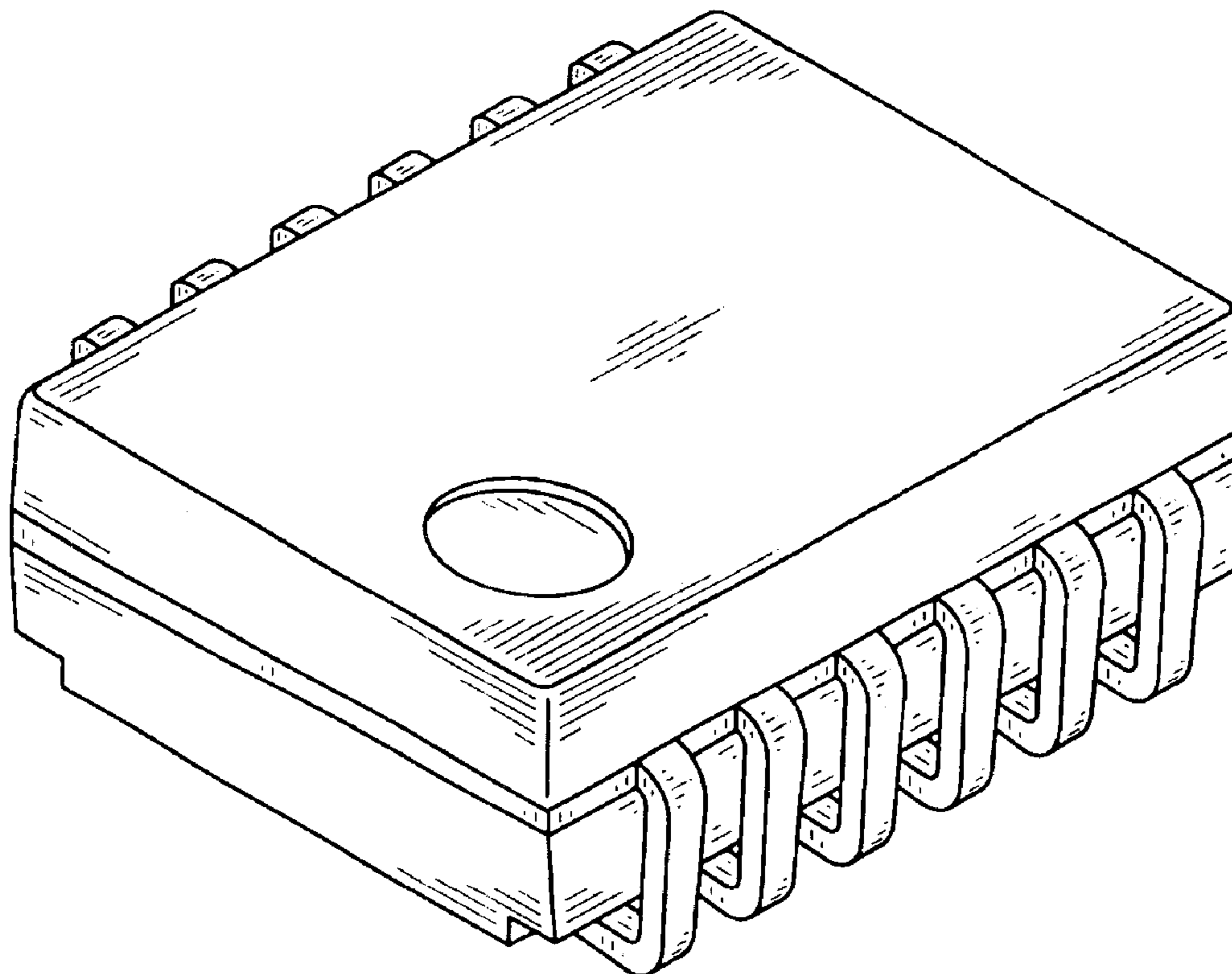
(57) **CLAIM**

The ornamental design for an oscillator, as shown and described.

DESCRIPTION

FIG. 1 is a top, left and front perspective view of the oscillator embodying our new design;
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a left side view thereof;
FIG. 5 is a right side view thereof;
FIG. 6 is a top plan view thereof;
FIG. 7 is a bottom plan view thereof; and,
FIG. 8 is a sectional view thereof taken along the lines 8—8 of FIG. 7.

1 Claim, 5 Drawing Sheets



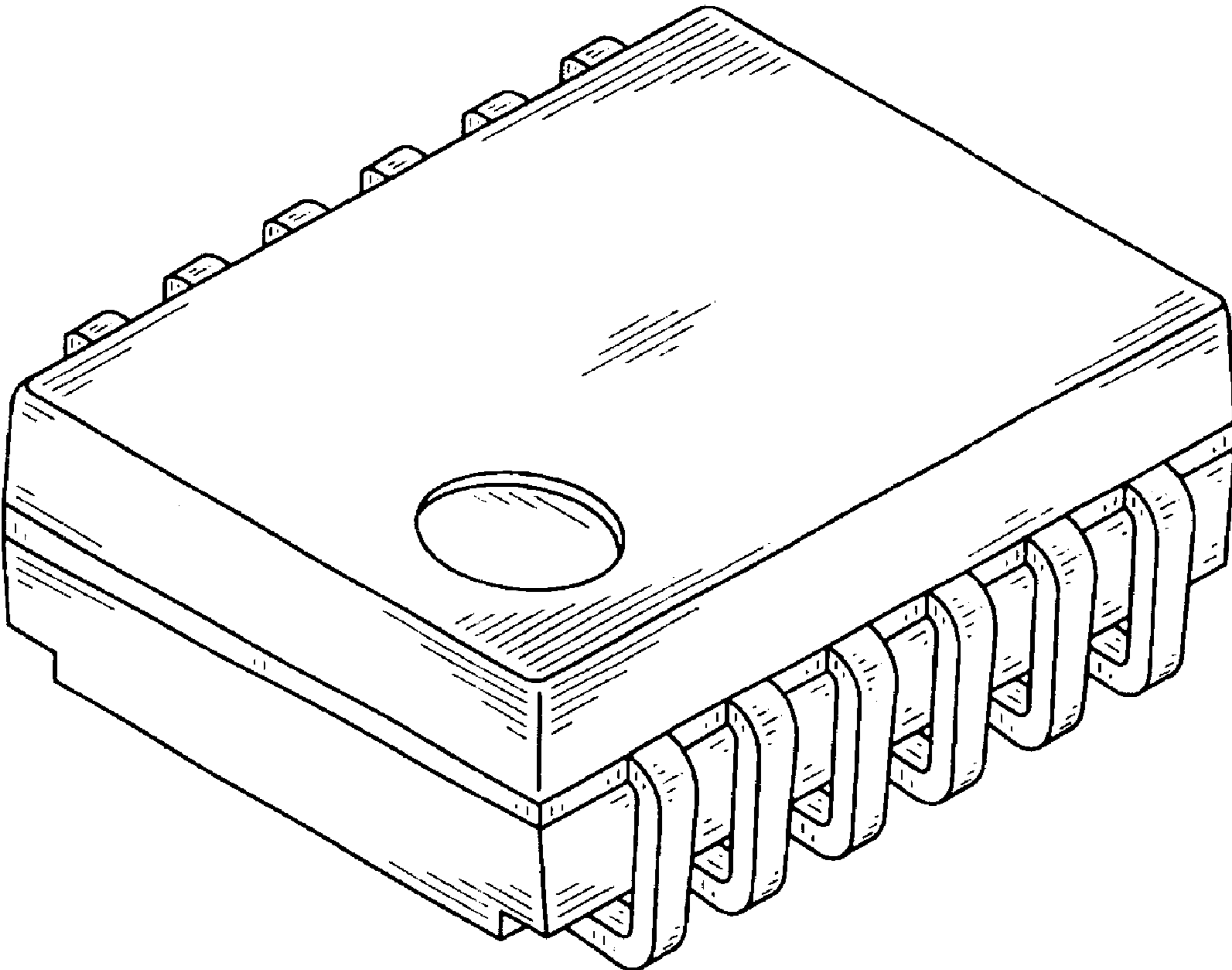


FIG. 1

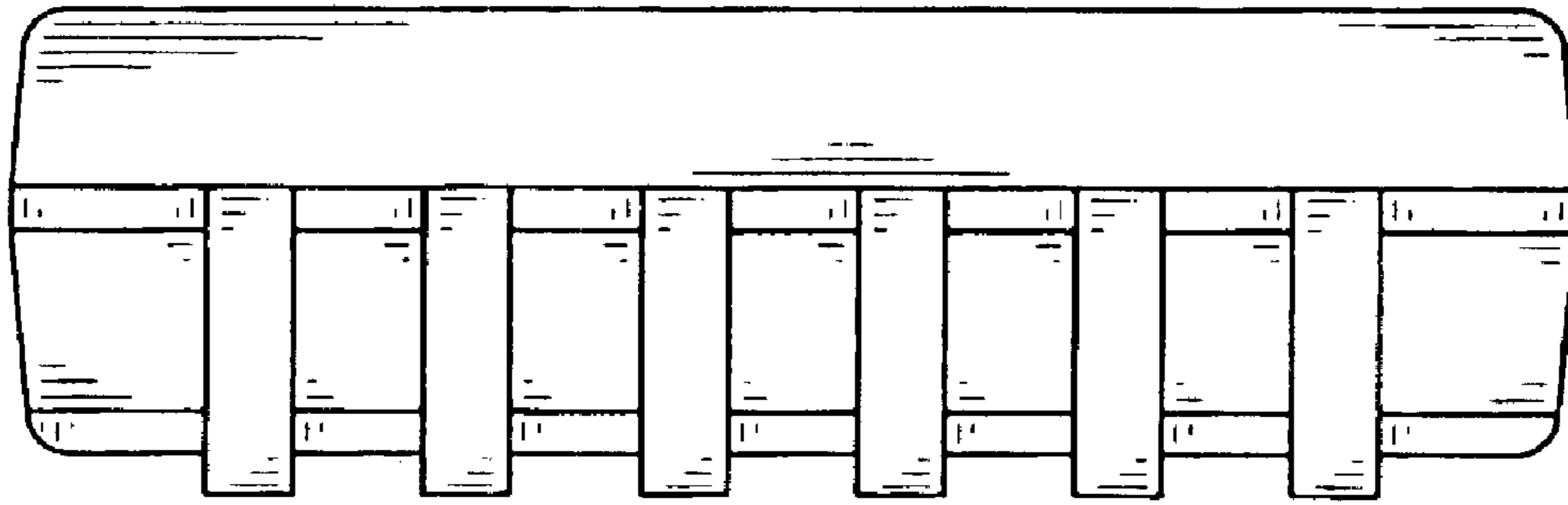


FIG. 2

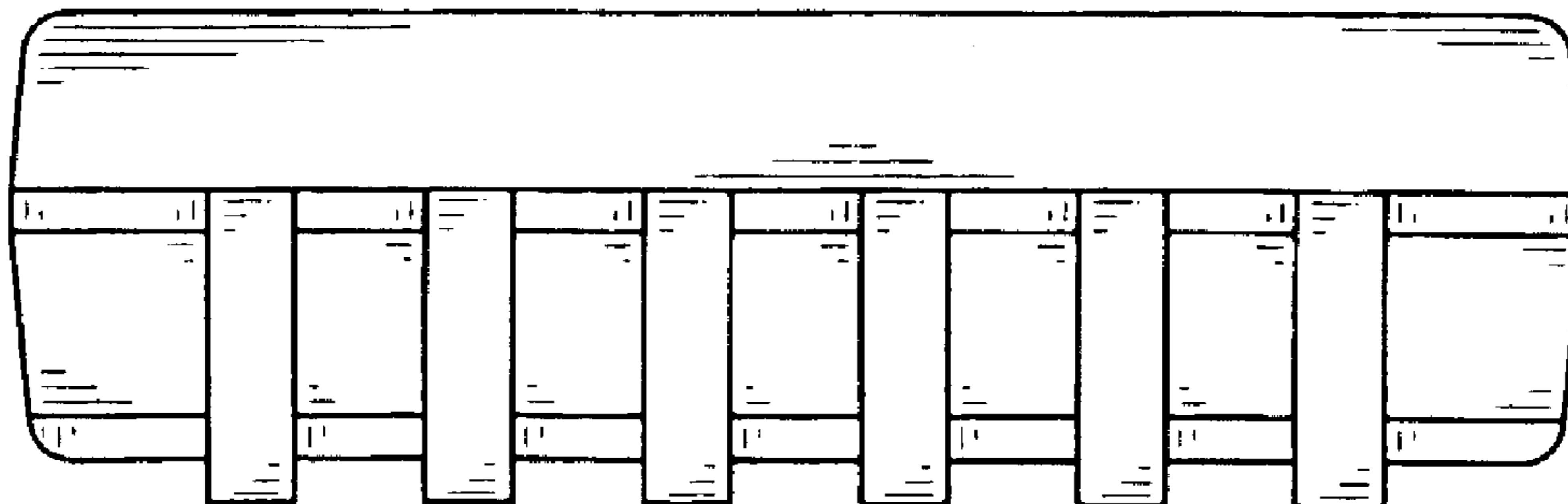


FIG. 3

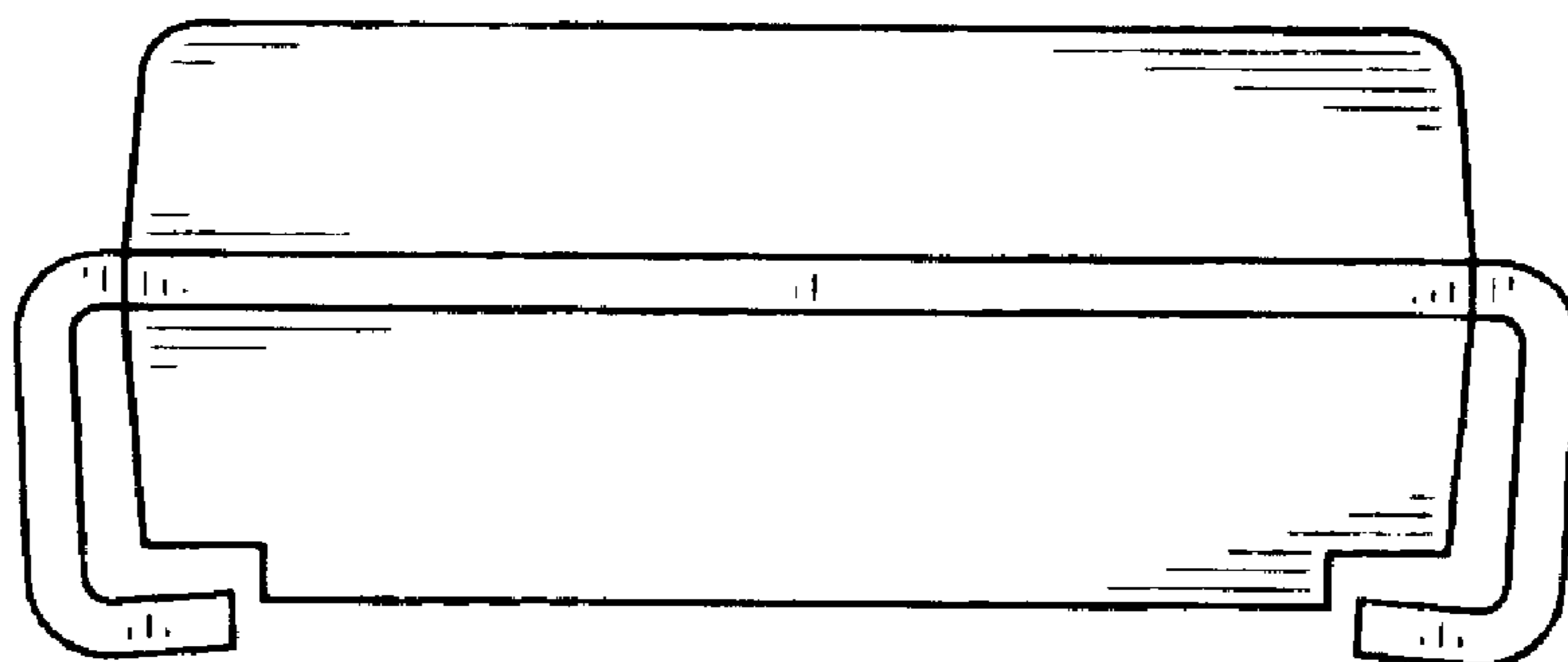


FIG. 4

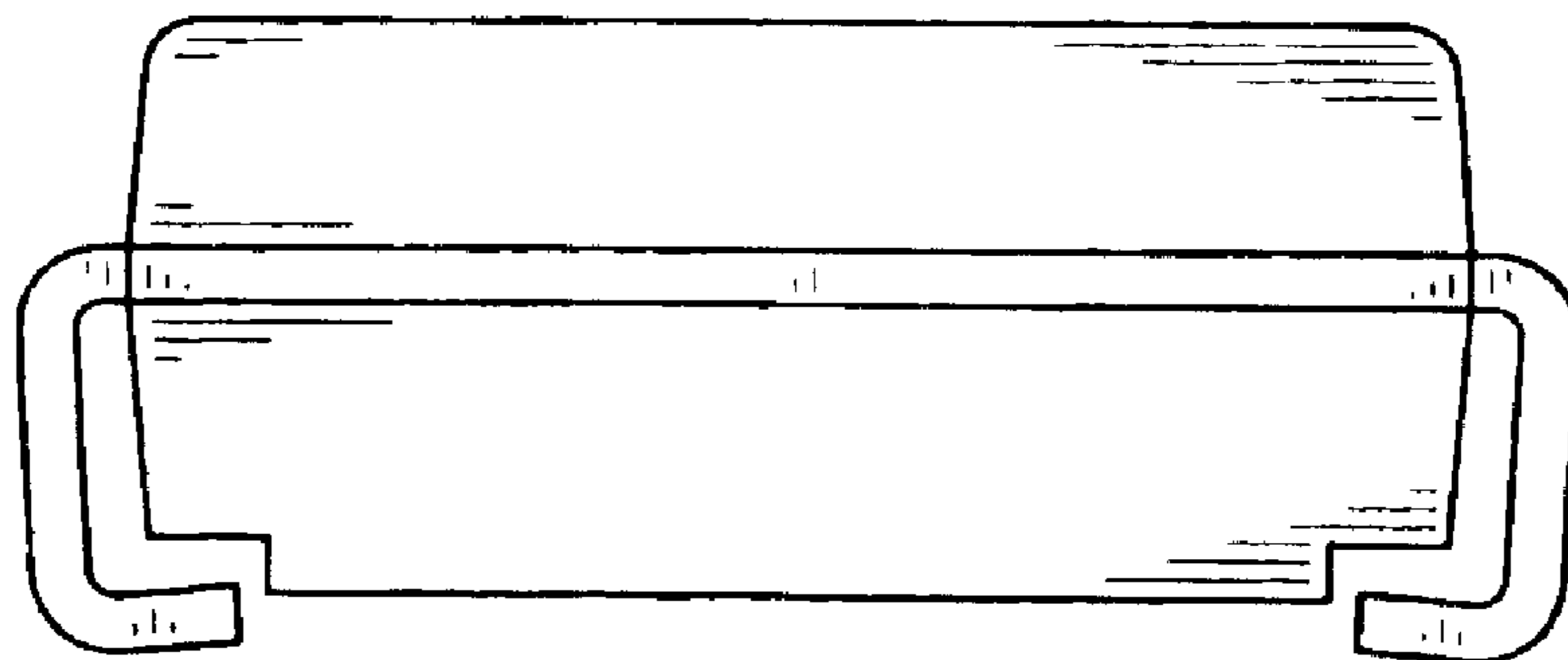


FIG. 5

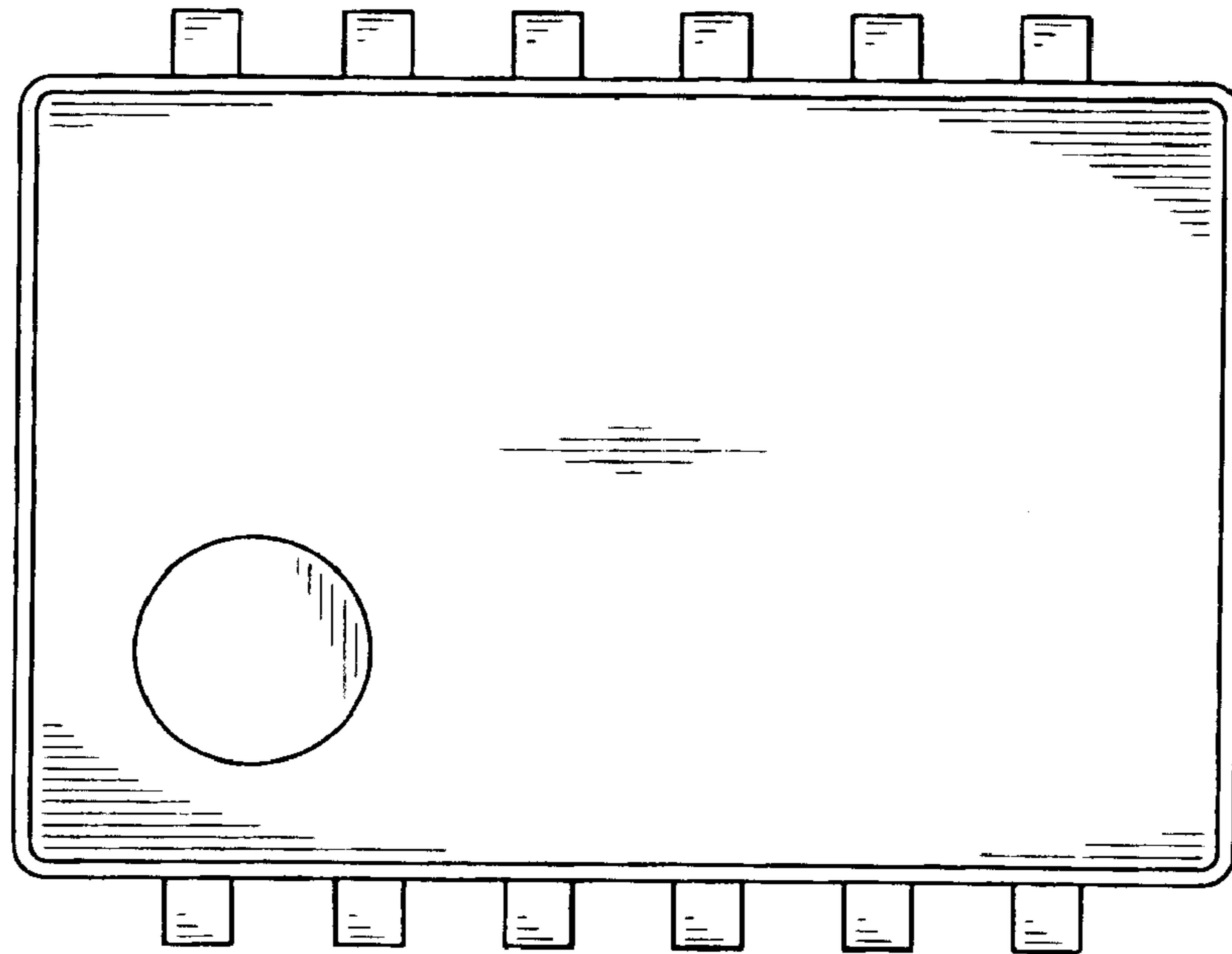


FIG. 6

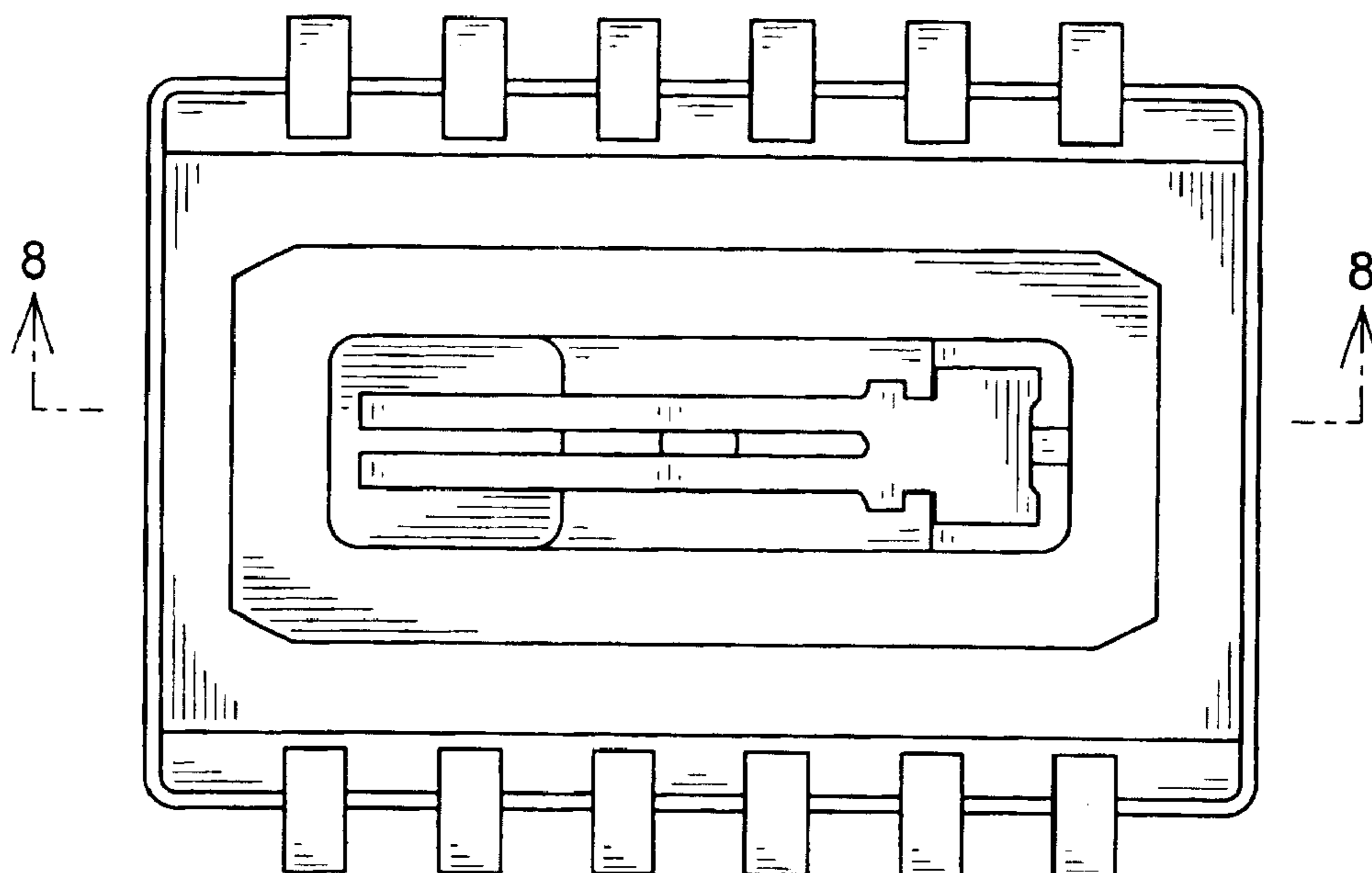


FIG. 7

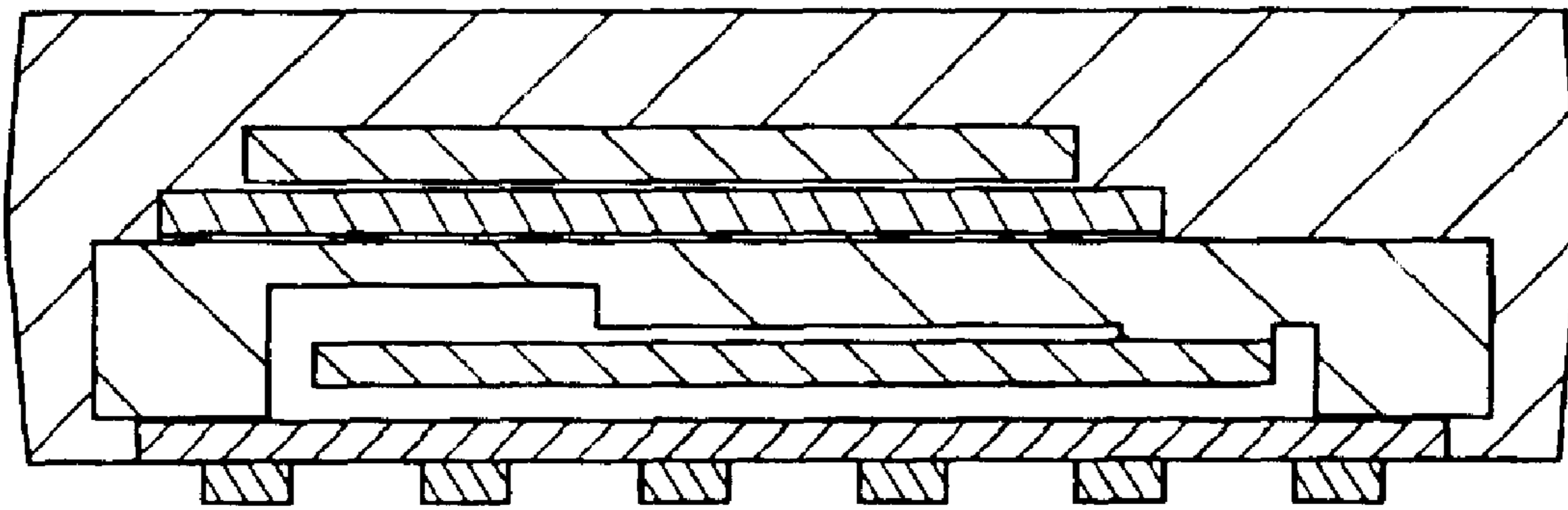


FIG. 8