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United States Patent [19]

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Yokoi et al.

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[54] **OPTO-ELECTRICAL SIGNAL CONVERTER**

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[73] Assignee: **Sharp Corporation**, Osaka, Japan

[**] Term: **14 Years**

[21] Appl. No.: **334,118**

[22] Filed: **Apr. 5, 1989**

[52] U.S. Cl. **D14/100; D13/184**

[58] Field of Search **D13/184, 123; 250/551, 250/214 R; 307/311; 455/602, 608, 611, 614, 617, 619; D14/100, 107, 114**

4,479,263	10/1984	Rosenfeldt et al.	455/602
4,503,388	3/1985	Zehl et al.	455/619 X
4,612,670	9/1986	Henderson	250/551 X
4,709,154	11/1987	Rademaker et al.	250/551

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[57] CLAIM

The ornamental design for an opto-electrical signal converter, shown and described.

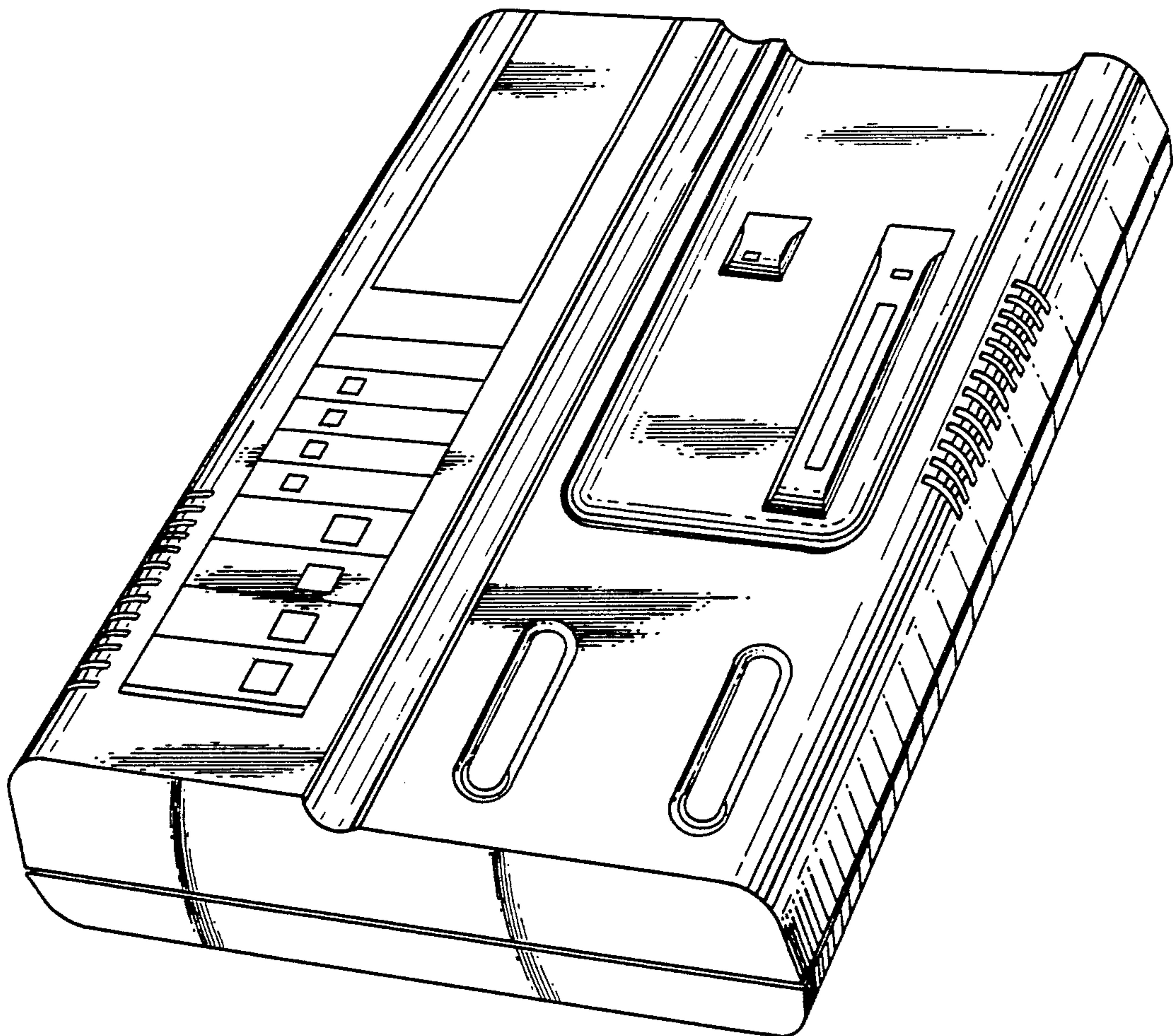
DESCRIPTION

FIG. 1 is top plan view of an opto-electrical signal converter showing our new design; FIG. 2 is a front elevational view thereof; FIG. 3 is a bottom plan view thereof; FIG. 4 is a rear elevational view thereof; FIG. 5 is a right side elevational view thereof; FIG. 6 is a left side elevational view thereof; and, FIG. 7 is a top perspective view thereof.

[56] References Cited

U.S. PATENT DOCUMENTS

D. 246,711	12/1977	Kneale	D14/107
D. 314,560	2/1991	Muller et al.	D14/107
D. 315,723	3/1991	Ito et al.	D14/100
4,456,828	6/1984	Mason et al.	250/551
4,477,721	10/1984	Chappell et al.	250/551 X



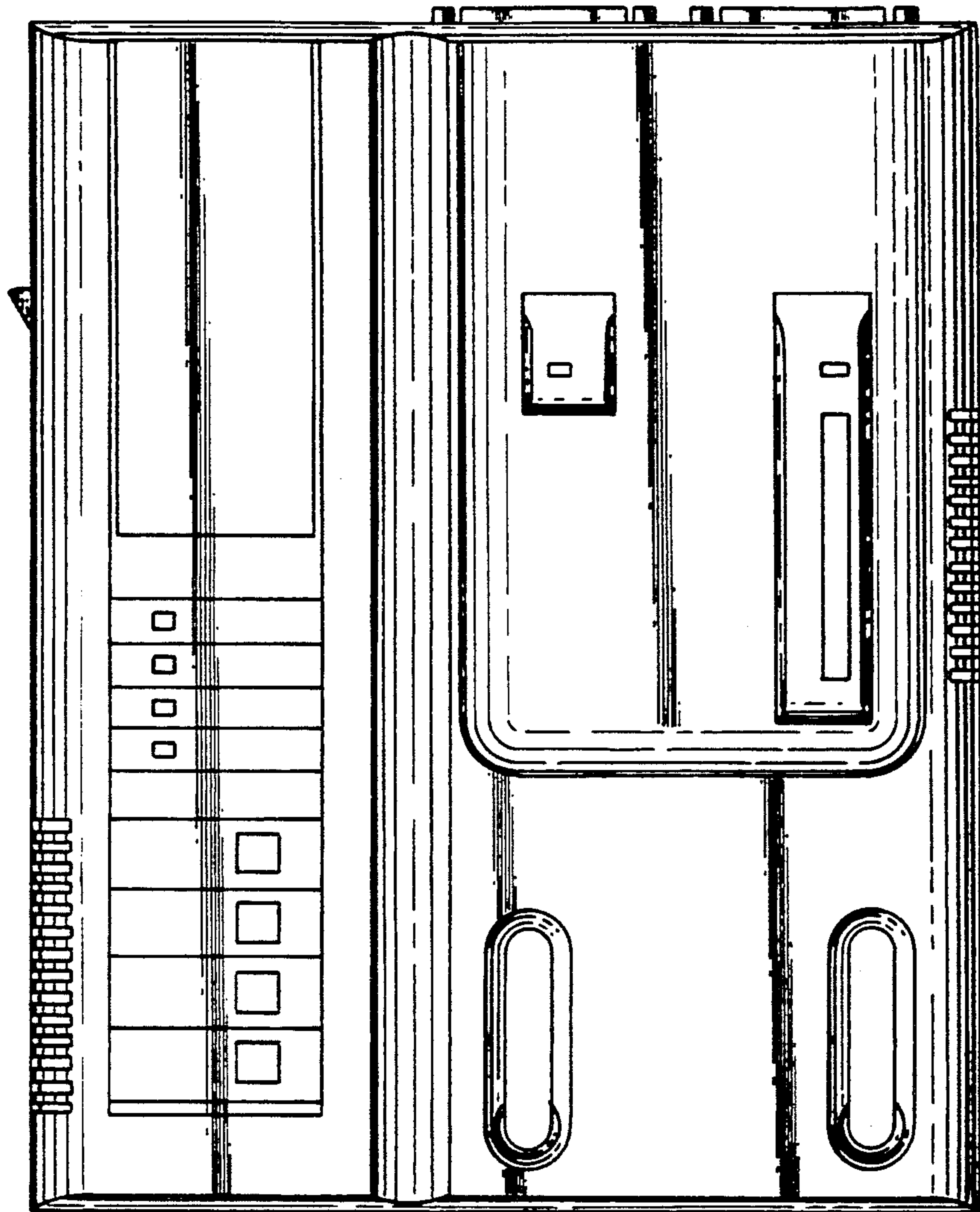


FIG. 1

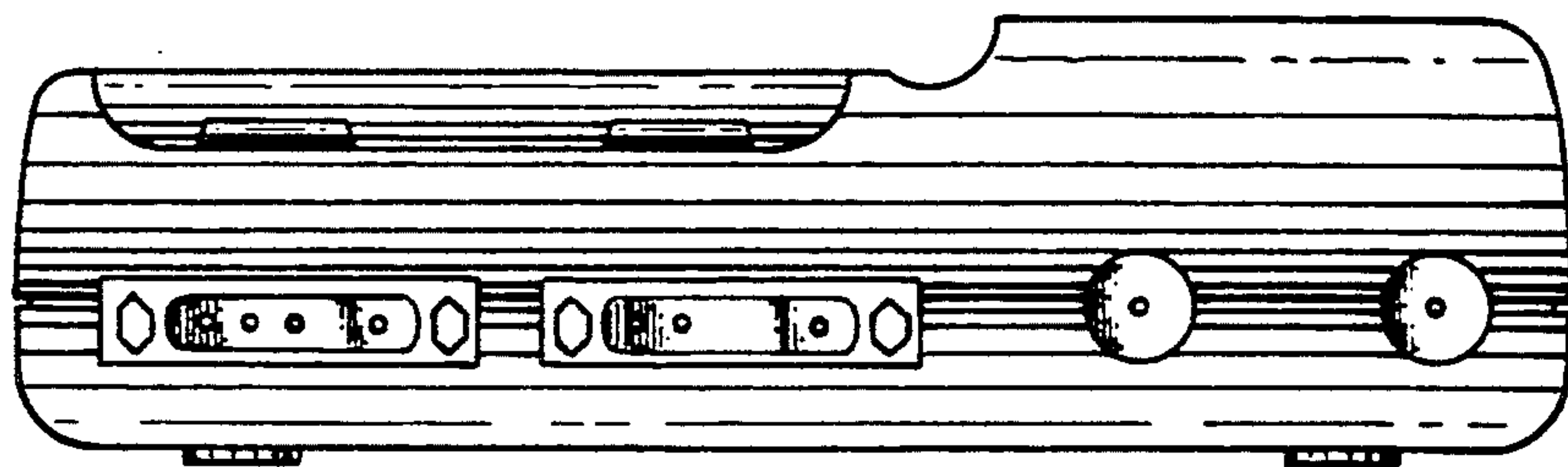


FIG. 2

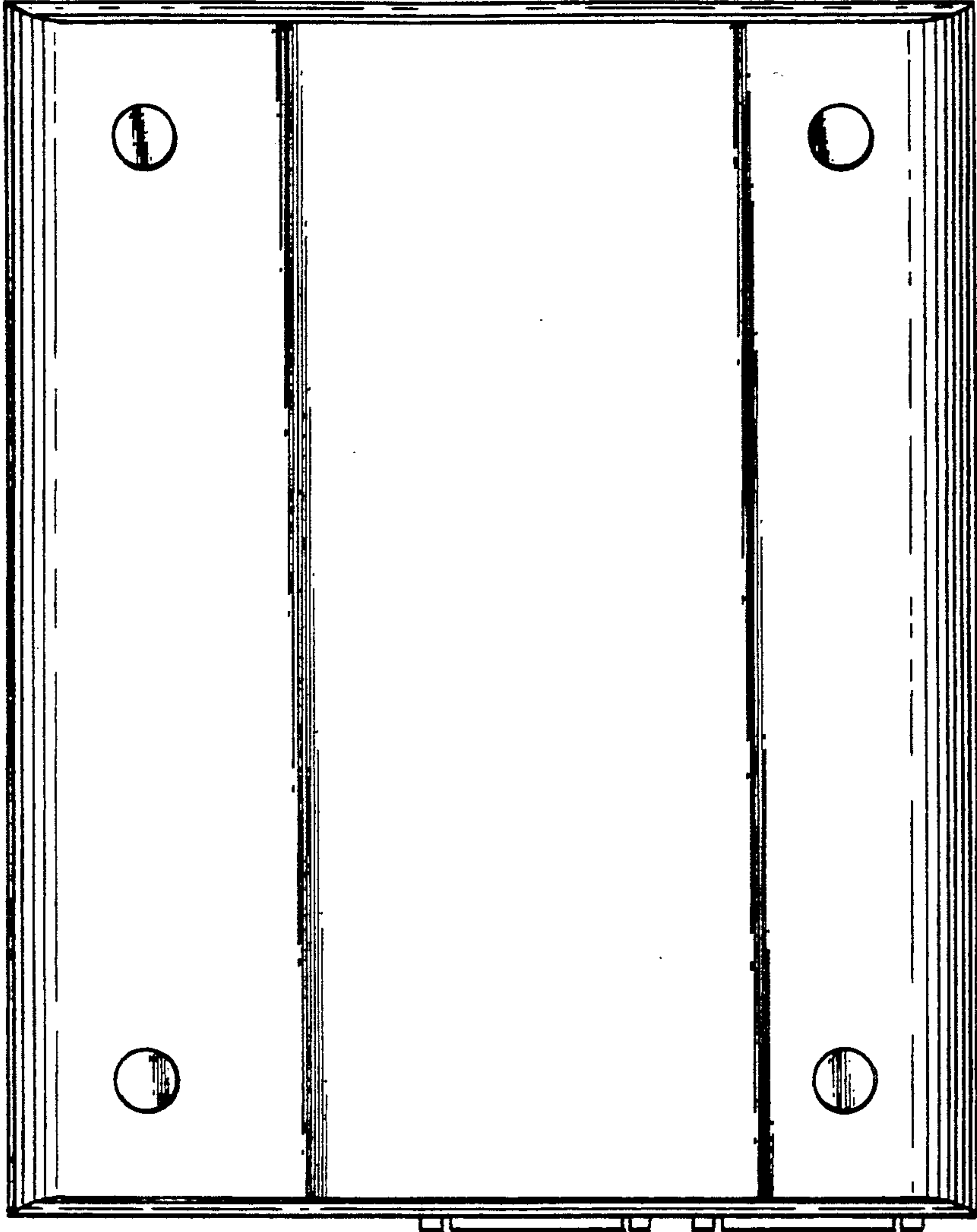


FIG. 3

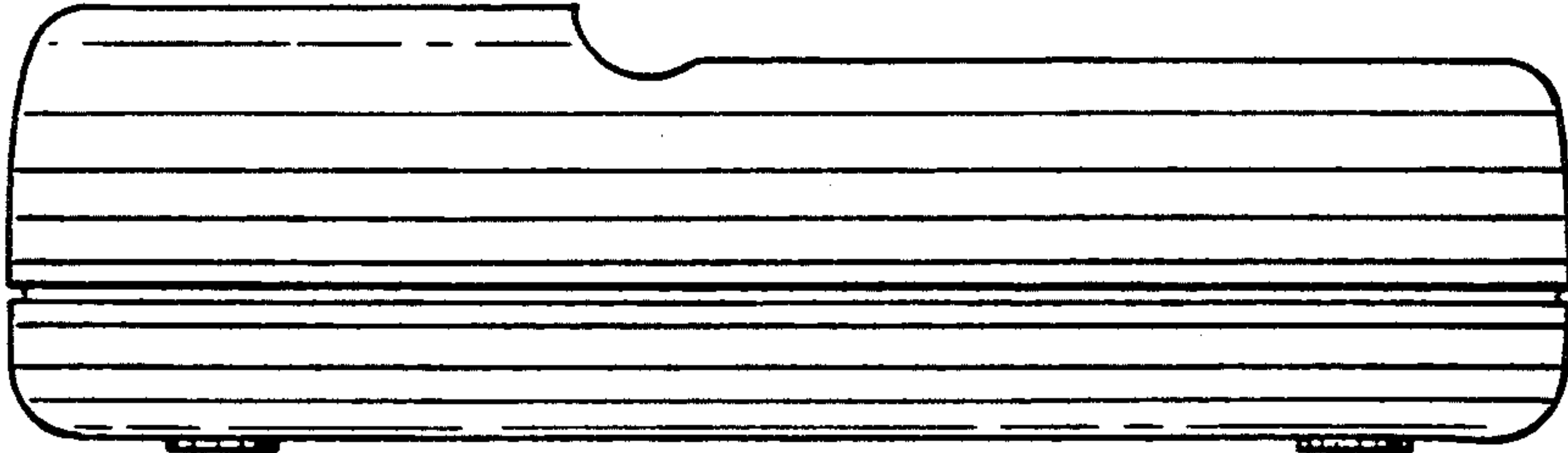


FIG. 4

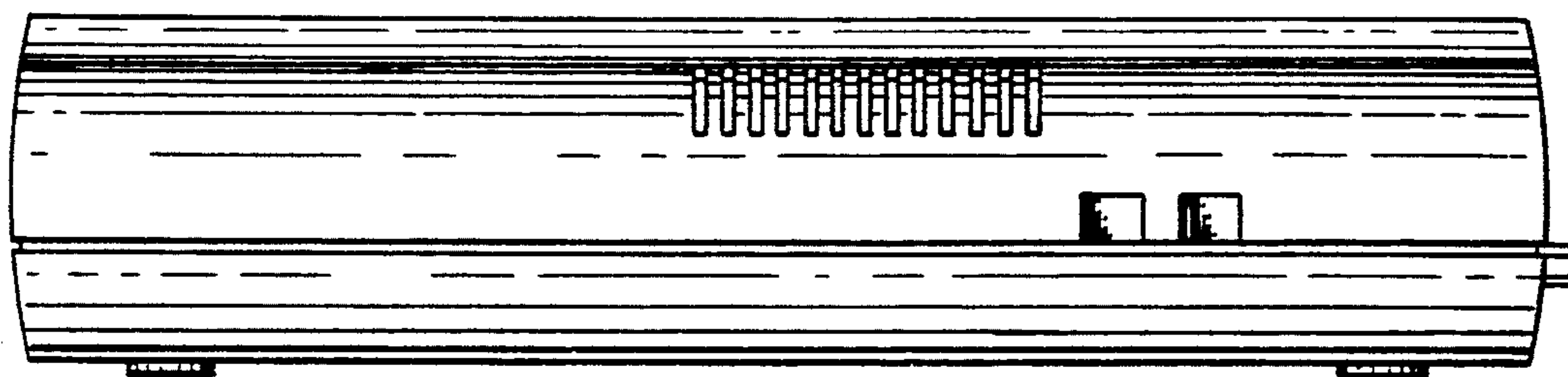


FIG. 5

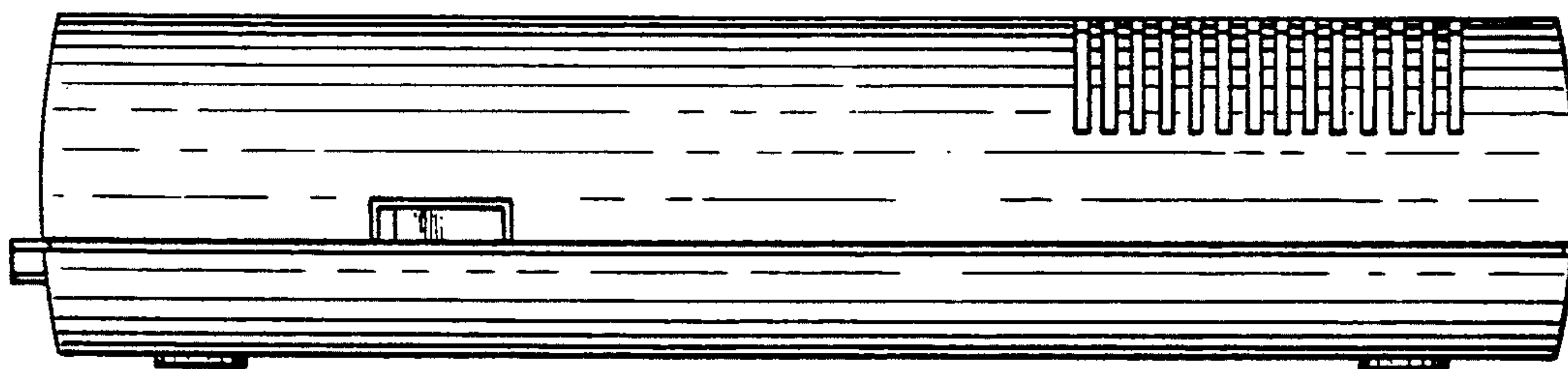


FIG. 6

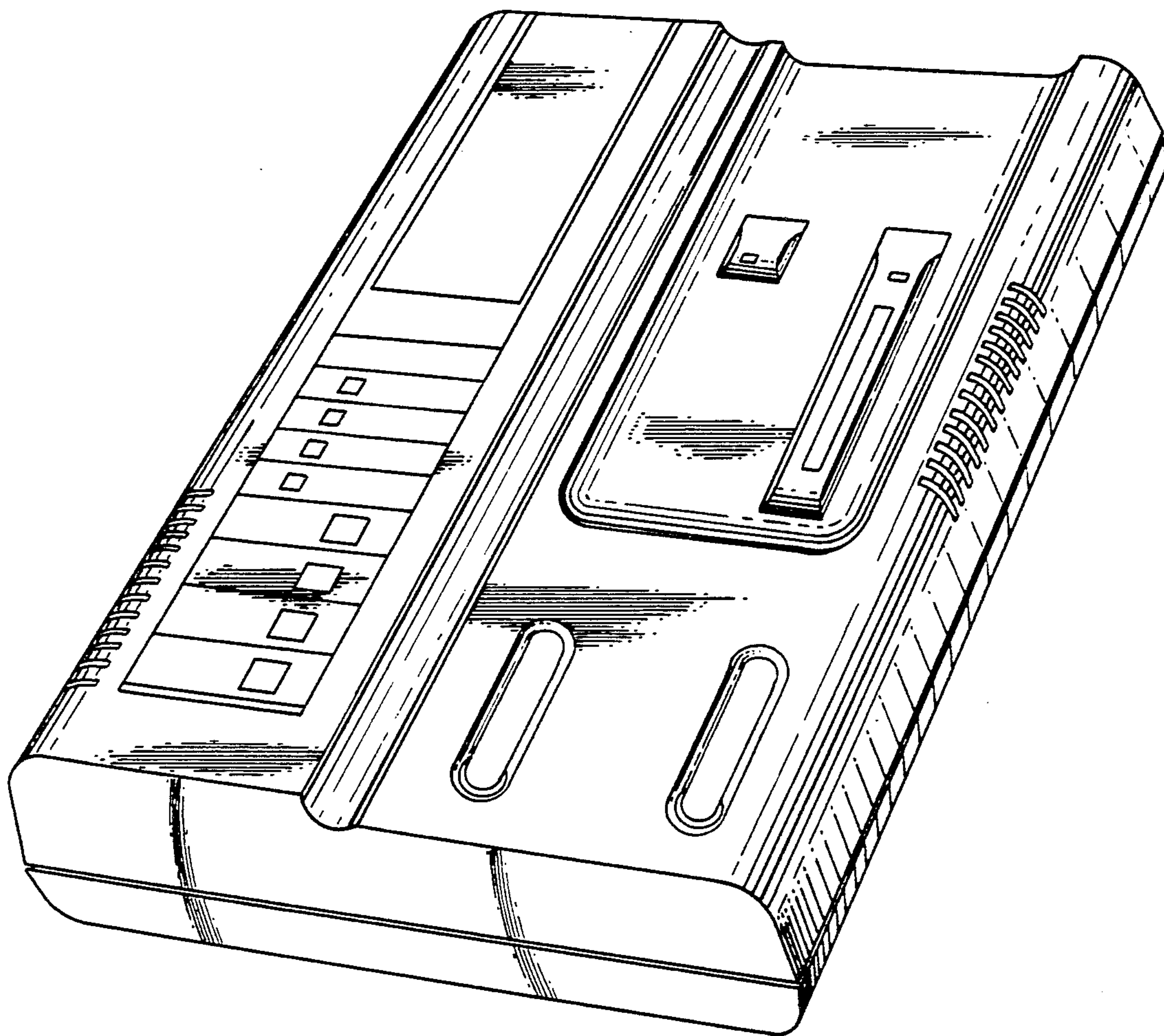


FIG. 7