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

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(45) **Date of Patent:** **** Oct. 22, 2013**

(54) **PUMP FOR LIQUID CHROMATOGRAPH ANALYZER**

D637,929 S * 5/2011 Kimura et al. D10/81
D637,930 S * 5/2011 Kimura et al. D10/81
D645,977 S * 9/2011 Oonuma et al. D24/232
D645,979 S * 9/2011 Oonuma et al. D24/232

(75) Inventors: **Kosuke Matoba**, Tokyo (JP); **Mitsuru Oonuma**, Tokyo (JP); **Masaru Tomioka**, Hitachinaka (JP); **Kiyotoshi Mori**, Hitachinaka (JP); **Akira Owada**, Hitachi (JP)

(Continued)

FOREIGN PATENT DOCUMENTS

(73) Assignee: **Hitachi High-Technologies Corporation**, Tokyo (JP)

CN 301049635 10/2009
CN 301321502 S 8/2010

(Continued)

OTHER PUBLICATIONS

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

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(21) Appl. No.: **29/429,043**

(Continued)

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Primary Examiner — Anhdao Doan

(30) **Foreign Application Priority Data**

(74) *Attorney, Agent, or Firm* — Antonelli, Terry, Stout & Kraus, LLP.

Mar. 23, 2012 (JP) 2012-006580

(51) **LOC (9) Cl.** **24-01**

(57) **CLAIM**

(52) **U.S. Cl.**

We claim the ornamental design for a pump for liquid chromatograph analyzer, as shown and described.

USPC **D24/216; D24/232**

DESCRIPTION

(58) **Field of Classification Search**

USPC D24/216, 217, 219, 223, 231, 232, 233, D24/107, 169, 186, 111; D10/81; 422/62-65, 67, 500, 547, 70, 81, 505, 422/506, 509; 436/43, 45, 47; 435/287.1, 435/287.3; 73/61.52, 61.55; 210/198.2, 210/656, 659

FIG. 1 is a front, top and right side perspective view of a pump for liquid chromatograph analyzer showing our new design; FIG. 2 is a front elevational view thereof; FIG. 3 is a rear elevational view thereof; FIG. 4 is a left side elevational view thereof; FIG. 5 is a right side elevational view thereof; FIG. 6 is a top plan view thereof; and, FIG. 7 is a bottom plan view thereof.

See application file for complete search history.

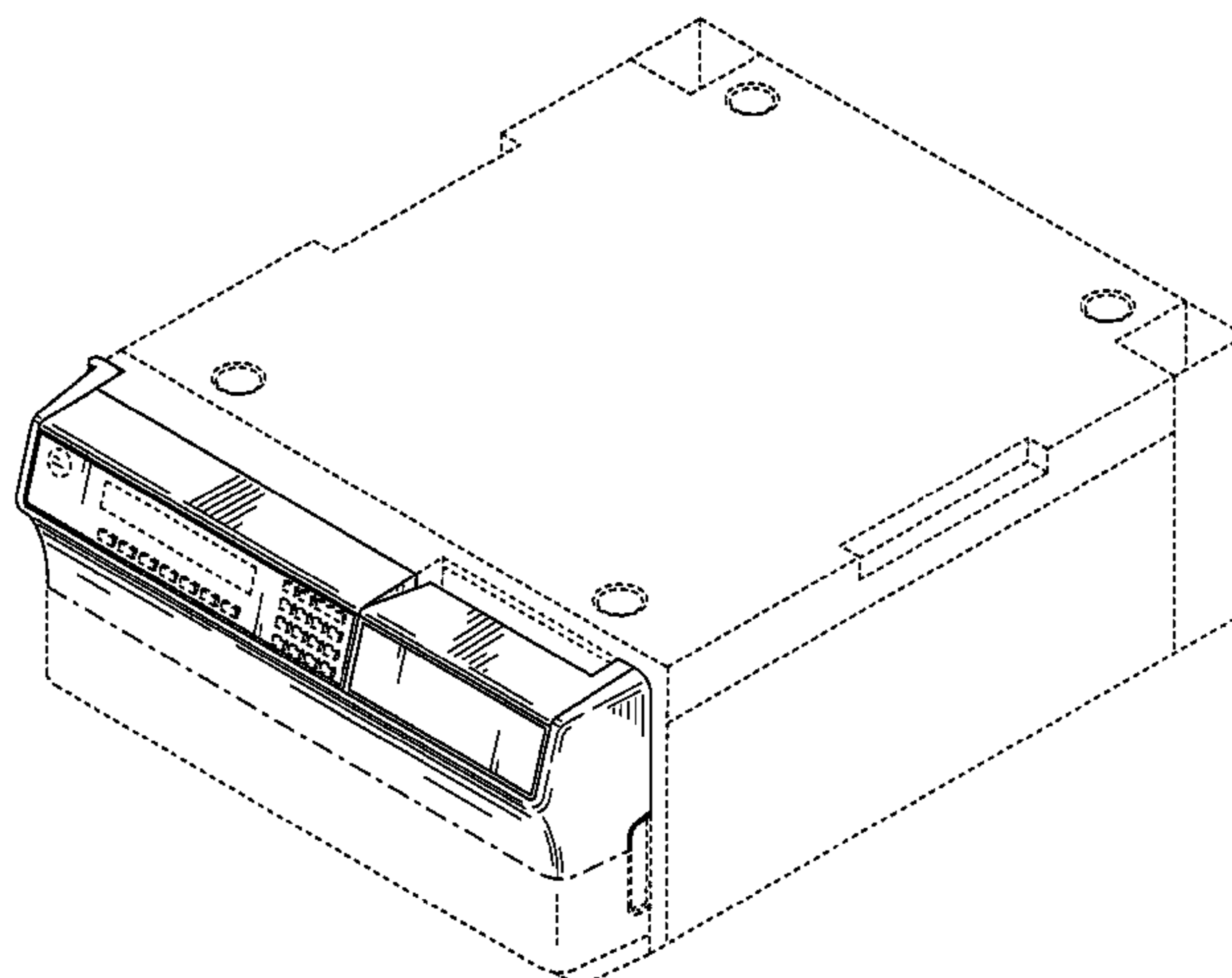
The broken lines in the drawing views are included for the purpose of illustrating portions of the pump for liquid chromatograph analyzer that form no part of the claimed design. The alternate long and short dash lines define, but are not included in, the boundaries of the claimed design.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D353,384 S * 12/1994 Ninomiya et al. D15/7
D422,925 S * 4/2000 Glaser et al. D10/81
D424,458 S * 5/2000 Hanson et al. D10/81
D456,728 S * 5/2002 Oonuma et al. D10/81
D631,976 S * 2/2011 Oonuma et al. D24/216

1 Claim, 5 Drawing Sheets



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(56)

References Cited

EM 001691320-0006 4/2010
JP D 988479 S 8/1997

U.S. PATENT DOCUMENTS

D646,189 S * 10/2011 Dinter et al. D10/81
D646,398 S * 10/2011 Oonuma et al. D24/232
D652,147 S * 1/2012 Isozaki D24/216
D663,856 S * 7/2012 Lieblein et al. D24/216

FOREIGN PATENT DOCUMENTS

CN 301456928 S 2/2011

OTHER PUBLICATIONS

U.S. Appl. No. 29/429,034, filed Aug. 7, 2012, Matoba, copending.
U.S. Appl. No. 29/429,035, filed Aug. 7, 2012, Matoba, copending.
U.S. Appl. No. 29/429,036, filed Aug. 7, 2012, Matoba, copending.

* cited by examiner

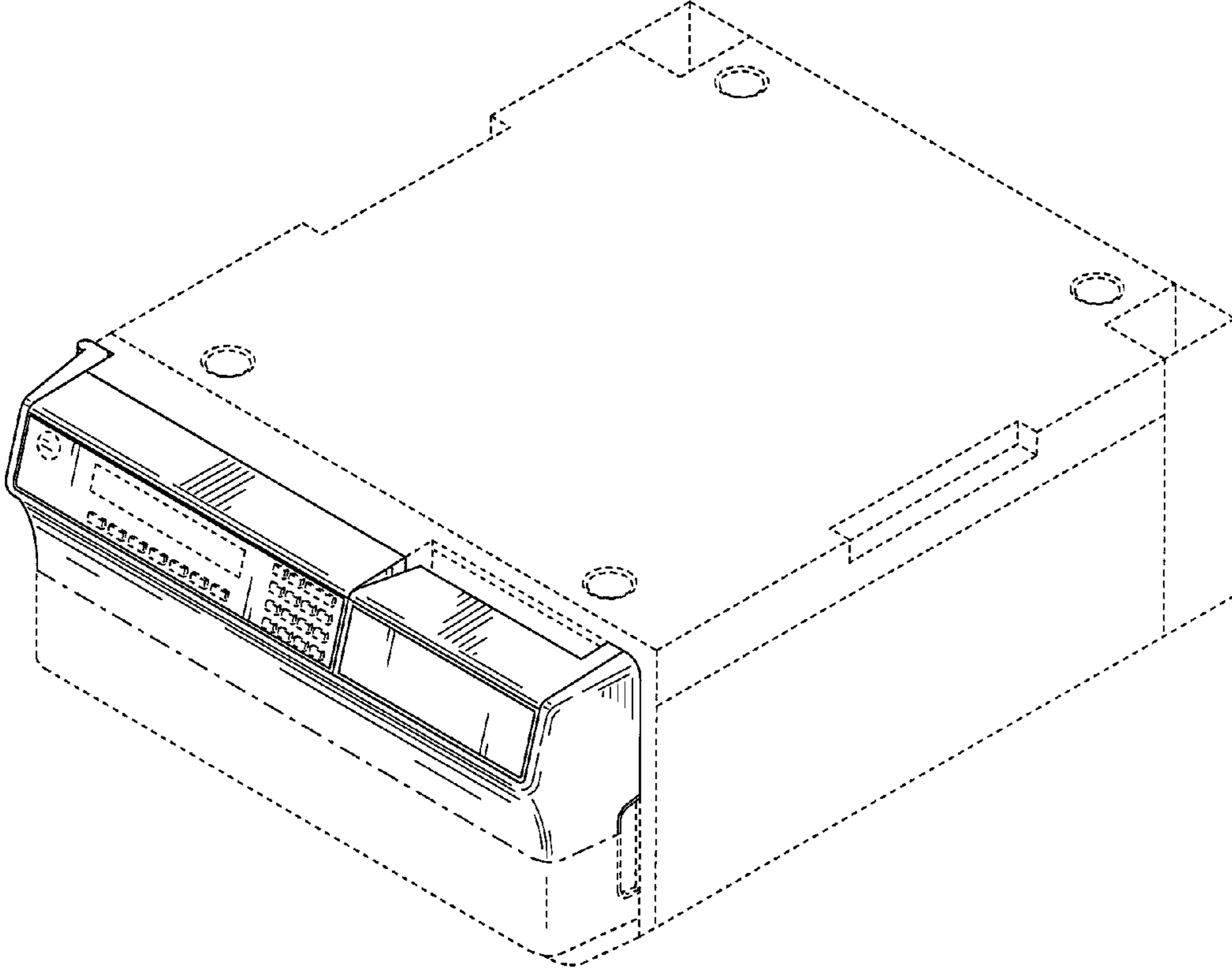


FIG. 1

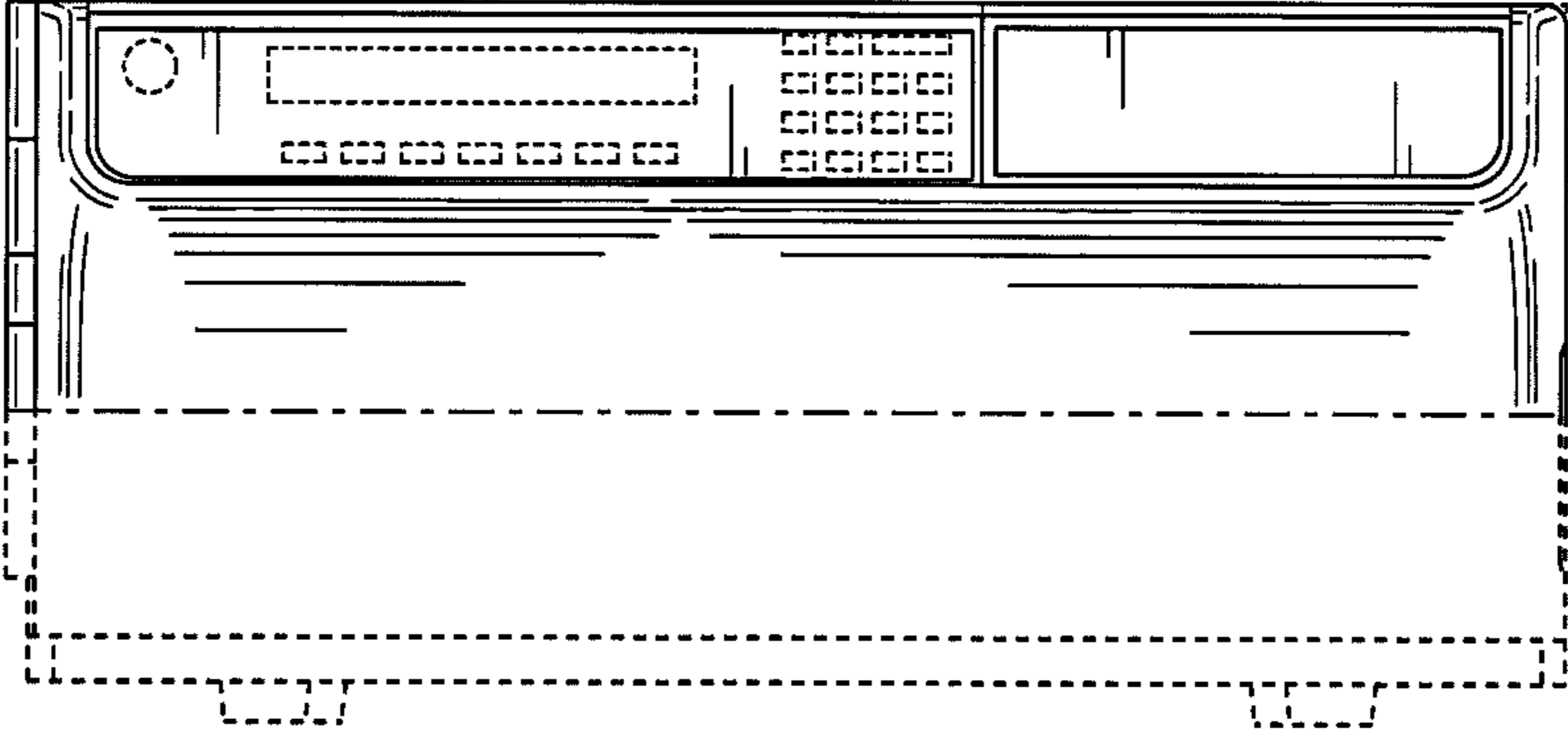


FIG. 2

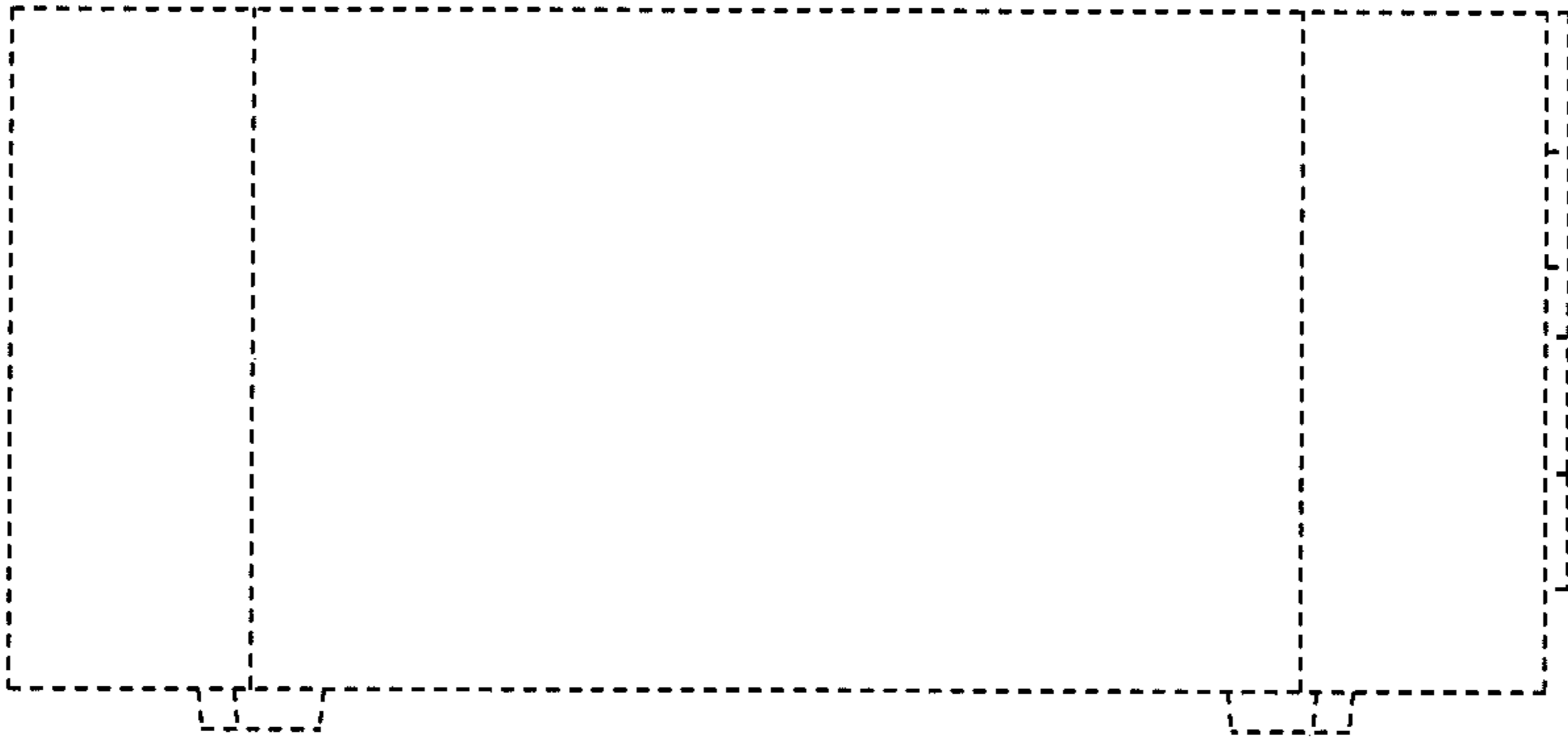


FIG. 3

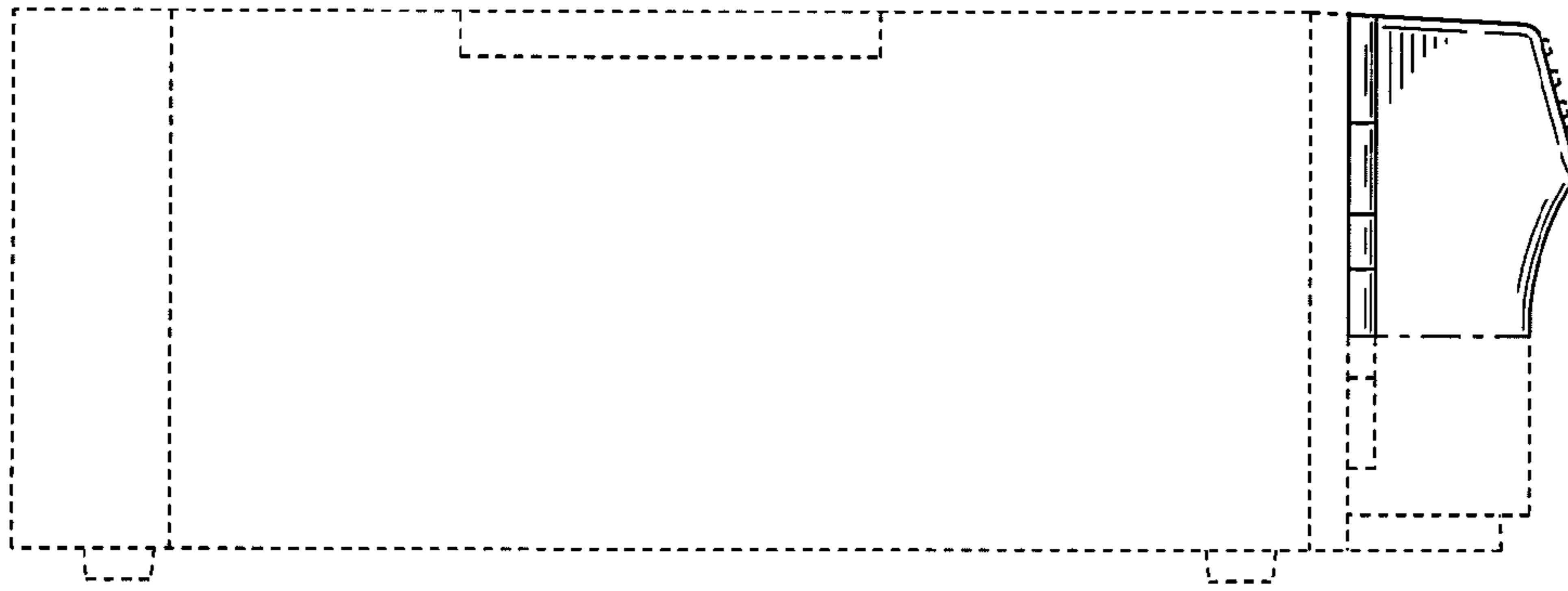


FIG. 4

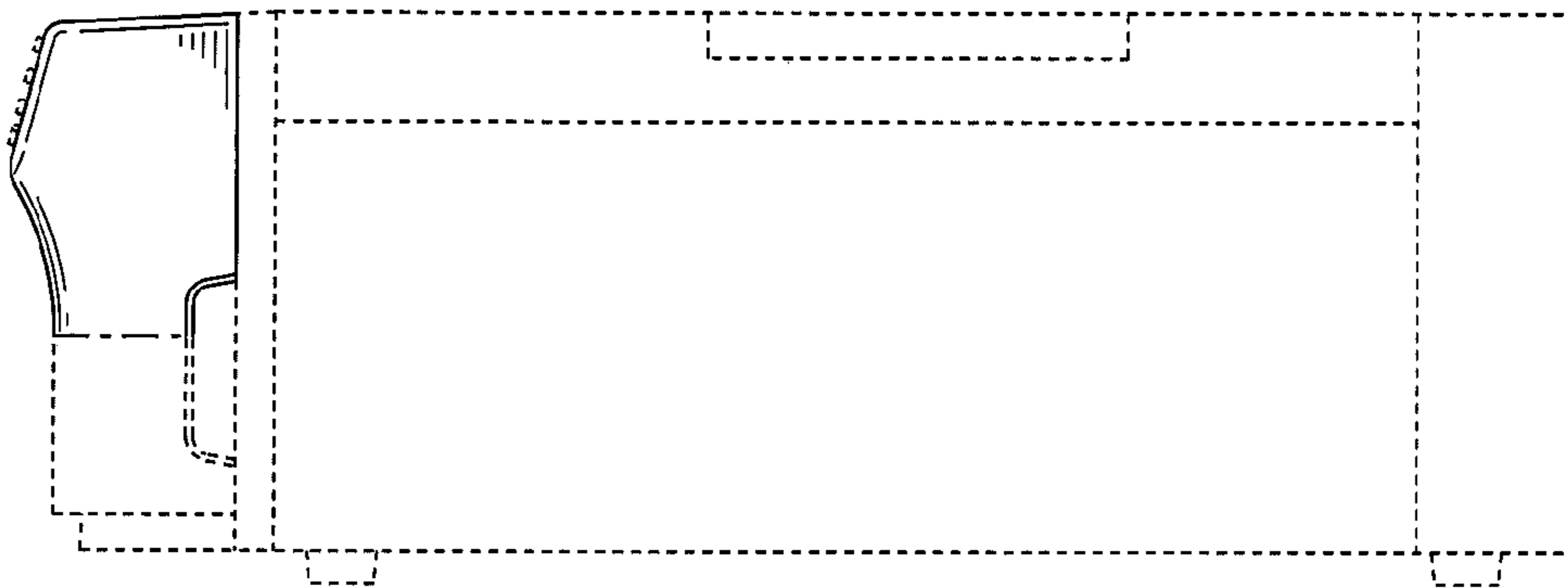


FIG. 5

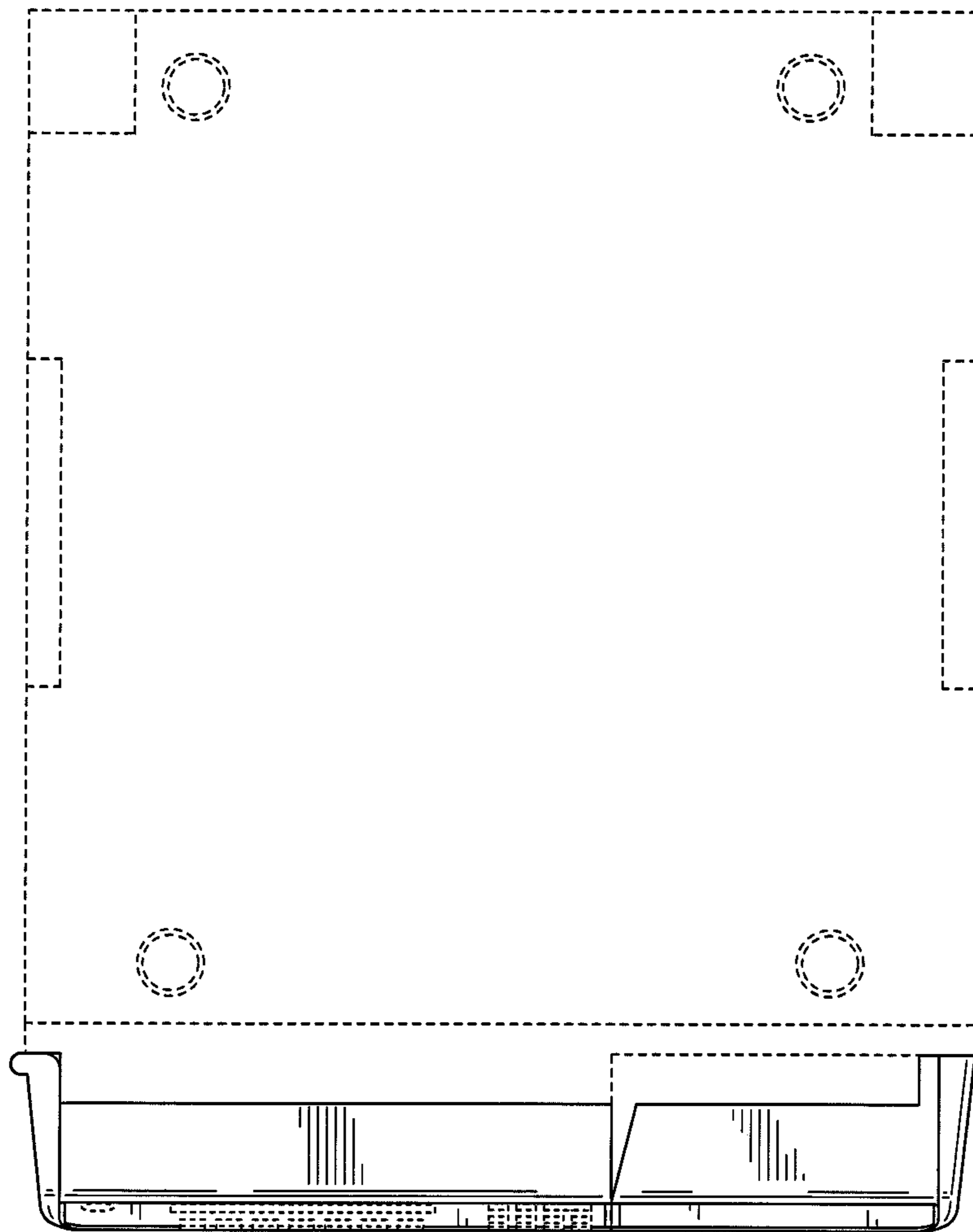


FIG. 6

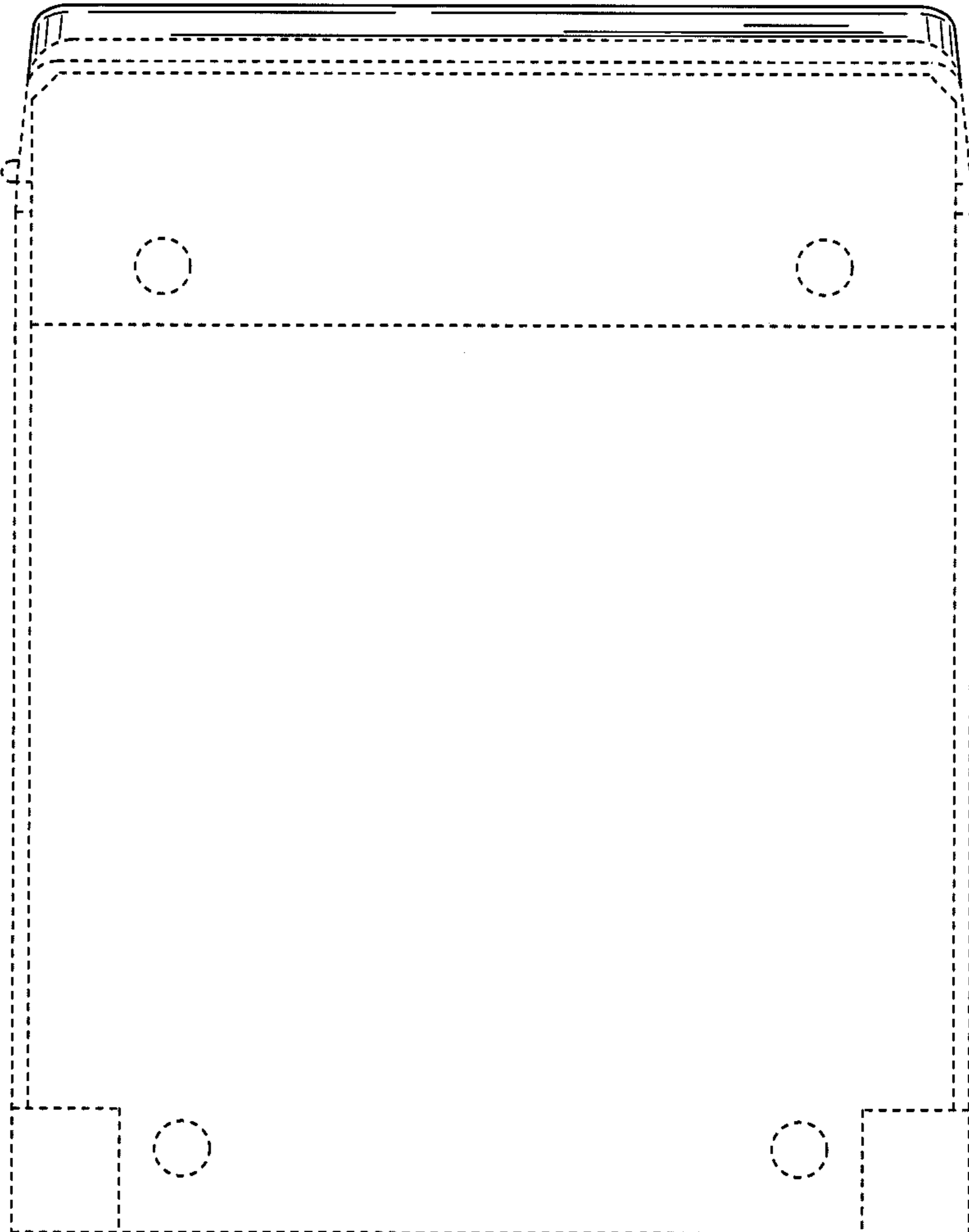


FIG. 7