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(12) **United States Design Patent** (10) **Patent No.:** **US D884,530 S**
Yokino et al. (45) **Date of Patent:** **** May 19, 2020**

(54) **SPECTROMETER HAVING A FLEXIBLE PRINTED CIRCUIT**

G01J 3/04; G01J 3/06; G01J 3/08; G01J 3/12; G01J 3/1256; G01J 3/14; G01J 3/16;

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(Continued)

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(**) Term: **15 Years**

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Primary Examiner — Antoine Duval Davis

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(74) *Attorney, Agent, or Firm* — Faegre Drinker Biddle & Reath LLP

(30) **Foreign Application Priority Data**

(57) **CLAIM**

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The ornamental design for a spectrometer having a flexible printed circuit, as shown and described.

(51) **LOC (12) Cl.** **10-04**

DESCRIPTION

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

USPC **D10/103**

(58) **Field of Classification Search**

USPC D10/81, 103; D14/437, 438

CPC G01J 3/00; G01J 3/0202; G01J 3/0205;

G01J 3/0208; G01J 3/021; G01J 3/0213;

G01J 3/0216; G01J 3/0218; G01J 3/0221;

G01J 3/0224; G01J 3/0227; G01J 3/0229;

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G01J 3/024; G01J 3/0243; G01J 3/0245;

G01J 3/0248; G01J 3/0251; G01J 3/0254;

G01J 3/0256; G01J 3/0259; G01J 3/0262;

G01J 3/0264; G01J 3/0267; G01J 3/027;

G01J 3/0272; G01J 3/0275; G01J 3/0278;

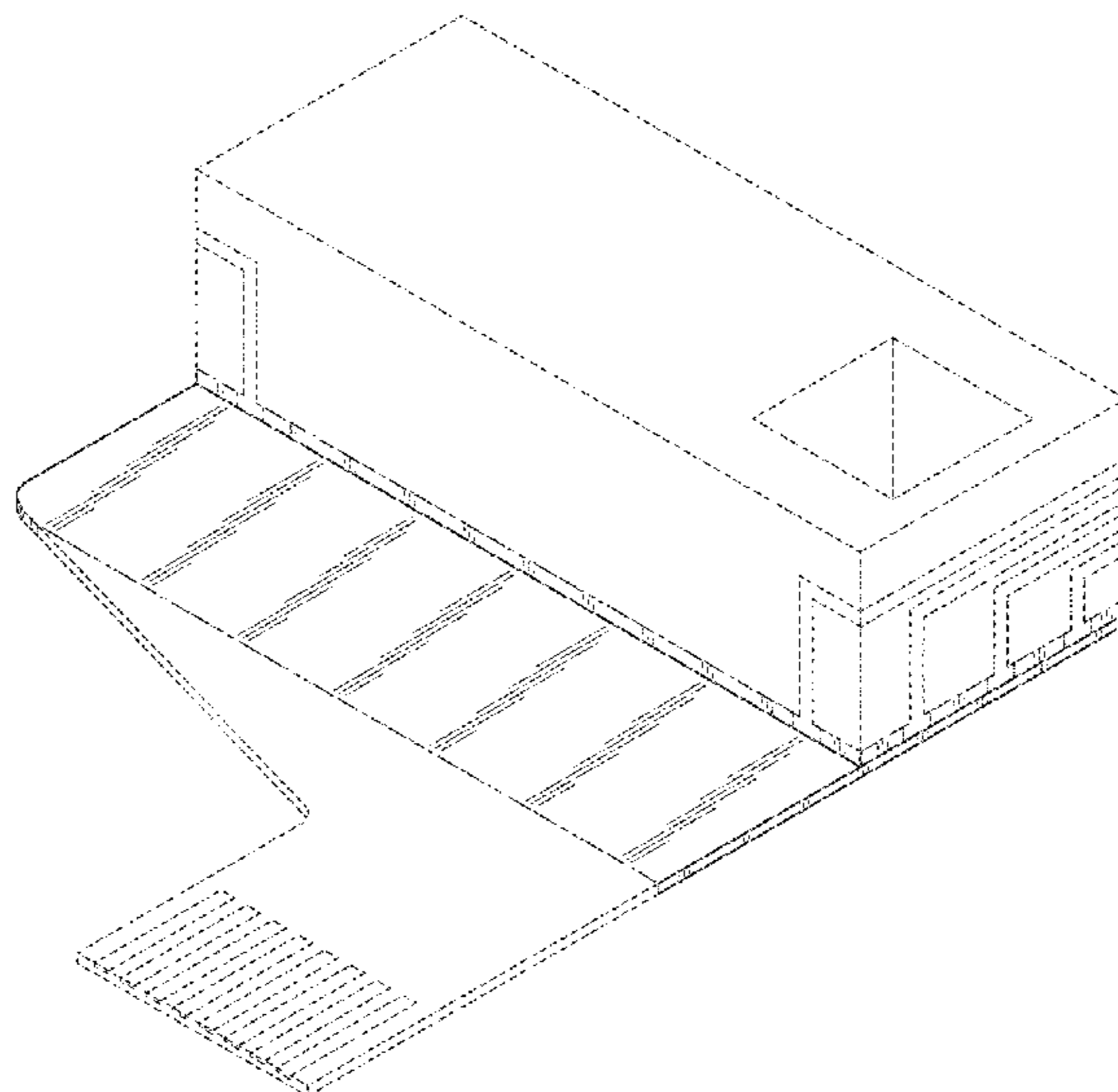
G01J 3/0283; G01J 3/0286; G01J 3/0289;

G01J 3/0291; G01J 3/0294; G01J 3/0297;

FIG. 1 is a top perspective view of a spectrometer having a flexible printed circuit showing our new design;
FIG. 2 is a bottom perspective view thereof;
FIG. 3 is a front view thereof;
FIG. 4 is a rear view thereof;
FIG. 5 is a top plan view thereof;
FIG. 6 is a bottom view thereof;
FIG. 7 is a right side view thereof; and,
FIG. 8 is a left side view thereof.

The features shown in broken lines depict environmental subject matter only and form no part of the claimed design. The alternate long and short dash lines are merely the boundary lines between the claimed parts and the non-claimed parts.

1 Claim, 8 Drawing Sheets



(58) **Field of Classification Search**

CPC G01J 3/18; G01J 3/1804; G01J 3/1809;
 G01J 3/1833; G01J 3/1838; G01J 3/189;
 G01J 3/1895; G01J 3/20; G01J 3/22;
 G01J 3/24; G01J 3/26; G01J 3/28; G01J
 3/2803; G01J 3/2823; G01J 3/2846; G01J
 3/2889; G01J 3/30; G01J 3/32; G01J
 3/36; G01J 3/40; G01J 3/42; G01J 3/427;
 G01J 3/433; G01J 3/4338; G01J 3/44;
 G01J 3/4406; G01J 3/4412; G01J 3/443;
 G01J 3/447; G01J 3/45; G01J 3/453;
 G01J 3/4531; G01J 3/4532; G01J 3/4535;
 G01J 3/4537; G01J 3/457; G01J 3/46;
 G01J 3/461; G01J 3/462; G01J 3/463;
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 G01J 3/502; G01J 3/504; G01J 3/505;
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 G01J 3/513; G01J 3/52; G01J 3/522;
 G01J 3/524; G01J 3/526; G01J 3/528;
 G01J 2003/0281; G01J 2003/042; G01J
 2003/045; G01J 2003/047; G01J
 2003/061; G01J 2003/062; G01J
 2003/064; G01J 2003/065; G01J
 2003/066; G01J 2003/067; G01J
 2003/068; G01J 2003/069; G01J
 2003/1204; G01J 2003/1208; G01J
 2003/1213; G01J 2003/1217; G01J
 2003/1221; G01J 2003/1226; G01J
 2003/123; G01J 2003/1234; G01J
 2003/1239; G01J 2003/1243; G01J
 2003/1247; G01J 2003/1252; G01J
 2003/126; G01J 2003/1265; G01J
 2003/1269; G01J 2003/1273; G01J
 2003/1278; G01J 2003/1282; G01J
 2003/1286; G01J 2003/1291; G01J
 2003/1295; G01J 2003/145; G01J
 2003/1814; G01J 2003/1819; G01J
 2003/1823; G01J 2003/1828; G01J

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 2003/1861; G01J 2003/1866; G01J
 2003/1871; G01J 2003/1876; G01J
 2003/188; G01J 2003/1885; G01J
 2003/262; G01J 2003/26; G01J 2003/267;
 G01J 2003/2806; G01J 2003/2809; G01J
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 2003/2859; G01J 2003/2863; G01J
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 2003/2873; G01J 2003/2876; G01J
 2003/2879; G01J 2003/2883; G01J
 2003/2886; G01J 2003/2893; G01J
 2003/2896; G01J 2003/323; G01J
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 2003/4275; G01J 2003/4332; G01J
 2003/4334; G01J 2003/4336; G01J
 2003/4418; G01J 2003/4424; G01J
 2003/4335; G01J 2003/451; G01J
 2003/452; G01J 2003/4534; G01J
 2003/4538; G01J 2003/466; G01J
 2003/467; G01J 2003/468; G01J
 2003/503; G01J 2003/507; G01J
 2003/516

See application file for complete search history.

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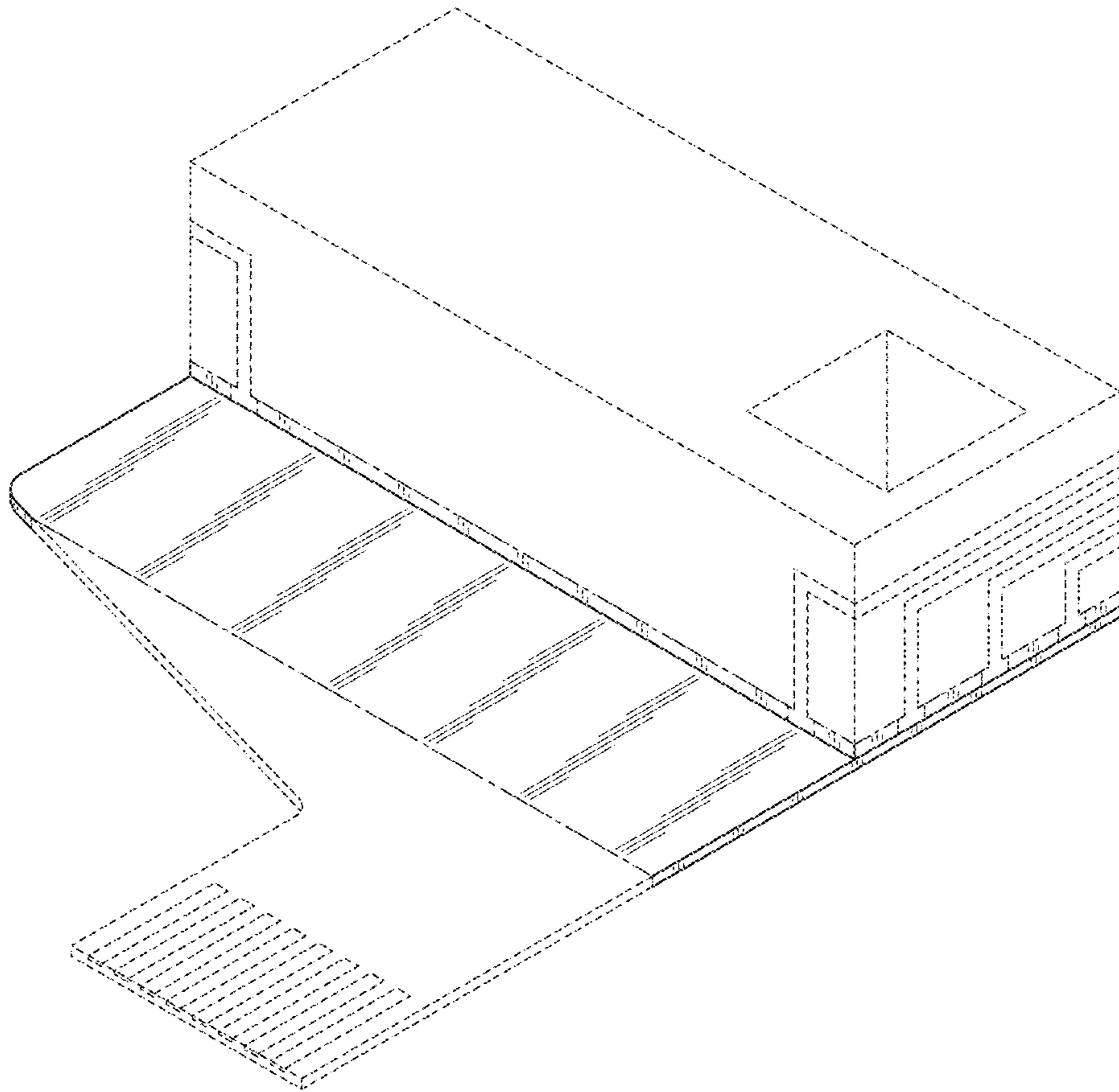


FIG. 1

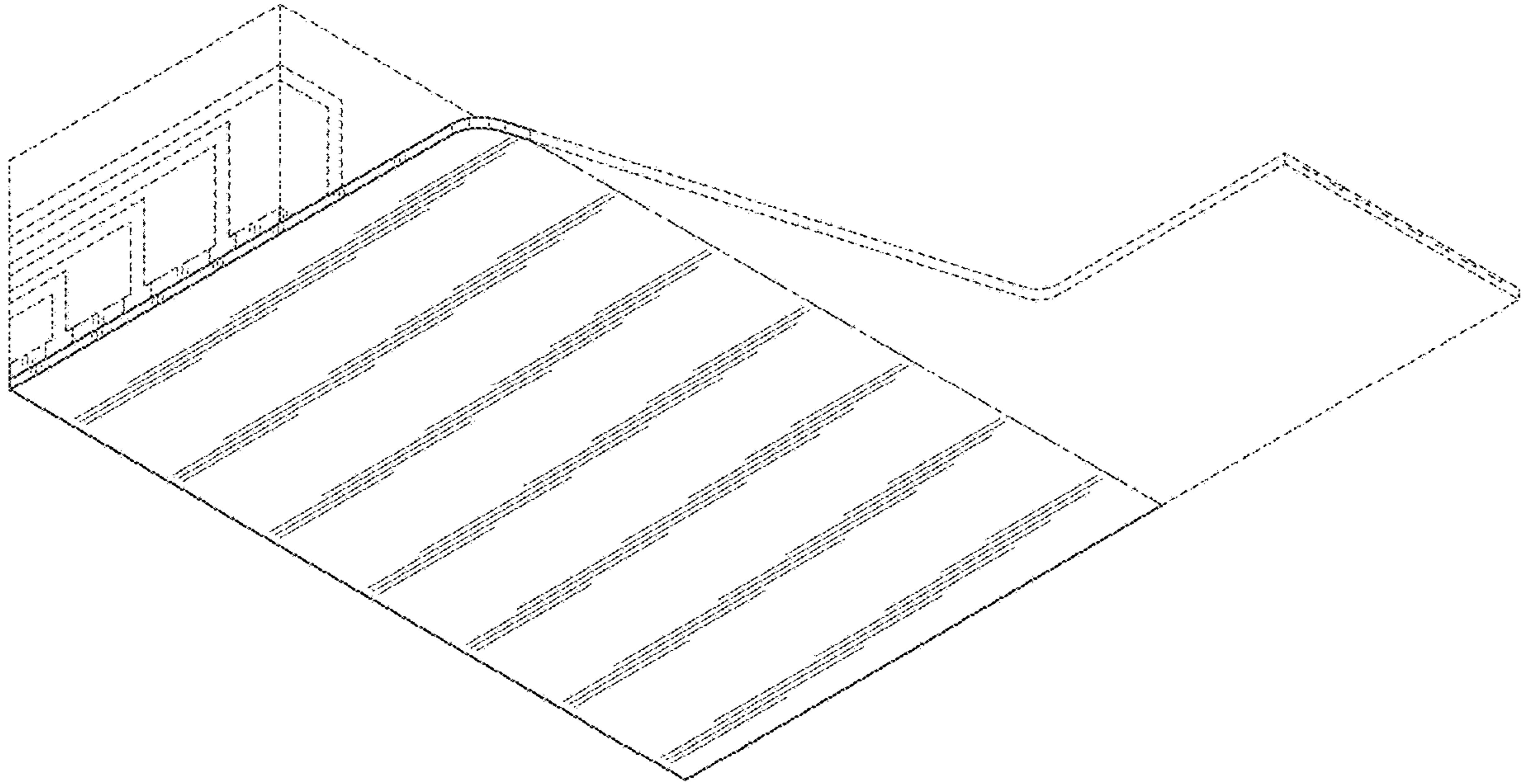


FIG. 2

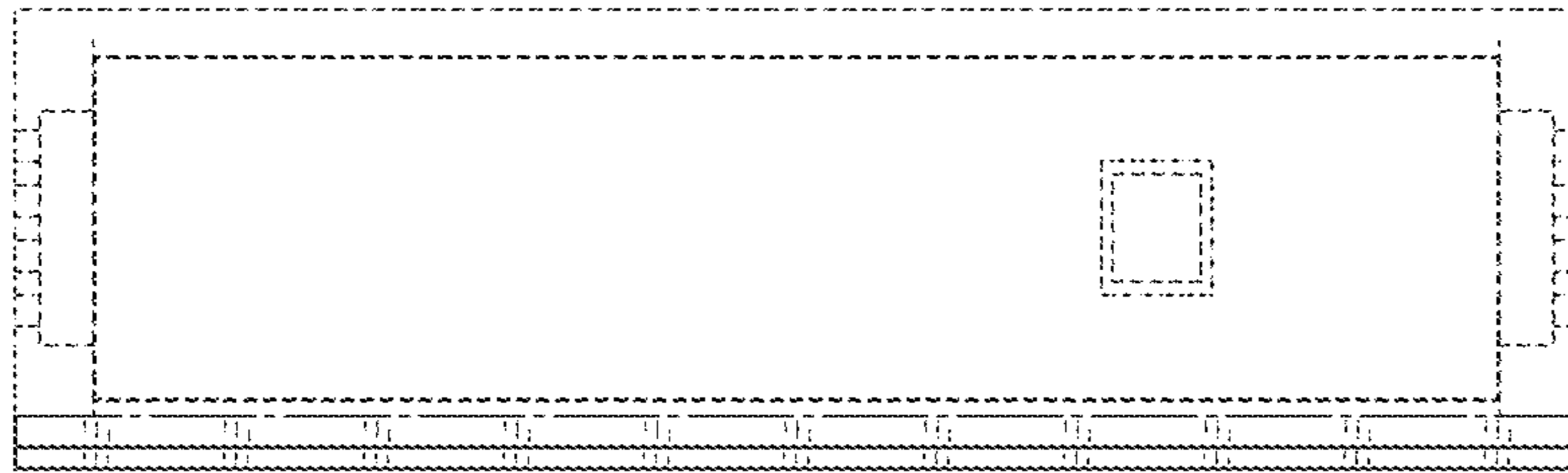


FIG. 3

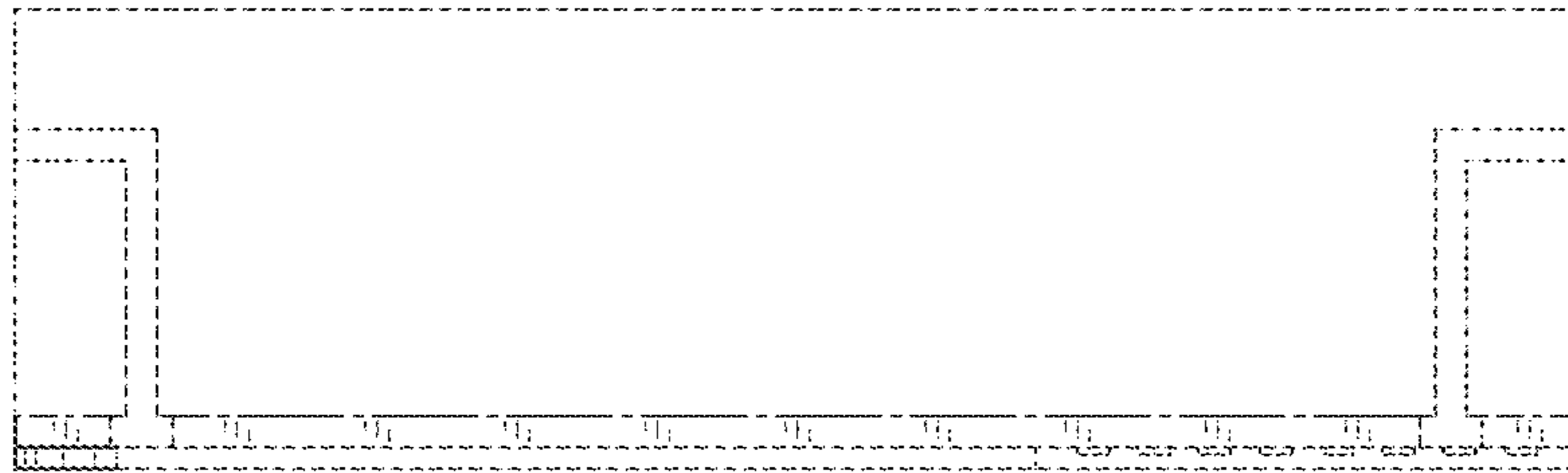


FIG. 4

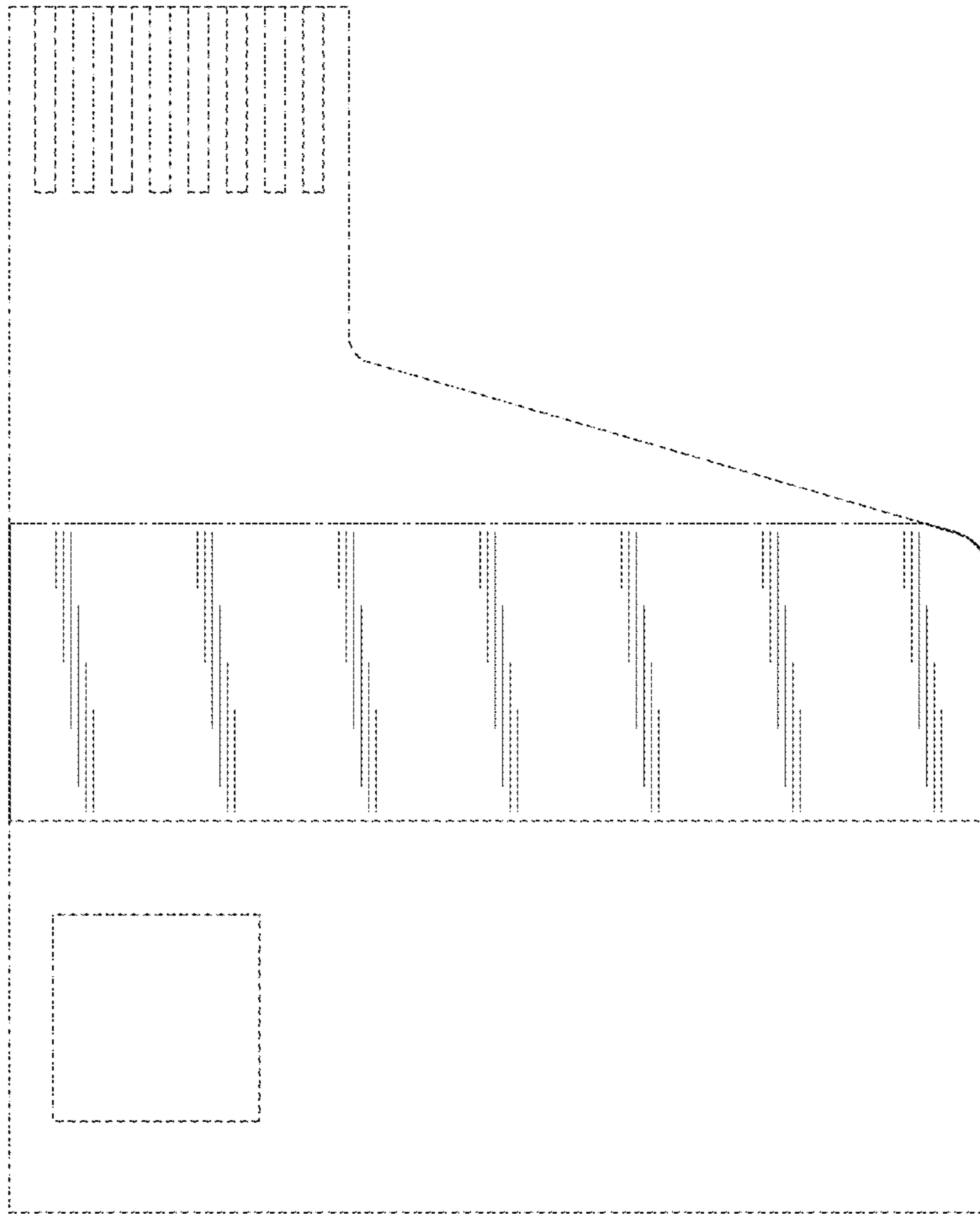


FIG. 5

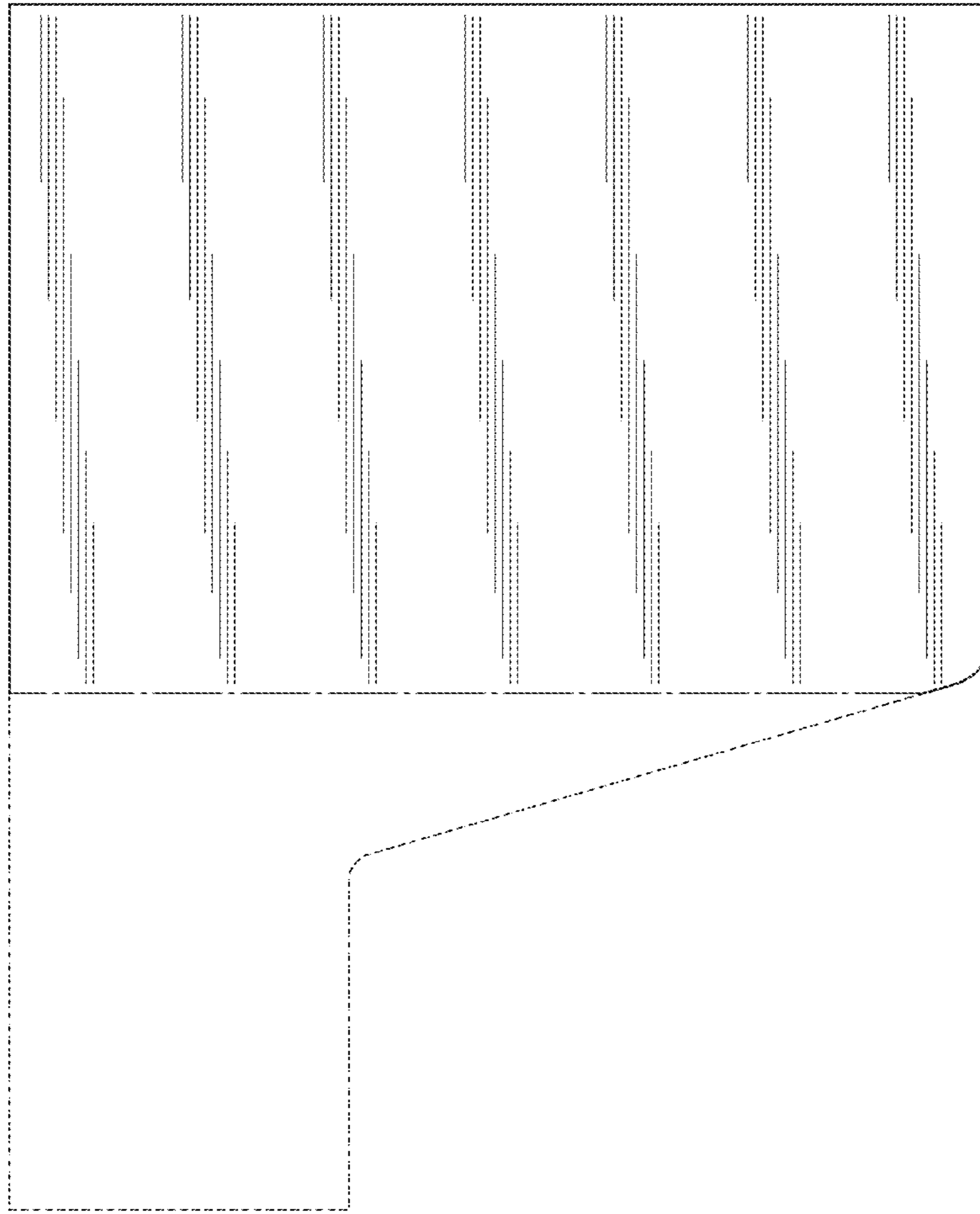


FIG. 6

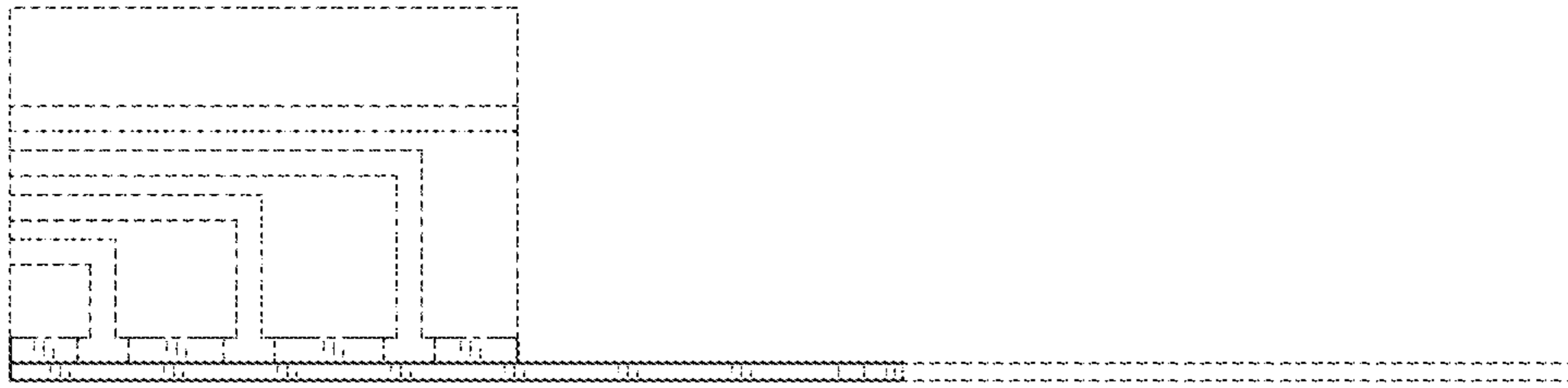


FIG. 7

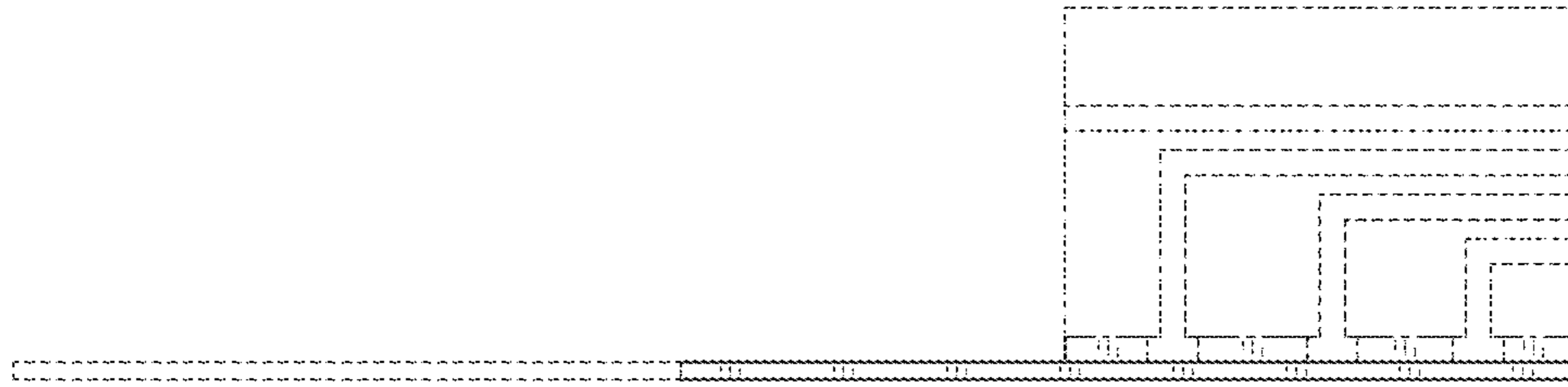


FIG. 8