US00D890005S

(12) United States Design Patent

Yokino et al.

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

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(73) Assignee: **HAMAMATSU PHOTONICS K.K.**, Hamamatsu-shi, Shizuoka (JP)

(*) Notice: This patent is subject to a terminal disclaimer.

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

(21) Appl. No.: **29/675,104**

(22) Filed: **Dec. 28, 2018**

(30) **Foreign Application Priority Data**

Jun. 29, 2018 (JP) 2018-014480

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

(52) **U.S. Cl.**
USPC **D10/103**

(58) **Field of Classification Search**
USPC D10/81, 103; D14/437, 438
(Continued)

(56) **References Cited**

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Primary Examiner — Antoine Duval Davis
(74) *Attorney, Agent, or Firm* — Faegre Drinker Biddle & Reath LLP

(57) **CLAIM**

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

DESCRIPTION

FIG. **1** is a top perspective view of a first embodiment 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;
FIG. **8** is a left side view thereof;
FIG. **9** is a top perspective view of a second embodiment of a spectrometer having a flexible printed circuit showing our new design;
FIG. **10** is a bottom perspective view thereof;
FIG. **11** is a front view thereof;
FIG. **12** is a rear view thereof;
FIG. **13** is a top plan view thereof;
FIG. **14** is a bottom view thereof;
FIG. **15** is a right side view thereof;
FIG. **16** is a left side view thereof;
FIG. **17** is a top perspective view of a third embodiment of a spectrometer having a flexible printed circuit showing our new design;
FIG. **18** is a bottom perspective view thereof;
FIG. **19** is a front view thereof;
FIG. **20** is a rear view thereof;
FIG. **21** is a top plan view thereof;
FIG. **22** is a bottom view thereof;
FIG. **23** is a right side view thereof; and,
FIG. **24** is a left side view thereof.

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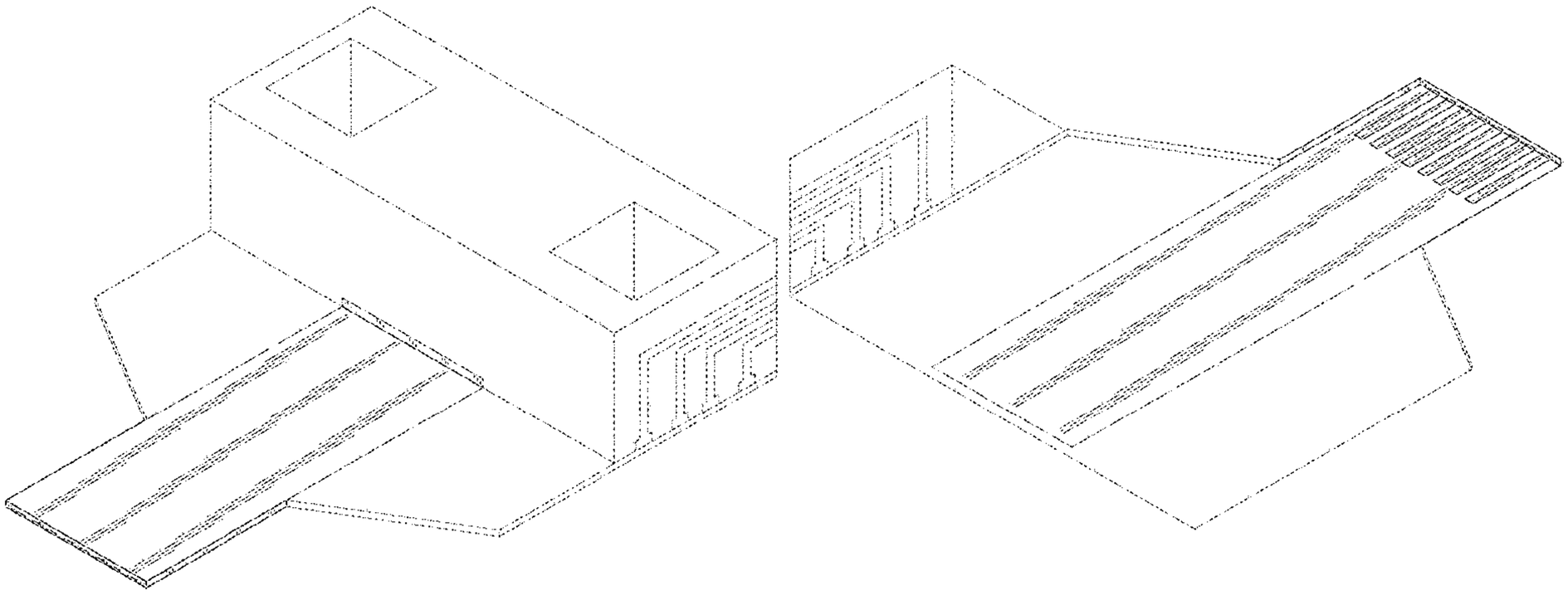

The features shown in broken lines depict environmental subject matter only and form no part of the claimed design. The alternate long and short dash lines are merely the boundary lines between the claimed parts and the non-claimed parts.

1 Claim, 24 Drawing Sheets

(58) **Field of Classification Search**
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; G01J 3/0232; G01J 3/0235; G01J 3/0237; 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; G01J 3/04; G01J 3/06; G01J 3/08; G01J 3/12; G01J 3/1256; G01J 3/14; G01J 3/16; 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; G01J 3/465; G01J 3/50; G01J 3/501; G01J 3/502; G01J 3/504; G01J 3/505; G01J 3/506; G01J 3/508; G01J 3/51; 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 2003/1842; G01J 2003/1847; G01J 2003/1852; G01J 2003/1857; G01J 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 2003/2813; G01J 2003/2816; G01J 2003/282; G01J 2003/2826; G01J 2003/283; G01J 2003/2833; G01J 2003/2836; G01J 2003/284; G01J 2003/2843; G01J 2003/285; G01J 2003/2853; G01J 2003/2856; G01J 2003/2859; G01J 2003/2863; G01J 2003/2866; G01J 2003/2869; G01J 2003/2873; G01J 2003/2876; G01J 2003/2879; G01J 2003/2883; G01J 2003/2886; G01J 2003/2893; G01J 2003/2896; G01J 2003/323; G01J 2003/326; G01J 2003/421; G01J 2003/423; G01J 2003/425; G01J 2003/4275; G01J 2003/4332; G01J 2003/4334; G01J 2003/4336; G01J 2003/4418; G01J 2003/4424; G01J 2003/4435; 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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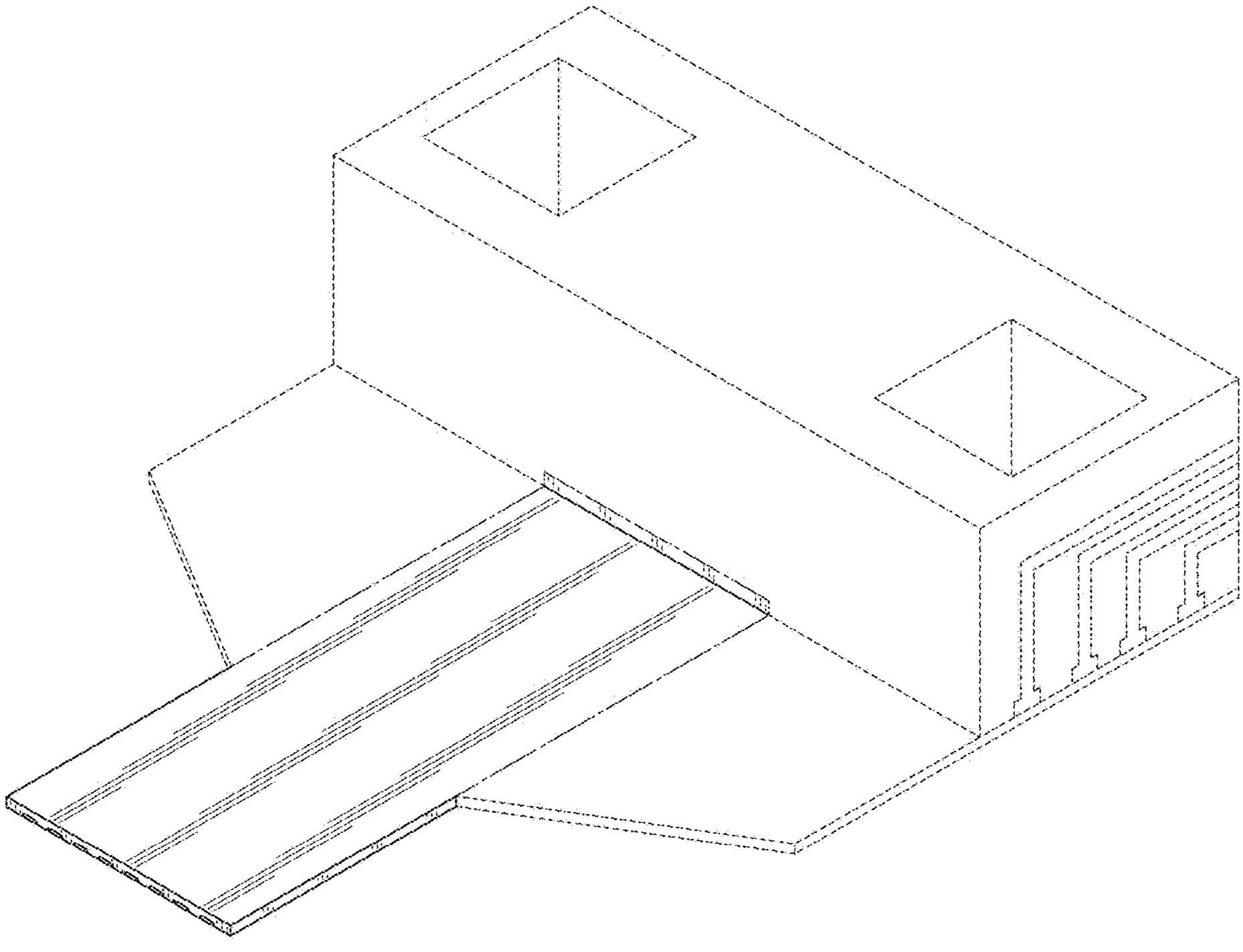


FIG. 1

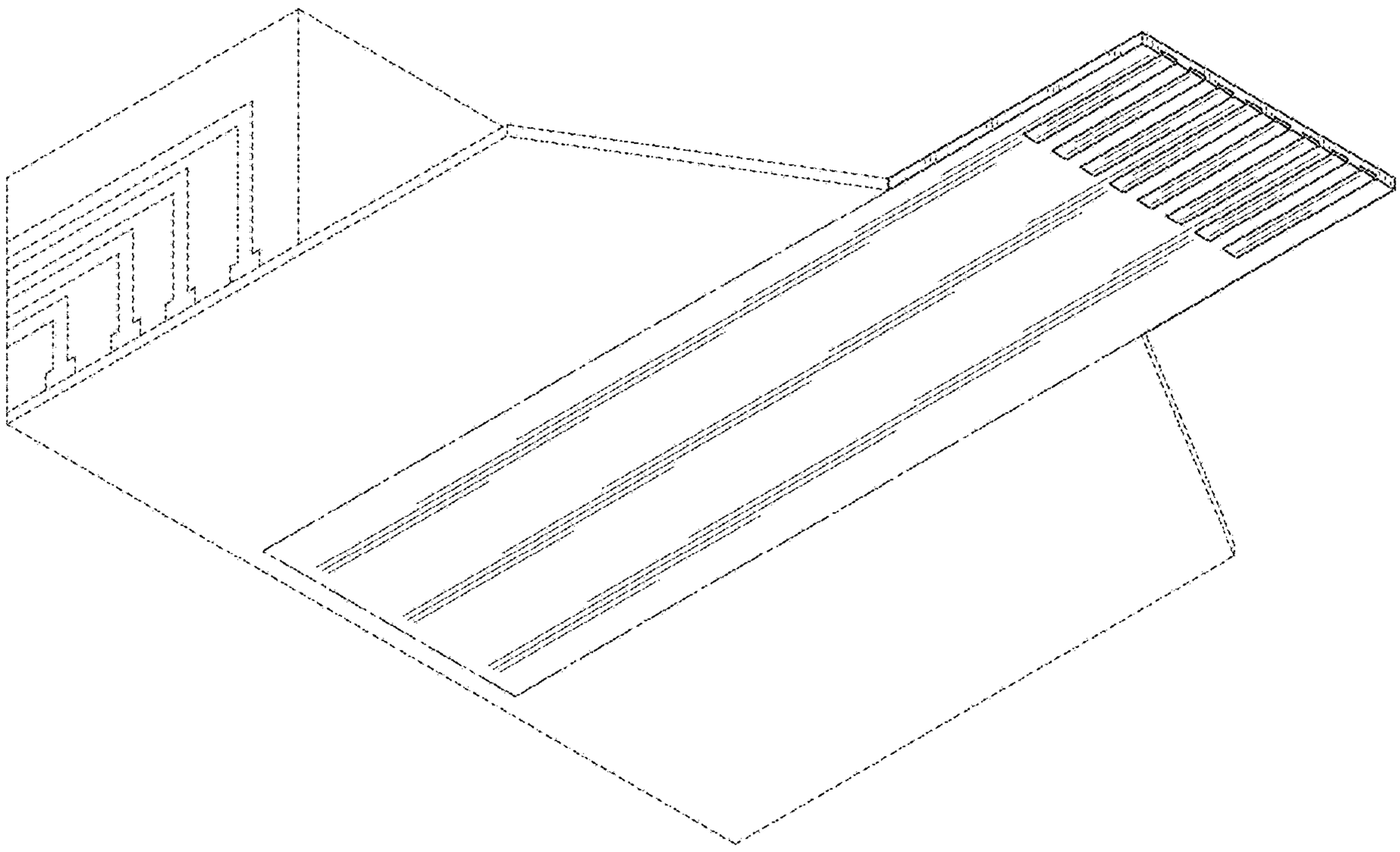


FIG. 2

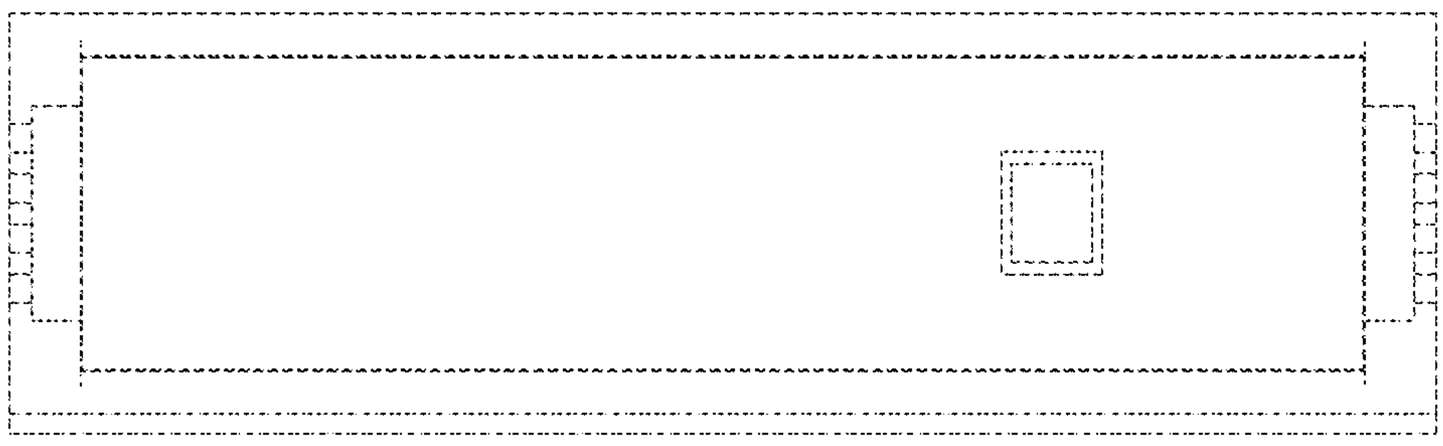


FIG. 3

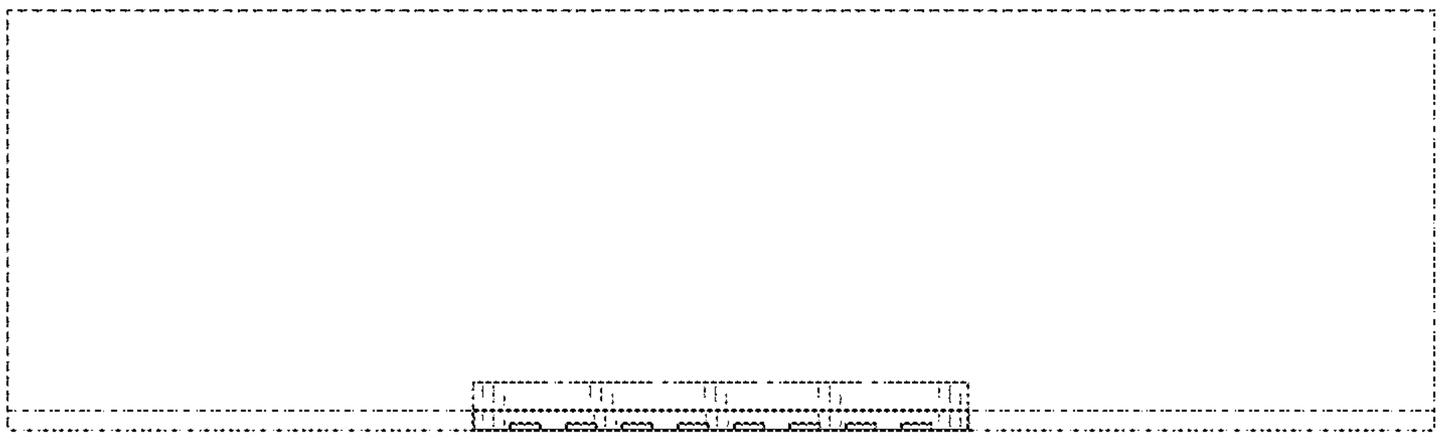


FIG. 4

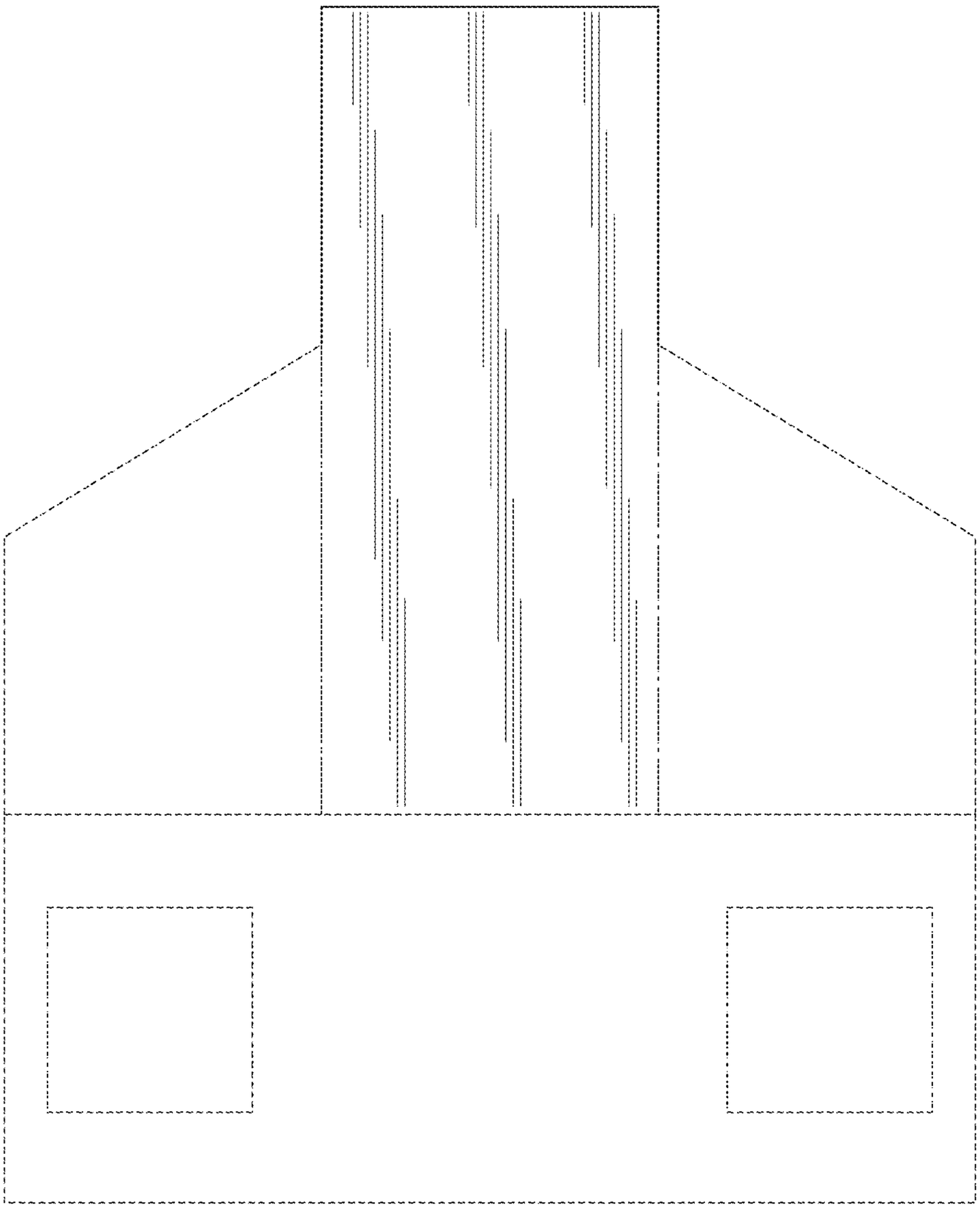


FIG. 5

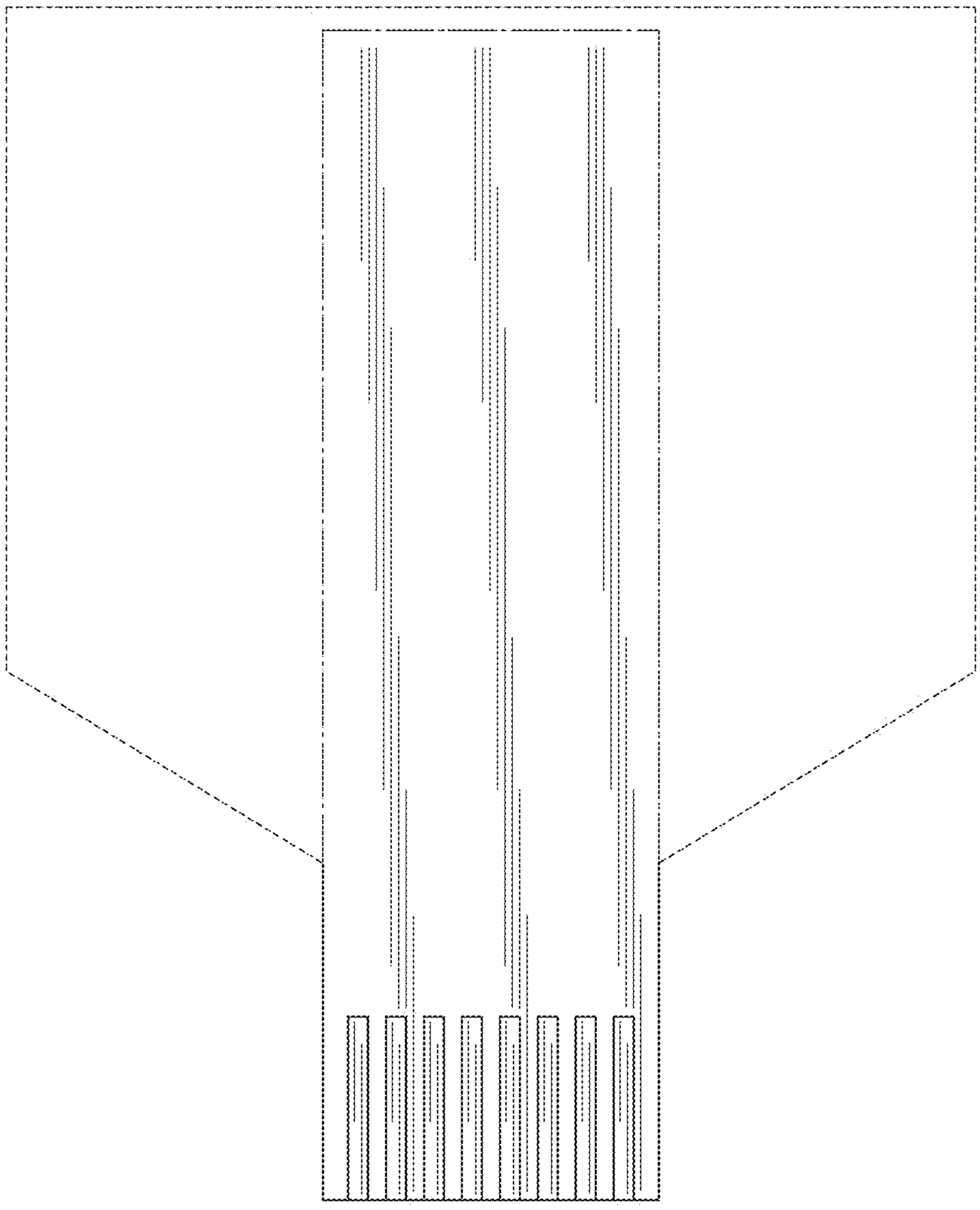


FIG. 6

FIG. 7

FIG. 8

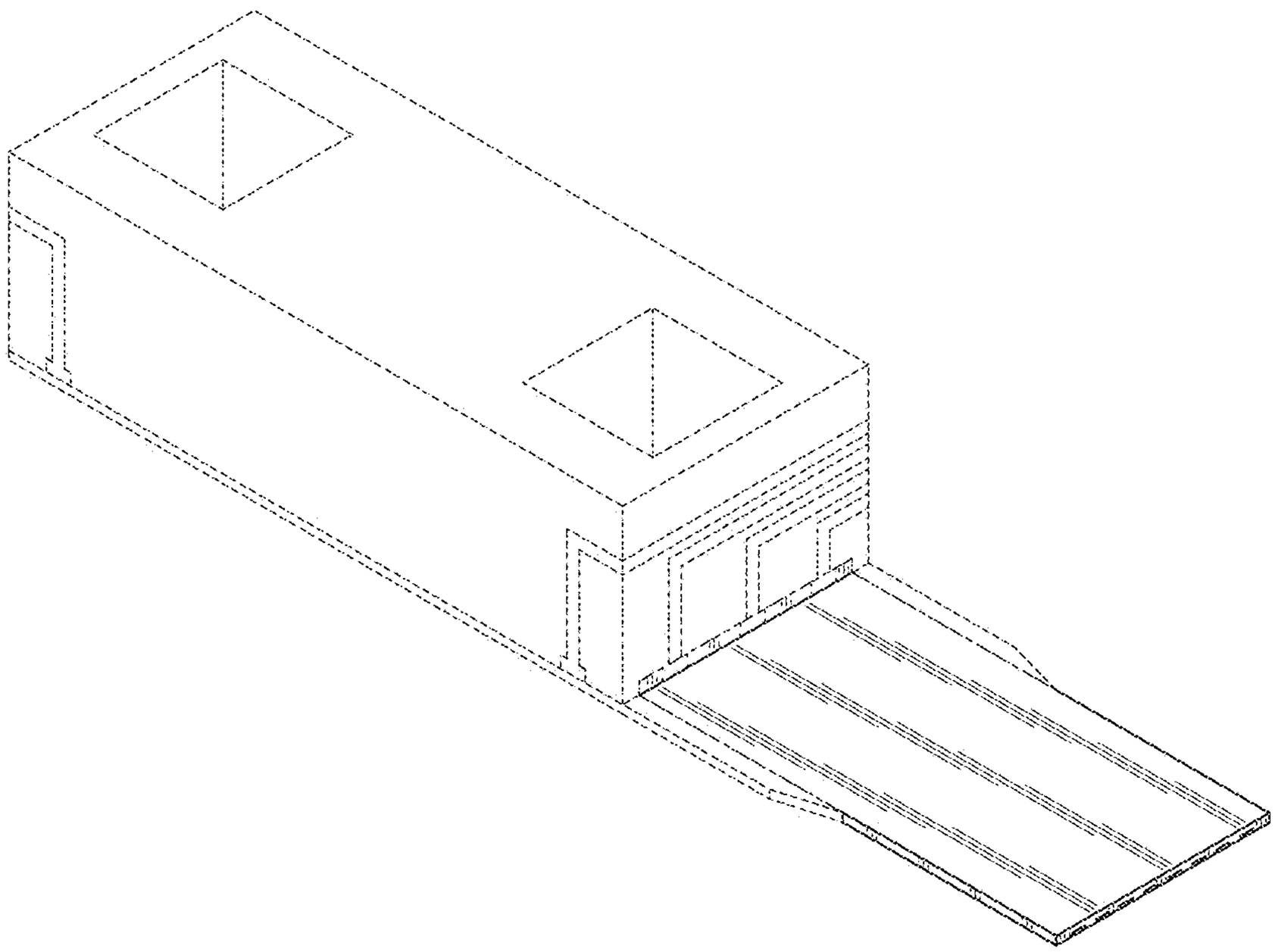


FIG. 9

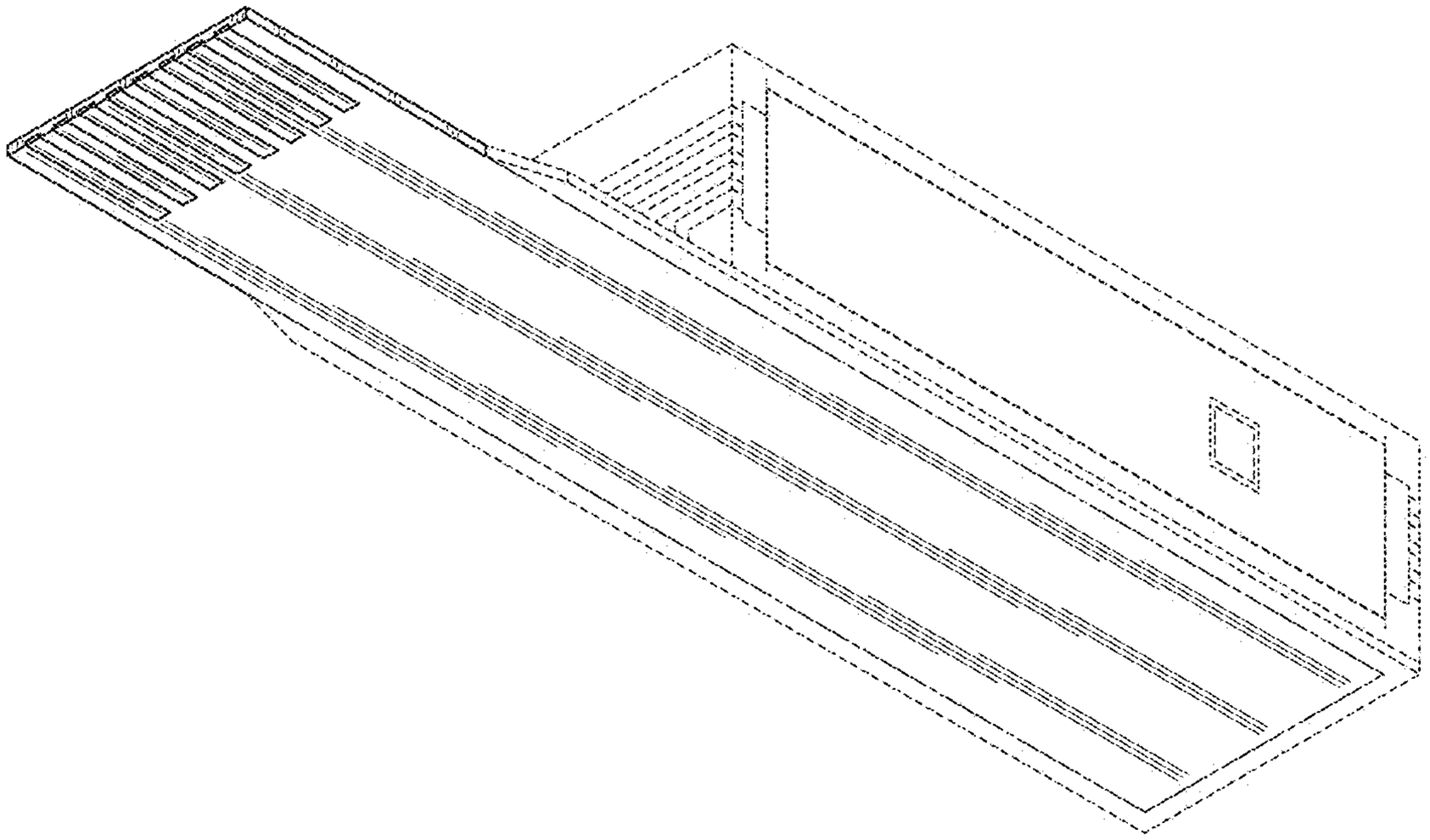


FIG. 10

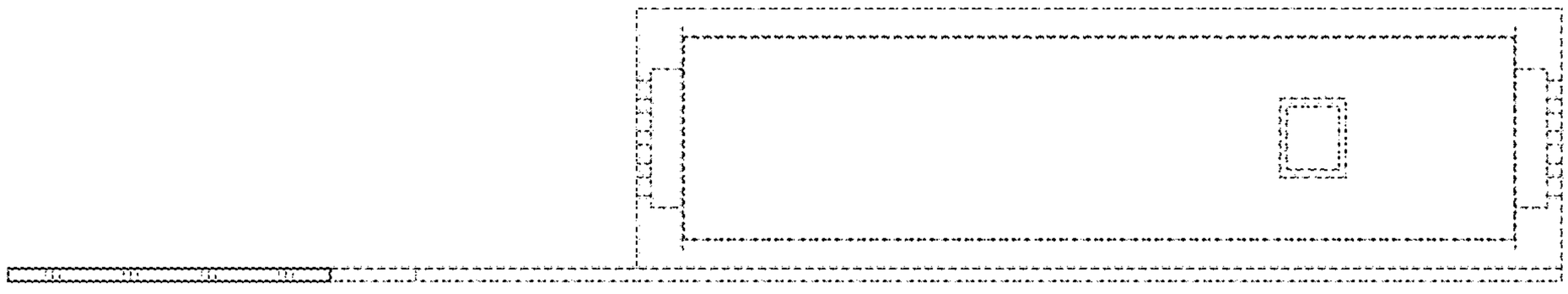
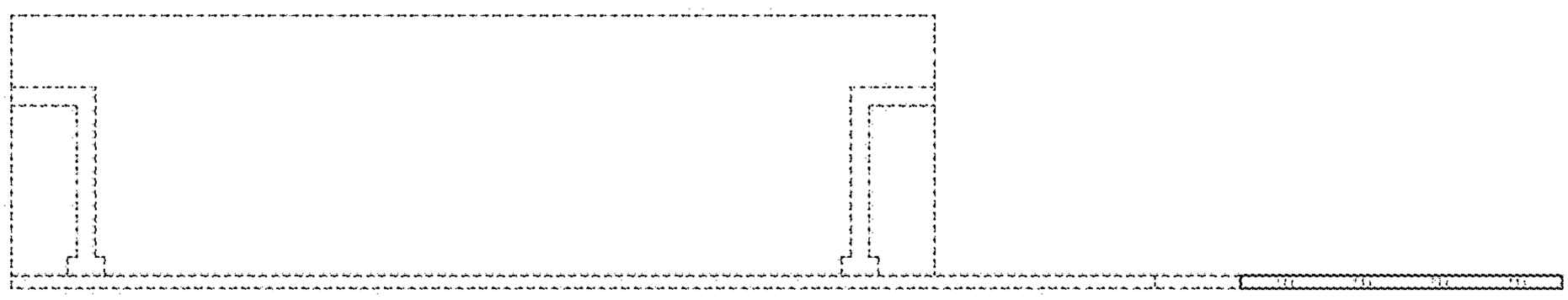


FIG. 11



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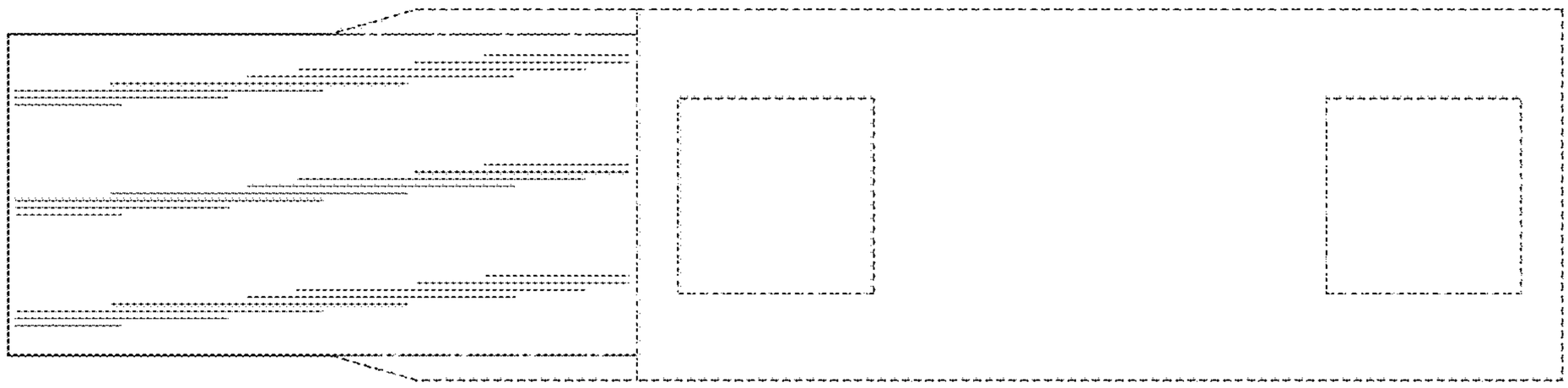

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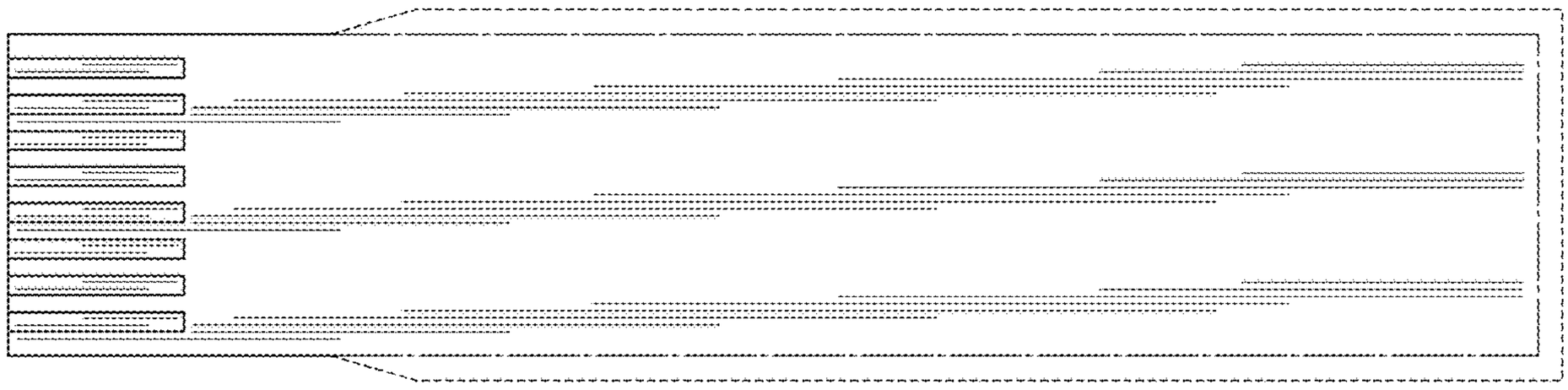

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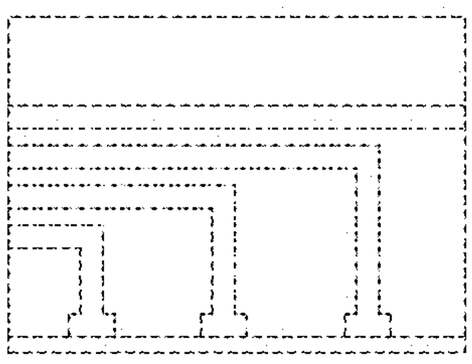


FIG. 15

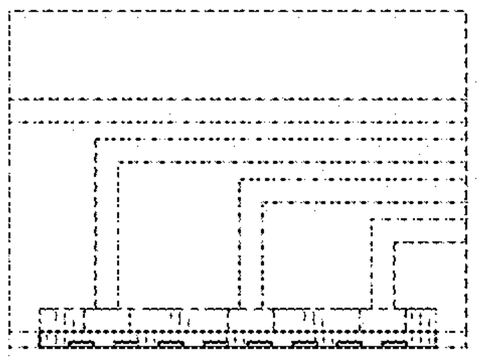


FIG. 16

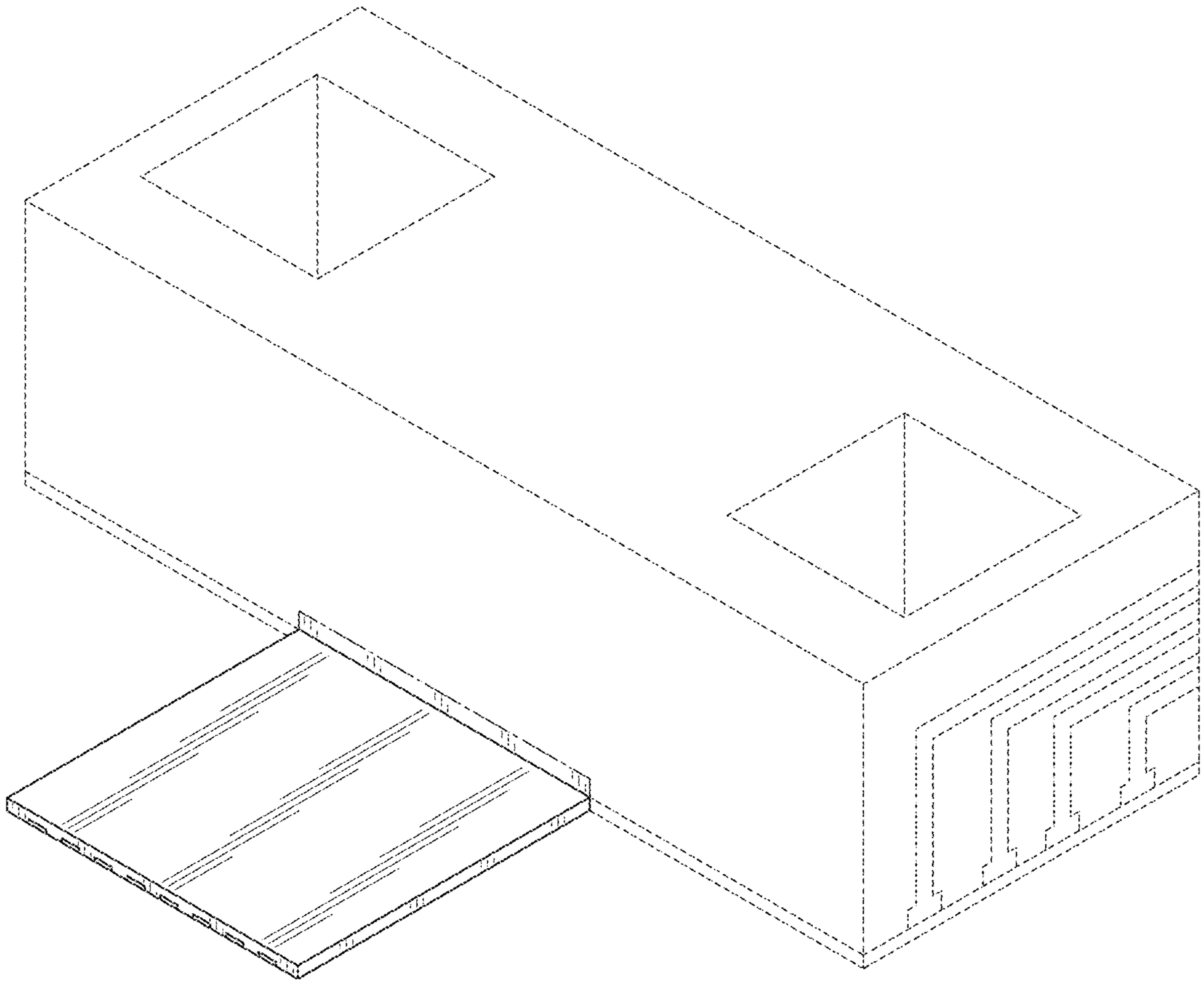


FIG. 17

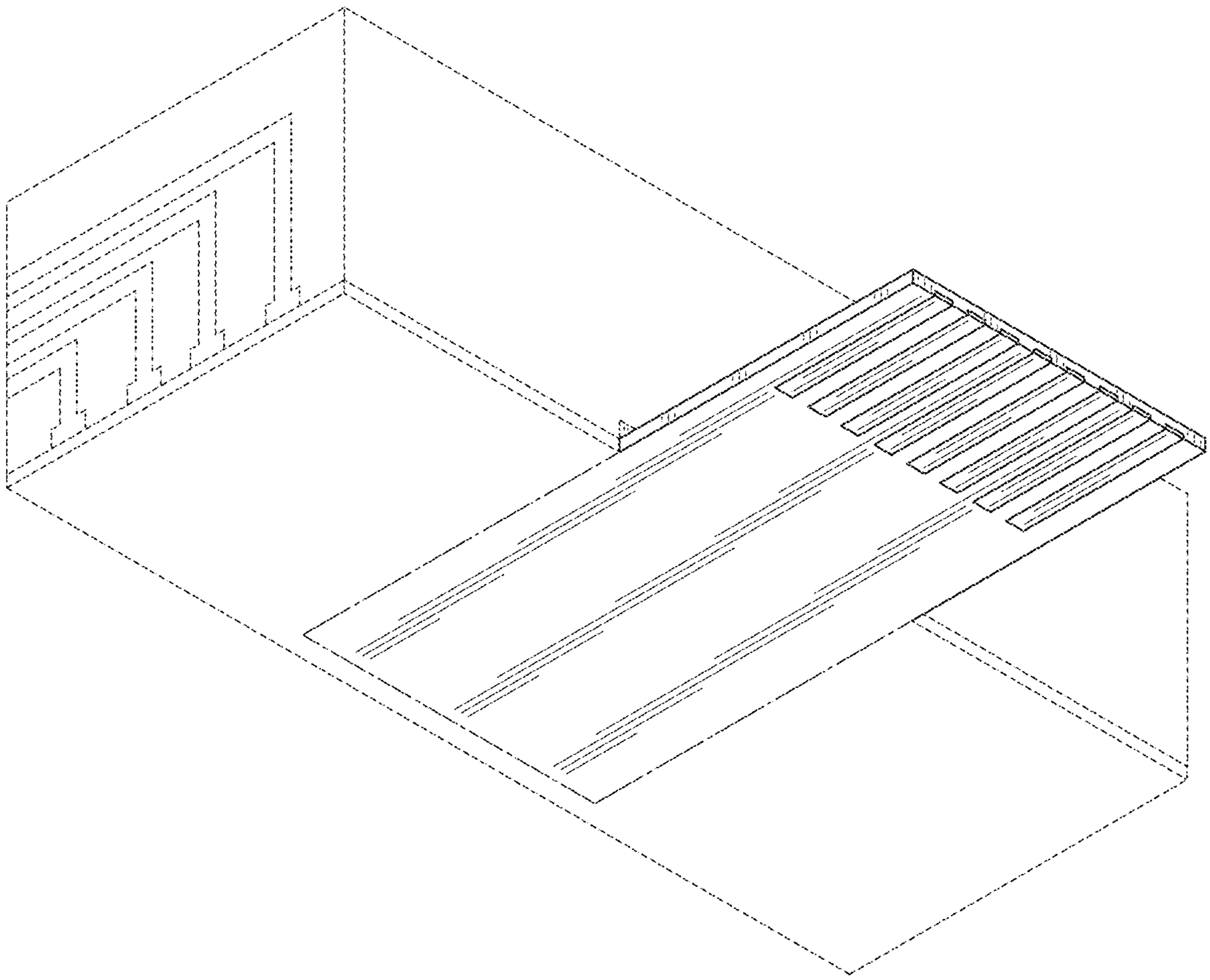


FIG. 18

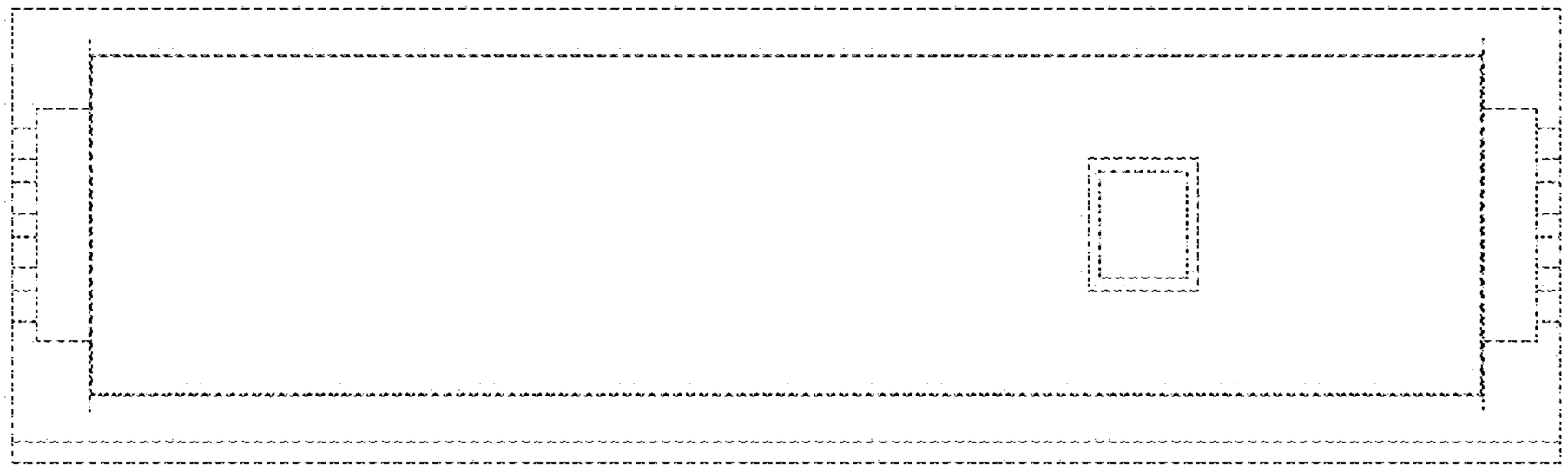


FIG. 19

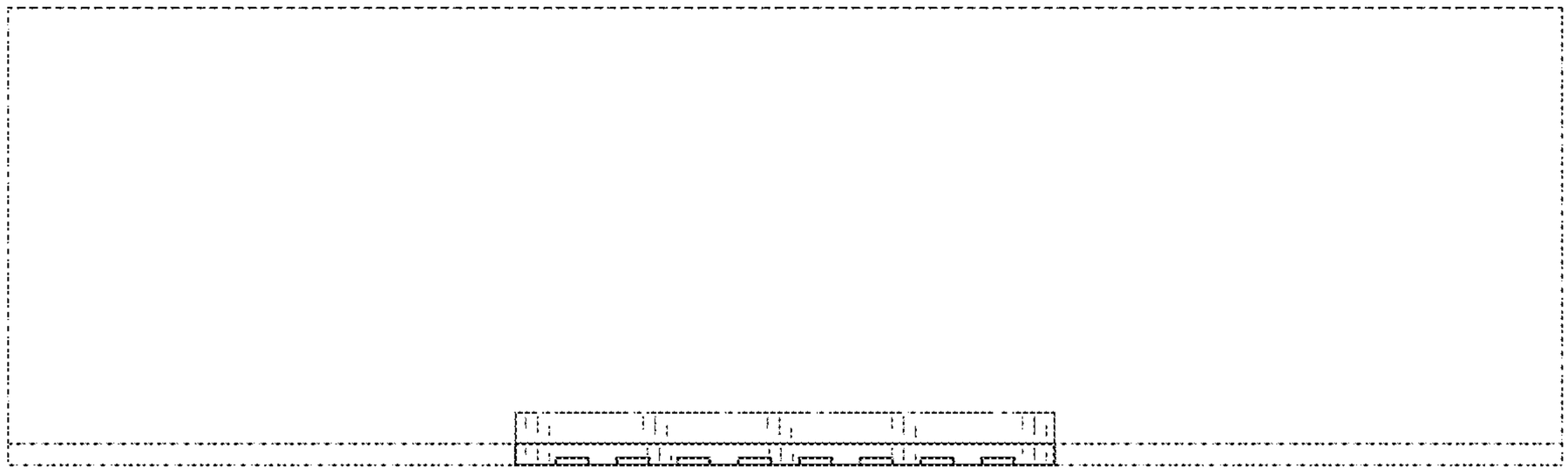


FIG. 20

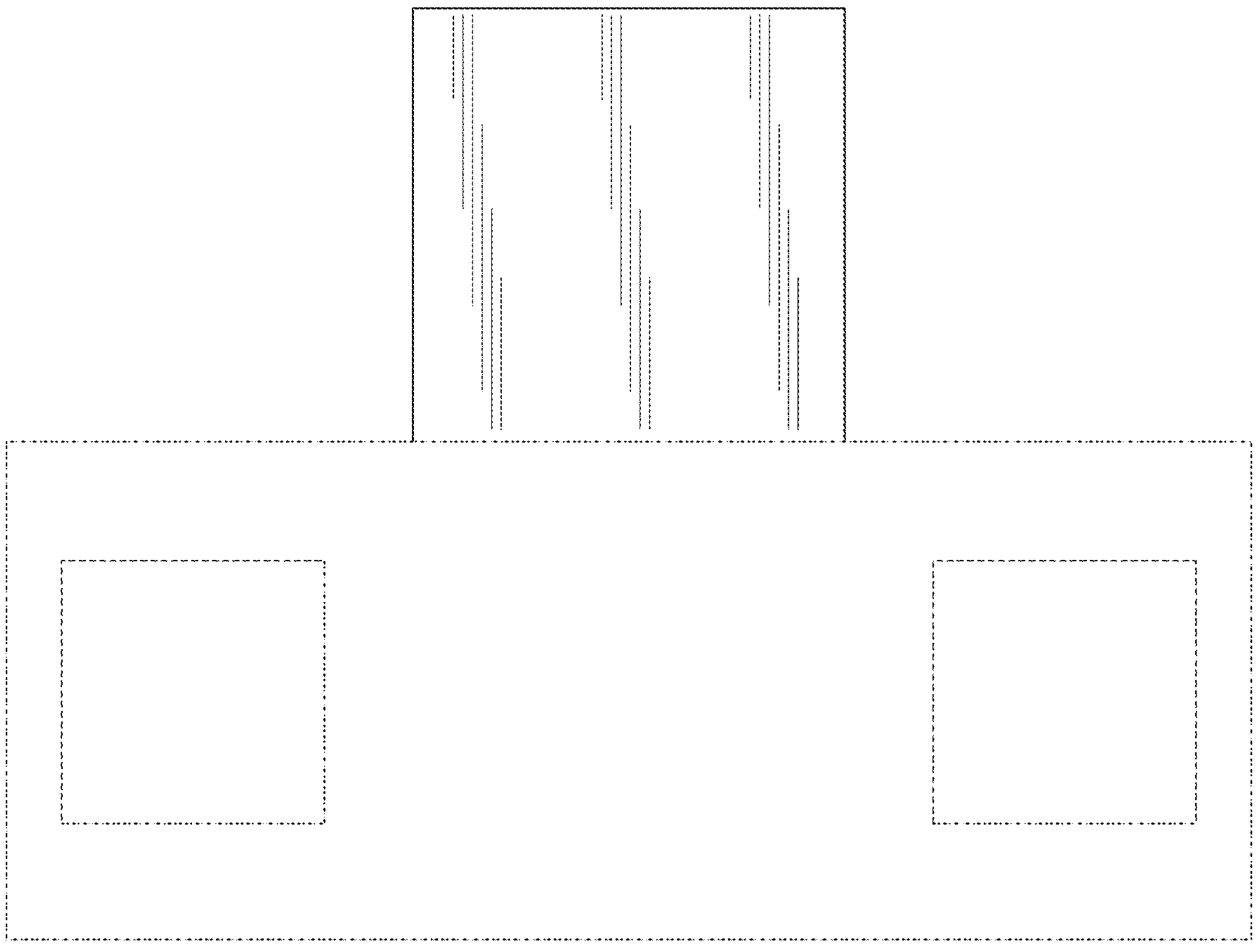


FIG. 21

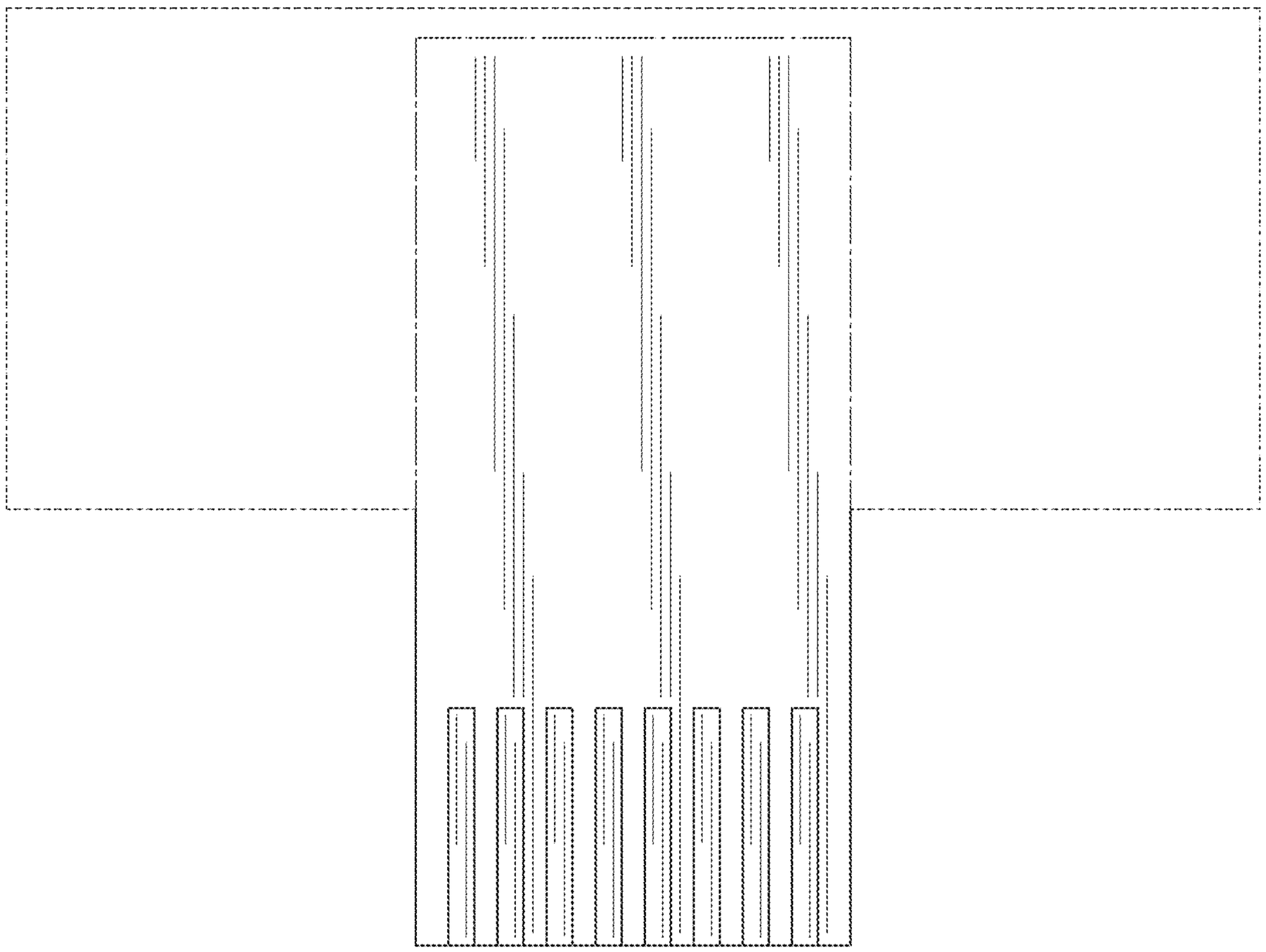
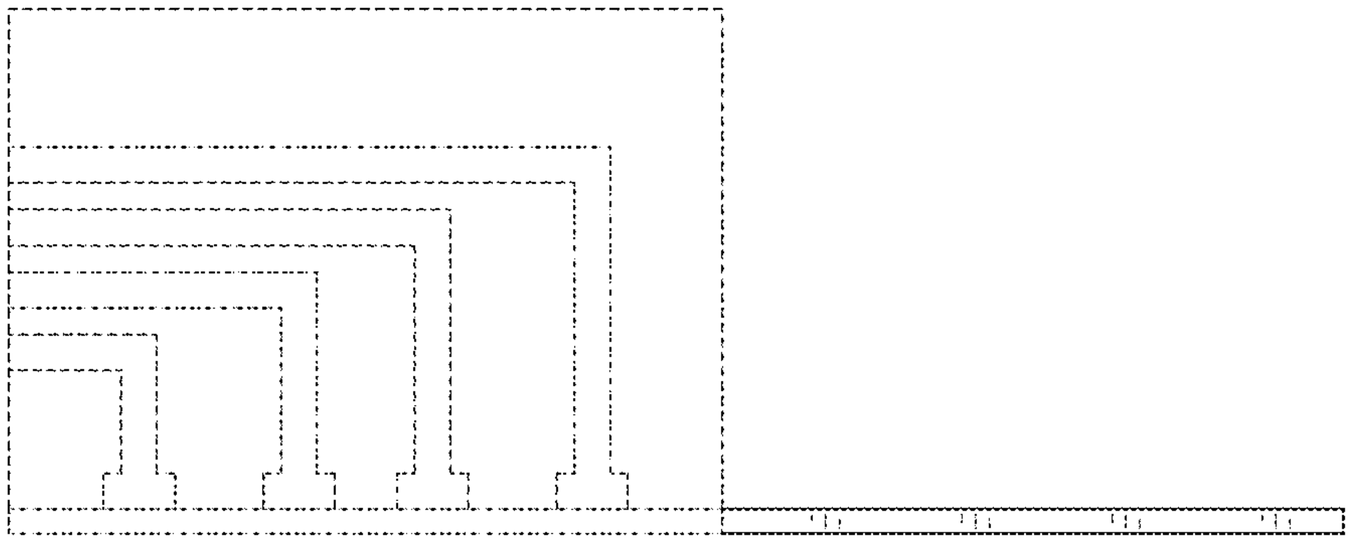


FIG. 22



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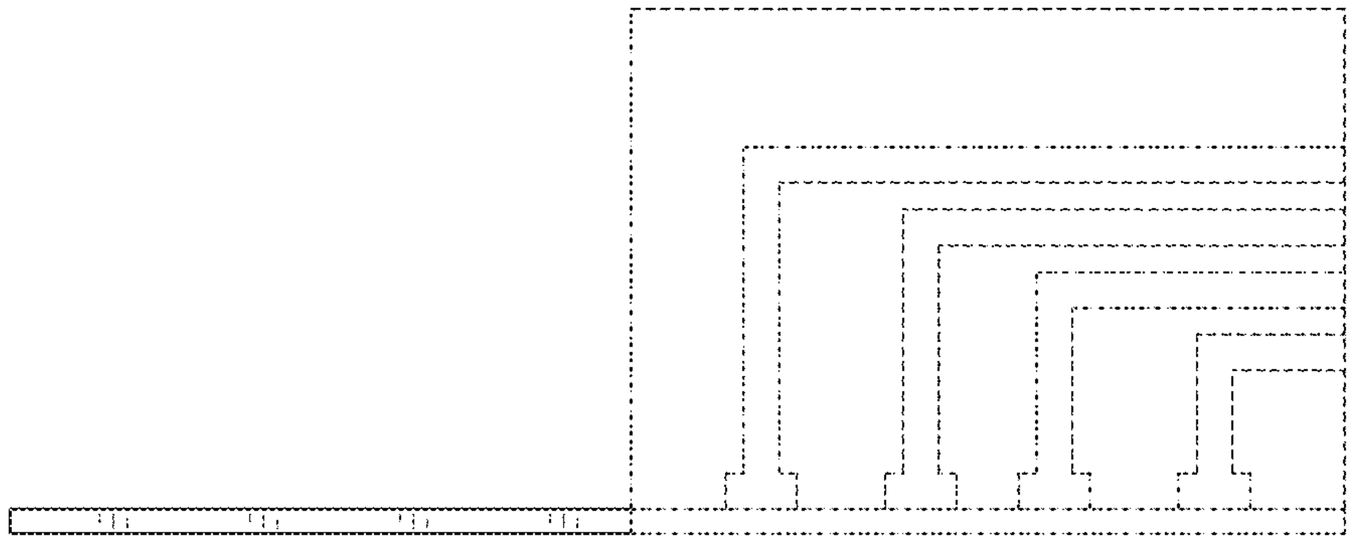

FIG. 24