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

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(45) **Date of Patent: ** Jul. 20, 2010**

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(54) **SEMICONDUCTOR BASED SWITCHING DEVICE**

(75) Inventors: **Walter Apfelbacher**, Freihung (DE); **Bertrand Viala**, Amberg (DE)

(73) Assignee: **Siemens Aktiengesellschaft**, Munich (DE)

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

(21) Appl. No.: **29/272,945**

(22) Filed: **Feb. 23, 2007**

(30) **Foreign Application Priority Data**

Aug. 23, 2006 (EM) 000585120

(51) **LOC (9) Cl.** **13-03**
(52) **U.S. Cl.** **D13/159**
(58) **Field of Classification Search** D13/123–126, D13/159, 182, 184, 199; 200/280, 303, 293, 200/294, 297; 331/131, 132, 133, 202, 196, 331/262, 251
See application file for complete search history.

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Primary Examiner—Daniel D Bui
Assistant Examiner—Thomas J Johannes
(74) *Attorney, Agent, or Firm*—Harness, Dickey & Pierce, P.L.C.

(57) **CLAIM**

The ornamental design for a semiconductor based switching device, as shown.

DESCRIPTION

FIG. **1** is a front elevational view of a first embodiment of a semiconductor based switching device showing our new design;

FIG. **2** is rear elevational view thereof;

FIG. **3** is a top plan view thereof;

FIG. **4** is a bottom plan view thereof;

FIG. **5** is a right side elevational view thereof;

FIG. **6** is a left side elevational view thereof;

FIG. **7** is a perspective view thereof;

FIG. **8** is a front elevational view of a second embodiment of a semiconductor based switching device showing our new design;

FIG. **9** is rear elevational view thereof;

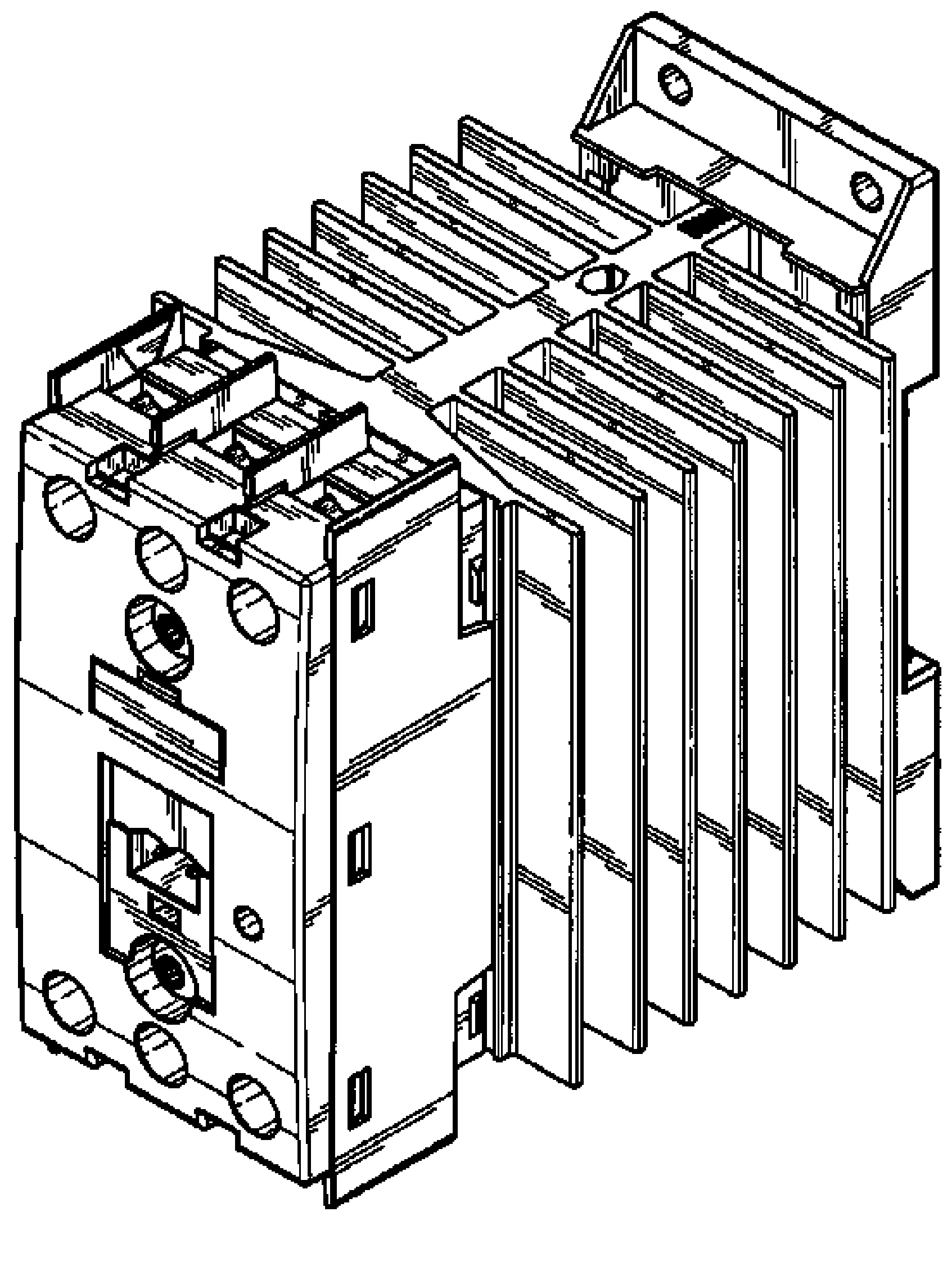
FIG. **10** is a top plan view thereof;

FIG. **11** is a bottom plan view thereof;

FIG. **12** is a right side elevational view thereof;

FIG. **13** is a left side elevational view thereof;

FIG. **14** is a perspective view thereof;



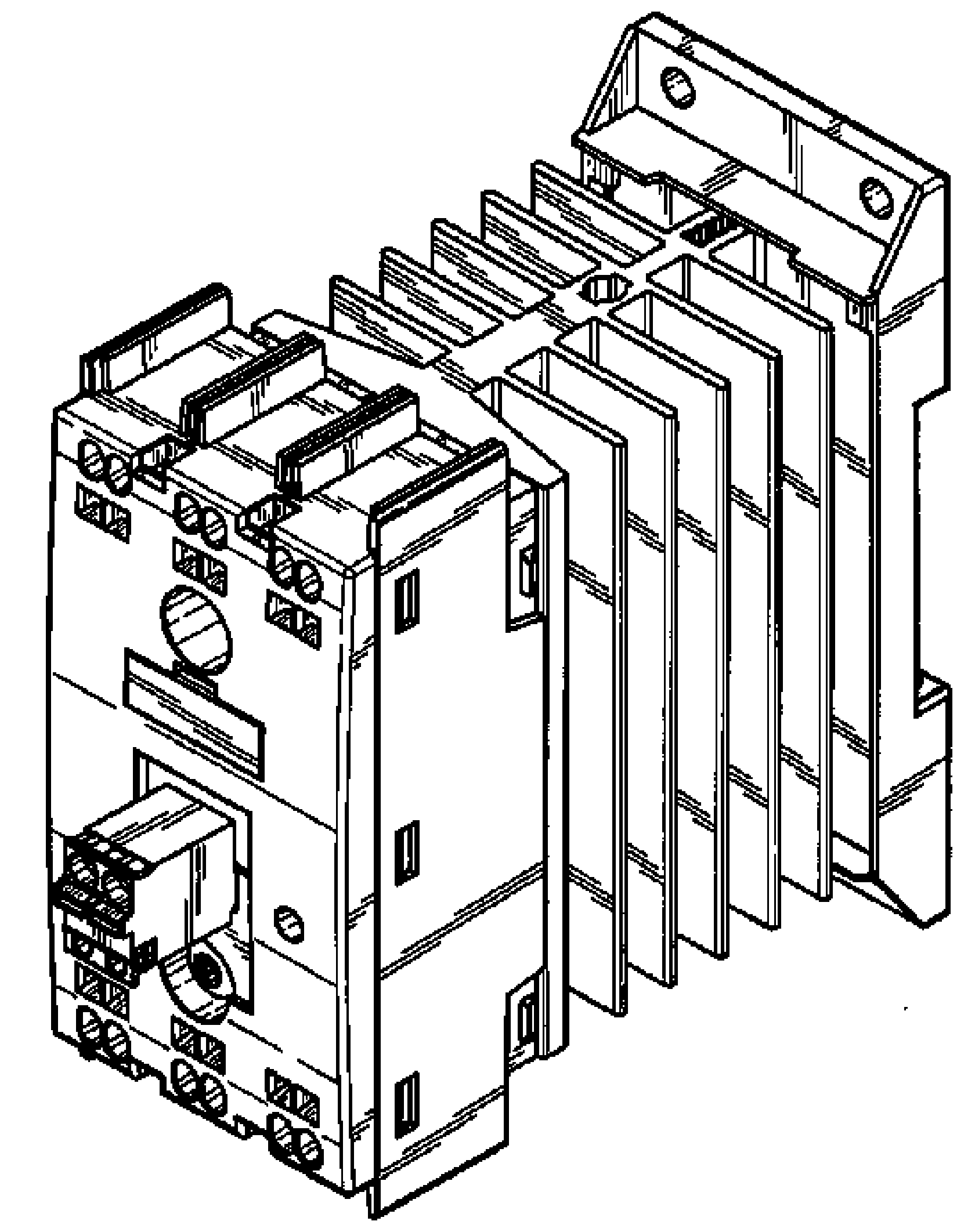


FIG. **15** is a front elevational view of a third embodiment of a semiconductor based switching device showing our new design;

FIG. **16** is rear elevational view thereof;

FIG. **17** is a bottom plan view thereof;

FIG. **18** is a top plan view thereof;

FIG. **19** is a right side elevational view thereof;

FIG. **20** is a left side elevational view thereof;

FIG. **21** is a perspective view thereof;

FIG. **22** is a front elevational view of a fourth embodiment of a semiconductor based switching device showing our new design;

FIG. **23** is rear elevational view thereof;

FIG. **24** is a bottom plan view thereof;

FIG. **25** is a top plan view thereof;

FIG. **26** is a right side elevational view thereof;

FIG. **27** is a left side elevational view thereof;

FIG. **28** is a perspective view thereof;

FIG. **29** is a front elevational view of a fifth embodiment of a semiconductor based switching device showing our new design;

FIG. **30** is rear elevational view thereof;

FIG. **31** is a top plan view thereof;

FIG. **32** is a bottom plan view thereof;

FIG. **33** is a right side elevational view thereof;

FIG. **34** is a left side elevational view thereof;

FIG. **35** is a perspective view thereof;

FIG. **36** is a front elevational view of a sixth embodiment of a semiconductor based switching device showing our new design;

FIG. **37** is rear elevational view thereof;

FIG. **38** is a top plan view thereof;

FIG. **39** is a bottom plan view thereof;

FIG. **40** is a right side elevational view thereof;

FIG. **41** is a left side elevational view thereof; and,

FIG. **42** is a perspective view thereof.

The broken line portion of the figure drawings is included to show unclaimed subject matter only and forms no part of the claimed design.

1 Claim, 42 Drawing Sheets

FIG 1

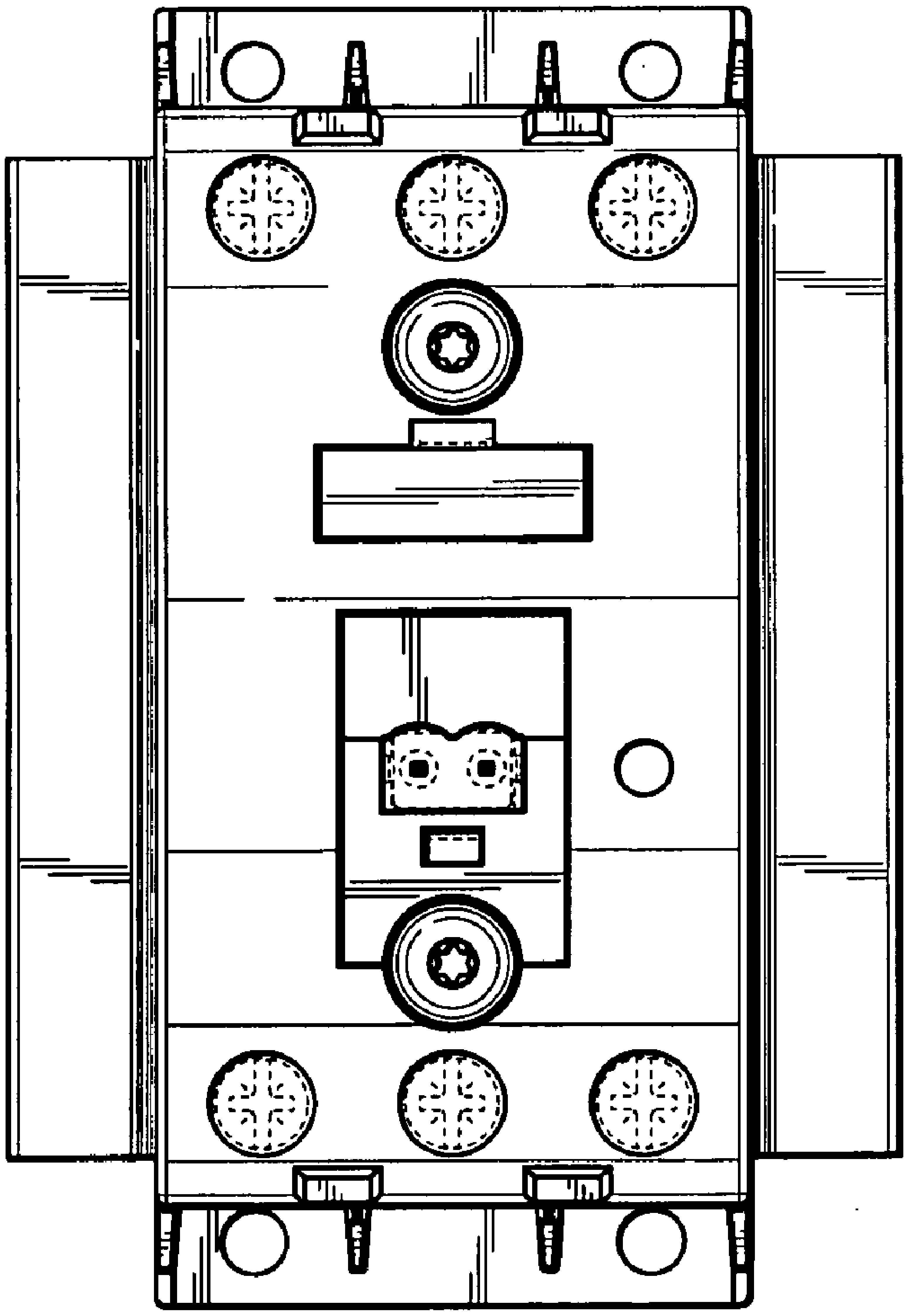
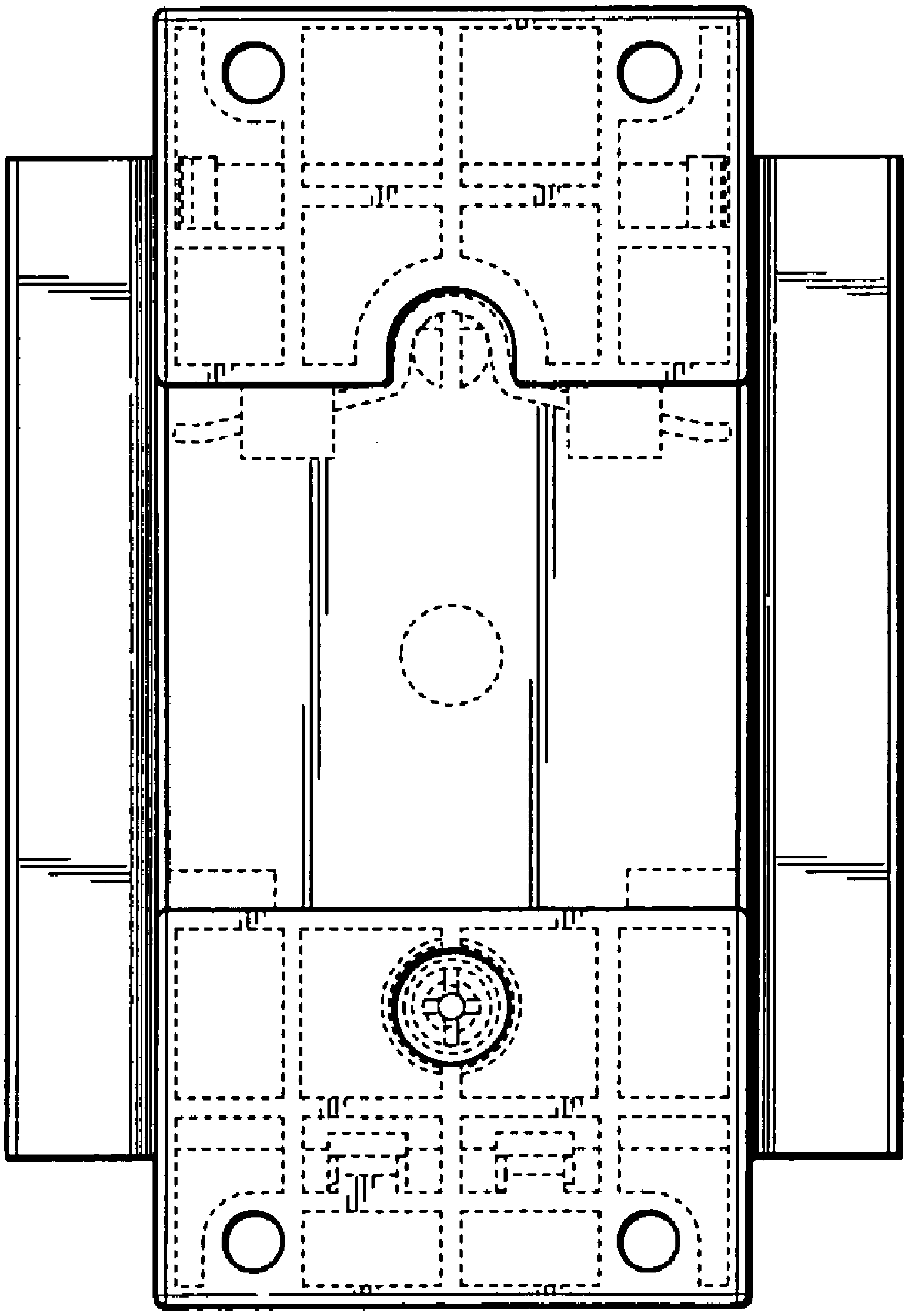


FIG 2



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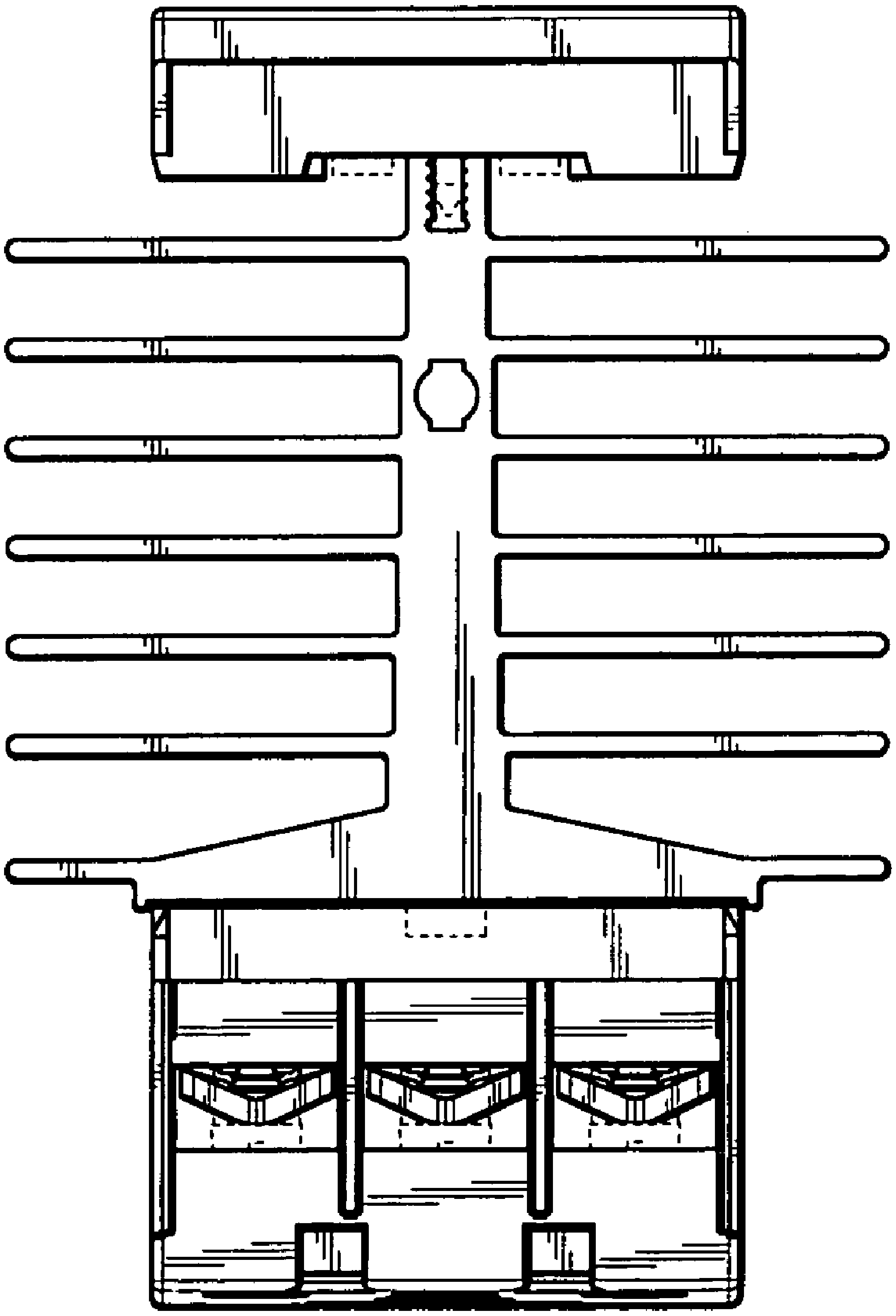

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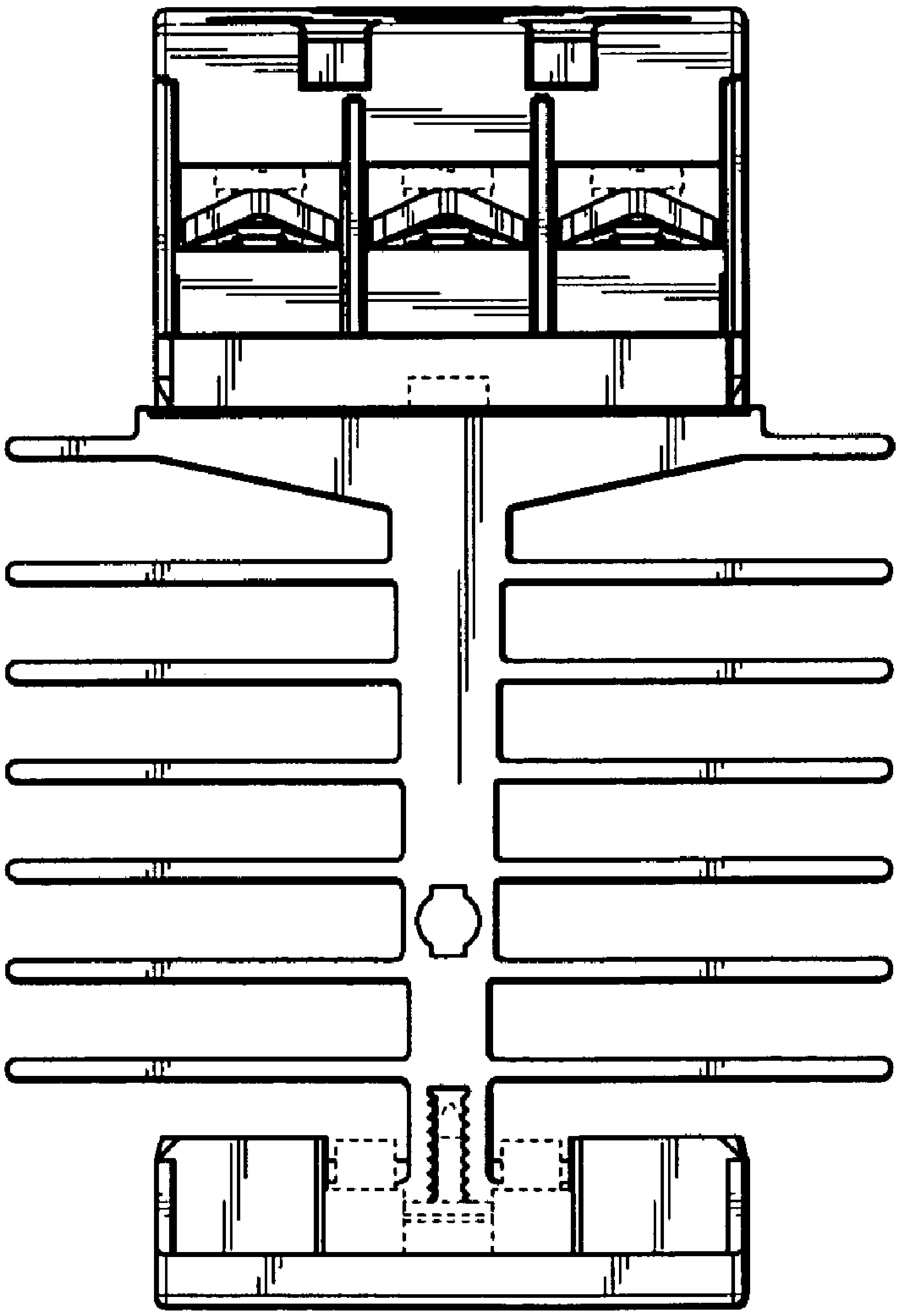
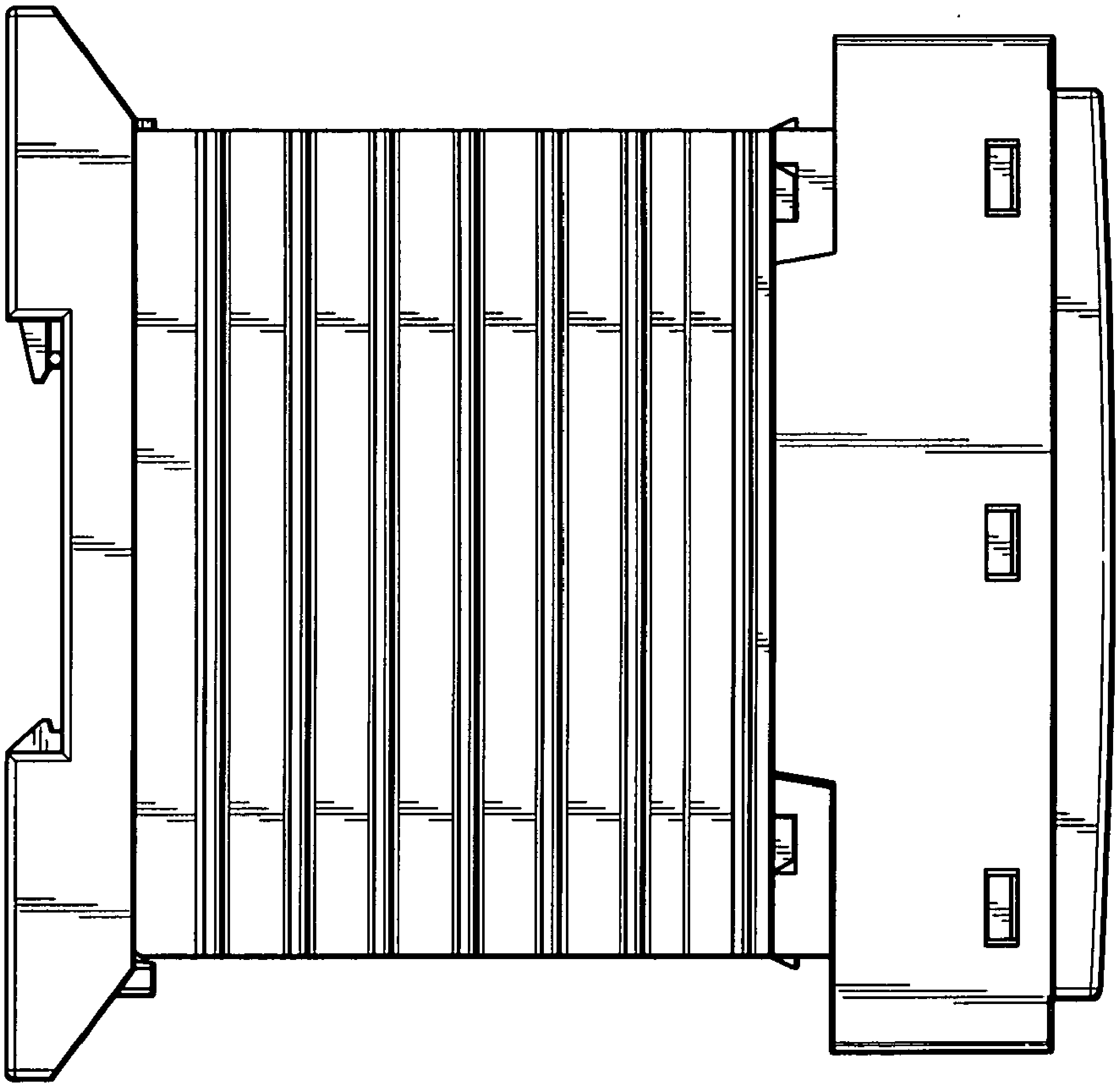


FIG 5



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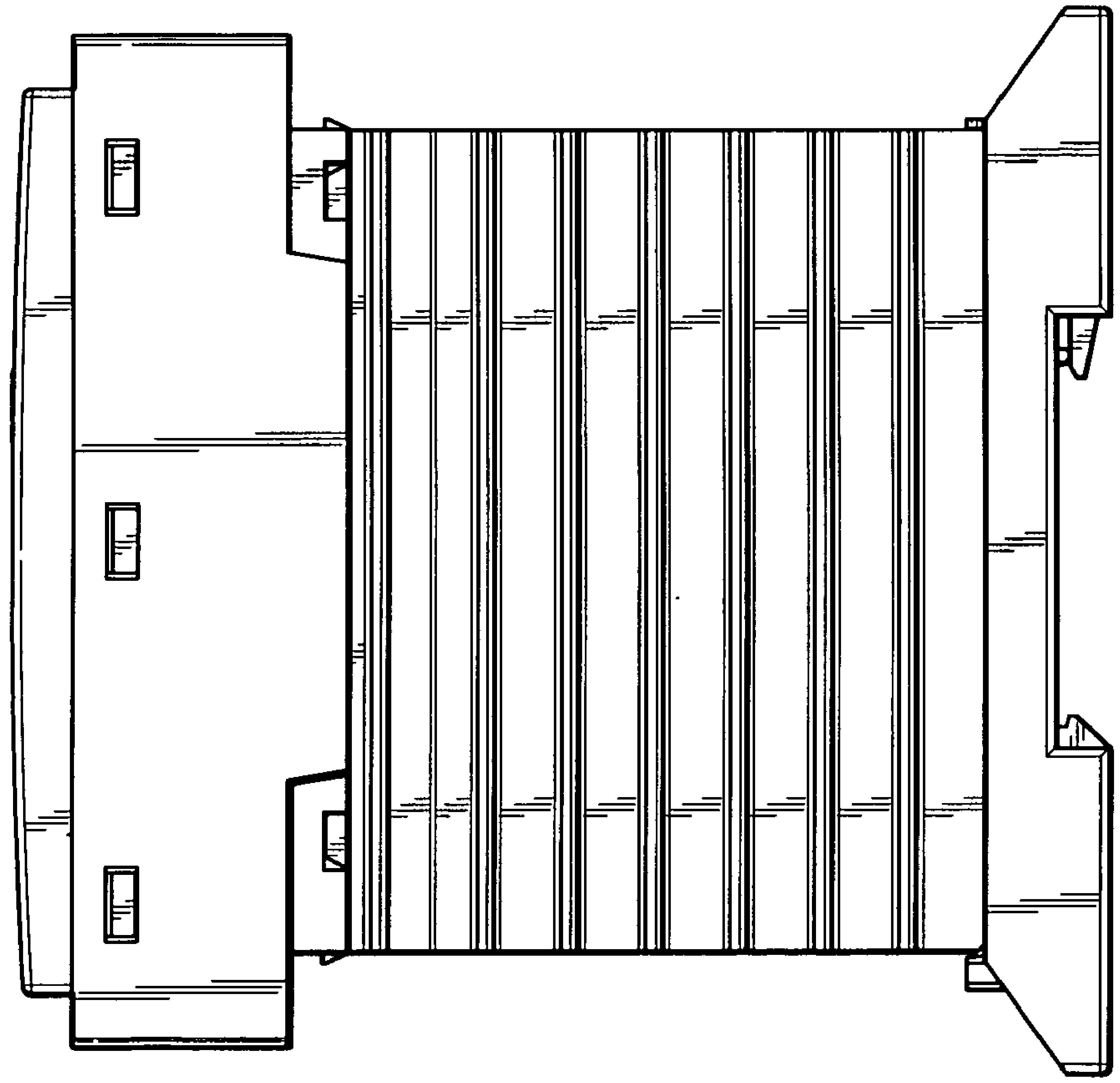

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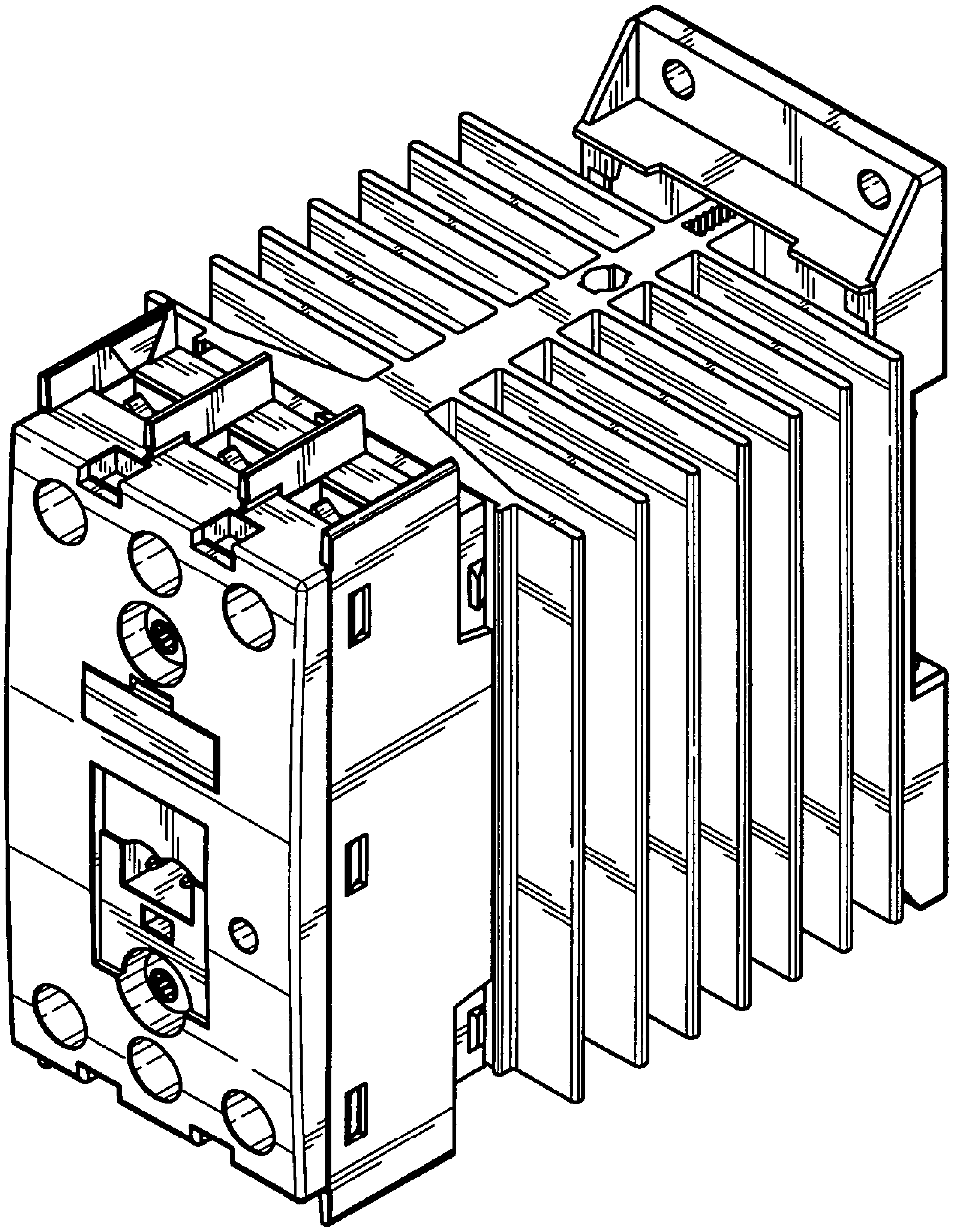


FIG 8

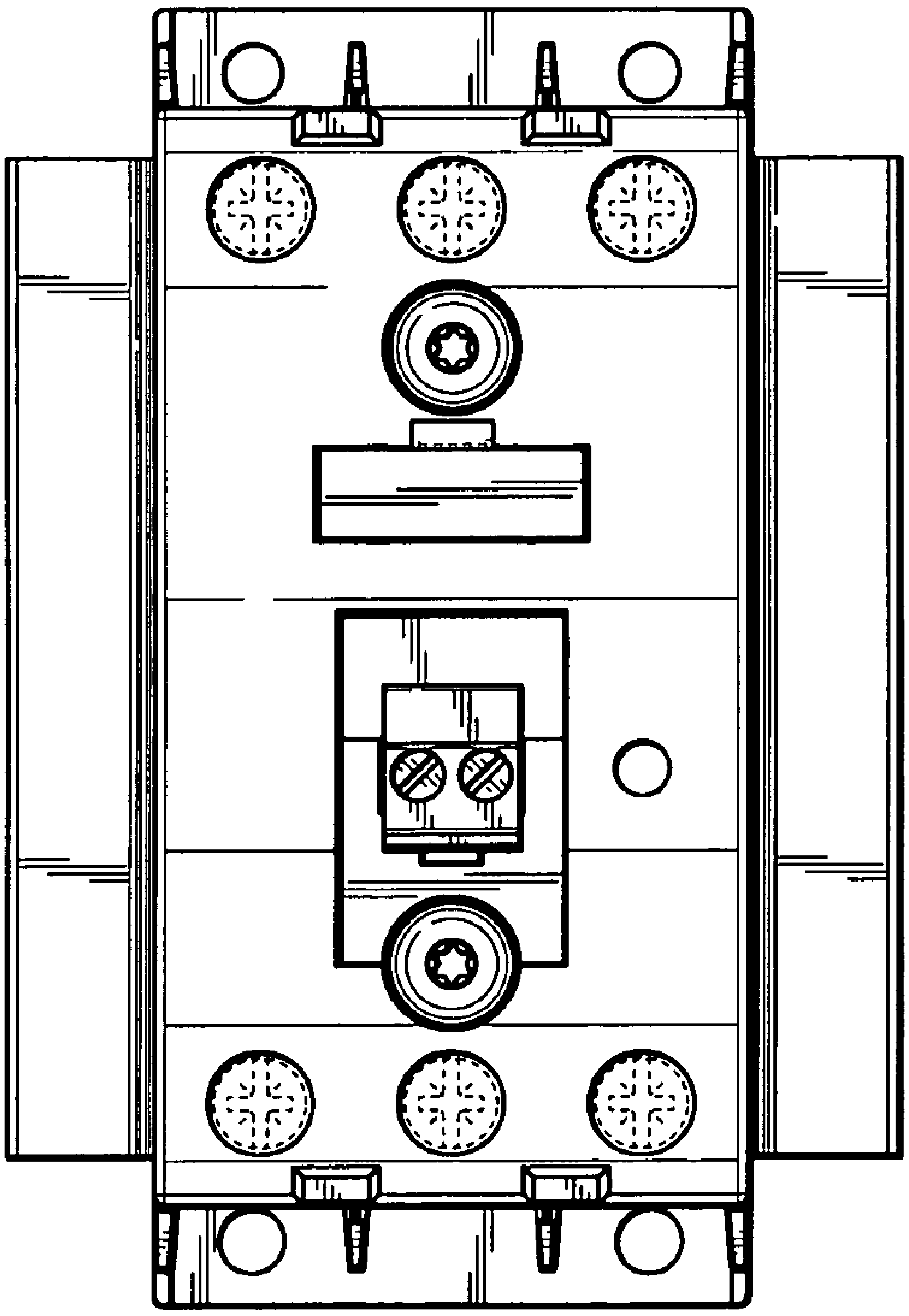


FIG 9

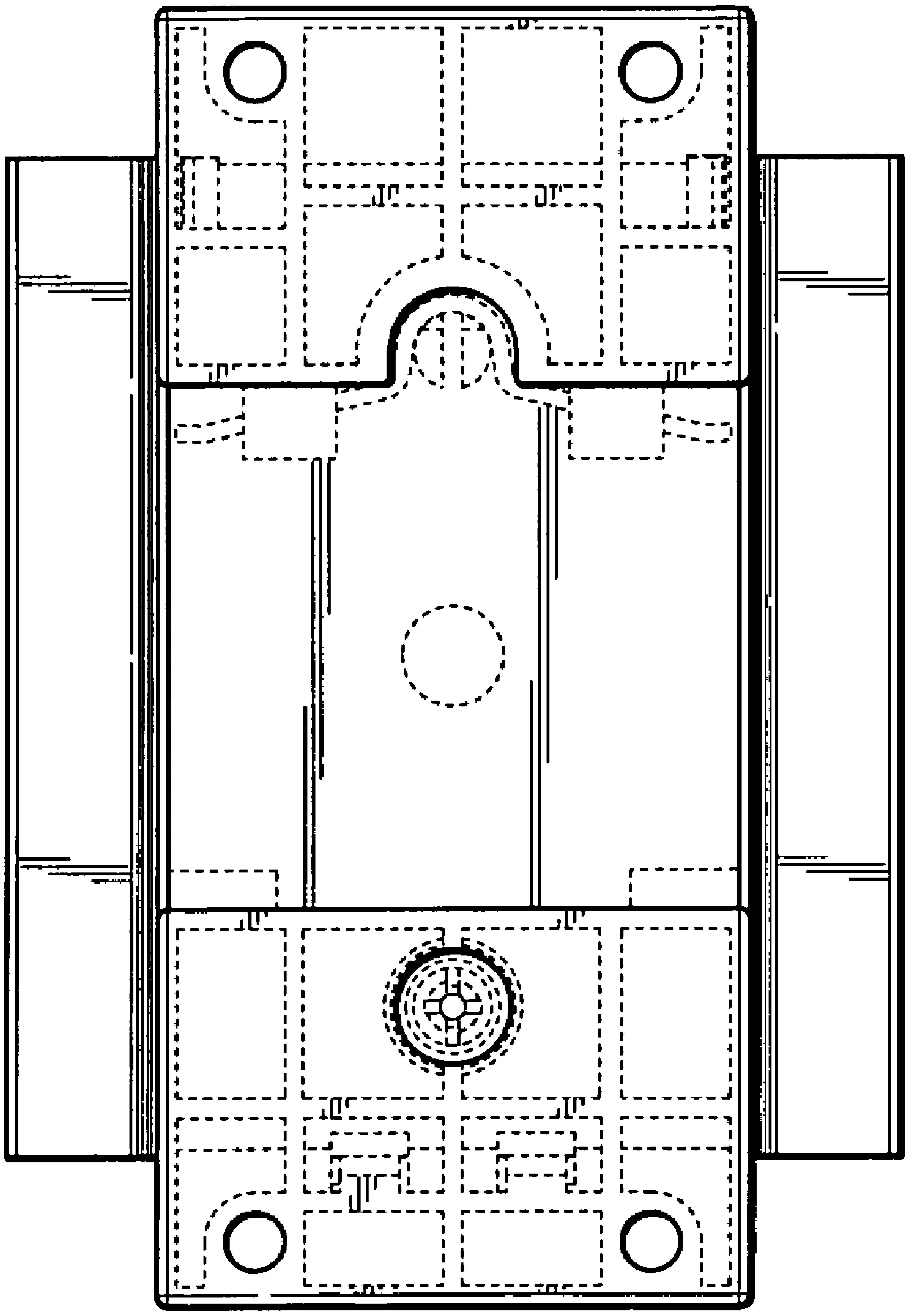
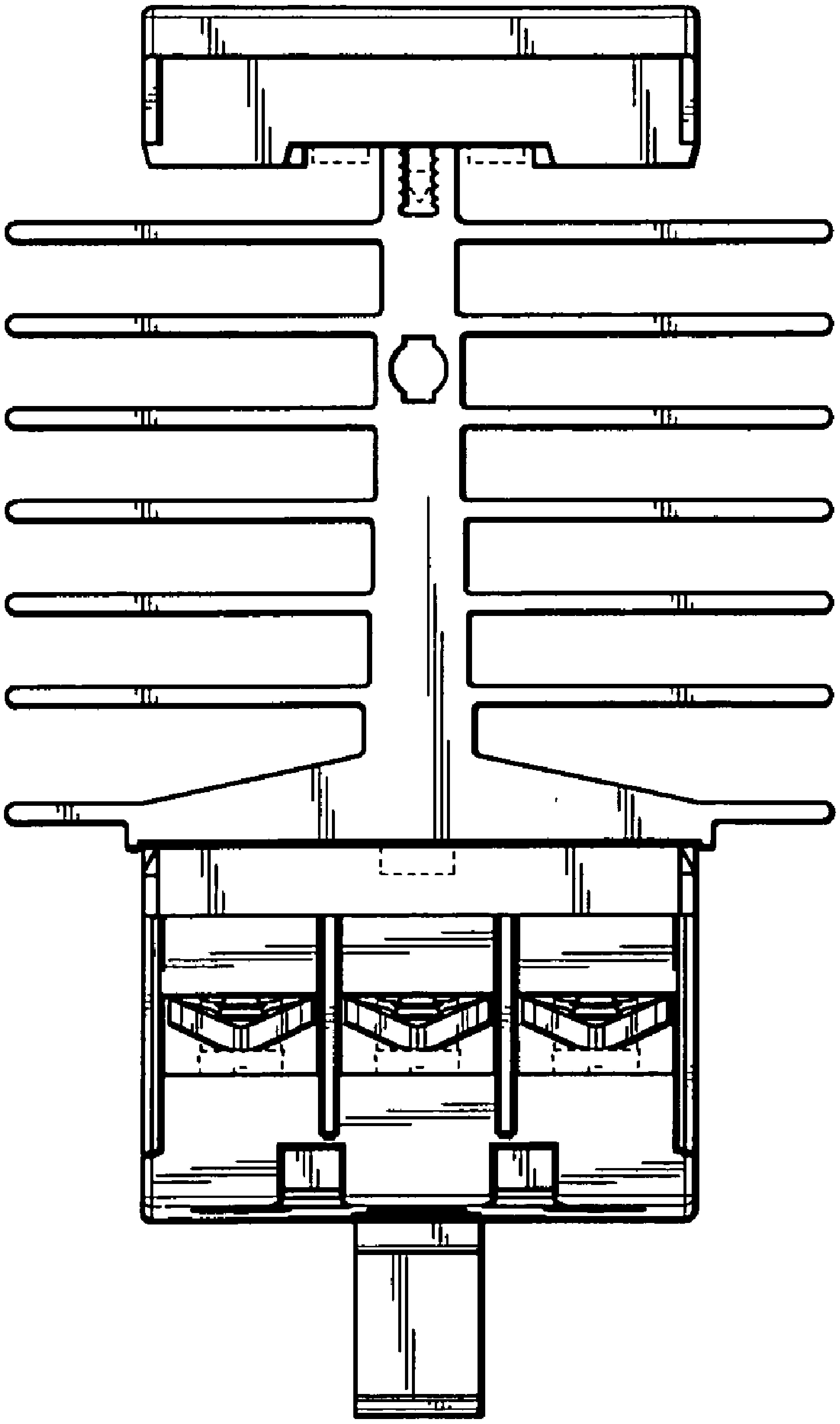


FIG 10



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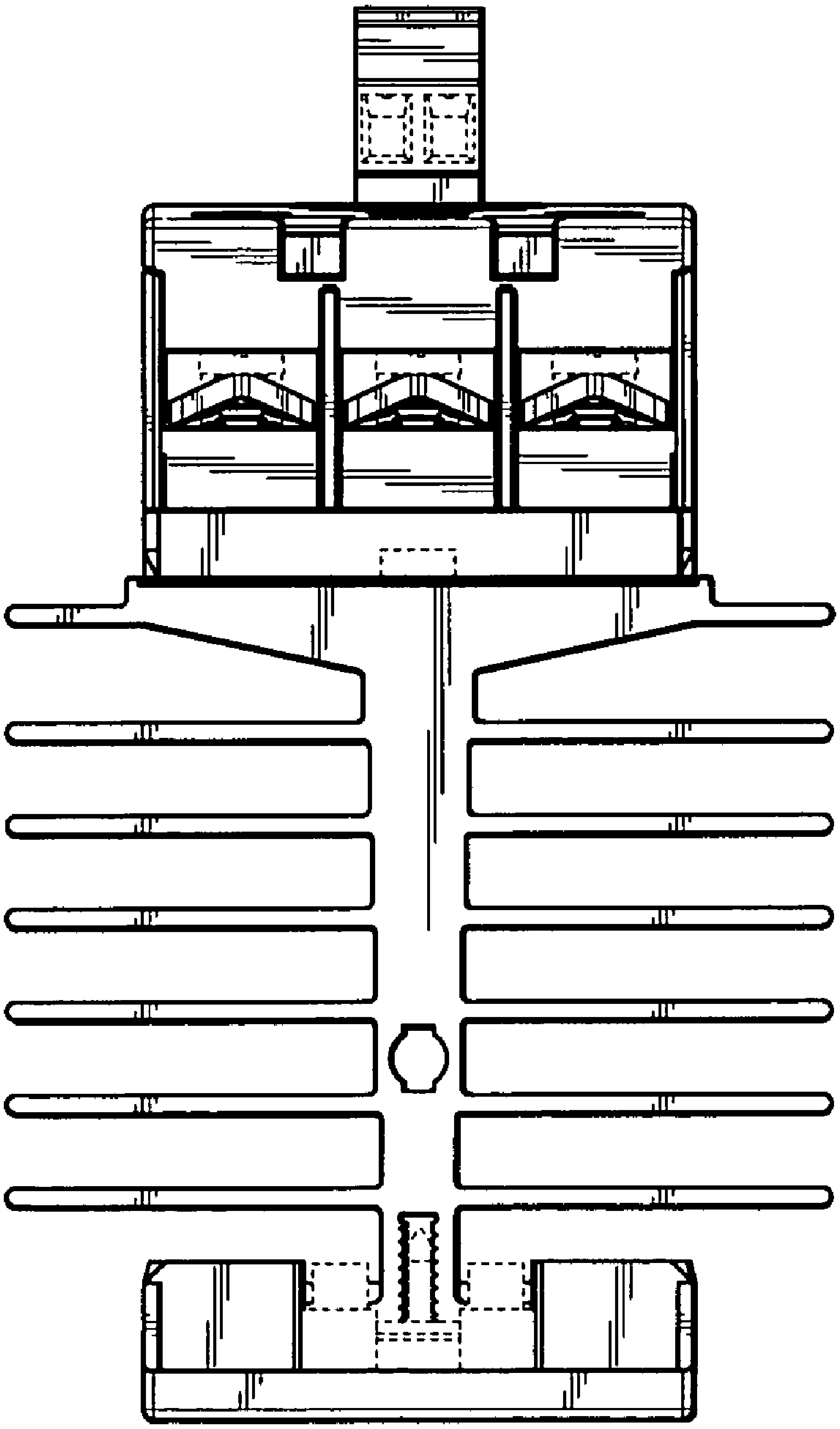
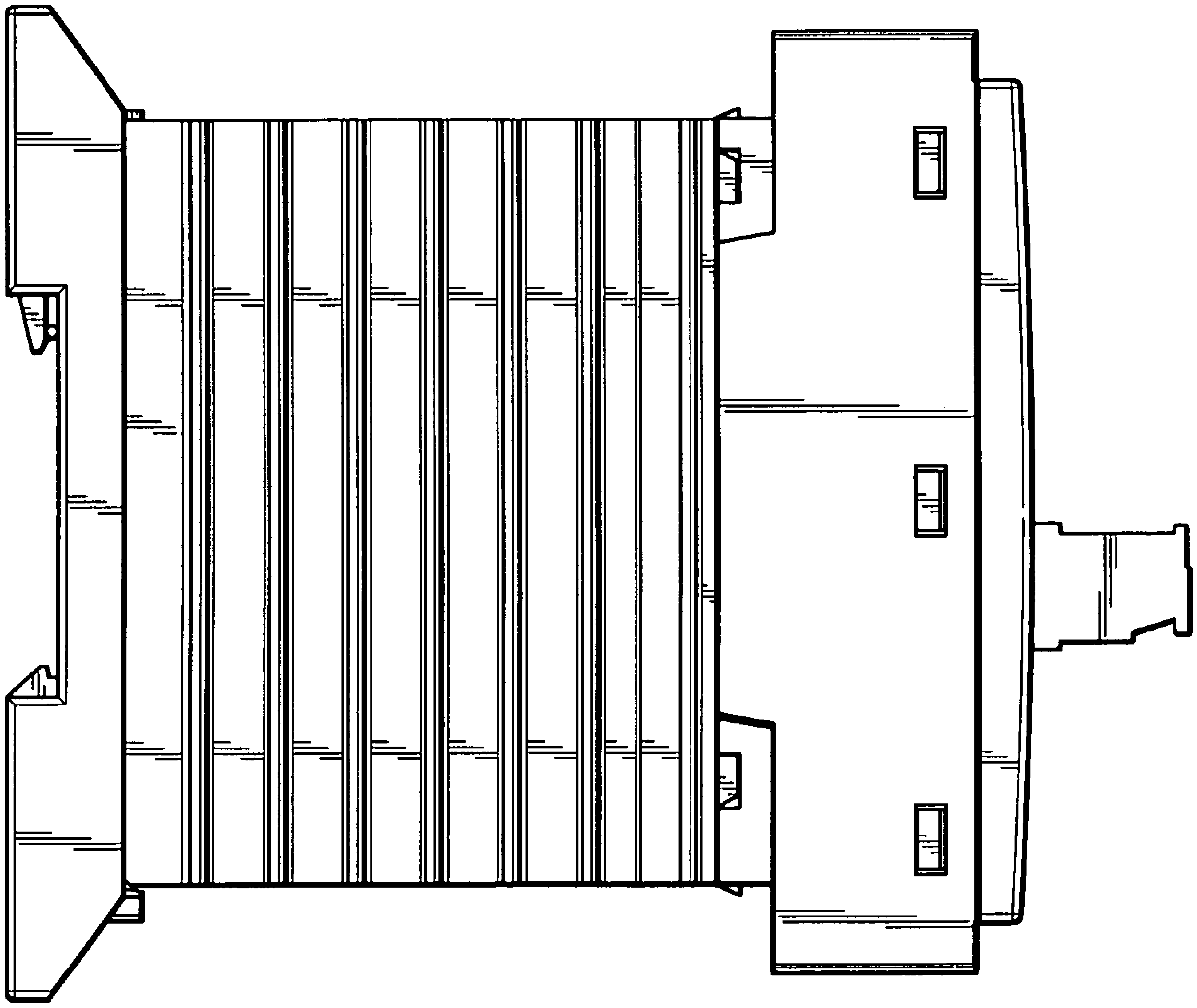


FIG 12



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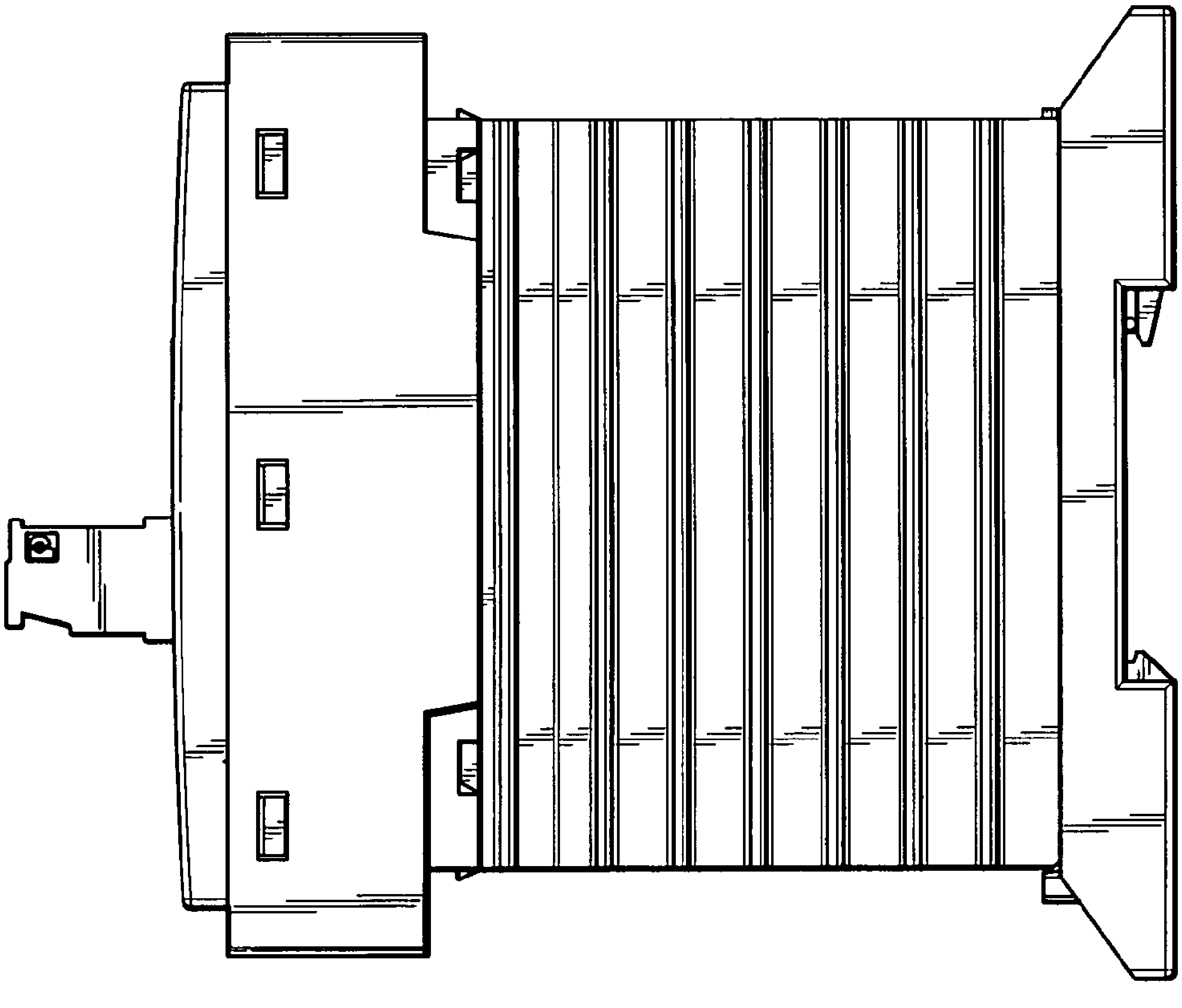


FIG 14

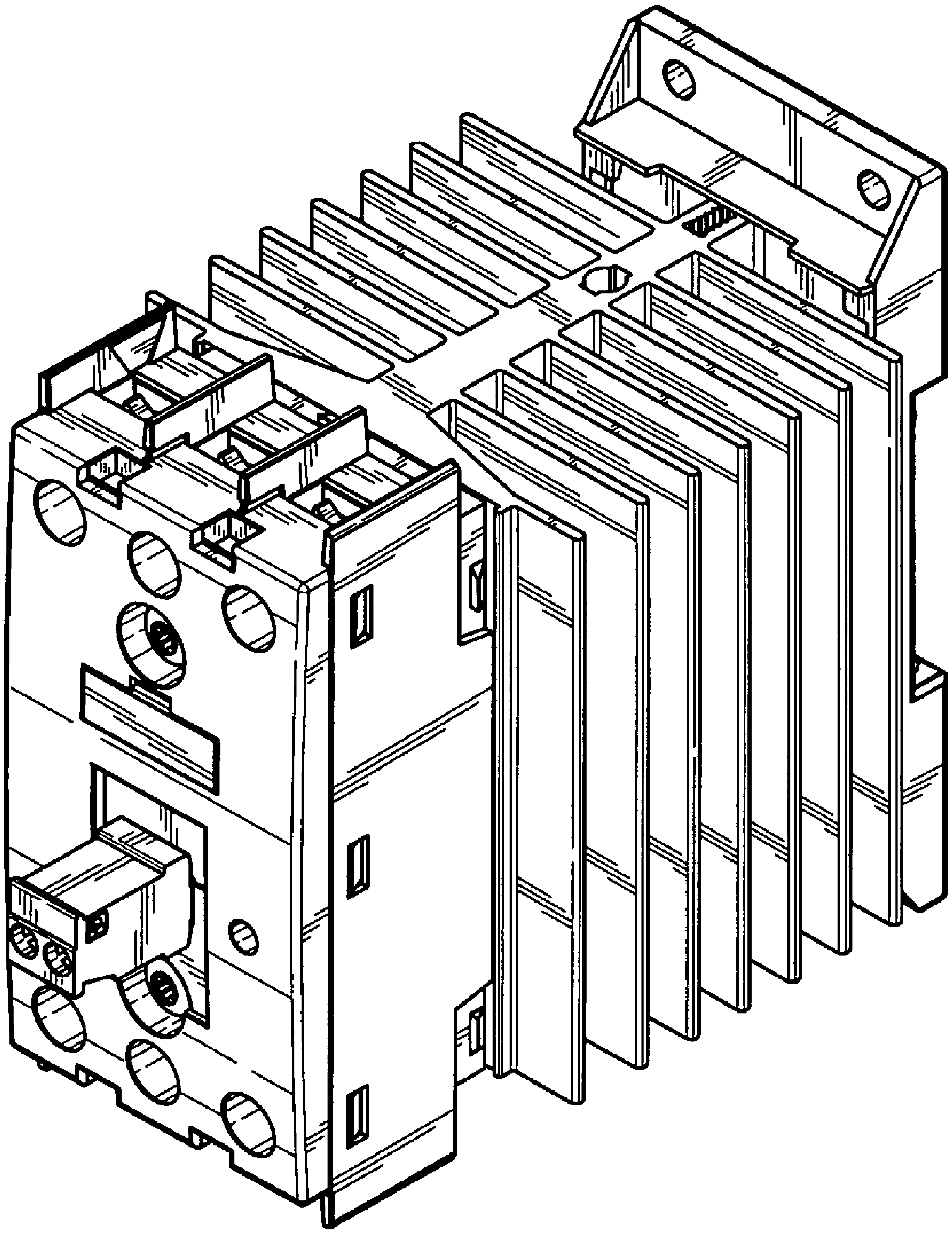


FIG 15

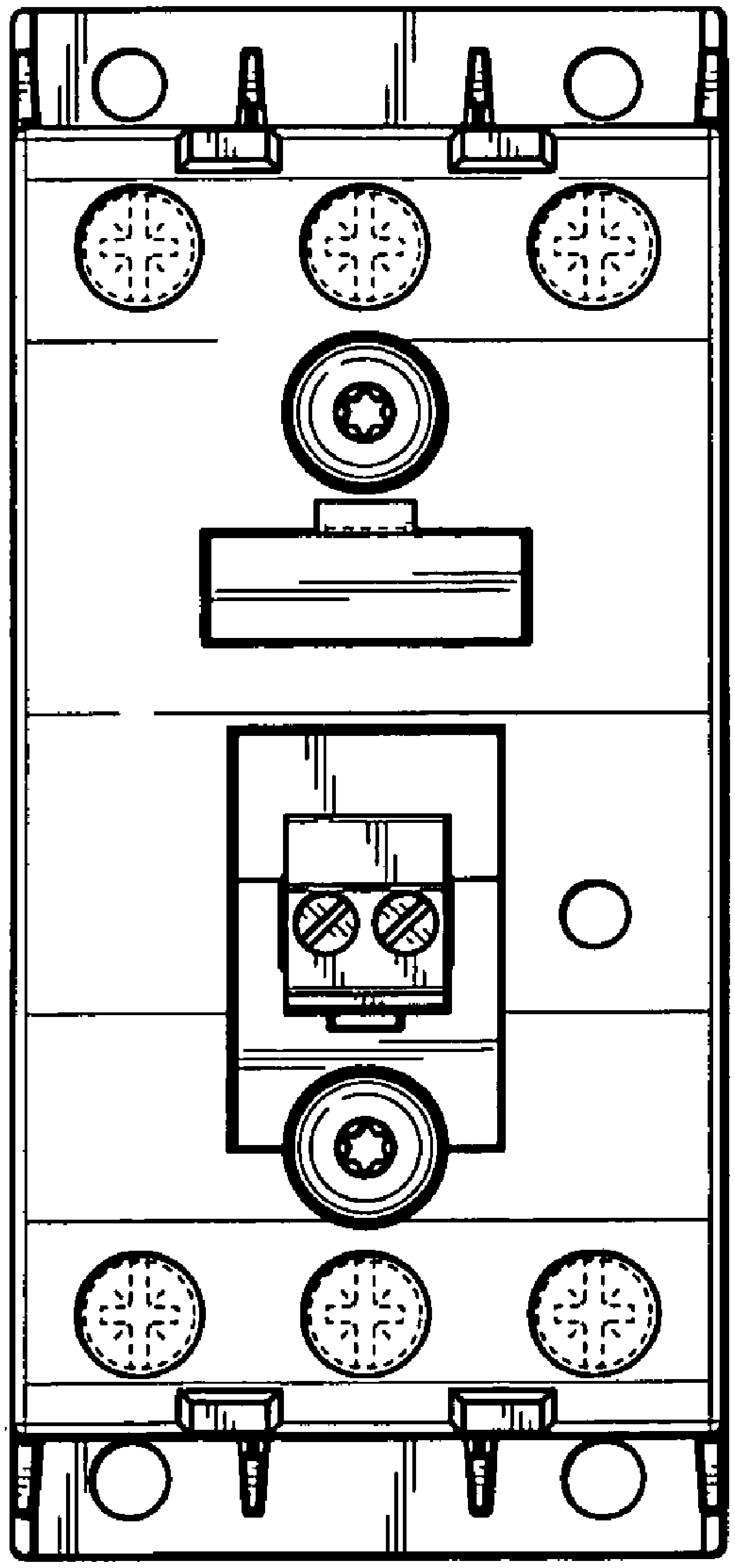


FIG 16

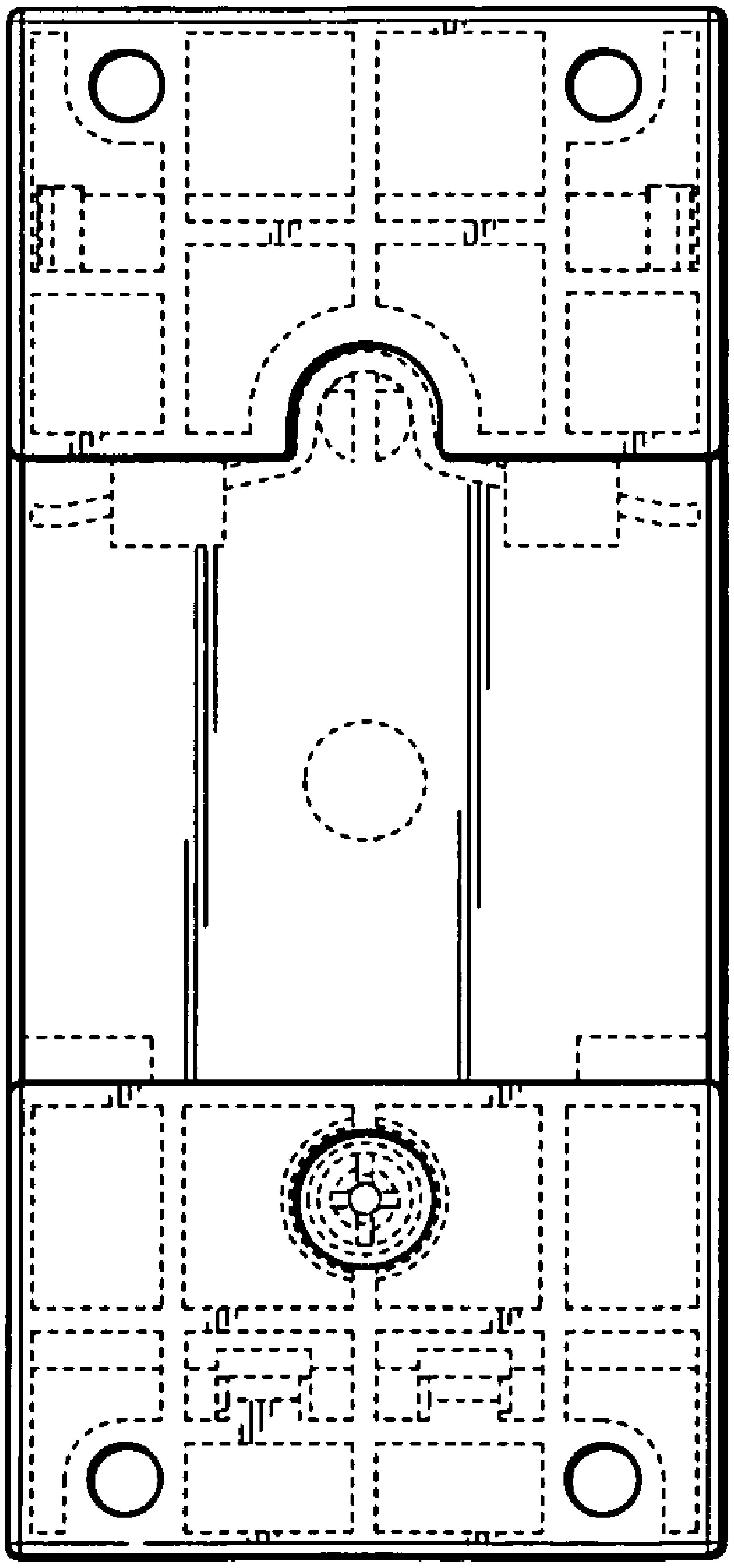
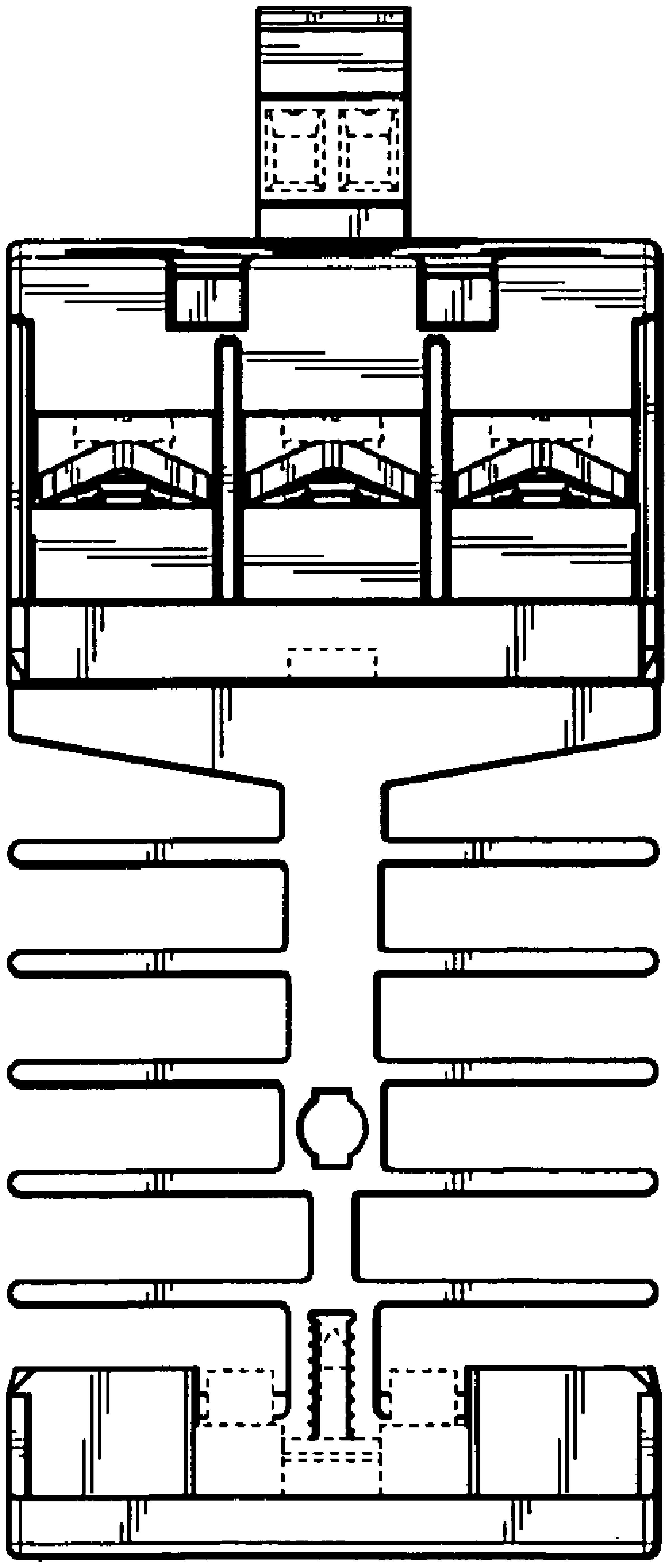


FIG 17



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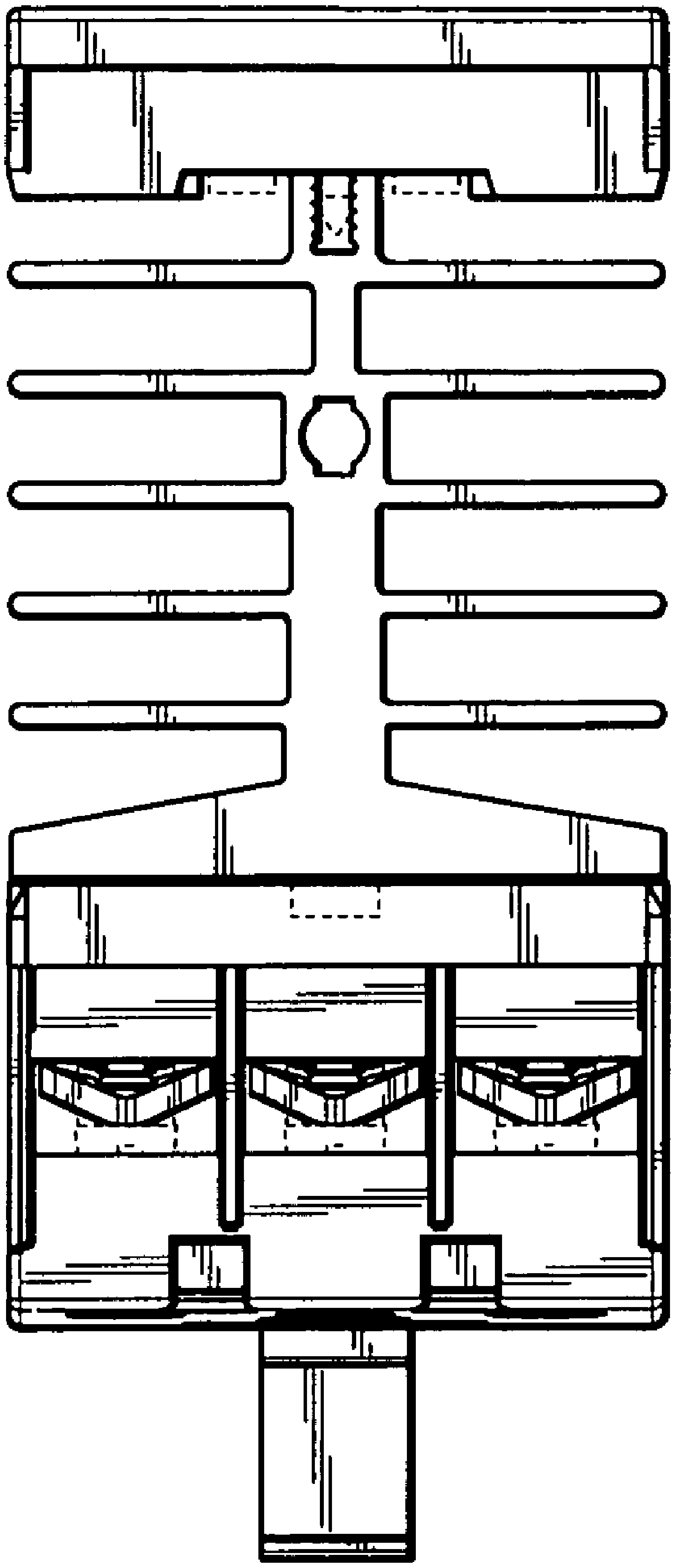

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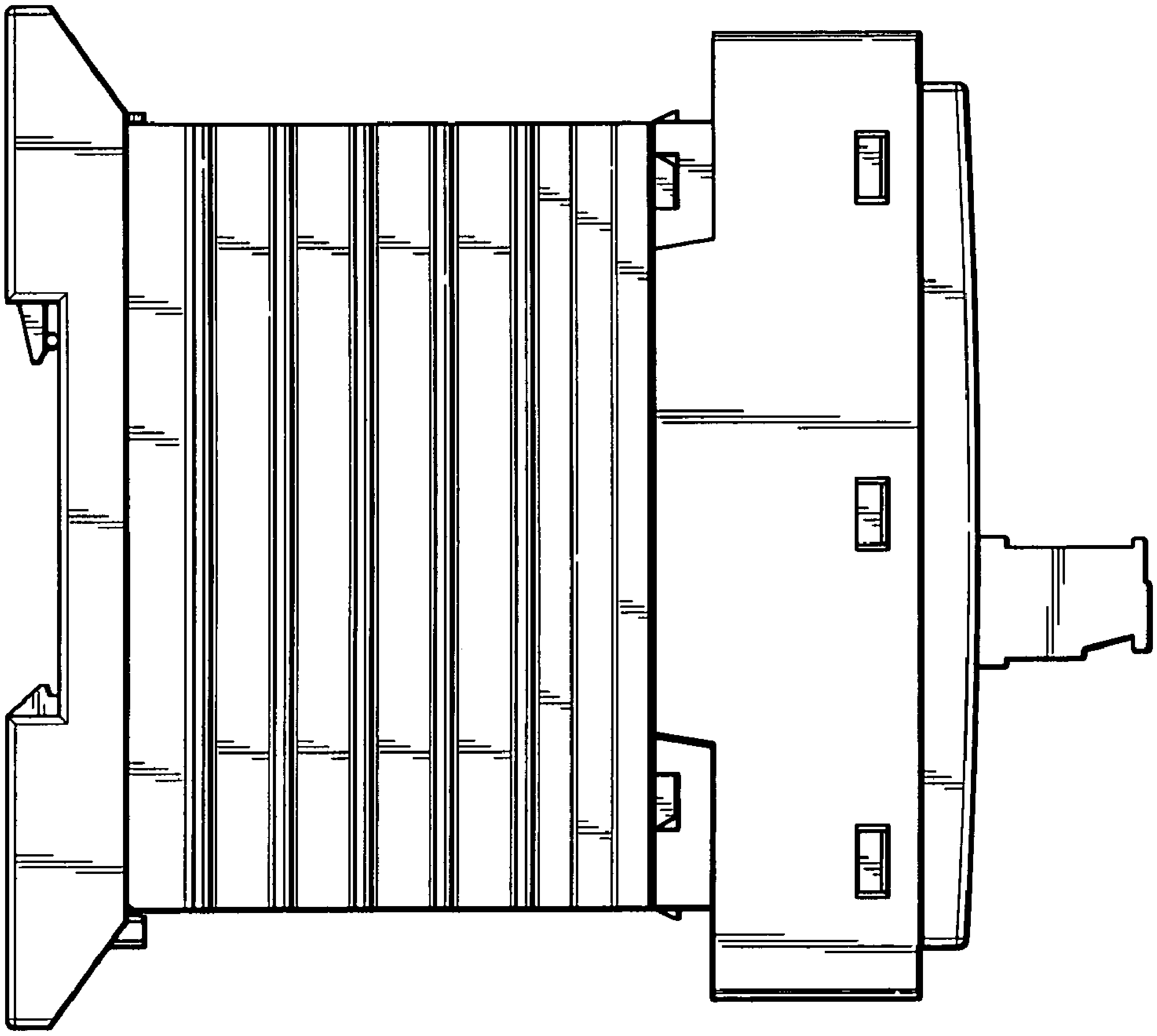


FIG 20

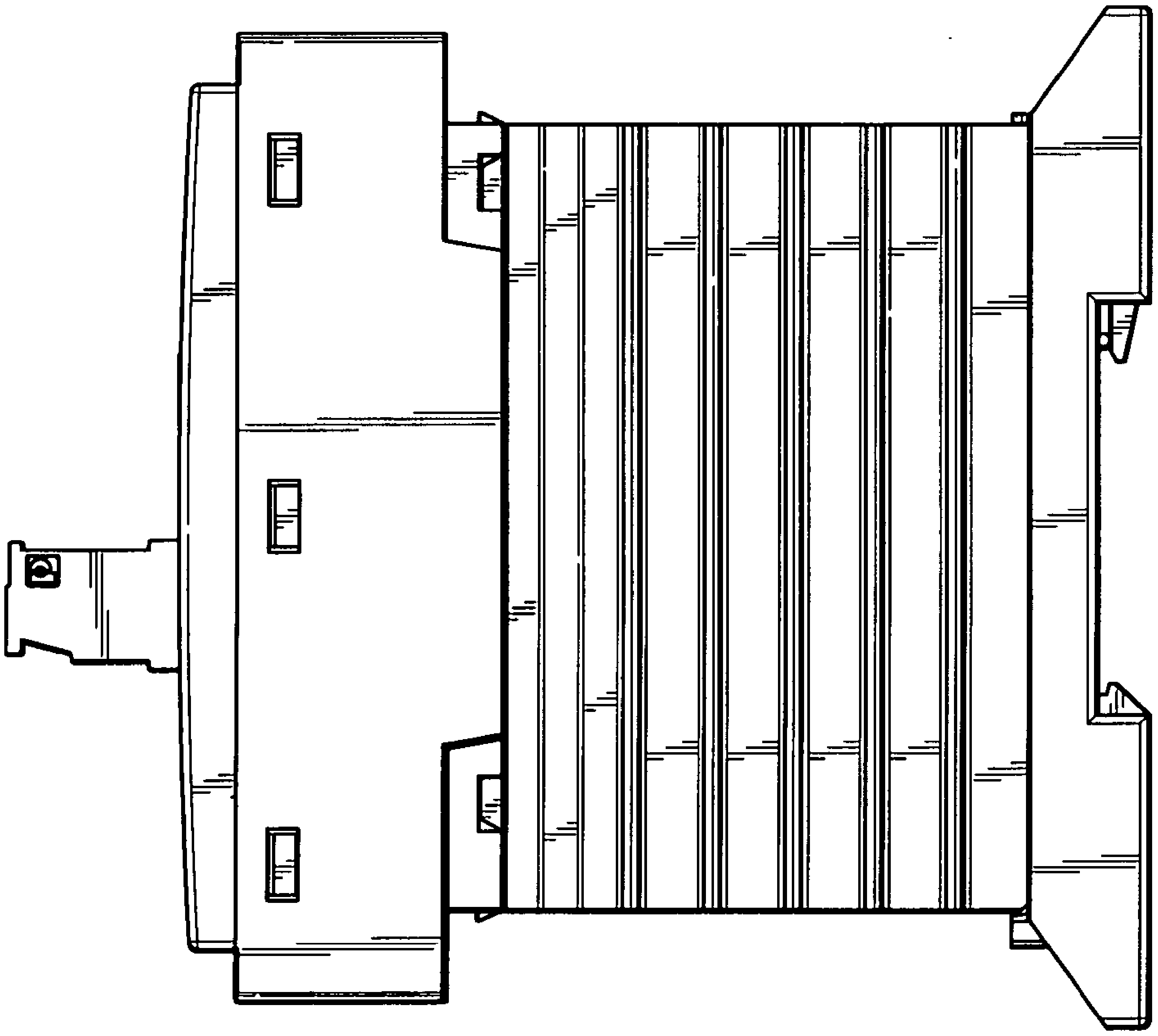


FIG 21

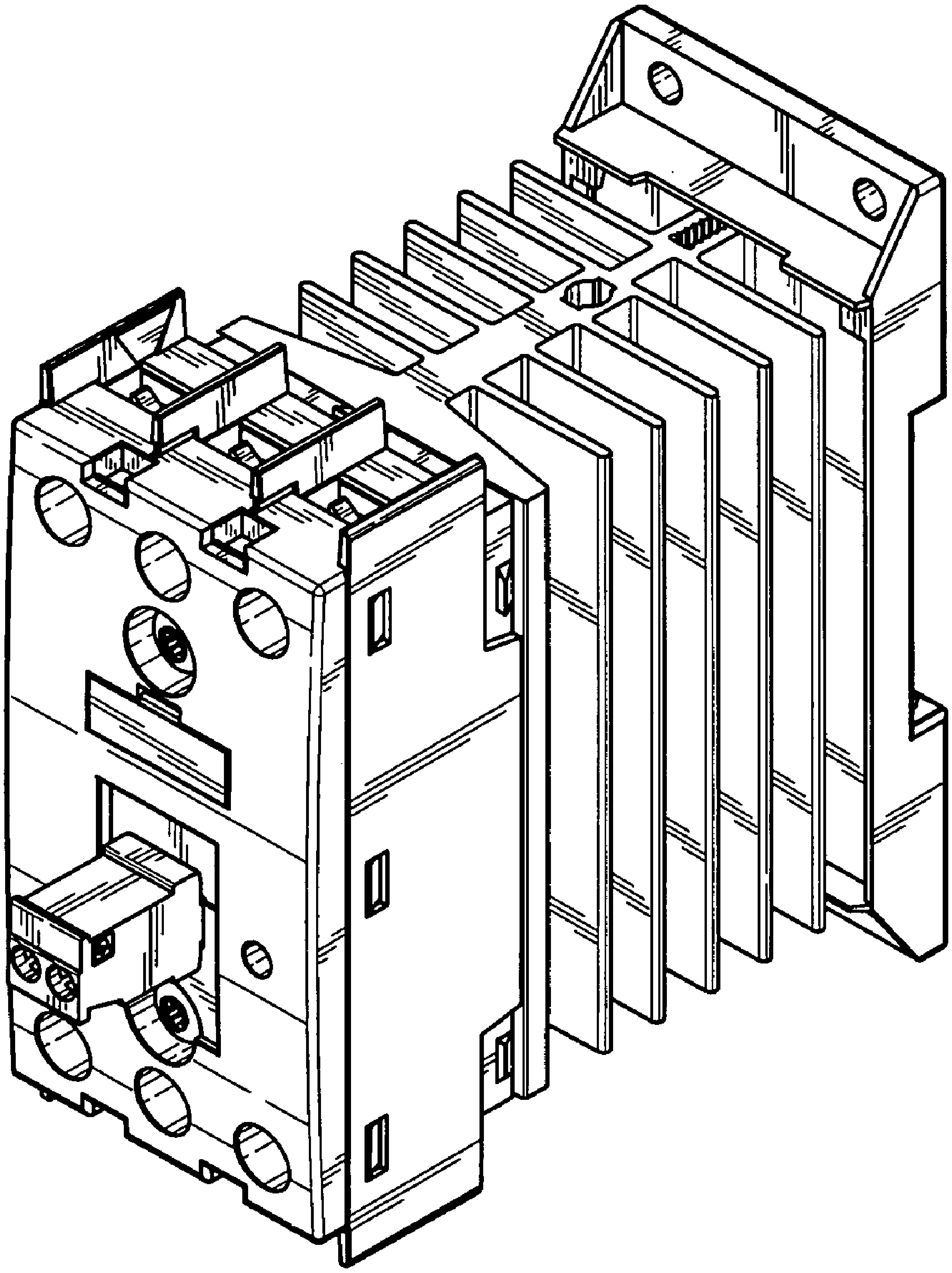
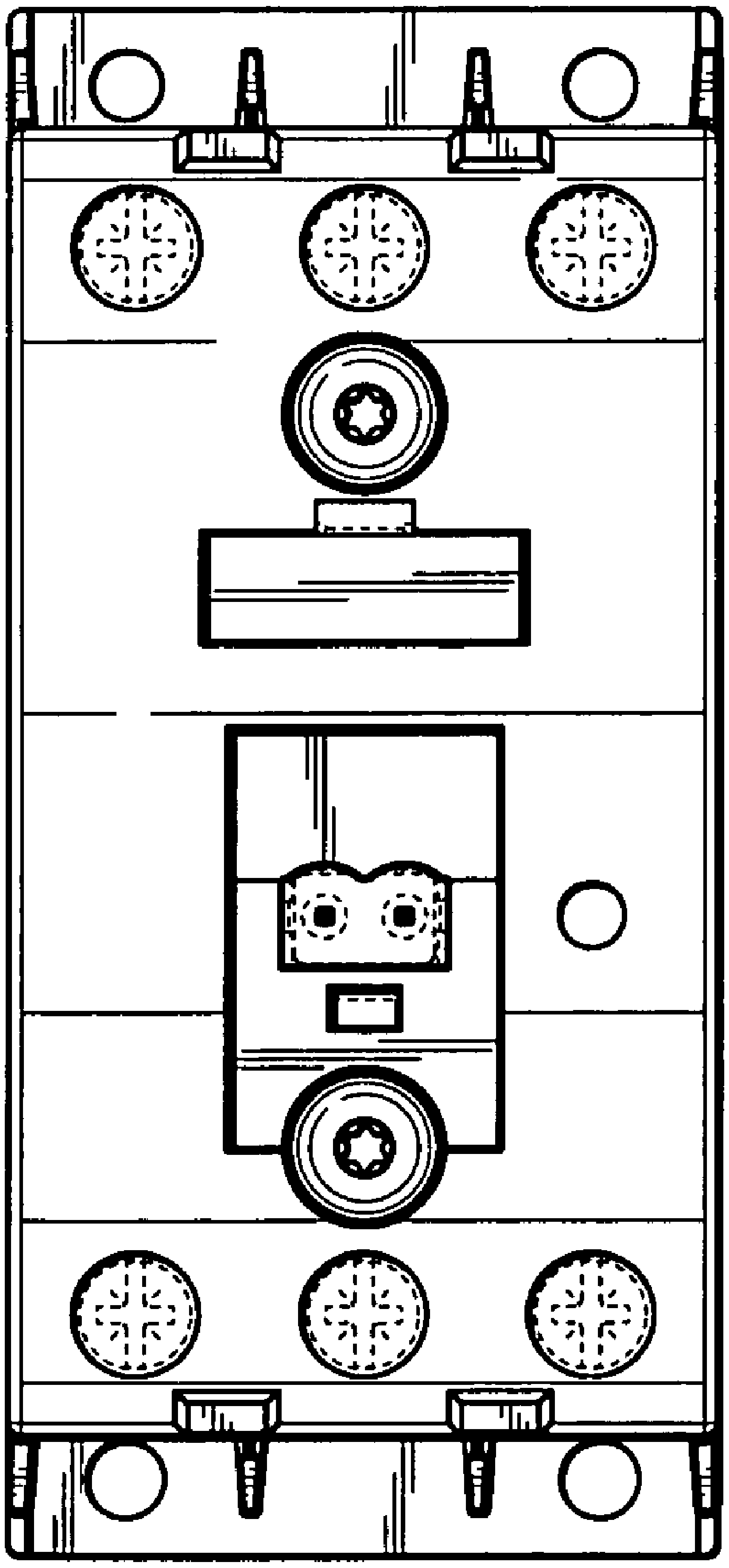


FIG 22



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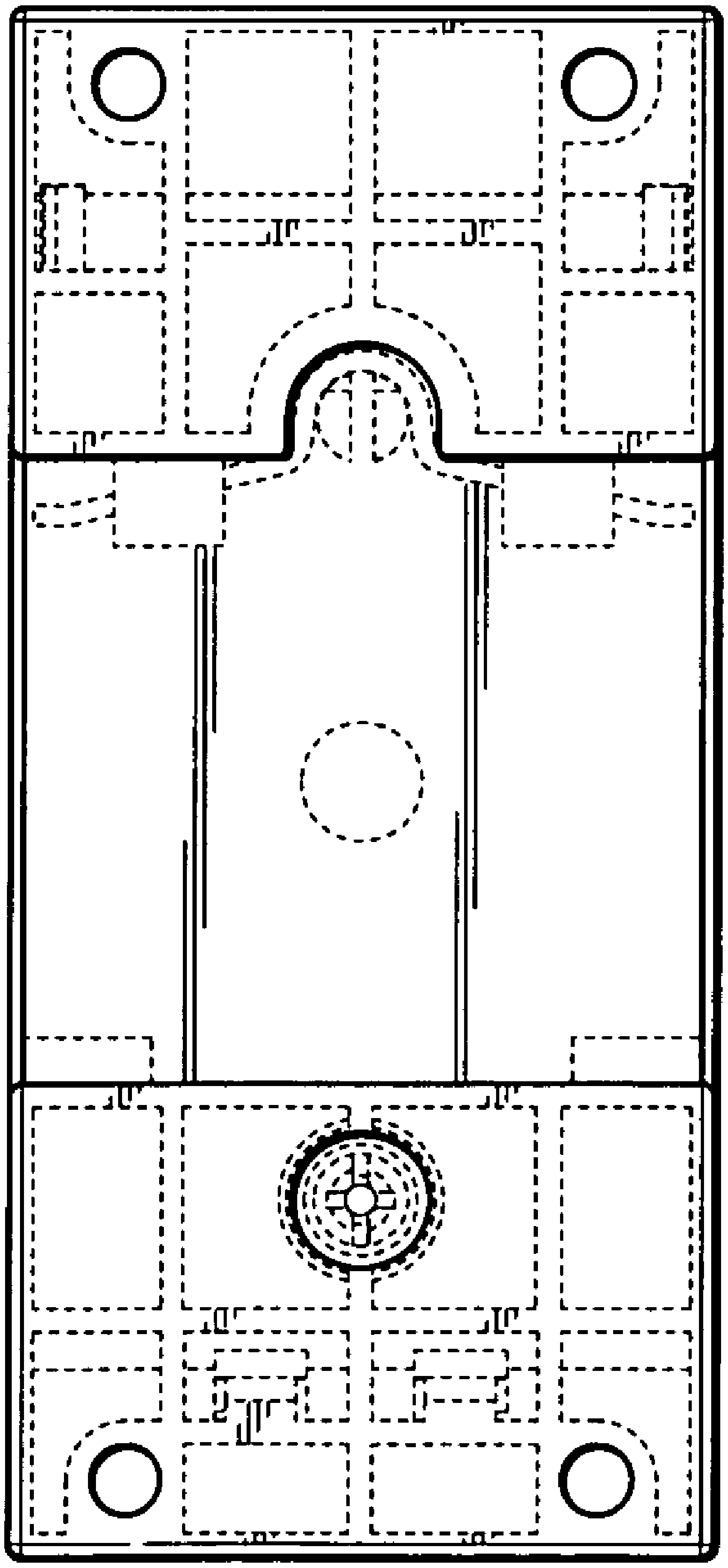


FIG 24

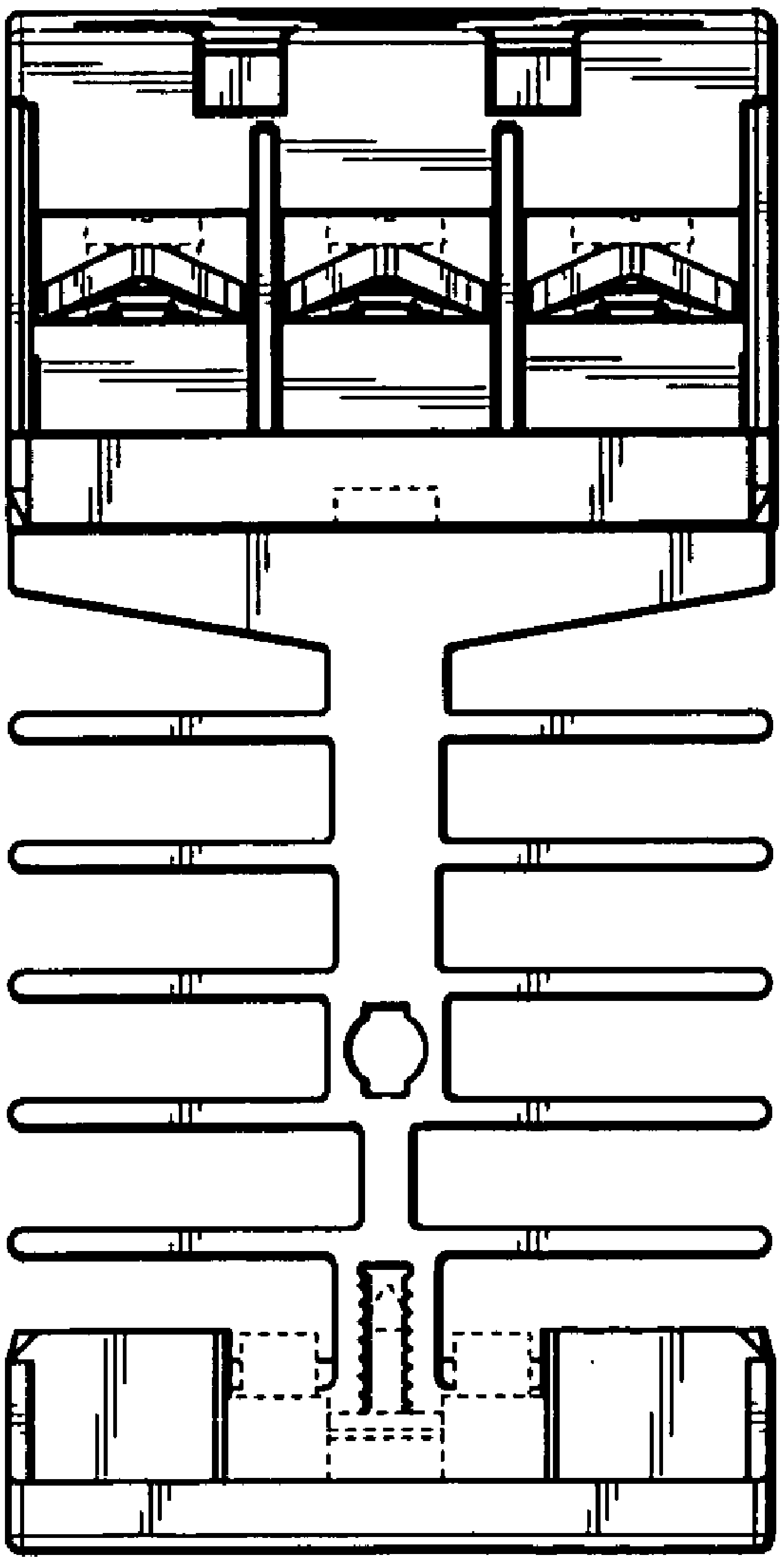


FIG 25

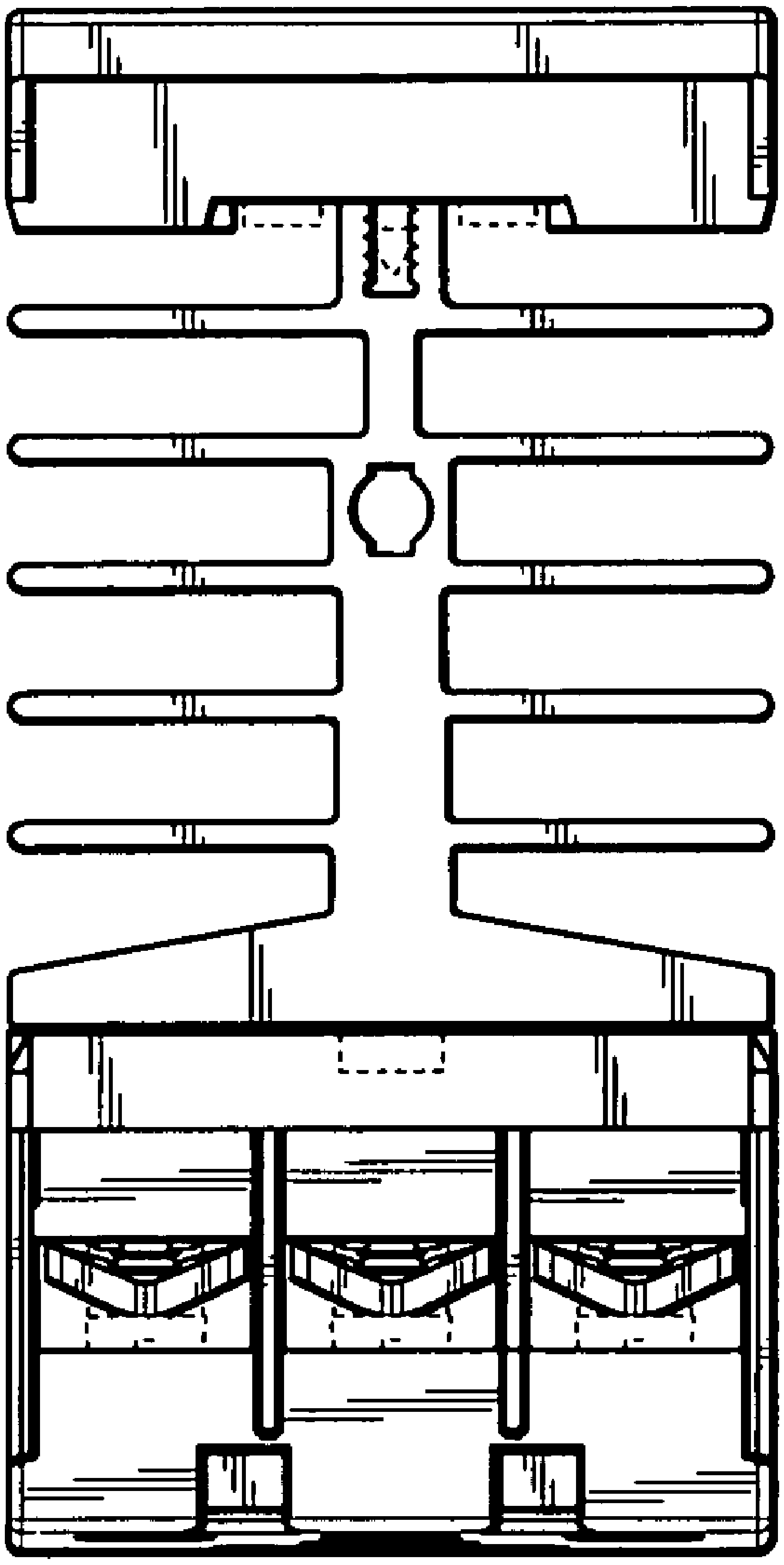


FIG 26

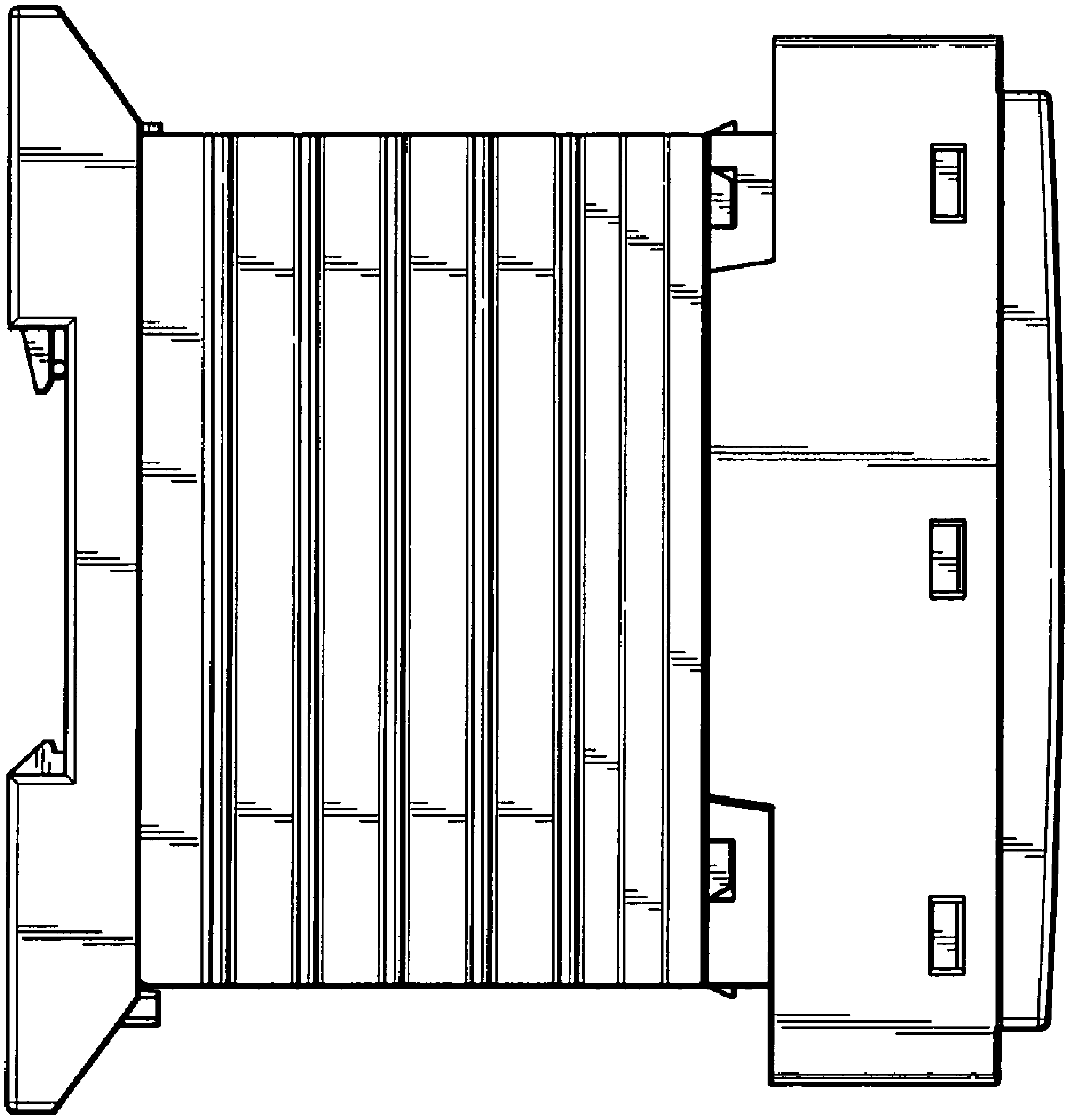


FIG 27

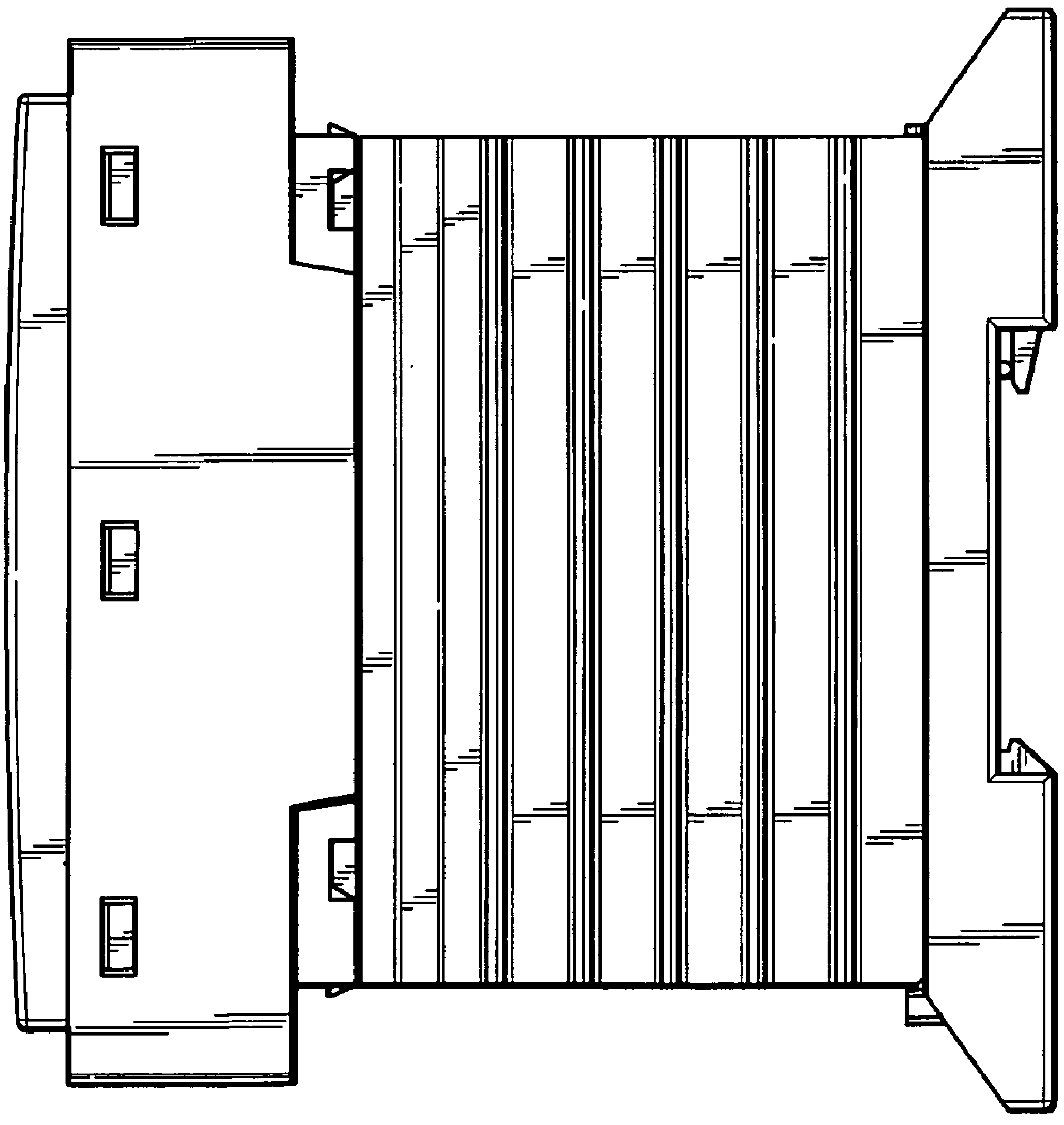


FIG 28

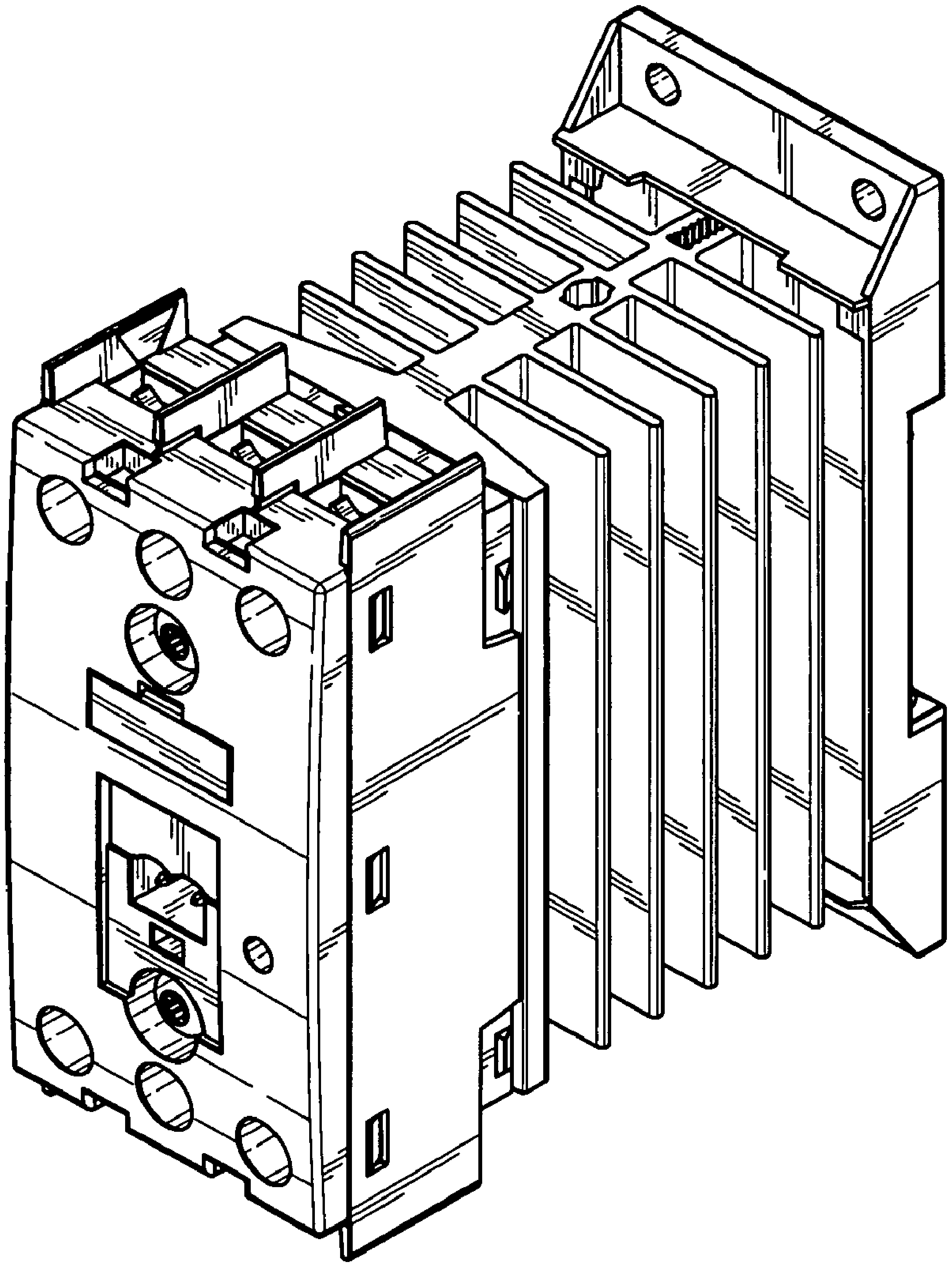


FIG 29

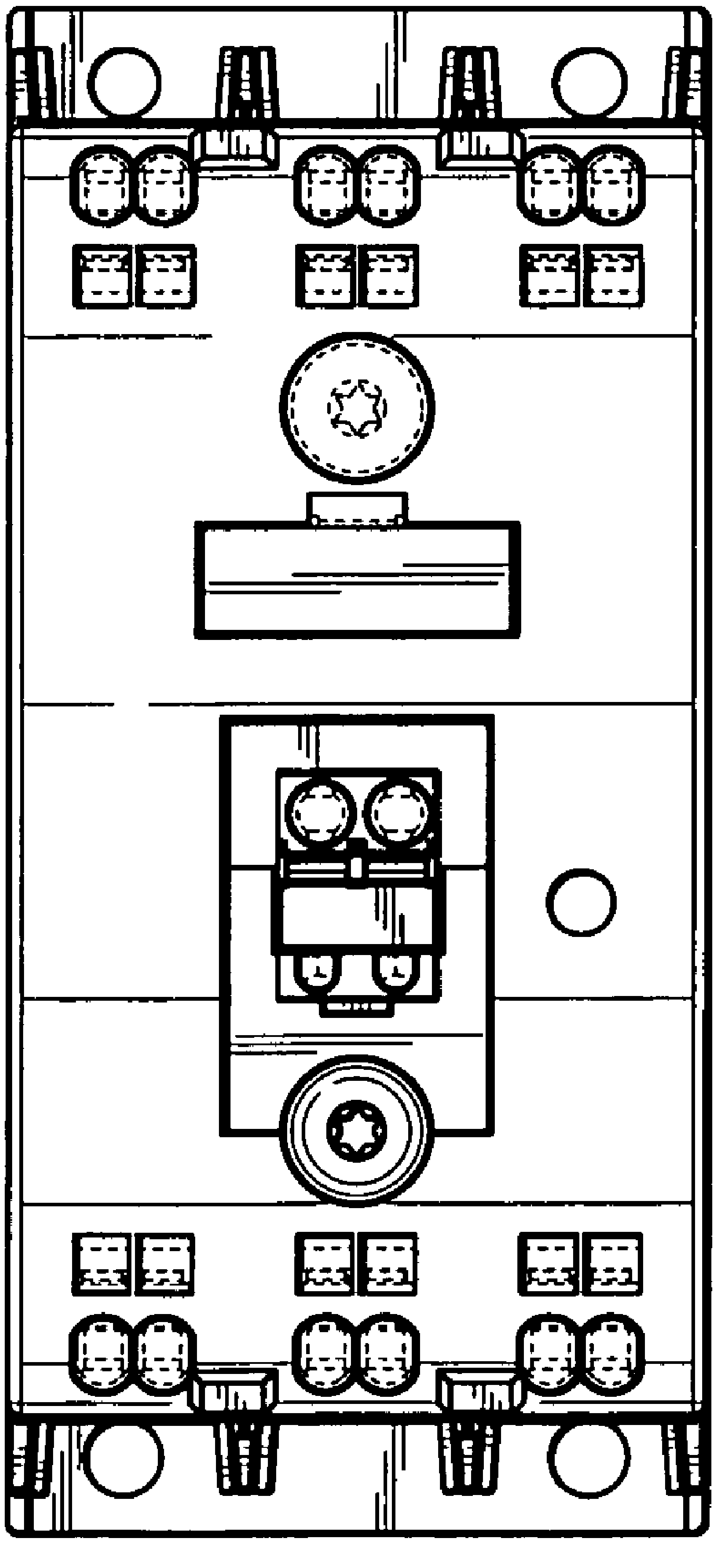


FIG 30

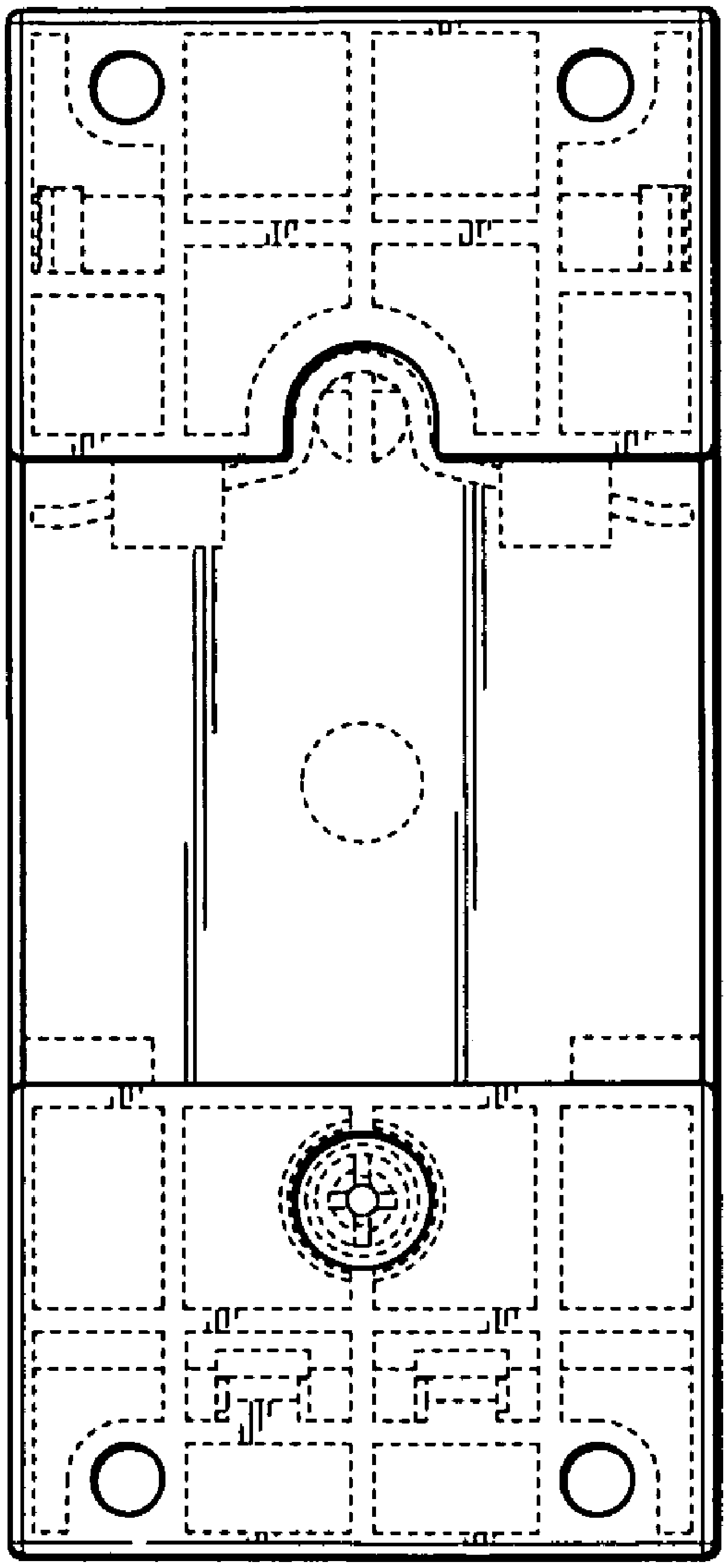


FIG 31

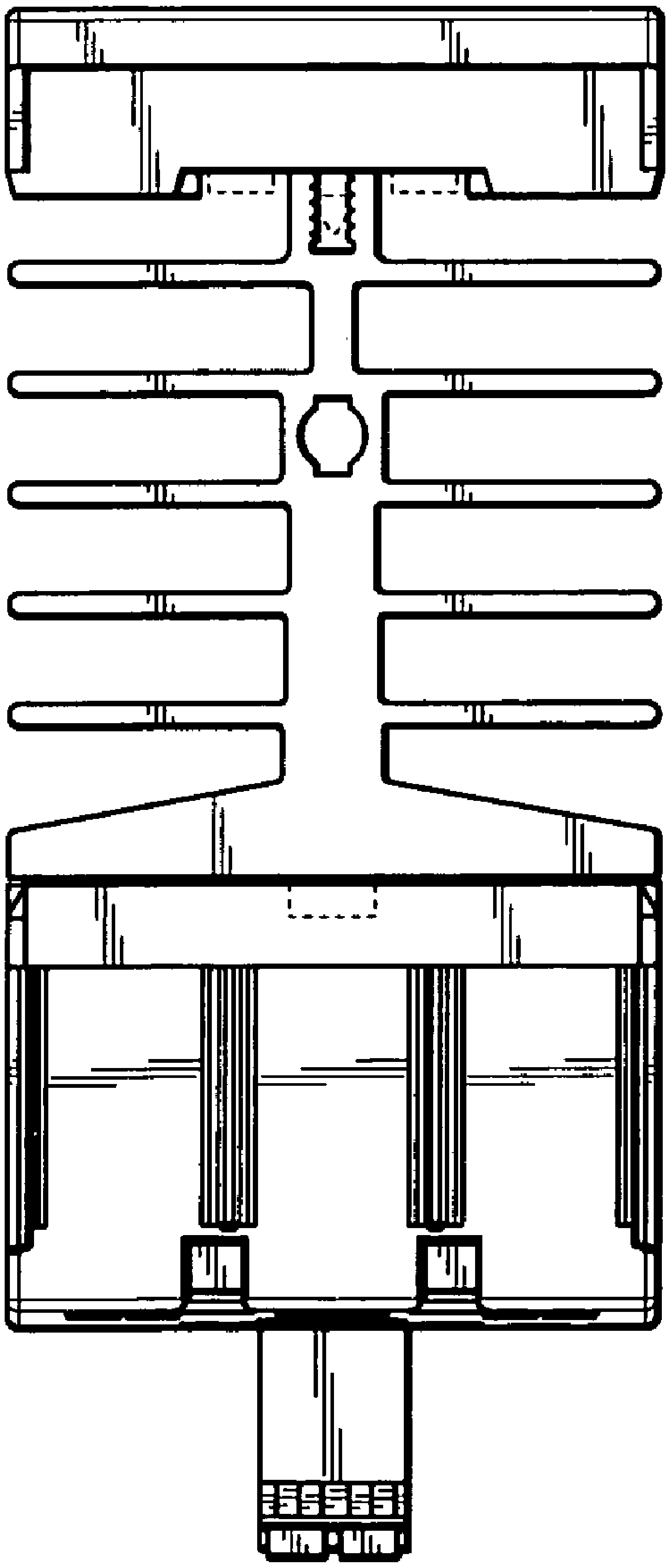


FIG 32

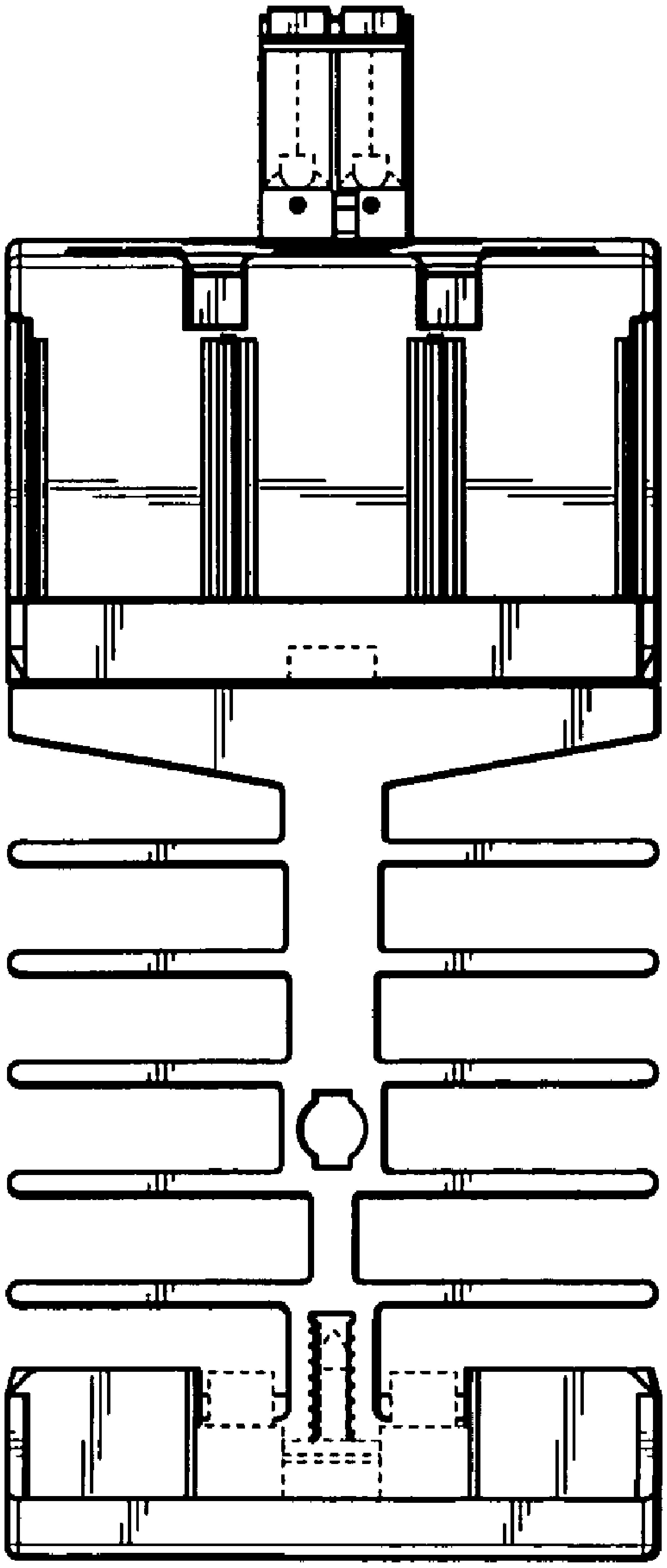


FIG 33

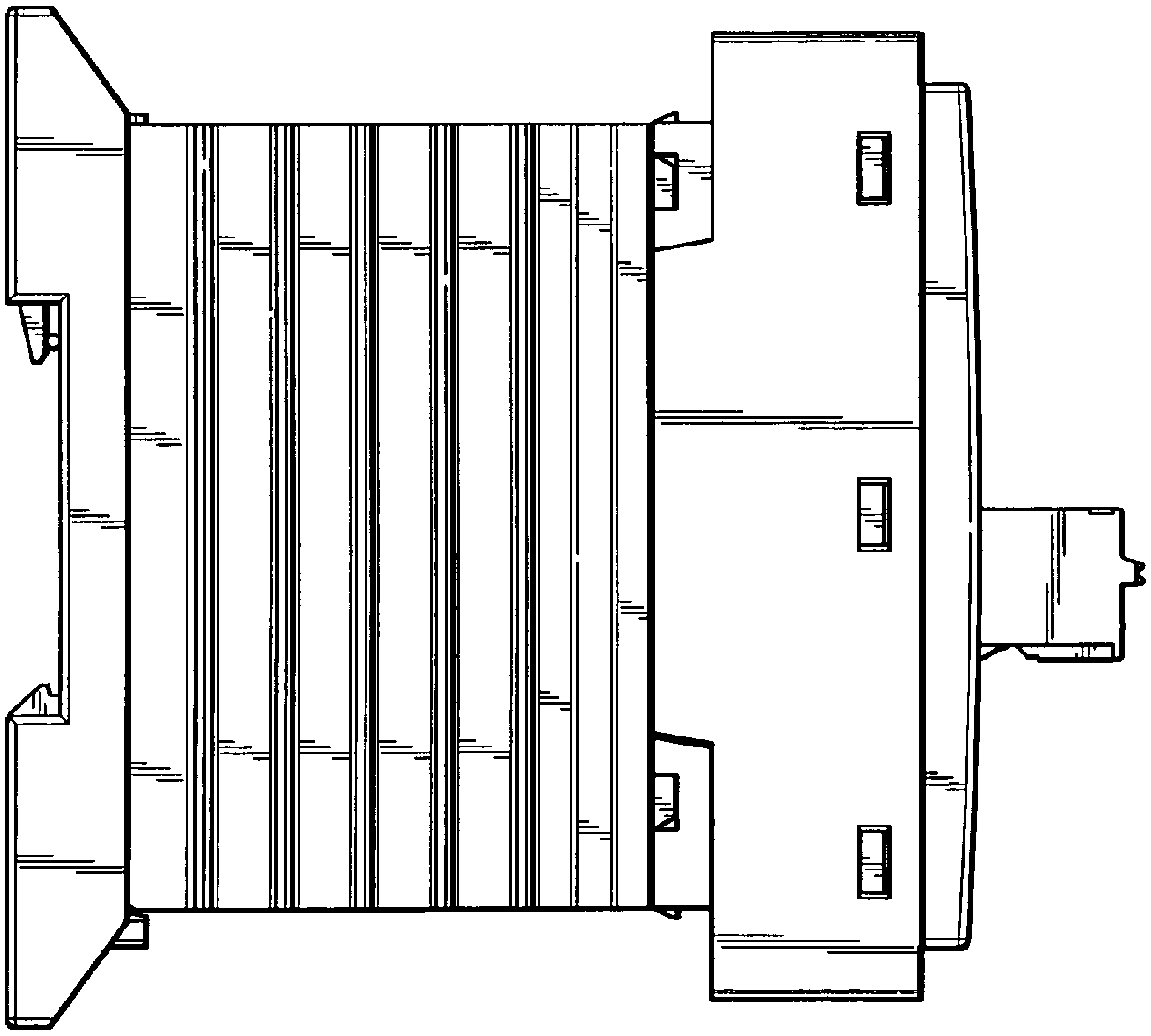


FIG 34

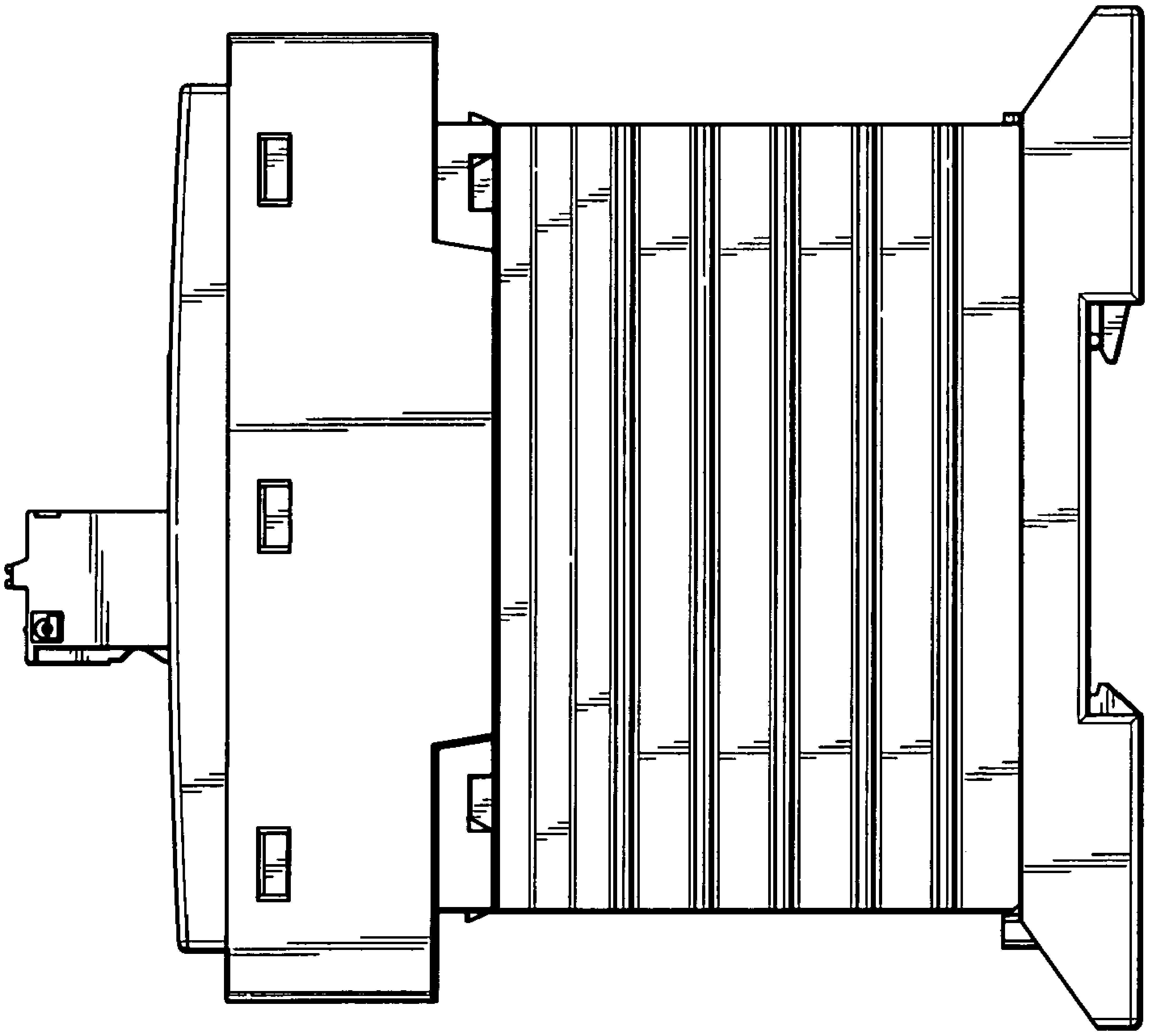


FIG 35

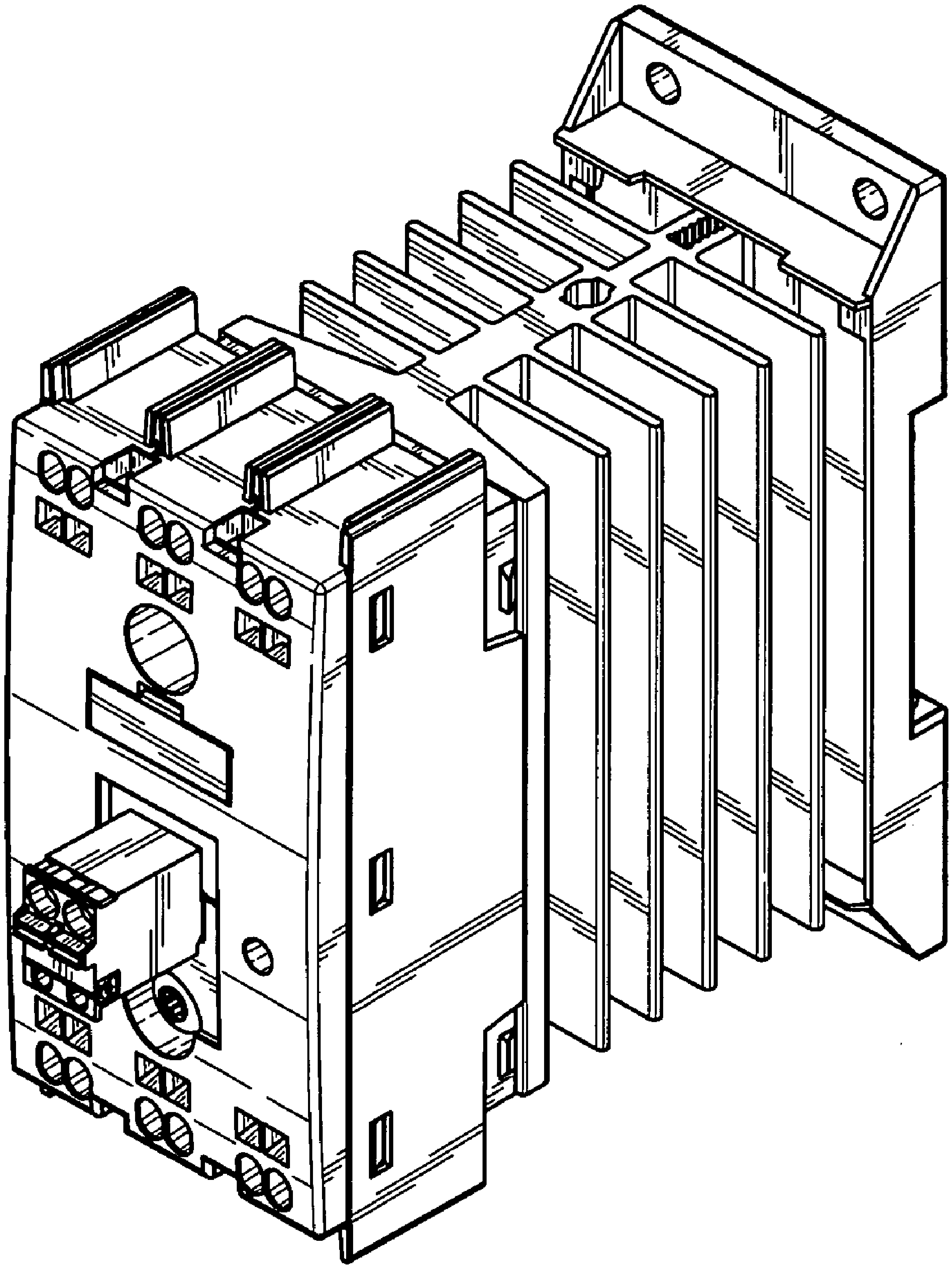


FIG 36

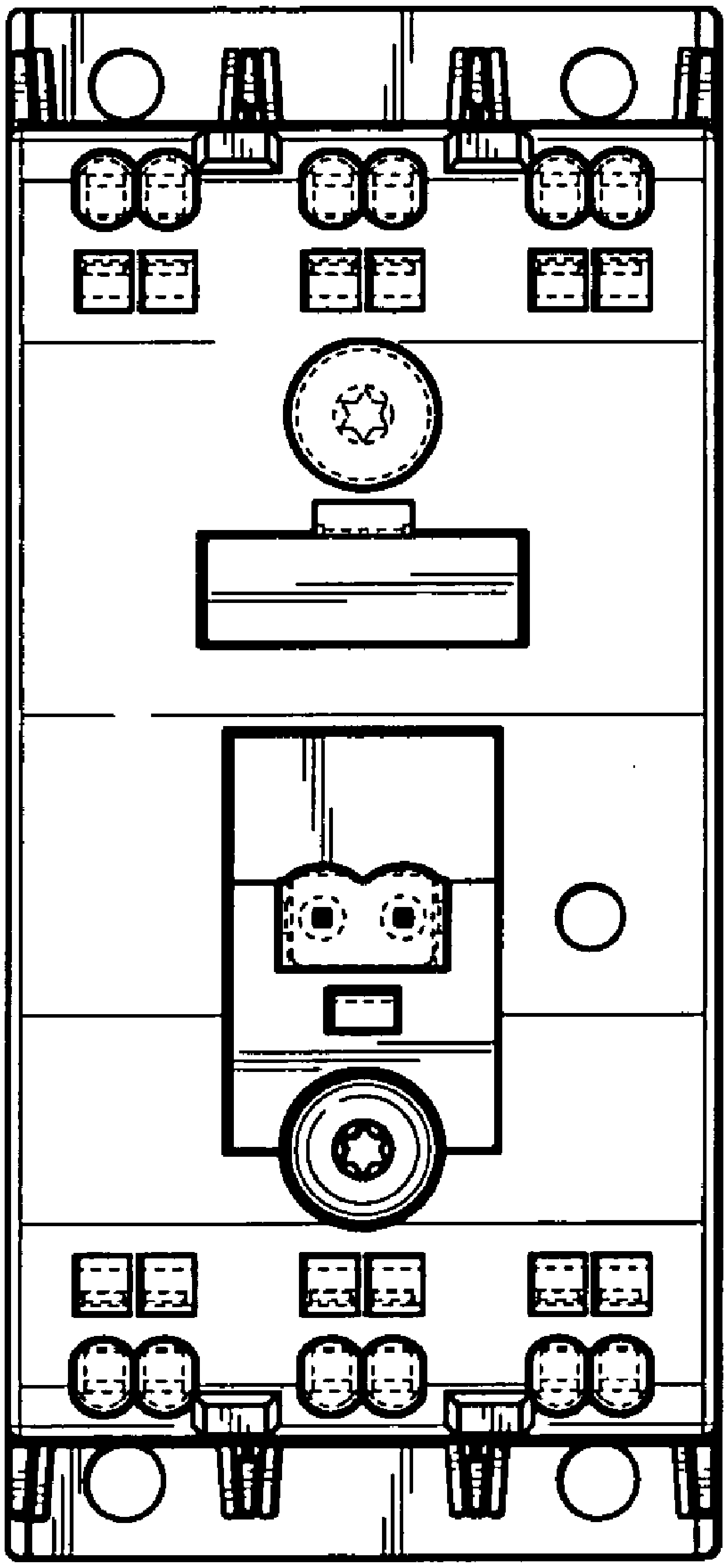
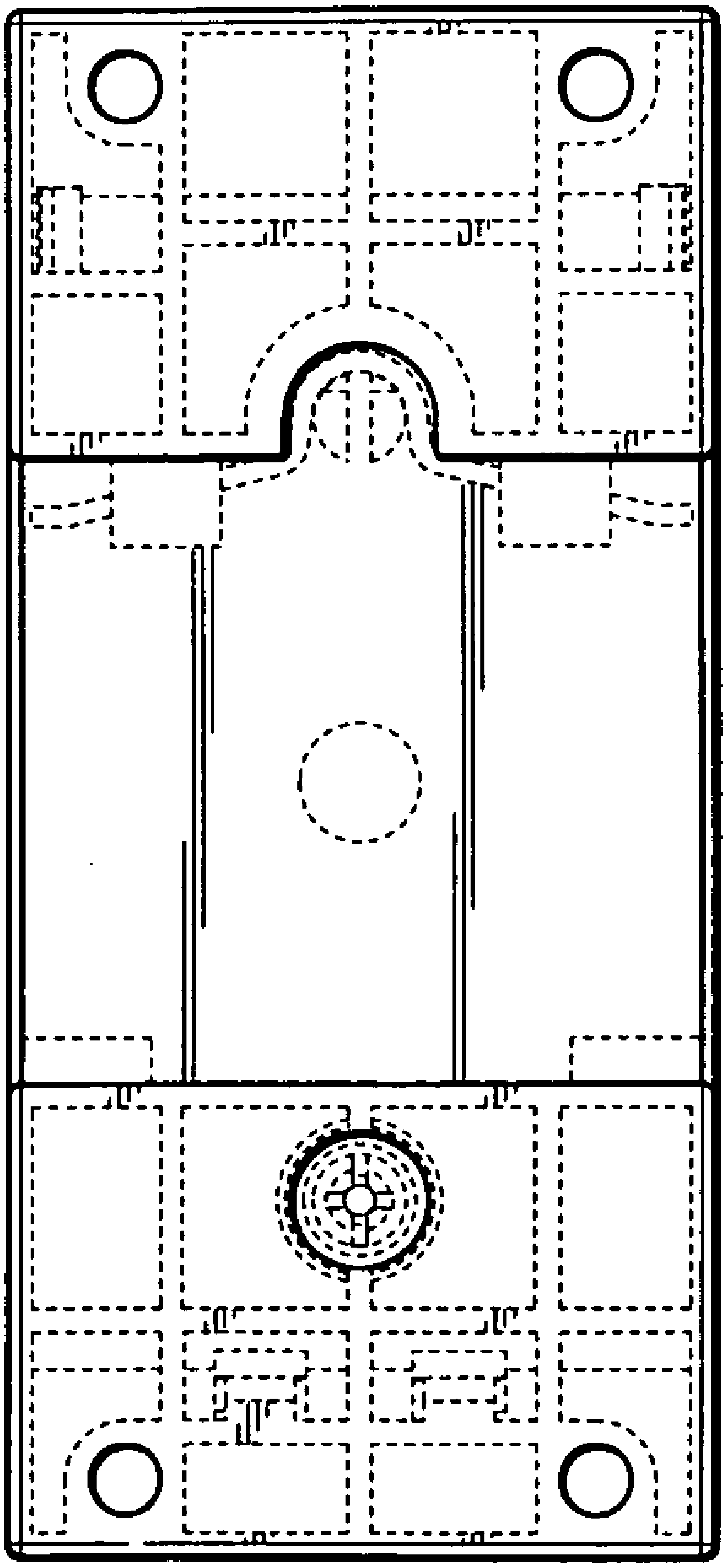


FIG 37



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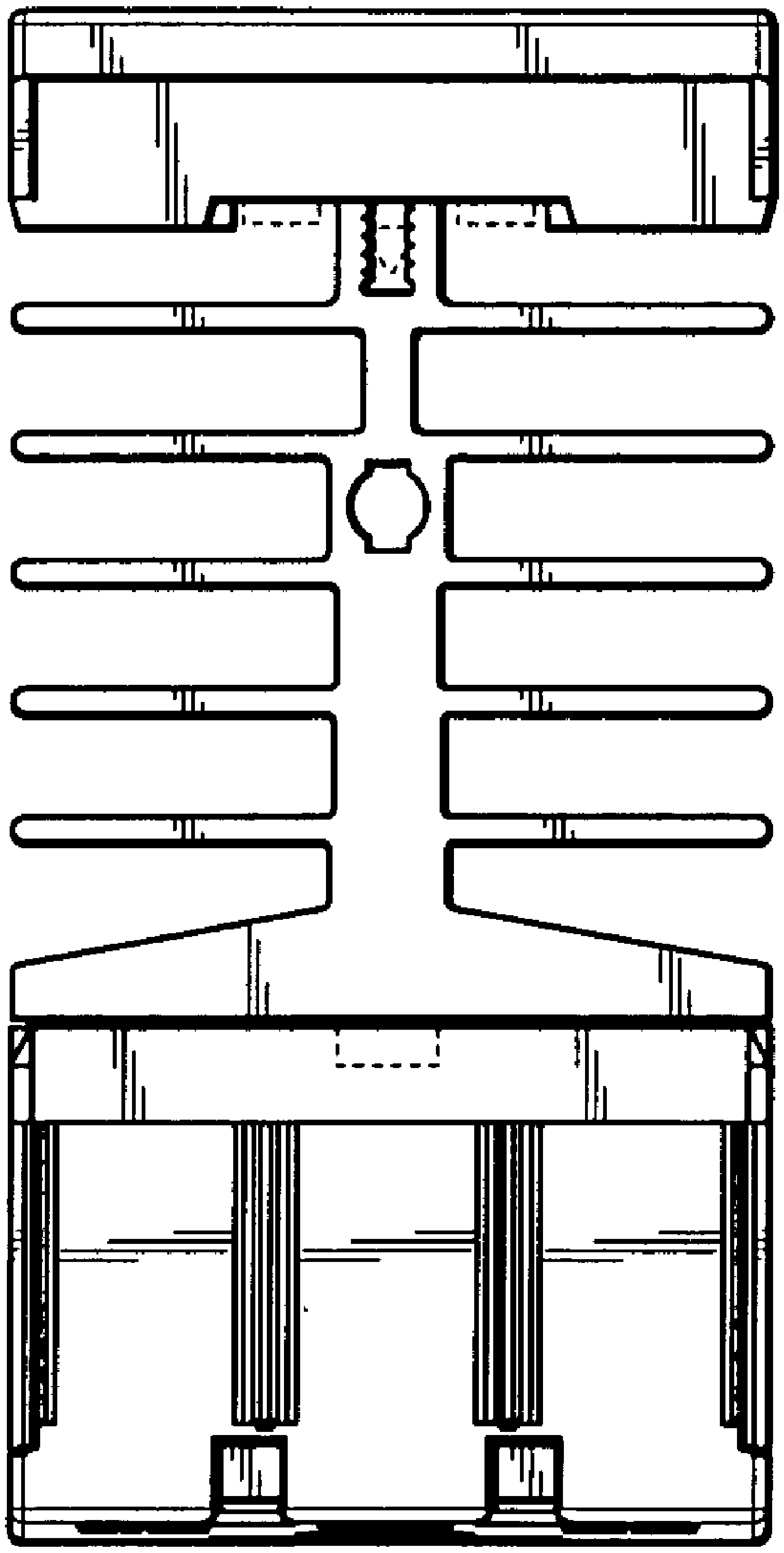
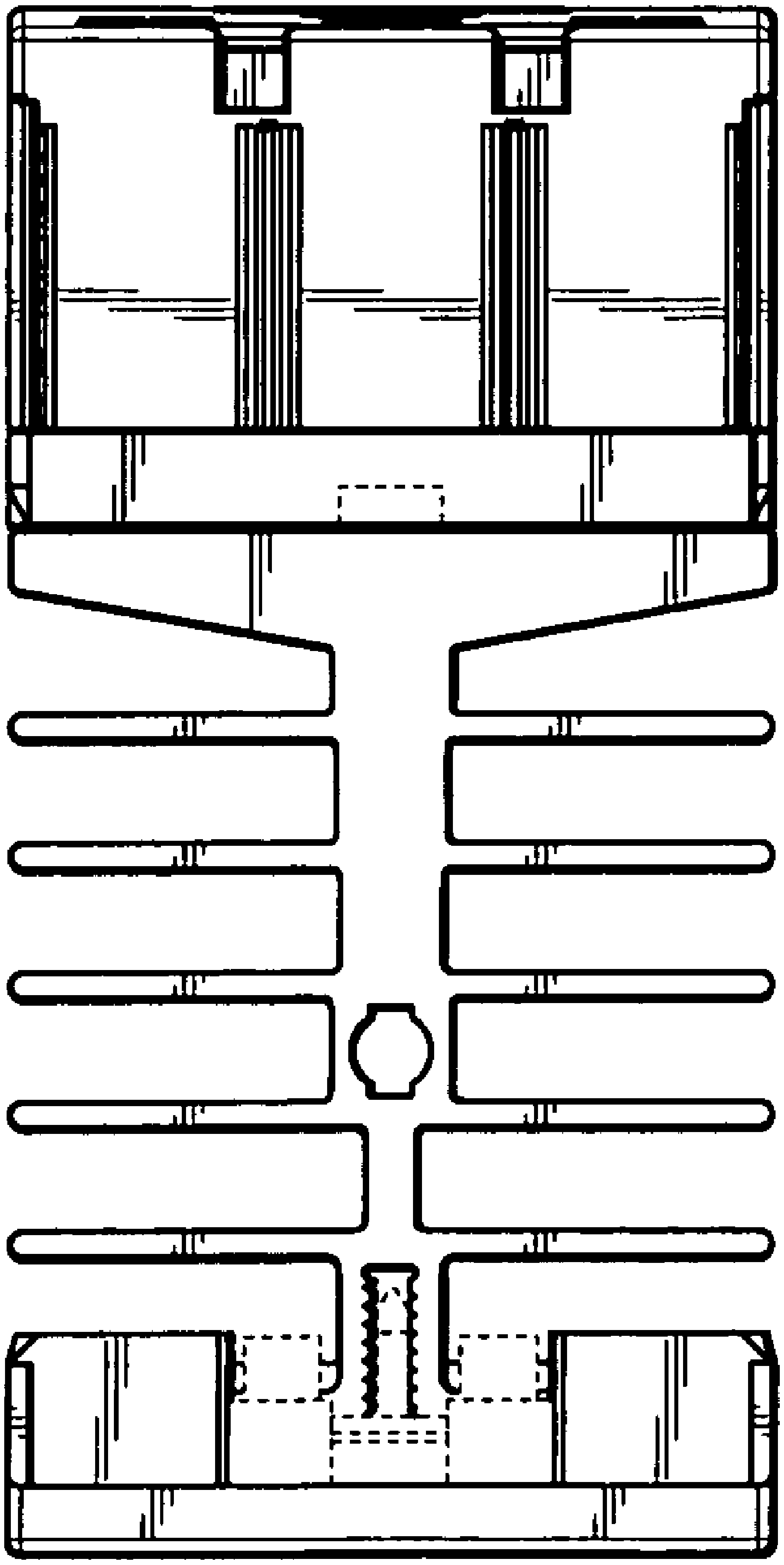


FIG 39



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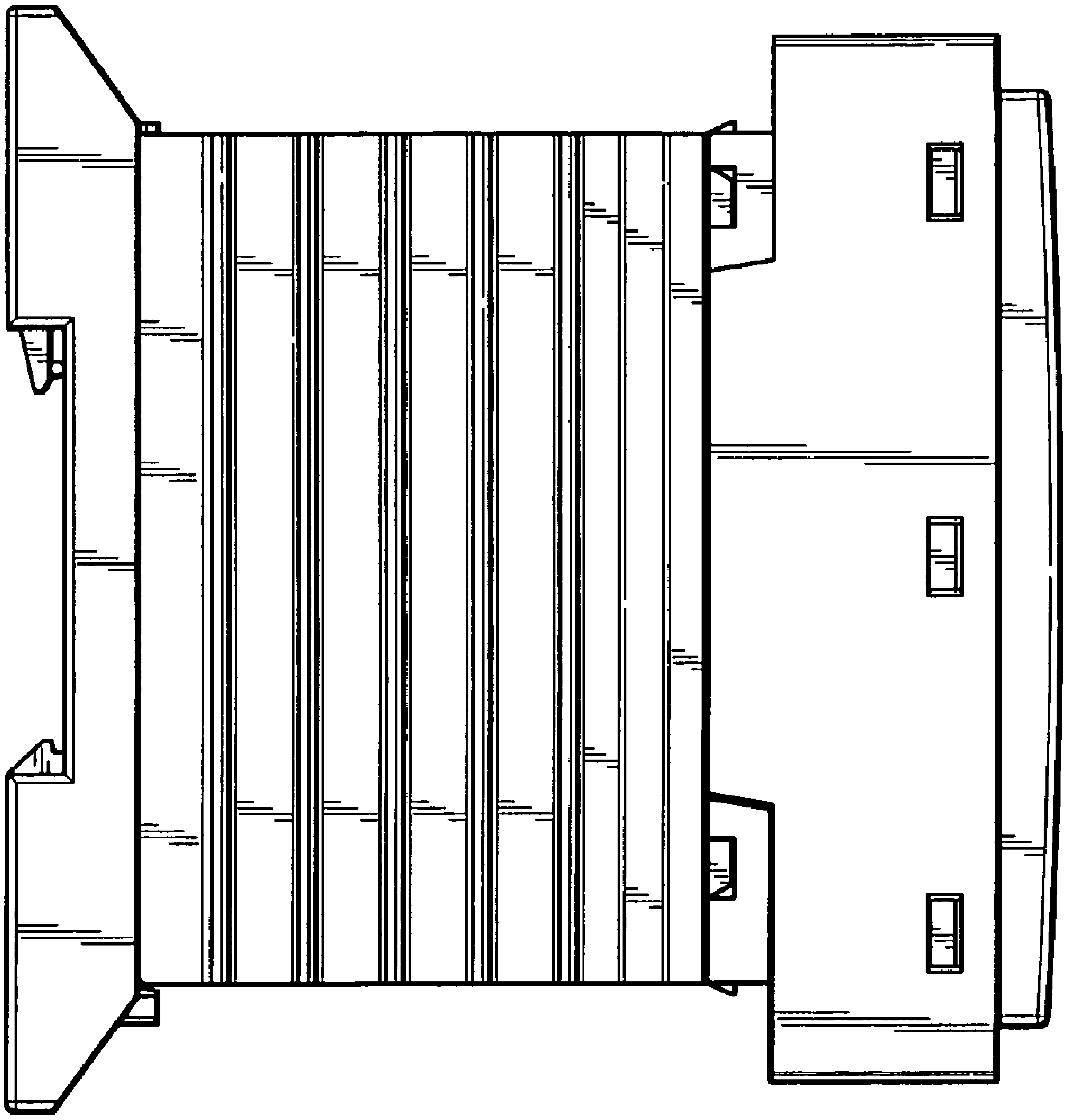

FIG 41

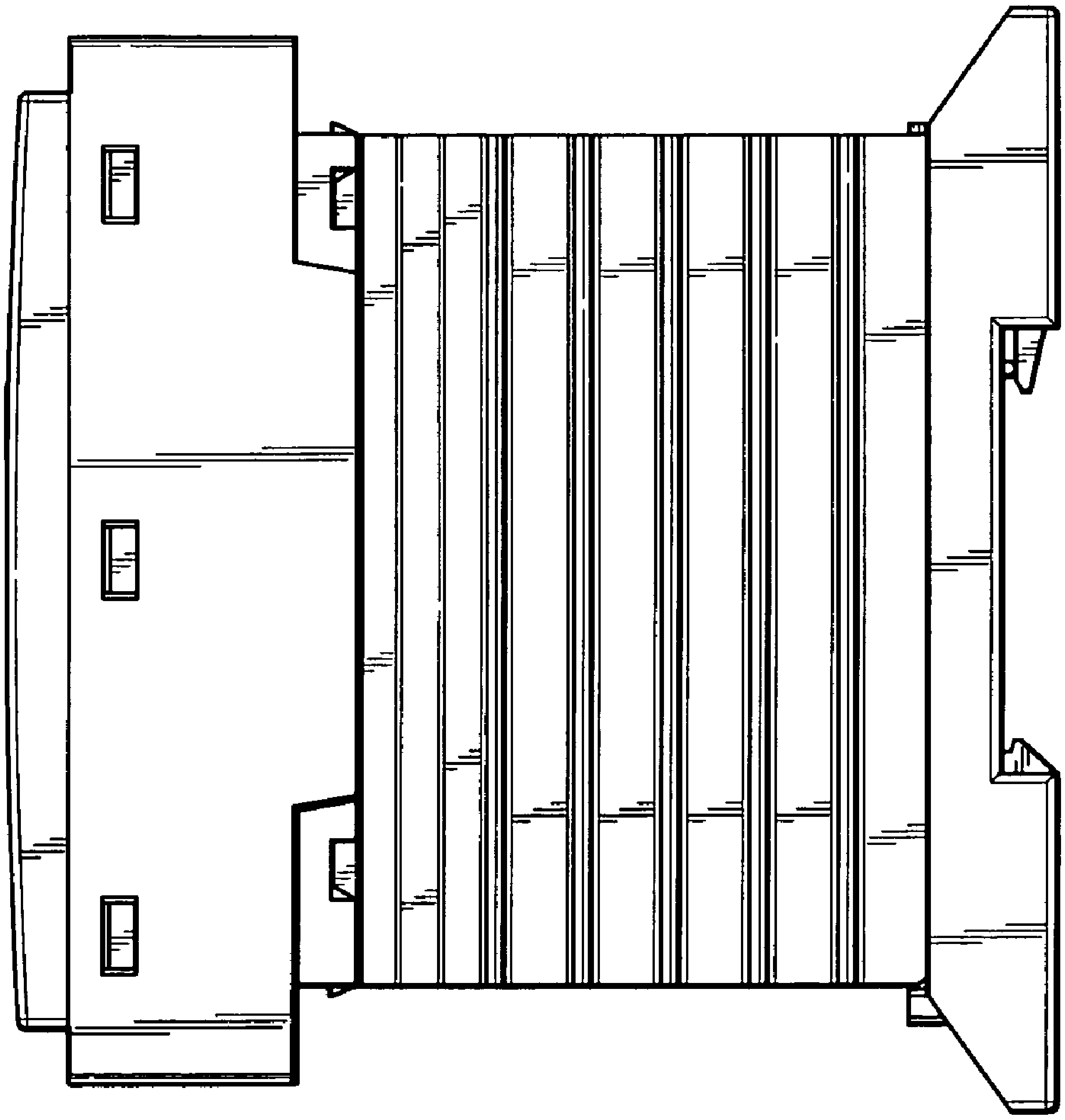

FIG 42