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

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(45) **Date of Patent: ** Jan. 21, 2020**

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(54) **SEMICONDUCTOR MODULE**

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

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(30) **Foreign Application Priority Data**

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Apr. 13, 2018 (JP) 2018-008232

(51) **LOC (12) Cl.** **13-03**
(52) **U.S. Cl.**
USPC **D13/182**
(58) **Field of Classification Search**
USPC D13/182
(Continued)

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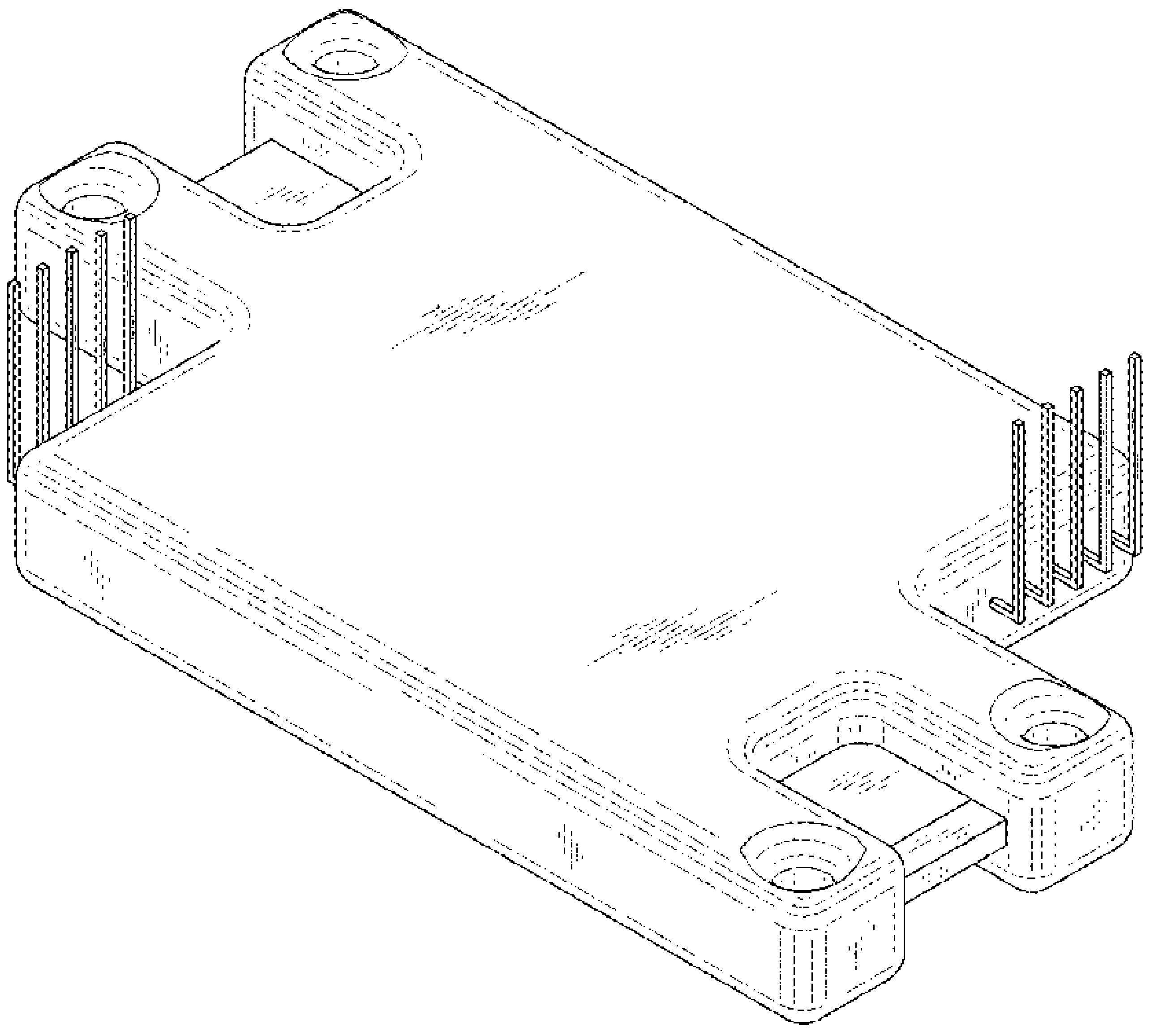
(57) **CLAIM**

The ornamental design for a semiconductor module, as shown and described.

DESCRIPTION

FIG. **1** is a front, top and right side perspective view of a first embodiment of a semiconductor module showing our new design;
FIG. **2** is a rear, bottom, and left side perspective view thereof;
FIG. **3** is a front view, the rear view being identical to FIG. **3**;
FIG. **4** is a top plan view thereof;
FIG. **5** is a bottom plan view thereof;
FIG. **6** is a right side view thereof;
FIG. **7** is a left side view thereof;
FIG. **8** is a cross-sectional view taken along line **8-8** in FIG. **4**;
FIG. **9** is a cross-sectional view taken along line **9-9** in FIG. **4**;
FIG. **10** is a front, top and right side perspective view of a second embodiment of a semiconductor module showing our new design;
FIG. **11** is a rear, bottom, and left side perspective view thereof;
FIG. **12** is a front view, the rear view being identical to FIG. **12**;
FIG. **13** is a top plan view thereof;
FIG. **14** is a bottom plan view thereof;
FIG. **15** is a right side view thereof;
FIG. **16** is a left side view thereof;
FIG. **17** is a cross-sectional view taken along line **17-17** in FIG. **13**; and,
FIG. **18** is a cross-sectional view taken along line **18-18** in FIG. **13**.
The member illustrated with fine, diagonal, parallel lines in FIG. **2** and FIG. **5** is translucent.

1 Claim, 14 Drawing Sheets



(58) **Field of Classification Search**
CPC H01L 21/02428; H01L 21/0243; H01L 21/02494; H01L 21/02496; H01L 21/02499; H01L 21/02502; H01L 21/02505; H01L 21/02507; H01L 21/0251; H01L 21/02513; H01L 21/02587; H01L 21/0259; H01L 21/02592; H01L 21/02595; H01L 21/02598; H01L 21/02603; H01L 21/02606; H01L 23/04; H01L 23/041; H01L 23/043; H01L 23/045; H01L 23/047; H01L 23/049; H01L 23/051; H01L 23/053; H01L 23/055; H01L 23/057; H01L 23/06; H01L 23/08; H01L 23/10; H01L 23/452; H01L 23/4922; H01L 29/02; H01L 29/04; H01L 29/045; H01L 29/06; H01L 29/0603; H01L 29/0657; H01L 29/0665; H01L 29/0684
See application file for complete search history.

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FIG.1

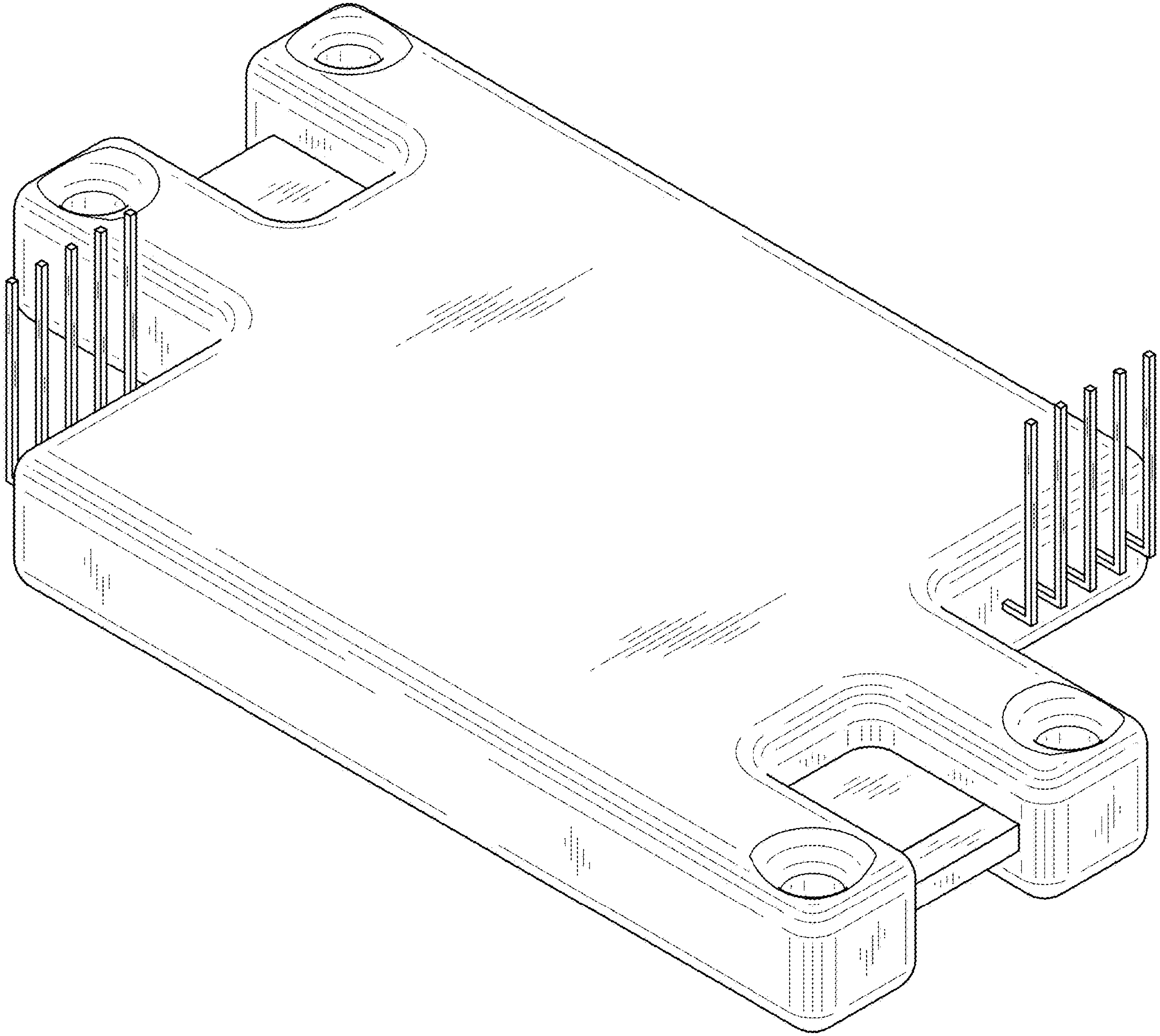
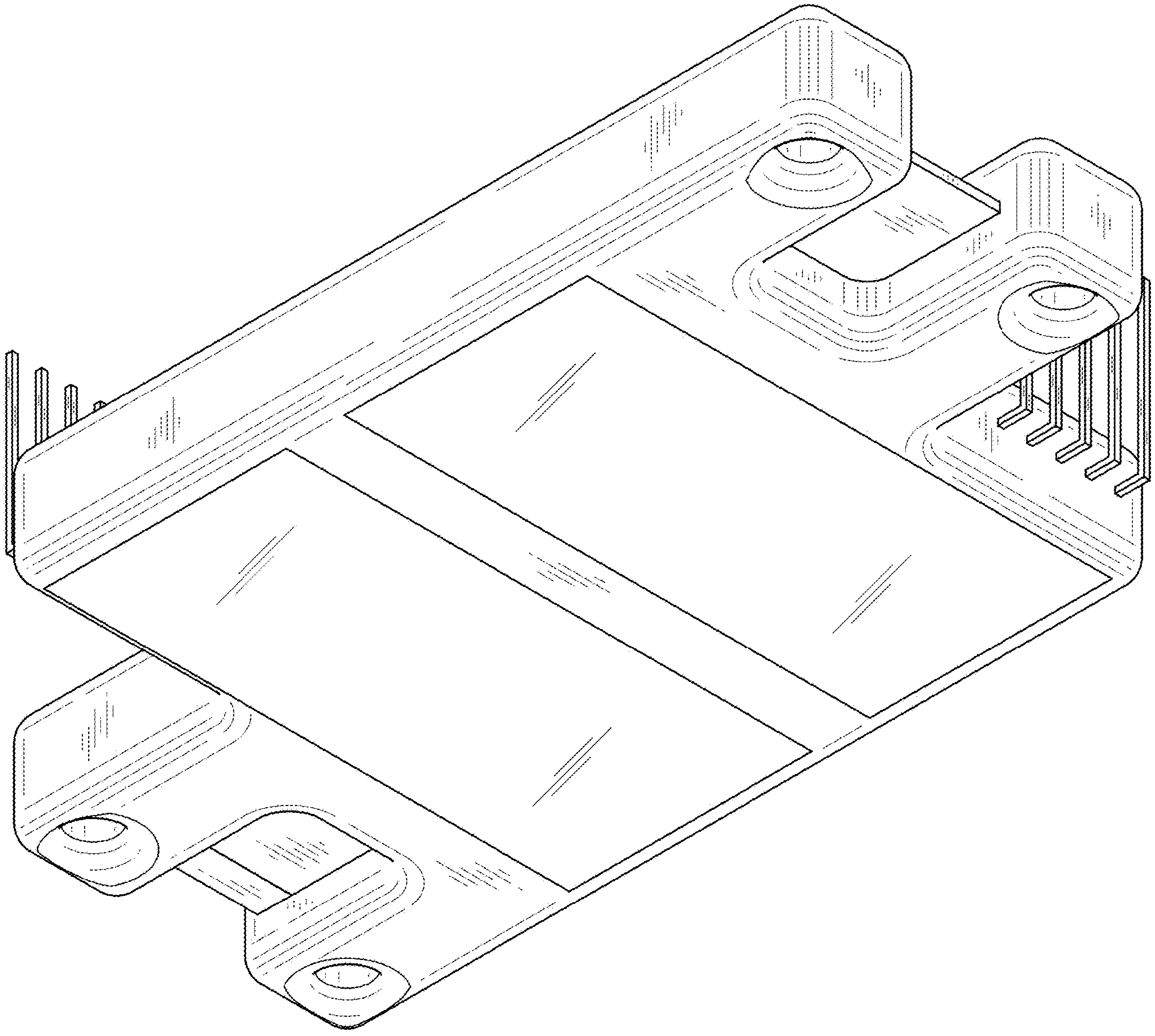


FIG.2



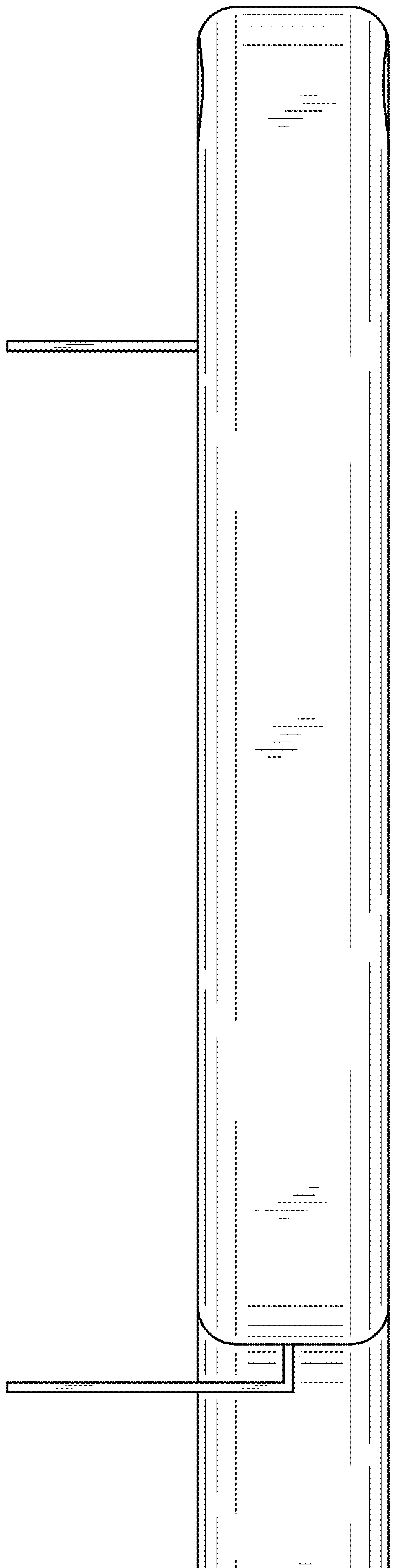


FIG.3

FIG.4

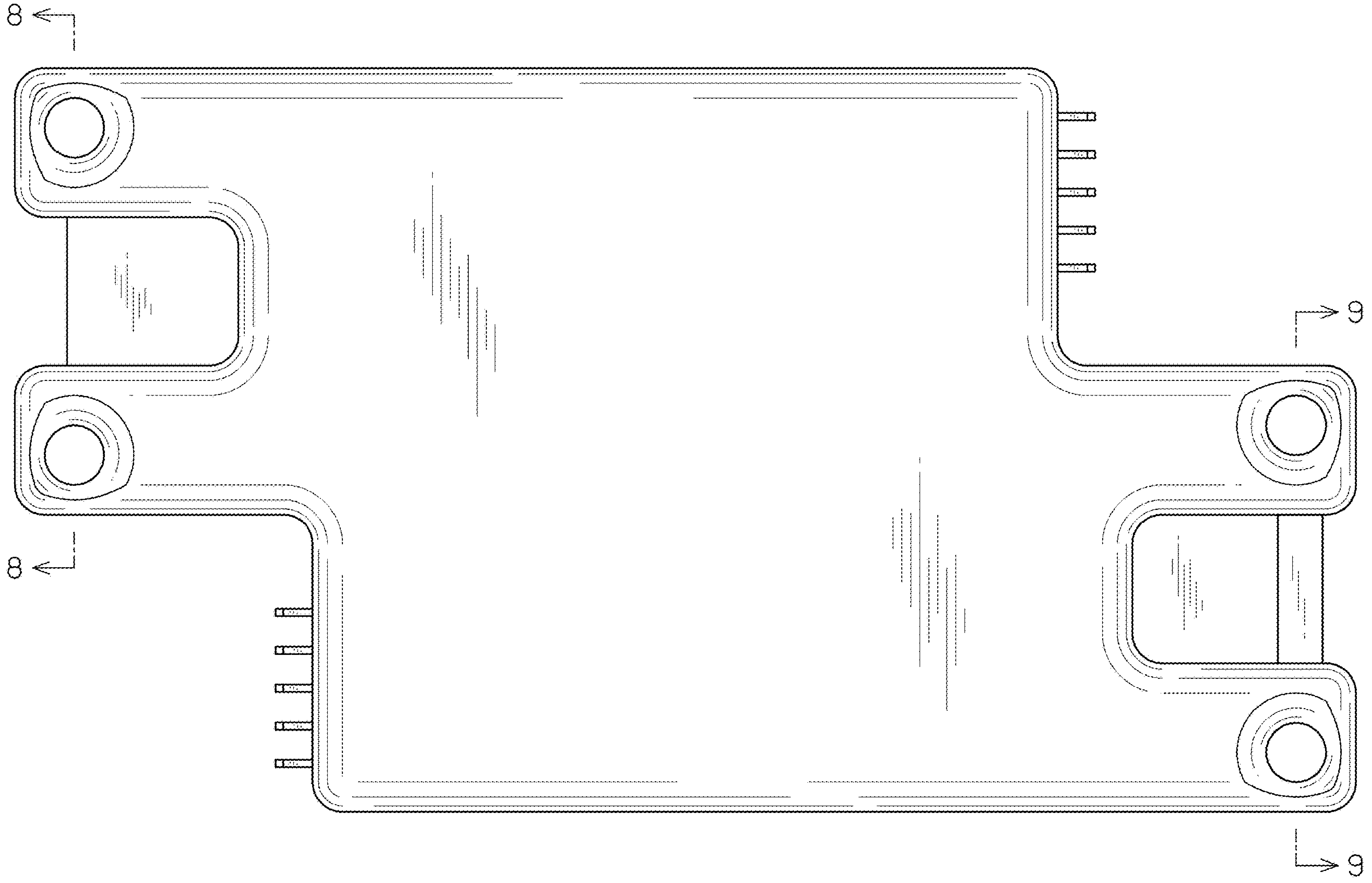


FIG.5

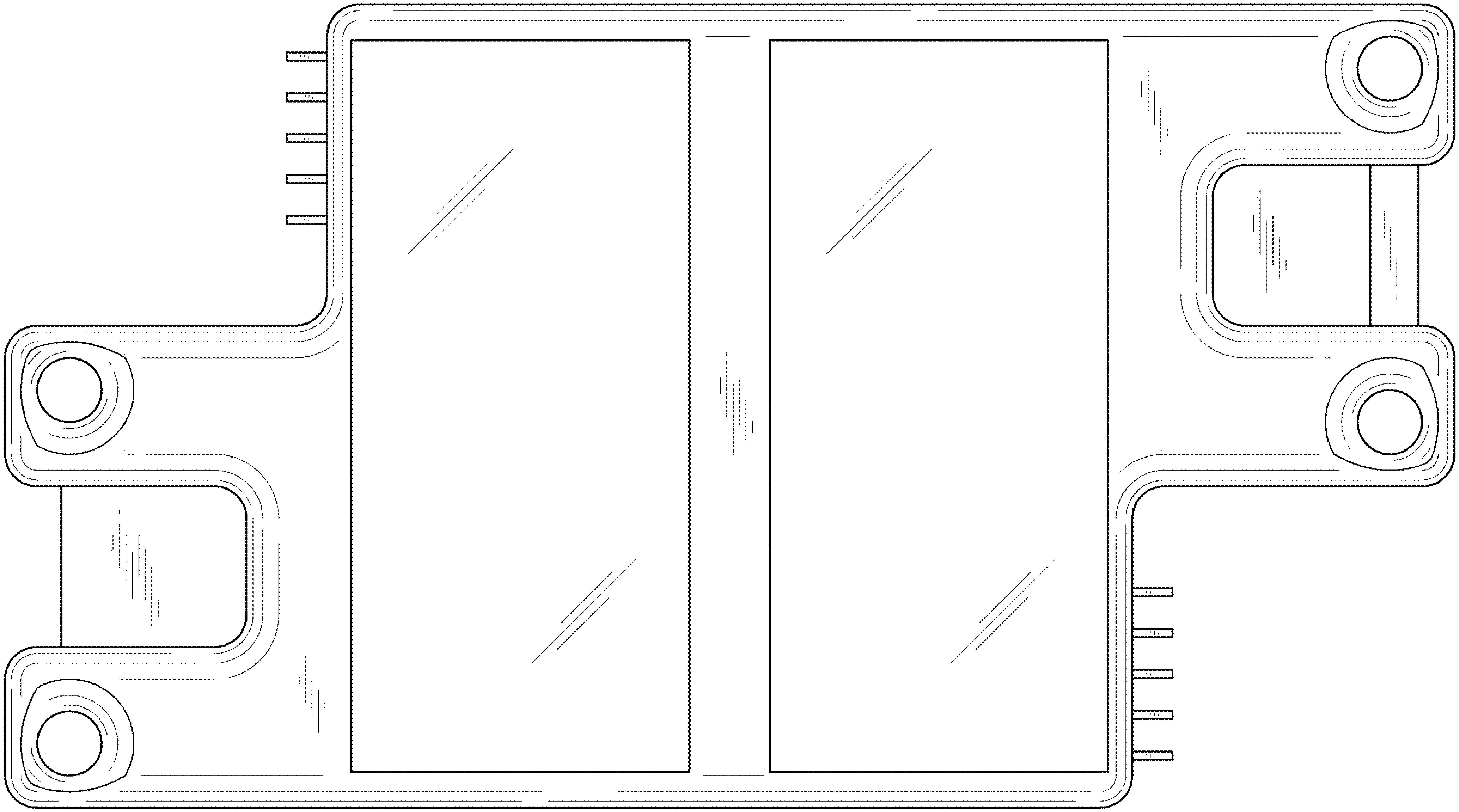


FIG.6

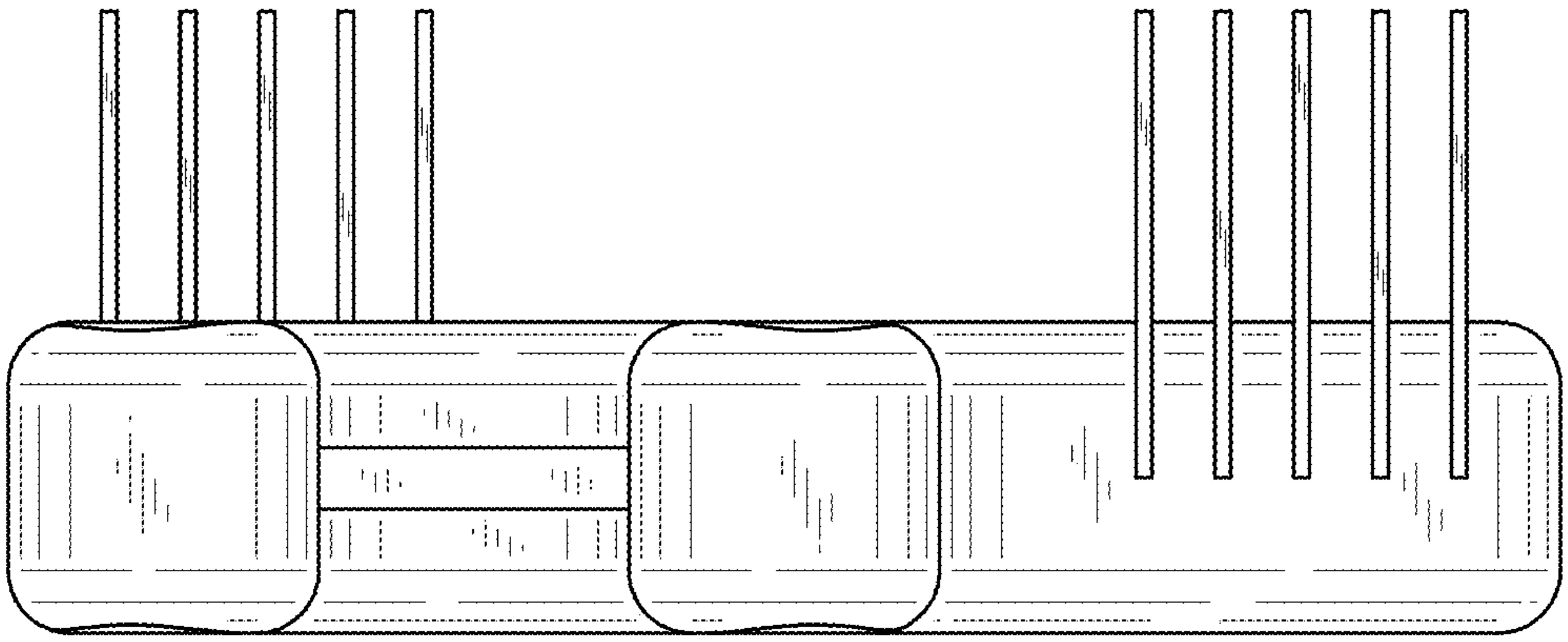


FIG.7

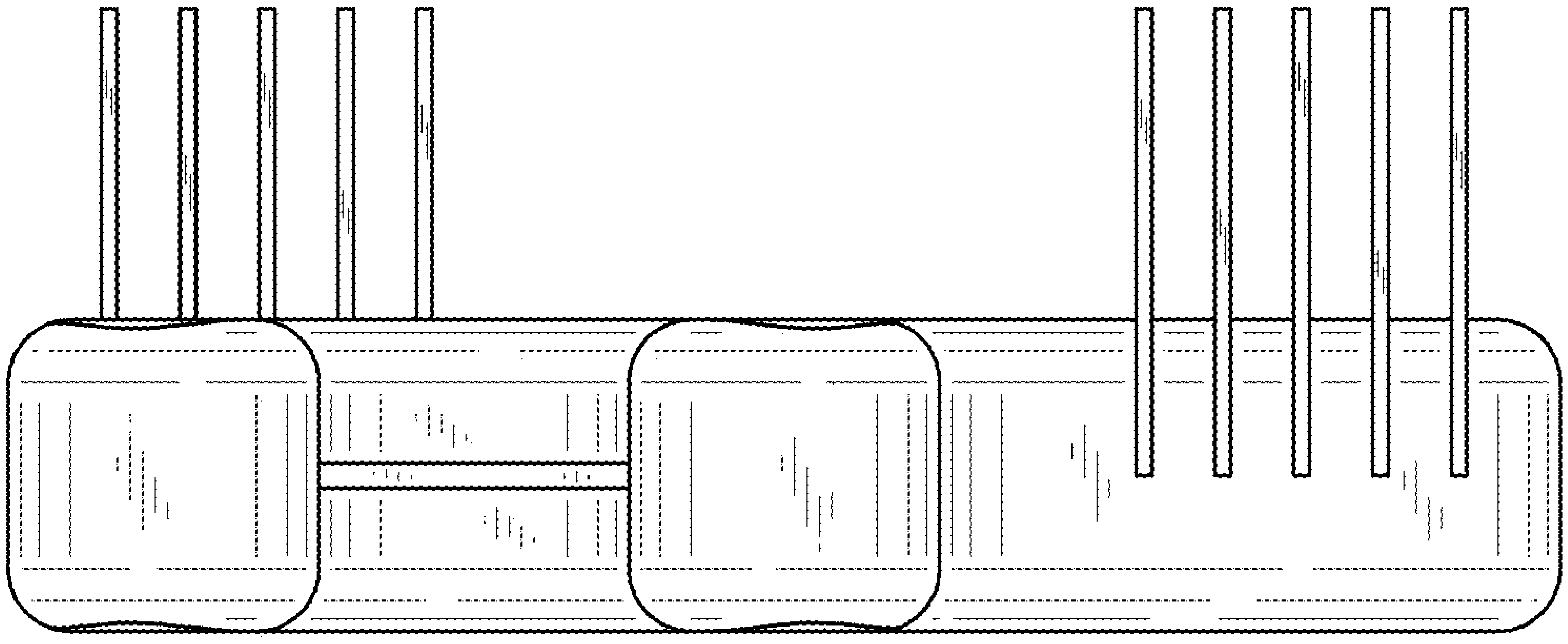


FIG.8

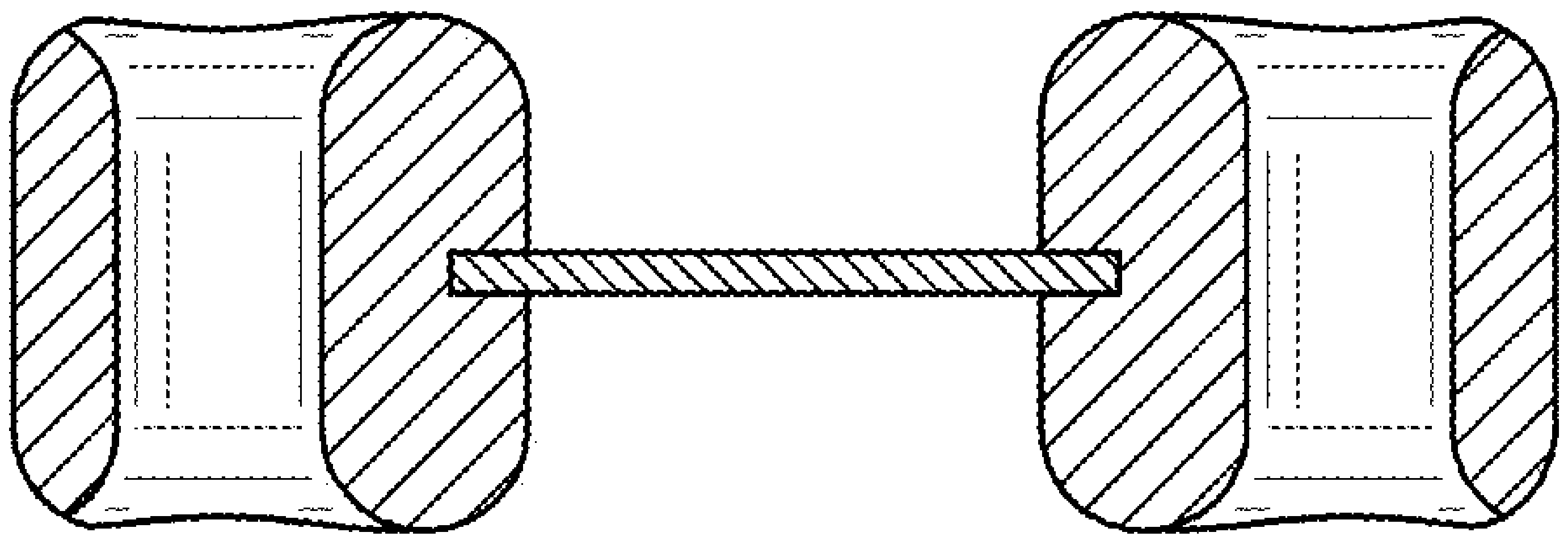
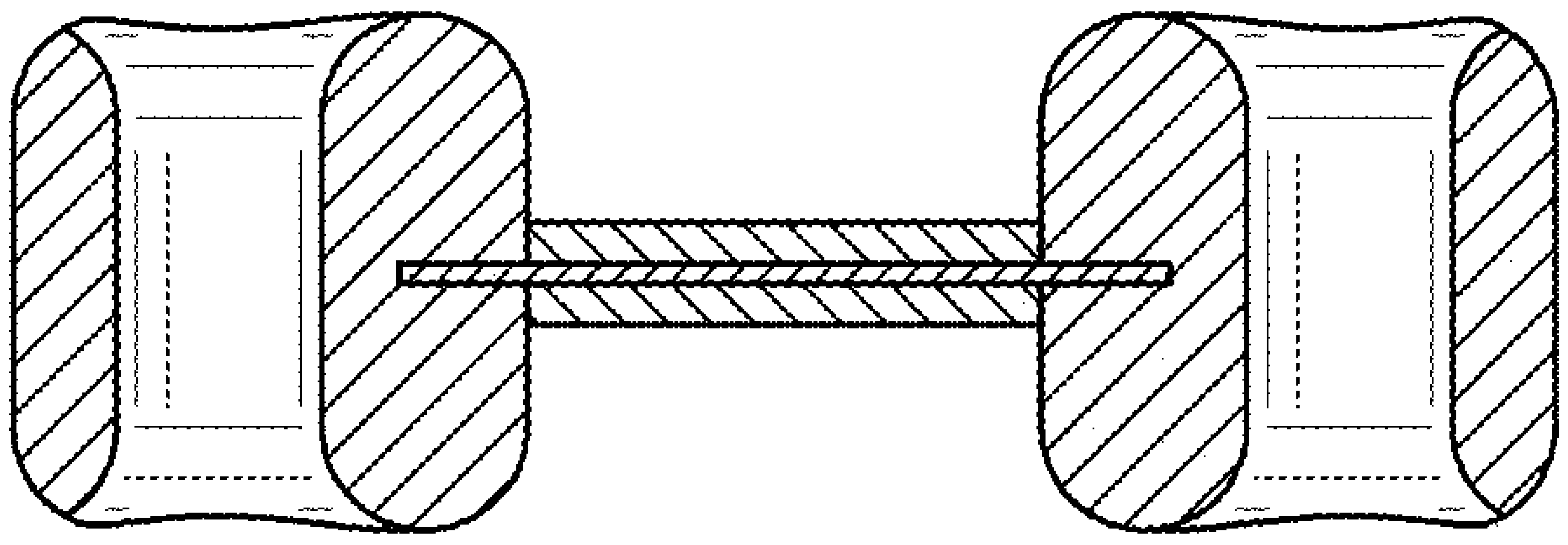


FIG.9



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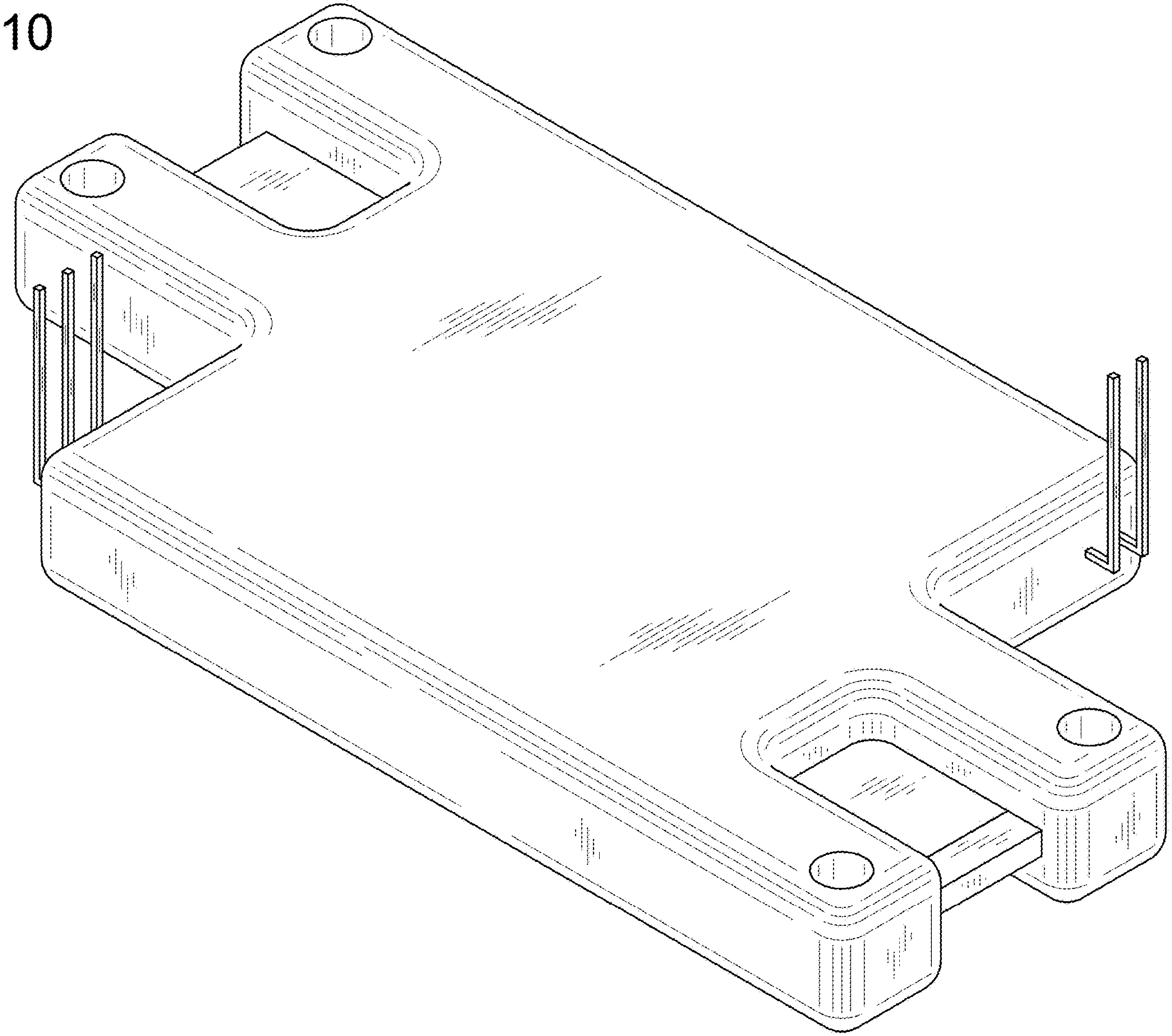

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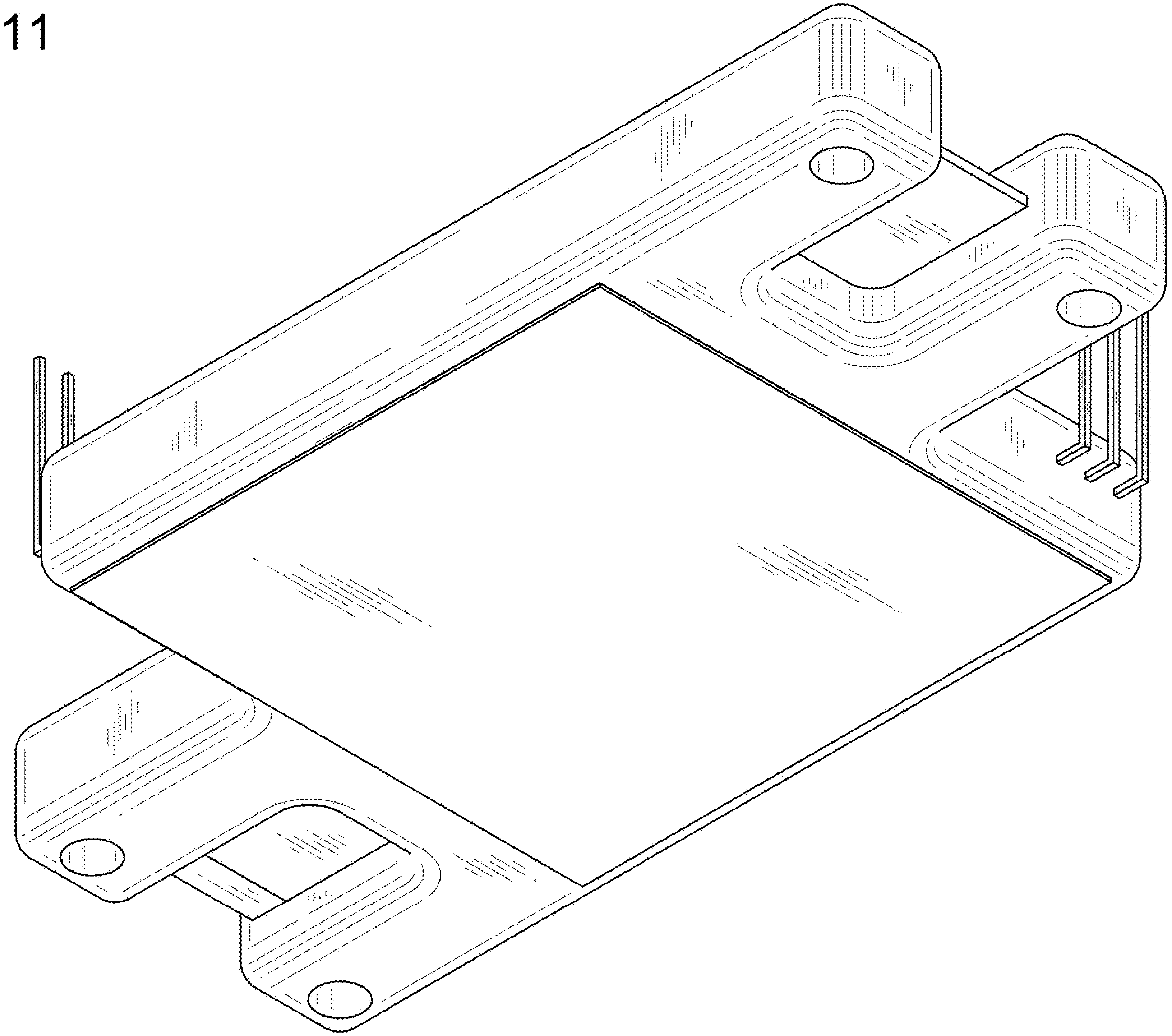
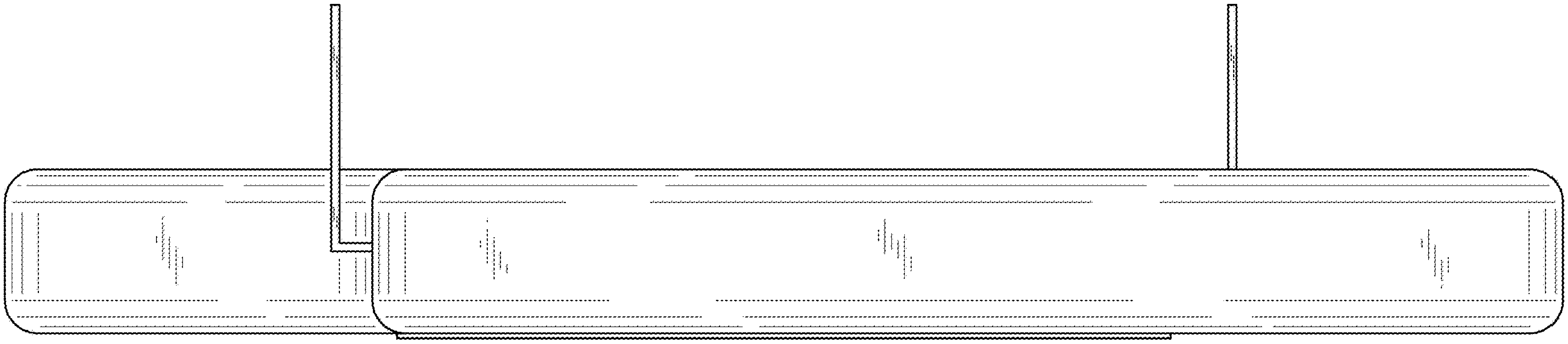


FIG.12



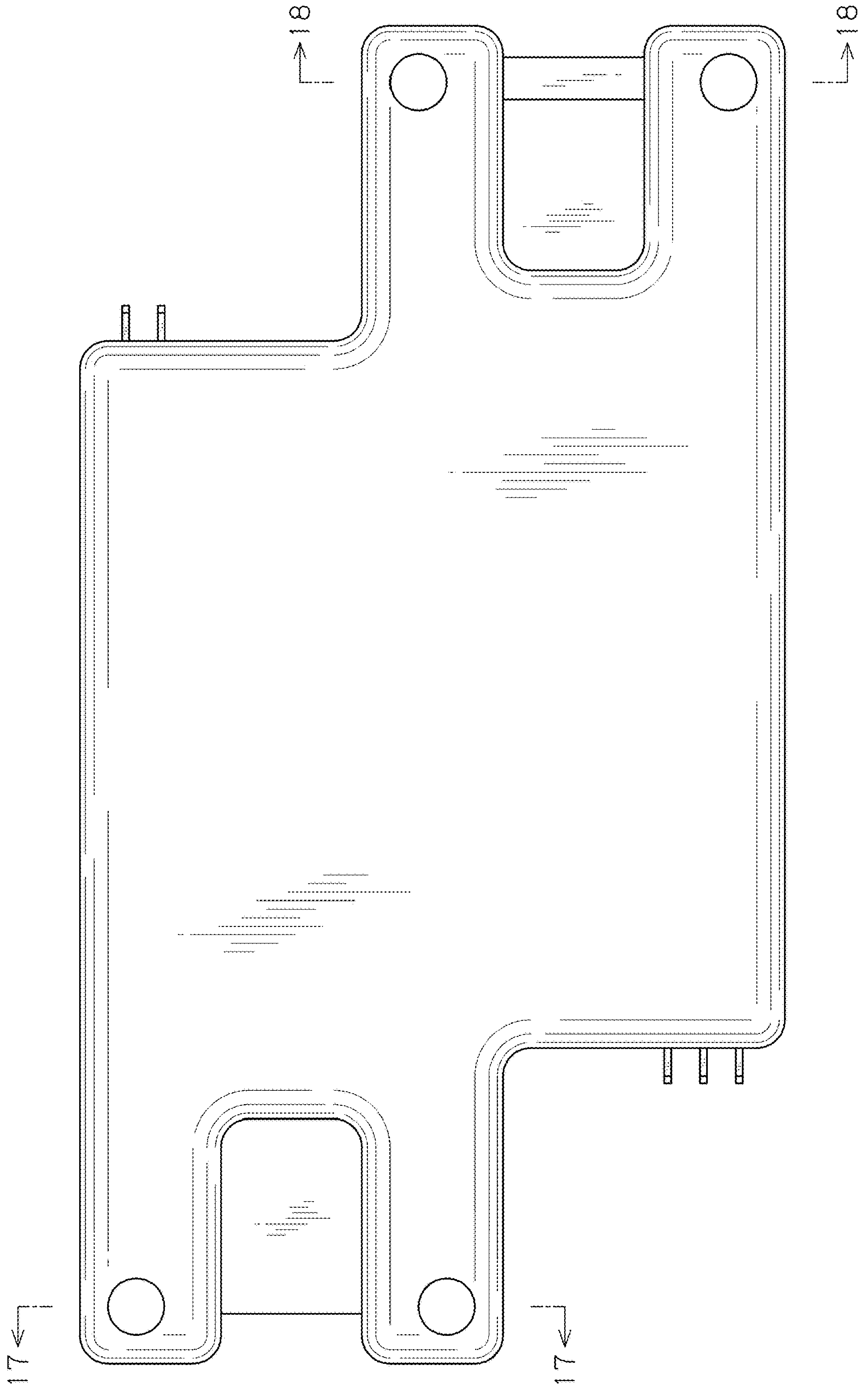


FIG.13

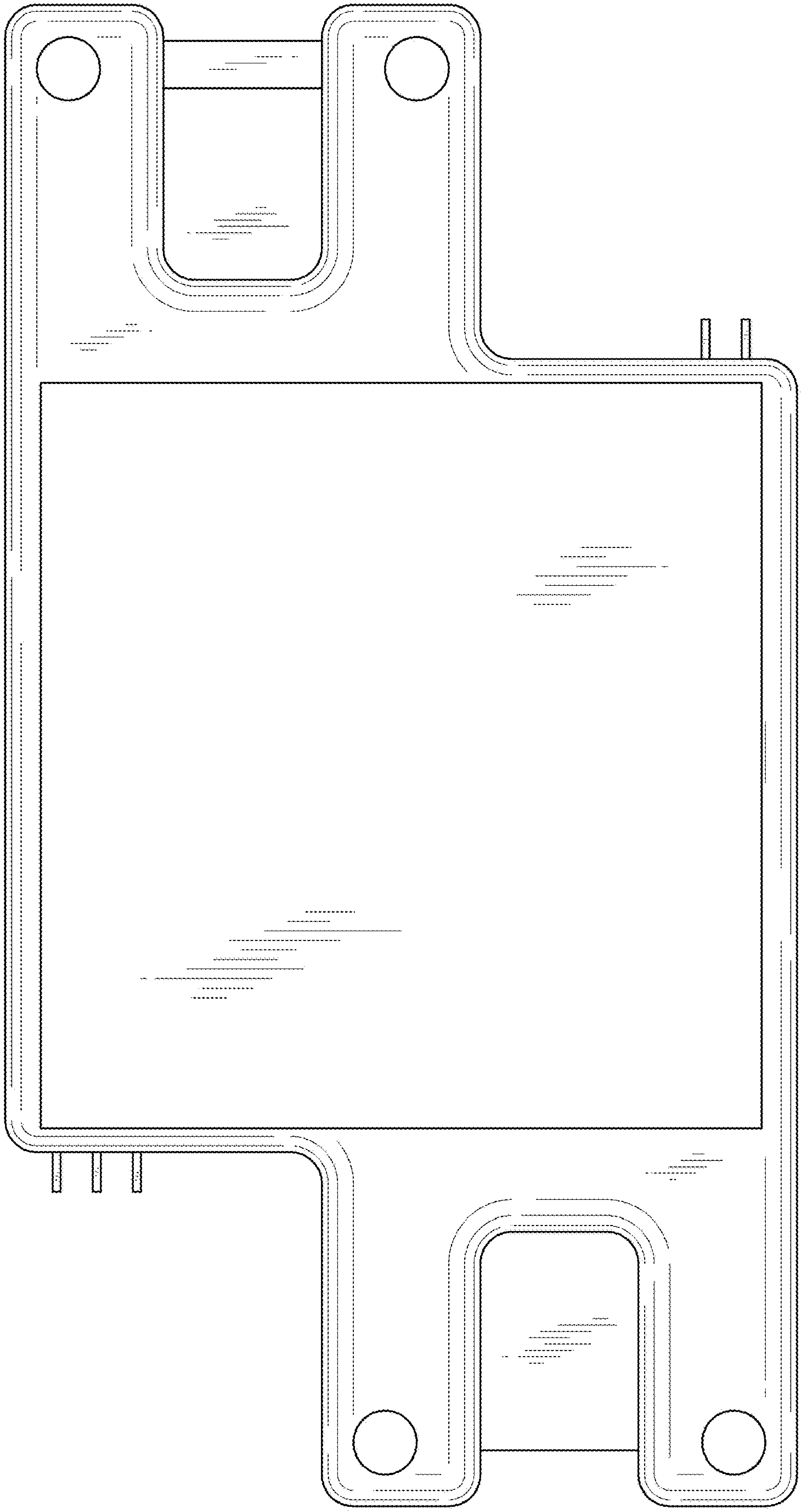


FIG.14

FIG.15

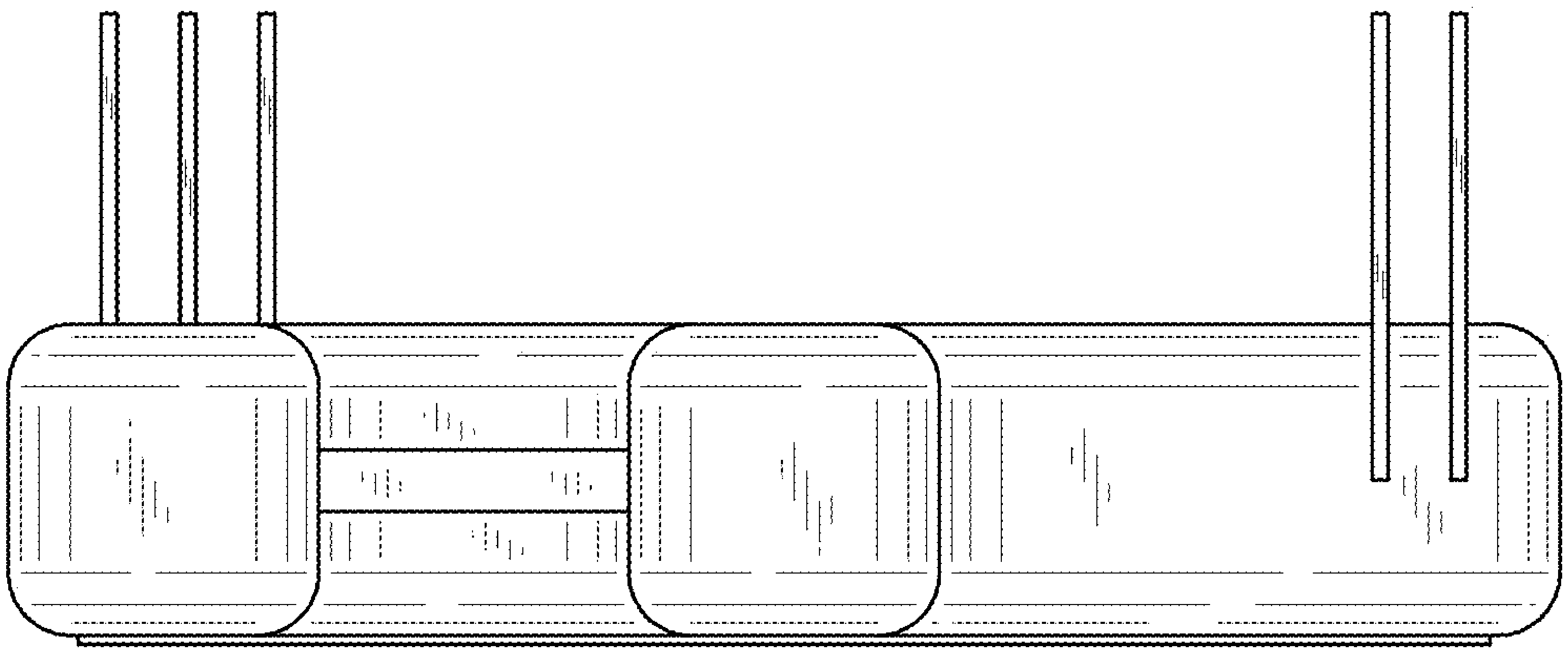


FIG.16

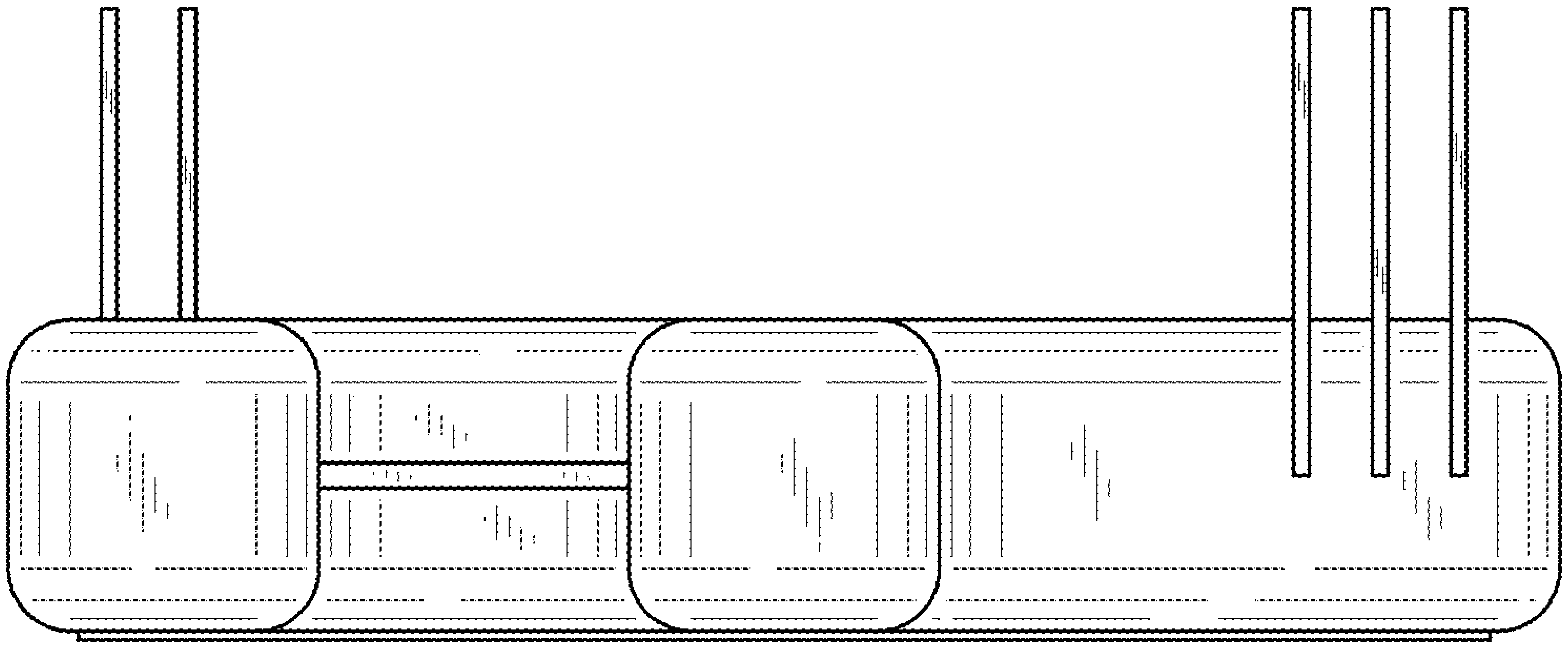


FIG.17

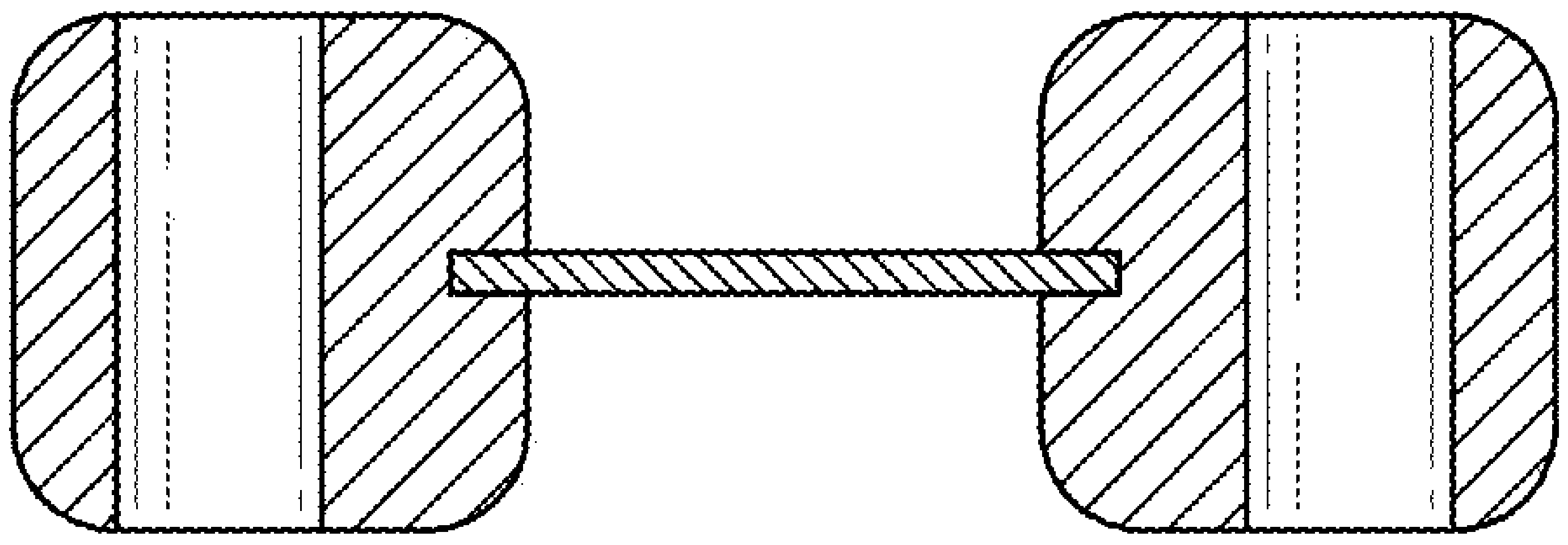


FIG.18