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**Hayashida et al.**

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(54) **ELECTRIC RELAY**

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(51) **LOC (10) Cl.** ..... **13-03**

(52) **U.S. Cl.**  
USPC ..... **D13/159**

(58) **Field of Classification Search**  
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D13/182, 184, 199  
CPC H01H 3/00; H01H 9/46; H01H 50/00; H01H  
50/02; H01H 50/54; H01H 50/56; H01H  
51/22; H01H 67/02; H01H 73/18; H01L  
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25/00  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D243,543 S \* 3/1977 Fadler ..... D13/182  
D251,840 S \* 5/1979 Fujita ..... D13/159  
5,353,201 A \* 10/1994 Maeda ..... H05K 9/0033  
174/362  
D358,804 S \* 5/1995 Siegel ..... D13/182

6,116,558 A \* 9/2000 Yano ..... H01R 13/443  
248/27.3  
D469,059 S \* 1/2003 Ando ..... D13/110  
D705,184 S \* 5/2014 Takahashi ..... D13/182  
2002/0036557 A1 \* 3/2002 Nakamura ..... H01H 9/40  
335/128  
2005/0242907 A1 \* 11/2005 Minowa ..... H01H 50/443  
335/129

(Continued)

**OTHER PUBLICATIONS**

OMRON General Purpose Relay, dated Mar. 17, 2015, [online],  
[site visited Dec. 3, 2016]. Available from Internet, <URL: <http://www.amazon.com/Omron-G7L-2A-TUB-CB-AC24-Insulation-QuickConnect-Terminal/dp/B005T743H0>>.\*

(Continued)

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Goldstein & Fox P.L.L.C.

(57) **CLAIM**

The ornamental design for an electric relay, as shown and described.

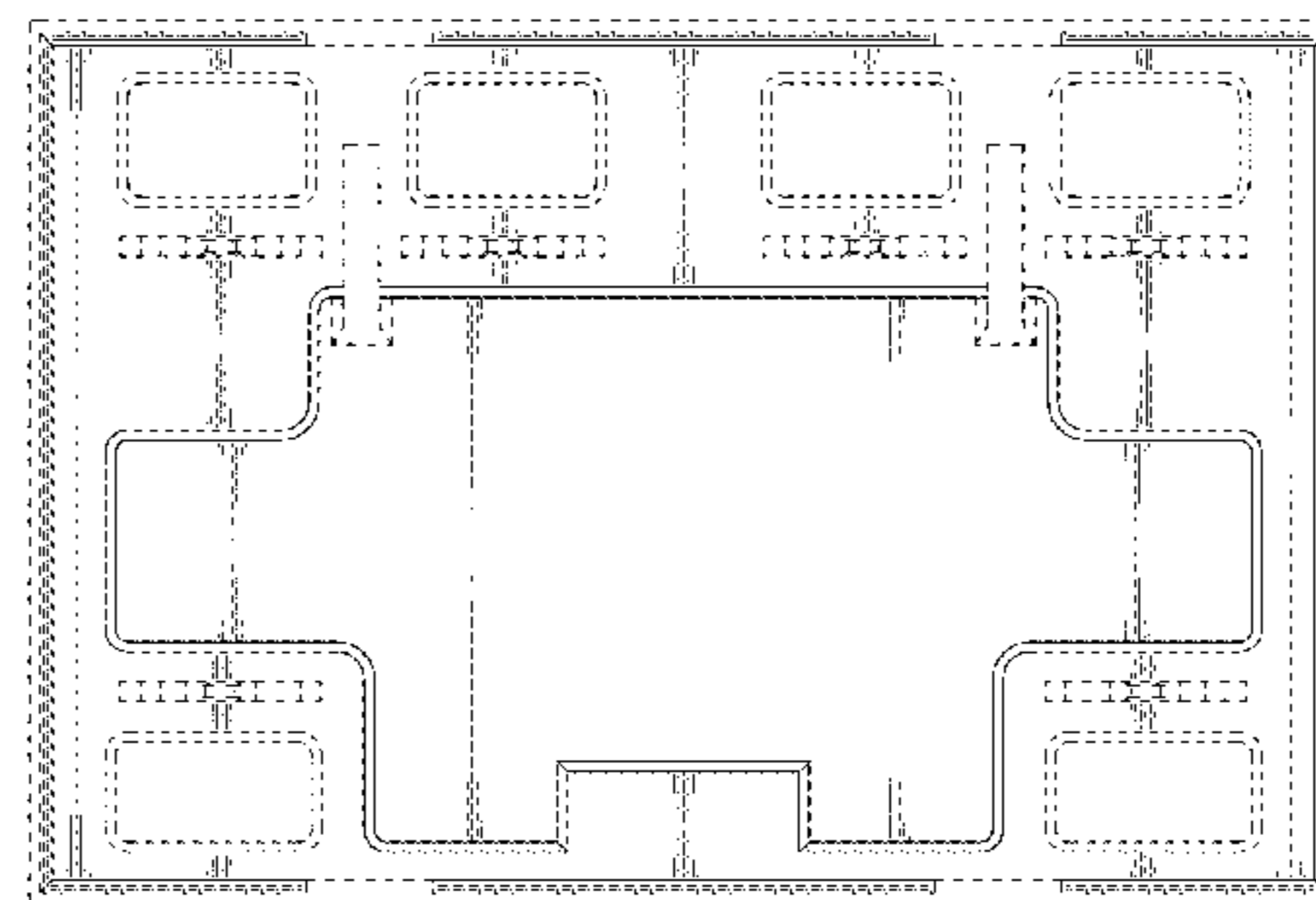
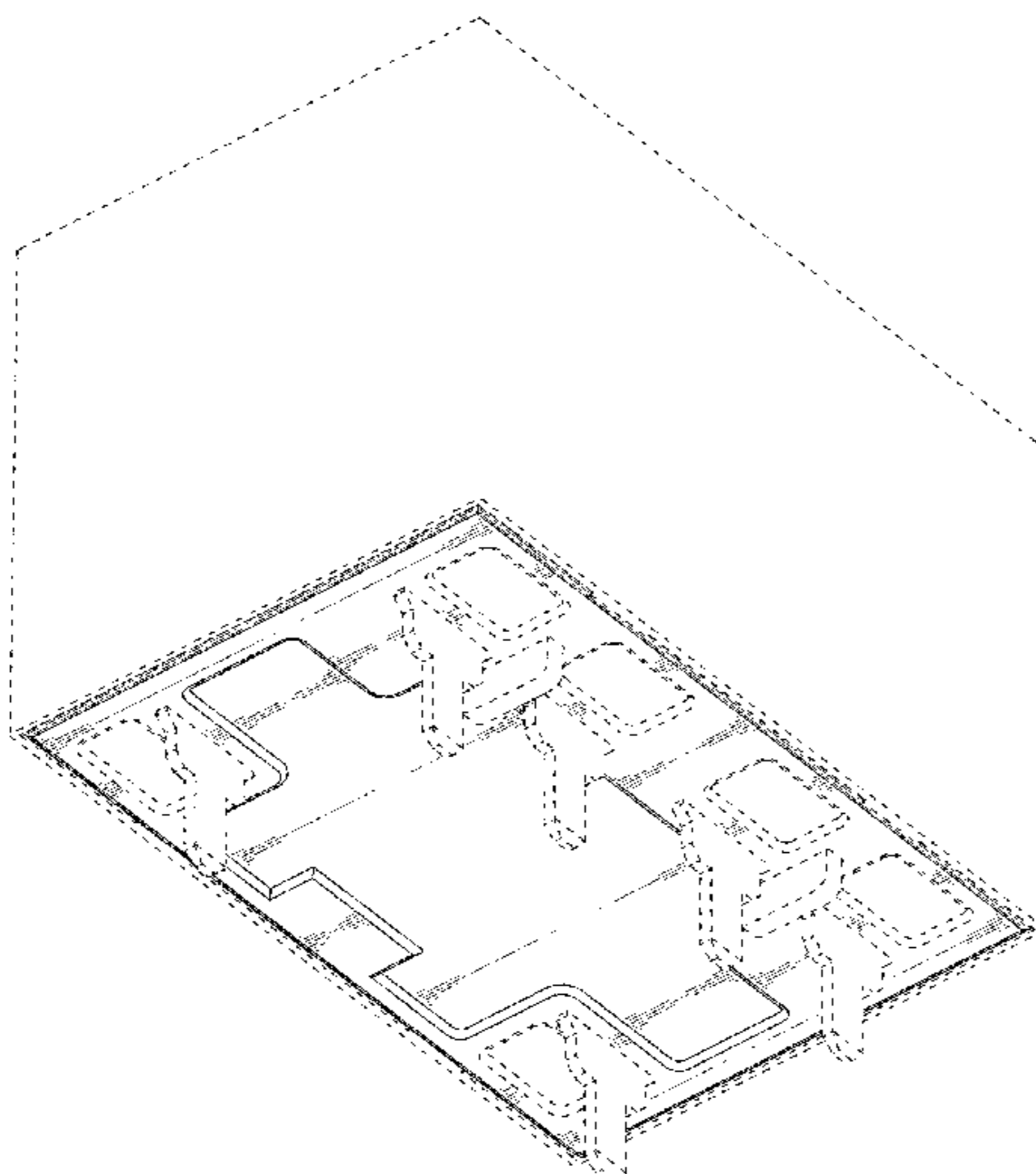
**DESCRIPTION**

FIG. 1 is a bottom perspective view of an electric relay showing the claimed design;  
FIG. 2 is a front view thereof;  
FIG. 3 is a rear view thereof;  
FIG. 4 is a left side view thereof;  
FIG. 5 is a right side view thereof;  
FIG. 6 is a top view thereof; and,  
FIG. 7 is a bottom view thereof.

The broken lines in the figures show portions of the electric relay that form no part of the claimed design.

The shade lines in the figures show contour and not surface ornamentation.

**1 Claim, 7 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

2013/0082806 A1\* 4/2013 Moriyama ..... H01H 50/026  
335/192  
2015/0042425 A1\* 2/2015 Sumino ..... H01H 50/643  
335/189  
2015/0235792 A1\* 8/2015 Takahashi ..... H01H 50/56  
335/127  
2015/0262777 A1\* 9/2015 Tsurusu ..... H01H 33/182  
335/201  
2016/0300673 A1\* 10/2016 Yamagata ..... H01H 33/182  
2016/0314923 A1\* 10/2016 Tsuneyoshi ..... H01H 9/0271

OTHER PUBLICATIONS

12 Volt Planet Relay Guide, dated Nov. 23, 2013, [online], [site visited Feb. 28, 2017]. Available from Internet, <URL: <http://www.12voltplanet.co.uk/relay-guide.html>>.\*  
Hobbytronics.com Relay 5V SPDT Sealed, dated Nov. 30, 2013, [online], [site visited Feb. 28, 2017]. Available from Internet, <URL: <http://www.hobbytronics.co.uk/relay-5v-spdt>>.\*  
Mojo Tone Relay Low Signal DPDT 5V, dated Jul. 9, 2014, [online], [site visited Feb. 28, 2017]. Available from Internet, <URL: <http://www.mojotone.com/amp-parts/Relay-Switching-Kits>>.\*

\* cited by examiner

FIG. 1

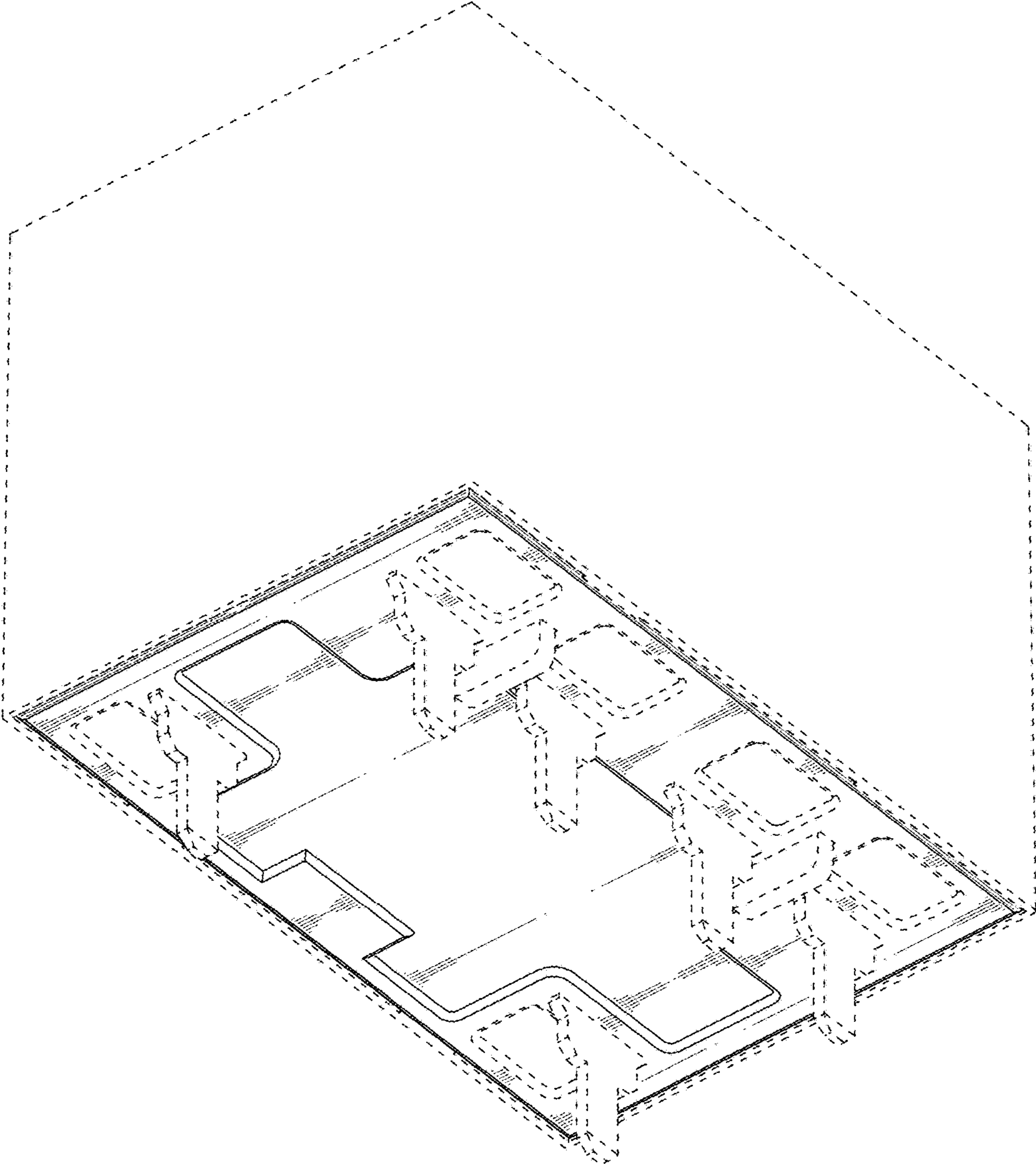
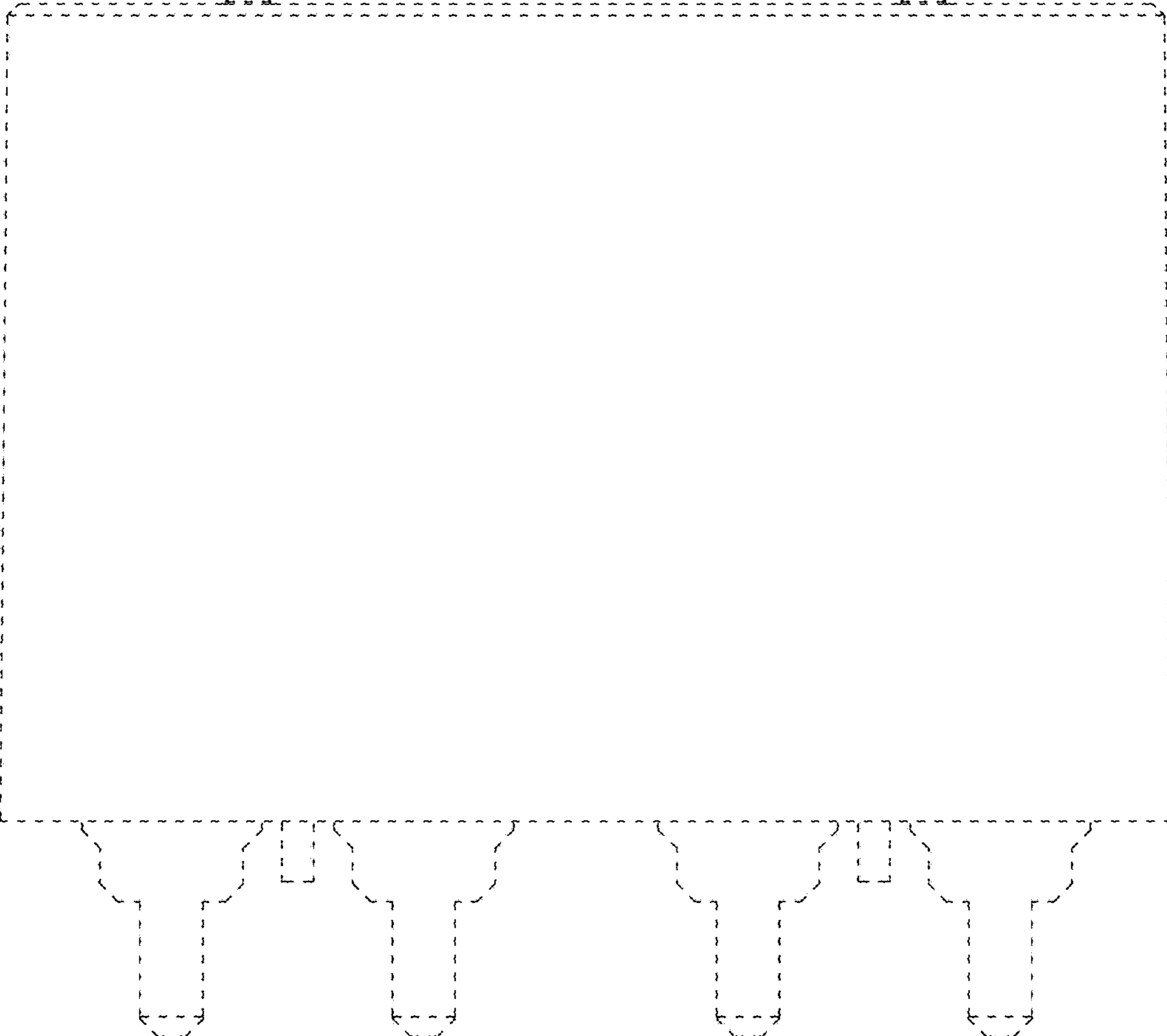
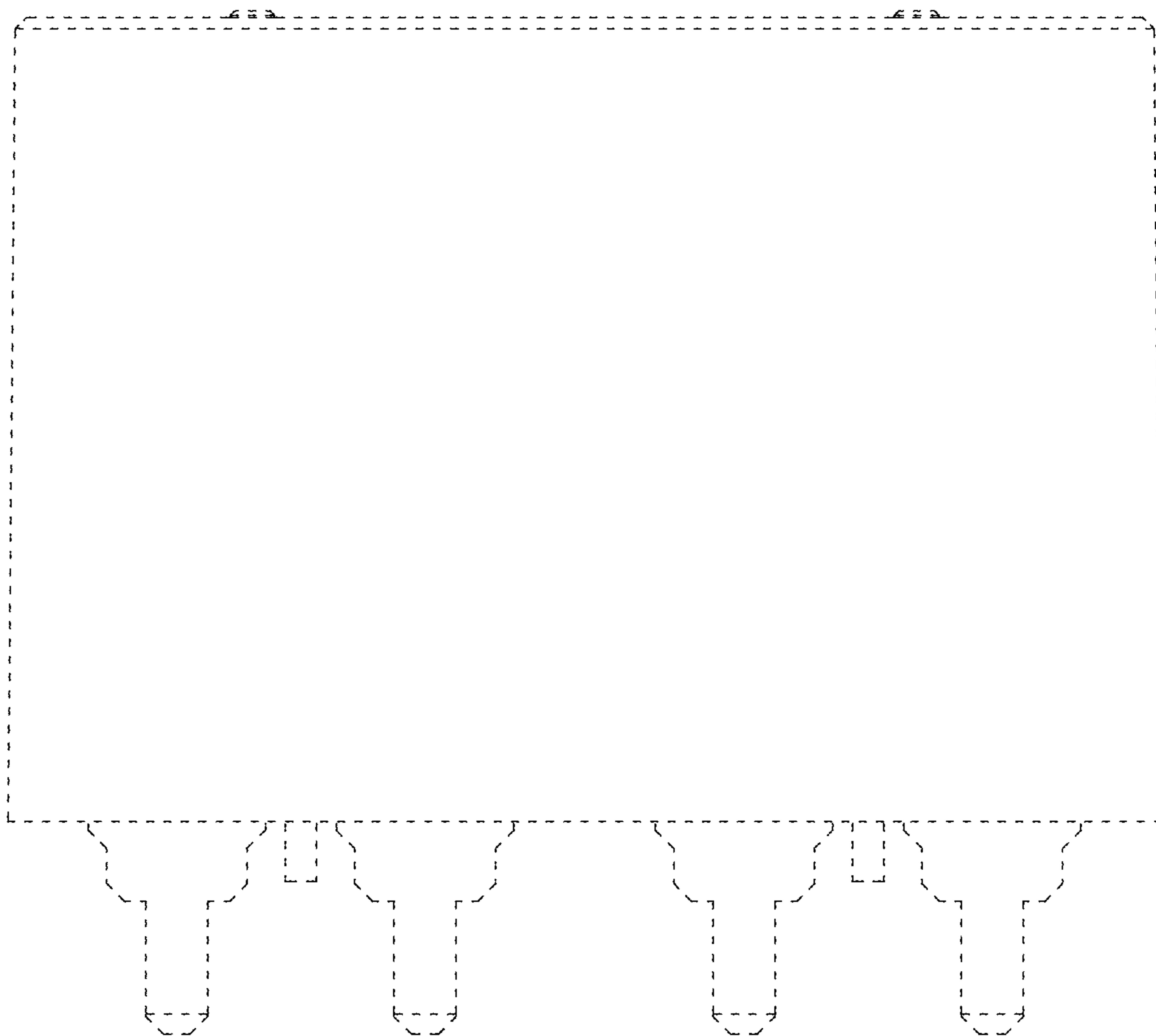


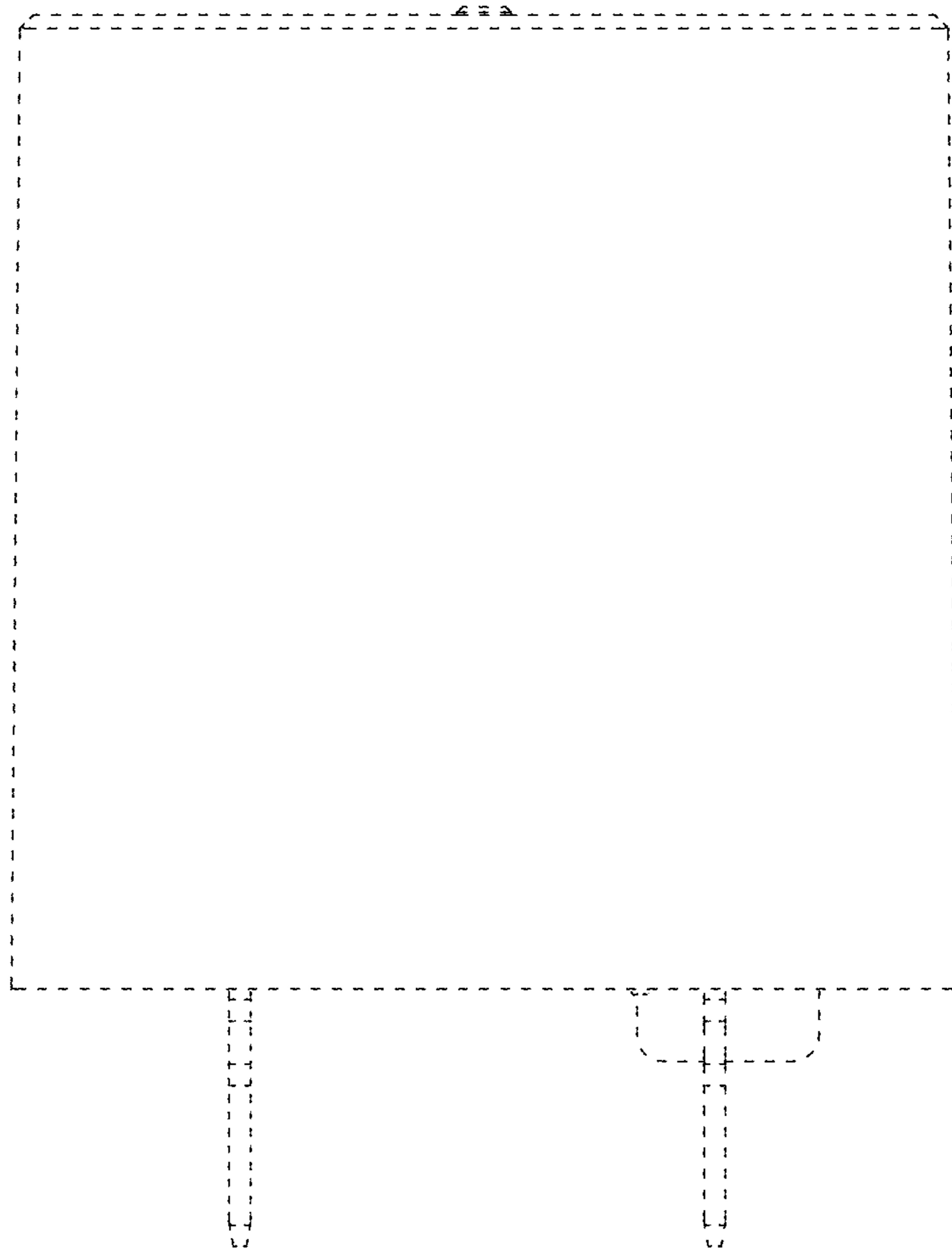
FIG. 2



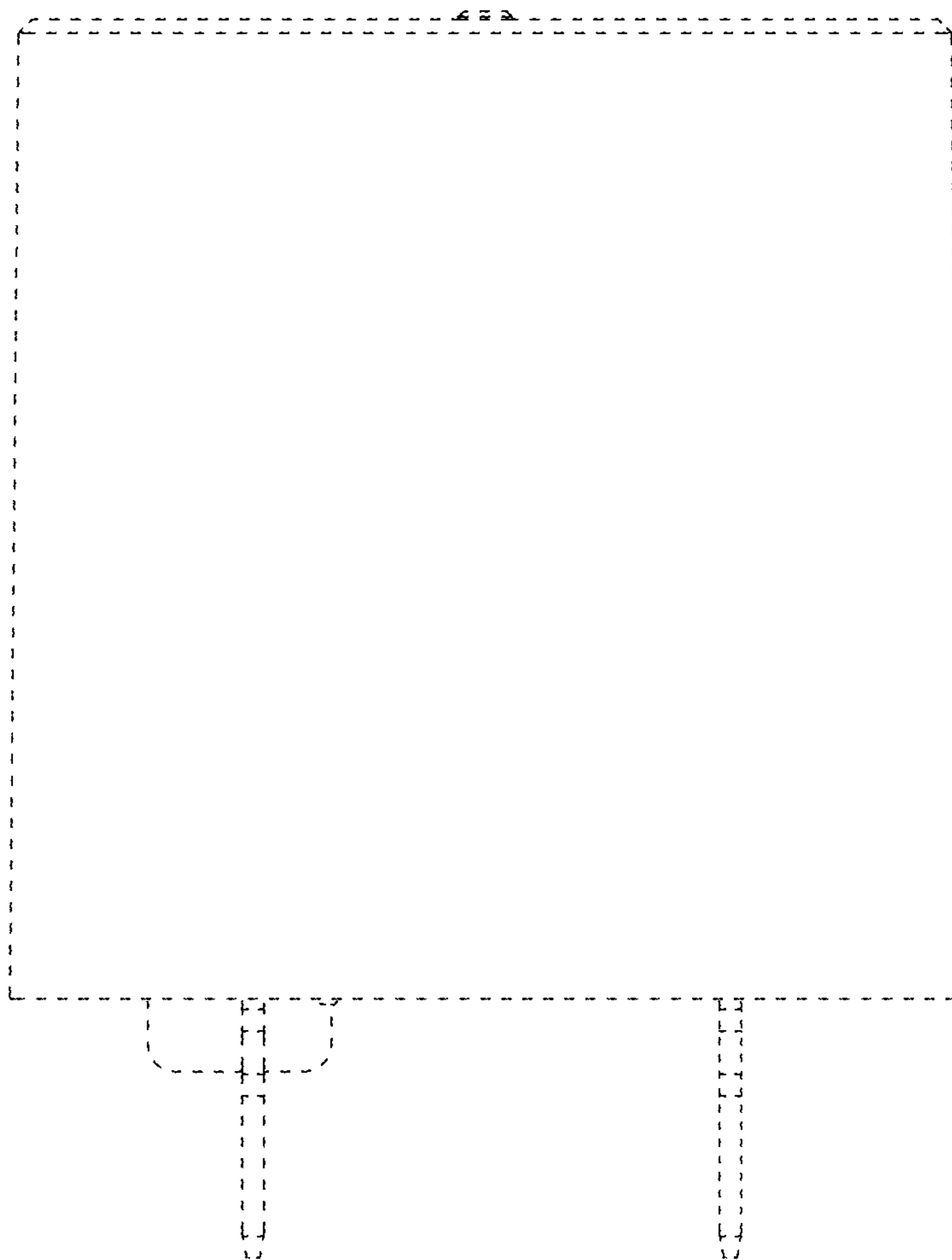
**FIG. 3**



**FIG. 4**



**FIG. 5**



**FIG. 6**

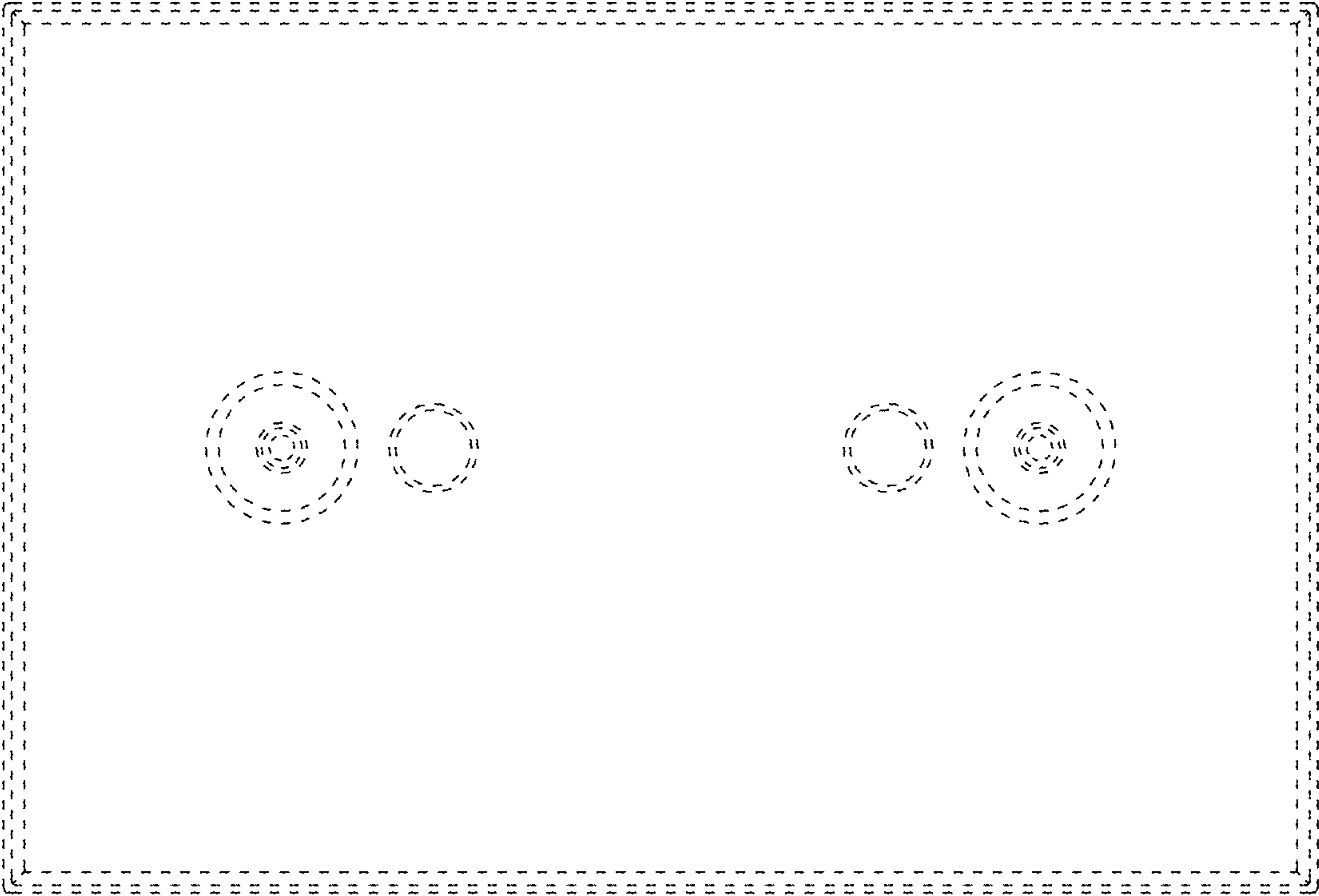




FIG. 7

