



US00D824850S

(12) **United States Design Patent** (10) **Patent No.:** **US D824,850 S**
Kojima et al. (45) **Date of Patent:** **** Aug. 7, 2018**

(54) **PORTABLE BATTERY CHARGER WITH SOLAR CELLS**

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(73) Assignee: **ZEON CORPORATION**, Chiyoda-ku, Tokyo (JP)

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

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(22) Filed: **Nov. 26, 2015**

(30) **Foreign Application Priority Data**

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May 29, 2015 (JP) 2015-012067
May 29, 2015 (JP) 2015-012068

(51) **LOC (11) Cl.** **13-02**

(52) **U.S. Cl.**
USPC **D13/107; D13/102**

(58) **Field of Classification Search**
USPC D13/102-110, 118-119, 184, 199;
D14/356, 432

(Continued)

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(57) **CLAIM**

The ornamental design for a portable battery charger with solar cells, as shown and described.

DESCRIPTION

FIG. 1 is a front view of a first embodiment of a portable battery charger with solar cells showing our new design;

FIG. 2 is a top view thereof;

FIG. 3 is a right side view thereof;

FIG. 4 is a bottom view thereof;

FIG. 5 is an enlarged sectional view taken along line 5-5 in FIG. 1;

FIG. 6 is a front view showing the solar cells in a deployed state;

FIG. 7 is a top view showing the deployed state;

FIG. 8 is a right side view showing the deployed state;

FIG. 9 is a left side view showing the deployed state;

FIG. 10 is a rear view showing the deployed state;

FIG. 11 is a bottom view showing the deployed state;

FIG. 12 is a front view of a second embodiment of the portable battery charger with solar cells showing our new design;

FIG. 13 is a top view thereof;

FIG. 14 is a right side view thereof;

FIG. 15 is a bottom view thereof;

FIG. 16 is an enlarged sectional view taken along line 16-16 in FIG. 12;

FIG. 17 is a front view showing the solar cells in a deployed state;

FIG. 18 is a top view showing the deployed state;

FIG. 19 is a right side view showing the deployed state;

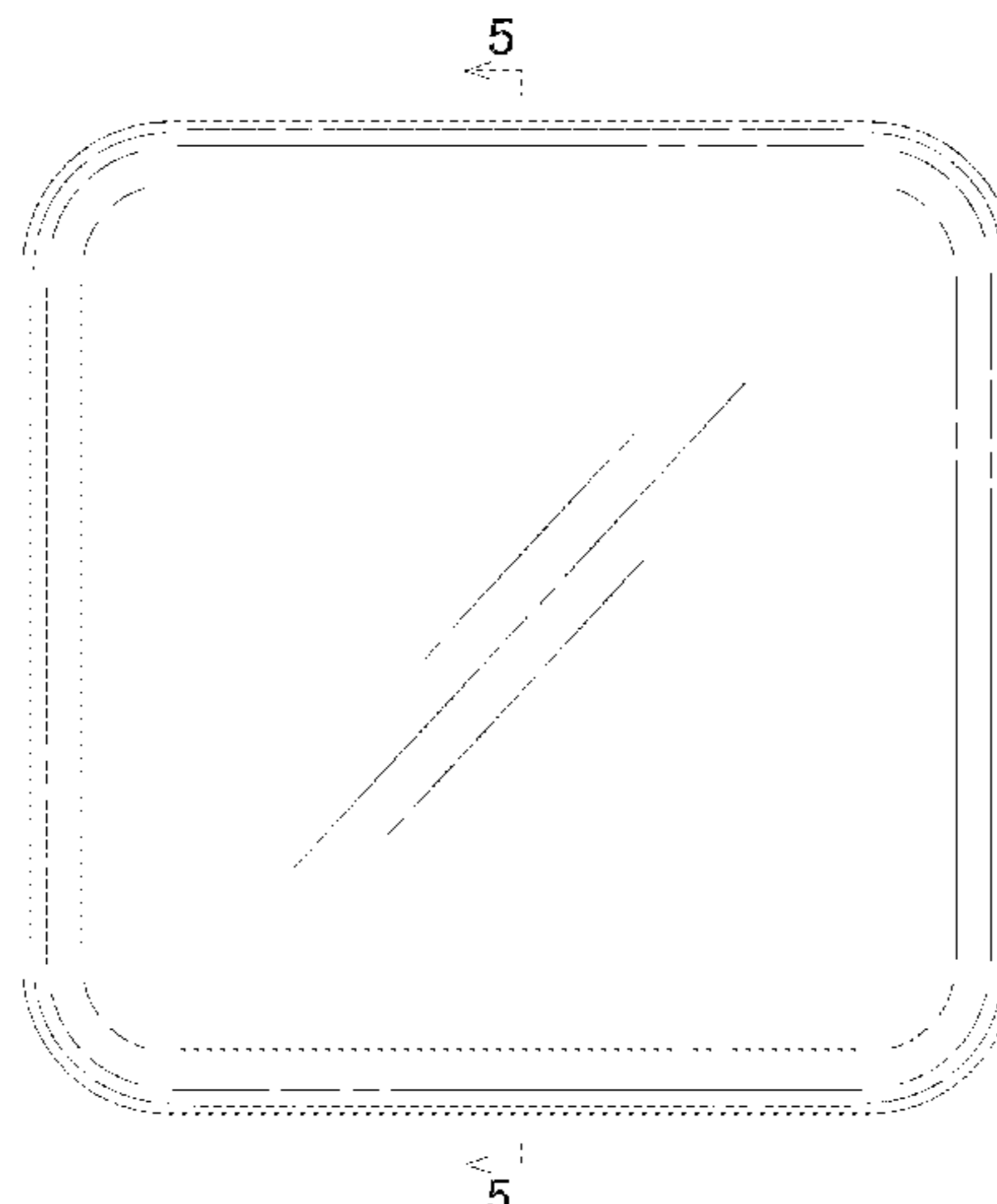
FIG. 20 is a left side view showing the deployed state;

FIG. 21 is a rear view showing the deployed state; and,

FIG. 22 is a bottom view showing the deployed state.

The broken lines in the figures depict portions of the article which form no part of the claimed design.

1 Claim, 22 Drawing Sheets



(58) **Field of Classification Search**

CPC Y02E 60/10; Y02E 60/12; Y02E 60/122;
Y02E 60/124; Y02E 60/50; Y02E 10/50;
Y02E 10/47; Y02E 10/547; Y02E 10/52;
H01M 2/02; H01M 2/022; H01M 2/0202;
H01M 2/0207; H01M 2/0212; H01M
2/1061; H01M 2/1022; H01M 2/1055;
H01M 2/1066; H01M 2/105; H01M 2/20;
H01M 2/204; H01M 2/206; H01M 10/44;
H01M 10/46; H01M 10/465; H01M
10/482; H01M 10/425; H01M 2200/30;
H01M 2250/30; H01M 2250/40; H02J
7/00; H02J 7/0003; H02J 7/0011; H02J
7/0013; H02J 7/0054; H02J 7/0055; H02J
7/0057; H02J 2007/0062; H02J 7/025;
H02J 7/0042; H02J 7/0044; H02J 7/0045;
H02S 10/40; H02S 30/20; H02S 40/34;
Y02T 90/14; Y02T 90/122; Y02T 90/128;

Y02T 90/163; H01F 38/14; H01R
13/6675; B60L 11/182; Y02P 70/521

See application file for complete search history.

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FIG. 1

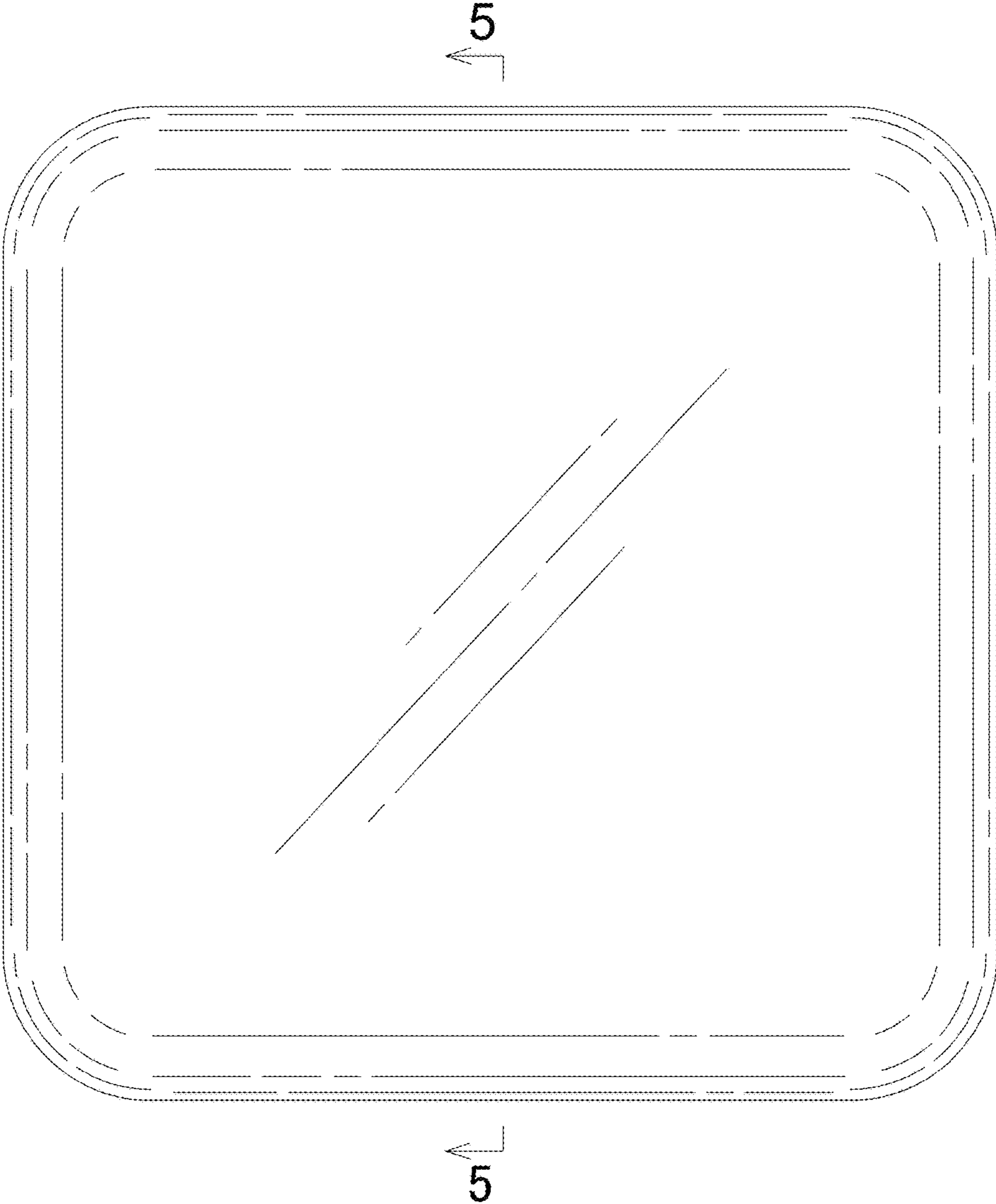


FIG. 2

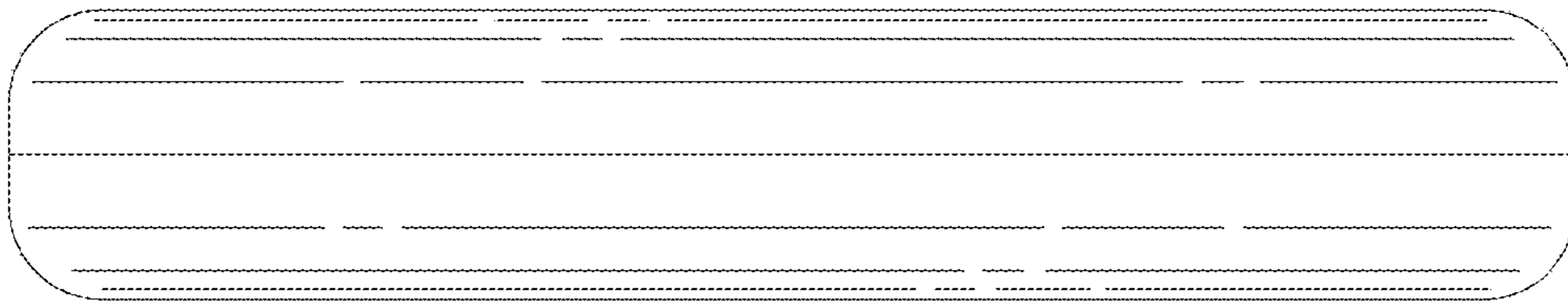


FIG. 3

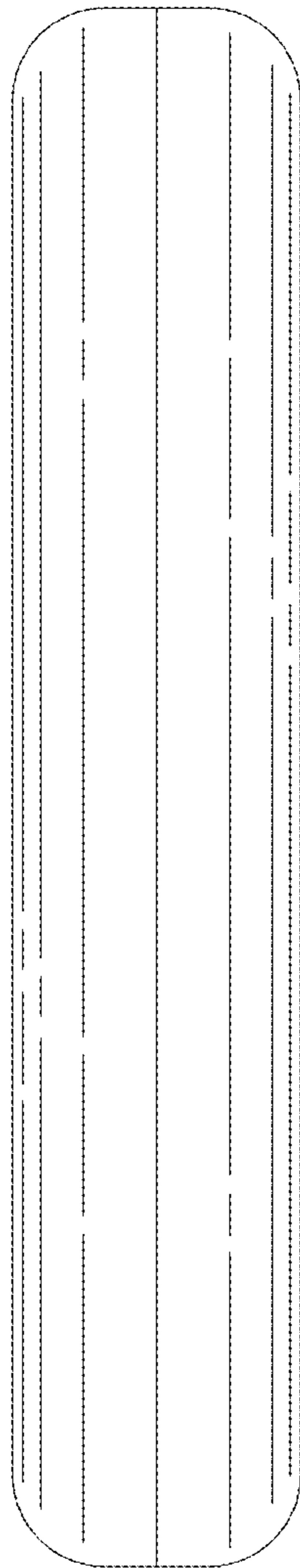


FIG. 4

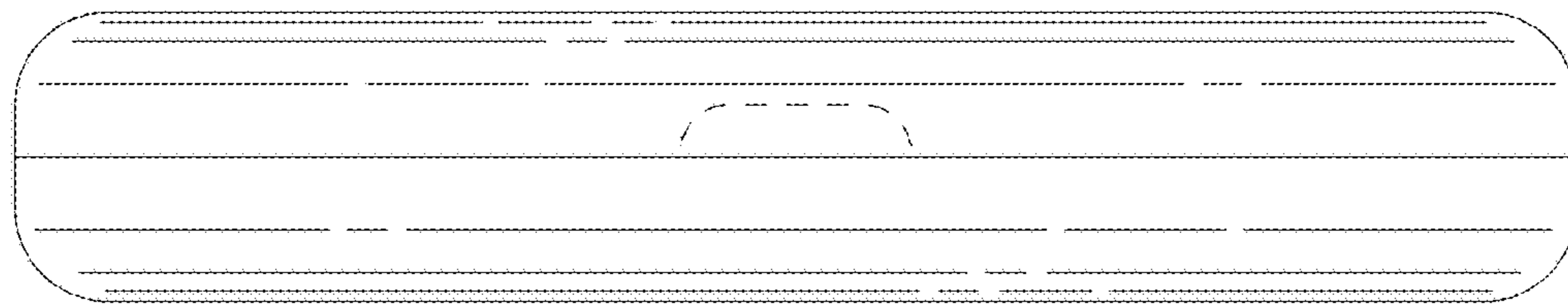


FIG. 5

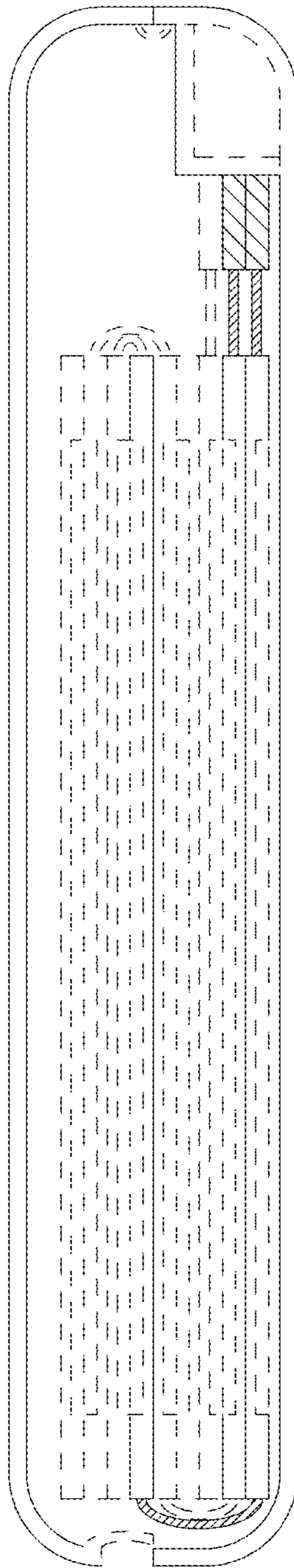


FIG. 6

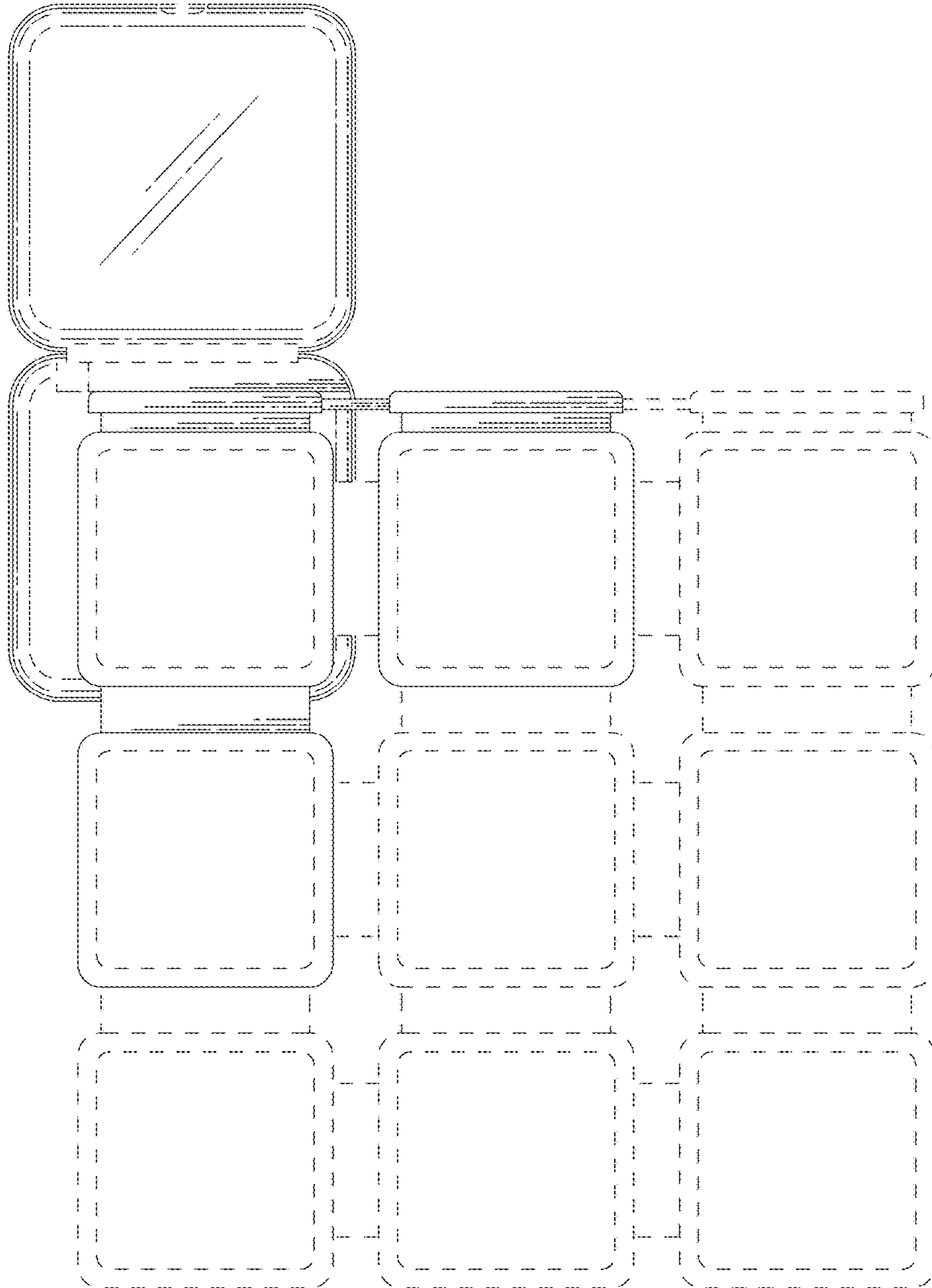


FIG. 7



FIG. 8

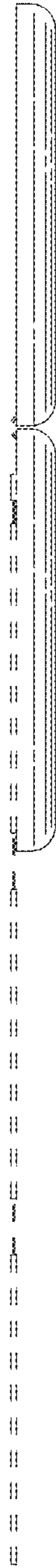


FIG. 9



FIG. 10

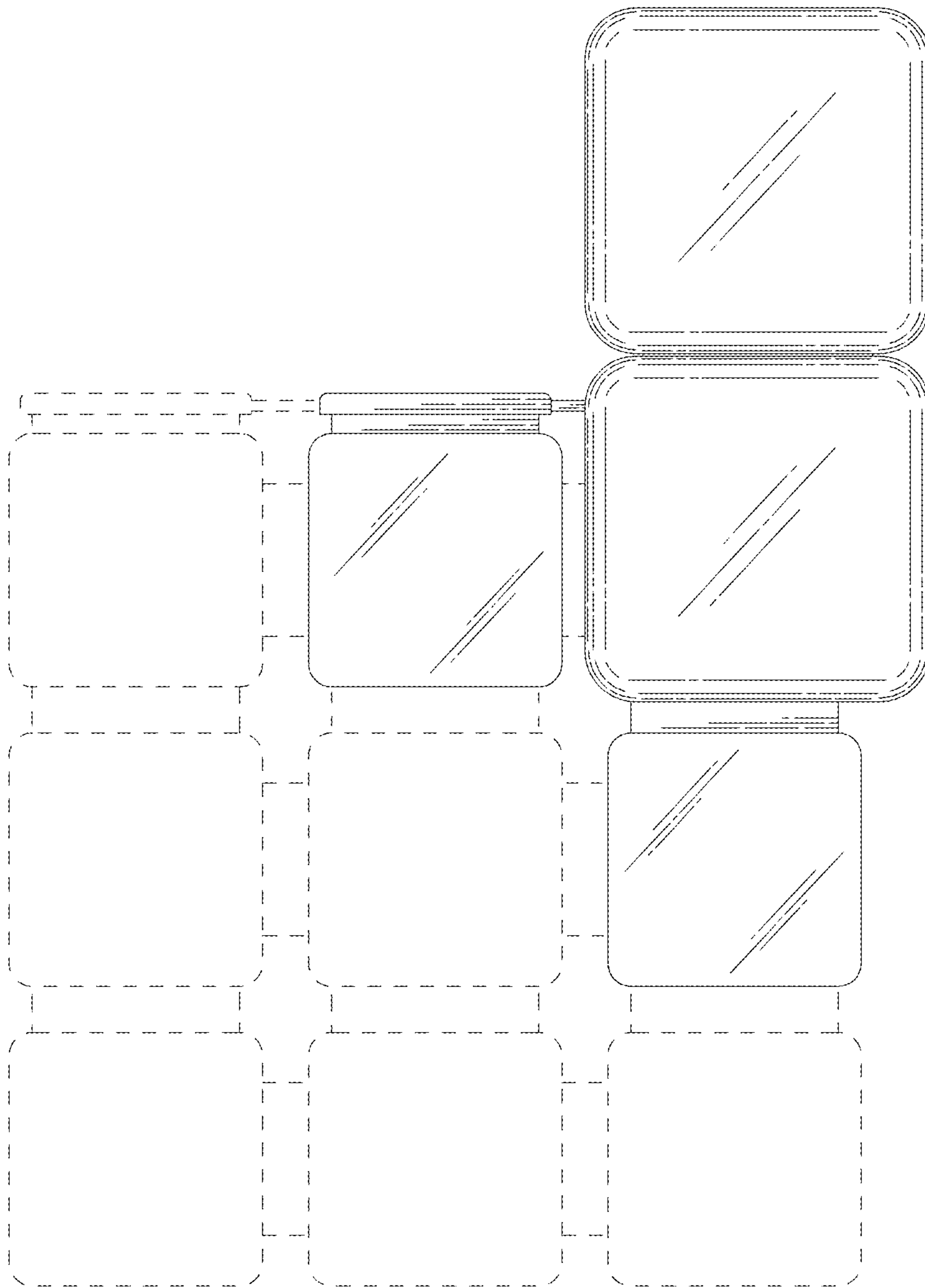


FIG. 11

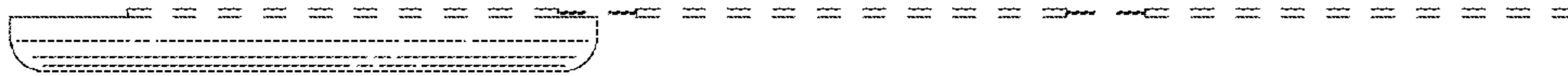


FIG. 12

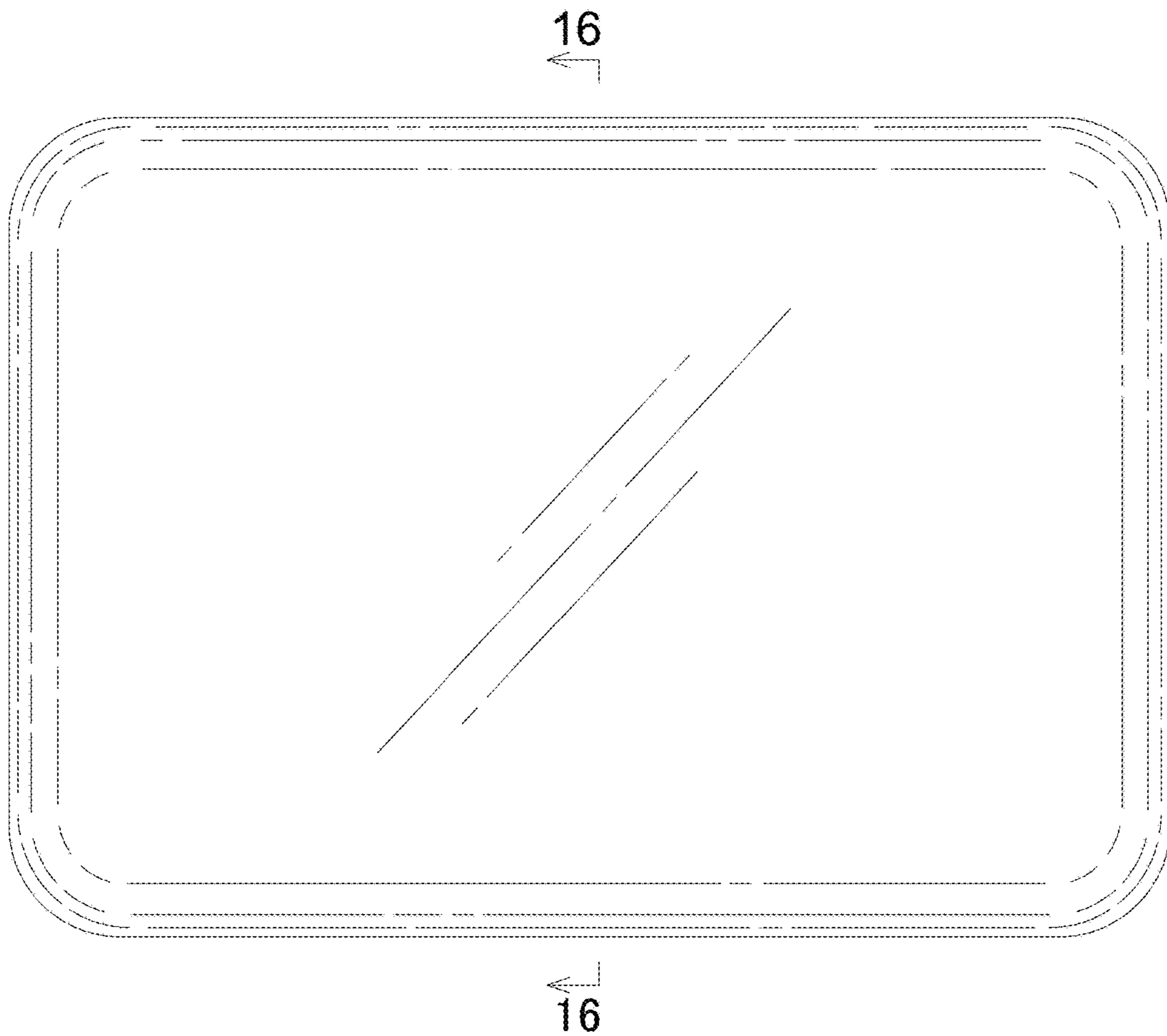


FIG. 13

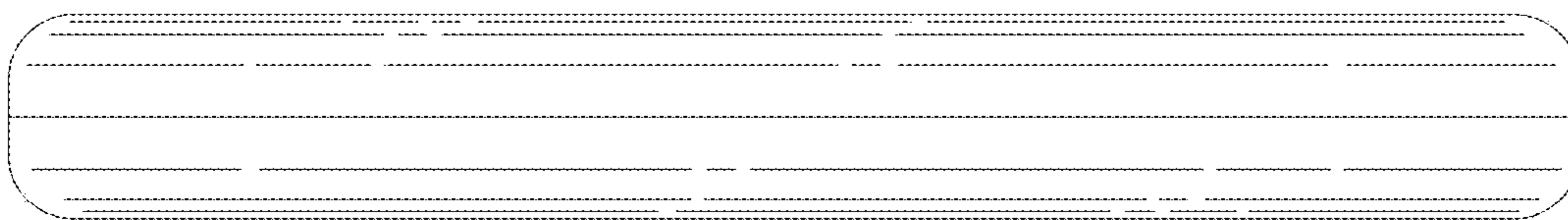


FIG. 14

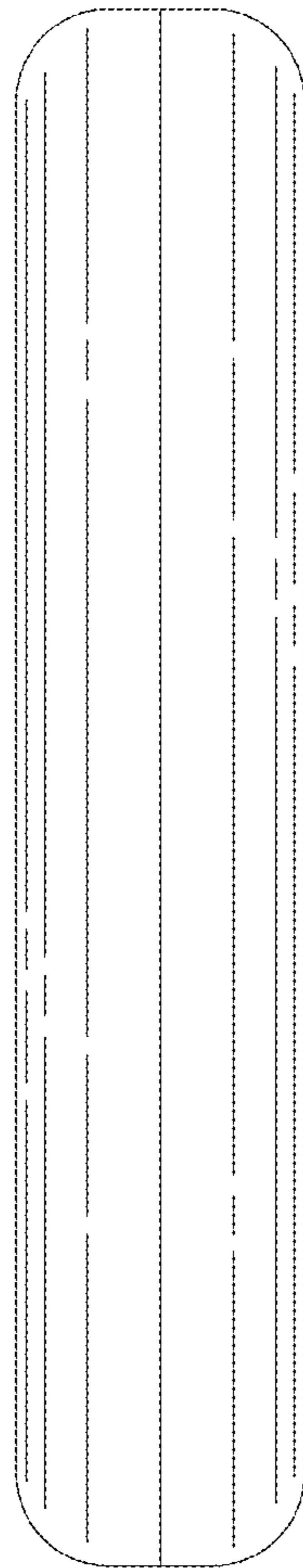


FIG. 15

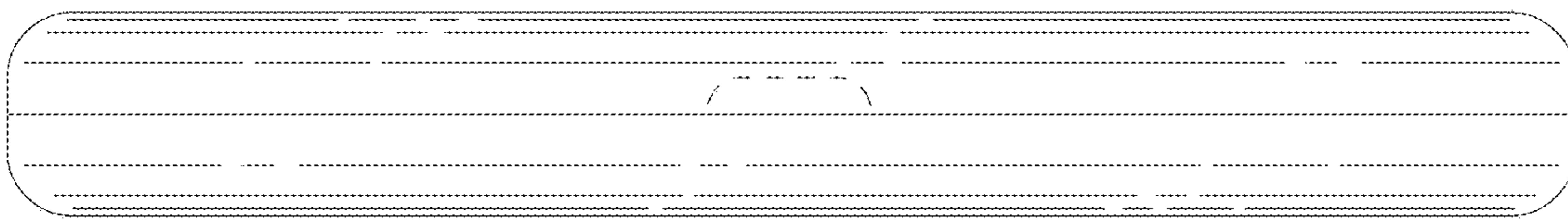


FIG. 16

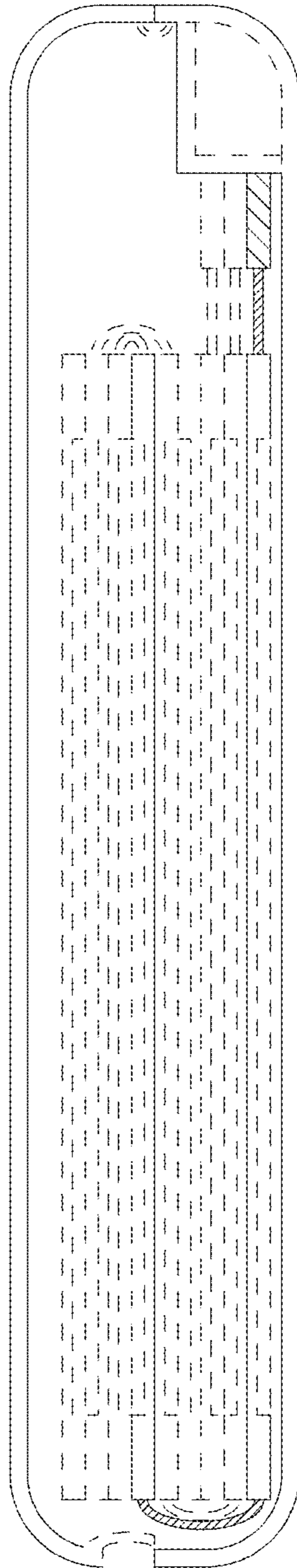


FIG. 17

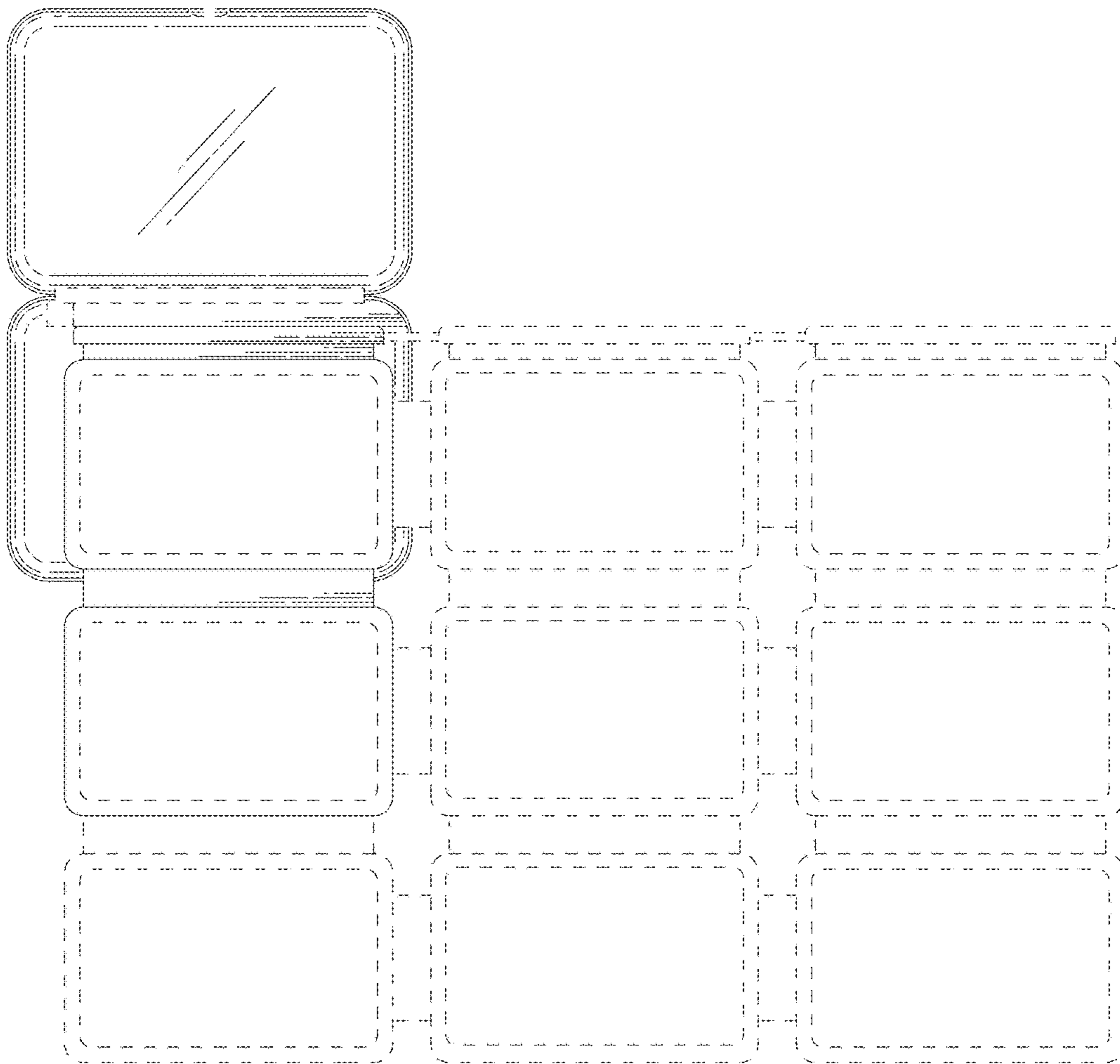


FIG. 18

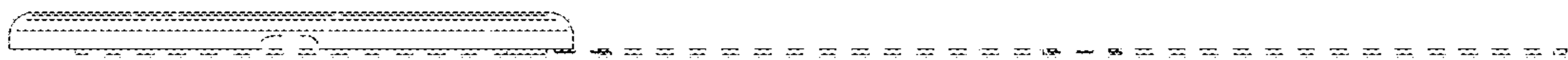


FIG. 19



FIG. 20

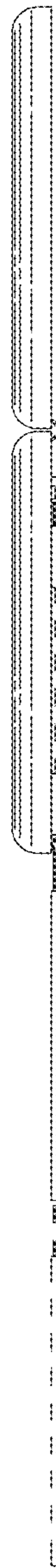


FIG. 21

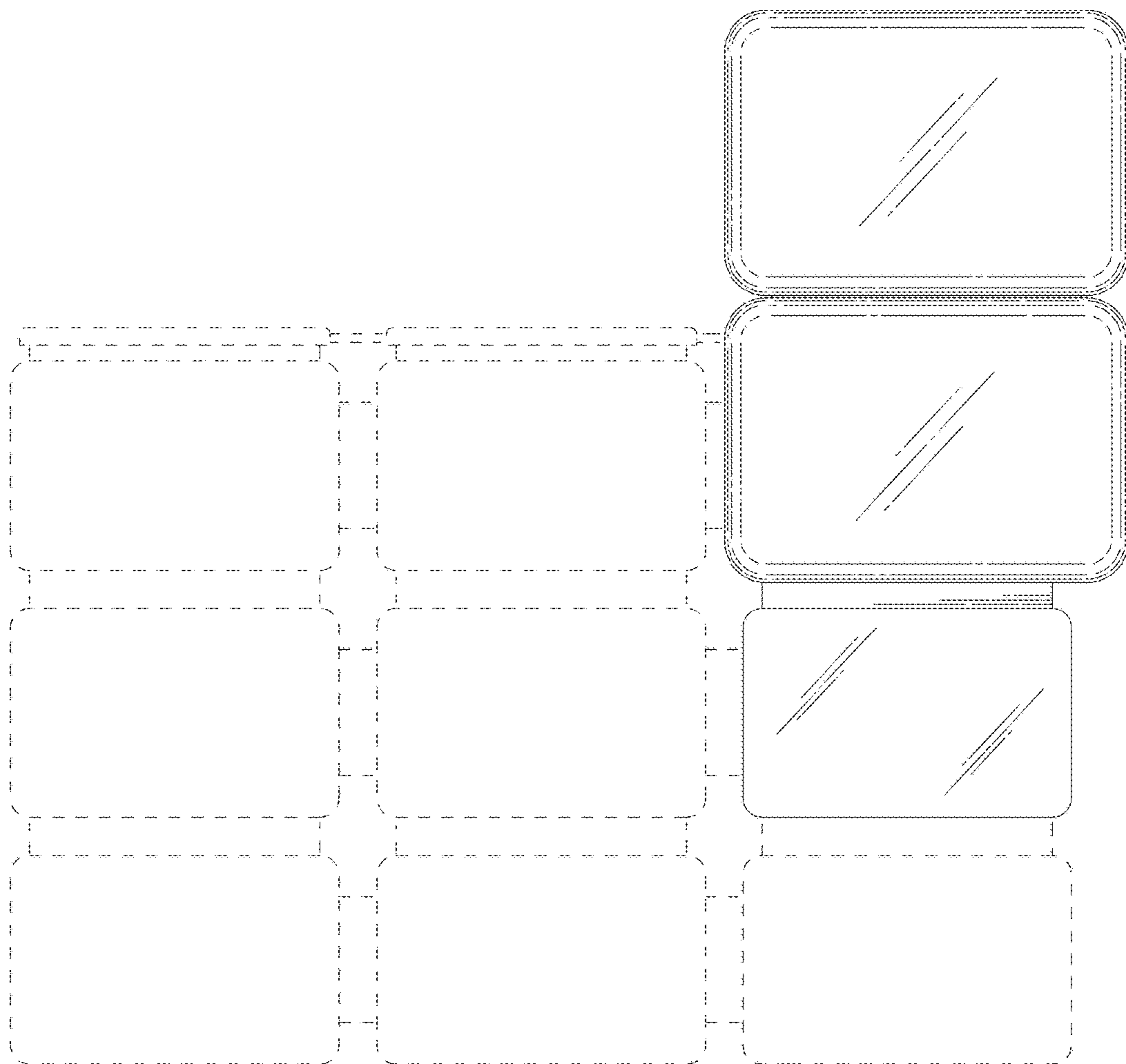


FIG. 22

