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Tissue culture container.

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A tissue culture container includes a container body having an internal space, and a cover having a transparent plate with a concave inner surface facing the internal space, and a locating portion engaged with the container body to seal the internal space for keeping the internal space in an aseptic condition. As a result, the light can be scattered evenly in the internal space by the concave inner surface of the transparent plate when passing through the transparent plate so as to obtain the high-quality plant tissues.

Title: TISSUE CULTURE CONTAINER

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates generally to a tissue culture container, and more specifically to a tissue culture
5 container that can obtain an even spread of light to raise the quality of cultured plant tissues

2. Description of the Related Art

In order to cultivate plant tissues conveniently, the plant tissues are generally placed into a tissue culture
10 container for preservation or carrying.

A conventional culture container comprises a container body for accommodation of plant tissues, and a cover mounted with an opening of the container body in such a way that a second flange of the cover is engaged with a first flange of
15 the container body, enabling the culture container to be sealed.

However, the above-mentioned culture container can be used to accommodate the plant tissues, but the sealed culture container will stop the light from passing through such that
20 the plant tissues can't grow well due to the absence of the light, causing low quality of the cultured plant tissues. Therefore, it is a need to provide an improved culture container.

SUMMARY OF THE INVENTION

25 The present invention has been accomplished in view of the above-noted circumstances. It is one objective of the present invention to provide a tissue culture container that can allow the light to pass through for cultivating high-quality plant tissues.

30 It is another objective of the present invention to provide a tissue culture container that can keep its internal space in an aseptic condition.

To achieve this objective of the present invention, the tissue culture container comprises a container body having an

open internal space, and a cover having a transparent plate with a concave inner surface facing the internal space, and a locating portion engaged with the container body to seal the internal space.

5 Accordingly, the tissue culture container of the present invention can allow the light to illuminate evenly plant tissues placed in the internal space through the concave inner surface of the transparent plate for obtaining the high-quality plant tissues, and keep the internal space in an
10 aseptic condition through the engagement between the locating portion of the cover and the container body.

 Further scope of applicability of the present invention will become apparent from the detailed description given hereinafter. However, it should be understood that the
15 detailed description and specific examples, while indicating preferred embodiments of the invention, are given by way of illustration only, since various changes and modifications within the spirit and scope of the invention will become apparent to those skilled in the art from this detailed
20 description.

BRIEF DESCRIPTION OF THE DRAWINGS

 The present invention will become more fully understood from the detailed description given herein below and the accompanying drawings which are given by way of illustration
25 only, and thus are not limitative of the present invention, and wherein:

 FIG. 1 is a sectional view of a tissue culture container according to a preferred embodiment of the present invention;

 FIG. 2 is an exploded view of FIG. 1;

30 FIG. 3 is a partial enlarged view of FIG. 1;

 FIG. 4 is a top view of the tissue culture container according to the preferred embodiment of the present invention;

 FIG. 5 is a bottom view of the tissue culture container
35 according to the preferred embodiment of the present invention, and

 FIG. 6 is a bottom view of the cover of the tissue culture container according to the preferred embodiment of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

As shown in FIGS. 1 and 2, a tissue culture container in accordance with a preferred embodiment of the present invention comprises a cover **10** and a container body **30**.

5 The cover **10** includes a rectangular transparent plate **12** with a concave inner surface **14**, an inclined portion **16** extending inclinedly downwards from a periphery of the transparent plate **12**, a side wall **18** disposed on the outside of the inclined portion **16**, and a locating portion **20** having
10 an extending section **22** extending downwards from a bottom of the side wall **18**, and a hook section **24** extending outwards from the extending portion **22**.

 The container body **30** has an internal space **32** for accommodation of plant tissues, and a retaining portion **34** at
15 the top end thereof. When the cover **10** is assembled with the container body **30**, the retaining portion **34** of the container body **30** is fitted between the extending section **22** and the hook section **24** of the locating portion **20** of the cover **10**, as shown in FIG. 3.

20 Referring to FIGS. 1, 4, and 5, since the concave inner surface **14** of the transparent plate **12** faces the internal space **32** of the container body **30**, the light can be scattered evenly in the internal space **32** by the concave inner surface
25 **14** when passing through the transparent plate **12**, allowing the plant tissues accommodated in the internal space **32** of the container body **30** to be exposed to the uniform scattered light.

 Further, when the locating portion **20** of the cover **10** is fitted to the retaining portion **34** of the container body **30**,
30 the extending section **22** and the hook section **24** of the locating portion **20** are respectively pressed against the inner and outer peripheries of the retaining portion **34** of the container body **30**, preventing dust mites from getting into the internal space **32** of the container body **30**, and keeping the
35 internal space **32** in an aseptic condition.

 For the purpose of enhancing the engagement strength between the cover **10** and the container body **30**, as shown in FIG. 6, a clipping portion **36** can be formed at each of

internal corners of the hook section **24** of the cover **10** for clipping the retaining portion **34** of the container body **30**.

Besides, when a culture solution added in the internal space **32** of the container body **30** has evaporated, it will be
5 condensed back into a liquid again because of meeting the inner surface **14** of the plate **12**, and then flow toward the inclined portion **16** along the concave inner surface **14** of the plate **12** without accumulating in the middle of the inner surface **14** of the plate **12**, thereby avoiding secondary
10 pollution.

By means of the aforesaid design, the tissue culture container of the present invention can provide sufficient light to illuminate the plant tissues through the concave inner surface of the transparent plate for obtaining the high-
15 quality plant tissues, and provide an aseptic space through the engagement between the locating portion of the cover and the retaining portion of the container body.

The invention being thus described, it will be obvious that the same may be varied in many ways. Such variations are
20 not to be regarded as a departure from the spirit and scope of the invention, and all such modifications as would be obvious to one skilled in the art are intended to be included within the scope of the following claims.

CONCLUSIES

1. Een weefselcultuurcontainer omvattende:

een containerlichaam met een open interne ruimte; en

een deksel die een transparante plaat heeft met een

concaaf binnenoppervlak naar de interne ruimte gericht, en een

5 plaatsingsportie in aangrijping met het containerlichaam om de

interne ruimte af te dichten, waardoor het licht bij passage

door de transparante plaat gelijkmatig door het concave

binnenoppervlak van de transparante plaat in de interne ruimte

kan worden verstrooid.

10

2. De weefselcultuurcontainer volgens conclusie 1, waarbij

het deksel een hellend gedeelte heeft dat zich hellend naar

beneden uitstrekt vanaf een periferie van de transparante

plaat.

15

3. De weefselcultuurcontainer volgens conclusie 2, waarbij

het deksel verder een zijwand heeft opgesteld op de

buitenzijde van het hellende gedeelte; waarbij het

plaatsingsgedeelte zich uitstrekt vanaf een bodem van de

20 zijwand.

4. De weefselcultuurcontainer volgens conclusie 1, waarbij

het plaatsingsgedeelte een uitsteeksectie heeft en een

haaksectie die naar buiten uitsteekt vanaf de uitsteekportie,

25 en waarbij het containerlichaam een vasthoudportie heeft

gemonteerd tussen de uitsteeksectie en de haaksectie.

5. De weefselcultuurcontainer volgens conclusie 4, waarbij de

haaksectie van de afdekking een klemportie heeft die is

30 vastgeklemd aan de vasthoudportie van het containerlichaam.

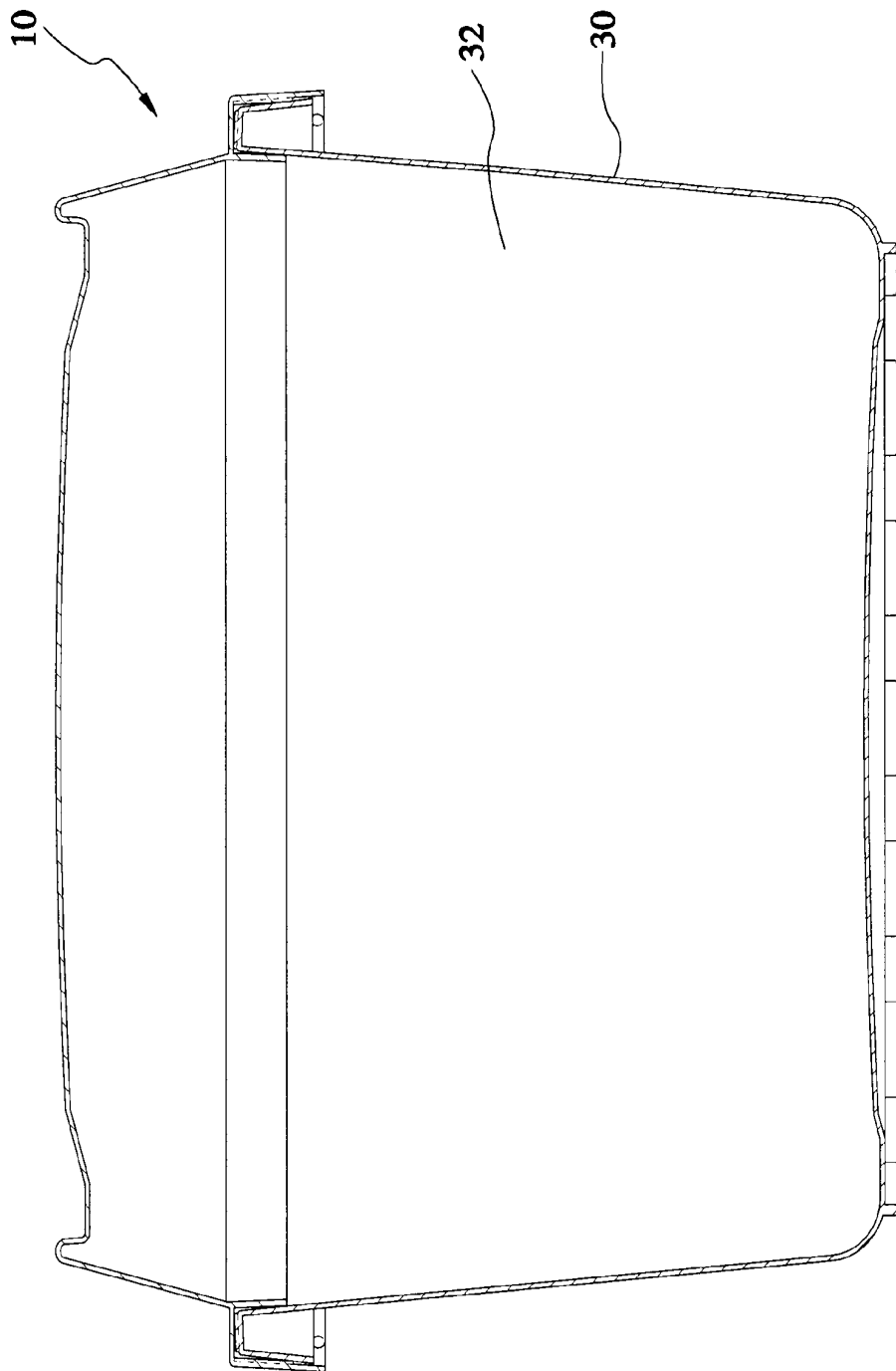


FIG.1

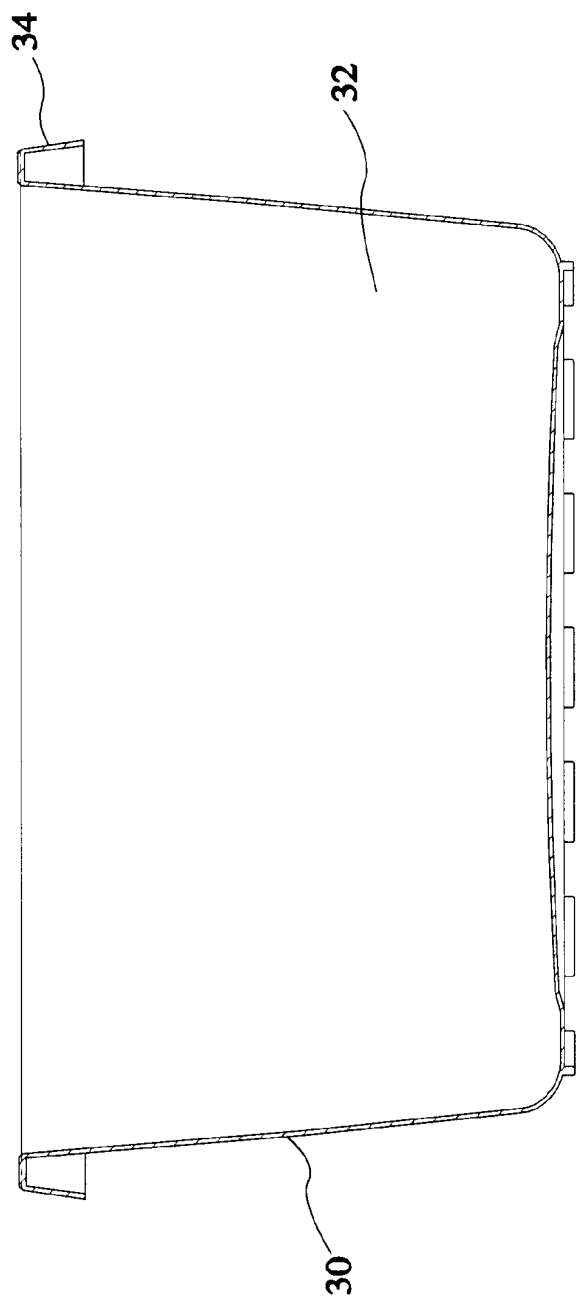
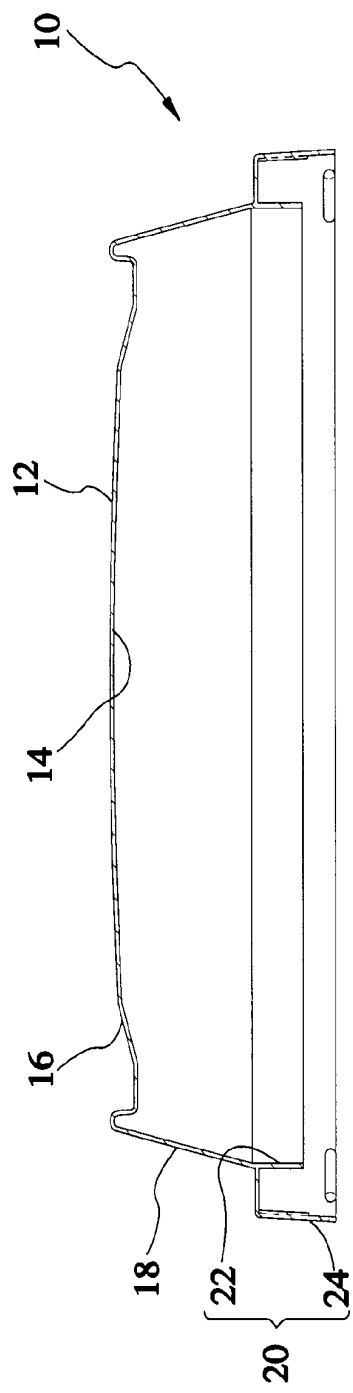


FIG.2

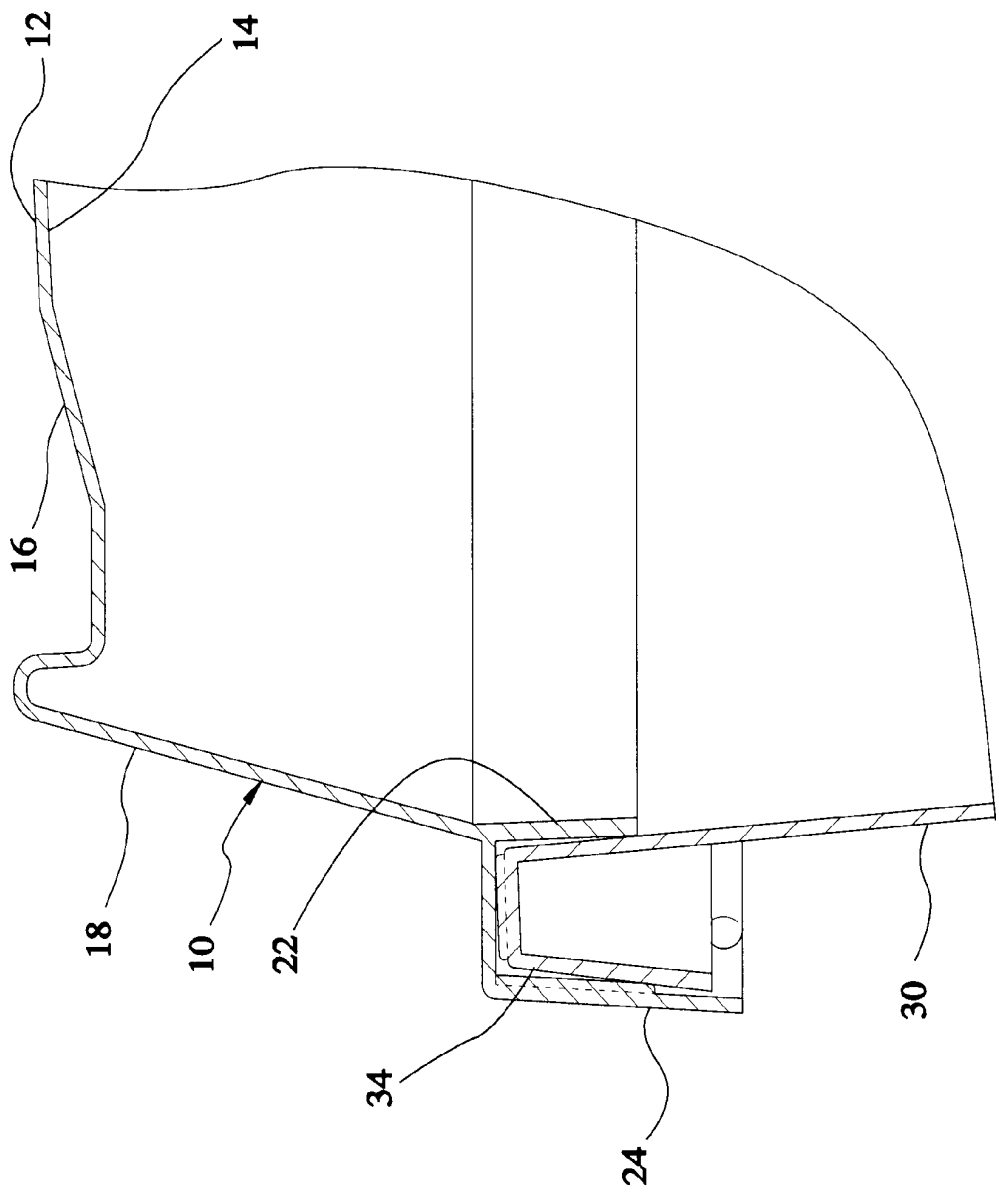


FIG.3

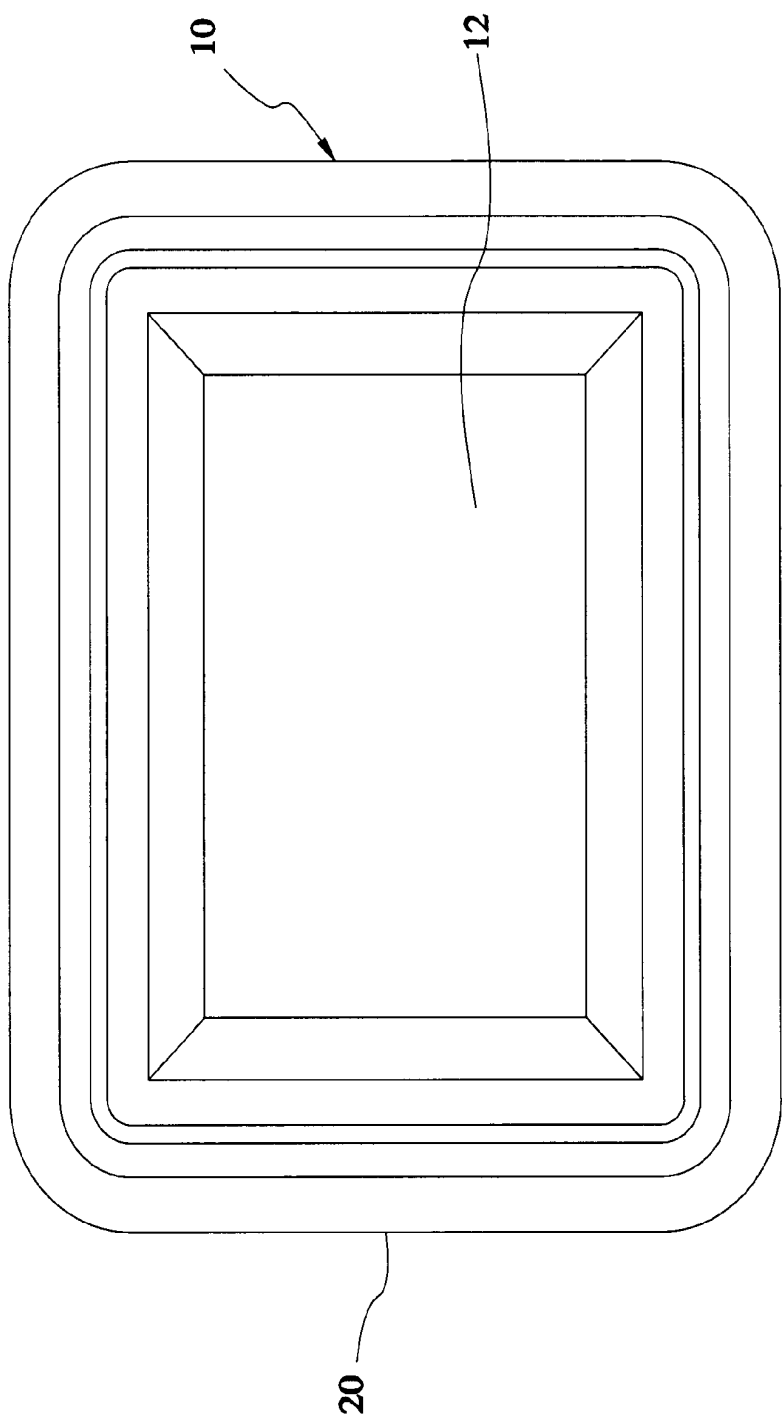


FIG.4

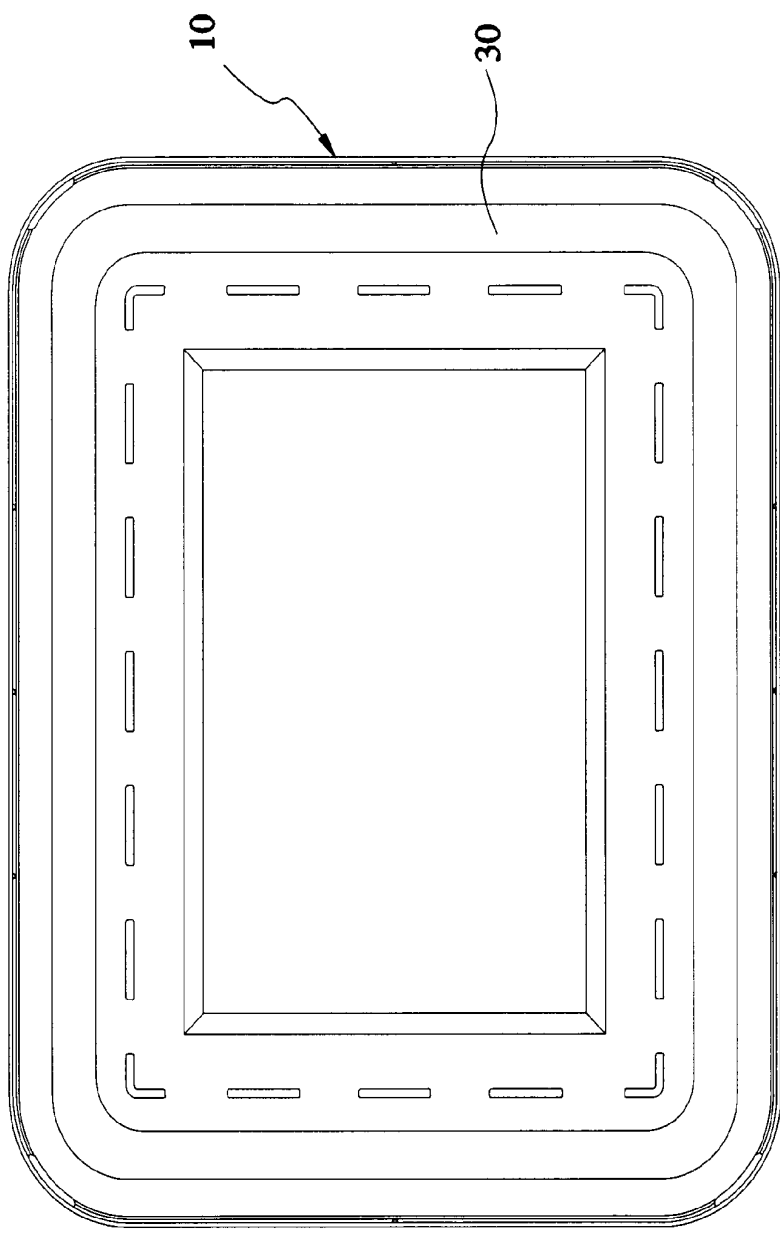


FIG.5

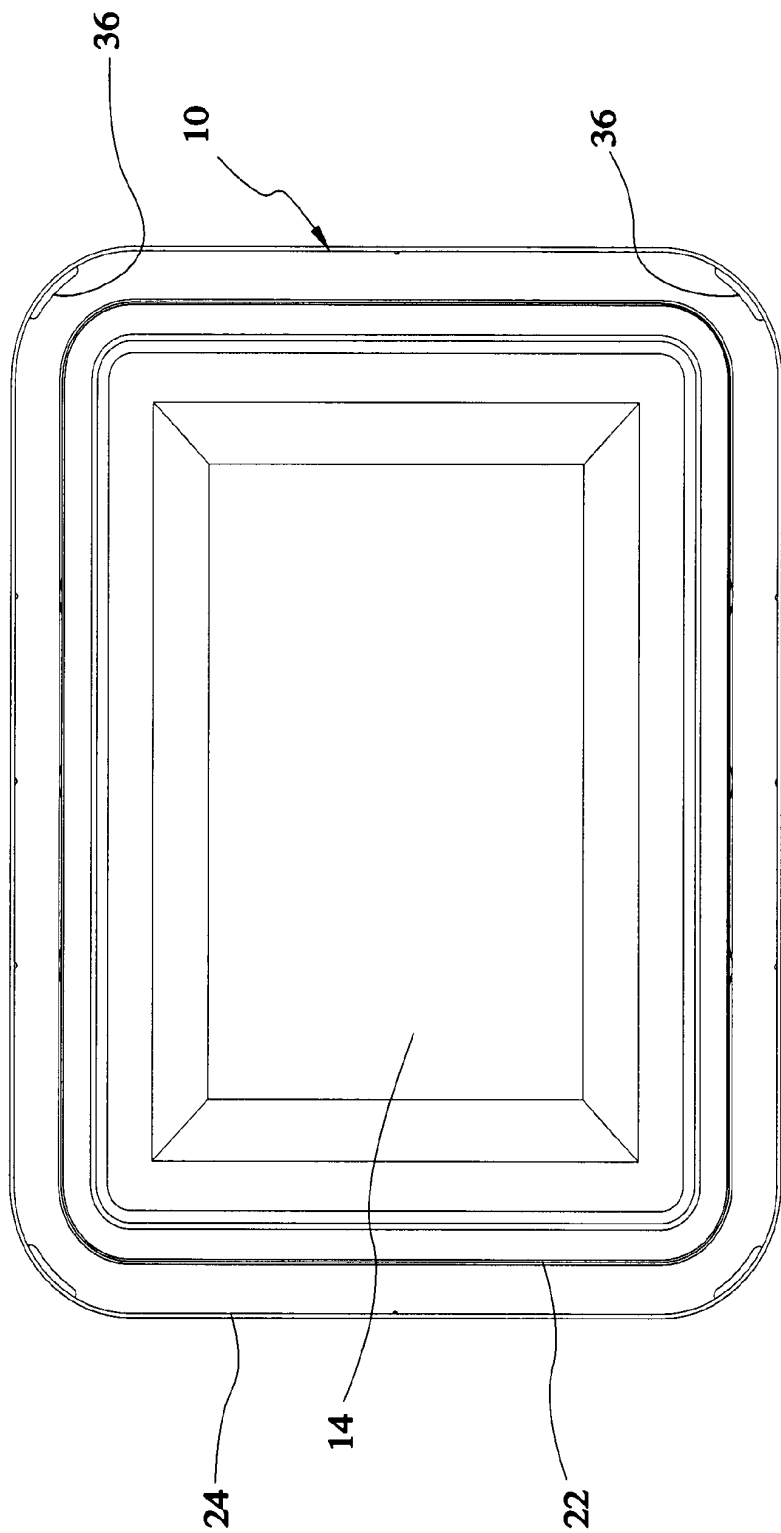


FIG.6