

STRUCTURE FOR PREVENTING SINKING OF FOOD COOKING CONTAINER

TECHNICAL FIELD

5 The present invention relates to a structure for preventing a sinking of a food cooking container, and in particular to a structure for preventing a sinking of a food cooking container wherein steam which generates in the inside of a container is discharged to the outside of the container via a discharge hole, and an external air can be supplied into an inner space part via a container
10 discharge hole, thus preventing an inward sinking of the container.

BACKGROUND ART

 A lunch box food or a food, for example, a side dish, are being sold in an airtight packed state sealed in the inside of a resin container in order to prevent
15 any impurity from being mixed or any degradation of food quality. Many of such foods can be heated and cooked in a packed state in a microwave range.

 If the food is heated in a state where it is sealed in the container, the container may expand outward by the steam which is generating from the food and may be broken. Moreover, a fermented food, for example, Korean Kimchi,
20 generates carbon dioxide as the foods is being fermented, the container may

explode even though the container is not heated.

In recent years, a new container is being developed, which is able to discharge steam or carbon dioxide generating from the contents in consideration of the above problems.

5 The conventional container for cooking foods filed by the same applicant as the present invention (the Korean patent registration number 10-1391841) includes a steam discharge hole.

 The above container for cooking foods including a steam discharge hole is configured in such a way that an upper side thereof is open to receive and
10 store foods, and a flange surface is formed along an upper rim. In this container, a sealing protrusion is protruding from the flange surface at a predetermined height and is attached with a cover film for the sake of sealing. A discharge space is formed since both ends are connected with a sealing protrusion part at an inner side of the sealing protrusion part. An assistant sealing protrusion part
15 which is attached with the cover film is formed at the flange surface. A steam discharge hole is formed at the flange surface having the discharge space in order for steam to be discharged to the outside.

 In the above container for cooking foods, since the pressure in the inside of the container may become lower than the external pressure after the
20 steam in the inside of the container is discharged via the discharge hole. For

this reason, the container may sink inward after heating. In order resolve the above problem, the applicant as the present invention has invented a new container for cooking foods, which is able to resolve a phenomenon where the container is sunk inward after heating in such a way to form a protrusion guide
5 and an opening groove at an inner side flange surface so that an external air can be supplied into the inside of the container via the discharge hole after the steam generating in the container for cooking foods is discharged via the discharge hole.

10 DISCLOSURE OF THE INVENTION

Accordingly, it is an object of the present invention to provide a structure for preventing a sinking of a food cooking container wherein steam which generates in the inside of a container is discharged to the outside of the container via a discharge hole, and an external air can be supplied into an inner
15 space part via a container discharge hole, thus preventing an inward sinking of the container.

It is another object of the present invention to provide a structure for preventing a sinking of a food cooking container wherein a protrusion guide and an opening groove are formed at an inner side flange surface in order for an
20 external air to be supplied into the inside of the container via a discharge hole

after steam which generate in the container for cooking foods is discharged via the discharge hole, thus preventing an inward sinking of the container.

To achieve the above objects according to one aspect to the present invention, there is provided a structure for preventing a sinking of a food cooking container, which may include, but is not limited to a container which includes an inner space part to store foods therein, wherein a flange surface is formed at a predetermined height along an upper rim, and a sealing protrusion part is protruding along the flange surface and is attached with a cover film, and an assistant sealing protrusion part is formed at the same height as the sealing protrusion part to be attached with the cover film and on the flange surface and at an inner side of the sealing protrusion part, and both ends of the assistant sealing protrusion part are connected with the sealing protrusion part, thus forming a predetermined sized discharge space, and a discharge hole is formed at the flange surface on which the discharge space is formed, in such a way to discharge steam through the discharge hole, wherein the assistant sealing protrusion part includes a tip part which is protruding inward in a shape of a tip to allow the cover film to be easily detached when the inner pressure of the container rises, and a protrusion guide is formed, protruding from both sides, at the inner flange surface which is spaced apart from the tip part of the assistant sealing protrusion part, wherein an opening groove is formed in the center in

such a way that an external air can be supplied via the discharge hole.

The present invention is characterized according to one aspect to the present invention in that the protrusion guides are formed slanted like a slanted protruding wall while being opposite to each other wherein the opening groove
5 is formed higher than the protrusion guide.

The present invention is characterized according to one aspect to the present invention in that the height of each of the protrusion guides is 0.5~1mm higher than the top of the assistant sealing protrusion part.

The present invention is characterized according to one aspect to the
10 present invention in that the cover film positions on the top of the protrusion guide, and when the inner pressure of the container rises, the cover film expands upward, and the tip part of the assistant sealing protrusion part separates, and the steam in the container can discharge to the outside of the container via the opening groove between the protrusion guides and via the
15 discharge hole of the discharge space, and the external air can be supplied into the inner space part of the container via the container discharge hole, the inner discharge space, and the opening groove between both the protrusion guides, so the container can be prevented from sinking inward.

To achieve the above objects according to another aspect of the present
20 invention, there is provided a structure for preventing a sinking of a food

cooking container, which may include, but is not limited to a container which includes an inner space part to store foods therein, wherein a flange surface is formed at a predetermined height along an upper rim, and a sealing protrusion part is protruding along the flange surface and is attached with a cover film, and

5 an assistant sealing protrusion part is formed at the same height as the sealing protrusion part to be attached with the cover film and on the flange surface and at an inner side of the sealing protrusion part, and both ends of the assistant sealing protrusion part are connected with the sealing protrusion part, thus forming a predetermined sized discharge space, and a discharge hole is formed

10 at the flange surface on which the discharge space is formed, in such a way to discharge steam through the discharge hole, wherein the assistant sealing protrusion part includes a tip part which is protruding inward in a shape of a tip to allow the cover film to be easily detached when the inner pressure of the container rises, and a protrusion guide is formed protruding on the flange

15 surface at the inner side spaced apart from the tip part of the assistant sealing protrusion part, and an opening groove is formed on the flange surfaces at both sides of the protrusion guide.

The present invention is characterized according to another aspect of the present invention in that the opening groove is formed in a U-shape in such

20 a way that the flange surface is formed grooved downward.

The present invention is characterized according to another aspect of the present invention in that the opening groove is formed in a quadrangular shape in such a way that the flange surface is formed grooved downward.

5 The present invention is characterized according to another aspect of the present invention in that the opening groove includes a quadrangular groove in such a way that the flange surface can be formed downwardly slanted toward the inner space part.

The present invention is characterized according to another aspect of the present invention in that the opening groove is formed in a U-shape in such a way that the flange surface is formed downwardly slanted toward the inner space part.

The present invention is characterized according to another aspect of the present invention in that the heights of the protrusion guides are 0.5~1mm higher than the top of the assistant sealing protrusion part.

15 The present invention is characterized according to another aspect of the present invention in that the width of each of the protrusion guides is 5mm to 10mm, and the width of each of the opening grooves is 3mm to 5mm.

The present invention is characterized according to another aspect of the present invention in that the cover film positions on the top of the protrusion guide, and when the inner pressure of the container rises, the cover film

expands upward, and the tip part of the assistant sealing protrusion part separates, and the steam in the container can discharge to the outside of the container via the opening groove between the protrusion guides and via the discharge hole of the discharge space, and the external air can be supplied into
5 the inner space part of the container via the container discharge hole, the inner discharge space, and the opening groove at both sides of the protrusion guides, so the container can be prevented from sinking inward.

INDUSTRIAL EFFECTS

10 The present invention has industrial effects in the way that the steam which generates in the inside of a container can be discharged to the outside of the container via a discharge hole, and an external air can be supplied into an inner space part via a container discharge hole, thus preventing an inward sinking of the container.

15 Moreover, the present invention has industrial effects in the way that a protrusion guide and an opening groove are formed at an inner side flange surface in order for an external air to be supplied into the inside of the container via a discharge hole after steam which generate in the container for cooking foods is discharged via the discharge hole, thus preventing an inward sinking of
20 the container.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will become better understood with reference to the accompanying drawings which are given only by way of illustration and thus
5 are not limitative of the present invention, wherein;

Figure 1 is a perspective view illustrating a structure for preventing a sinking of a container for cooling foods according to a first embodiment of the present invention;

Figure 2 is a cross sectional view illustrating major components of a
10 structure for preventing a sinking of a container for cooling foods according to a first embodiment of the present invention;

Figure 3 is a view illustrating a state where an inner steam is being discharged from a container for cooking foods according to a first embodiment of the present invention;

15 Figure 4 is a view illustrating a state where an external air is being supplied into the inside of a container in the container for cooking foods according to a first embodiment of the present invention;

Figure 5 is a perspective view illustrating a structure for preventing a sinking of a container for cooling foods according to a second embodiment of
20 the present invention;

Figure 6 is a perspective view illustrating a structure for preventing a sinking of a container for cooling foods according to a third embodiment of the present invention;

Figure 7 is a cross sectional view illustrating major components of a
25 structure for preventing a sinking of a container for cooling foods according to

second and third embodiments of the present invention;

Figure 8 is a view illustrating a state where an inner steam of a container for cooking foods is being discharged according to second and third embodiments of the present invention;

5 Figure 9 is a view illustrating a state where an external air is being supplied into the inside of a container in the container for cooking foods according to second and third embodiments of the present invention;

Figure 10 is a perspective view illustrating a structure for preventing a sinking of a container for cooling foods according to a fourth embodiment of the
10 present invention; and

Figure 11 is a perspective view illustrating a structure for preventing a sinking of a container for cooling foods according to a fifth embodiment of the present invention.

15 Legend of Reference number

1: Cover film	10: Container
11: Flange surface	12: Space part
13: Sealing protrusion part	14: Assistant sealing protrusion part
15: Discharge space	16: Discharge hole
20 17: Protrusion part	20, 30, 40, 50, 60: Protrusion guides
21, 31, 41, 51, 61: Opening grooves	

MODES FOR CARRYING OUT THE INVENTION

The preferred embodiments of the present invention will be described with reference to the accompanying drawings. It is obvious that the present invention may be implemented into various different forms, and the present invention is not limited to the disclosure below.

5 Figure 1 is a perspective view illustrating a structure for preventing a sinking of a container for cooling foods according to a first embodiment of the present invention, Figure 2 is a cross sectional view illustrating major components of a structure for preventing a sinking of a container for cooling foods according to a first embodiment of the present invention, Figure 3 is a
10 view illustrating a state where an inner steam is being discharged from a container for cooking foods according to a first embodiment of the present invention, Figure 4 is a view illustrating a state where an external air is being supplied into the inside of a container in the container for cooking foods according to a first embodiment of the present invention, Figure 5 is a
15 perspective view illustrating a structure for preventing a sinking of a container for cooling foods according to a second embodiment of the present invention, Figure 6 is a perspective view illustrating a structure for preventing a sinking of a container for cooling foods according to a third embodiment of the present invention, Figure 7 is a cross sectional view illustrating major components of a
20 structure for preventing a sinking of a container for cooling foods according to second and third embodiments of the present invention, Figure 8 is a view illustrating a state where an inner steam of a container for cooking foods is being discharged according to second and third embodiments of the present invention, Figure 9 is a view illustrating a state were an external air is being
25 supplied into the inside of a container in the container for cooking foods

according to second and third embodiments of the present invention, Figure 10 is a perspective view illustrating a structure for preventing a sinking of a container for cooling foods according to a fourth embodiment of the present invention, and Figure 11 is a perspective view illustrating a structure for preventing a sinking of a container for cooling foods according to a fifth embodiment of the present invention.

The present invention is directed to a structure for preventing a sinking of a food cooking container. Moreover the present invention is directed to a structure for preventing a sinking of a food cooking container wherein steam which generates in the inside of a container is discharged to the outside of the container via a discharge hole, and an external air can be supplied into an inner space part via a container discharge hole, thus preventing an inward sinking of the container.

As illustrated in Figures 1 to 4, the structure for preventing a sinking of a food cooking container wherein steam according to a first embodiment of the present invention will be described.

In the structure for preventing a sinking of a food cooking container, the container 10 includes an inner space part 12 to store foods therein, and a flange surface 11 is formed at a predetermined height along an upper rim, and a sealing protrusion part 12 is protruding along the flange surface 11 and is attached with a cover film 1. An assistant sealing protrusion part 14 is formed at the same height as the sealing protrusion part 12 to be attached with the cover film and on the flange surface and at an inner side of the sealing protrusion part 12. Both ends of the assistant sealing protrusion part 14 are connected with the sealing protrusion part 12, thus forming a predetermined sized discharge space 15. A discharge hole 16 is formed at the flange surface 11 on which the

discharge space 15 is formed, in such a way to discharge steam through the discharge hole 16. The assistant sealing protrusion part 14 includes a tip part which is protruding inward in a shape of a tip to allow the cover film 1 to be easily detached when the inner pressure of the container 10 rises. A protrusion
5 guide 20 is formed, protruding from both sides, at the inner flange surface 11 which is spaced apart from the tip part of the assistant sealing protrusion part 14, wherein an opening groove 21 is formed in the center in such a way that an external air can be supplied via the discharge hole 16.

A protrusion part 17 which is formed inwardly bulged is formed in the
10 space part 12 at the inner lower side where the protrusion guide 20 is formed.

The protrusion guides 2 are formed slanted like a slanted protruding wall while being opposite to each other wherein the opening groove 21 is formed higher than the protrusion guide 20.

The height of the protrusion guide 20 is 0.5~1mm higher than the top of
15 the assistant sealing protrusion part 14.

The cover film 1 positions on the top of the protrusion guide 20. When the inner pressure of the container 10 rises, the cover film 1 expands upward, and the tip part of the assistant sealing protrusion part 14 separates, and the steam in the container 10 can discharge to the outside of the container 10 via
20 the opening groove 21 between the protrusion guides 20 and via the discharge hole 16 of the discharge space 15. The external air can be supplied into the inner space part 12 of the container 12 via the container discharge hole 16, the inner discharge space 15, and the opening groove 21 between the protrusion guides 20 in the order which they appear, so the container 10 can be prevented
25 from sinking inward.

The operations and effects of the container 10 for cooking foods

according to the present invention will be described.

In a state where foods to be cooked are stored in the inside of the container 10, the cover film 1 is attached to the upper sealing protrusion part 13 of the flange surface 11 and to the assistant sealing protrusion part 14 at the inner side of the corner, so the container 10 is packed sealed in a double-sealed engaging state.

The sealing protrusion part 13 protruding from the upper side of the flange surface 11 and the assistant sealing protrusion part 14 at the inner side are formed in a protruding shape, for which the foods or water can run down, not being attached to the upper portions of the sealing protrusion part 13 and the assistant sealing protrusion part 14, whereupon the cover film 1 can be attached with a predetermined pressure to the upper portions of the sealing protrusion part 13 and the assistant sealing protrusion part 14 during the sealing procedure. In this way, the foods in the inside of the packing container 10 can be packed sealed.

In the above state, the container 10 for cooking foods is input in the microwave oven, and the foods in the container 10 are heated and cooked. During the cooking, the inner pressure in the inside of the container rises by the steam from the foods.

If the pressure in the container 10 reaches a predetermined level, the steam in the container 10 moves via the opening groove 21 formed between both the protrusion guides 20, thus weakening the sealing force of the tip part of the assistant sealing protrusion part 14. For this reason, the cover film 1 separates from the tip part of the assistant sealing protrusion part 14, and a high pressure steam moves toward the discharge space 15 and is discharged, as illustrated in Figure 3, via the discharge hole 16.

In this state, since the inner pressure concentrates at the tip part of the assistant sealing protrusion part 14, the cover film 1 can separate from the tip part, so the steam can be efficiently discharged to the discharge hole 16.

Even while the high pressure steam is being discharged, the sealing protrusion part 13 formed along the rim of the container keeps being sealed with the cover film 1, thus preventing any fast discharge of the steam, which consequently results in preventing impurities or foods from randomly spraying onto the inner wall surfaces of the microwave oven due to the fracture of the cover film 1.

10 In this state, an external air will be supplied into the inner space part 12 of the container 10 via the container discharge hole 16, the inner discharge space 15 and the opening groove 21 formed between both the protrusion guides 20, thus preventing the container 10 from sinking inward.

When the inner steam of the container 10 discharges from the discharge hole 16, the protrusion guide 20 will control the movement of the steam generating in the inside of the container.

In the present invention, the steam may circulate all over the inner portions of the container 10, thus efficiently discharging the steam from the inside of the container while uniformly heating the contents.

20 When the cover film 1 which has expanded upward due to the inner pressure of the container goes back to its initial state, the protrusion guide 20 will temporarily support the cover film 1, so an external air outside the container can be efficiently inputted into the inside of the container.

In this way, it is possible to prevent the container from sinking inward after the steam in the container 10 is discharged via the discharge hole 16.

As illustrated in Figures 5 to 11, an apparatus for preventing a sinking of

a food cooking container according to the second embodiment to the fifth embodiment of the present invention will be described.

In the structure for preventing a sinking of a food cooking container according to the present invention, the container 10 includes an inner space
5 part 12 to store foods therein, and a flange surface 11 is formed at a predetermined height along an upper rim, and a sealing protrusion part 12 is protruding along the flange surface 11 and is attached with a cover film 1. An assistant sealing protrusion part 14 is formed at the same height as the sealing protrusion part 12 to be attached with the cover film and on the flange surface
10 and at an inner side of the sealing protrusion part 12. Both ends of the assistant sealing protrusion part 14 are connected with the sealing protrusion part 12, thus forming a predetermined sized discharge space 15. A discharge hole 16 is formed at the flange surface 11 on which the discharge space 15 is formed, in such a way to discharge steam through the discharge hole 16. The assistant
15 sealing protrusion part 14 includes a tip part which is protruding inward in a shape of a tip to allow the cover film 1 to be easily detached when the inner pressure of the container 10 rises. Protrusion guides 30, 40, 50 and 60 are protruding from the inner flange surface 11 which is spaced apart from the tip part of the assistant sealing protrusion part 14, wherein opening groove 31, 41,
20 51 and 61 are formed at both the flange surfaces 11 of the protrusion guides 30, 40, 50 and 60.

A protrusion part 17 which is bulged inward is formed in a space part 12 at the inner lower side where the protrusion guides are formed.

As illustrated in Figure 5, the opening groove 31 is formed in a U-shape
25 in such a way that the flange surface 11 is formed grooved downward.

As illustrated in Figure 6, the opening groove 41 is formed in a

quadrangular shape in such a way that the flange surface 11 is formed grooved downward.

As illustrated in Figure 10, the opening groove 51 includes a quadrangular groove in such a way that the flange surface 11 can be formed downwardly slanted toward the inner space part.

As illustrated in Figure 11, the opening groove 61 is formed in a U-shape in such a way that the flange surface is formed downwardly slanted toward the inner space part.

The heights of the protrusion guides 30, 40, 50 and 60 are 0.5~1mm higher than the top of the assistant sealing protrusion part 14.

The width of each of the protrusion guides 30, 40, 50 and 60 is 5mm to 10mm, and the width of each of the opening grooves 31, 41, 51 and 61 is 3mm to 5mm.

The cover film 1 positions at the tops of the protrusion guides 30, 40, 50 and 60. When the inner pressure of the container 10 rises, the cover film 1 expands upward, and the tip part of the assistant sealing protrusion part 14 separates, and the steam in the container 10 can be discharged to the outside of the container via the opening guides 31, 41, 51 and 61 of the protrusion guide and the discharge hole 16 of the discharge space 15 in the order that they appear, and the external air can be supplied into the inner space part 12 of the container via the container discharge hole 16, the inner discharge space 15, the and the opening grooves 31, 41, 51 and 61 of the protrusion guides 30, 40, 50 and 60 in the order that they appear, so it is possible to prevent the packing container 10 from sinking inward.

The operations and effects of the container 10 for cooking foods according to the second embodiment to the fifth embodiment of the present

invention will be described below.

In case where the container 10 for cooking foods according to the present invention is input in a microwave oven, and the foods stored therein are heated and cooked, the inner pressure of the container rises due to the steam
5 *generating from the foods.*

If the pressure in the container 10 reaches a predetermined level, the steam in the container 10 moves via the opening grooves 31, 41, 51 and 61 of the protrusion guides 30, 40, 50 and 60, thus weakening the sealing force of the tip part of the assistant sealing protrusion part 14. For this reason, the cover film
10 1 separates from the tip part of the assistant sealing protrusion part 14, and a high pressure steam moves toward the discharge space 15 and is discharged, as illustrated in Figure 8, via the discharge hole 16.

In this state, since the inner pressure concentrates at the tip part of the assistant sealing protrusion part 14, the cover film 1 can separate from the tip
15 *part, so the steam can be efficiently discharged to the discharge hole 16.*

Even while the high pressure steam is being discharged, the sealing protrusion part 13 formed along the rim of the container keeps being sealed with the cover film 1, thus preventing any fast discharge of the steam, which consequently results in preventing impurities or foods from randomly spraying
20 onto the inner wall surfaces of the microwave oven due to the fracture of the cover film 1.

In this state, an external air as illustrated in Figure 9 will be supplied into the inner space part 12 of the container 10 via the container discharge hole 16, the inner discharge space 15 and the opening groove 31 and 41 of the
25 protrusion guides 30 and 40, thus preventing the container 10 from sinking inward.

When the inner steam of the container 10 discharges from the discharge hole 16, the protrusion guide 20 will control the movement of the steam generating in the inside of the container.

In the present invention, the steam may circulate all over the inner portions of the container 10, thus efficiently discharging the steam from the inside of the container while uniformly heating the contents.

When the cover film 1 which has expanded upward due to the inner pressure of the container goes back to its initial state, the protrusion guides 30, 40, 50 and 60 will temporarily support the cover film 1, so an external air outside the container can be efficiently inputted into the inside of the container.

In this way, it is possible to prevent the container from sinking inward after the steam in the container 10 is discharged via the discharge hole 16.

The present invention is able to prevent the container from sinking inward in such a way to form the protrusion guides and the opening grooves on the inner flange surfaces so that the external can be supplied into the inside of the container via the discharge hole after the steam has been discharged from the container for cooking foods via the discharge hole.

As the present invention may be embodied in several forms without departing from the spirit or essential characteristics thereof, it should also be understood that the above-described examples are not limited by any of the details of the foregoing description, unless otherwise specified, but rather should be construed broadly within its spirit and scope as defined in the appended claims, and therefore all changes and modifications that fall within the meets and bounds of the claims, or equivalences of such meets and bounds

are therefore intended to be embraced by the appended claims.

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What is claimed is:

1. A structure for preventing a sinking of a food cooking container, comprising:

a container which includes an inner space part to store foods therein,
5 wherein a flange surface is formed at a predetermined height along an upper rim, and a sealing protrusion part is protruding along the flange surface and is attached with a cover film, and an assistant sealing protrusion part is formed at the same height as the sealing protrusion part to be attached with the cover film and on the flange surface and at an inner side of the sealing protrusion part,
10 and both ends of the assistant sealing protrusion part are connected with the sealing protrusion part, thus forming a predetermined sized discharge space, and a discharge hole is formed at the flange surface on which the discharge space is formed, in such a way to discharge steam through the discharge hole, wherein the assistant sealing protrusion part includes a tip part which is
15 protruding inward in a shape of a tip to allow the cover film to be easily detached when the inner pressure of the container rises, and a protrusion guide is formed, protruding from both sides, at the inner flange surface which is spaced apart from the tip part of the assistant sealing protrusion part, wherein an opening groove is formed in the center in such a way that an external air can
20 be supplied via the discharge hole.

2. The structure of claim 1, wherein the protrusion guides are formed slanted like a slanted protruding wall while being opposite to each other wherein the opening groove is formed higher than the protrusion guide.

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3. The structure of either claim 1 or claim 2, wherein the height of each of the protrusion guides is 0.5~1mm higher than the top of the assistant sealing protrusion part.

10 4. The structure of either claims 1 or claim 2, wherein the cover film positions on the top of the protrusion guide, and when the inner pressure of the container rises, the cover film expands upward, and the tip part of the assistant sealing protrusion part separates, and the steam in the container can discharge to the outside of the container via the opening groove between the protrusion
15 guides and via the discharge hole of the discharge space, and the external air can be supplied into the inner space part of the container via the container discharge hole, the inner discharge space, and the opening groove between both the protrusion guides, so the container can be prevented from sinking inward.

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5. A structure for preventing a sinking of a food cooking container, comprising:

a container which includes an inner space part to store foods therein, wherein a flange surface is formed at a predetermined height along an upper rim, and a sealing protrusion part is protruding along the flange surface and is attached with a cover film, and an assistant sealing protrusion part is formed at the same height as the sealing protrusion part to be attached with the cover film and on the flange surface and at an inner side of the sealing protrusion part, and both ends of the assistant sealing protrusion part are connected with the sealing protrusion part, thus forming a predetermined sized discharge space, and a discharge hole is formed at the flange surface on which the discharge space is formed, in such a way to discharge steam through the discharge hole, wherein the assistant sealing protrusion part includes a tip part which is protruding inward in a shape of a tip to allow the cover film to be easily detached when the inner pressure of the container rises, and a protrusion guide is formed protruding on the flange surface at the inner side spaced apart from the tip part of the assistant sealing protrusion part, and an opening groove is formed on the flange surfaces at both sides of the protrusion guide.

6. The structure of claim 5, wherein the opening groove is formed in a U-

shape in such a way that the flange surface is formed grooved downward.

7. The structure of claim 5, wherein the opening groove is formed in a quadrangular shape in such a way that the flange surface is formed grooved
5 downward.

8. The structure of claim 5, wherein the opening groove includes a quadrangular groove in such a way that the flange surface can be formed downwardly slanted toward the inner space part.

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9. The structure of claim 5, wherein the opening groove is formed in a U-shape in such a way that the flange surface is formed downwardly slanted toward the inner space part.

15 10. The structure of claim 5, wherein the heights of the protrusion guides are 0.5~1mm higher than the top of the assistant sealing protrusion part.

11. The structure of claim 5, wherein the width of each of the protrusion guides is 5mm to 10mm, and the width of each of the opening grooves is 3mm
20 to 5mm.

12. The structure of any of claims 5 to 11, wherein the cover film positions on the top of the protrusion guide, and when the inner pressure of the container rises, the cover film expands upward, and the tip part of the assistant sealing protrusion part separates, and the steam in the container can discharge to the outside of the container via the opening groove between the protrusion guides and via the discharge hole of the discharge space, and the external air can be supplied into the inner space part of the container via the container discharge hole, the inner discharge space, and the opening groove at both sides of the protrusion guides, so the container can be prevented from sinking inward.

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