

**International Judicial Symposium on Intellectual Property 2024**  
**Hypothetical Case; Japan Patent Office**

**I        Scope of Claims (Claim 1)**

- A    A lid used as a part of a storage container in which stored food can be heated in a microwave oven, the lid comprising:
- B    a top plate portion that covers an opening of a container body forming a storage space and has a through hole formed therein;
- C    an attachment portion that is provided on an outer periphery of the top plate portion and is configured to be attachable to an upper edge that forms the opening of the container body; and
- D    a flap that is provided to be elastically deformable to rotate with respect to the top plate portion, and has a protrusion that can close the through hole,
- E    wherein the flap is configured such that the protrusion is spaced apart from the through hole in a natural condition and the through hole is maintained in a closed state by the protrusion, and
- F    wherein the through hole is formed outside a base end portion of the flap in plan view of the lid.

**II        Description**

[Detailed Description of the Invention]

[Technical field]

[0001]

The present disclosure relates to a storage container in which stored food can be heated in a microwave oven.

[Background art]

[0002]

In addition to storing food in a refrigerator, there are known storage containers in which stored food can be heated in a microwave oven as it is.

[0003]

A storage container 7 of the prior art shown in FIG. 5 includes a container body 8 that forms a storage space, and a lid 9 that can be attached to the container body 8.

[0004]

As shown in FIG. 6, the lid 9 comprises a top plate portion 91, an attachment portion 92, and a flap 93. Note that the top plate portion 91, the attachment portion 92, and the flap 93 are integrally molded from plastic.

[0005]

The top plate portion 91 is a roughly rectangular plate-shaped portion that covers an opening of the container body 8. A through hole 911 is formed in the top plate portion 91 to release an excessive pressure inside the storage container 7 due to heating in a microwave oven.

[0006]

The attachment portion 92 is provided on an outer periphery of the top plate portion 91. The attachment portion 92 is configured to be attachable to an upper edge that forms the opening of the container body 8.

[0007]

The flap 93 is a plate-shaped portion extending from an edge of the attachment portion 92. The flap 93 has a protrusion 931 that can close the through hole 911.

[0008]

As shown in FIG. 7A, the flap 93 is positioned such that the protrusion 931 is spaced apart from the through hole 911 in a natural condition in which no external force is applied.

[0009]

As shown in FIG. 7B, when the user elastically deforms the flap 93 to fit the protrusion 931 into the through hole 911, the through hole 911 becomes closed state. Further, in this state, the protrusion 931 is fixed to the through hole 911 against the elastic force of the flap 93 that attempts to return to its original shape. Therefore, the closed state of the through hole 911 is maintained until the protrusion 931 is removed from the through hole 911 by the user.

[Outline of the Invention]

[Problem to be solved by the invention]

[0010]

The lid 9 of the storage container 7 of the prior art is configured such that a base end portion 93a, which is the base of the flap 93, is located at the edge of the attachment portion 92 for reasons such as ease of molding. Therefore, in a plan view of the lid 9, the base end portion 93a of the flap 93 is located outside the through hole 911. In addition, in a plan view of the lid 9, the outer side means the side farther from the center of the lid.

[0011]

After heating the food stored in the storage container 7 in a microwave oven, there are cases where it is desired to remove only the excess water that has accumulated in the storage container 7. However, in the conventional storage container 7, when tilted to drain water through the through hole 911 as shown in Figure 8, the flap 93 was located below the through-hole 911, so there was a problem in that the water drained from the through hole 911 hits the flap and splatters.

[0012]

One aspect of the present disclosure is to provide a lid that can prevent water discharged

from the through hole from hitting the flap.

[Means for solving the problem]

[0013]

One embodiment of the present disclosure is a lid used as a part of a storage container in which stored food can be heated in a microwave oven. The lid comprises a top plate portion, an attachment portion, and a flap. The top plate portion is a portion that covers an opening of a container body forming a storage space and has a through hole formed therein. The attachment portion is a portion that is provided on an outer periphery of the top plate portion and is configured to be attachable to an upper edge that forms the opening of the container body. The flap is a portion that is provided to be elastically deformable to rotate with respect to the top plate portion and has a protrusion that can close the through hole. The flap is configured such that the protrusion is spaced apart from the through hole in a natural condition and the through hole is maintained in a closed state by the protrusion. The through hole is formed outside a base end portion of the flap in a plan view of the lid.

[0014]

According to the present disclosure, it is possible to provide a lid that can prevent water from hitting the flap while discharged from the through hole.

[Brief description of the drawings]

[0015]

FIG. 1 is a perspective view of a storage container according to the embodiment.

FIG. 2 is a plan view of the storage container of the embodiment.

FIG. 3A is a partial cross-sectional view of the lid of the embodiment in a state where the through hole is open.

FIG. 3B is a partial cross-sectional view of the lid of the embodiment in a state where the through hole is closed.

FIG. 4 is a diagram showing a state in which water is discharged from the through hole in the storage container of the embodiment.

FIG. 5 is a perspective view of a storage container of the prior art.

FIG. 6 is a plan view of a storage container of the prior art.

FIG. 7A is a partial cross-sectional view of a conventional lid in a state where the through hole is open.

FIG. 7B is a partial cross-sectional view of the conventional lid in a state where the through hole is closed.

FIG. 8 is a diagram showing a state in which water is discharged from the through hole in a storage container of the prior art.

[Description of embodiments]

[0016]

The storage container 1 of the embodiment shown in FIG. 1 comprises a container body 2 and a lid 3. The container body 2 and the lid 3 are made of plastic with a heat resistance temperature of -20 to 140°C. Therefore, in addition to storing food in the storage container 1 and storing it in the refrigerator, the user can heat the stored food directly in a microwave oven.

[0017]

The container body 2 is a roughly rectangular box-shaped component with an opening formed on the top surface. The container body 2 forms a storage space for storing food.

[0018]

The lid 3 is configured to be attachable to the container body 2. As shown in FIG. 2, the lid 3 comprises a top plate portion 31, an attachment portion 32, and a flap 33. Note that the top plate portion 31, the attachment portion 32, and the flap 33 are integrally molded from plastic.

[0019]

The top plate portion 31 is a roughly rectangular plate-shaped portion that covers the opening of the container body 2. A through hole 311 is formed in the top plate portion 31 to release an excessive pressure inside the storage container 1 due to heating in a microwave oven.

One (1) through hole 311 is formed at a corner of the top plate portion 31 (a position near the attachment portion 32). The through hole 311 is designed to have such a size that the water inside the storage container 1 can be smoothly discharged and the food inside the storage container 1 can be prevented from being discharged. When the through hole 311 is circular, its diameter is preferably within the range of 10 to 20 mm.

[0020]

The attachment portion 32 is a part provided on the outer periphery of the top plate portion 31. The attachment portion 32 is configured to be able to be mounted on the upper edge of the container body 2 that forms the opening. The storage container 1 is sealed by attaching the lid 3.

[0021]

The flap 33 is a plate-shaped portion that is formed to extend from the upper surface of the top plate portion 31 and is provided to be elastically deformable to rotate with respect to the top plate portion 31. Specifically, the flap 33 is provided at a position where the through hole 311 is outside the base end portion 33a of the flap 33 in the plan view of the lid 3. The flap 33 has a protrusion 331 that can close the through hole 311.

[0022]

As shown in FIG. 3A, the flap 33 is positioned such that the protrusion 331 is spaced apart from the through hole 311 in a natural condition in which no external force is applied.

[0023]

As shown in FIG. 3B, when the user elastically deforms the flap 33 by rotating it downward to fit the protrusion 331 into the through hole 311, the through hole 311 becomes in a closed state. Further, in this state, the protrusion 331 is fixed to the through hole 311 against the elastic force of the flap 33 that attempts to return to its original shape. Therefore, the closed state of the through hole 311 is maintained until the protrusion 331 is removed from the through hole 311 by the user.

[0024]

According to the storage container 1 of this embodiment, when the user wants to remove only the excess water accumulated in the storage container 1, the user can remove the excess water from the through hole 311 to drain water, as shown in FIG. 4, without hitting the flap 33.

[Explanation of letters or numerals]

[0025]

1: storage container, 2: container body, 3: lid, 31: top plate portion, 32: attachment portion, 33: flap, 33a: base end portion, 311: through hole, 331: protrusion.

[Fig.1]

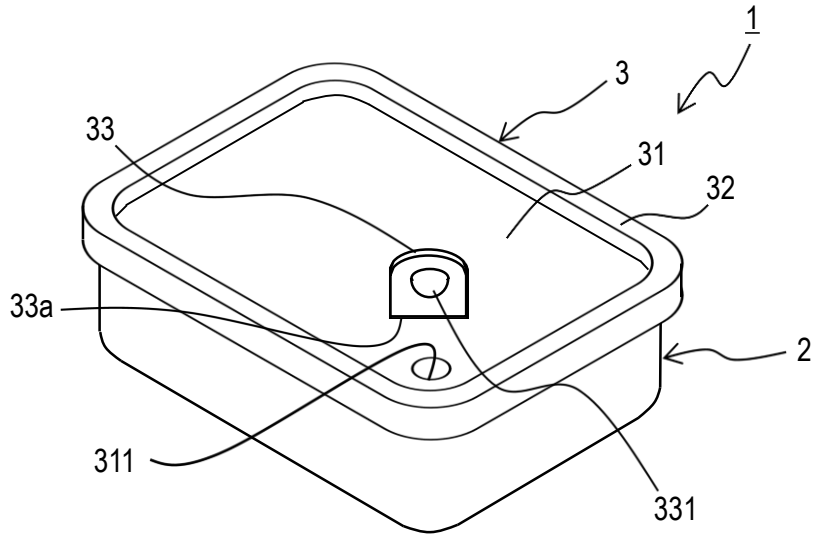


Fig.1

[Fig.2]

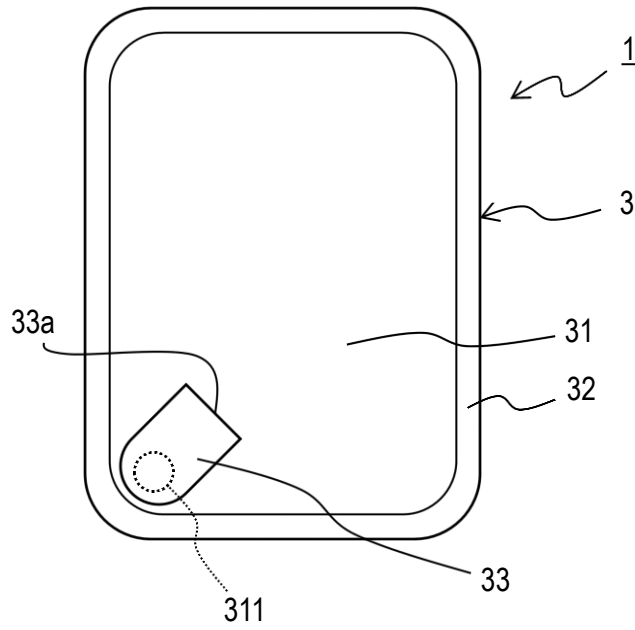


Fig.2

[Fig.3A]

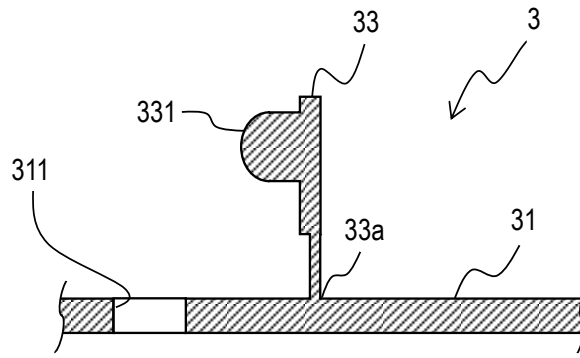


Fig.3A

[Fig.3B]

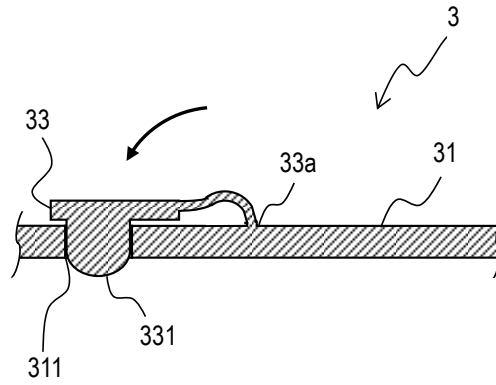


Fig.3B

[Fig.4]

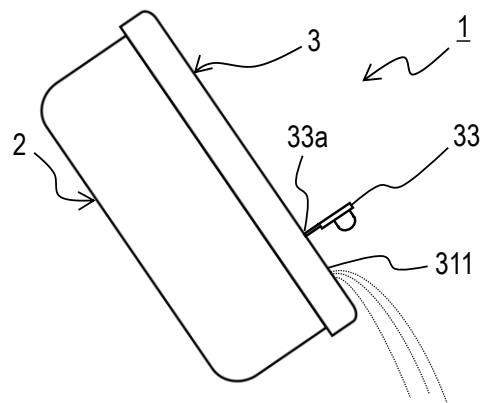


Fig.4

[Fig.5]

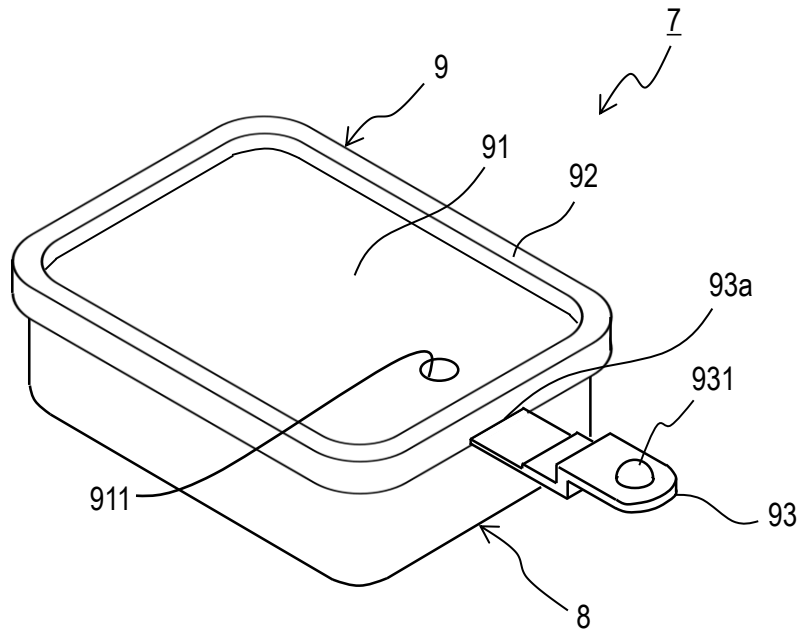


Fig.5

[Fig.6]

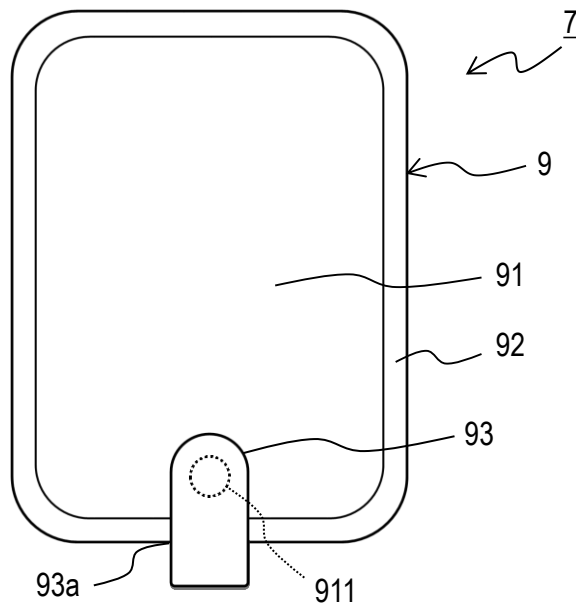


Fig.6



[Fig.7A]

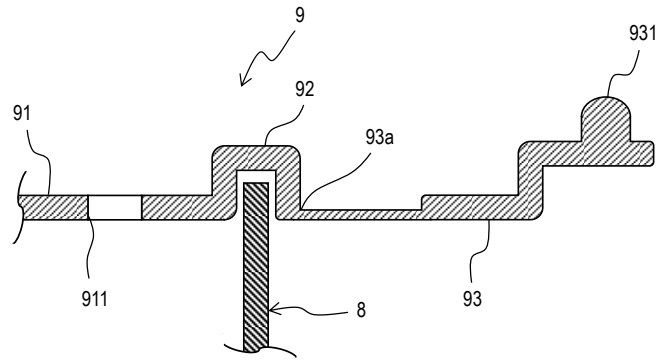


Fig.7A

[Fig.7B]

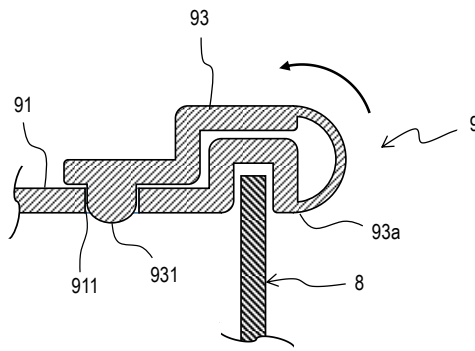


Fig.7B

[Fig.8]

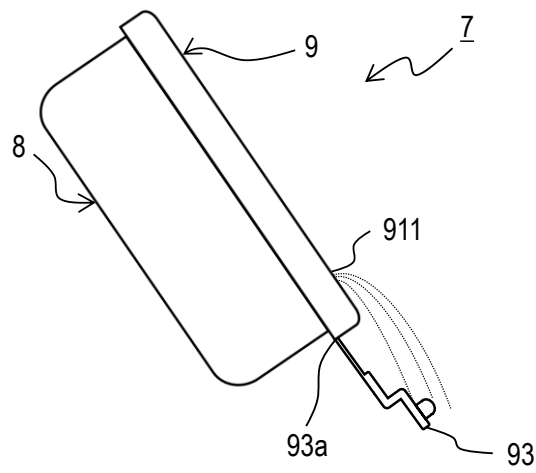


Fig.8

End