[0010]

Moreover, for the packing pouch for microwaves disclosed in patent document 5, in consideration of serviceability for users when putting a contained item into the packing pouch and when displaying goods, there is disclosed a packing pouch to be placed in the vertical state in which a gusset is disposed in a bottom section of the packing pouch and which has substantially a triangular cross section such that the bottom section facilitates the standing of the packing pouch.

PRIOR ART REFERENCE

PATENT DOCUMENT

[0011]

PATENT DOCUMENT 1: Japanese Patent Laid-Open Ser. No. 2002-80072

PATENT DOCUMENT 2: Japanese Patent Laid-Open Ser. No. 2005-82172

PATENT DOCUMENT 3: Japanese Patent Laid-Open Ser. No. 2003-182779

PATENT DOCUMENT 4: Japanese Patent Laid-Open Ser. No. 2005-320023

PATENT DOCUMENT 5: Japanese Patent No. 3665795

SUMMARY OF INVENTION

PROBLEMS TO BE SOLVED BY THE INVENTION

[0012]

The packing pouch including the vapor exhaust mechanism described above has been widely used for its serviceability, and further improvement has been strongly desired.

[0013]

Embodiments of the present invention to provide a packing pouch in which improvement is made for vapor exhaust.

MEANS FOR SOLVING TO THE PROBLEMS

[0014]

According to a first aspect of the present invention, there is provided a packing bag having a seal section formed by sealing films, wherein the seal section is peeled off by inner vapor pressure generated inside and vapor is discharged to an outside of the packing bag, comprising;

a vapor exhaust seal section projecting by inflecting a part of the seal section in an inward direction, wherein the vapor exhaust seal section is substantially V-shaped,

a non-seal section formed outside the vapor exhaust seal section, and

a cut or a notch formed in a film of the non-seal section, wherein

in a state before the packing bag expands, an inward end the cut or notch is disposed in a position inside of the packing bag than a line connecting start points of the substantially V shape,

the vapor exhaust seal section is sandwiched by a pair of band-shaped end seal sections,

the pair of band-shaped end seal sections are connected to side seal sections sealing side edges of the packing bag, respectively,

the start points are points where an extension of an inner boundary line of each of the pair of band-shaped end seal sections crosses the vapor exhaust seal section, and

a width of the vapor exhaust seal section is smaller than width of the pair of band-shaped end seal sections.

[0014a]

According to a second aspect of the present invention, there is provided a packing bag having a seal section formed by sealing films, wherein the seal section is peeled off by inner vapor pressure generated inside and vapor is discharged to an outside of the packing bag, comprising;

a vapor exhaust seal section projecting by inflecting a part of the seal section in an inward direction, wherein the vapor exhaust seal section is substantially V-shaped,

a non-seal section formed outside the vapor exhaust seal section, wherein a gap between the films which are not sealed each other in the non-seal section communicate with the outside of the packing bag,

wherein the vapor exhaust seal section and the non-seal section are provided in a joining section formed by folding and overlapping of the films,

wherein the packing bag further comprising;

a first vapor discharge section and a second vapor discharge section

wherein the first vapor discharge section is composed of an opening area and the non-seal section, and the opening area is an area where the vapor exhaust seal section is peeled off and opened when the packaging bag expands, and

wherein the second vapor discharge section is formed by a cut or a notch formed in the non-seal section, wherein

in a state before the packing bag expands, an inward end of the cut or notch is disposed in a position inside of the packing bag than a line connecting start points of the substantially V shape.

the vapor exhaust seal section is sandwiched by a pair of band-shaped end seal sections, and

a width of the vapor exhaust seal section is smaller than width of the pair of band-shaped end seal sections.

[0015]

The packing pouch in accordance with the present invention is characterized by comprising a vapor exhaust seal section formed by inflecting and projecting part of a seal section in which films are laminated onto each other, in an inner direction, wherein in the vapor exhaust seal section, peeling-off strength of at least part thereof is less than that of

the section other than the part; and at peeling-off due to vapor pressure, the section other than the part remains and forms an edge section, to make a sound when vapor is exhausted.

ADVANTAGEOUS EFFECTS OF THE INVENTION

[0016]

In accordance with embodiments of the present invention, it is possible to propose a packing pouch in which improvement is made for vapor exhaust.

BRIEF DESCRIPTION OF THE DRAWINGS

[0017]

FIG. 1 is a diagram showing a configuration example of a packing pouch 100 in a first embodying mode, (a) is a perspective view of the packing pouch 100 before an opening 4 is sealed up, and (b) is a perspective view of the packing pouch 100 in a state in which a contained item D is put into the packing pouch 100 and then the packing pouch 100 is sealed up by heat-sealing the opening 4.

FIG. 2 is a diagram showing a configuration example of a vapor exhaust seal section 7 and a non-seal section 9 (9a, 9b).

FIG. 3 is a diagram to explain a function of the packing pouch 100 of the present embodying mode, (a) is a side view of the packing pouch 100 showing a state in which the packing pouch 100 of FIG. 1(b) is heated by a microwave and expands, (b) is a diagram showing a state in which a tip end 70 of the vapor exhaust seal section 7 opens at high-pressure expansion and a vapor discharge section is formed, and (c) is a perspective view of the packing pouch 100 showing a state in which the packing pouch 100 is heated by a microwave and expands.

FIG. 4 is a diagram to explain an example in which a sound is made when a vapor discharge section is formed.

FIG. 5 is a diagram to explain the vapor discharge section.

FIG. 6 is a diagram showing a configuration example of the packing pouch of the present embodying mode.

FIG. 7 is a diagram showing a configuration example of the packing pouch of the present embodying mode.

FIG. 8 is a diagram to explain an example in which a sound is made in the configuration example shown in FIG. 7(c).

FIG. 9 is a diagram showing a configuration example of a packing pouch in

Claims:

1. A packing bag having a seal section formed by sealing films, wherein the seal section is peeled off by inner vapor pressure generated inside and vapor is discharged to an outside of the packing bag, comprising;

a vapor exhaust seal section projecting by inflecting a part of the seal section in an inward direction, wherein the vapor exhaust seal section is substantially V-shaped,

a non-seal section formed outside the vapor exhaust seal section, and

a cut or a notch formed in a film of the non-seal section, wherein

in a state before the packing bag expands, an inward end the cut or notch is disposed in a position inside of the packing bag than a line connecting start points of the substantially V shape,

the vapor exhaust seal section is sandwiched by a pair of band-shaped end seal sections,

the pair of band-shaped end seal sections are connected to side seal sections sealing side edges of the packing bag, respectively,

the start points are points where an extension of an inner boundary line of each of the pair of band-shaped end seal sections crosses the vapor exhaust seal section, and

a width of the vapor exhaust seal section is smaller than width of the pair of band-shaped end seal sections.

2. The packing bag according to claim 1, wherein

a gap between the films which are not sealed each other in the non-seal section communicate with the outside of the packing bag, and

the vapor exhaust seal section and the non-seal section are disposed in a joining section formed through folding and overlapping of the films.

3. A packing bag having a seal section formed by sealing films, wherein the seal section is peeled off by inner vapor pressure generated inside and vapor is discharged to an outside of the packing bag, comprising;

a vapor exhaust seal section projecting by inflecting a part of the seal section in an inward direction, wherein the vapor exhaust seal section is substantially V-shaped,

a non-seal section formed outside the vapor exhaust seal section, wherein a gap between the films which are not sealed each other in the non-seal section communicate with the outside of the packing bag,

wherein the vapor exhaust seal section and the non-seal section are provided in a joining section formed by folding and overlapping of the films,

wherein the packing bag further comprising;

a first vapor discharge section and a second vapor discharge section

wherein the first vapor discharge section is composed of an opening area and the non-seal section, and the opening area is an area where the vapor exhaust seal section is peeled off and opened when the packaging bag expands, and

wherein the second vapor discharge section is formed by a cut or a notch formed in the non-seal section, wherein

in a state before the packing bag expands, an inward end of the cut or notch is disposed in a position inside of the packing bag than a line connecting start points of the substantially V shape.

the vapor exhaust seal section is sandwiched by a pair of band-shaped end seal sections, and

a width of the vapor exhaust seal section is smaller than width of the pair of band-shaped end seal sections.

4. The packing bag according to any one of claims 1 to 3, wherein

link seal sections connected to both ends of the vapor exhaust seal section, respectively are tapered so that widths of the link seal sections increase from both ends of the vapor exhaust seal section toward side edges of the packing bag, respectively, and

a seal free section is provided in an area of the link seal section, the seal free section is a non-sealed area surrounded by a sealed area.