

【DESCRIPTION】**【Invention Title】**

Kimchi packaging container with flexibility and firmness

【Technical Field】

5 The disclosure relates to a kimchi packaging container and, more particularly, to a kimchi packaging container with flexibility and firmness, in which the lower end portion of an accommodation part made of a flexible material and accommodating kimchi therein is coupled to a support part
10 formed in a fixed shape, such that the storage and transport of kimchi can be readily achieved by maintaining the shape of the lower end of the accommodation part by the support part.

【Background Art】

15 In the past, kimchi products (hereinafter, referred to as "kimchi") have been generally packaged in pouches made of flexible materials.

20 However, if kimchi is packaged in a pouch made of a flexible material and the pouch tilts or falls to any side during storage and transportation, some of the kimchi in the pouch cannot be immersed in the liquid thereof, resulting in yeast and mold formation, discoloration, physical deterioration and the like and thus deteriorating the quality of the kimchi.

25 In order to solve the problems, the present applicant has proposed a kimchi packaging container as disclosed in

Korean Utility Model Registration No. 20-0431140, published on November 14, 2006.

In the kimchi packaging container, the kimchi in a pouch part is pressed by pressing plates provided on the bottom surface of a cover part and thus immersed in the liquid thereof such that the quality of the kimchi can be easily maintained.

However, the conventional kimchi packaging container has a problem that the lower end of the pouch part, which is in contact with the bottom of a shelf and the like frequently, is easily damaged by external impact due to the material properties.

In addition, since the conventional kimchi packaging container is apt to be wrinkled or bent in the pouch part due to the material properties thereof, it is difficult to confirm the product information displayed on the outer surface thereof, thereby making it difficult for a consumer to select. Besides, since the shape of the lower end of the pouch part can be maintained and thus cannot be stacked, there is a further problem that it is difficult to store and transport kimchi.

Further, the conventional kimchi packaging container has a problem that when the pouch is brought into contact with the inner wall of a refrigerator during the refrigeration storage, the kimchi around the contact area is apt to be easily frozen, deteriorating the quality of the kimchi.

Also, in the conventional kimchi packaging container, the lower end of a connection part that is coupled with the cover part is located at a lower position than the lower ends

of the pressing plates of the cover part. Therefore, if the kimchi storage amount in the pouch part is reduced to a certain level or less due to eating, a space is formed by the connection part between the lower ends of the pressing plates and the kimchi in the pouch part such that the kimchi cannot be pressed by the pressing plates, deteriorating the quality of the kimchi.

For the above reasons, in the related field, although there have been many development attempts to maintain the shape of the lower end of the pouch part so as to easily store and transport kimchi while preventing the deterioration of the quality of kimchi during the storage and transportation, no satisfactory results have been obtained so far.

15 **【Disclosure】**

【Technical Problem】

The disclosure has been made in view of the above circumstances and has an objective to provide a kimchi packaging container, which can solve the problem that the lower end of the pouch part is easily damaged by external impact in the conventional kimchi packaging containers.

In addition, the disclosure has another objective to provide a kimchi packaging container, which can solve the problem that the shape of the lower end of the pouch part cannot be maintained in the conventional kimchi packaging containers, resulting in the difficulty in the storage and transportation of kimchi.

Besides, the disclosure has still another objective to provide a kimchi packaging container, which can solve the problem of deteriorating the quality of kimchi due to the frequent freezing of kimchi in the pouch part during refrigerated storage of kimchi in the conventional kimchi packaging containers.

Further, the disclosure has a further objective to provide a kimchi packaging container, which can solve the problem of deteriorating the quality of kimchi due to the release of the pressure applied to kimchi by the pressing plate in the conventional kimchi packaging containers.

【Technical Solution】

According to the disclosure to achieve the above objectives, there is provided a kimchi packaging container with flexibility and firmness, comprising: an accommodation part formed in the shape of a pouch made of a flexible material; a connection part for maintaining the upper end of the accommodation part in an open state; a cover part for blocking the opening of the upper end of the connection part and pressing kimchi accommodated in the accommodation part with pressing plates provided on the bottom surface thereof; and a support part for blocking the opening of the lower end of the accommodation part and formed in a fixed shape so as to constantly maintain the shape of the lower end of the accommodation part.

The accommodation part may be formed of vinyl or a synthetic resin film, which is transparent or translucent.

The connection part is provided such that the outer or inner circumference thereof is fused to the inner or outer circumference of upper end of the accommodation part.

5 The connection part has a protruding edge, which protrudes outwards on the outer circumference thereof.

The connection part has protrusions, which are formed on the outer surface of the connection part so as to face each other in the back and forth directions or in the right and left directions of the connection part.

10 Each one of the protrusions is coupled to any one of a plurality of coupling holes formed in the both end portions of a handle strap.

The connection part may be formed of a synthetic resin injection molding.

15 The cover part has a coupling protrusion, which protrudes inwards on the inner circumference thereof.

The cover part may be formed of a synthetic resin injection molding.

20 The pressing plate has a lower end positioned at the lower position than the lower end of the connection part in a state, in which the cover part is coupled to the connection part.

25 The support part is provided such that the outer or inner circumference thereof is fused to the inner or outer circumference of the lower end of the accommodation part.

The support part is formed in a shape and size to accommodate the connection part and the cover part.

The support part may be formed in any one of a circular shape, an elliptical shape, and a polygonal shape.

The support part has protrusions, which are formed on the outer surface of the support part so as to face each other in the back and forth directions or in the right and left directions of the support part.

Each one of the protrusions is coupled to any one of the plurality of coupling holes formed in the both end portions of the handle strap.

The support part has a wall member extending upwards at a predetermined height from the edge of the bottom surface.

The wall member includes a plurality of extension pieces, which protrude in the upward direction.

The support part may be formed of a synthetic resin injection molding.

【Advantageous Effects】

As for the kimchi packaging container with flexibility and firmness according to the disclosure, the lower end of the accommodation part is coupled to the support part, which has a fixed shape, such that the lower end of the accommodation part is protected by the support part and simultaneously the shape of the lower end of the accommodation part is uniformly maintained such that the lower end of the accommodation part can be prevented from being damaged and the storage and transportation of kimchi can be facilitated.

In addition, as for the kimchi packaging container with flexibility and firmness according to the disclosure, the lower end of the pressing plate is positioned at a lower position than the lower end of the connection part and the support part can accommodate the connection part and cover part, the pressure applied to the kimchi by the plate can be maintained continuously such that the deterioration of the quality of kimchi can be prevented.

【Description of Drawings】

Fig. 1 is a perspective view showing the appearance of a kimchi packaging container with flexibility and firmness according to the disclosure.

Fig. 2 is an exploded perspective view illustrating the structure of the kimchi packaging container with flexibility and firmness according to the disclosure.

Fig. 3 is a coupled state cross-sectional view for explaining the structure of the kimchi packaging container with flexibility and firmness according to the disclosure.

Fig. 4 is a perspective view showing a modified form of a support part in the kimchi packaging container with flexibility and firmness according to the disclosure.

Fig. 5 is an illustration for explaining kimchi pressurization through the pressing plates of a cover part in the kimchi packaging container with flexibility and firmness according to the disclosure.

Fig. 6 is an illustration for explaining the accommodation of the cover part and a connection part through

the support part in the kimchi packaging container with flexibility and firmness according to the disclosure.

Fig. 7 is an illustration showing the kimchi packaging container with flexibility and firmness, to which a handle
5 strap is coupled, and

Fig. 8 is another illustration showing the kimchi packaging container with flexibility and firmness, to which a handle strap is coupled.

Brief Explanation of Reference Symbols

10	10: accommodation part	20: connection part
	21: protruding edge	22: protrusion
	30: cover part	31: pressing plate
	32: coupling protrusion	40: support part
	41: protrusion	40a: bottom surface
15	40b: wall member	40c: extension piece
	50: handle strap	51: coupling hole
	100: kimchi	A: kimchi packaging container

【Best Mode for Carrying out the Invention】

Hereinafter, the present invention will be described in
20 detail in accordance with preferred embodiments thereof with reference to the accompanying drawings.

As shown in Fig. 1 to Fig. 3, a kimchi packaging container A with flexibility and firmness according to the

disclosure includes an accommodation part 10, a connection part 20, a cover part 30, and a support part 40.

The accommodation part 10 is formed in the shape of a pouch made of a flexible material.

5 The accommodation part 10 is formed in an open shape with an upper portion and a lower position.

As the upper portion and the lower portion of the accommodation part 10 are formed in the open shape, the connection part 20 can be coupled to the upper end of the
10 accommodation part 10 and the support part 40 can be coupled to the lower end of the accommodation part 10.

Meanwhile, the accommodation part 10 may be formed of vinyl or a synthetic resin film, which is transparent or translucent.

15 As the accommodation part 10 is formed of vinyl or a synthetic resin film, which is transparent or translucent, it is possible to visually confirm the kimchi 100 accommodated inside the accommodation part 10 from the outside of the accommodation part 10 due to the material properties thereof.

20 The connection part 20 maintains the upper end of the accommodation part 10 open.

It is preferable that the outer or inner circumference of the connection part 20 is fused to the inner or outer circumference of the upper end of the accommodation part 10.

25 As the outer or inner circumference of the connection part 20 is fused to the inner or outer circumference of the upper end of the accommodation part 10, the liquid and the

like of the kimchi 100 are prevented from leaking between the connection part 20 and the accommodation part 10.

Further, it is preferable that the connection part 20 includes a protruding edge 21 which protrudes outwards on the
5 outer circumference thereof.

As the connection part 20 has the protruding edge 21, the connection part 20 and the cover part 30 can be coupled to each other in such a manner that the protruding edge 21 is caught by a coupling protrusion 32 formed on the cover part
10 30, which is described below.

In addition, it is preferable that the connection part 20 includes protrusions 22 formed on the outer surface of the connection part 20 and the protrusions 22 face each other in the back and forth directions or in the right and left
15 directions of the connection part 20.

As the connection part 20 includes the protrusions 22, a handle strap 50 is coupled to the connection part 20 in such a manner that any one of a plurality of coupling holes 51, which are provided in both end portions of the handle strap
20 50, is coupled to each of the protrusions 22.

The connection part 20 may be formed of a synthetic resin injection molding.

As the connection part 20 is formed of a synthetic resin injection molding, the durability of the connection part 20
25 can be stabilized and the connection part 20 is easily prepared.

The cover part 30 blocks the opening of the upper end of the connection part 20 and presses the kimchi 100

accommodated in the accommodation part 10 through the pressing plates 31 on the bottom surface thereof.

It is preferable that the cover part 30 as above includes a coupling protrusion 32 which protrudes inwards on
5 the inner circumference thereof.

As the cover part 30 includes the coupling protrusion 32, the cover part 30 can be coupled to the connection part 20 in such a manner that the protruding edge 21 provided on the connection part 20 is caught by the coupling protrusion 32.

10 The cover part 30 may be formed of a synthetic resin injection molding.

As the cover part 30 is formed of a synthetic resin injection molding, the durability of the cover part 30 can be stabilized and the cover part 30 is easily prepared.

15 Meanwhile, in the cover part 30, the pressing plate 31 may be of any normal shape so long as the pressing plate 31 can press the kimchi 100 in the accommodation part 10.

However, it is preferable that the lower end of the pressing plate 31 is located at a lower position than the
20 lower end of the connection part 20 in a state, in which the cover part 30 is coupled to the connection part 20.

Since the lower end of the pressing plate 31 is located at a lower position than the lower end of the connection part 20, thereby preventing the generation of a space between the
25 pressing plate 31 and the kimchi 100 in the accommodation part 10 due to the connection part 20, the kimchi 100 is continuously applied with pressure by the pressing plate 31 in the accommodation part 10.

The support part 40 blocks the opening of the lower end of the accommodation part 10 and has a fixed shape so as to constantly maintain the shape of the lower end of the accommodation part 10.

5 It is preferable that the outer or inner circumference of the support part 40 is fused to the inner or outer circumference of the lower end of the accommodation part 10.

As the outer or inner circumference of the support part 40 is fused to the inner or outer circumference of the lower
10 end of the accommodation part 10, the liquid and the like of the kimchi 100 are prevented from leaking between the support part 40 and the accommodation part 10.

In addition, it is preferable that the support part 40 is formed in a shape and size such that the connection part
15 20 and the cover part 30 can be accommodated in the support part 40, as shown in Fig. 6.

When the connection part 20 and the cover part 30 are accommodated in the support part 40, even if the kimchi 100 is left adjacent to the bottom of the support part 40, the
20 kimchi 100 can be pressed by the pressing plates 31. Thus, regardless of the storage amount of the kimchi 100, the quality of the kimchi 100 can be maintained.

Herein, the support part 40 may be formed in any one shape capable of accommodating the connection part 20 and the
25 cover part 30, for example, a circular shape, an elliptical shape, or a polygonal shape.

In addition, it is preferable that the support part 40 includes protrusions 41 formed on the outer surface of the

support part 40 and the protrusions 41 face each other in the back and forth directions or in the right and left directions of the support part 40.

As the support part 40 includes the protrusions 41, the
5 handle strap 50 is coupled to the support part 40 in such a manner that any one of a plurality of coupling holes 51, which are provided in both end portions of the handle strap 50, is coupled to each of the protrusion 41.

The support part 40 may be formed of a synthetic resin
10 injection molding.

As the support part 40 is formed of a synthetic resin injection molding, the durability of the support part 40 can be stabilized and the support part 40 is easily prepared.

In addition, it is preferable that the support part 40
15 includes a wall member 40b extending upwards at a constant height from the edge of the bottom surface 40a.

As the support part 40 includes the wall member 40b, a certain amount of the kimchi 100 can be accommodated in the support part 40.

20 Meanwhile, the wall member 40b may include a plurality of extension pieces 40c protruding upwards, as another example of the support part 40 as shown in Fig. 4.

As the wall member 40b has the extension pieces 40c, the shape of the accommodation part 10 is further maintained by
25 the extension pieces 40c.

The following is a detailed description of the kimchi packaging container A with flexibility and firmness

(hereinafter, referred to as "container") with respect to the packaging of the kimchi 100.

According to the disclosure, the accommodation part 10 is formed in the shape of a pouch made of a flexible material and has flexibility in terms of the material properties thereof. Due to the flexibility of the accommodation part 10,

As the accommodation part 10 is lowered down by the load of the connection part 20 and the cover part 30, the lower ends of the pressing plates 31 are brought into contact with the kimchi 100 so that the pressing of the kimchi 100 can be pressed by the pressing plates 31, as shown in Fig. 5.

Therefore, even if a small amount of kimchi 100 is initially put in the accommodation part 10, that is, a small amount of kimchi 100 is packaged, or some of the kimchi 100 in the accommodation part 10 is withdrawn and eaten, the kimchi 100 in the accommodation part 10 can be still maintained under pressure through the pressing plates 31, thereby uniformly maintaining the quality of the kimchi 100.

Herein, since the accommodation part 10 is formed in the shape of a pouch made of a flexible material, damage to the lower end of the accommodation part 10 may occur and, in particular, the accommodation part 10 may move, be tilted or fall to a side. In this case, it is not easy to put the accommodation part 10 upright or stack the same, resulting in the difficulty in the storage and transportation of the kimchi 100.

However, according to the disclosure, the accommodation part 10 is coupled to the support part 40, which is in a fixed shape, with the lower end thereof, such that the lower

end of the accommodation part 10 is protected by the support part 40 and the shape of the lower end of the accommodation part 10 is uniformly maintained. Therefore, it is possible to put the accommodation part 10 upright or stack the same through the support part 40 and thus the storage and transportation of the kimchi 100 can be facilitated.

Meanwhile, the connection part 20 and the support part 40, according to the disclosure, have the protrusions 22 and 41, respectively, such that the handle strap 50 can be coupled by means of the protrusions 22 and 41, as shown in Fig. 7. By using the handle strap 50, the kimchi 100 can be more easily stored and transported.

In this case, when the coupling state of the handle strap 50 with respect to the connection part 20 and the support part 40 is fixed, a gap between the lower end of the connection part 20 and the upper part of the support part 40 is also fixed such that the storage capacity of the kimchi 100 may be limited in the accommodation part 10.

However, according to the disclosure, each of the protrusions 22 is coupled to any one of the plurality of coupling holes 51 provided in the handle strap 50. Therefore, an interval between the lower end of the connection part 20 and the upper end of the support part 40 can be adjusted by selecting any one of the plurality coupling holes 51 and coupling each of the protrusions 22 thereto such that the storage capacity of the kimchi 100 through the accommodation part 10 can be changed, as shown in Fig. 8. Therefore, according to the disclosure, the kimchi 100 can be packaged in various capacity in the container A.

As for the kimchi packaging container with flexibility and firmness according to the disclosure described hereinabove, the support part 40 in a fixed shape is coupled to the lower end of the accommodation part 10 such that the lower end of the accommodation part 10 is protected by the support part 40 and simultaneously the shape of the lower end of the accommodation part 10 is constantly maintained by the support part 40, thereby preventing the damage to the lower end of the accommodation part 10 and facilitating the storage and transportation of the kimchi 100. Besides, since the lower ends of the pressing plates 31 are located at a lower position than the lower end of the connection part 20 and the support part 40 can accommodate the connection part 20 and the cover part 30, the kimchi 100 can be continuously maintained under pressure by the pressing plates 31 without deterioration of the quality thereof.

The disclosure as described above is not limited to the embodiments described above and can be modified without departing from the gist of the disclosure claimed in the claims of the disclosure and such modifications are within the scope of the disclosure as defined by the following claims.

【CLAIMS】**【Claim 1】**

A kimchi packaging container with flexibility and firmness, comprising:

5 an accommodation part formed in the shape of a pouch made of a flexible material;

 a connection part for maintaining the upper end of the accommodation part in an open state;

10 a cover part for blocking the opening of the upper end of the connection part and pressing kimchi accommodated in the accommodation part with pressing plates provided on the bottom surface thereof; and

 a support part for blocking the opening of the lower end of the accommodation part and formed in a fixed shape so as
15 to constantly maintain the shape of the lower end of the accommodation part.

【Claim 2】

 The kimchi packaging container with flexibility and firmness according to claim 1, wherein the accommodation part
20 is formed of vinyl or a synthetic resin film, which is transparent or translucent.

【Claim 3】

 The kimchi packaging container with flexibility and firmness according to claim 1, wherein the connection part is

provided such that the outer or inner circumference thereof is fused to the inner or outer circumference of the upper end of the accommodation part upper.

【Claim 4】

5 The kimchi packaging container with flexibility and firmness according to claim 1, wherein the connection part has a protruding edge, which protrudes outwards on the outer circumference thereof.

【Claim 5】

10 The kimchi packaging container with flexibility and firmness according to claim 1, wherein the connection part has protrusions, which are formed on the outer surface of the connection part so as to face each other in the back and forth directions or in the right and left directions of the
15 connection part, such that each one of the protrusions is coupled to any one of a plurality of coupling holes formed in the both end portions of a handle strap.

【Claim 6】

 The kimchi packaging container with flexibility and
20 firmness according to claim 1, wherein the cover part has a coupling protrusion, which protrudes inwards on the inner circumference thereof.

【Claim 7】

 The kimchi packaging container with flexibility and
25 firmness according to claim 1, wherein the pressing plate has

a lower end positioned at the lower position than the lower end of the connection part in a state, in which the cover part is coupled to the connection part.

【Claim 8】

5 The kimchi packaging container with flexibility and firmness according to claim 1, wherein the support part is provided such that the outer or inner circumference thereof is fused to the inner or outer circumference of the lower end of the accommodation part.

10 **【Claim 9】**

 The kimchi packaging container with flexibility and firmness according to claim 1, wherein the support part is formed in a shape and size to accommodate the connection part and the cover part.

15 **【Claim 10】**

 The kimchi packaging container with flexibility and firmness according to claim 1, wherein the support part has protrusions, which are formed on the outer surface of the support part so as to face each other in the back and forth
20 directions or in the right and left directions of the support part, such that each one of the protrusions is coupled to any one of the plurality of coupling holes formed in the both end portions of the handle strap.

【Claim 11】

The kimchi packaging container with flexibility and firmness according to claim 1, wherein the support part has a wall member extending upwards from the edge of the bottom
5 surface at a predetermined height

【Claim 12】

The kimchi packaging container with flexibility and firmness according to claim 1, wherein the wall member includes a plurality of extension pieces, which protrude in
10 the upward direction.