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(54) **VACUUM SEALED PRESERVATION BAG WITH EVACUATION VALVE SEAT**

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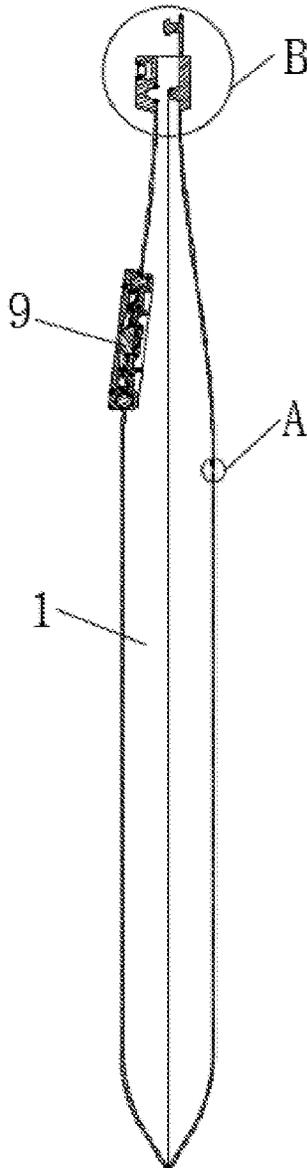
(57) **ABSTRACT**

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The invention is about a vacuum sealed preservation bag with an evacuation valve seat. With arranging the silica gel sheet, the first sealing strip, the second sealing strip, the buckle strip and the T-shaped groove, the rib strips implement the sealing by mutual friction, they are easy to separate under the action of external force, which causes the air to enter the sealed bag, affecting the using effect of the sealed bag is solved.

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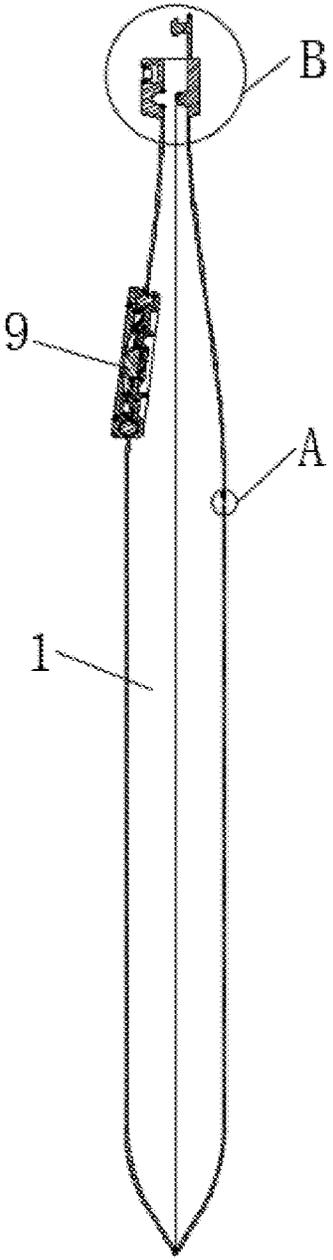


FIG.1

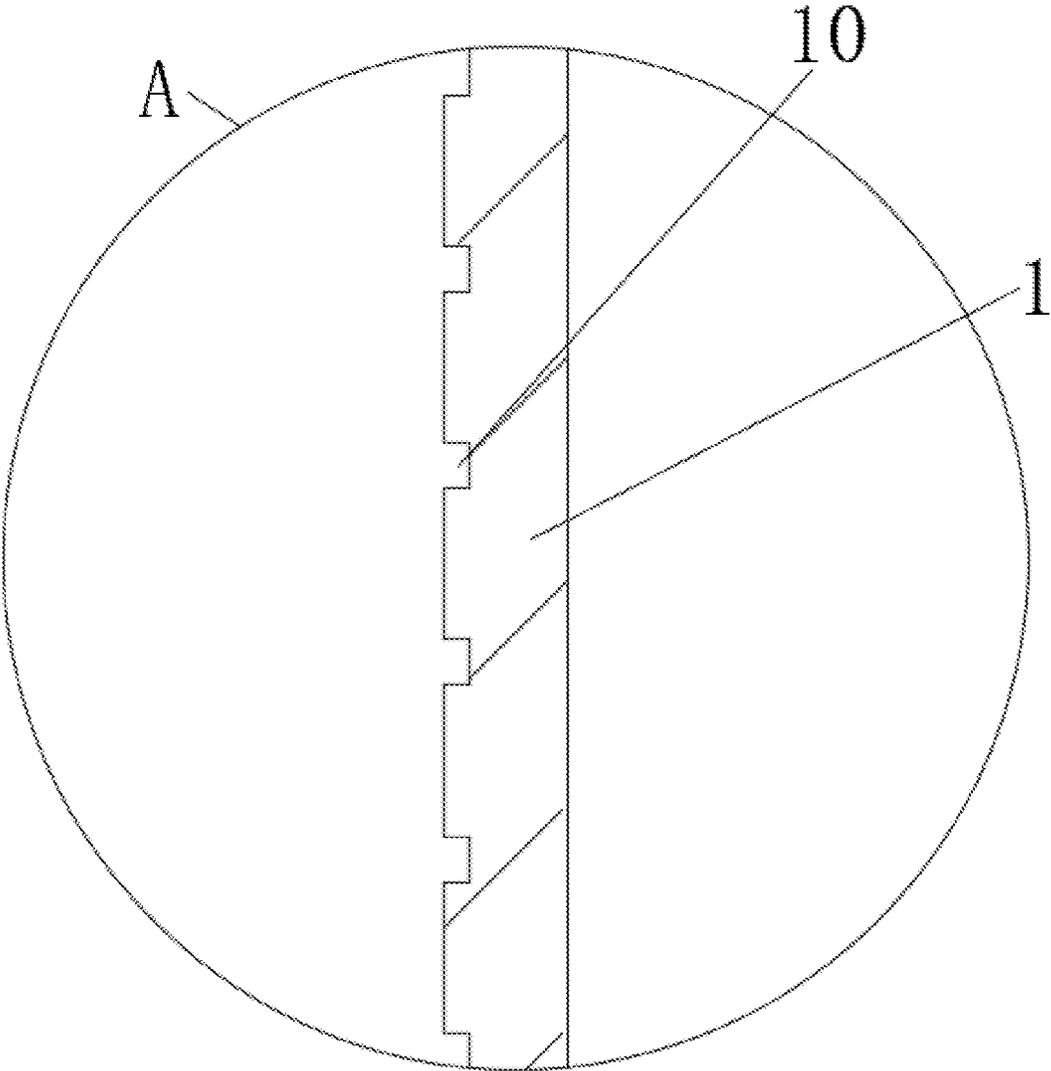


FIG.2

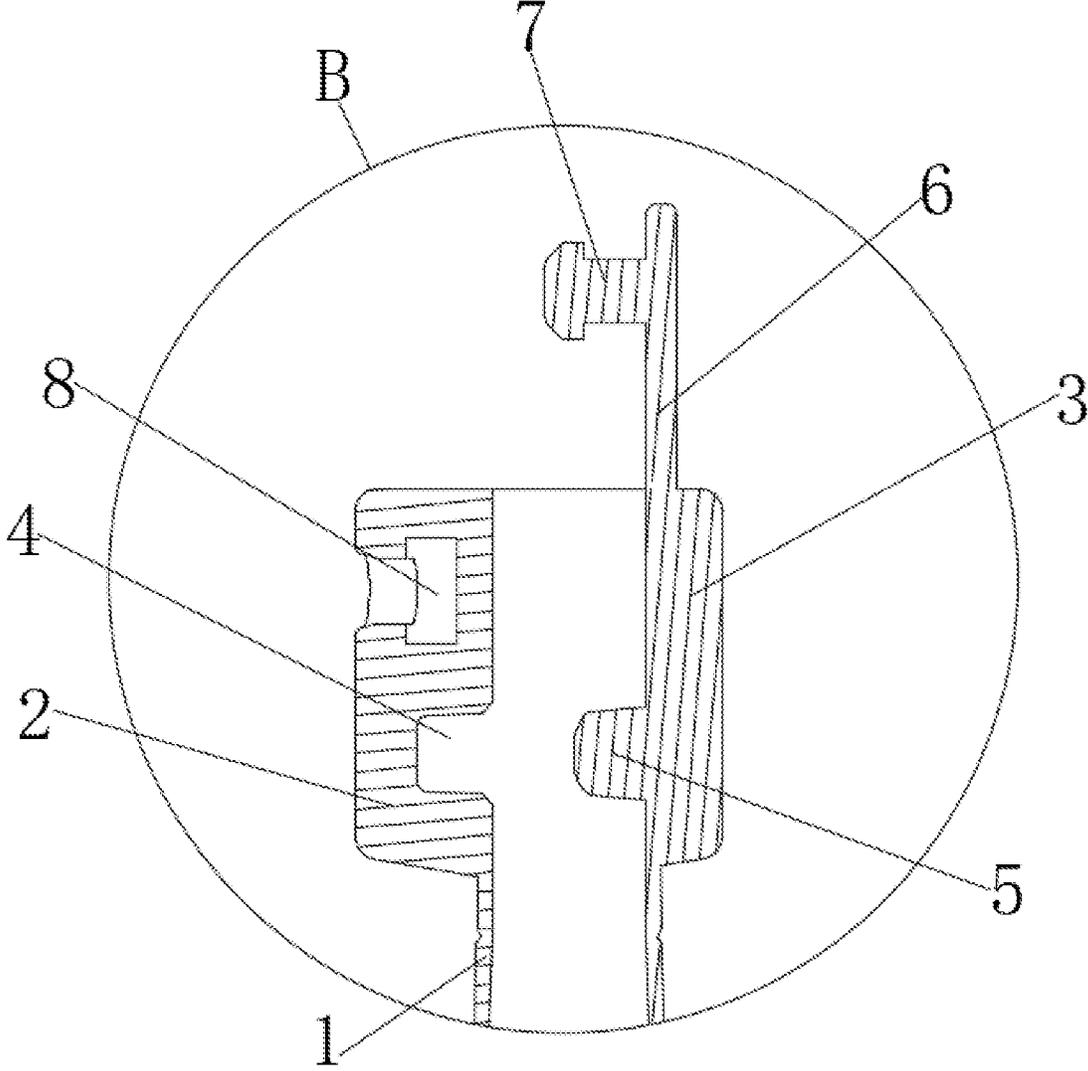


FIG.3

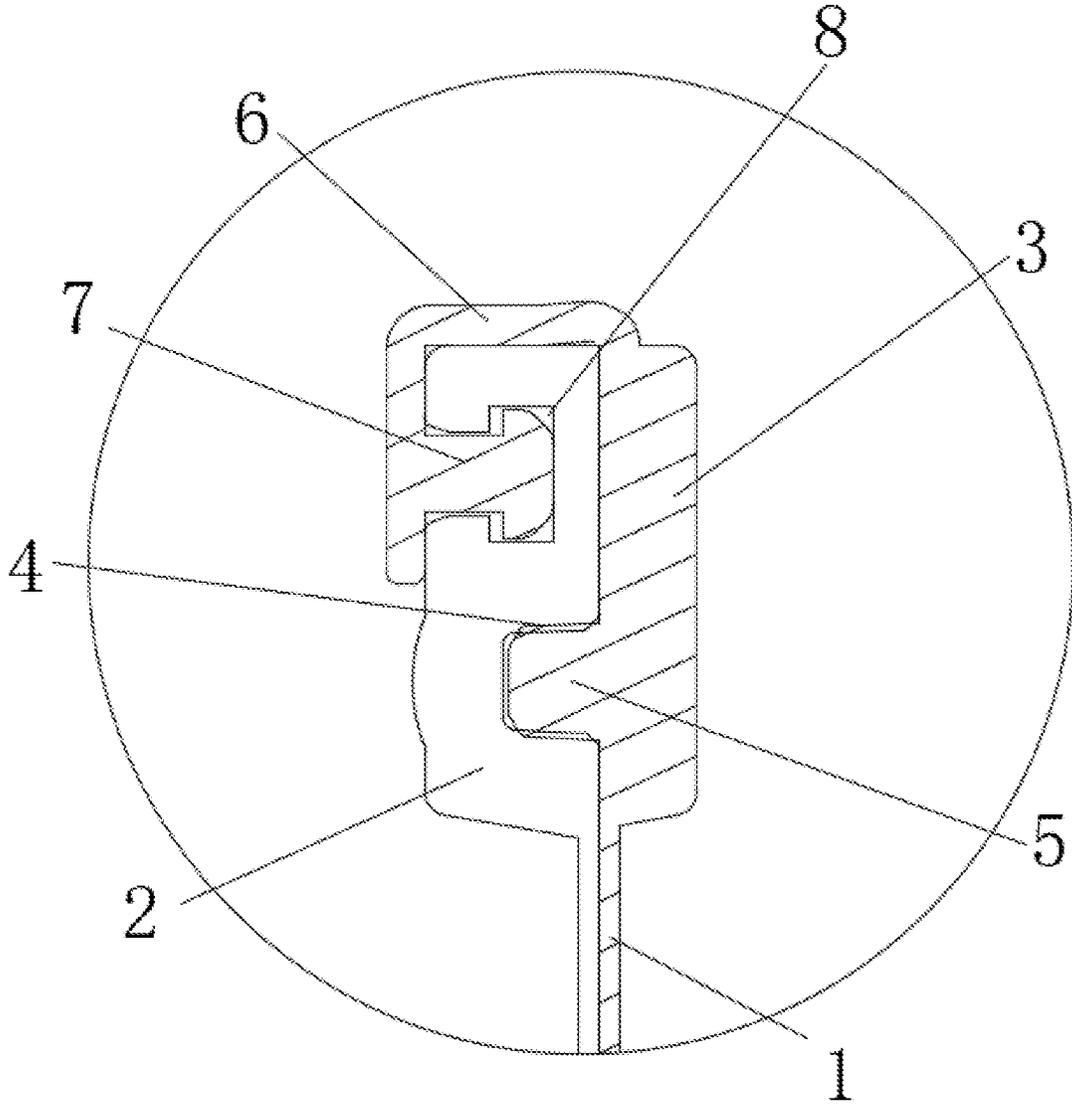


FIG.4

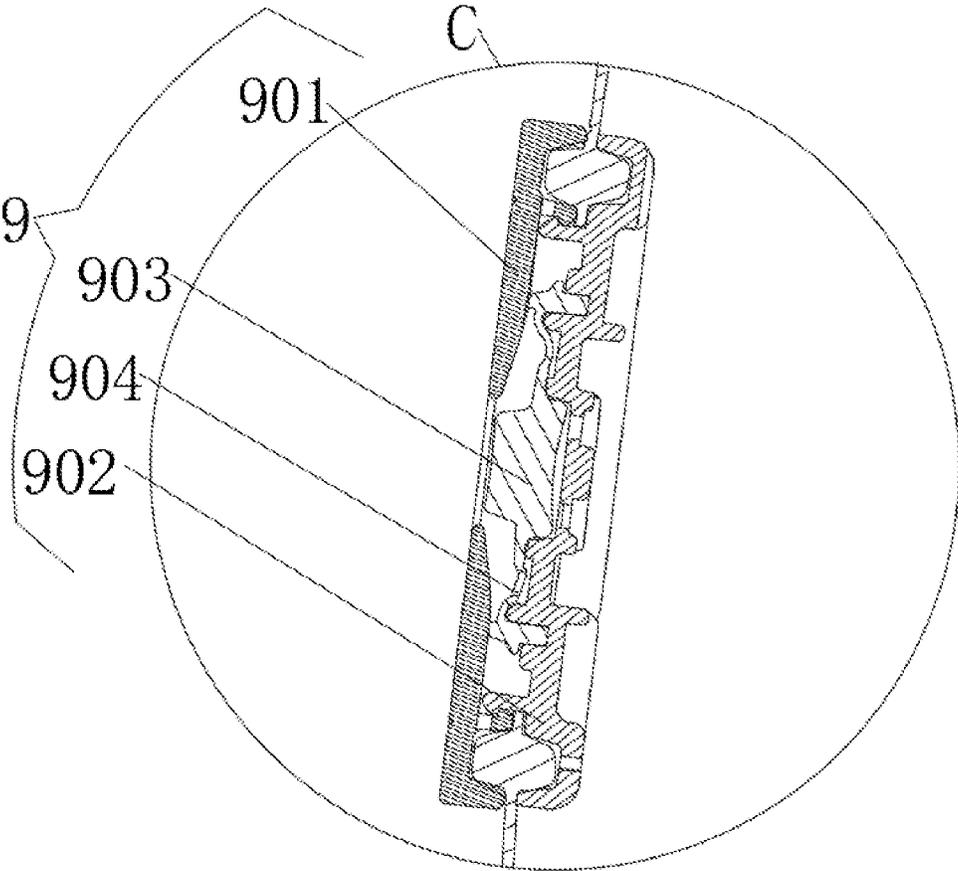


FIG. 5

## VACUUM SEALED PRESERVATION BAG WITH EVACUATION VALVE SEAT

### CROSS-REFERENCE TO RELATED APPLICATIONS

**[0001]** This is a U.S. patent application which claims the priority and benefit of Chinese Patent Application Number 202121766736.1, filed on Jul. 31, 2021, the disclosure of which is incorporated herein by reference in its entirety.

### TECHNICAL FIELD

**[0002]** The present utility model relates to the technical field of sealed bags, in particular to a vacuum sealed preservation bag with an evacuation valve seat. It is convenient for the air to be discharged and evacuated quickly and effectively.

### BACKGROUND

**[0003]** In daily life, sealed preservation bags are frequently used, which are re-sealable plastic bags made of polyethylene and high-pressure linear polyethylene as raw materials. They can isolate items from contacting with air, keeps food fresh, and are hygienic and safe.

**[0004]** For common sealed plastic bags on the market, the sealing is implemented with rib strips. Because the rib strips implement the sealing by mutual friction, they are easy to separate under the action of external force, which causes the air to enter the sealed bag, affecting the using effect of the sealed bag.

### SUMMARY

**[0005]** The present utility model provides a vacuum sealed preservation bag with an evacuation valve seat, which has the advantage of performing secondary sealing on the mouth of the sealed preservation bag to enhance the sealing performance of the sealed preservation bag, so as to solve the problem that because the rib strips implement the sealing by mutual friction, they are easy to separate under the action of external force, which causes the air to enter the sealed bag, affecting the using effect of the sealed bag.

**[0006]** In order to achieve the purpose of performing secondary sealing on the mouth of the sealed preservation bag to enhance the sealing performance of the sealed preservation bag, the present utility model provides the following technical solution: a vacuum sealed preservation bag with an evacuation valve seat includes two silica gel sheets, where a first sealing strip and a second sealing strip are respectively arranged on the surfaces of the two silica gel sheets, the side of the first sealing strip close to the second sealing strip is provided with a horizontal groove, the side of the second sealing strip close to the first sealing strip is fixedly connected to a horizontal strip, a flap is arranged on the surface of the second sealing strip, a buckle strip is fixedly connected to the surface of the flap, the surface of the first sealing strip is provided with a T-shaped groove, and an evacuation valve body is arranged on the surface of the silica gel sheet.

**[0007]** As a preferred technical solution of the present utility model, the shape of the inner wall of the T-shaped groove is matched with the shape of the buckle strip.

**[0008]** As a preferred technical solution of the present utility model, the opposite sides of the two silica gel sheets are both provided with fine corrugations.

**[0009]** As a preferred technical solution of the present utility model, the two silica gel sheets are integrated.

**[0010]** As a preferred technical solution of the present utility model, the shape of the horizontal strip is matched with the shape of the inner wall of the horizontal groove.

**[0011]** As a preferred technical solution of the present utility model, the buckle strip is made of silica gel.

**[0012]** As a preferred technical solution of the present utility model, the evacuation valve body includes an extraction seat upper cover, an extraction seat lower cover and a one-way sealing valve, where the one-way sealing valve is made of silica gel, has an edge that is of a sheet structure and is provided with many exhaust holes, the one-way sealing valve is communicated with the inside of the silica gel sheet, the extraction seat upper cover and an evacuation seat lower cover are fastened together by the one-way sealing valve through peripheral buckle positions.

**[0013]** Compared with the prior art, the present utility model provides a vacuum sealed preservation bag with an evacuation valve seat, which has the following beneficial effects:

**[0014]** 1. According to the vacuum sealed preservation bag with an evacuation valve seat, by providing the silica gel sheet, the first sealing strip, the second sealing strip, the horizontal strip and the horizontal groove, an object that needs to be sealed is placed between the two silica gel sheets. The first sealing strip and the second sealing strip are attached tightly, such that the horizontal strip is stuck into the horizontal groove. At this time, the two silica gel sheets are sealed well, and the flap is rotated to make the buckle strip stuck into the T-shaped groove. The horizontal strip and the horizontal groove are used for primary sealing, and the buckle strip and the T-shaped groove are used for secondary sealing, which solves the problem of insufficient airtightness of common sealed preservation bags on the market.

**[0015]** 2. According to the vacuum sealed preservation bag with an evacuation valve seat, the fine corrugations are provided, and an evacuation cylinder is arranged on the evacuation valve body for evacuation, when evacuation, since there are the fine corrugations between the two silica gel sheets, the air can flow between the fine corrugations, the sealing is more convenient, and the sealing effect is better.

### BRIEF DESCRIPTION OF THE DRAWINGS

**[0016]** FIG. 1 is a schematic structural diagram of the present utility model.

**[0017]** FIG. 2 is an enlarged view of part A in FIG. 1 of the present utility model.

**[0018]** FIG. 3 is an enlarged view of part B in FIG. 1 of the present utility model.

**[0019]** FIG. 4 is a schematic structural diagram of a buckle strip in FIG. 3 in the closed state of the present utility model.

**[0020]** FIG. 5 is an enlarged view of part C in FIG. 1 of the present utility model.

**[0021]** In the drawings: 1. silica gel sheet; 2. first sealing strip; 3. second sealing strip; 4. horizontal groove; 5. horizontal strip; 6. flap; 7. buckle strip; 8. T-shaped groove; 9. extraction valve body; 901. extraction seat upper cover; 902. extraction seat lower cover; 903. one-way sealing valve; 904. exhaust hole; and 10. fine corrugations.

DETAILED DESCRIPTION OF THE  
EMBODIMENTS

**[0022]** The technical solutions in the embodiments of the present utility model will be clearly and completely described below with reference to the accompanying drawings in the embodiments of the present disclosure. Obviously, the embodiments described are merely a part of the embodiments of the present utility model, not all the embodiments. Based on the embodiments of the present utility model, all other embodiments obtained by a person of ordinary skill in the art without creative work shall fall within the protection scope of the present utility model.

**[0023]** Referring to FIGS. 1-5, the present utility model discloses a vacuum sealed preservation bag with an evacuation valve seat, including two silica gel sheets 1. A first sealing strip 2 and a second sealing strip 3 are respectively arranged on the surfaces of the two silica gel sheets 1. The side of the first sealing strip 2 close to the second sealing strip 3 is provided with a horizontal groove 4. The side of the second sealing strip 3 close to the first sealing strip 2 is fixedly connected to a horizontal strip 5. A flap 6 is arranged on the surface of the second sealing strip 3. A buckle strip 7 is fixedly connected to the surface of the flap 6. The surface of the first sealing strip 2 is provided with a T-shaped groove 8. An evacuation valve body 9 is arranged on the surface of the silica gel sheet 1.

**[0024]** Specifically, the shape of the inner wall of the T-shaped groove 8 is matched with the shape of the buckle strip 7.

**[0025]** In this embodiment, it is convenient for the buckle strip 7 to be smoothly placed into the T-shaped groove 8 to enhance secondary airtightness.

**[0026]** Specifically, the opposite sides of the two silica gel sheets 1 are both provided with fine corrugations 10.

**[0027]** In this embodiment, it is convenient for air to circulate through gaps of the fine corrugations 10.

**[0028]** Specifically, the two silica gel sheets 1 are integrated.

**[0029]** In this embodiment, the airtightness between the two silica gel sheets 1 is enhanced, such that they are not easy to leak and damage during use.

**[0030]** Specifically, the shape of the horizontal strip 5 is matched with the shape of the inner wall of the horizontal groove 4.

**[0031]** In this embodiment, it is convenient for the horizontal bar 5 to be put into the horizontal groove 4, such that the airtightness is better.

**[0032]** Specifically, the buckle strip 7 is made of silica gel.

**[0033]** In this embodiment, the buckle strip 7 can be easily put into the T-shaped groove 8 by utilizing the flexibility of silica gel, without affecting the airtightness.

**[0034]** Specifically, the evacuation valve body 9 includes an extraction seat upper cover 901, an extraction seat lower cover 902 and a one-way sealing valve 903. The one-way sealing valve 903 is made of silica gel, has an edge that is of a sheet structure and is provided with many exhaust holes 904. The one-way sealing valve 903 is communicated with the inside of the silica gel sheet 1. The extraction seat upper cover 901 and an evacuation seat lower cover 902 are fastened together by the one-way sealing valve 903 through peripheral buckle positions.

**[0035]** In this embodiment, with the exhaust hole 904, it is convenient to discharge air, the air is evacuated through the

one-way sealing valve 903, and then the one-way sealing valve 903 is sealed by buckle positions to prevent air intake.

**[0036]** The working principle and use process of the present utility model are as follows: When in use, an object that needs to be sealed is placed between the two silica gel sheets 1, and the first sealing strip 2 and the second sealing strip 3 are closely attached, such that the horizontal strip 5 is buckled into the horizontal groove 4. At this time, the two silica gel sheets 1 are well sealed, and the flap 6 is rotated to make the buckle strip 7 stuck into the T-shaped groove 8 to enhance secondary airtightness between the two silica gel sheets 1. In addition, an evacuation cylinder is arranged on the evacuation valve body 9 for evacuation, and the evacuation is completed when the two silica gel sheets 1 are compressed.

**[0037]** In summary, according to the vacuum sealed preservation bag with an evacuation valve seat, by arranging the silica gel sheet 1, the first sealing strip 2, the second sealing strip 3, the buckle strip 7 and the T-shaped groove 8, the problem that because the rib strips implement the sealing by mutual friction, they are easy to separate under the action of external force, which causes the air to enter the sealed bag, affecting the using effect of the sealed bag is solved.

**[0038]** It should be noted that, terms such as “include,” “comprise,” or any other variants thereof here are intended to cover non-exclusive inclusion, so that a process, method, article or device including a series of elements not only includes those elements, but also includes other elements that are not explicitly listed, or elements inherent to the process, method, article, or device. Without more restrictions, the element defined by the sentence “including a . . . ” does not exclude the existence of other identical elements in the process, method, article, or device that includes the element.

**[0039]** Although the embodiments of the present utility model have been shown and described, for a person of ordinary skill in the art, it will be understood that various changes, modifications, substitutions and variations can be made to these embodiments without departing from the principle and spirit of the present utility model, and the scope of the present utility model is defined by the appended claims and their equivalents.

What is claimed is:

1. A vacuum sealed preservation bag with an evacuation valve seat, comprising two silica gel sheets (1), wherein a first sealing strip (2) and a second sealing strip (3) are respectively arranged on the surfaces of the two silica gel sheets (1), the side of the first sealing strip (2) close to the second sealing strip (3) is provided with a horizontal groove (4), the side of the second sealing strip (3) close to the first sealing strip (2) is fixedly connected to a horizontal strip (5), a flap (6) is arranged on the surface of the second sealing strip (3), a buckle strip (7) is fixedly connected to the surface of the flap (6), the surface of the first sealing strip (2) is provided with a T-shaped groove (8), and an evacuation valve body (9) is arranged on the surface of the silica gel sheet (1).

2. The vacuum sealed preservation bag with an evacuation valve seat according to claim 1, wherein the shape of the inner wall of the T-shaped groove (8) is matched with the shape of the buckle strip (7).

3. The vacuum sealed preservation bag with an evacuation valve seat according to claim 1, wherein the opposite sides of the two silica gel sheets (1) are both provided with fine corrugations (10).

4. The vacuum sealed preservation bag with an evacuation valve seat according to claim 1, wherein the two silica gel sheets (1) are integrated.

5. The vacuum sealed preservation bag with an evacuation valve seat according to claim 1, wherein the shape of the horizontal strip (5) is matched with the shape of the inner wall of the horizontal groove (4).

6. The vacuum sealed preservation bag with an evacuation valve seat according to claim 1, wherein the buckle strip (7) is made of silica gel.

7. The vacuum sealed preservation bag with an evacuation valve seat according to claim 1, wherein the evacuation valve body (9) comprises an extraction seat upper cover (901), an extraction seat lower cover (902) and a one-way sealing valve (903), wherein the one-way sealing valve (903) is made of silica gel, has an edge that is of a sheet structure and is provided with many exhaust holes (904), the one-way sealing valve (903) is communicated with the inside of the silica gel sheet (1), the extraction seat upper cover (901) and an evacuation seat lower cover (902) are fastened together by the one-way sealing valve (903) through peripheral buckle positions.

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