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(54) **A SEALING ELEMENT FOR BUTTON-CONTROLLED COOKING DEVICES**

DICHTELEMENT FÜR KNOPFGESTEUERTE GARGERÄTE

ÉLÉMENT D'ÉTANCHÉITÉ POUR DISPOSITIFS DE CUISSON COMMANDÉS PAR BOUTON

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Description

Technical Field

[0001] The present invention relates to a sealing element which is suitable for use in button-controlled cooking devices, especially cooktops, and provides liquid sealing at openings of control elements which are located on a plate of the cooktop.

Background of the Invention

[0002] Gas and/or electric heaters are used in cooking devices (especially in cooktops) that are used for cooking foods. Such heaters are controlled by at least one button and, preferably, by a control element which is connected with the button. While using the cooking device, a part or liquid part of the food may spill onto the button from a pan or kitchen utensils as spoons, ladles or plates. In this case, if exposed parts of the hole for accessing the control element that is connected with the button are sealed with a sealing element, parts or liquid parts of the food are prevented from leaking into the product.

[0003] However, since the cooking devices are generally mass-produced, some problems may occur as failure of inserting the sealing element fully into the hole provided on the plate of the cooking device or wear/tear of the sealing element while being inserted. Moreover, failure of inserting the sealing member fully into the hole causes an increase in insertion time and accordingly the production period of the cooking device. In addition, in case the sealing member wears off due to use of the cooking device, the sealing member should be replaced. In this case, since it is a difficult and corrosive process to insert existing sealing elements, service life of the new sealing element to be inserted into the cooking device is also decreased.

[0004] An example for solving said problem is disclosed in published patent document no. TR2005/02100. Said document discloses a sealing gasket which provides sealing below a button of the cooking device and comprises an upper flange and a lower flange larger than the upper flange. However, the sealing gasket is inserted into the hole provided on the plate of the cooking device by being pushed from an inner surface of the plate towards the outer surface thereof. This complicates processes of detaching and replacing the sealing gasket once the cooking device is assembled.

Brief Description of the Invention

[0005] A sealing element according to the invention is suitable to use, in a cooking device comprising at least one plate suitable for positioning a cooking vessel thereon for cooking process; at least one heater providing heat to the cooking vessel for the cooking process; at least one button for controlling the cooking process; and at least one hole provided on the plate for receiving the button; for prevention of leakage of a part and/or liquid part of foods through the hole upon being positioned at the hole, wherein the sealing element comprises at least one body which has at least one opening extending longitudinally therein and at least one wall extending around the opening; at least one upper flange located at a first side of the body so that at least a side of the upper flange is connected with the wall, having at least a first width which extends away from the wall in a horizontal plane, and suitable for being placed on an upper surface of the plate which is provided at a part thereof intersecting with the hole; and at least one lower flange which is suitable for being placed on a lower surface of the plate provided at a part thereof intersecting with the hole, which is located at the first side of the body below the upper flange so that at least one side of the lower flange is connected with the wall, and which comprises at least a first part in the form of an arc section having at least a first width in the horizontal plane, at least a second part in the form of an arc section located opposite to the first part and having at least a second width in the horizontal plane that is larger than the first width, and at least a third part which couples opposing ends of the first part and the second part.

[0006] With the sealing element according to the present invention, a part and/or liquid part of foods are prevented from leaking through the hole provided on the plate in the button-controlled cooking devices. Thanks to the structure of the sealing element, wear and/or tear risks are minimised during processes of insertion into and removal from the hole which is provided at the plate of the cooktop. Therefore, an easy-to-use, practical and reliable sealing element is achieved.

Object of the Invention

[0007] An object of the present invention is to provide a sealing element for button-controlled cooking devices, especially for cooktops.

[0008] Another object of the present invention is to provide a sealing element which is located at the plate of the cooking device and provides sealing at the holes in which the button is located.

[0009] A further object of the present invention is to provide a sealing element which is located at the plate of the cooking device and prevents problems as wear or tear during insertion and removal of the button into and from the holes where it is located.

[0010] Yet another object of the present invention is to provide an easy-to-assemble, practical and reliable sealing element.

Description of the Drawings

[0011] Exemplary embodiments of the sealing element according to the present invention are illustrated in the attached drawings, in which:

Figure 1 is a perspective view of the sealing element according to the invention.

Figure 2 is a side sectional view of the sealing element according to the invention.

Figure 3 is a top view of an upper flange of the sealing element according to the invention.

Figure 4 is a top view of a lower flange of the sealing element according to the invention.

Figure 5 is a top view of the sealing element according to the invention.

[0012] All the parts illustrated in figures are individually assigned a reference numeral and the corresponding terms of these numbers are listed below:

Sealing element	(S)
Plate	(T)
Body	(1)
Opening	(1a)
Upper flange	(2)
Lower flange	(3)
First part	(3a)
Second part	(3b)
Third part	(3c)
Wall	(4)
Protrusion	(5)

Description of the Invention

[0013] Gas and/or electric heaters provided in cooking devices which are used for cooking foods are controlled by at least one button and preferably a control panel which is connected with the button. The button is located at the holes so that it is preferably connected with the control panel, wherein the holes are provided on the plate of the cooking device. Exposed parts of the hole in which the button is located are sealed by means of a sealing element to prevent parts or liquid parts of the food from reaching the control panel. However, since the cooking devices are generally produced in an assembly line, some problems may occur as failure of inserting the sealing element fully into the hole provided on the plate of the cooking device or wear/tear of the sealing element while being inserted. Moreover, in case the sealing element is required to be replaced, service life of the sealing element is decreased because the insertion and removal processes are difficult and corrosive. Within this context, the present invention provides a sealing element for button-controlled cooking devices.

[0014] The sealing element (S), exemplary embodiments of which are illustrated in figures 1-5, which is suitable to use, in a cooking device comprising at least one plate (T) suitable for positioning a cooking vessel thereon for cooking process; at least one heater providing heat to the cooking vessel for the cooking process; at least one button (the button is preferably connected with at least one control element provided in the cooking device) for controlling the cooking process (e.g. adjusting the heat amount emitted from the heater, adjusting the cooking interval, performing ignition process especially for gas cooking devices, etc.); and at least one hole provided on the plate (T) for receiving the button preferably such that the end parts of the control element are exposed for mounting the button to the control element; for prevention of leakage of a part and/or liquid part of foods through the hole upon being positioned at the hole, wherein the sealing element (S) comprises at least one body (1) which has at least one opening (1a) extending longitudinally therein and having a circular or oval cross sectional area and at least one wall (4) extending around the opening (1a) (e.g. towards the button which is mounted to the end part of the control element); at least one upper flange (2) located at a first side of the body (1) so that at least a side of the upper flange (2) is connected with the wall (4), having at least a first width which extends away from the wall (4) in a horizontal plane (e.g. a plane parallel to the plate (T) (x-y plane)), and suitable for being placed on an upper surface of the plate (T) which is provided at a part thereof intersecting with the hole; and at least one lower flange (3) which is suitable for being placed on a lower surface of the plate (T) provided at a part thereof intersecting with the hole, which is located at the first side of the body (1) below the upper flange (2) so that at least one side of the lower flange (3) is connected with the wall (4). The lower flange (3) comprises at least a first part (3a) in the form of an arc section having at least a first width in the horizontal plane (in other words, preferably having an equal width with the upper flange (2)), at least a second part (3b) in the form of an arc section located opposite to the first part (3a) and having at least a second width in the horizontal plane that is larger than the first width, and at least a third part (3c) which couples opposing ends of the first part (3a) and the second part (3b).

[0015] In an exemplary embodiment of the invention, in the cooktops which can be controlled by a button, the button is preferably located at the end parts of the control element which are exposed by the holes provided on the plate (T) of the cooking device such that a distance is provided between the plate (T) of the cooktop and the button, and at least a part of the button extends through the hole into the cooking device. The sealing element (S) which is inserted into the holes and preferably produced as a monolithic structure covers the distance between the button and the plate (T) of the cooktop so that the parts or liquid parts of the food are prevented from leaking through the hole and reaching the lower part of the plate (T) (e.g. a control panel provided at this lower part). For that reason, the sealing element (S) is passed through the hole by bending the lower flange (3) preferably from an area where the second part (3b) and the third part (3c) forming the outer wall thereof engages such that the upper flange (2) preferably having a circular cross sectional area (in other words, e.g. in the form of a ring) is at the upper surface of the plate (T) which is provided at

a part thereof intersecting with the hole. By this way, upper surface of the lower flange (3) is placed at the lower surface of the plate (T) provided at a part intersecting with the hole. In other words, the lower flange (3) and the upper flange (2) form a channel structure and the parts of the plate (T) intersecting with the hole is fixed in that channel. In this placement, the wall (4) forming the body of the sealing element (S) covers the gap which is to be formed due to the distance between the button and the plate (T) of the cooktop. Therefore, when the parts and/or liquid parts of the food are spilled onto the part where the hole is provided, the parts and/or the liquid parts which have been spilled are effectively prevented from leaking through hole and reaching the lower part of the plate (T). In addition, thanks to such a channel structure, the parts and/or liquid parts of the food are able to be prevented from reaching the lower flange (3) even if the parts and/or liquid parts of the food leak through the upper flange (2).

[0016] In a preferred embodiment of the invention, the sealing element (S) according to the invention is preferably made of silicon material. Thus, the lower flange (3) easily stretches when it is bent for inserting the sealing element (S) into the hole provided on the plate (T), and passes through the hole without wearing or tearing.

[0017] In a preferred embodiment of the invention, the sealing element (S) according to the invention comprises at least one protrusion (5) which is provided at a side of the outer edge of the upper flange (2) corresponding to the first part (3a) (preferably provided at the middle of the side of the outer edge of the upper flange (2) corresponding to the first side (3a)), which, preferably, has a narrowing structure away from the center of the opening (1a), and which indicates the direction that the lower flange (3) is removed out of the plate (T) (in other words, the direction that indicates the first part (3a) of the lower flange (3)). When the sealing element (S) is required to be removed out of the hole, the sealing element (S) is removed after being pulled from the side where the protrusion (5) is provided. Therefore, the sealing element (S) is removed out of the hole without being deformed.

[0018] In a preferred embodiment of the invention, arc section form of the first part (3a) of the sealing element (S) according to the invention has an elliptical section or a circle section form.

[0019] In another embodiment of the invention, arc section form of the second part (3b) of the sealing element (S) according to the invention has an elliptical section or a circle section form.

[0020] In a preferred embodiment of the invention, the third part (3c) of the sealing element (S) according to the invention is a part which has a flat form, which passes along at least one side of the first part (3a) (preferably passing along at least one end of the first side (3a)), and which corresponds to a part remaining in between a point of at least one tangent line where the tangent line contacts the first part (3a) and a point thereof intersecting with an end of the second part (3b) (the end of the second part (3b) is the end which is close to the tangent line or the opposite end thereof where the tangent line passes). By this way, it is provided that the lower flange (3) is easily bent by the person who inserts the sealing element (S), thereby achieving a sealing element (S) which can be easily inserted and removed.

[0021] While the body (1) may have a cylindrical form in a preferred embodiment of the invention, the body (1), in another preferred embodiment of the invention, has preferably a truncated cone form whose surface area of the base connected with the upper flange (2) is smaller than the surface are of the other base.

[0022] With the sealing element (S) according to the present invention, a part and/or liquid part of foods are prevented from leaking through the hole provided on the plate (T) in the button-controlled cooking devices. Thanks to the structure of the sealing element (S), wear and/or tear risks are minimised during processes of insertion into and removal from the hole which is provided at the plate of the cooktop. Therefore, an easy-to-use, practical and reliable sealing element (S) is achieved.

Claims

1. A sealing element (S) which is suitable to use, in a cooking device comprising at least one plate (T) suitable for positioning a cooking vessel thereon for cooking process; at least one heater providing heat to the cooking vessel for the cooking process; at least one button for controlling the cooking process; and at least one hole provided on the plate (T) for receiving the button; for prevention of leakage of a part and/or liquid part of foods through the hole upon being positioned at the hole, wherein the sealing element (S) comprises

    - at least one body (1) which has at least one opening (1a) extending longitudinally therein and at least one wall (4) extending around the opening (1a);
    - at least one upper flange (2) located at a first side of the body (1) so that at least a side of the upper flange (2) is connected with the wall (4), having at least a first width which extends away from the wall (4) in a horizontal plane, and suitable for being placed on an upper surface of the plate (T) which is provided at a part thereof intersecting with the hole;

    the sealing element (S) **characterized by** comprising

    - at least one lower flange (3) which is suitable for being placed on a lower surface of the plate (T) provided at a part thereof intersecting with the hole, which is located at the first side of the body (1) below the upper flange (2) so that at least one side of the lower flange (2) is connect-

ed with the wall (4), and which comprises:

• at least a first part (3a) in the form of an arc section having at least a first width in the horizontal plane,
• at least a second part (3b) in the form of an arc section located opposite to the first part (3a) and having at least a second width in the horizontal plane that is larger than the first width, and
• at least a third part (3c) which couples opposing ends of the first part (3a) and the second part (3b).

2. A sealing element (S) according to Claim 1, **characterized by** comprising at least one protrusion (5) which is provided at a side of the outer edge of the upper flange (2) corresponding to the first part (3a) and indicates the direction that the lower flange (3) is removed out of the plate (T).

3. A sealing element (S) according to Claim 2, **characterized in that** the protrusion (5) has a narrowing structure away from the center of the opening (1a).

4. A sealing element (S) according to Claim 1, **characterized in that** arc section form of the first part (3a) has an elliptical section form.

5. A sealing element (S) according to Claim 1, **characterized in that** arc section form of the first part (3a) has a circle section form.

6. A sealing element (S) according to Claim 1, **characterized in that** arc section form of the second part (3b) has an elliptical section form.

7. A sealing element (S) according to Claim 1, **characterized in that** arc section form of the second part (3b) has a circle section form.

8. A sealing element (S) according to Claim 1, **characterized in that** the third part (3c) is a part which has a flat form and corresponds to a part remaining in between a point of at least one tangent line where the tangent line contacts the first part (3a) and a point thereof intersecting with an end of the second part (3b), wherein the tangent line passes along at least one side of the first part (3a).

9. A sealing element (S) according to Claim 1, **characterized in that** the body (1) has a cylindrical form.

10. A sealing element (S) according to Claim 1, **characterized in that** the body (1) has a truncated cone form.

11. A sealing element (S) according to Claim 1, **characterized in that** the body (1) has a truncated cone form whose surface area of the base connected with the upper flange (2) is smaller than the surface area of the other base.

12. A sealing element (S) according to Claim 1, **characterized in that** the upper flange (2) has a circular cross section.

13. A sealing element (S) according to Claim 1, **characterized in that** the opening (1a) has a circular or oval cross-sectional area.

14. A sealing element (S) according to Claim 1, **characterized in that** the first part (3a) has an equal width with the upper flange (2).

15. A sealing element (S) according to any of the preceding claims, **characterized in that** the sealing element (S) is made of silicone material.

Patentansprüche

1. Dichtungselement (S), das zur Verwendung in einem Kochgerät geeignet ist, welches wenigstens eine Platte (T), die zur Positionierung eines Kochgefäßes darauf für einen Kochvorgang geeignet ist, wenigstens eine Heizeinrichtung, die dem Kochgefäß für den Kochvorgang Wärme zuführt, wenigstens einen Knopf zur Steuerung des Kochvorgangs und wenigstens eine Öffnung in der Platte (T) zur Aufnahme des Knopfes aufweist, zum Verhindern des Austritts von Bestandteilen und/oder flüssigen Anteilen von Speisen durch die Öffnung bei der Platzierung an der Öffnung, wobei das Dichtungselement (S) aufweist

- wenigstens einen Körper (1), der wenigstens eine in Längsrichtung darin verlaufende Öffnung (1a) und wenigstens eine Wand (4) aufweist, die sich um die Öffnung (1a) herum erstreckt,
- wenigstens einen oberen Flansch (2), der sich an einer ersten Seite des Körpers (1) befindet, so dass wenigstens eine Seite des oberen Flansches (2) mit der Wand (4) verbunden ist, der wenigstens eine erste Breite hat, die sich von der Wand (4) in einer horizontalen Ebene erstreckt, und der dazu geeignet ist, auf einer oberen Oberfläche der Platte (T) platziert zu werden, die in einem Teilbereich davon bereitgestellt ist, der sich mit der Öffnung schneidet,

dadurch gekennzeichnet, dass das Dichtungselement (S) aufweist:

- wenigstens einen unteren Flansch (3), der dazu geeignet ist, auf einer unteren Oberfläche der

Platte (T) platziert zu werden, die sich als Teilbereich davon mit der Öffnung schneidet, der sich an der ersten Seite (1) des Körpers unterhalb des oberen Flansches (2) befindet, so dass wenigstens eine Seite des unteren Flansches (2) mit der Wand (4) verbunden ist, und der aufweist:

- wenigstens einen ersten Teil (3a) in der Form eines Bogenabschnitts mit wenigstens einer ersten Breite in der horizontalen Ebene,
- wenigstens einen zweiten Teil (3b) in der Form eines Bogenabschnitts, der sich gegenüber des ersten Teils (3a) befindet und wenigstens eine zweite Breite in der horizontalen Ebene hat, die größer als die erste Breit ist, und
- wenigstens einen dritten Teil (3c), der gegenüberliegende Enden des ersten Teils (3a) und des zweiten Teils (3b) verbindet.

2. Dichtungselement (S) nach Anspruch 1, **dadurch gekennzeichnet, dass** es wenigstens einen Vorsprung (5) aufweist, der an einer Seite des äußeren Randes des oberen Flansches (2) entsprechend dem ersten Teil (3a) vorgesehen ist und der die Richtung anzeigt, die der untere Flansch (3) von der Platte (T) entfernt ist.

3. Dichtungselement (S) nach Anspruch 2, **dadurch gekennzeichnet, dass** der Vorsprung (5) weg von dem Zentrum der Öffnung (1a) eine sich verengende Struktur hat.

4. Dichtungselement (S) nach Anspruch 1, **dadurch gekennzeichnet, dass** die Bogenabschnittsform des ersten Teils (3a) eine elliptische Querschnittsform hat.

5. Dichtungselement (S) nach Anspruch 1, **dadurch gekennzeichnet, dass** die Bogenabschnittsform des ersten Teils (3a) eine kreisförmige Querschnittsform hat.

6. Dichtungselement (S) nach Anspruch 1, **dadurch gekennzeichnet, dass** die Bogenabschnittsform des zweiten Teils (3b) eine elliptische Querschnittsform hat.

7. Dichtungselement (S) nach Anspruch 1, **dadurch gekennzeichnet, dass** die Bogenabschnittsform des zweiten Teils (3) eine kreisförmige Querschnittsform hat.

8. Dichtungselement (S) nach Anspruch 1, **dadurch gekennzeichnet, dass** der dritte Teil (3c) ein Teil ist, der eine flache Form hat und der einem Teil entspricht, der zwischen einem Punkt wenigstens einer Tangentenlinie, wo die Tangentenlinie den ersten Teil (3a) kontaktiert, und einem Punkt davon verbleibt, der sich mit einem Ende des zweiten Teils (3b) schneidet, wobei die Tangentenlinie entlang wenigstens einer Seite des ersten Teils (3a) verläuft.

9. Dichtungselement (S) nach Anspruch 1, **dadurch gekennzeichnet, dass** der Körper (1) eine zylindrische Form hat.

10. Dichtungselement (S) nach Anspruch 1, **dadurch gekennzeichnet, dass** der Körper (1) Kegelstumpfform hat.

11. Dichtungselement (S) nach Anspruch 1, **dadurch gekennzeichnet, dass** der Körper (1) eine Kegelstumpfform hat, wobei deren Oberfläche der Stirnfläche, die mit dem oberen Flansch (2) verbunden ist, kleiner als die Oberfläche der anderen Stirnfläche ist.

12. Dichtungselement (S) nach Anspruch 1, **dadurch gekennzeichnet, dass** der obere Flansch (2) einen kreisförmigen Querschnitt hat.

13. Dichtungselement (S) nach Anspruch 1, **dadurch gekennzeichnet, dass** die Öffnung (1a) eine kreisförmige oder ovale Querschnittsfläche hat.

14. Dichtungselement (S) nach Anspruch 1, **dadurch gekennzeichnet, dass** der erste Teil (3a) eine gleiche Breite mit dem oberen Flansch (2) hat.

15. Dichtungselement (S) nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** das Dichtungselement (S) aus einem Silikonmaterial hergestellt ist.

Revendications

1. Élément d'étanchéité (S) qui est approprié pour une utilisation dans un dispositif de cuisson comprenant au moins une plaque (T) appropriée pour positionner un récipient de cuisson sur celle-ci pour un processus de cuisson ; au moins un dispositif de chauffage fournissant de la chaleur au récipient de cuisson pour le processus de cuisson ; au moins un bouton pour commander le processus de cuisson ; et au moins un trou prévu sur la plaque (T) pour recevoir le bouton ; pour empêcher une fuite d'une partie et/ou d'une partie liquide d'aliments à travers le trou lorsqu'il est positionné au niveau du trou, dans lequel l'élément d'étanchéité (S) comprend

- au moins un corps (1) qui présente au moins une ouverture (1a) s'étendant longitudinale-

ment dans celui-ci et au moins une paroi (4) s'étendant autour de l'ouverture (1a) ;
- au moins une bride supérieure (2) située sur un premier côté du corps (1) de sorte qu'au moins un côté de la bride supérieure (2) est relié à la paroi (4), ayant au moins une première largeur qui s'étend à partir de la paroi (4) dans un plan horizontal, et appropriée pour être placée sur une surface supérieure de la plaque (T) qui est prévue sur une partie de celle-ci coupant le trou ;

l'élément d'étanchéité (S) **caractérisé en ce qu'il** comprend

- au moins une bride inférieure (3) qui est appropriée pour être placée sur une surface inférieure de la plaque (T) prévue au niveau d'une partie de celle-ci coupant le trou, qui est située au niveau du premier côté du corps (1) en dessous de la bride supérieure (2) de sorte qu'au moins un côté de la bride inférieure (2) est relié à la paroi (4), et qui comprend

• au moins une première partie (3a) sous la forme d'une section en arc ayant au moins une première largeur dans le plan horizontal,
• au moins une deuxième partie (3b) en forme de section en arc située à l'opposé de la première partie (3a) et ayant au moins une deuxième largeur dans le plan horizontal qui est plus grande que la première largeur, et
• au moins une troisième partie (3c) qui couple les extrémités opposées de la première partie (3a) et de la deuxième partie (3b).

2. Élément d'étanchéité (S) selon la revendication 1, **caractérisé en ce qu'**il comprend au moins une saillie (5) qui est prévue sur un côté du bord extérieur de la bride supérieure (2) correspondant à la première partie (3a) et indique la direction dans laquelle la bride inférieure (3) est retirée de la plaque (T).

3. Élément d'étanchéité (S) selon la revendication 2, **caractérisé en ce que** la saillie (5) présente une structure de rétrécissement à partir du centre de l'ouverture (1a).

4. Élément d'étanchéité (S) selon la revendication 1, **caractérisé en ce que** la forme de section en arc de la première partie (3a) présente une forme de section elliptique.

5. Élément d'étanchéité (S) selon la revendication 1, **caractérisé en ce que** la forme de section en arc de la première partie (3a) présente une forme de section circulaire.

6. Élément d'étanchéité (S) selon la revendication 1, **caractérisé en ce que** la forme de section en arc de la deuxième partie (3b) présente une forme de section elliptique.

7. Élément d'étanchéité (S) selon la revendication 1, **caractérisé en ce que** la forme de section en arc de la deuxième partie (3b) présente une forme de section circulaire.

8. Élément d'étanchéité (S) selon la revendication 1, **caractérisé en ce que** la troisième partie (3c) est une partie qui présente une forme plate et correspond à une partie restante entre un point d'au moins une ligne tangente où la ligne tangente est en contact avec la première partie (3a) et un point de celle-ci coupant une extrémité de la deuxième partie (3b), dans lequel la ligne tangente passe le long d'au moins un côté de la première partie (3a).

9. Élément d'étanchéité (S) selon la revendication 1, **caractérisé en ce que** le corps (1) présente une forme cylindrique.

10. Élément d'étanchéité (S) selon la revendication 1, **caractérisé en ce que** le corps (1) présente une forme tronconique.

11. Élément d'étanchéité (S) selon la revendication 1, **caractérisé en ce que** le corps (1) présente une forme tronconique dont la superficie de la base reliée à la bride supérieure (2) est inférieure à la superficie de l'autre base.

12. Élément d'étanchéité (S) selon la revendication 1, **caractérisé en ce que** la bride supérieure (2) présente une section transversale circulaire.

13. Élément d'étanchéité (S) selon la revendication 1, **caractérisé en ce que** l'ouverture (1a) présente une section transversale circulaire ou ovale.

14. Élément d'étanchéité (S) selon la revendication 1, **caractérisé en ce que** la première partie (3a) présente une largeur égale à celle de la bride supérieure (2).

15. Élément d'étanchéité (S) selon l'une quelconque des revendications précédentes, **caractérisé en ce que** l'élément d'étanchéité (S) est réalisé en matériau silicone.

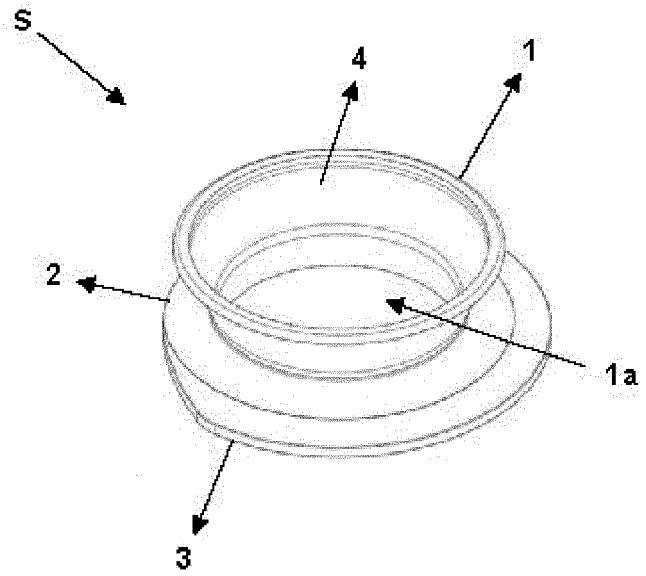

Figure – 1

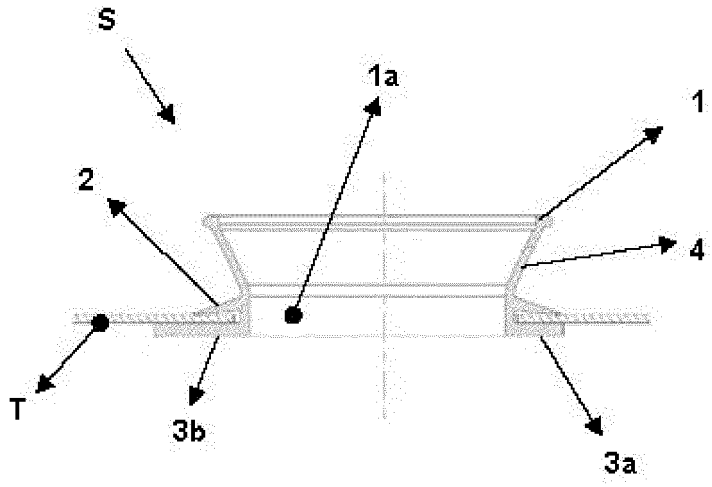

Figure – 2

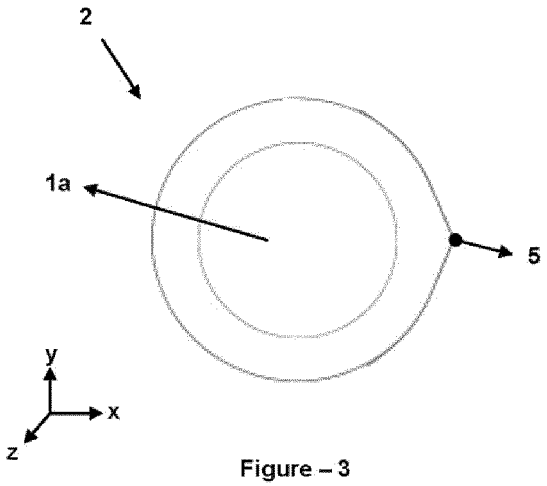

Figure – 3

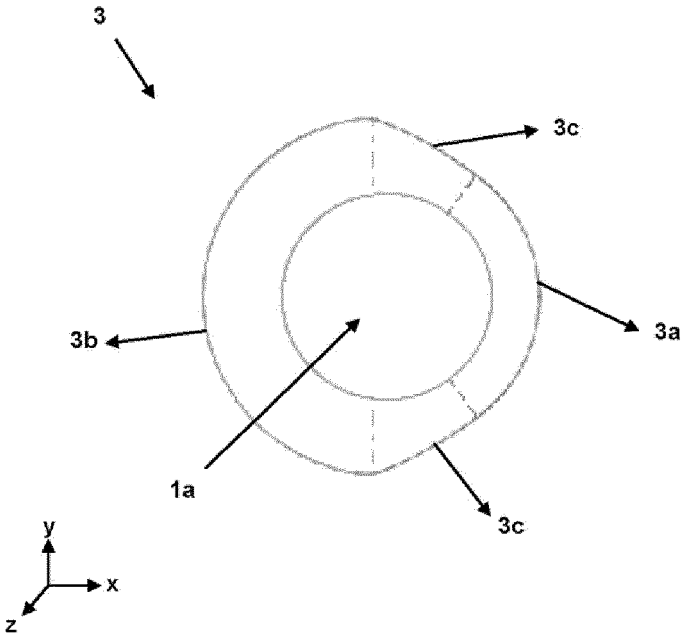

Figure – 4

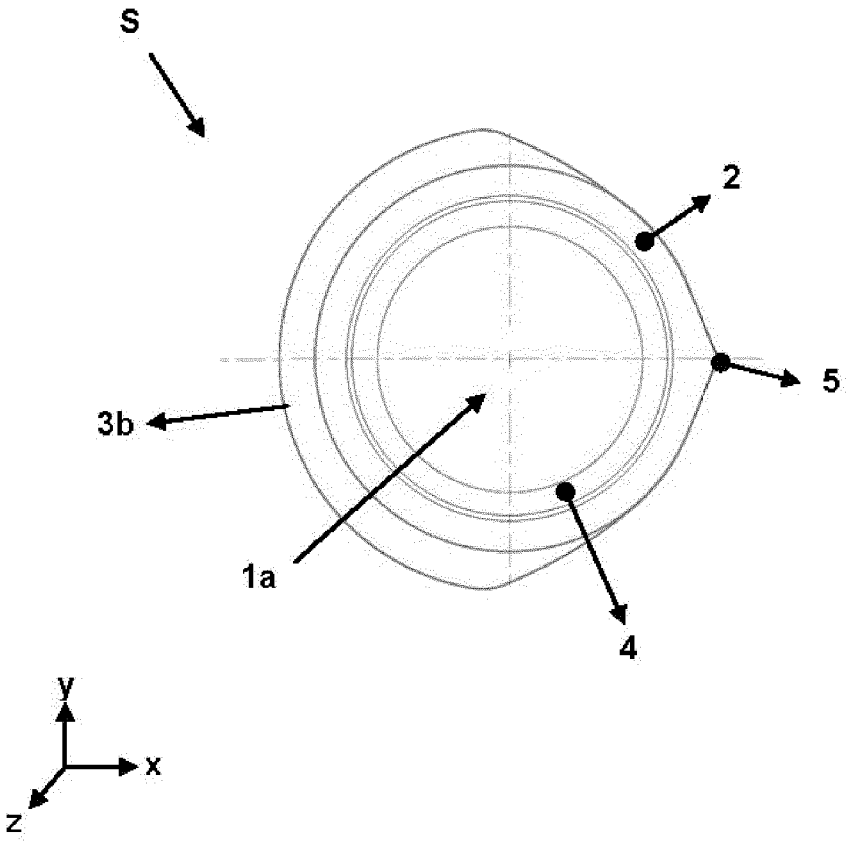

Figure – 5

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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