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(72) Feltaláló(k):
BUTTER-JENTSCH, Ralph, 40764 Langenfeld (DE)
MÜHLHAUSEN, Hans-Georg, 40597 Düsseldorf (DE)

(73) Jogosult(ak):
Henkel AG & Co. KGaA, 40589 Düsseldorf (DE)

(74) Képviselő:
SBGK Szabadalmi Ügyvivői Iroda, Budapest

(54) **WC-kosár öblítővíz-elosztó elemmel**

Az európai szabadalom ellen, megadásának az Európai Szabadalmi Közlönyben való meghirdetésétől számított kilenc hónapon belül, felszólalást lehet benyújtani az Európai Szabadalmi Hivatalnál. (Európai Szabadalmi Egyezmény 99. cikk(1))

A fordítást a szabadalmas az 1995. évi XXXIII. törvény 84/H. §-a szerint nyújtotta be. A fordítás tartalmi helyességét a Szellemi Tulajdon Nemzeti Hivatala nem vizsgálta.

WC balls with flushing water distributing element

[2] The invention relates to a WC basket comprising a flushing water distributing element according to the preamble of claim 1.

Prior art

[3] In order to automatically clean toilet bowls, it is known to attach active-ingredient preparations to the inner rim of the toilet bowl in solid form in a cage-like container. Each time the toilet is flushed, some of the active ingredient dissolves in the flushing water and is distributed around the bowl together with the water.

[4] Those active-ingredient preparations are used which can be shaped into dimensionally stable blocks that do not melt away and also have sufficient solubility so that a sufficient quantity of active ingredients is discharged into the water during the short flushing phase. It is also important that the block of active ingredient remains unchanged after the flushing process, except for releasing a scent.

[5] One example of an active-ingredient preparation of this type is found in DE 34 24 317 A1. The preparation contains anionic and non-ionic surfactants, scent, cellulose powder, rinsing regulators, inorganic salts, complexing agents, limescale-dissolving acids, antimicrobial active ingredients, plasticizers and other standard additives.

[6] Single-use WC baskets are known which have to be disposed of after the block of active ingredient has completely dissolved. The refillable WC baskets that are also known are better for the environment, two of which are described in DE 80 01 994 U1 and der DE 34 23 758 A1.

[7] The known WC baskets for receiving pieces of WC cleaning blocks usually cannot be used for pastes or liquids. The paste or liquid is specifically not supposed to automatically flow or drip out of the basket after the end of the flushing process. In addition, only a defined fraction of the liquid or paste is supposed to be discharged in each flushing process. This discharged fraction of the active-ingredient preparation is supposed to be as equal as possible for each flushing process. WC baskets of this type for pasty or liquid preparations are known from DE19520145A1 or EP1334239B1, for example.

[8] The prior art also discloses multi-chamber containers for the active-ingredient preparations mentioned at the outset which hang into the WC bowl such that, when water is flushed into the WC bowl, the active ingredient is discharged from the WC basket into the toilet bowl. Owing to the non-

uniform flow conditions within the flow of flushing water, depending on the positioning of the WC basket on the rim of the toilet bowl, the chambers may become empty at different rates.

[9] As mentioned at the outset, a significant drawback of all of these WC baskets is accordingly that the metering essentially depends on the particular local flow conditions in the toilet bowl during the flushing process. The flow conditions may, however, be very different depending on the type of toilet and the positioning of the WC basket in or on the toilet bowl. Therefore, it may for example be the case that, in some types of toilet, no active ingredient is released from the WC basket, since no water or not enough water flows over the WC basket during the flushing process and the metering mechanism of the WC basket is thus not triggered.

[10] The active ingredients are usually released from WC baskets of this type by flushing water penetrating openings in the WC basket, the active substances being dissolved and being discharged and swept out of the WC basket when the flushing water exits through corresponding discharge openings. Depending on the arrangement of the WC basket in the toilet, the water flows therethrough at different flow intensities due to the often locally very different flow conditions of the discharge of flushing water out of the bowl rim of the toilet, as a result of which only an imprecise quantity of the active ingredients can be supplied. This non-uniform supply of active ingredients is a significant drawback.

[11] This is particularly problematic in an elongate, "linear-type" design of the WC basket, since the active ingredients may be rinsed out of a WC basket of this type in a locally non-uniform manner due to the flow conditions mentioned at the outset, as is also disclosed in US20070245470A1, for example.

[12] The same also applies to WC baskets for discharging liquid or gel-like active-ingredient preparations, in which – depending on the design of the WC basket – a distributing element can be provided, via which the liquid active-ingredient preparations in particular can be discharged by the active-ingredient preparation(s) first being distributed on the distributing element, over which flushing water then flows such that said preparation is released into the flushing water. Here too, the degree to which said preparation is rinsed out of said basket is largely dependent on the position and the flow conditions in the toilet.

[13] Other WC baskets are disclosed in US1091265, US6389610 and US6651261. US1091265 is considered to be the closest prior art. The preamble of claim 1 corresponds to this document.

Problem

[14] The problem addressed by the invention is therefore to provide a WC basket which ensures that preparation is discharged as uniformly as possible into the flushing water.

[15] This problem is solved by a WC basket according to claim 1.

WC basket

[16] In a first embodiment of the invention, the WC basket for receiving solid or gel-like preparations comprises at least one container for receiving at least one preparation, wherein the container can be positioned below the toilet bowl rim in such a manner that flushing water flows thereover when the toilet is flushed, and at least one inlet opening and one outlet opening are formed in the container wall for the flushing water, and comprises a holder for securing the WC basket on the toilet bowl rim, wherein a flushing water distributing element is arranged and configured on the WC basket in such a manner that the flushing water distributing element is acted on by flushing water when flushing the toilet and a uniformly distributed supply of flushing water into the inlet opening in the container is achieved.

[17] In an alternative embodiment of the invention, the WC basket for receiving liquid preparations comprises at least one container for receiving at least one preparation and at least one outlet opening, a plate-like preparation distributing element, which comprises a region of action over which flushing liquid flows when the toilet is flushed, wherein the interior of the container is permanently connected to the preparation distributing element by means of the outlet opening, an assembly preventing the active-ingredient fluid from flowing freely being arranged therebetween, and comprises a support for securing the container on the toilet bowl rim, wherein a flushing water distributing element is arranged and configured on the WC basket in such a manner that the flushing water distributing element is acted on by flushing water when flushing the toilet and a uniformly distributed supply of flushing water to the preparation distributing element is achieved.

[18] Within the meaning of this application, a "uniformly distributed supply" is understood to mean a supply of flushing water into the inlet openings in the container that is more uniform than for a WC basket without a flushing water distributing element, owing to a uniform distribution of flushing water and/or more constant flow distribution along the WC basket.

[19] In a preferred embodiment of the invention, the WC basket is formed to be elastic in such a manner that in the installed state it follows the contour of the toilet bowl. For this purpose, the WC basket may be made of an elastic material or may have flexible regions on which the WC basket is movably mounted. In particular, the WC basket may also consist of substantially dimensionally stable containers, which are interconnected by an elastic connection.

Container

[20] A container is understood to mean packaging which is suitable for surrounding a solid, liquid or gel-like preparation at least in part and/or for holding said preparation together.

[21] The WC basket according to the invention may consist of one or more containers. In particular if there is a plurality of containers, these are arranged beside one another, preferably in a line.

[22] Furthermore, it is preferable for more than one container for receiving a preparation or preparations that differ from one another to be provided on the WC basket. As a result, in particular preparations that are not storage-stable in combination can be stored separately from one another. It is however also conceivable in principle, in particular for solid preparations, to position differing preparations beside one another in a container.

[23] In this context, it is advantageous to design the containers such that flushing water that enters is prevented from being exchanged between the containers.

[24] If there is a plurality of containers, these may be interconnected in one piece. This is advantageous in that the containers can be formed in one piece, for example in an injection-molding process, and there is then no need for individual containers to be subsequently joined together. If the containers are designed in this manner, it is also advantageous to design the containers as half-shells, which are interconnected by a material bridge. The material bridge acts as a hinge, about which the half-shells can be tilted and joined to one or more containers.

[25] In one embodiment of the invention, the containers may be interconnected via a water-conveying web. This means that in particular dimensionally stable containers can be formed which provide the preparations stored therein with sufficient mechanical protection, it being possible for the webs to form an elastic connection between the containers, so that the WC basket follows the contour of the toilet bowl in the installed state.

[26] In particular for solid and gel-like preparations, the container is designed such that flushing water can flow therethrough, i.e. it comprises at least one inlet opening for flushing water to enter the container and at least one outlet opening for flushing water loaded with preparation to leave the container.

[27] In an advantageous embodiment of the WC basket according to the invention, when the WC basket is installed in the toilet, the inlet opening in the container(s) is located outside of the flushing water stream. This means that without using a flushing water distributing element, no

flushing water or only a very small amount of flushing water enters the container(s) through the inlet opening(s).

[28] It is particularly preferable for the containers to be formed in a substantially ball-like manner. A ball-like design has proven to be particularly advantageous for the flushing water to act uniformly on the containers. This appears to be due in particular to the fact that the ball-like surfaces of the containers reflect and guide impinging flushing water particularly advantageously. The ball-like surfaces provide comparatively low flow resistance, so that in regions in which a WC basket designed in this way is acted on by a particularly large amount of flushing water, this is diverted over the ball-like surface to adjacent ball-like containers. In addition, in particular between adjacent ball-like containers, the flushing water is refracted and reflected such that the impinging flushing water is uniformly distributed between the containers. This will be discussed in greater detail below.

[29] It is also advantageous for the inlet opening(s) to be parallel to the longitudinal axis of the WC basket in the manner of a slot.

[30] In particular for liquid preparations, the container comprises just one outlet opening.

Flushing water distributing element

[31] The flushing water distributing element is used to uniformly distribute the flushing water stream leaving the toilet, i.e. to guide the flushing water stream from the outlet under the rim of a toilet bowl over the length of the WC basket as uniformly as possible into the inlet openings, in order to ensure that the preparation(s) are dissolved and rinsed out of the WC basket over its entire length as consistently as possible.

[32] For this purpose, the flushing water distributing element is designed such that when the WC basket is hung in the toilet, it is acted on by flushing water when flushing the toilet and a uniformly distributed supply of flushing water into the inlet openings in the container(s) is achieved.

[33] In an advantageous embodiment, the flushing water distributing element is designed as a deflector plate which generates splashing water when flushing water impinges thereon, as a result of which uniformly distributed wetting or exposure of the containers or the inlet openings is achieved.

[34] In one embodiment of the WC basket designed to receive solid or gel-like preparations, the flushing water distributing element is arranged below the inlet opening(s) in the container(s). In this case, the flushing water distributing element and the inlet openings are designed such that the flow

of flushing water is guided out of the toilet bowl from under the toilet bowl rim, over the flushing water distributing element and to the inlet openings in the containers of the WC basket.

[35] In a preferred embodiment in which the inlet openings into the containers are arranged above the flushing water distributing element, a ridge is molded between the inlet openings and the flushing water distributing element which limits the inflow of flushing water from the flushing water distributing element into a container. The amount of flushing water that is guided into the container can be adjusted by means of the distance between the inlet openings and the flushing water distributing element, i.e. the height of the ridge. Flushing water that is guided over the flushing water distributing element to the inlet openings is refracted and reflected on the ridge, which acts in a similar manner to a weir, and this also contributes to a uniformly distributed supply of flushing water into the inlet openings.

[36] In an alternative embodiment of the WC basket designed to receive a solid or gel-like preparation, the flushing water distributing element is arranged above the inlet opening(s) in the container(s). In this case, the flushing water distributing element and the inlet openings are designed such that the flow of flushing water is guided out of the toilet bowl from under the toilet bowl rim, over the flushing water distributing element and to the inlet openings in the containers of the WC basket.

[37] The flushing water distributing element is advantageously plate-like, chute-like, ramp-like or trough-like.

[38] In order to better distribute or guide flushing water over the length of the distributing element, the flushing water distributing element may comprise grooves extending in the longitudinal direction of the WC basket.

[39] It may also be advantageous for the flushing water distributing element to be formed at least in part as a grating, in particular if the flushing water distributing element is arranged above the inlet openings in the container(s). This means that the water uniformly drips into the inlet openings or onto a preparation distributing element.

[40] One flushing water distributing element may be provided for all the containers, or one may be provided for each container. It is particularly advantageous to form the flushing water distributing element in one piece with the container(s), since this prevents the needs for an additional manufacturing step for joining.

[41] According to another preferred embodiment of the invention, the length of the distributing element substantially corresponds to the length of the WC basket.

Preparation

[42] Solid preparations, which are also commonly referred to as toilet rim blocks, are mainly produced in the form of compressed molded bodies, extrudates or by means of casting processes. It is also conceivable to make molded bodies of this type at least in part from a gel-like or liquid phase. Therefore, for example the core of a toilet rim block may consist of a gel which is secured in a cavity in the toilet rim block, e.g. by bonding.

[43] Usually, toilet rim blocks nowadays have a cylindrical or bar-like shape. It is, however, conceivable and desirable to provide shapes that are different from these conventional shapes, meaning that greater individuality of a corresponding product from the point of a view of consumer can be achieved. In particular, the solid preparations may therefore be ball-like. The diameter of a preferred ball-shaped toilet rim block is between 1 mm and 10 cm, preferably between 5 mm and 5 cm, in particular between 1 cm and 3 cm.

[44] Preparations for a WC basket according to the invention usually contain substances such as cleaning substances, enzymes, perfume oils, dyes, surfactants or foaming agents. In particular, these may be natural perfume oils, dyes and surfactants. The preparation preferably has a surfactant content of from 2 to 50 wt.% and/or a perfume oil content of from 1 to 20 wt.% and/or a dye content of from 0.5 to 20 wt.%. In a particularly preferred embodiment, the preparation comprises at least one enzyme in a concentration of from 0.1 to 10 wt.%.

[45] It is particularly preferable for a toilet rim block to comprise at least one first water-soluble main body and at least one outer water-soluble layer that covers the main body at least in part. It is most particularly preferable for the outer layer to have different visual properties from the main body, such as color and/or gloss. This makes it possible to provide the user with an indicator function which, after a few flushes, indicates how uniformly the water is flowing over and acting on the respective toilet rim blocks in the WC basket, so that the user can reposition the WC basket in the toilet bowl if necessary.

[46] The outer layer of the toilet rim block preferably has a thickness of between 10 and 1000 µm, particularly preferably 20 to 500 µm, most particularly preferably 50 to 150 µm. Preferably, the layer completely encloses the main body.

[47] Preferred toilet rim blocks are also characterized in that the main body is a granulate and/or an extrudate and/or a pellet and/or a prill and/or a fused-cast molded body and/or a tablet.

Holder

[48] The WC basket according to the invention comprises a holder for securing the WC basket to the bowl rim of a toilet.

[49] Usually, holders of this type are designed as rod-shaped elements having two loops, so that the holder can be clipped to the rim of the toilet by the spring effect of the loops.

[50] In an advantageous development of the invention, the holder has at least one spring element, which has a substantially vertical or horizontal spring travel when the WC basket is installed in the toilet. Furthermore, it most particularly preferable for the holder to have at least two spring elements, wherein when the WC basket is installed in the toilet, one spring element has a substantially vertical spring travel and one spring element has a substantially horizontal spring travel. Owing to the spring travel provided, the WC basket can be secured to toilets which have different rim designs and thicknesses in an improved and more flexible manner. In particular, the spring element may be rhomboid.

[51] Further embodiments of the inventions are explained on the basis of the accompanying drawings, in which:

[52] Fig. 1 is a side view of a WC basket for solid or gel-like preparations, comprising a flushing water distributing element arranged above the inlet opening,

[53] Fig. 2 is a side view of a WC basket comprising a trough-like flushing water distributing element,

[54] Fig. 3 is a side view of a WC basket comprising a chute-like flushing water distributing element,

[55] Fig. 4 is a side view of a WC basket comprising a ramp-like flushing water distributing element,

[56] Fig. 5 is a side view of a WC basket for solid or gel-like preparations, comprising a flushing water distributing element arranged below the inlet opening,

[57] Fig. 6 is a plan view of a WC basket comprising containers arranged beside one another in a row and comprising a flushing water distributing element,

[58] Fig. 7 is a perspective view of a WC basket for solid or gel-like preparations, comprising ball-like containers and a flushing water distributing element,

[59] Fig. 8 is a front view of a WC basket for solid or gel-like preparations, comprising ball-like containers and a flushing water distributing element,

[60] Fig. 9 is a schematic view of a WC basket for solid or gel-like preparations on which flushing water is acting, comprising ball-like containers,

[61] Fig. 10(a) is a plan view and Fig. 10(b) is a side view of a WC basket for liquid preparations, comprising a preparation distributing element and a flushing water distributing element, and

[62] Fig. 11 is a cross section through a WC basket comprising spacers.

[63] The alternatives shown in Fig. 1-6 and 10 are not covered by the scope of protection of claim 1.

[64] **List of reference numerals**

1. WC basket
2. holder
3. container
4. preparation
5. inlet opening
6. outlet opening
7. container wall
8. flushing water distributing element
9. spring element
10. spring element
11. distributing element
12. receiving portion
13. connection
14. spacer

[65] A first embodiment is shown in Fig. 1 and is a side view of a WC basket 1 for solid or gel-like preparations 4, comprising a flushing water distributing element 8 arranged above the inlet opening 5. The WC basket 1 consists of a container 3 which has an inlet opening 5 on the top, through which the flushing water can enter the container 3 via the flushing water distributing element 8. The flushing water entering the container 3 dissolves some of the preparation 4 stored in the container 3, the flushing water loaded with preparation 4 leaving the container 3 via the outlet opening 6 and thus being supplied into the interior of the toilet bowl.

[66] In the embodiment shown, the flushing water distributing element 8 is plate-like. The flushing water distributing element 8 is in the flushing water stream in the toilet bowl, the main flow direction of the flushing water stream – as indicated by the arrow – usually being directed downwards in the direction of gravity. The flushing water stream is refracted by the flushing water distributing element 8, which acts similarly to a deflector plate, and is distributed over the surface of the flushing water distributing element 8. The surface of the flushing water distributing element 8 facing the flow of flushing water may comprise liquid-guiding and/or liquid-distributing structures, such as transversely and/or longitudinally extending grooves, capillaries or gratings.

[67] The flushing water distributing element 8 may also comprise an opening through which flushing water can flow into the inlet opening 5 in the container 3.

[68] As can also be seen from Fig. 1, the WC basket shown comprises a holder 2, by means of which a user can releasably attach the WC basket to the rim of a toilet bowl.

[69] The holder 2 comprises a first spring element 9 and a second spring element 10, the first spring element 9 having a substantially vertical spring travel and the second spring element 10 having a substantially horizontal spring travel when the WC basket is installed in the toilet, meaning that the WC basket 1 can be secured to toilets which have different rim designs and thicknesses in an improved and more flexible manner.

[70] Further embodiments of the flushing water distributing element 8 known from Fig. 1 are found in Fig. 2-4. Fig. 2 first shows a trough-like flushing water distributing element 8. The flushing water distributing element 8 comprises a peripheral rim, so that flushing water is collected in the receiving portion thus formed in order to then be guided through the inlet openings 5 into the container 3. In addition to the effect of the deflector plate, as has already been described at the outset, by means of the flushing water distributing element 8 shown in Fig. 2 a uniformly distributed supply of flushing water into the inlet openings 5 in the container 3 is achieved by temporarily storing flushing water in the trough-like flushing water distributing element 8.

[71] Another possible embodiment of the flushing water distributing element is shown in Fig. 3. The flushing water distributing element 8 is chute-shaped. When the WC basket 1 is installed, it has a substantially horizontal part, from which a part extends which goes upwards counter to the direction of gravity. Owing to this design of the flushing water distributing element 8, the deflector-plate effect described is supplemented by an accelerated flow of flushing water that impinges on the flushing water distributing element 8 towards the inlet opening 5 in the container 3.

[72] A ramp-like design of the flushing water distributing element 8 is shown in Fig. 4, the flushing water distributing element 8 being arranged below the inlet opening 5 in the container 3. Therefore, a ridge is formed between the inlet opening 5 and the flushing water distributing element 8 which has a function similar to that of a weir. Owing to the ridge, aside from splashing water, flushing water can only enter the inlet opening 5 when the water level in the funnel formed by the flushing water distributing element 8 comprising the container 3 rises above the height of the ridge or the weir.

[73] Of course, any combination of the plate-like, trough-like, chute-like and/or ramp-like flushing water distributing elements 8 known from Fig. 1-4 are conceivable. Fig. 5 shows an alternative embodiment of a WC basket according to the invention for solid or gel-like preparations, comprising a flushing water distributing element arranged below the inlet opening. Unlike the WC basket known from Fig. 4, the WC basket 1 from Fig. 5 comprises a plate-like flushing water distributing element 8, which extends immediately from below the inlet opening 5 in the container 3 towards the toilet rim when the WC basket 1 is installed in a toilet bowl.

[74] Fig. 6 is a plan view of a WC basket for solid or gel-like preparations, as known in particular from Fig. 1-5, comprising four containers 3a-d arranged in a row beside one another and comprising a flushing water distributing element 8. As can be indicated by the different shading of preparations 4 a-d, the containers 3a-d may contain different preparations 4a, 4b, 4c, 4d. Adjacent containers 3a-d are interconnected by a non-water-conveying connection 13.

[75] Fig. 7 is a perspective view of a WC basket 1 made of transparent material for solid or gel-like preparations 4a-d, comprising ball-like containers 3a-d and a flushing water distributing element 8. The containers 3a-d are arranged in a row beside one another. Ball-shaped, solid preparations 4a-d are stored in the transparent containers 3a-d, and these preparations may be different from one another. Owing to the transparent design of the containers 3a-d, the user can easily visually assess the degree to which the preparations have been used up.

[76] The plate-like flushing water distributing element 8 extending at the level of the longitudinal axis is arranged below the slot-shaped inlet openings 5a-d in the containers 3a-d and extends over

the entire length of the WC basket, and this can also be clearly seen from the front view of the WC basket 1 known from Fig. 7, as shown in Fig. 8.

[77] The containers 3a-d and the distributing element 8 are formed in one piece, i.e. the containers 3a-d are formed by two half-shell-like elements which are connected by a hinge-like material bridge, in particular in an injection-molding process, the flushing water distributing element 8 being integrally formed on one of the half-shell-like elements. By closing the two half-shell-like elements, the containers 3a-d are then formed, the elements being secured to one another by a suitable interlocking and/or bonded connection when joined together.

[78] The one-piece holder 2, by means of which the WC basket 1 can be secured to the rim of a toilet bowl, has two rhomboid spring elements 9, 10, the first spring element 9 having a substantially vertical spring travel and the second spring element 10 having a substantially horizontal spring travel when the WC basket 1 is installed in the toilet. Owing to the spring travel provided, the WC basket 1 can be secured to toilets which have different rim designs and thicknesses in an improved and more flexible manner.

[79] The function of the ball-shaped containers 3a-d and of the flushing water distributing element 8 is explained in greater detail on the basis of Fig. 9.

[80] Fig. 9 schematically shows a first flushing water stream impinging on the ball-shaped containers by means of an arrow A, the width of the arrow A symbolizing the amount of flushing water and the length of the arrow A symbolizing the speed of the flushing water. If the flushing water stream strikes the ball-shaped surface of the container, the impinging flushing water stream is refracted, i.e. part of it is deflected and generates a proportion of splashing water, as shown by the arrow A1, and part of it is diverted over the surface of the container, as shown by the arrow A2.

[81] A second flushing water stream B is shown in Fig. 9 by way of example which has a lower amount of flushing water and a lower speed of the flushing water than the flushing water stream A, which can be seen from the shorter arrow length and smaller width. When there is a lower amount of flushing water and a lower speed of the flushing water, when said water strikes a ball-shaped surface the proportion of splashing water decreases and the proportion of flushing water that is diverted over the ball-shaped container surface after striking said surface increases.

[82] If, when the WC basket is installed in the toilet, one of the ball-shaped containers is positioned in a portion on which the flushing water is acting intensely and vigorously, a larger proportion of splashing water is generated, which then distributes flushing water to the adjacent ball-shaped containers, where said water runs off over the surface of the ball-shaped containers or directly enters the inlet openings in the containers. In the regions in which the flushing water has

less intense action, due to the ball-like container design, less splashing water is generated and a larger proportion of flushing water runs off over the container surface. As a result, a uniformly distributed supply of flushing water into the inlet openings in the containers is achieved.

[83] The flushing water distributing element, which is introduced into the flushing water stream as a type of deflector plate when the WC basket is installed, has a similar effect. In the regions in which the flushing water is acting intensely and vigorously, a larger proportion of splashing water is generated than in the regions having less intense action of the flushing water, and this results in a uniformly distributed supply of the flushing water into the inlet openings in the container.

[84] Owing to the configuration of the ball-shaped containers and the flushing water distributing element, in particular owing to the measure by means of which the ball-shaped containers are positioned in the flushing water stream in full or in part, to the size and design of the inlet openings in the containers and to the size and position of the flushing water distributing element, the preparations can be uniformly rinsed out of said containers.

[85] For this purpose, it is preferable for the ball-shaped containers 3a, 3b for receiving ball-shaped preparations to be provided with a diameter of from 25 to 40 mm. Furthermore, it is preferable for the flushing water distributing element 8 to have a depth of from 2 to 20 mm, particularly preferably of between 5 and 15 mm, "depth" being understood to mean the horizontal extension in the direction of the toilet rim acted on by flushing water when the flushing water distributing element 8 is hung thereon. It is also advantageous for the flushing water distributing element 8 to be arranged in or above the horizontal sectional plane of the ball-shaped containers 3a, 3b which contains the central point.

[86] According to a preferred embodiment of the invention, the distance between the lower edges of the flushing water inlet openings 5a, 5b in the ball-shaped containers 3a, 3b and the flushing water distributing element 8 is between 2 mm and 8 mm. Furthermore, horizontally extending slots may be preferred as flushing water inlet openings 5a, 5b, the slots preferably having a height of between 1 and 6 mm, preferably 2 and 4 mm, and a width of from 5 to 35 mm, preferably 20 to 25 mm.

[87] A WC basket for liquid preparations comprising a preparation distributing element and a flushing water distributing element is shown in plan view in Fig. 10(a) and in a side view in Fig. 10(b).

[88] The WC basket 1 for receiving liquid preparations 4 comprises a first container 3a and a second container 3b for receiving at least one preparation 4. The containers 3a and 3b are arranged beside one another and each comprise an outlet opening (not shown) that is directed

downwards in the direction of gravity. The containers 3a, 3b may be coupled to the receiving portion 12 of the WC basket 1 either individually or together, the interior of the containers 3a, 3b being permanently connected to a preparation distributing element 11 by means of the outlet opening, an assembly preventing the active-ingredient fluid from flowing freely being arranged therebetween in the receiving portion 12. When the WC basket 1 is installed, the plate-like preparation distributing element 11 comprises a region of action over which flushing liquid flows during the flushing process.

[89] In order to provide a uniformly distributed supply of flushing water onto the preparation distributing element 11, a flushing water distributing element 8 is arranged above the preparation distributing element 11 and extends over the entire length of the preparation distributing element 11. The flushing water distributing element 8 has a width that is less than the width of the preparation distributing element 11, and this is clear in particular from Fig. 10b.

[90] In this embodiment of the invention, the preparation distributing element 11 may in particular be designed as a grating.

[91] Fig. 11 shows another advantageous embodiment of the WC basket 1 according to the invention in cross section. As can be seen from Fig. 11, the ball-shaped preparation 4 rests on spacers 14a, 14b. These spacers 14a, 14b mean that the outlet opening 6 in the container 3 is not closed by the ball-shaped preparation 4, and therefore the WC basket is prevented from becoming blocked.

[92] The spacers 14a, 14b may be of any design and are not limited to the embodiment shown.

[93] The spaces 14a, 14b are designed such that flushing water can flow between the spacers 14a, 14b to the outlet opening 6 in the container 3, and this is shown by the dashed line of the spacers 14a, 14b.

SBGK
Szabadalmi
Ügyvivői Iroda

714953/DO

WC-KOSÁR ÖBLÍTŐVÍZ-ELOSZTÓ ELEMMEL

SZABADALMI IGÉNYPONTOK

1. WC-kosár (1) szilárd készítményekkel, amely kosár magában foglal

- legalább két tartórekeszt (3a, 3b, 3c, 3d) legalább két, egymástól eltérő készítmény (4a, 4b, 4c, 4d) befogadására, amely tartórekeszek (3a, 3b, 3c, 3d) oly módon helyezhetők el a toalett pereme alatt, hogy a toalett öblítésekor az öblítővíz elárasztja őket, és legalább egy-egy beömlőnyílás (5a, 5b, 5c, 5d) és egy-egy kiömlőnyílás (6a, 6b, 6c, 6d) van kiképezve a rekeszfalakban (7) az öblítővíz számára,

- egy tartót (2) a WC-kosárnak (1) a kagyló peremén való rögzítésére,

azzal jellemezve, hogy

a tartórekeszek (3a, 3b, 3c, 3d) nagyjából gömb alakúra vannak kiképezve, és egymással egy darabban vannak összekötve, továbbá a tartórekeszekben (3a, 3b, 3c, 3d) tárolt szilárd készítmények (4a, 4b, 4c, 4d) nagyjából gömb alakúra vannak kialakítva, és a WC-kosáron (1) egy öblítővíz-elosztó elem (8) oly módon van elhelyezve és kialakítva, hogy az öblítővíz-elosztó elemre (8) az öblítővíz öblítéskor ráömlik, és az öblítővíz kiegyenlített eloszlásban jut a tartórekeszek (3a, 3b, 3c, 3d) beömlőnyílásaiba (5a, 5b, 5c, 5d), amely öblítővíz-elosztó elem (8) lapszerűen van kialakítva, valamennyi tartórekesz (3a, 3b, 3c, 3d) számára egyaránt rendelkezésre áll, egy darabból van kialakítva a tartórekeszekkel, és a beömlőnyílások (5a, 5b, 5c, 5d) alatt helyezkedik el, továbbá az öblítővíz-elosztó elem (8) hossza nagyjából megegyezik a WC-kosár (1) hosszával.

2. Az 1. igénypont szerinti WC-kosár, azzal jellemezve, hogy a beömlőnyílások (5a, 5b, 5c, 5d) a WC-öblítőnek a toalettbe beillesztett állapotában az öblítővíz-áramon kívül vannak.

3. Az 1. vagy a 2. igénypont szerinti WC-kosár, azzal jellemezve, hogy a tartórekeszek (3a, 3b, 3c, 3d) oly módon vannak kialakítva, hogy a belépő öblítővíz a tartórekeszek (3a, 3b, 3c, 3d) között nem tud felcserélődést előidézni.

4. Az előző igénypontok egyike szerinti WC-kosár, azzal jellemezve, hogy a beömlőnyílások (5a, 5b, 5c, 5d) hasítékként vannak kialakítva.

5. Az előző igénypontok egyike szerinti WC-kosár, azzal jellemezve, hogy az öblítővíz-elosztó elemnek (8) a WC-öblítő hosszirányában kiterjedő barázdái vannak.

6. Az előző igénypontok egyike szerinti WC-kosár, azzal jellemezve, hogy az öblítővíz-elosztó elem (8) egy rács.

7. Az előző igénypontok egyike szerinti WC-kosár, azzal jellemezve, hogy a

tartórekeszek (3a, 3b, 3c, 3d) egy vizet nem vezető hídon (13) át egymással össze vannak kötve.

8. Az előző igénypontok egyike szerinti WC-kosár, azzal jellemezve, hogy a tartónak (2) van legalább egy rugós eleme (9, 10).

9. Az előző igénypontok egyike szerinti WC-kosár, azzal jellemezve, hogy a tartónak (2) legalább két rugós eleme (9, 10) van, továbbá a WC-öblítőnek a toalettbe beillesztett állapotában egy rugós elemnek (9) nagyjából függőleges a rugóútja, és egy rugós elemnek (10) nagyjából vízszintes a rugóútja.

10. Az előző igénypontok egyike szerinti WC-kosár, azzal jellemezve, hogy a WC-kosár (1) oly módon van rugalmasan kialakítva, hogy beillesztett állapotban követi a vécékagyló körvonalát.

(A meghatalmazott)

Pásztorné Benkő Katalin
szabadalmi ügyvivő
SBGK Szabadalmi Ügyvivői Iroda
H-1062 Budapest, Andrássy út 113.
Telefon: 461-1000 Fax: 461-1099
E-mail: [illegible]

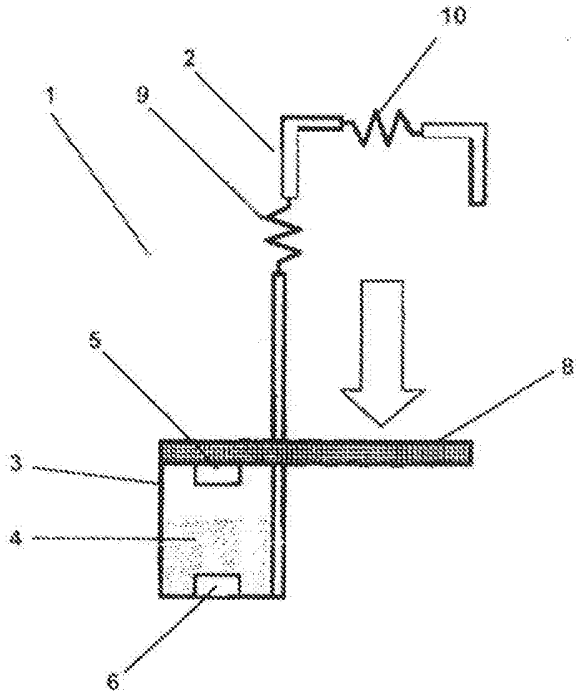


Fig. 1

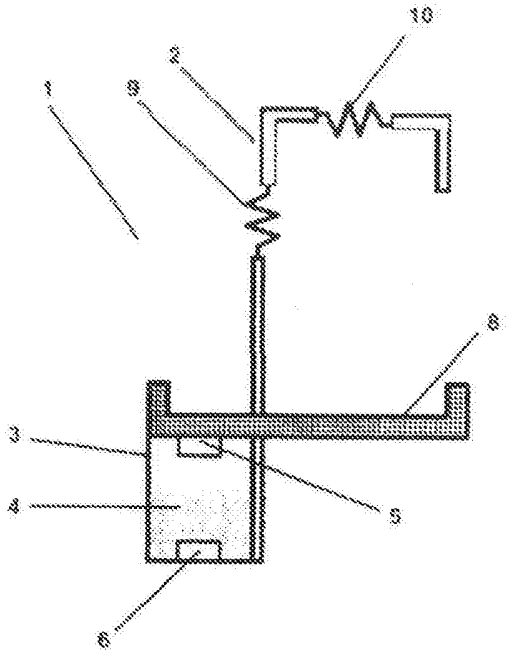


Fig. 2

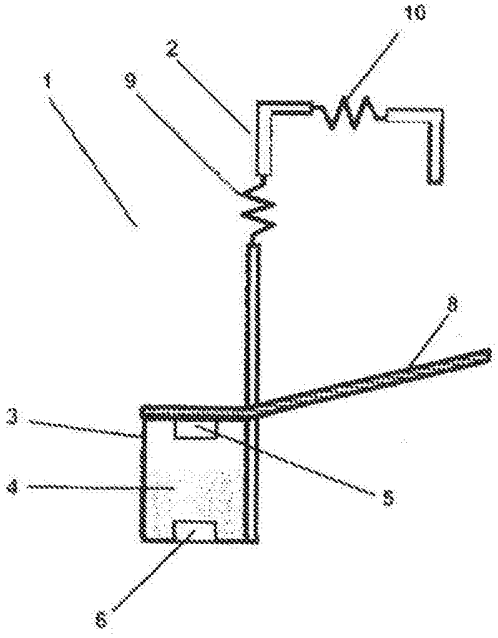


Fig. 3

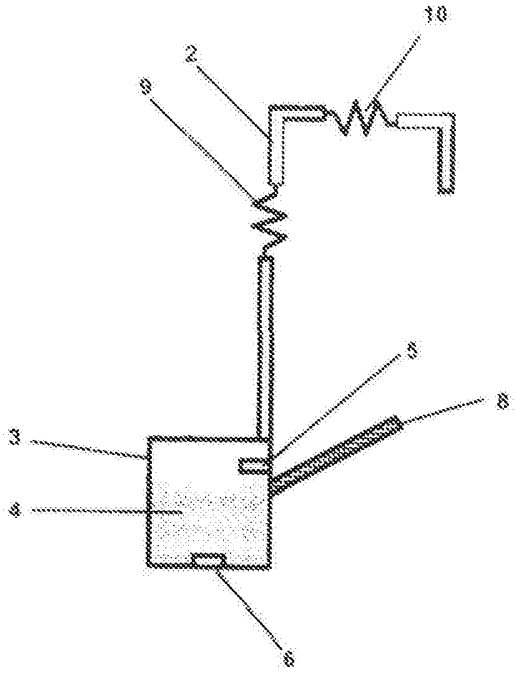


Fig. 4

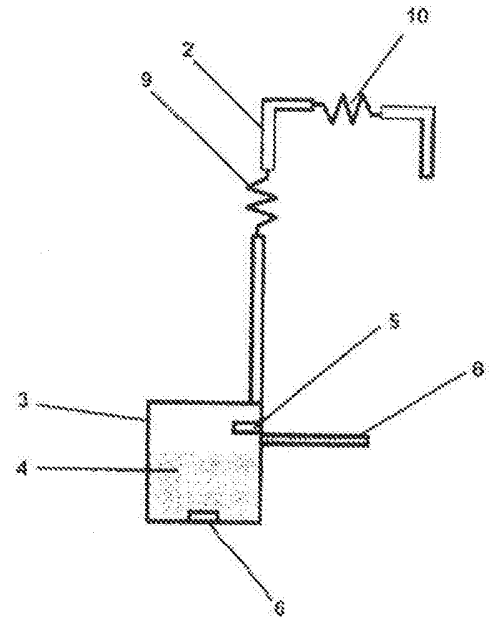


Fig. 5

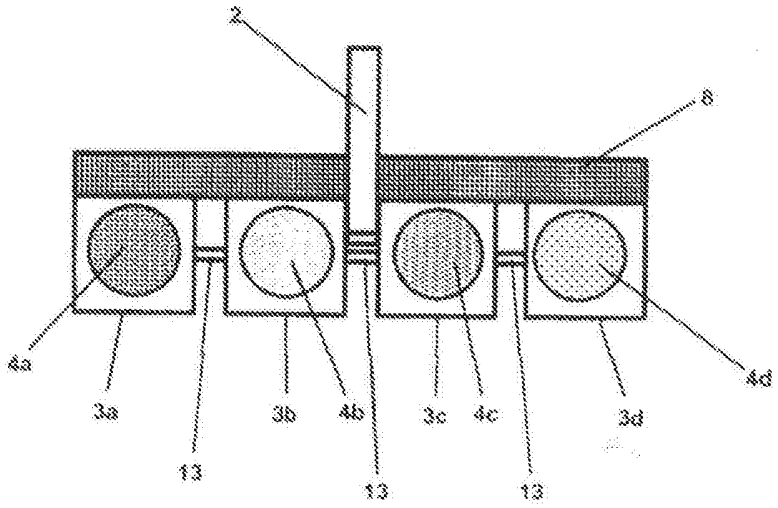

2
8
4a
3a
13
3b
4b
13
3c
4c
13
3d
4d

Fig. 6

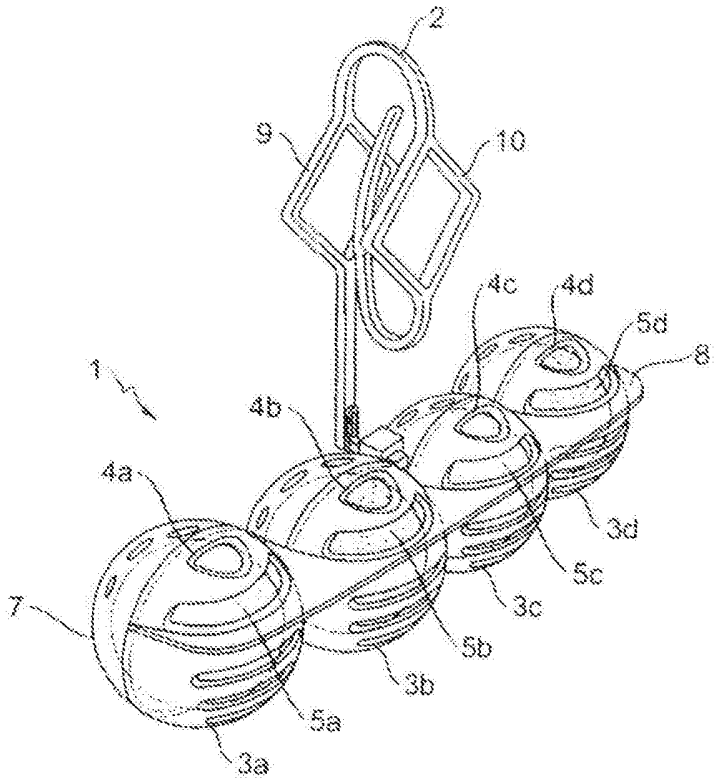

2
9
10
4c
4d
5d
8
1
4b
4a
3d
5c
3c
7
5b
3b
5a
3a

Fig. 7

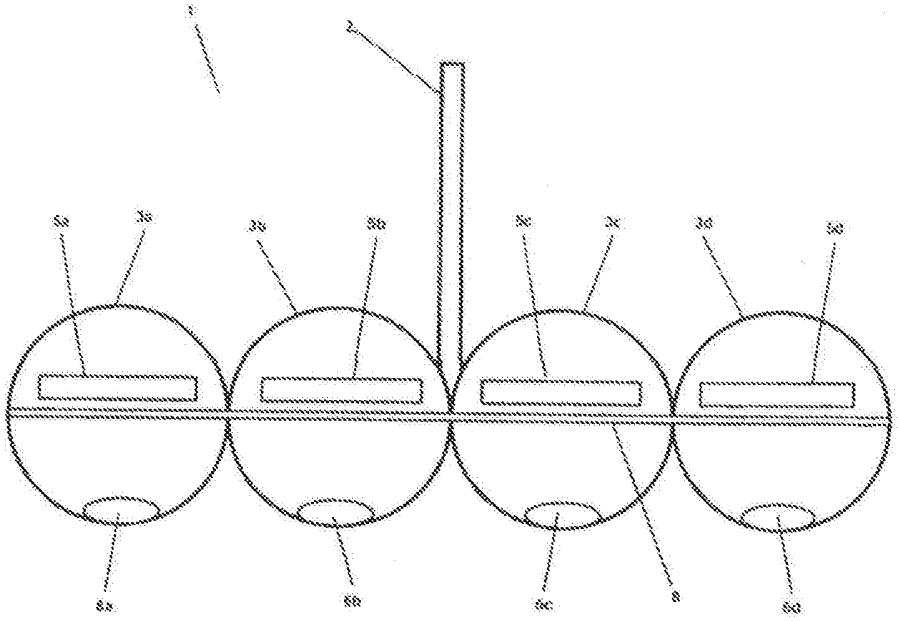

1
2
3a
3b
3c
3d
4a
4b
4c
4d
5
6a
6b
6c
6d

Fig. 8

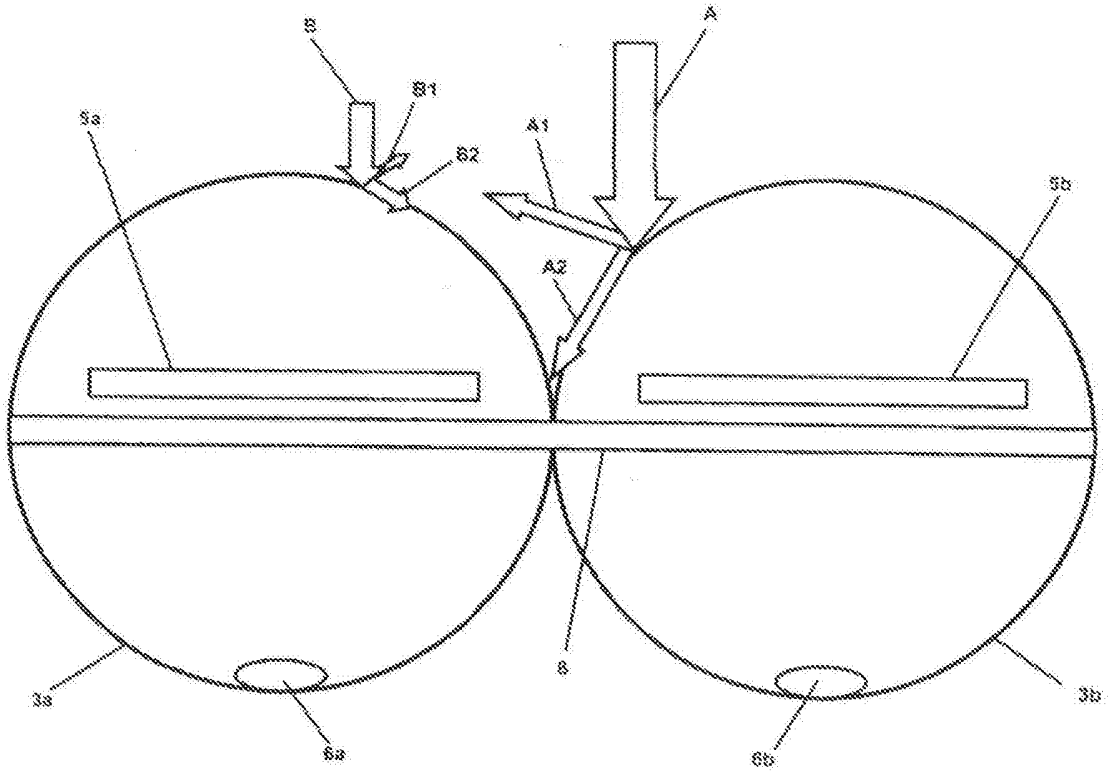

A
A1
A2
B
B1
B2
3a
3b
4
5a
5b
6a
6b

Fig. 9

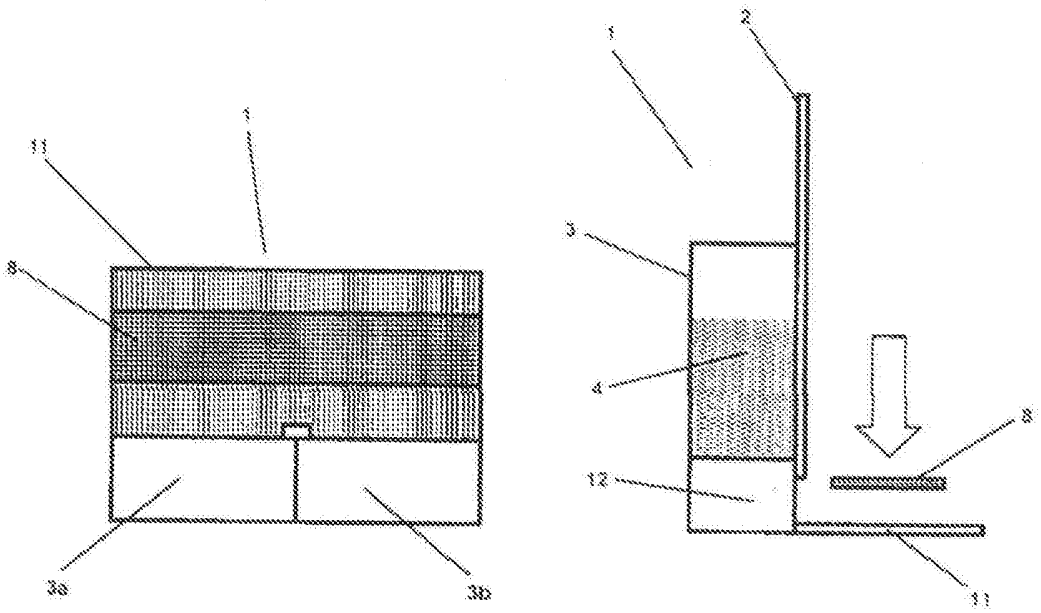


Fig. 10

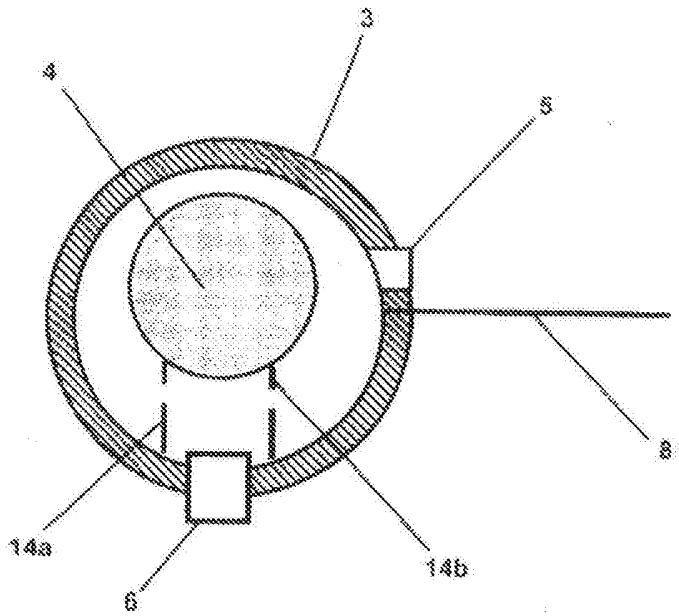


Fig. 11