

**TITLE: METHOD FOR FORMING SANITARY FOAMING
IN SANITARY DEVICE**

BACKGROUND OF THE INVENTION

5 (a) Technical Field of the Invention

The present invention relates to a sanitary foaming forming method that forms a thick layer of foaming on an inside bottom of a sanitary device, and in particularly to a sanitary foaming forming method that forms, in a
10 sanitary device, sanitary foaming that features perfuming, deodorizing, cleaning, disinfecting, sterilization, lubricating, toughening and long-lasting.

(b) Description of the Prior Art

The most-commonly known sanitary devices are
15 often operated by pre-wetting with pre-flushing and after-flush after the user thereof for cleaning. An example is a toilet. The general toilet comprises a water tank storing therein a predetermined amount of water for flushing a toilet bowl of the toilet. In addition,
20 inside the toilet bowl, normally an amount of water is present to serve as a water seal that blocks odor transmitting through the discharge pipe of the toilet. In using the toilet, it is often that feces drop to the water contained in the toilet bowl to cause water splashes.
25 In addition, odors may spread from the toilet bowl to the

atmosphere and even attached to the user's body.

Further, water splashes may also be caused by the flushing water that flushes a used toilet bowl to cause undesired contamination of the surroundings.

5 Moreover, the feces that moves and turns over inside the toilet bowl while being flushing may cause the user feeling sick. The ordinary toilet bowl also suffers the problems of a dead corner where flushing is insufficient to remove the dirt and feces, which in turn generate
10 undesired odors and cultivation of bacteria.

SUMMARY OF THE INVENTION

The primary purpose of the present invention is to provide a method for forming sanitary foaming in a
15 sanitary device, which generates a thick layer of foaming in an inside bottom of the sanitary device with chemicals or agents for perfuming, deodorizing, cleaning, disinfecting, sterilizing, lubricating, toughening and long-lasting added in the foaming.

20 In accordance with the present invention, the method for forming foaming layer is carried out by spraying a foaming agent that generates foaming or a mixture of the foaming agent and water onto the inside bottom of the sanitary device to generate a thick layer of foaming,
25 which serves as the sanitary foaming in the present

invention. Chemicals or agents for perfuming, deodorizing, cleaning, disinfecting, sterilization, lubricating, toughening and long-lasting may be added to provide the foaming with features of perfuming, 5 deodorizing, cleaning, disinfecting, sterilizing, lubricating, toughening and long-lasting. By distributing the thick foaming layer of the dense, continuous, tough, and flexible sanitary foaming on the water surface of the water seal, splashing and 10 contamination caused by contact with and falling of the feces onto the water contained in the bowl can be prevented and further, feces partially floating on the water surface of the water seal is isolated from the atmosphere by the foaming layer to prevent spread of 15 odors and bacteria into the atmosphere, which may than attack the user's body. In addition, in carrying out flushing, the sanitary foaming layer buffers the impact force of the flushing water with the contaminated water contained in the bowl to reduce possible splashing of 20 water and contamination of the surroundings caused by the splashed water droplets. The foaming layer also functions to isolate the outward spreading of bacteria and odors caused by the feces that are turned and fast moved by the flushing water and shield the turning 25 feces from the eyes of the user to avoid feeling sick of

the user. Moreover, the foaming that features perfuming, deodorizing, cleaning, disinfecting, sterilizing, lubricating, toughening and long-lasting can function all of the features to realize disinfection,
5 deodorization, sterilization, cleaning, and perfuming of the sanitary device while in use and also provide lubrication to enhance effective flushing of the sanitary device.

Thus, the method of the present invention solves
10 sanitary problems occurring in a sanitary device and also solves various sanitary-related problems, clearing dead space occurring in the sanitary device to effectively achieve cleaning and sanitary purposes and improve sanitary environment and quality thereof.

15 The foregoing object and summary provide only a brief introduction to the present invention. To fully appreciate these and other objects of the present invention as well as the invention itself, all of which will become apparent to those skilled in the art, the
20 following detailed description of the invention and the claims should be read in conjunction with the accompanying drawings. Throughout the specification and drawings identical reference numerals refer to identical or similar parts.

25 Many other advantages and features of the present

invention will become manifest to those versed in the art upon making reference to the detailed description and the accompanying sheets of drawings in which a preferred structural embodiment incorporating the principles of the present invention is shown by way of illustrative example.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is schematic view illustrating a method of forming sanitary foaming layer in a sanitary device in accordance with the present invention; and

Figure 2 is a schematic view illustrating the effectiveness of the method in accordance with the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The following descriptions are of exemplary embodiments only, and are not intended to limit the scope, applicability or configuration of the invention in any way. Rather, the following description provides a convenient illustration for implementing exemplary embodiments of the invention. Various changes to the described embodiments may be made in the function and arrangement of the elements described without

departing from the scope of the invention as set forth in the appended claims.

With reference to the drawings and in particular to Figure 1, the present invention provides a method for
5 forming sanitary foaming in a sanitary device, which is carried out by directly spreading a foaming agent 10 on a water surface of water seal 11 inside for example a toilet bowl or alternatively, spreading the foaming agent 10 on water container in a container 12 to form a
10 mixture and then pouring the mixture liquid into the toilet bowl, both forming a thick layer of sanitary foaming 13 on the water surface of the water seal 11. Or alternatively, the foaming agent 10 is contained in a container 14, which has a nozzle 15 that may directly
15 spray foam 16 on the water surface of the water seal 11 inside the toilet bowl to form the sanitary foaming 13 of a desired thickness. All these are some simple ways of forming the sanitary foaming of the present invention. In other embodiments, a conveyance device 17 is
20 provided to guide water flow 18, which is controlled by a controller 19 for mixing the water flow with a foaming agent 10 to form a mixture. The mixture is driven by the kinetic energy or by external power, such as electricity, to flow through the conveyance device 17 to
25 a sprayer 20 from which the mixture of foaming agent

and water is sprayed into the interior space and inside bottom of the toilet bowl to carry out cleaning, disinfection, deodorizing, sterilizing, perfuming and lubricating of the sanitary device and forming a layer of
5 sanitary foam 13 of a desired thickness on the water surface of the water seal 11. This is a practical process of the sanitary foaming forming method in accordance with the present invention.

In using the toilet, as shown in Figure 2, the thick
10 layer of sanitary foam 13 of the present invention effectively prevents splashing 21 of the contaminated water out of the toilet bowl caused by the falling and contact of the feces, isolates the feces on the water surface of the water seal 11 from the atmosphere to
15 eliminate spreading of bacteria and odors 22, buffers the impact between the flushing water and the contaminated water contained in the bowl in flushing the bowl to further prevent splashing of the flushing water and the contaminated water, and, during flushing,
20 shields the turning and moving feces from the eyesight of the toilet user and prevents the spreading of bacteria and odors 22. Further, to enhance the effectiveness of sanitary, the foaming agent can be added with chemicals or agents of perfuming, deodorizing, cleaning,
25 disinfecting, and sterilizing, and the likes. In this way,

the sanitary of toilet can be enhanced. It is noted that the foaming formation can be selectively cancelled to allow a toilet user to for example visually examine the feces.

5 Although the present invention has been described with reference to the best mode for carrying out the invention, it is apparent to those skilled in the art that a variety of modifications and changes may be made without departing from the scope of the present
10 invention which is intended to be defined by the appended claims.

It will be understood that each of the elements described above, or two or more together may also find a useful application in other types of methods differing
15 from the type described above.

While certain novel features of this invention have been shown and described and are pointed out in the annexed claim, it is not intended to be limited to the details above, since it will be understood that various
20 omissions, modifications, substitutions and changes in the forms and details of the device illustrated and in its operation can be made by those skilled in the art without departing in any way from the spirit of the present invention.

I CLAIM:

1. A method for forming sanitary foaming in a
sanitary device, characterized in that a layer of
foaming of a given thickness is formed on an
5 inside bottom of the sanitary device to serve as
sanitary foam, which functions to prevent
splashing of contamination, spreading of bacteria
and odors, shielding disgusting condition and
spreading of bacteria and odors caused by
10 flushing of water and also realizing cleaning,
lubricating, disinfecting, and sterilization of the
sanitary device.
2. The method as claimed in Claim 1, wherein a
foaming agent used to form the foaming layer is
15 added with chemical agents of perfuming,
deodorizing, cleaning, and disinfecting.
3. A method for forming sanitary foaming in a
sanitary device, characterized in that a layer of
foaming of a given thickness is formed on an
20 inside bottom of the sanitary device to serve as
sanitary foam, which functions to prevent
splashing of contamination, spreading of bacteria
and odors, shielding disgusting condition and
spreading of bacteria and odors caused by
25 flushing of water and also realizing cleaning,

- lubricating, disinfecting, and sterilization of the sanitary device, wherein conveyance and spraying means is used to convey a foaming agent for forming the foaming layer and a controller is provided to control a water flow supplied through the conveyance and spraying means for mixing with the foaming agent to form a mixture that is then conveyed and sprayed into interior space and inside bottom of the sanitary device to form the sanitary foam.
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4. A method for forming sanitary foaming in a sanitary device, characterized in that a layer of foaming of a given thickness is formed on an inside space of the sanitary device to serve as sanitary foam, which functions to prevent splashing of contamination, spreading of bacteria and odors, shielding disgusting condition and spreading of bacteria and odors caused by flushing of water and also realizing cleaning, lubricating, disinfecting, and sterilization of the sanitary device, wherein a foaming agent that forms the foaming layer is directly spread on a surface of a water seal of the sanitary device to form the sanitary foam.
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