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### (54) Sanitary seat for toilet bowl

(57) Disclosed is a sanitary seat for a toilet bowl, in which disposable seat films consisting of a plurality of unit seat films adhered by an adhesive are attached to an upper surface of a toilet seat, such that the seat film may be used on the toilet bowl one by one. The sanitary seat includes at least two unit seat films attached to an upper surface of the toilet seat by means of an adhesive, such that the seat film is used on the toilet bowl one by

one. The unit seat film is provided at both sides of a rear portion thereof with a pair of knobs, and the knobs are outwardly protruded from the rear portion so that the film is easily detached by a user. Alternatively, the unit seat film is provided at a rear center portion thereof with a knob.

#### Description

#### **BACKGROUND OF THE INVENTION**

#### Field of the Invention

**[0001]** The present invention relates to a sanitary seat for a toilet bowl, and more particularly, to a sanitary seat for a toilet bowl, in which disposable seat films consisting of a plurality of unit seat films adhered by an adhesive are attached to an upper surface of a toilet seat, such that the seat film may be used on the toilet bowl one by one.

#### **Background of the Related Art**

**[0002]** Generally, toilet bowls installed in locations, such as homes, public offices, various industrial fields, public bathrooms and so forth, includes a toilet body, a toilet seat and a toilet seat lid, such that a user may relieve his/her bowels, with one sitting on the toilet seat at easy, and it may prevent the trousers from being creased.

**[0003]** With the toilet bowls constructed as described above, the buff of buttocks and fleshy inside of a thigh of the user is directly contacted with the toilet seat in use. Therefore, in case many and unspecified persons use it, it is difficult to keep the toilet bowl clean, thereby providing a cause of making a user's gorge rise.

[0004] Due to the above reasons, several methods to solve the above problem have been proposed as following: (a) the bathroom equipped with the toilet bowl is separately provided with a disposable seat made of a wrap or vinyl having the same shape as the toilet seat, so that when using the toilet bowl the user may take out the disposable seat from a storing box one by one, and seat on the disposable seat disposed on the upper surface of the toilet seat; (b) in case of the seat with a front center portion being opened, the user inserts the disposable seat into both arms of the seat, respectively; (c) if the user operates a switch, a used vinyl seat is forcefully moved into a storing box, and a measure of new vinyl seat is provided from another storing box; and (d) before the user uses the toilet seat, the surface of the toilet seat is sterilized by means of ultraviolet rays or disinfectant.

**[0005]** In the above method 'a', since a number of seats are stored in the form of a toilet roll or a tissue block, there is an uneconomical problem that several sheets are simultaneously out of from the box. When the user sits on the toilet seat, the disposable seat is not properly positioned thereon. In addition, the disposable seat may be slid out from the proper position in use.

**[0006]** In the above method 'b', it is cumbersome that the user pulls out a pair of disposable seats from the storing box, and then inserts them into the both arms of the toilet seat, respectively. In addition, since the user's hands are in contact with the toilet seat, this method is

not almost used.

**[0007]** In the above method 'c', by operating the switch, the used vinyl seat is automatically replaced with the new vinyl seat, thereby providing the convenience. However, the apparatus is expensive, and is frequently out of order, thereby requiring an additional cost to maintain it. In addition, there is a drawback that it is not used during the repair.

**[0008]** Finally, in the above method 'd', since the human body may be exposed to electric current, ultraviolet rays or disinfectant, the method is not secure. In addition, it's too much of an expense to maintain the apparatus

**[0009]** The above-mentioned methods are destitute of the practicality due to the limits of universality, economical efficiency, safety, maintenance and so forth. In particular, it is difficult for the above disposable seats to utilize or apply to the toilet bowl of a railway vehicle, an airplane, a bus or the other moving at high speed.

#### **SUMMARY OF THE INVENTION**

**[0010]** Accordingly, the present invention is directed to a sanitary seat for a toilet bowl that substantially obviates one or more problems due to limitations and disadvantages of the related art.

**[0011]** An object of the present invention is to provide a sanitary seat for a toilet bowl, in which disposable seat films consisting of a plurality of unit seat films adhered by an adhesive are attached to an upper surface of a toilet seat, such that the seat film may be used on the toilet bowl one by one.

**[0012]** To achieve the object and other advantages, according to one aspect of the present invention, there is provide a sanitary seat for a toilet bowl including a toilet body and a toilet seat hinged to an upper surface of the toilet body, the sanitary seat comprising: at least two unit seat films attached to an upper surface of the toilet seat by means of an adhesive, such that the seat film is used on the toilet bowl one by one.

[0013] The unit seat film is provided at both sides of a rear portion thereof with a pair of knobs, and the knobs are outwardly protruded from the rear portion so that the film is easily detached by a user. Alternatively, the unit seat film is provided at a rear center portion thereof with a knob, and the knob is outwardly protruded from the rear portion so that the film is easily detached by a user.

[0014] Preferably, the toilet seat is adapted to have a height of 20 mm to 40 mm, with a rear vertical surface being inclined toward a front thereof.

**[0015]** An additional film is attached to upper and lower surfaces or one side of the knob in such a way that a space is formed between the knobs.

**[0016]** It is to be understood that both the foregoing general description and the following detailed description of the present invention are exemplary and explanatory and are intended to provide further explanation of the invention as claimed.

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#### **BRIEF DESCRIPTION OF THE DRAWINGS**

**[0017]** The accompanying drawings, which are included to provide a further understanding of the invention and are incorporated in and constitute a part of this application, illustrate embodiment(s) of the invention and together with the description serve to explain the principle of the invention. In the drawings:

**[0018]** Figs. 1a and 1b are side and top plan views showing the state that a disposable seat film for a toilet bowl according to one preferred embodiment of the present invention is positioned on a toilet seat, respectively:

**[0019]** Fig. 2 is a perspective view showing the entire shape of a unit seat film provided in a disposable seat film for a toilet bowl according to the present invention; **[0020]** Fig. 3 is a partially cross-sectional view of a disposable seat film for a toilet bowl according to the present invention;

**[0021]** Figs. 4a and 4b are side and top plan views showing the state that a disposable seat film for a toilet bowl according to another preferred embodiment of the present invention is positioned on a toilet seat, respectively;

**[0022]** Figs. 5a and 5b are perspective views showing the shape of the unit seat film provided in the disposable seat film for the toilet bowl shown in Figs. 4a and 4b; and **[0023]** Fig. 6 is a partially cross-sectional view of the disposable seat film shown in Fig. 4.

# DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

**[0024]** A preferred embodiment according to the present invention will now be explained with reference to the accompanying drawings.

**[0025]** Figs. 1a and 1b are side and top plan views showing the state that a disposable seat film for a toilet bowl according to one preferred embodiment of the present invention is positioned on a toilet seat, respectively, and Fig. 2 is a perspective view showing the entire shape of a unit seat film provided in the disposable seat film for the toilet bowl according to the present invention.

**[0026]** Referring to Figs. 1a to 2, the disposable seat film 16 for the toilet bowl according to the present invention is formed of a stacked structure with a plurality of unit seat films 17 laminated in order, the unit seat film having an adhering layer 18 under a bottom surface thereof. The disposable seat film 16 constructed as described above is attached to an upper surface of a toilet seat 12 hinged to the upper surface of the toilet body 10.

**[0027]** The detailed structure of the unit seat film 17 which is a part of the disposable seat film 16 will now be further described with reference to Fig. 2.

**[0028]** The unit seat film 17 is cut to have the same shape as the toilet seat 12 installed to the toilet bowl, and the bottom surface of the unit seat film is applied with a common non-venomous (vegetable) adhesive to

form an adhering layer 18. The adhering layer 18 is to integrally secure the unit seat films 17 to the toilet seat, and to be convenient for manufacture and transportation thereof. When several sheets of the unit seat films 17 are properly disposed on the toilet seat 12, it prevents from the disorder or separation due to the sliding.

**[0029]** The unit seat film 17 is integrally formed at both sides of a rear portion thereof with knobs 20, and the knobs are outwardly protruded from the rear portion so that the film is easily detached by a user's write or left hand. An additional film 22 having a thickness equal or similar to that of the film 17 is attached to upper and lower surfaces or one side of the knob 20. The additional film 22 is attached to the upper and lower surfaces of the knob 20 in such a way that a space 24 is formed between ends of the respective knobs 20, as shown in Fig. 3, so that the user may more easily catch the knob 20 by one sheet when detaching the knob.

[0030] Preferably, a color of the additional film 22 may be selected to be different from that of the unit seat film 17, so that the user can certainly appreciate the difference between the additional film and the unit seat film. Preferably, ends of the knobs 20 with the additional film 22 attached are downwardly oriented in such a way that an inclined angle of the respective ends are more increased as shown in Fig. 3. This is the reason when the user detaches the knob of the unit seat film 17 by one sheet the end of the knob does not interfere the detachment.

[0031] When the user uses the disposable seat film for the toilet bowl, the user detaches and removes the uppermost unit seat film 17, which is previously used by other user, from the unit seat films 17 stacked on the upper surface of the toilet seat 12. Therefore, the user may use conveniently and sanitarily the toilet bowl 100. [0032] At that time, since the knobs 20 are formed at both rear sides of the unit seat film 17, the user may more easily detach the unit seat film 17 by use of his/her right or left hand.

**[0033]** Fig. 4a to Fig. 6 show the state that a disposable seat film for a toilet bowl according to another preferred embodiment of the present invention is positioned on a toilet seat. The detailed structure of the disposable unit seat for the toilet bowl will now be described, while the operation thereof will be omitted because of the same as the above embodiment.

[0034] Referring to figures, the disposable seat film 116 for the toilet bowl 200 is formed of a stacked structure with a plurality of unit seat films 117 laminated in order, the unit seat film having an adhering layer 112 under a bottom surface thereof. The disposable seat film 116 constructed as described above is attached to an upper surface of a toilet seat 112 hinged to the upper surface of the toilet body 110.

**[0035]** The unit seat film 117 is integrally formed at a rear center portion thereof with a knob 120, and the knob is outwardly protruded from the rear center portion. An additional film 122 having a thickness equal or similar

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to that of the film 117 is attached to upper and lower surfaces or one side of the knob 120. The additional film 122 is attached to the upper and lower surfaces of the knob 120 in such a way that a space 124 is formed between ends of the respective knobs 120.

**[0036]** As shown in Figs. 4a to 5, the toilet seat 112 is adapted to have a height of 20 mm to 40 mm higher than that the conventional toilet seat, and is adapted to have an inclined angle of about 30 degrees toward a front thereof. With the structure as described above, the knob 120 is not contacted with the upper surface of the toilet body 110, and the user may easily catch the knob by using his/her fingers, with being free from the interference of the rear portion of the toilet seat 112.

[0037] Specifically, when the disposable seat film 116 is disposed on the upper surface of the toilet seat 112, the knob 112 is positioned at the center of the rear portion of the toilet seat 112, so that the knob 112 is not contacted with the upper surface of the toilet body 110 to prevent the filth from being stuck to the knob, and the knob 112 may be easily detached from the disposable seat film.

[0038] If the knobs 112 are in contact with the upper surface of the toilet body 110, the knobs 122 are not inclined downwardly and the space 124 is not formed between the knobs 122. Therefore, the user may not easily catch the knob 122. According to the present invention, by forming the thicker toilet seat 112, the knob 122 is disposed to have a desired height from the toilet body 110, thereby solving the above problem. Preferably, the film may contain aromatic derivatives. Also, the film may be printed to have various patterns on the upper or lower surface. In addition, the film may be provided on the surface thereof with embossing or grooves.

**[0039]** With the description as described above, the disposable seat films consisting of a plurality of unit seat films adhered by the adhesive are attached to the upper surface of the toilet seat, such that the seat film may be used on the toilet bowl one by one. The disposable seat of the present invention may be applied to various transporting means. Addition, the present invention solves the drawbacks contained in the conventional seat.

**[0040]** The forgoing embodiments are merely exemplary and are not to be construed as limiting the present invention. The present teachings can be readily applied to other types of apparatus. The description of the present invention is intended to be illustrative, and not to limit the scope of the claims. Many alternatives, modifications, and variations will be apparent to those skilled in the art.

**Claims** 

1. A sanitary seat for a toilet bowl including a toilet body and a toilet seat hinged to an upper surface of the toilet body, the sanitary seat comprising:

at least two unit seat films attached to an upper surface of the toilet seat by means of an adhesive, such that the seat film is used on the toilet bowl one by one.

- 2. The sanitary seat for the toilet bowl as claimed in claim 1, wherein the unit seat film is provided at both sides of a rear portion thereof with a pair of knobs, and the knobs are outwardly protruded from the rear portion so that the film is easily detached by a user.
- 3. The sanitary seat for the toilet bowl as claimed in claim 1, wherein the unit seat film is provided at a rear center portion thereof with a knob, and the knob is outwardly protruded from the rear portion so that the film is easily detached by a user.
- 4. The sanitary seat for the toilet bowl as claimed in claim 3, wherein the toilet seat is adapted to have a height of 20 mm to 40 mm, with a rear vertical surface being inclined toward a front thereof.
- 5. The sanitary seat for the toilet bowl as claimed in claim 2 or 3, wherein an additional film is attached to upper and lower surfaces or one side of the knob in such a way that a space is formed between the knobs.

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Fig. 1a

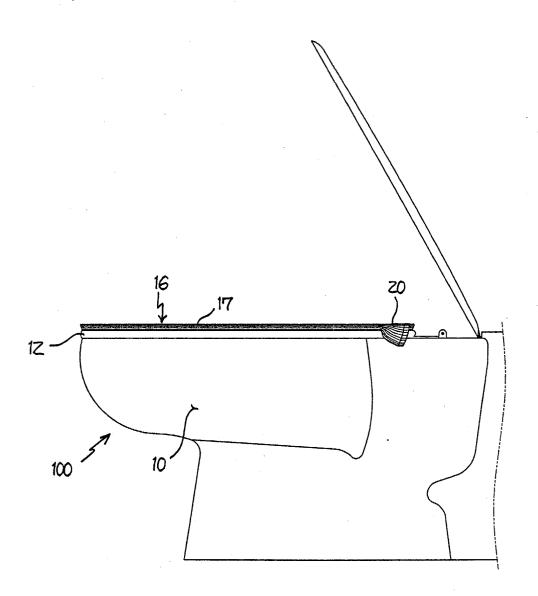


Fig. 1b

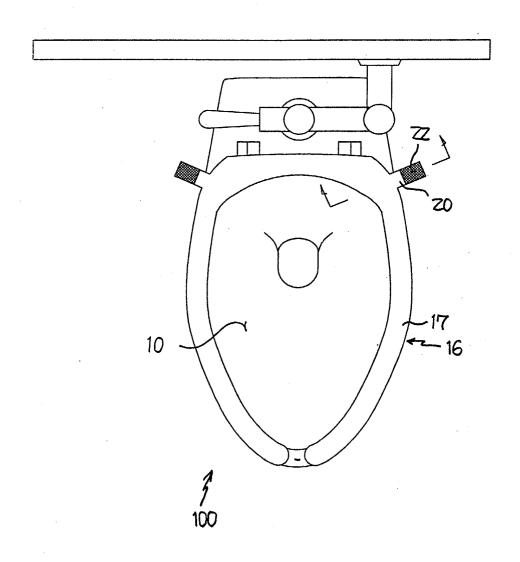


Fig. 2

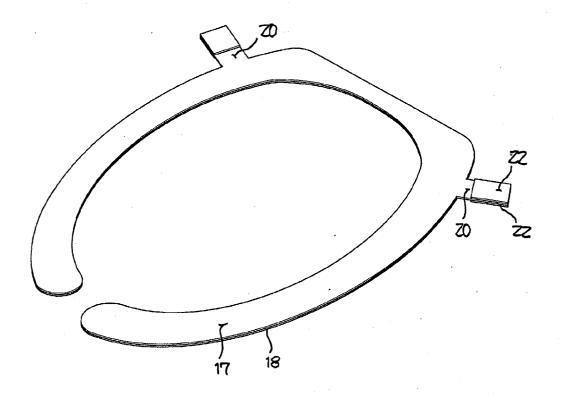
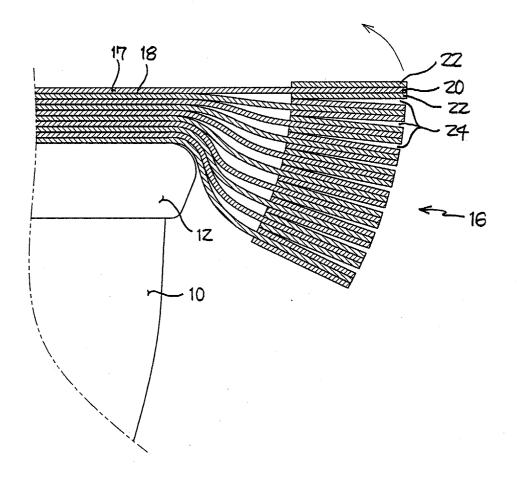
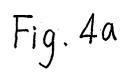


Fig. 3





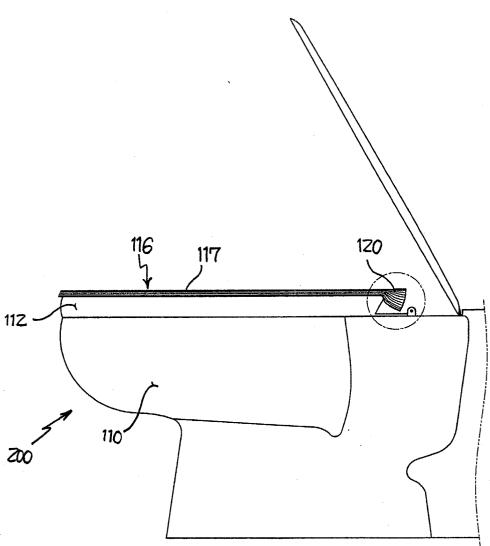


Fig. 4b

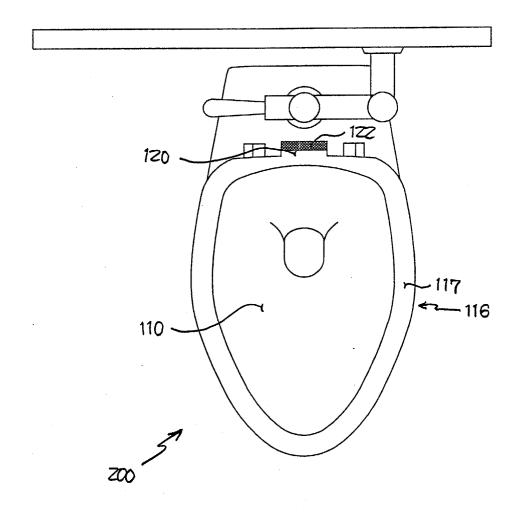


Fig. 5

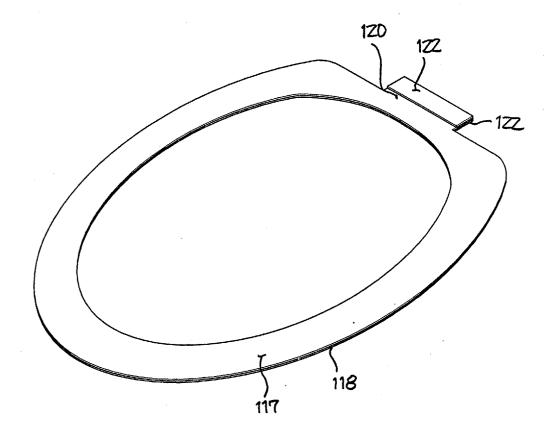


Fig. 6

