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(54) **TOILET SEAT WITH REPLACEMENT COVER**

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ABSTRACT

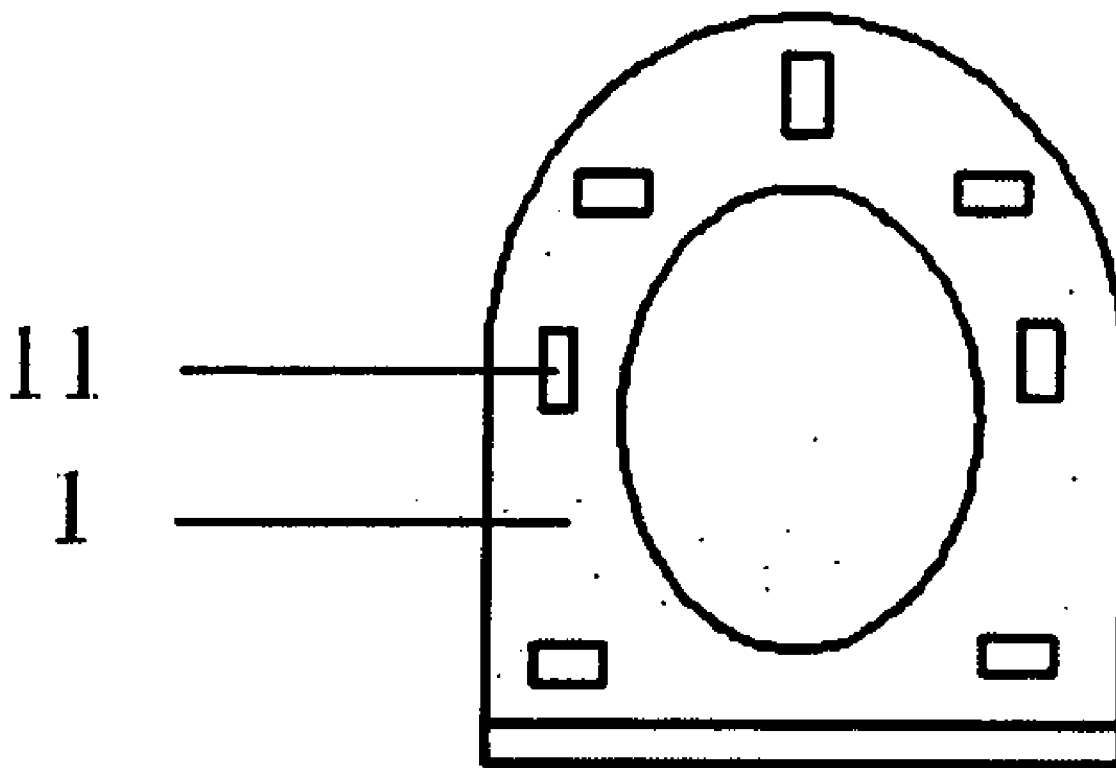
A toilet seat with a replaceable cover that may be placed on currently used toilet bowls in the usual fashion, whose outer form corresponds to that of toilet seats currently in use, and which consists of three parts: a base, attached to the bowl in the usual fashion, with an upper surface that includes depressions sunk to at most half its thickness; a counterpart, which is placed on top of the base and which includes projections that are inserted into the depressions in the base; and layers of sheeting attached to the counterpart with tabs used for tearing them off the stack.

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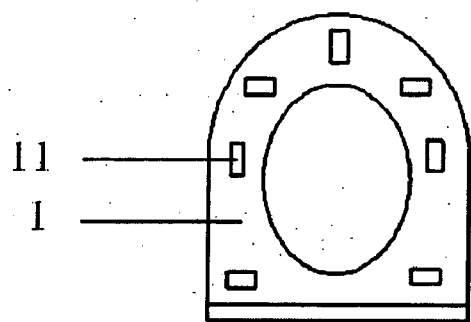


FIG. 1

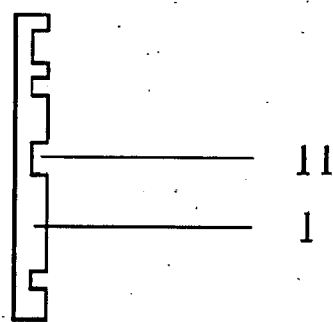


FIG. 2

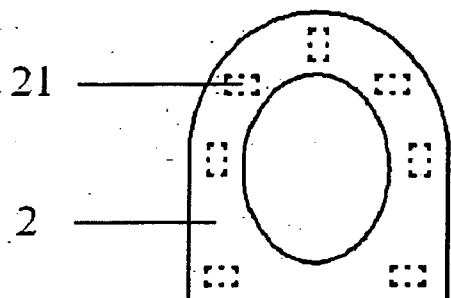


FIG. 3

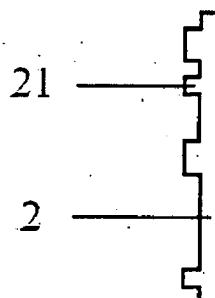


FIG. 4

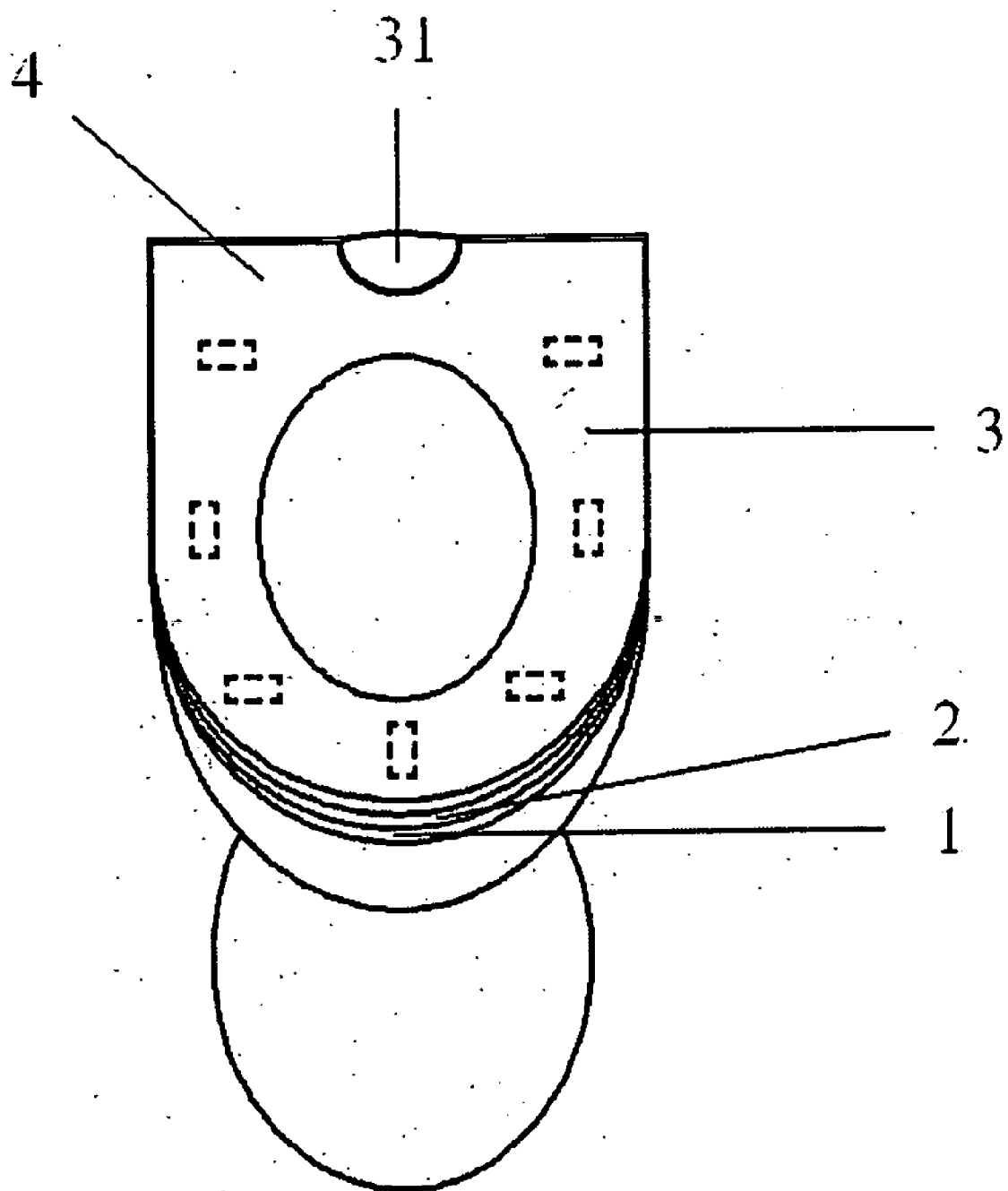


Fig. 5

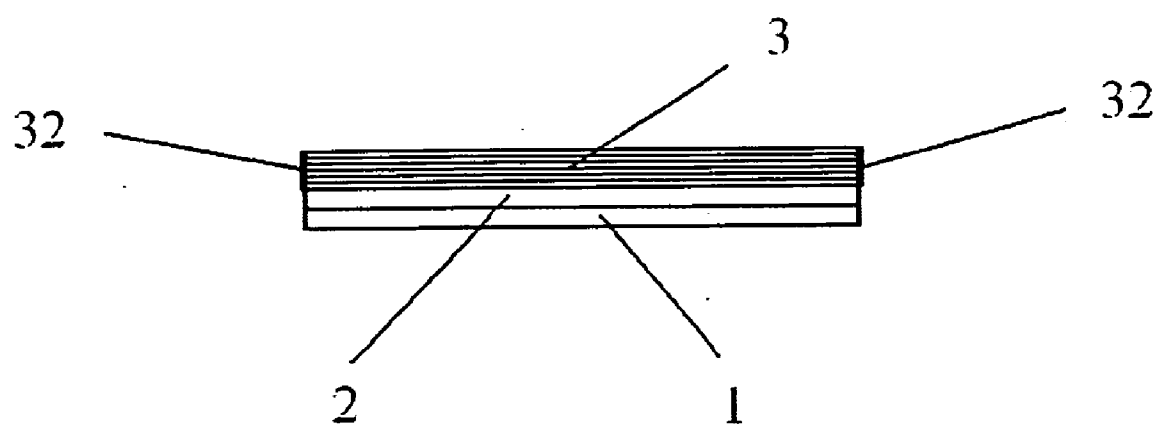


FIG. 6

TOILET SEAT WITH REPLACEMENT COVER

[0001] The working model is of a toilet seat with a replaceable cover, which, when installed on any type of commercially available toilet bowl, solves the problem of sanitary toilet use in public places, public institutions, and other highly trafficked locations.

[0002] It is commonly known that infections and diseases may be transmitted from one human being to another by the seats of communal toilets if they are not kept properly clean. The ideal solution would be if every toilet might be disinfected after each human use. This solution is virtually impossible to implement, as it would require an inordinate quantity of labour and even more disinfectant. The automatic devices used to do so are complicated and expensive and operators cannot afford them. Prior art includes numerous similar solutions that have not come into general use to this day.

[0003] U.S. Pat. No. 4,551,369 describes a solution for this purpose, whereby perforated plastic membranes of a size identical to that of the seat are connected to each other in a roll and placed in a storage area. Once removed from the storage area and placed on the toilet seat, these provide the sanitary environment desired for toilet seat use. The disadvantages of this solution are that the placement of the plastic sheets in the lavatory area requires complicated storage equipment and labour steps and that the user must place the torn-off sheet of plastic on this seat himself/herself in order to use it. The sheet may be placed improperly on the seat or may slip, or the user's hand may touch the toilet bowl, which is not itself covered by a replaceable cover, during the process.

[0004] U.S. Pat. No. 4,566,648 describes another paper roll-type solution for this purpose, for which rolls of paper are installed in roll housings placed at the two back ends of the seat. When the toilet is used, the paper is pulled of the rolls and placed on the seat, then discarded with other waste materials. The disadvantage of this solution is that the strips of paper from the roll do not follow the curvature of the seat and thus do not cover it properly. In addition, the solution requires a separate dispensing and storage apparatus, which is costly and complicated and thus requires constant maintenance.

[0005] The solution that most closely resembles my own working model is described by Hungarian working model number U 00 00228, whereby a stack of protective plastic sheets are placed on plastic toilet seats used in commercial establishments. The seat protector consists of stacked protective sheets fixed at the lower end and supplied with a self-adhesive element. The protective sheets are joined to one another by their self-adhesive elements and are supplied with elements for grasping and pulling them off at one end of their U-shaped surface.

[0006] Hungarian working model number U 1873 describes another stack of protective sheets, in which the several protective layers that form the stack are sheets that are joined to each other in removable fashion. The disadvantage in both of the above solutions is that the sheets are stuck to the toilet seat by self-adhesive pads, elements or a layer of glue, so that during use, sheets in the stack may easily slip over one another, in which case hygienic requirements are not met perfectly.

[0007] My purpose in constructing the present working model was to create a toilet seat that avoids the disadvantages inherent in the above solutions, that is easy to manufacture, that may be installed quickly and conveniently, and whose use provides the user with a completely sanitary solution. The invention is based on the recognition that if I produce a base toilet seat by plastic injection moulding, such that the layers of sheeting placed on it are attached to it in the manner of a counterpart so as to prevent slippage, and layers of sheeting that are attached both to their counterpart and to each other in removable fashion so as to prevent slippage, then I can prevent the layers of sheeting from slipping over the base or each other and thus create a toilet seat that is perfectly sanitary.

[0008] The subject of this working model, therefore, is a toilet seat with a replaceable cover that may be placed on currently used toilet bowls in the usual fashion, whose outer form corresponds to that of toilet seats currently in use, and which consists of three parts: a base, attached to the bowl in the usual fashion, with an upper surface that includes depressions sunk to at most half its thickness; a counterpart, which is placed on top of the base and which includes projections that are inserted into the depressions in the base; and layers of sheeting attached to the counterpart with tabs used for tearing them off the stack.

[0009] In one embodiment of the toilet seat with replaceable cover according to this working model, the base and counterpart are of identical form and are produced using plastic injection moulding.

[0010] In a second embodiment of the toilet seat with replaceable cover according to this working model, the layers of sheeting are joined to the counterpart with an adhesive and to each other by the application of an adhesive at the edges.

[0011] In a third embodiment of the toilet seat with replaceable cover according to this working model, the layers of sheeting are attached to each other at the edges by melting effected by cutting with a heated blade.

[0012] In a further embodiment of the toilet seat with replaceable cover according to this working model, the adhesion or melting employed at the edges of the layers of sheeting is perforated to allow the sheets to be removed more easily.

[0013] In a third embodiment of the toilet seat with replaceable cover according to this working model, the tabs on the layers of sheeting are folded back over each individual layer.

[0014] In a third embodiment of the toilet seat with replaceable cover according to this working model, the upper surfaces of individual layers of sheeting also serve as an advertising medium.

[0015] One example embodiment of the toilet seat with replaceable cover according to the present working model is presented below by means of attached drawings, where:

[0016] FIG. 1 gives a top view of the base of the toilet seat with replaceable cover according to the present working model,

[0017] FIG. 2 gives a side view of the base of the toilet seat with replaceable cover according to the present working model,

[0018] FIG. 3 gives a top view of the counterpart of the toilet seat with replaceable cover according to the present working model,

[0019] FIG. 4 gives a side view of the counterpart of the toilet seat with replaceable cover according to the present working model,

[0020] FIG. 5 depicts the placement of the toilet seat with replaceable cover according to the present working model onto the toilet bowl following assembly of its three parts, and

[0021] FIG. 6 gives a cross sectional view of the three parts of the toilet seat with replaceable cover according to the present working model.

[0022] FIGS. 1 and 2 clearly detail how the base of the toilet seat with replaceable cover is constructed.

[0023] The base of injection-moulded plastic shown in top view in FIG. 1 takes the form of a conventional toilet seat, its upper surface, which is shown clearly in FIG. 2, includes depressions in the plastic of a depth up to one half the thickness of the piece. These depressions serve to receive the projections (21) on the counterpart (2) shown in FIG. 3. The base (1) is preferably produced of plastic using the process of injection moulding and is joined to the toilet bowl in conventional fashion.

[0024] The top view of the counterpart (2) shown in FIGS. 3 and 4 clearly shows how the form of the counterpart conforms to that of the base, including projections (21) on its lower surface positioned at locations where the depressions (11) on the base (1) are disposed, as shown in FIG. 1. The counterpart (2), also preferably made of plastic using an injection moulding process, is placed over the base (1) such that the projections (21) fit into the depressions (11), thus securing the two pieces to each other.

[0025] FIG. 5 shows the toilet seat composed of 3 parts, where the counterpart (2) is attached to the base (1) by means of the projections (21), the lower layer of the layers of sheeting (3) is attached to the counterpart (2), and the layers of sheeting (3) are attached to each other at their edges by means of an adhesive or melting. This melting may be achieved by means of cutting with a heated blade, so that the edges of the layers of sheeting (3) are melted together at the time of cutting. The layers of sheeting (3) may be torn off the stack by means of a continuation of the layers (3), preferably by means of a tab (31) disposed at the centre of the straight back edge, such that the tabs (31) are folded back over the upper surface of each layer of sheeting (3) so that they allow only the top layer of sheeting (3) to be removed at any one time. Removal of individual layers of sheeting (3) is also facilitated by the use of perforation of the adhesive or melting employed at the edges so that the adhesive or melting is not implemented over the entire edge line, but is interrupted by the perforations, making it easier to remove each sheet in succession. The drawing also clearly shows how the entire upper surface of the layer of sheeting (3) may be used as an advertising medium (4) for the display of emblems, logos, and advertising text.

[0026] FIG. 6 shows in detail the three parts of the toilet seat, with the base (1) on the bottom and the counterpart (2) fixed to the base by means of the projections (21) shown in FIG. 4. The bottom sheet (32) of the layers of sheeting (3)

is secured to the counterpart (2) by an adhesive, while the remaining sheets above it are attached to the bottom sheet at the edges, also preferably by an adhesive. The adhesive (32) employed at the edges is preferably perforated.

[0027] The cover, which is supplied with layers of sheeting (3), is used by removing the layers of sheeting (3) completely by their tabs, then removing the counterpart (2) from the base (1) by means of the projections (21) and placing another counterpart (2) supplied with layers of sheeting (3) onto the base (1).

[0028] A possible use of the toilet seat with replaceable cover according to the present working model has already been described in the introductory section. From this, the objectives met by our solution were expressed. The advantages of our solution are the following:

[0029] It is a simple, practical means for constructed a toilet seat with replaceable cover for locations where many individuals use the toilets (including hospitals, schools, restaurants, public lavatory facilities, etc.).

[0030] It offers a clean, inexpensive solution that provides protection from infectious diseases.

[0031] It is comfortable and practical to use. Cleaning personnel need only replace the counterpart with its layers of sheeting, with users themselves removing individual layers of sheeting.

[0032] Its use saves both labour and cleaning materials.

1. A Toilet seat with replaceable cover such that that may be placed on currently used toilet bowls in the usual fashion, whose outer form corresponds to that of toilet seats currently in use, characterised by a base (1) attached to the bowl in the usual fashion with an upper surface that includes depressions (11) sunk to at most half its thickness; a counterpart (2), which is placed on top of the base (1) and which includes projections (21) that are inserted into the depressions (11) in the base (1); and layers of sheeting (3) attached to the counterpart (2) with tabs (31) used for tearing them off the stack.

2. The toilet seat with replaceable cover according to claim 1, characterised by the condition that the base (1) and counterpart (2) are identical in construction and are both produced from injection-moulded plastic.

3. The toilet seat with replaceable cover according to claim 1, characterised by the condition that the layers of sheeting (3) are attached to the counterpart (2) by means of an adhesive (2) and to each other by an adhesive disposed at the edges.

4. The toilet seat with replaceable cover according to claim 3 characterised by the condition that the layers of sheeting (3) are attached to one another by means of melting caused by cutting with a heated blade.

5. The toilet seat with replaceable cover according to claim 1, characterised by the condition that the adhesion or melting of the layers of sheeting (3) at the edges is perforated.

6. The toilet seat with replaceable cover according to claim 1 characterised by the condition that the tabs (31) used

for tearing off layers of sheeting (3) are folded back over the individual layers of sheeting (3).

7. The toilet seat with replaceable cover according to claim 1 characterised by the condition that the upper surfaces of the layers of sheeting (3) also serve as advertising media (4).

8. The toilet seat with replaceable cover according to claim 2, characterised by the condition that the layers of sheeting (3) are attached to the counterpart (2) by means of an adhesive (2) and to each other by an adhesive disposed at the edges.

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