TOILET SEAT WITH A WATER SPLASH GUARD

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ABSTRACT

The invention relates to a toilet seat affording hygienic environment by adding a water splash guard on the toilet seat. The water spray guard protects water escaping through the gap between the toilet seat and the toilet bowl by covering and rerouting the water flow into the toilet bowl when the water splash occurs. It is comprised of a strip element that is located on the underbody of the toilet seat and surrounds the partial or complete inner opening to cover the gap. The strip element is attached or molded to the conventional toilet seat, and its number can be increased for more protection and ornamentation. The invention also relates to a toilet seat having an inward slope on the top surface to facilitate the water flowing into the toilet bowl.
TOILET SEAT WITH A WATER SPLASH GUARD

RELATED APPLICATIONS

[0001] This application is continuation-in-part (CIP) of prior U.S. patent application Ser. No. 10/983,552 applied on Nov. 8, 2004, which is fully incorporated herein.

BACKGROUND OF THE INVENTION

[0002] 1. Field of Invention

[0003] This invention relates to a toilet seat with a water splash guard on the underbody, engaging in protecting water escaping through the gap between the toilet seat and the toilet bowl.

[0004] 2. Description of Related Art

[0005] The invention in earlier application has been improved by adding new features, which include a water splash guard molded on the flat underbody of conventional toilet seat. The present invention is directed to the functional and aesthetic improvement over the attachment of the water splash guard. This is accomplished by forming or molding the toilet seat with a water splash guard around the inner opening located in the middle. The invention will be understood that the basic application is the toilet seat in relation with the toilet bowl without its lids and water tank.

[0006] The prior arts have included many types of toilet seats to improve the designs and the functions. Some toilet seats are made of plastic or wood, having a sense of rigid or toughness. Other toilet seats are foamed over the hard material, yielding a touch of softness. Another toilet seats have the devises to improve functions of the existing toilet seats. However, there is none relating to the toilet seat with a water splash guard to protect the environment from the water escaping through the gap between the toilet seat and the toilet bowl.

[0007] It is an object of the present invention to provide a toilet seat with one or more water splash guards located around the partial or complete inner opening to protect or ornament the surrounding gap.

[0008] It is an object of the present invention to provide a toilet seat with an inward slope on the top surface to make the water flow into the bowl.

[0009] It is an object of the present invention to provide a water splash guard having a round end corner for easy engagement and better sealing against the toilet bowl.

[0010] It is an object of the present invention to provide a water splash guard having a round corner at the base for better binding with the underbody.

SUMMARY OF THE INVENTION

[0011] The present invention provides a toilet seat with a water splash guard on the underbody and an inward slope on the top surface, wherein the water splash guard is attached or molded to the conventional toilet seat having a flat underbody. The water splash guard which is a set of long flexible strips can be attached on the flat underbody of the conventional toilet seat using the fasteners together with the sealers. The long flexible strip is placed around the partial or complete inner opening of the toilet seat. The height of the flexible strip is preferably not less than the thickness of the seat pads so that the gap is fully covered to prevent the escape of the water. The water splash guard can also be formed by a set of long flexible strips molded to the underbody. The molded water splash guard affords durability and aesthetic beauties. It also makes it easy to clean, because there is no split line on the base. The sets of multiple strips placed for the water splash guard can be accommodated as the ornaments as well by locating them on the outside. The invention also provides an inward slope on the top surface of the toilet seat to facilitate the water flowing into the toilet bowl.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] FIG. 1 is a top view showing a toilet seat with a water splash guard and the toilet seat pads on the underbody.

[0013] FIG. 2 is a side section view of the toilet seat taken on the line 1-1 of FIG. 1 placed on the top of the toilet bowl.

[0014] FIG. 3 is a perspective view of the toilet seat with a water splash guard fully enclosed around the inner opening on the underbody.

[0015] FIG. 3A is a section view of the toilet seat taken on the line 3-3 of FIG. 3 with a water splash guard attached on the underbody with the fasteners and sealer on the base.

[0016] FIG. 3B is a section view of the toilet seat taken on the line 3-3 of FIG. 3 with a water splash guard molded on the underbody to form a single unit.

[0017] FIG. 4 is a perspective side view of toilet seat with a water splash guard placed on the top of the toilet bowl, showing the area for protection around the gap.

[0018] FIG. 5 is a perspective view of the end-opened toilet seat with a water splash guard partially enclosed on the underbody.

[0019] FIG. 6 is a perspective view of the end-closed toilet seat with the water splash guards partially and completely enclosed on the underbody.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0020] Reference is now made in detail to the present invention, examples of which are illustrated in the accompanying drawings wherein reference numerals having the same first two digits indicate related elements, such as 10 and 103. The numerals having the same first three digits indicate same components with different elements, such as 120 and 1203. General structures of the present invention will be described following by details and the function of components. Referring to FIG. 1, a perspective view of the present invention, a toilet seat with a water splash guard, is shown and indicated the number 10. The system is generally composed of a toilet seat 10, namely “seat”; a water splash guard 120; seat pads 107; a seat top 108; a seat inner opening 109; an edge of the inner opening 1092; a rear sector 113 for attachment; an opening for water flush 909. There are more elements related to the toilet seat 10 in FIG. 1 and toilet bowl 90, namely “bowl”, in FIG. 2, but they are hidden. More details are in the following with full descriptions.

[0021] The toilet seat 10 in FIG. 1, comprising a body 101 with a top area 108, an inner opening 109 in the middle, and seat pads 107 on the underbody 103 in FIG. 2, is included
a water splash guard 120 around the inner opening 109. The toilet bowl 90 in FIG. 2, containing the water 905 for flushing, has an opening 909 in the bottom for disposal. The height of the splash guard 158 in FIG. 2 is greater than the gap 157 between the underbody 103 of the seat 10 and the rim 903 of the bowl 90. The one edge 1201 in FIG. 2 of the water splash guard 120 is located inside of the bowl as shown in FIG. 2, so that the water on the splash guard can be flowing into the bowl 90. The water splash guard placed near the rim 903 of the bowl 905 can afford a better sealing and establish a larger surrounding area.

[0022] When the toilet seat 10 in FIG. 3 with the water splash guard 120 on the underbody 103 is placed on the top 903 of the bowl 90, the water splash guard 120 covers the gap between the under body 103 and rim 903 of the bowl 90 as shown in FIG. 4. The one end of the splash guard 120 is located inside of the bowl 90 so that the water is flowing down the inside of the bowl 90. The water splash guard 120 in FIG. 3A can be attached on the flat underbody 103 using the fasteners 1201 and the sealers 140 around the base 1203. The water splash guard 120 in FIG. 3B can also be molded to the underbody 101 to improve the function and the aesthetic appearance. The molded splash guard offers durability and reduces the water damage around the base. The round edge 1209 at the end 1201 of the water splash guard 120 in FIG. 3A is placed for easy engagement with the inside surface 907 of the bowl 90. The supporting element 1207 of the water splash guard at the joining area in FIG. 3B is located for affording more strength. The complete multiple water splash guards can be placed on the underbody for decoration or better protection. The toilet seat 10 is also improved by implementing a partial 105 or ill 108 inward sloping on the top surface 106 to divert the water flowing into the bowl 90.

[0023] The toilet seat 30 in FIG. 5 has an open-end including the partial water splash guard 320 around the inner opening 309. The water splash guard 320 is located between the seat pads 307 and the edge 3092 of the inner opening 309 of the seat 30. The toilet seat 40 in FIG. 6 has a closed-end including the partial 420 and complete 430 water splash guards around the inner opening 409. The complete water splash guard 430 can be placed at the outside of the seat pads 407 for more shield and ornamentation. The partial water splash guard 420 may be necessary if any spray nozzle of a Bidet or the water sprayer is located on the way 4203, 4205. The toilet seat can implement any combination of the partial and complete water splash guards for various purposes of protection and ornamentation.

What I claimed as my invention is:

1. Toilet seat with the water splash guard comprises:
   a body having an inner opening closed or opened at the end, a top surface, and an underbody;
   a beveled element of said top surface to facilitate the water flowing down;
   an inward sloping of said top surface to facilitate the water flowing toward the center and the inside of the toilet bowl;
   a water splash guard attached on said underbody with means to secure;
   a water splash guard molded on the said underbody to form an inseparable element;
   a property of said water splash guard being but not limited a lengthy strip;
   a height element of said water splash guard preferably but not limited being large enough to cover the gap between the toilet seat and the toilet bowl when the seat is placed on the bowl;
   a length element of said water splash guard for enclosing completely or partially said inner opening of said toilet seat;
   a quantity of said water splash guard for being one or a multiple numbers on said underbody for decoration or protection;
   a beveled edge at the end of said water splash guard for easy insertion into said toilet bowl;
   a location of said water splash guard on any area of said underbody of the toilet seat;
   a location of said water splash guard on said underbody, preferably but not limited, to be placed between the edge of said inner opening of the seat and the top edge of the opening of the bowl;
   a optimum location of said water splash guard on said underbody of the toilet seat to be located at the nearest the top edge of the opening of the bowl for securing sealing and affording the maximum surrounding area.

2. Toilet seat with the water splash guard according to claim 1 wherein said water splash guard attached on said underbody comprises:
   a body having heterogeneous structure from said underbody of the toilet seat;
   a property of attachment of said body to said underbody using a means to secure;
   a base element of said body for a means to secure;
   a means to secure including but not limited various types of screw, thread, adhesive, hook, anchors, welding, or any fastening measure for securing said base element onto said underbody of the toilet seat;
   a sealer that seals the joint area for protection.

3. Toilet seat with the water splash guard according to claim 1 wherein said water splash guard molded on said underbody comprises:
   a body having homogeneous structure as said underbody of the toilet seat;
   a property of unification of said body on said underbody produced as a single unit;
   a supporting element around the base including but not limited a round corner for stronger binding to said underbody.