

URINAL WITH SHOWER FUNCTION FOR THE PENIS

The present invention pertains to a urinal, particularly a urinal with integrated shower function for men.

After urinating into a urinal, men may encounter the problem that urine drops remaining on the penis end up in the pants or underpants. This leads both objectively to deficient hygiene and subjectively to an inadequate hygienic feeling. Unpleasant odor can lead to insecurity and the risk of infections for diabetic patients may be increased. In conventional urinals, this problem can be aggravated by splashback that occurs when the stream of urine impacts on a smooth surface.

All this leads to the use of a urinal being perceived as a rather unpleasant experience, which (in contrast, for example, to showering) does not impart a subsequent sense of well-being.

The present invention therefore is based on the objective of making available a urinal that makes it possible to eliminate the above-described problems and to provide a pleasant experience for the user.

This objective is attained with a urinal according to claim 1. Enhancements of the invention are disclosed in the respective dependent claims.

The inventive urinal comprises a basin for collecting a stream of urine and a shower head designed for delivering a water jet for washing the penis after and/or during urination.

A water jet in the context of the present invention generally includes any jet-like form of water delivery, e.g. an individual jet like that of a faucet, which may

optionally be aerated by means of an aerator, multiple adjacent jets like those of a shower, jets dissolved into individual drops or the like. A soft, warm water jet preferably is used. Instead of using pure water, the water jet may also be formed by a mixture of water and soap.

A thusly designed urinal enables a user to wash the penis and optionally also the hands in the water jet immediately after urination. This improves the hygiene and allows a pleasant feeling of cleanliness like after a shower. The improved hygiene can also reduce the risk of infections for diabetic patients.

Other characteristics and advantages of the invention can be gathered from the description of exemplary embodiments with reference to the attached drawings.

Figure 1 shows a perspective view of a urinal according to a first embodiment of the present invention.

Figure 2 shows a front view of the urinal according to Figure 1.

Figure 3 shows a side view of the urinal according to Figure 1.

Figure 4 shows a perspective view of a urinal according to a second embodiment of the present invention.

A urinal 1 according to a first embodiment is initially described below with reference to attached Figures 1 to 3. Figure 1 shows a perspective view, Figure 2 shows a front view and Figure 3 shows a side view of the urinal 1.

The urinal 1 comprises a basin 10 for collecting the urine and a cover 12. The basin 10 and the cover 12 are arranged on a wall 16 by means of a bracket 14 such that an upper edge 11 of the basin 10 and a lower edge 13 of the cover 12 are arranged at a distance from one another and/or at an angle to one another. In this way, a sufficiently large clearance for holding the penis above the basin 10 underneath the cover 12 is formed on the front side of the urinal (on the right side in Figures 1 and 3). While the urinal is used, the cover 12 serves as a privacy shield that protects the penis from glances of a user of an adjacent urinal. The cover 12 may be mounted rigidly or pivotably.

In the example illustrated in Figure 1, the basin and the cover are designed in the form of a slightly opened clamshell for aesthetic reasons. However, the present invention is not limited to this specific design.

The basin 10 is supported by a column 18 that stands on the (not-shown) floor. In the example illustrated in Figure 1, the column is downwardly tapered, but the present invention is not limited to this specific design.

In the present embodiment, the cover 12 is provided with a water supply pipe 20 that leads to a shower head 22 within or underneath the cover 12, wherein said shower head is arranged underneath the front portion of the cover and designed for delivering a water jet 24. The water supply pipe 20 and the shower head 22 are illustrated with broken lines in Figure 1 because they are covered by the cover 12.

A drain pipe 26 serves for discharging the urine and the water 24 delivered by the shower head 22 from the basin 10. In the example illustrated in Figure 1, the drain pipe 26 extends into the floor through the column.

A splashback protection 30 in the form of a sphere (pearl) may be arranged in the basin 10, preferably above the connection of the drain pipe 26. Due to its rounded shape, the splashback protection 30 prevents direct splashback of the stream of urine.

Light sources 32 such as light-emitting diodes for producing luminous spots or luminous bands may be arranged on the upper edge 11 of the basin 10 and/or the lower edge 13 of the cover 12. Similar light sources may also be arranged at other locations of the urinal, e.g. for illuminating the shower head or the "pearl."

The user can manually activate the shower head 22 by means of the switch or a button during or after urination, wherein this activation preferably takes place in a contactless manner, e.g. by means of a light barrier or a proximity switch, for hygienic reasons. However, it may also be activated automatically as soon as the user approaches the urinal, e.g. by means of a proximity switch. After this activation, the shower head 22 delivers a water jet 24 that can be used for washing the penis. The water jet can be deactivated automatically after a predefined period of time or by means of a proximity switch that detects the departure of the user from the urinal.

A thusly designed urinal enables the user to wash the penis immediately after urination. This allows a pleasant feeling like after a shower and prevents drops of urine from ending up in the pants or underpants. Urinating and showering of the penis may also take place simultaneously. Cleanliness and hygiene are additionally improved due to the splashback protection. The improved hygiene can also reduce the risk of infections for diabetic patients. In addition, the privacy shield formed by the cover makes the use of the urinal more

pleasant for the user. These effects and an appealing design make a trip to the urinal a pleasant experience.

Figure 4 shows a perspective view of a urinal 2 according to a second embodiment of the present invention.

The urinal 2 illustrated in Figure 4 merely differs from the urinal 1 illustrated in Figure 1 with respect to the arrangement of the shower head and the water supply pipe. The remaining components correspond to the urinal 1 illustrated in Figure 1 and therefore are not described anew.

In the urinal 2, the water supply pipe 21 (which is illustrated with broken lines in Figure 4) extends underneath the basin 10 or through the body of the basin and the shower head 23 is arranged on the front end of the basin 10. After its activation, the shower head 23 delivers an upwardly directed water jet 25, which can be used for washing the penis and optionally also the hands just like the downwardly directed water jet 24 in the first embodiment. Consequently, the urinal 2 makes it possible to achieve the same effects as those of the urinal 1.

In both embodiments, the shower head and the water jet 24 may furthermore be realized in such a way that it is simultaneously possible to wash the hands. The number of washbasins can be reduced as a result of this additional effect.

Other modifications of the two above-described embodiments are also possible. For example, the drain pipe may lead into the wall through the body of the basin. The column does not contain a water pipe in this case. The column can also be entirely omitted and the entire urinal may merely be held on the wall by the

bracket. Furthermore, the splashback protection may be realized in another rounded shape that prevents splashback of the stream of urine instead of in the form of a sphere.

The urinal may additionally contain other devices, preferably devices that can be operated in a contactless manner such as a soap dispenser or a paper dispenser for paper towels or a hot air nozzle similar to a hand dryer for drying the washed penis and optionally also the hands.

PATENT CLAIMS

1. A urinal (1, 2) comprising

a basin (10) for collecting a stream of urine and

a shower head (22, 23) designed for delivering a
water jet (24, 25) for washing the penis after
and/or during urination.
2. The urinal (1, 2) according to claim 1, furthermore
comprising a cover (12) that is designed in the
form of a privacy shield for protecting the penis
from glances of the user of an adjacent urinal.
3. The urinal (1, 2) according to claim 2, wherein the
cover is arranged above the basin in such a way
that an upper edge (11) of the basin (10) and a
lower edge (13) of the cover (12) are arranged at
a distance from one another and/or at an angle to
one another.
4. The urinal (1) according to claim 2 or 3, wherein
the shower head (22) is arranged on an underside of
the cover (12).
5. The urinal (2) according to one of claims 1 to 3,
wherein the shower head (23) is arranged within the
basin (10).
6. The urinal (2) according to claim 5, wherein the
shower head (23) is designed for delivering an
upwardly directed water jet (25).
7. The urinal (2) according to one of claims 1 to 6,
wherein

the shower head (22) can be manually activated by the user,

wherein the activation preferably takes place in a contactless manner.

8. The urinal (2) according to one of claims 1 to 7, wherein

the shower head (22) is automatically activated as soon as the urinal is used.

9. The urinal (2) according to one of claims 1 to 8, wherein

the water jet is deactivated automatically after a predefined period of time and/or

the water jet is deactivated automatically upon departure of the user from the urinal.

10. The urinal (2) according to one of claims 1 to 9, furthermore comprising a splashback protection (30) that is designed for preventing splashback of the stream of urine.

11. The urinal (2) according to claim 10, wherein the splashback protection (30) is formed by a body with rounded surfaces, preferably by a sphere.

12. The urinal (2) according to one of claims 1 to 11, wherein

the basin is supported by a column (18) that rests on a floor.

13. The urinal (2) according to claim 12, furthermore comprising a drain pipe (26) that leads into the floor through the column (18).
14. The urinal (2) according to one of claims 1 to 12, furthermore comprising a drain pipe that leads into a wall, on which the urinal is mounted.
15. The urinal (2) according to one of claims 1 to 14, furthermore comprising at least one light source (32), wherein

the at least one light source (32) preferably is formed by light-emitting diodes for producing luminous spots or luminous bands and/or

the at least one light source (32) preferably is arranged on the upper edge (11) of the basin (10) and/or the lower edge (13) of the cover (12).