

Sanitary Tub

Specification:

The invention relates to a sanitary tub having a tub body that has a tub edge that has been turned towards the outside, whereby the tub edge ends with an up-drawn collar. - The tub body consists, for example, of enameled sheet steel, a deep-drawn plastic shell, or a laminate material having an outer shell made of sheet steel and an inner shell of plastic. Within the scope of the invention, tub bodies having a high level of shape rigidity are preferred. A sanitary tub having the characteristics described initially is known from DE 298 19 364 U1. The up-drawn collar of the tub edge lies against a wall surface, with the interposition of a seal. The tub [sic-should be wall] surface is tiled above the tub edge, whereby the first row of tiles lies against the outside of the seal arranged on the collar and covers it.

At the entry side of the sanitary tub, away from the wall, the tub edge is usually not configured with an up-drawn edge. Here, the tub edge is usually configured as an essentially level surface on the top and, for reasons of stability, is angled down in a U shape. At the same time, the U-shaped

angle forms an end edge for tub paneling and/or tiled surfaces that follow on the bottom. In the case of high-quality baths, there is a need, for optical reasons, to provide a tub end covering that is adapted to the room in terms of material, color, and design. Furthermore, technical devices, such as cleaning jets, jets for an automatic inflow of liquid bath additives, overflow openings, and the like are supposed to be arranged so that they are covered, for optical reasons. Furthermore, there is the problem that in the case of conventional tub bodies, no bath furniture can be suspended in them, or no accessories, for example soap dishes, can be attached in movable manner.

The invention is based on the task of improving the top end of a sanitary tub with regard to both optical and functional aspects.

Proceeding from a sanitary tub having the characteristics described initially, this task is accomplished, according to the invention, in that a carrier having a tub edge covering is attached to the collar of the tub edge, whereby the carrier has a bottom edge arranged at a distance above the tub edge, which, together with the tub edge, forms a groove that is open towards the interior of the tub body. The groove that is open

towards the interior of the tub body makes it possible to attach accessories, for example soap dishes and the like. Furthermore, the groove can be used for hanging in bath furniture, for example tray tables, back rests, and the like. For this purpose, the bath furniture has guide tabs that engage in the groove between the tub edge of the tub body and the carrier of the tub edge covering.

In another embodiment, the invention teaches that the carrier for the tub edge covering forms an installation space for electrical installations and/or water installations, and that functional elements of these installations are arranged on the bottom edge of the carrier. Because of their installation within the groove, the functional elements are arranged so that they are covered, to a great extent. Cleaning jets or jets for feeding in liquid bath substances, which are connected with lines for liquid in the installation space of the carrier, can be arranged on the bottom edge of the carrier. Furthermore, there is the possibility of housing a device for illuminating the tub interior in the installation space of the carrier. The arrangement can easily be made in such a manner that the light exits from the groove that is open towards the tub interior, as a band of light. Furthermore, the up-drawn collar of the tub space can contain

one or more overflow openings, to which an overflow channel is connected. In all of the exemplary embodiments described, the technical installations are not visible from the outside, or hardly visible, because of their arrangement within the groove that is open towards the tub interior.

According to a preferred embodiment of the invention, the carrier has ribs having connector formations for attaching the tub edge covering. It is practical if the tub edge covering is configured as a handle profile, which surrounds the bottom edge of the carrier. With regard to material, color, and design, the tub edge covering can be structured in variable manner, and can be coordinated with the bath fittings. Profiles made of plastic, metal, or wood are suitable as a tub edge covering. In addition, there is the possibility of producing the tub edge covering as an elastically resilient molded body, for example made of Technogel, or of using a tub edge covering made of natural stone elements.

There are various design possibilities for attaching the carrier to the up-drawn collar of the tub edge. According to a preferred embodiment, the carrier has a connection segment that is U-shaped in cross-section, which surrounds the top edge of the collar formed on the tub edge, and has a width

that is sufficient to allow lines to be passed through. The width is sized in such a manner that lines for liquid and electrical lines can be passed through, to supply the installations that are provided within the carrier. Other design features are the object of the subordinate claims 10 to 14 and will be explained in greater detail in the following, using exemplary embodiments. The drawings schematically show:

Fig. 1 a cross-section through a sanitary tub,

Fig. 2 the detail A of Fig. 1, on a greater scale as compared with Fig. 1,

Fig. 3 another embodiment of the teaching according to the invention, and

Fig. 4 an example of use.

Fig. 1 shows the outlines of a sanitary tub 1 having a tub paneling 2. The sanitary tub 1 consists of a tub body 3 having a tub edge 4 that is turned towards the outside, which ends with an up-drawn collar 5 on the circumference. A carrier 6 having a tub edge covering 7, which can be variably structured with regard to material, color, and design, is

attached to the collar 5.

Plastic or metal profiles, wood profile strips, elastically resilient molded bodies or, if applicable, also natural stone elements can be used as the tub covering 7. The carrier 6 has a bottom edge 8 arranged at a distance above the tub edge 4 which, together with the tub edge 4, forms a groove 9 that is open towards the interior of the tub body. This groove 9 can be used for hanging in bath furniture 10, as this is shown as an example in Fig. 4. The bath furniture 10 has guide tabs 11 that engage in the groove 9 between the carrier 6 and the tub edge 4.

It is evident from the representations in Fig. 2 and Fig. 3 that the carrier 6 forms an installation space for electrical installations and/or water installations, and that functional elements of these installations can be arranged on the bottom edge 8 of the carrier 6. In the exemplary embodiment, cleaning jets 12, which are connected with lines 13 for liquid that are laid in the installation space of the carrier 6, are arranged at the bottom edge 8 of the carrier 6. Furthermore, a device 14 for illuminating the tub interior is housed in the installation space of the carrier 6. The carrier 6 contains light exit openings 15. Because the light exit openings 15

are arranged in the interior of the groove 9, and covered, the light that is emitted is glare-free. The arrangement can be made in such a manner that the light exits from the groove 9 as a band of light. In the exemplary embodiment, the up-drawn collar 5 of the tub edge furthermore contains one or more overflow openings 16, to which an overflow channel 17 is connected.

The carrier 6 has ribs 18 having connector formations to attach the tub edge covering 7. In this connection, the tub edge covering 7 is configured as a handle profile, which surrounds the bottom edge of the carrier 6. It is furthermore evident from the representations in Fig. 2 and Fig. 3 that the carrier 6 has a connection segment 19 that is U-shaped in cross-section, which surrounds the top edge of the collar 5 formed on the tub edge 4, and has a width B that is sufficient for passing lines through.

In the exemplary embodiment of Fig. 1, the carrier 6 is set onto the collar 5 of the tub edge 4 as well as onto a tub paneling 2, whereby the connection end of the tub paneling 2 has an attachment collar 20 and a projection 21 that connects with the latter. The carrier 6 possesses a segment 22 that projects towards the tub exterior, the bottom edge 8' of which

is arranged at a distance from the projection 21 of the tub paneling 2. A device 14' for exterior illumination of the sanitary tub is arranged on the bottom edge 8' of the carrier segment 22, which is arranged at a distance above the projection 21 of the tub paneling 2. Furthermore, tub accessories, such as tub handles and entry aids, small tray tables, and the like, can be attached in the groove delimited by the carrier 6 and the projection 21 of the tub paneling 2. It is evident from Fig. 2 that the carrier 6 has a connection segment 19 that is U-shaped in cross-section, which surrounds the collar 5 of the tub edge 4 and the attachment collar 20 of the tub paneling 2 at least at the edge, and has a width B that is sufficient for passing lines through. To attach the carrier 6 to the sanitary tub 1, as well as to the tub paneling 2, clamp elements can be used, which are inserted between the attachment collar 20 of the tub paneling 2 and the collar 5 of the tub edge 4.

In the exemplary embodiment shown in Fig. 3, the carrier 6 also has a connection segment 19 that is U-shaped in cross-section, which surrounds the top edge of the collar 5 formed on the tub edge 4 and has a width B that is sufficient for passing lines through. The shank 24 of the U-shaped connection segment 19 that lies on the outside of the tub

possesses a shank length, in cross-section, that at least corresponds to the height of the collar 5 that is formed on the tub edge 4. The carrier 6 can be attached to the sanitary tub 1 by means of clamp elements that are inserted between the up-drawn collar 5 of the tub edge 4 and the shank 24 of the carrier 6 that lies on the outside of the tub. Furthermore, a tub paneling 2 can be attached to the outside of the shank 24.

Claims:

1. Sanitary tub having a tub body (3) that has a tub edge (4) that has been turned towards the outside, whereby the tub edge (4) ends with an up-drawn collar (5) on the circumference, characterized in that a carrier (6) having a tub edge covering (7) is attached to the collar (5) of the tub edge, whereby the carrier (6) has a bottom edge (8) arranged at a distance above the tub edge (4) which, together with the tub edge (4), forms a groove (9) that is open towards the interior of the tub body.

2. Sanitary tub according to Claim 1, characterized in that the carrier (6) forms an installation space for electrical installations and/or water installations, and that functional elements of these installations are arranged on the bottom edge (8) of the carrier (6).

3. Sanitary tub according to Claim 2, characterized in that cleaning jets (12), which are connected with lines (13) for liquid in the installation space of the carrier (6), are arranged on the bottom edge (8) of the carrier (6).

4. Sanitary tub according to Claim 2 or 3, characterized in

that a device (14) for illuminating the tub interior is fitted into the installation space of the carrier (6).

5. Sanitary tub according to one of Claims 1 to 4, characterized in that the up-drawn collar (5) of the tub edge contains at least one overflow opening (16), to which an overflow channel (17) is connected.

6. Sanitary tub according to one of Claims 1 to 5, characterized in that the carrier (6) has ribs (18) having connector formations for attaching the tub edge covering (7).

7. Sanitary tub according to one of Claims 1 to 6, characterized in that the tub edge covering (7) has a handle profile, which surrounds the bottom edge of the carrier (6).

8. Sanitary tub according to one of Claims 1 to 7, characterized in that the tub edge covering (7) consists of profiles made of plastic or metal, or wood profile strips, or elastically resilient molded bodies, or natural stone elements.

9. Sanitary tub according to one of Claims 1 to 8, characterized in that the carrier (6) has a connection segment

(19) that is U-shaped in cross-section, which surrounds the top edge of the collar (5) formed on the tub edge, and has a width (B) that is sufficient to allow lines to be passed through.

10. Sanitary tub according to Claim 9, characterized in that the shank (24) of the U-shaped connection segment (19) that lies on the outside of the tub possesses a shank length, in cross-section, that at least corresponds to the height of the collar (5) that is formed on the tub edge, and that the carrier (6) is attached by means of clamp elements that are inserted between the up-drawn collar (5) of the tub edge and the shank (24) of the carrier that lies on the outside of the tub.

11. Sanitary tub according to one of Claims 1 to 9, characterized in that the carrier (6) is set onto the collar (5) of the tub edge as well as onto a tub paneling (2), whereby the connection end of the tub paneling (2) has an attachment collar (20) and a projection (21) that connects with the latter, and that the carrier (6) possesses a segment (22) that projects towards the tub exterior, the bottom edge (8') of which is arranged at a distance from the projection (21) of the tub paneling (2).

12. Sanitary tub according to Claim 11, characterized in that a device (14') for exterior illumination of the sanitary tub is arranged on the bottom edge (8') of the carrier segment (22), which is arranged at a distance above the projection (21) of the tub paneling.

13. Sanitary tub according to Claim 11 or 12, characterized in that tub accessories are attached in the groove delimited by the carrier (6) and the projection (21) of the tub paneling (2).

14. Sanitary tub according to one of Claims 11 to 13, characterized in that the carrier (6) has a connection segment (19) that is U-shaped in cross-section, which surrounds the collar (5) of the tub edge and the attachment collar (20) of the tub paneling (2) at least at the edge, and has a width (B) that is sufficient for passing lines through, and that the carrier (6) is attached by means of clamp elements, which are inserted between the attachment collar (20) of the tub paneling (2) and the collar (5) of the tub edge.