(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 0 990 410 A2

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
05.04.2000 Bulletin 2000/14

(51) Int. Cl.[7]: **A47K 3/30**

(21) Application number: **99203129.4**

(22) Date of filing: **23.09.1999**

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: **28.09.1998 IT TV980037 U**

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(54) A cap for covering a water-outlet nozzle in hygiene/sanitary apparatus such as, for example but not exclusively, a shower cubicle, a bath tub, or the like

(57) An outlet nozzle for a jet of water in hygiene/sanitary apparatus is described and has means for covering the nozzle (12) in order to mask the nozzle (12) from view when it is not in use.

The means are constituted basically by a cap (14) which is hinged, on one of its sides, to the inner wall of the hygiene/sanitary apparatus whereas, on the opposite side, the cap is provided with means for temporary engagement and locking on the inner wall of the hygiene/sanitary apparatus.

The temporary engagement and locking means are configured in a manner such as to allow the nozzle (12) to be freed and the cap (14) to be brought to a rest position by the pressure of the water emerging from the nozzle (12).

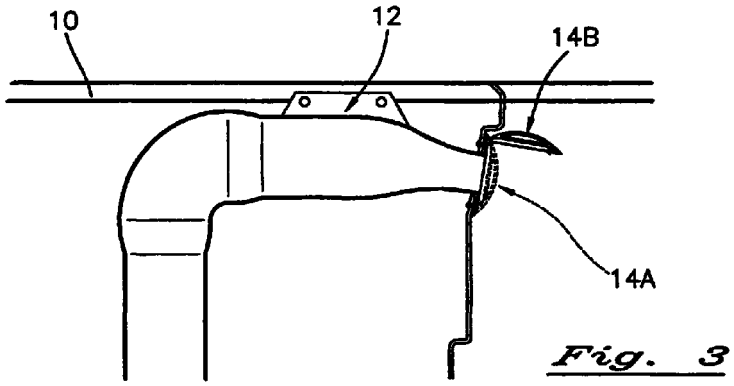

Fig. 3

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Description

[0001] Hygiene/sanitary apparatus is generally known and it is also known that this apparatus has a series of internal water-outlet nozzles such as, for example, hydro-massage nozzles, Turkish bath delivery nozzles, nozzles for generating a water flow known in the art as a "cascade" flow, and the like.

[0002] The outlet nozzles mentioned above are widely known and, with regard to the technology and operation thereof, various types of nozzle have been devised and implemented in order to achieve optimal operation of the nozzle and also in anticipation of the needs and requirements put forward by users.

[0003] The present invention does not relate in particular to the specific technology of the design and production of these nozzles but is directed towards means for covering the outlet ends of these nozzles in order to mask them from view since they are generally unaesthetic with regard to the general appearance the hygiene/sanitary apparatus, be it a shower cubicle, a bath tub, or the like.

[0004] More particularly, the present invention relates to covering means which can be fitted inside the hygiene/sanitary apparatus and which can mask the nozzle from view when the apparatus, or the individual outlet nozzle, is not in use.

[0005] A typical example of application of a covering means according to the present invention which is not currently produced, is constituted by the outlet nozzle of a jet known in the art as a "cascade" jet which is generally used in shower cubicles.

[0006] This nozzle, particularly its outlet end, is arranged in the upper, internal portion of the shower cubicle so that, when the nozzle is not in operation and the cubicle is not in use, the nozzle remains in view and is an element which is inconsistent with the overall appearance of the interior of the shower cubicle, to which the producers give particular importance and attention.

[0007] One of the objects of the present invention is therefore, although not exclusively, to provide a means for covering the outlet nozzle, enabling a covering element to be fitted once the outlet nozzle is not in use, masking the presence of the nozzle and rendering the overall appearance of the shower cubicle as a whole substantially pleasing.

[0008] Another object of the present invention is to provide a covering means as indicated above which, once fitted, does not however prevent subsequent use of the outlet nozzle. In fact, if the covering means were to have or to be provided with particularly firm and effective locking means, activation of the outlet nozzle would be extremely dangerous since failure of the covering means to open would inevitably cause water to flow back into the nozzle and into the supply pipes, with serious damage to the apparatus of the shower cubicle.

[0009] A water-outlet nozzle for hygiene/sanitary apparatus such as, for example, a shower cubicle or the like, which solves the conventional problems, masking the nozzle from view and, principally, allowing the nozzle to reopen to permit the supply of water has now been devised and constitutes the subject of the present invention.

[0010] The subject of the present invention is therefore a water-outlet nozzle in hygiene/sanitary apparatus such as, for example, a shower cubicle or the like, which is characterized in that it has, in the region of its water outlet end and inside the hygiene/sanitary apparatus, a covering cap for masking the outlet end of the nozzle from view, and means for locking the covering element in the working operative position, the means being such as to allow the nozzle to reopen for use.

[0011] The characteristics and the advantages of the outlet nozzle according to the present invention will become clear from the following detailed description of a preferred embodiment thereof; given with reference to the appended drawings, in which:

Figure 1 shows the nozzle according to the invention with its covering cap in the position of use, that is, in the covering position,

Figure 2 shows the same nozzle with the covering cap brought to the rest position, that is, the uncovering position, and

Figure 3 is a schematic cross-sectional view showing the nozzle with the cap in the two positions, that is, the working position and the rest position, respectively.

[0012] With reference to the appended drawings, the embodiment described in the present description is that of a shower cubicle which is considered generically and is not described in detail since is widely known *per se* in the art, and reference will be made to the typical case of an outlet nozzle for a cascade jet which is fitted in the upper portion of the frame of the shower cubicle, generally indicated 10.

[0013] The outlet nozzle is generally indicated 12 and, since the nozzle is for generating a cascade-like flow of water, it is not described in detail because it is known *per se*.

[0014] As can be seen in particular from Figure 2, when the nozzle is in view inside the frame 10 of the shower cubicle, it is aesthetically displeasing and, moreover, is not protected when the shower cubicle is used for other purposes such as, for example, hydromassage, Turkish baths, etc.

[0015] According to the present invention, a covering cap, generally indicated 14, has therefore been devised and is applied to the nozzle 12 in question, the cap being fitted on the inner side of the wall of the shower cubicle 10 and being movable between two operative positions which are visible more particularly in the detail of Figure 3, from which it can easily be appreciated that the covering cap 14 can adopt two positions in one of

which it is fitted fully against the inner wall of the frame of the cubicle 10 (14A in Figure 3) and in which it masks and covers the outlet nozzle 12, and a rest position (14B of Figure 3) which is a position such that the cap leaves the outlet end of the nozzle 12 free for use.

[0016] The two operative positions described briefly above can be seen in particular from Figures 1 and 2, of which Figure 1 shows the cap 14 in the position in which it covers the outlet nozzle 12, and Figure 2 shows the same cap 14 in its raised position in which it no longer covers the outlet end of the nozzle 12.

[0017] In greater detail, the covering cap 14 is hinged, along one of its sides, to the frame 10 of the shower cubicle by any known means, which are neither shown nor described in detail, the cap generally having a shape and configuration such as to cover the outlet end of the nozzle 12 completely.

[0018] Naturally, the shape and configuration of the covering cap 14 are suitable for and conform to the particular shape of the outlet nozzle 12 in order, as shown in particular by Figure 1, to be completely suitable for masking the outlet end of the nozzle 12, thus contributing to the general appearance of the interior of the shower cubicle which is not affected by a view of the nozzle 12 since its outlet end is completely masked.

[0019] It is one of the characteristics of the present invention that the engagement and locking means which keep the cap 14 in its position 14A covering the nozzle 12 are not too firm and should not be too firm so that if, owing to an oversight by the user, the cap 14 is not moved to the rest position 14B of Figure 3 (or Figure 1), the supply of water through the nozzle 12 is not affected by the cap of the nozzle and the substantial disadvantage of the generation of a back-flow of water towards the interior of the nozzle 12 is thus avoided.

[0020] As means for temporary engagement and locking as mentioned above, it is possible to use means of any type, for example, a projection, a tooth or the like or a plurality of projections or teeth on the end or rim of the cap 14, for engaging, for example, by resilient deformation, a corresponding recess in the surface or inner face of the frame of the shower cubicle 10.

[0021] Clearly, these means can lock the cap 14 temporarily in the position 14A when the cap 14 is brought manually to this position by the user until the nozzle 12 is subsequently re-used, when the user should return the cap 14 to the rest position 14B.

[0022] In the event of an oversight as a result of which the cap 14 is left in its covering position 14A, the temporary locking means should allow the cap 14 to open, the cap thus being brought to the position 14B simply by the effect of a biasing spring (not shown), or the like.

[0023] In achieving this basic characteristic of the invention, it is taken into account that it should remain effective both when the delivery pressure of the water flow is that of the water mains and, in particular and extremely advantageously, if this pressure is greater than that of the water mains, as is the case, in known manner, for a cascade jet in which the water flow is generated with considerable pressure by a suitable pump provided for this purpose.

[0024] The characteristics of the nozzle according to the present invention are clear from the foregoing description and, secondarily, it should also be borne in mind that an aesthetically noteworthy element which can contribute to the general appearance of the shower cubicle such as, for example, a figurative element which may advantageously be the name or trade mark of the producer of this item, may be fitted on the visible face of the nozzle, as can be seen in particular from Figure 1.

[0025] The advantages resulting from the use of the nozzle according to the present invention are clear from the foregoing description without thereby departing from the scope of protection thereof.

[0026] Finally, structurally equivalent variations and/or modifications may, of course, be applied to the outlet nozzle according to the present invention, without thereby departing from the scope of protection thereof.

Claims

1. An outlet nozzle for hygiene/sanitary apparatus such as, in particular but not exclusively, a shower cubicle or the like, characterized in that the nozzle has, in the region of its outlet end, means (14) for covering its outlet end, the covering means being able to operate between two operative positions in one of which the means (14) completely cover and mask the outlet end of the nozzle (12) and in a second of which the means are brought to their rest condition in which the outlet end of the nozzle (12) is left free to permit the supply of a water flow.

2. An outlet nozzle according to Claim 1, characterized in that the covering means are constituted by a cap (14) which is hinged, along one of its sides, to the internal wall of the hygiene/sanitary apparatus and which is provided, substantially in the region of its opposite edge, with temporary engagement and locking means for keeping the cap in the position in which it covers the end of the nozzle (12).

3. An outlet nozzle according to Claim 2, characterized in that the means for locking the cap (14) temporarily in the position in which it covers the nozzle (12) are configured in a manner such as to allow the nozzle (12) to be opened by the pressure of the water emerging from the nozzle (12).

4. A nozzle according to Claim 3, characterized in that the means for locking the cap (14) in the covering position are constituted substantially by a projection, a hook or the like, applied to the rim of the cap (14) for resilient coupling with a corresponding recess or housing of the fixed internal wall of the hygiene/sanitary apparatus.

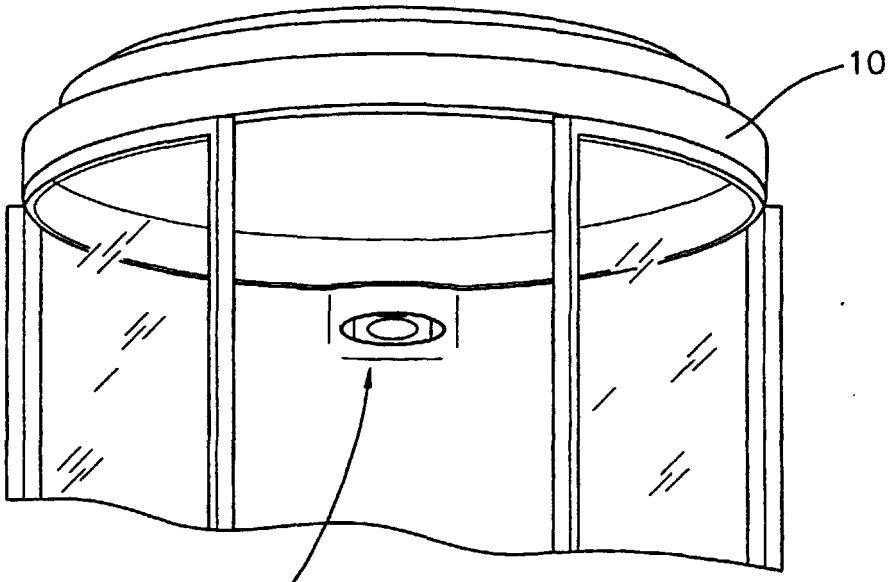

Fig. 1

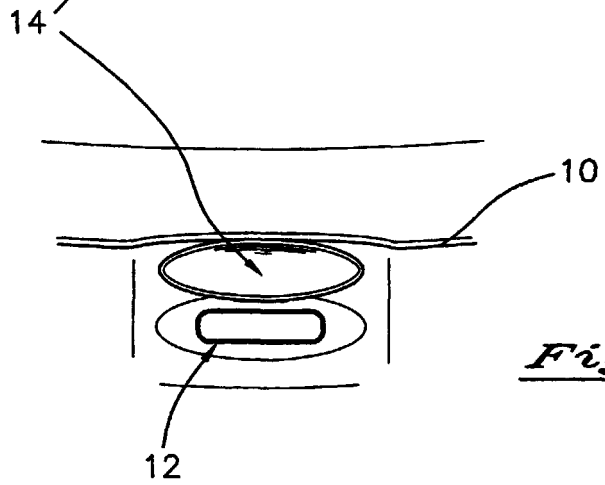

Fig. 2

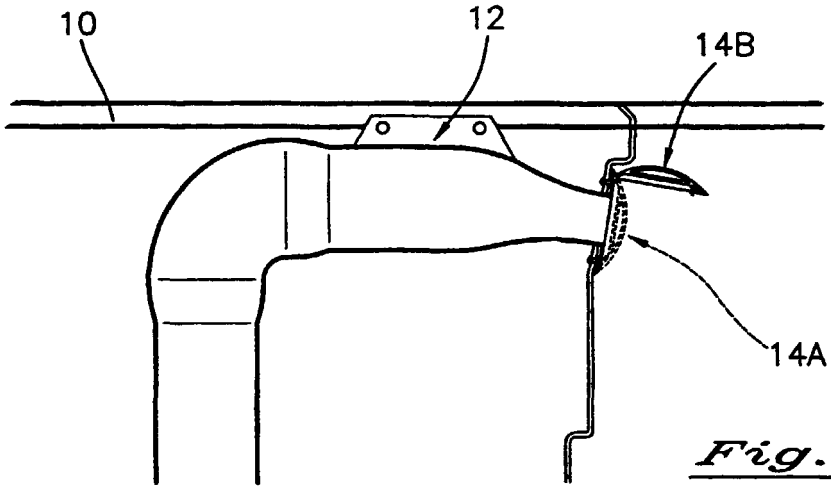

Fig. 3