

(19)



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(11)

EP 1 654 969 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:

10.05.2006 Bulletin 2006/19

(51) Int Cl.:

A47K 3/28 (2006.01)

E03C 1/06 (2006.01)

(21) Application number: **04425824.2**

(22) Date of filing: **04.11.2004**

(84) Designated Contracting States:

**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HU IE IS IT LI LU MC NL PL PT RO SE SI SK TR**

Designated Extension States:

AL HR LT LV MK YU

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(54) Shower enclosure with massaging properties

(57) A shower enclosure with massaging action, comprising at least one shower tray (8), which forms a respective standing surface (9) affected by at least one water discharge opening (10); the shower tray (8) comprises at least one dispenser (12), which is adapted to

propel at least one massaging water jet into the enclosure in a substantially vertical direction from below; the dispenser (12) is associated with respective water supply elements (13) integrated in the shower tray (8) and is arranged at a higher level than the standing surface (9).

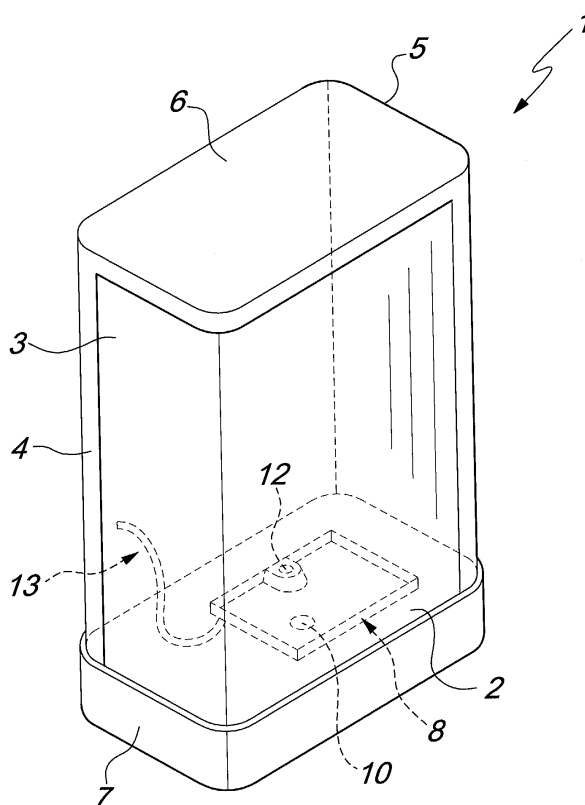


Fig. 1

Description

[0001] The present invention relates to a shower enclosure with massaging action.

[0002] Modern shower enclosures are currently usually provided with water dispensers that have a plurality of functions as well as many highly sophisticated adjustment options.

[0003] Some shower enclosures have water dispensers that also allow to apply a massaging action to the body of the user, by utilizing the particular characteristics imparted to the water jets or by way of the placement of said dispensers, some of which are arranged for example in substantially lateral regions of the enclosure.

[0004] Currently, the need is felt to have shower enclosures that allow to apply, in addition to the normal body washing functions, also a massaging action that is mainly aimed at the lower parts of the body, for example the feet, the legs and the back.

[0005] The aim of the present invention is to provide a shower enclosure that is adapted to meet this requirement.

[0006] Within this aim, an object of the present invention is to provide a shower enclosure that can be produced easily with conventional production methods.

[0007] Another object of the present invention is to provide a shower enclosure that is flexible in use and versatile with respect to the requirements of its users.

[0008] Another object of the present invention is to provide a shower enclosure that has a simple structure, is relatively easy to provide in practice, safe in use, effective in operation, and has a relatively low cost.

[0009] This aim and these and other objects that will become better apparent hereinafter are achieved by the present shower enclosure with massaging action, comprising at least one shower tray, which forms at least one respective standing surface affected by at least one water discharge opening,

characterized in that the shower tray comprises at least one dispenser that is adapted to propel at least one massaging water jet into said enclosure in a substantially vertical direction from below, the dispenser being associated with respective water supply elements integrated in said shower tray and being arranged at a higher level than said standing surface.

[0010] Further characteristics and advantages of the present invention will become better apparent from the following detailed description of a preferred but not exclusive embodiment of a shower enclosure with massaging action according to the invention, illustrated by way of nonlimiting example in the accompanying drawings, wherein:

Figure 1 is a schematic perspective view of the shower enclosure in a first embodiment according to the invention;

Figure 2 is a detail plan view of the shower tray of the enclosure of Figure 1;

Figure 3 is a side elevation view of a detail of the shower tray of Figure 2;

Figure 4 is a detail plan view of the shower tray in a second embodiment of the enclosure according to the invention;

Figure 5 is a detail side elevation view of the shower tray of Figure 4.

[0011] In the embodiments that follow, individual characteristics, given in relation to specific examples, may actually be interchanged with other different characteristics that exist in other embodiments.

[0012] Moreover, it is noted that anything found to be already known during the patenting process is understood not to be claimed and to be the subject of a disclaimer.

[0013] With reference to Figure 1, the reference numeral 1 generally designates a shower enclosure with massaging action according to the invention in a first embodiment.

[0014] In the specific case, Figure 1 illustrates schematically a shower enclosure, for example for homes, hotels, gymnasiums and the like, which forms lateral walls 2, 3, 4 and 5, an upper wall 6, and a footing 7, which is fixed to the floor of the room in which the shower enclosure is installed.

[0015] The enclosure 1 further comprises at least one shower tray, generally designated by the reference numeral 8 (Figures 2 and 3), which is integrated in the footing 7 and forms lateral shoulders 8a and a standing surface 9. The shower tray 8 is affected by at least one water discharge opening 10 and is preferably provided with contoured raised portions 11 that have an anti-slip function: the raised portions 11 may have any geometry but may also not be present. The shower tray 8 can be equally square, rectangular or circular, but may also have any other geometry.

[0016] According to the invention, the shower tray 8 comprises advantageously at least one dispenser 12, which is adapted to propel one or more massaging water jets into the enclosure in a substantially vertical direction from below so as to reach a suitable preset height in maximum water pressure conditions.

[0017] The dispenser 12 is associated with respective water supply elements, generally designated by the reference numeral 13, which are conveniently integrated in the shower tray 8. The supply elements 13 are conveniently of the conventional type and comprise for example ducts 13a, connectors and any other components required to convey the necessary water flow from the water mains to the inlet of the dispenser 12.

[0018] The dispenser 12 is preferably of a substantially conventional type, provided with a water ejection surface that is affected by a distribution of nozzles constituted for example by simple holes or also by small protruding spouts. It is thus possible to propel upward, in a substantially vertical direction, a plurality of substantially parallel water jets.

[0019] Conveniently, the enclosure according to the invention furthermore comprises means 14 for adjusting the flow of water propelled by the dispenser 12, which can be operated by the user. The adjustment means 14 preferably comprise at least one water mixing valve, which is provided with a respective selector lever or knob, which is arranged proximate to the dispenser 12 so that the user can operate it by applying an appropriate pressure with hit foot. As an alternative, the mixing valve 14 can be arranged along one of the side walls 2, 3, 4, 5 at an appropriate height, so that it can be operated easily by hand by the user. The adjustment means 14 allow the user to vary precisely the pressure and flow-rate of the water jets according to his specific requirements and therefore to adjust also the height that said jets reach within the enclosure.

[0020] As shown in particular in Figure 3, the dispenser 12 is provided so that the water ejection surface is arranged at a height that is appropriately greater than the height of the standing surface 9, on a corresponding supporting plate 15, which is rigidly coupled to the shower tray 8; this refinement prevents the water that accumulates in the shower tray (in which dirt and impurities are dissolved) and is then gradually discharged through the opening 10 from clogging the nozzles of the dispenser 12.

[0021] Advantageously, the shower tray 8 is provided with a plurality of additional dispensers 16, 17, 18 and 19, whose dimensions are preferably smaller than those of the dispenser 12; said additional dispensers are distributed on the standing surface 9 and, as mentioned, at a height that is appropriately greater than that of said surface. The additional dispensers 16-19 are arranged along the sides of the standing surface and preferably at the corners. The elements 13 for supplying the water to be dispensed therefore conveniently comprise branches of ducts 13a, which are integrated in the shower tray 8 and reach its four corners.

[0022] It has thus been shown that the invention achieves the intended aim and objects. The upward dispensing of water jets from below, in a substantially vertical direction and at the appropriate pressure set by the user, allows to apply to the body of the user an effective massaging action on the feet, legs and optionally also along the back.

[0023] The enclosure is rather simple to provide by resorting to fully conventional manufacturing techniques and can be installed substantially in any room provided with a connection to the water mains.

[0024] The invention thus conceived is susceptible of numerous modifications and variations, all of which are within the scope of the appended claims.

[0025] A second embodiment of the shower enclosure according to the invention is shown in detail in Figures 4 and 5. It has a shower tray 8 in which the plate 15, and therefore the dispenser 12, are arranged substantially at the center of the standing surface 9. There are also additional dispensers 116, 117, which are arranged on the plate 15 on either side of the dispenser 12. This advan-

tageous arrangement of the dispensers 12, 116, 117 allows the user to apply a more effective foot and leg massaging action.

[0026] All the details may be replaced with other technically equivalent ones.

[0027] In practice, the materials used, as well as the shapes and dimensions, may be any according to requirements without thereby abandoning the scope of the appended claims.

[0028] Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly such reference signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference signs.

Claims

1. A shower enclosure with massaging action, comprising at least one shower tray (8), which forms a respective standing surface (9) affected by at least one water discharge opening (10), **characterized in that** said shower tray (8) comprises at least one dispenser (12) that is adapted to propel at least one massaging water jet into said enclosure in a substantially vertical direction from below, said dispenser (12) being associated with respective water supply elements (13) integrated in said shower tray (8) and being arranged at a higher level than said standing surface (9).
2. The enclosure according to claim 1, **characterized in that** it comprises means (14) for adjusting the flow of water propelled by said dispenser (12), which can be operated by the user.
3. The enclosure according to claim 2, **characterized in that** said means (14) for adjusting the flow of water are arranged at such a height that they can be operated easily by hand by the user.
4. The enclosure according to claim 2, **characterized in that** said means (14) for adjusting the flow of water are arranged substantially proximate to said dispenser (12), so that they can be operated easily by means of the pressure of a foot of the user.
5. The enclosure according to one or more of the preceding claims, **characterized in that** said shower tray (8) comprises a plurality of additional dispensers (16, 17, 18, 19, 116, 117), which are distributed on said standing surface (9).
6. The enclosure according to one or more of the preceding claims, **characterized in that** said dispenser (12) and said additional dispensers (16, 17, 18, 19),

are arranged along the sides of said standing surface (9).

7. The enclosure according to one or more of the preceding claims, **characterized in that** said additional dispensers (16, 17, 18, 19) are arranged substantially at the corners of said standing surface (9). 5
8. The enclosure according to one or more of the preceding claims, 10
characterized in that said dispenser (12) and said additional dispensers (116, 117) are arranged substantially in the central portion of said standing surface (9). 15

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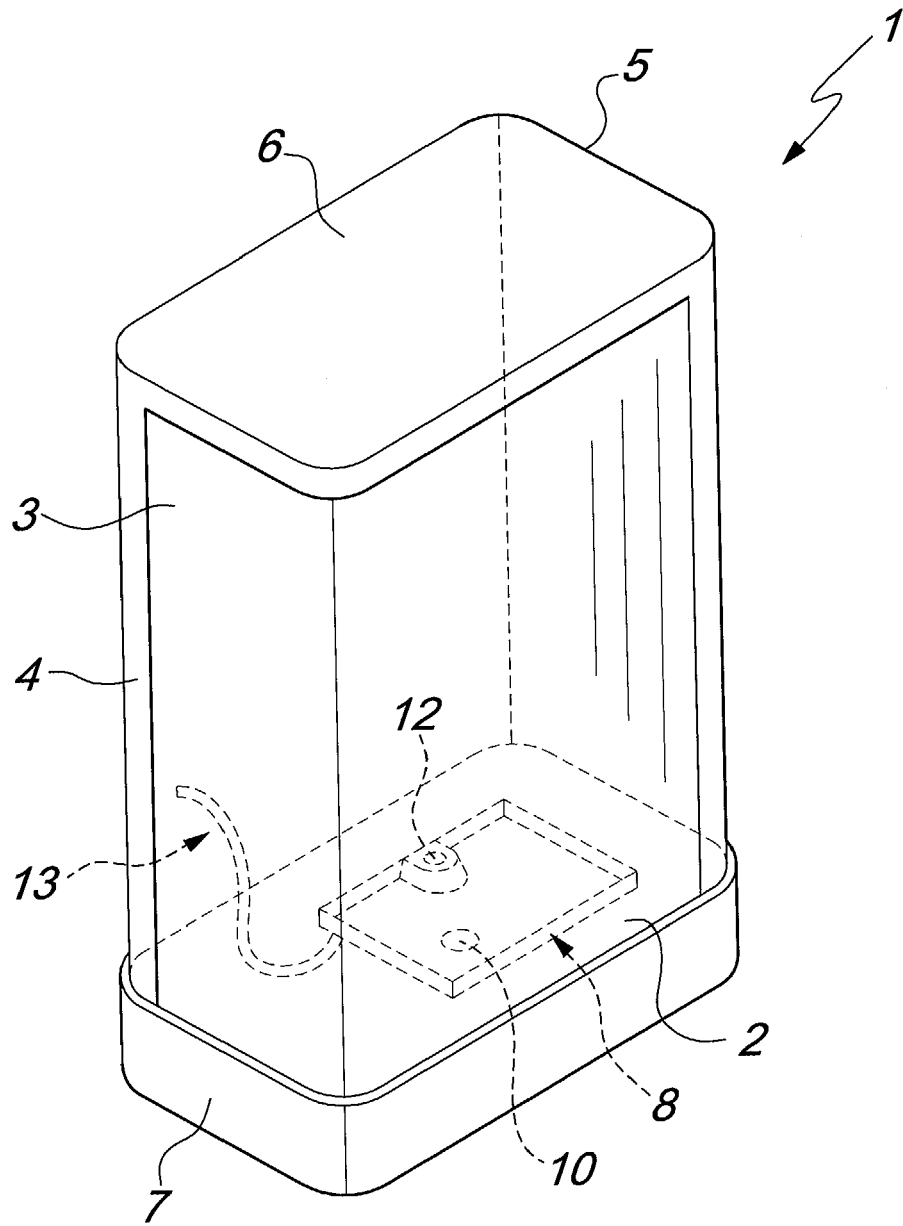
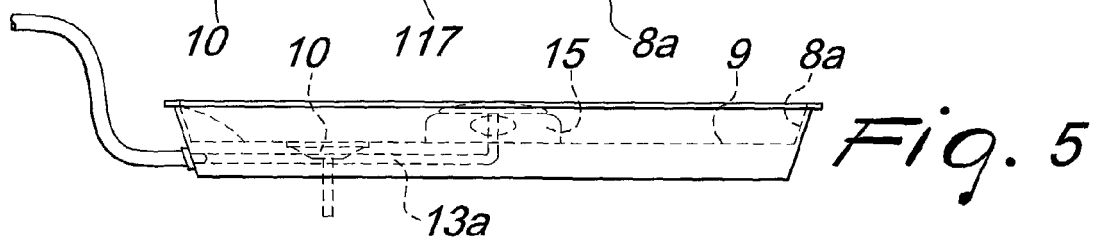
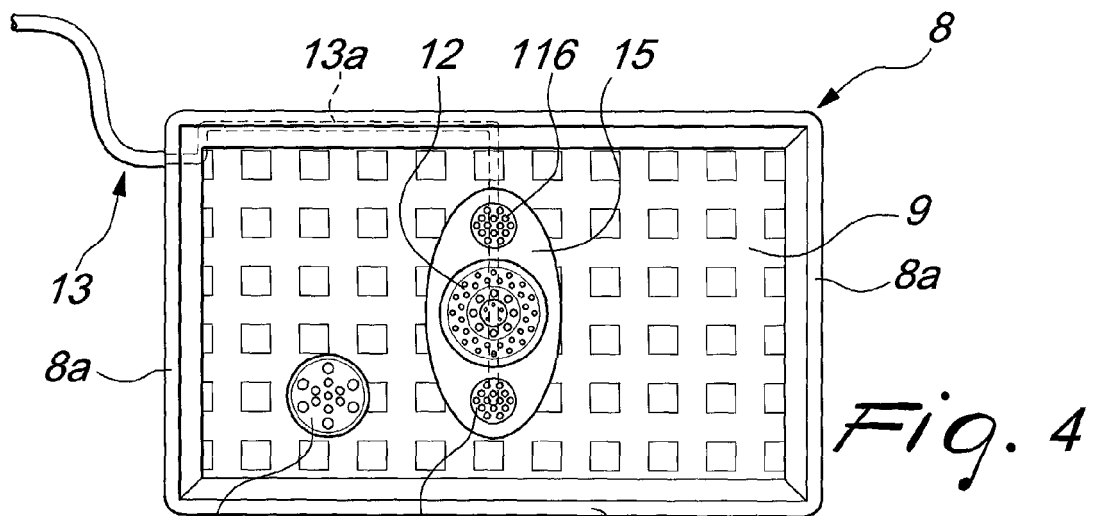
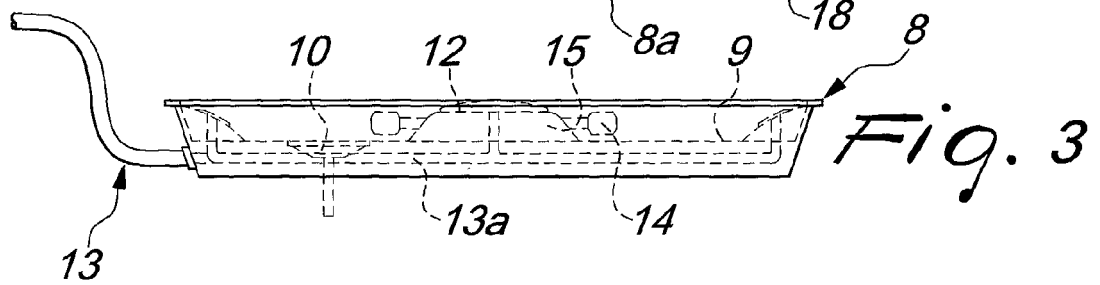
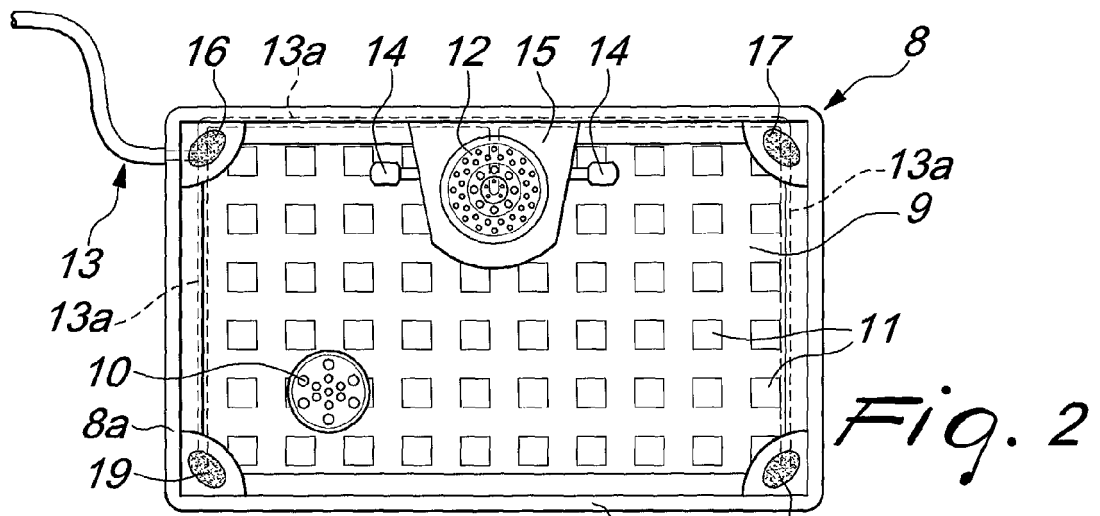


Fig. 1





European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 04 42 5824

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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 7 April 2005	Examiner Fajárnés Jessen, A
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 04 42 5824

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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