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Remarks:

Claims filed after the date of filing of the application (Rule 68(4) EPC).

(54) **Drainage channel**

(57) A water outlet unit for drainage chutes consists of a frame (1) which presents a perimetric support (2) with an interior skirting (3) terminating in flanges (4), and a plate (5), with dimensions somewhat less than the perimetric support (2) of the frame (1), that rests on the flanges against the interior skirting (3) with the mediation of several spacers (6) which, for these purposes, present a vertical wall (7) and a horizontal wall (8). A rib (9) is provided below the horizontal wall (8) in order to configure

a cross-section in "U" which clasps the flange (4), permitting the spacers (6) to be attached to it.

Optionally, the rib (9) of the spacer (6) can present a stud (10) intended for being introduced into a drill-hole (11) provided in the flange (4), which improves the attachment of the spacer (6) to the frame (1).

In this way, the plate (5) becomes separated both from the interior skirting (3) and from its flange (4) permitting water to pass freely.

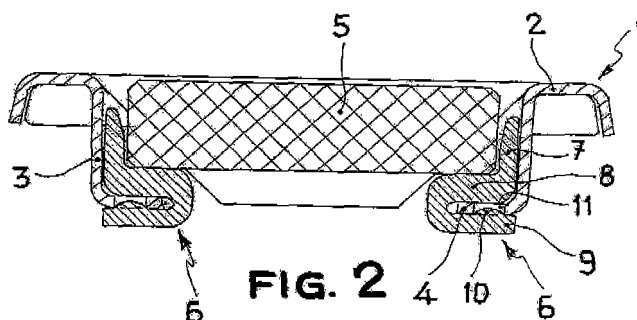
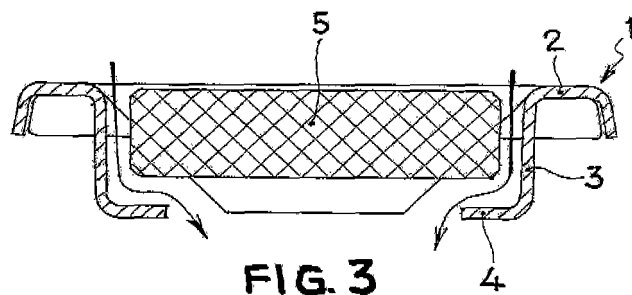


FIG. 2



Description

[0001] The present invention relates to a water outlet unit for drainage chutes. Its field of application is that of drainage devices in general, and especially that of constructed shower bases.

Background of the invention

[0002] The water outlet in drainage chutes is normally done via a grille or perforated plate fitted tightly on a suitable frame. The array of holes for the passage of water and their small dimension lead to frequent blockages due to the accumulation of dirt, hair, etc, which makes it necessary to carry out constant cleaning if it is wished to maintain a proper functioning and an acceptable appearance.

[0003] Consequently, it is an objective of the present invention to provide a water outlet unit for drainage chutes that is safe and easy to clean.

[0004] Another objective of the present invention is to provide a water outlet unit for drainage chutes that is as simple as possible.

Description of the invention

[0005] In order to achieve the proposed objectives a water outlet unit for drainage chutes has been conceived which presents a perimetric support in order to allow it to rest on the drainage chute and on an interior skirting which terminates in a flange.

[0006] A plate with dimensions smaller than the perimetric support rests on the flanges and is separated from the interior skirting by means of an array of spacers which for these purposes present a vertical wall, a horizontal wall and a rib which permits its attachment to the flange of the interior skirting of the frame, which it clasps.

[0007] In this way, a perimetric separation is configured between the plate and the frame, via which the water circulates. The unit permits a high through-flow thanks to the large perimeter of this type of chute, even with a small separation between the plate and the frame.

[0008] In addition to a high rate of flow, the invention also offers a device that is clean and safe, and with an installation that is extremely simple and economical.

Brief description of the drawings

[0009] In order to complement the foregoing description, and with the aim of aiding a better understanding of the characteristics of the invention, a detailed description is going to be made of a preferred embodiment, on the basis of a set of plans accompanying this descriptive specification and in which the following has been represented in an illustrative and non-limiting basis.

Figure 1 shows an exploded perspective view of the inventive water outlet unit.

Figure 2 shows a cross-section of the above unit showing the spacers.

Figure 3 shows a cross-section of the unit of figure 1 showing the passage of water through the plate/frame separation.

[0010] In the above figures, the numerical references correspond to the following parts and elements:

1. Frame.
2. Perimetric support.
3. Interior skirting.
4. Flanges.
5. Plate.
6. Spacers.
7. Vertical wall.
8. Horizontal wall.
9. Rib.
10. Stud.
11. Drill-hole.

Detailed description of a preferred embodiment

[0011] As can be seen in figures 1 and 2, the water outlet unit for drainage chutes of the invention consists of a frame (1) which presents a perimetric support (2) and an interior skirting (3) terminating in flanges (4).

[0012] A plate (5), with dimensions somewhat less than the perimetric support (2) of the frame (1), rests on the flanges (4) and against the interior skirting (3) with the mediation of several spacers (6) which, for these purposes, present a vertical wall (7) and a horizontal wall (8). A rib (9) is provided below the horizontal wall (8) in order to configure a cross-section in "U" which clasps the flange (4), permitting the spacers (6) to be attached to it.

[0013] Optionally, the rib (9) of the spacer (6) can present a stud (10) intended for being introduced into a drill-hole (11) provided in the flange (4), which improves the attachment of the spacer (6) to the frame (1).

[0014] In this way, and as can be seen in figure 3, the plate (5) becomes separated both from the interior skirting (3) and from its flange (4) permitting water to pass freely. Although it might seem that the separation between the plate (5) and the frame (1) is too narrow to ensure a high flow of water, this is not the case due to the large perimeter of the device. The change of direction that the flow of water can undergo does not introduce

any appreciable restriction on the rate.

[0015] There are a series of variants that will be evident to an expert on the subject which, adapting the embodiment of the design and the means of production, respect the essence of the invention. So, advantageously, the plate (5) will be made in toughened glass though it can equally be manufactured in stone, ceramic or another suitable material. Likewise, the frame (1) will advantageously be carried out in folded stainless steel sheet though it can also be done in injected plastic or any other appropriate material.

Claims

1. Water outlet unit for drainage chutes **characterised by** comprising a frame (1) which presents a perimetric support (2) with an interior skirting (3) which terminates in a flange (4), and a plate (5) with dimensions somewhat less than the perimetric support (2) which rests on the flanges (4) and against the interior skirting (3) with the mediation of several spacers (6) which, for these purposes, present a vertical wall (7) and a horizontal wall (8), incorporating a rib (9) which, together with the horizontal wall (8) configures a cross-section in "U" which clasps the flange (4).
2. Water outlet unit for drainage chutes according to claim 1, **characterised in that** the rib (9) of the spacer (6) presents a stud (10) intended to be introduced into a drill-hole (11) provided for these purpose in the flange (4).

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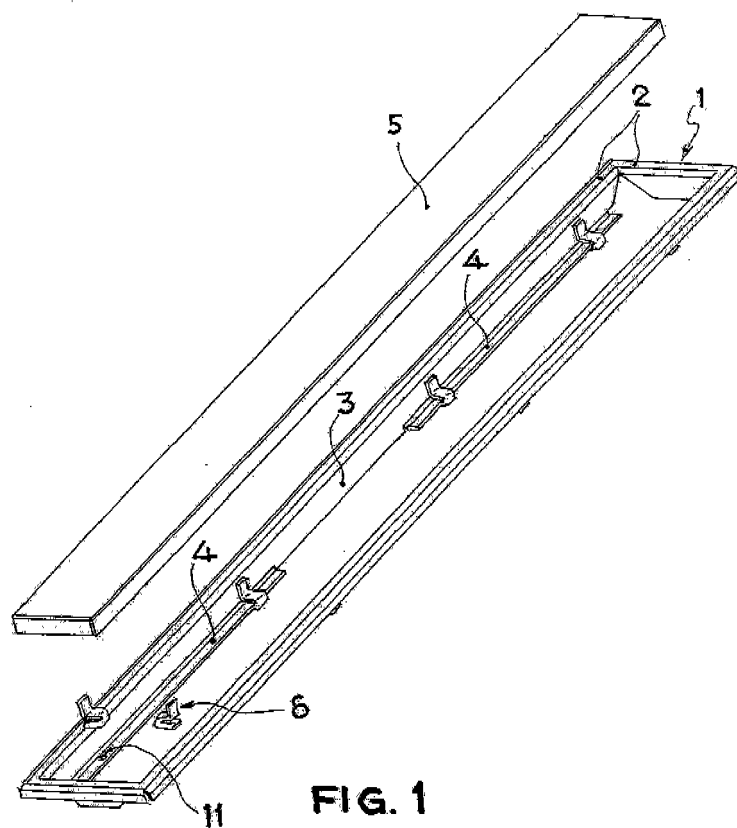
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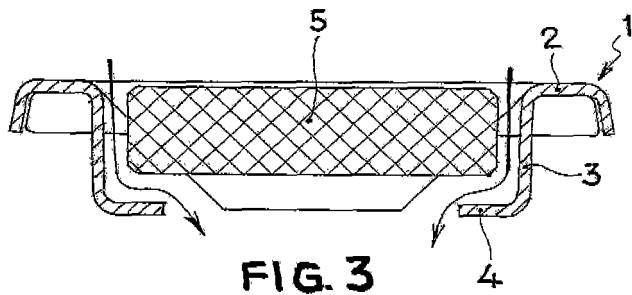
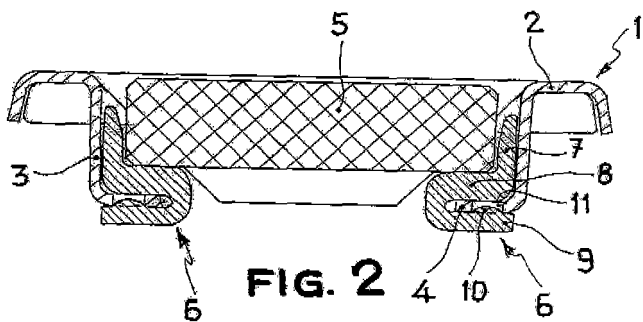
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EUROPEAN SEARCH REPORT

Application Number
EP 12 00 0972

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	EP 1 191 148 A1 (WIEHE WILHELM [DE]; WILDE LOTHAR [DE]; MEYER ROLF [DE]) 27 March 2002 (2002-03-27) * figure 5 *	1	INV. E03D11/14 E03F5/04
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A	WO 2004/072392 A1 (AHLMANN ACO SEVERIN [DE]; MESSERSCHMIDT HEINO [DE]; SIEBER MICHAEL [DE]) 26 August 2004 (2004-08-26) * figure 1 *	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC) E03D E03F
Place of search Munich		Date of completion of the search 6 July 2012	Examiner Isailovski, Marko
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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EPO FORM 1503 03.02 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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