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(71) Applicant: **Easy Sanitary Solutions B.V.**
7581 EZ Losser (NL)

(72) Inventor: **Keizers, Jurgen Hendrik Peter Jozeph**
7582 GH Losser (NL)

(74) Representative: **'t Jong, Bastiaan Jacob**
Inaday Patent B.V.
Hengelosestraat 141
7521 AA Enschede (NL)

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(54) **Wall drain with height adjustable inflow opening**

(57) The invention relates to a wall drain, comprising:
- a collecting container with an outflow opening for connecting to an outlet pipe;
- a substantially upright cover plate arranged on a side of the collecting container, which cover plate comprises

in a side a recess for providing an inflow opening between the cover plate and the collecting container, wherein the cover plate comprises at least two parallel plate parts sliding perpendicularly of the side with the inflow opening.

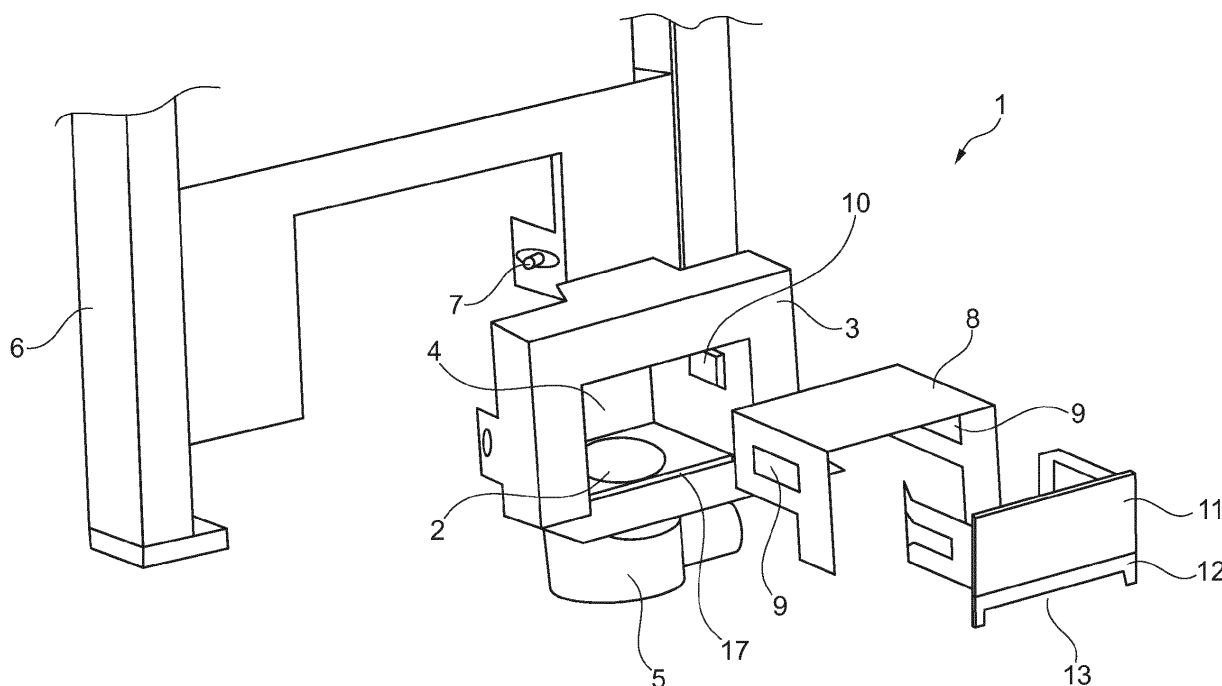


Fig. 1

Description

[0001] The invention relates to a wall drain, comprising:

- a collecting container with an outflow opening for connecting to an outlet pipe;
- a substantially upright cover plate arranged on a side of the collecting container, which cover plate comprises in a side a recess for providing an inflow opening between the cover plate and the collecting container.

[0002] Such a wall drain is for instance known from ES 2299295. Provided here in a wall is a recess in which a collecting container with a housing thereon is arranged. The housing is open on one side so that water can flow via this side into the collecting container. Provided for the purpose of concealing a large part of this opening in the housing from view is a cover plate which has a recess on the underside for passage of water.

[0003] EP 2009187 also describes a wall drain. This publication shows a wall drain which is arranged in a frame. This frame is disposed in front of a fixed wall, after which wall panels are arranged over the frame, thereby creating a pre-wall.

[0004] The wall drain according to this publication also comprises a collecting container with a housing arranged thereon. Also provided in the opening in the wall of the housing is a cover plate which has an inflow opening on the underside.

[0005] When arranging these known wall drains it is necessary to know the thickness of the wall tiles as well as the thickness of the floor tiles. The housing of the wall drain has to be arranged in the wall such that, after the wall tiles have been arranged, the cover plate lies flush with the surrounding wall tiles.

[0006] The prior art wall drain also has to be set to the correct height relative to the floor so that, after the floor tiles have been arranged, the inflow opening is situated above the upper surface of the floor tiles.

[0007] Further known is a wall drain which is a variant of EP 2009187. The wall drain can be adjusted here in the height as long as the wall tiles have not yet been arranged. The height can thus be adjusted after the floor tiles have been arranged. The drawback of this embodiment is that different seals are required for the height adjustment. Once the wall tiles have been arranged, an insert part with flanges is then placed in the drain. The flanges lie here on the wall tiles.

[0008] It is an object of the invention to reduce, or even obviate, the above stated drawbacks.

[0009] This object is achieved according to the invention with a wall drain according to the preamble **characterized in that** the cover plate comprises at least two parallel cover parts, for instance plate parts, sliding perpendicularly of the side with the inflow opening.

[0010] Because the cover plate consists of at least two cover parts, for instance plate parts, it is possible to adjust

the height of the cover plate after the floor tiles have been arranged. A floor tile thus preferably extends into the inflow opening so that the cover plate can be placed on the tile and so that the height is adjusted automatically by the parallel sliding plate parts.

[0011] In addition, the sliding plate parts have the advantage that a plate part can easily be pushed upward in order to temporarily enlarge the inflow opening. It is thus possible to insert a hand in the inflow opening, while during normal use the height of the inflow opening is small.

[0012] This also makes it easier to remove the cover plate by hand in order to gain access to the collecting container, for instance for cleaning thereof.

[0013] A further advantage of the invention is that, when a bathroom or shower space is renovated, wherein new floor tiles are arranged, the height of the inflow opening can still be modified. In the prior art this is only possible when the wall tiles are partially removed.

[0014] The upper plate part can optionally be provided with a wall tile so that the wall drain is less visible in the wall. The upper plate part can also be provided with lighting. Because the upper plate part can be easily removed, possible maintenance of the lighting can likewise be easily performed.

[0015] In addition, the upper plate part can also be arranged in recessed manner when this is aesthetically desirable. Adjusting means are provided for this purpose in the housing.

[0016] A preferred embodiment of the wall drain according to the invention further comprises a housing arranged on the collecting container and having an open side in which the cover plate is arranged.

[0017] The housing provides for a neat finish to the cavity above the collecting container. In addition, the housing provides the option of for instance attaching the cover plate and of allowing a mortar wall to rest partially on the housing.

[0018] In a further embodiment of the wall drain according to the invention the cover plate is arranged slidably perpendicularly of the plane of the cover plate.

[0019] The cover plate can hereby slide into and out of the opening of the housing and the cover plate can at any point in time be set flush with the surface of the wall tiles.

[0020] In another preferred embodiment of the wall drain according to the invention an adjustable tile frame is arranged around the cover plate. This tile frame provides a finish for the adjacent wall tiles. This tile frame is preferably made from thin sheet material so that a thin aesthetic edge is obtained around the opening of the cavity above the collecting container.

[0021] The tile frame can optionally also be arranged in recessed manner so that only a joint is visible and it appears as if the tiles extend without interruption.

[0022] Yet another embodiment of the wall drain according to the invention comprises a build-in frame, on which the collecting container is arranged, for the pur-

pose of being built into a pre-wall.

[0023] These and other features of the invention will be further elucidated with reference to the accompanying drawings.

Figure 1 shows an embodiment of the wall drain according to the invention with exploded parts.

Figure 2 shows the wall drain according to figure 1 partially built into a wall.

Figure 3 shows a cross-sectional view of figure 2.

[0024] Figure 1 shows a wall drain 1 according to the invention.

This wall drain 1 has a collecting container 2 having above it a housing 3 with an open side 4.

[0025] Arranged under collecting container 2 is a siphon 5 with which collecting container 2 can be connected to an outlet pipe.

[0026] Collecting container 2 and housing 3 are secured in a frame with bolts 7.

[0027] A tile frame 8 is pushed into the open side 4. Tile frame 8 has slots 9 into which protrusions 10 extend and whereby it is possible to adjust the depth of tile frame 8.

[0028] A cover plate 11, 12 with which the opening is largely covered is further placed into tile frame 8. Cover plate 11, 12 consists of an upper plate part 11 and a lower plate part 12 which is provided with an inflow opening 13.

[0029] Provided in the bottom of collecting container 2 is a threshold 17 against which a tile floor can be arranged. It is hereby further possible to easily seal the tile against the threshold with for instance a silicone edge trim.

[0030] Figure 2 shows wall drain 1 in partially built-in position. Frame 6 is secured here in front of for instance a fixed wall (not shown). Wall panels 14 are then arranged over frame 6. Housing 3 is fixed in the frame here such that the front surface of housing 3 lies flush with the surface of wall panels 14.

[0031] Wall tiles 15 are subsequently arranged over wall panels 14. Tile frame 8 is adjusted here to a depth such that the visible edge of tile frame 8 lies flush with the surrounding wall tiles 15.

[0032] Further provided are floor tiles 16 which extend into housing 3 and lie against threshold 17.

[0033] Figure 3 shows a cross-section of wall drain 1 according to the invention. It will be apparent from this figure 3 that floor tiles 16 extend into housing 3. Plate part 12 stands here on floor tile 16 so that inflow opening 13 is wholly clear at all times. When access to housing 3 is desired, plate part 12 can be pushed upward and cover plate 11, 12 can optionally be wholly removed for the purpose of cleaning drain 1.

[0034] Protrusions 10 can optionally be adjusted with for instance a screw so that a desired depth of cover plate 11 can be set.

Claims

1. Wall drain, comprising:

- 5 - a collecting container with an outflow opening for connecting to an outlet pipe;
- a substantially upright cover plate arranged on a side of the collecting container, which cover plate comprises in a side a recess for providing an inflow opening between the cover plate and the collecting container,

characterized in that

- 10 the cover plate comprises at least two parallel cover parts, for instance plate parts, sliding perpendicularly of the side with the inflow opening.

2. Wall drain as claimed in claim 1, further comprising a housing arranged on the collecting container and having an open side in which the cover plate is arranged.

3. Wall drain as claimed in claim 1 or 2, wherein the cover plate is arranged slidably perpendicularly of the plane of the cover plate.

4. Wall drain as claimed in any of the foregoing claims, wherein an adjustable tile frame is arranged around the cover plate.

5. Wall drain as claimed in any of the foregoing claims, comprising a build-in frame, on which the collecting container is arranged, for the purpose of being built into a pre-wall.

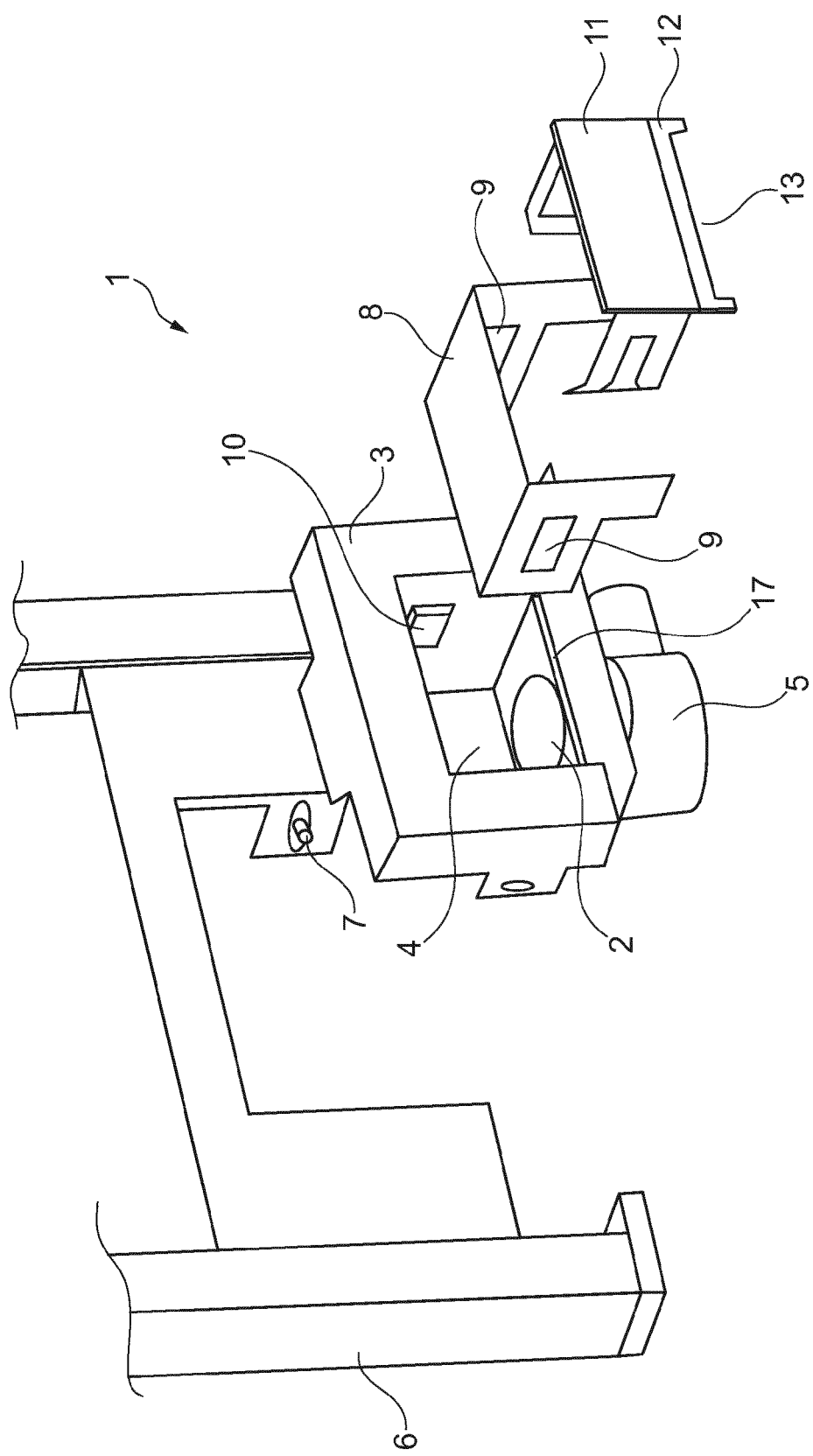


Fig. 1

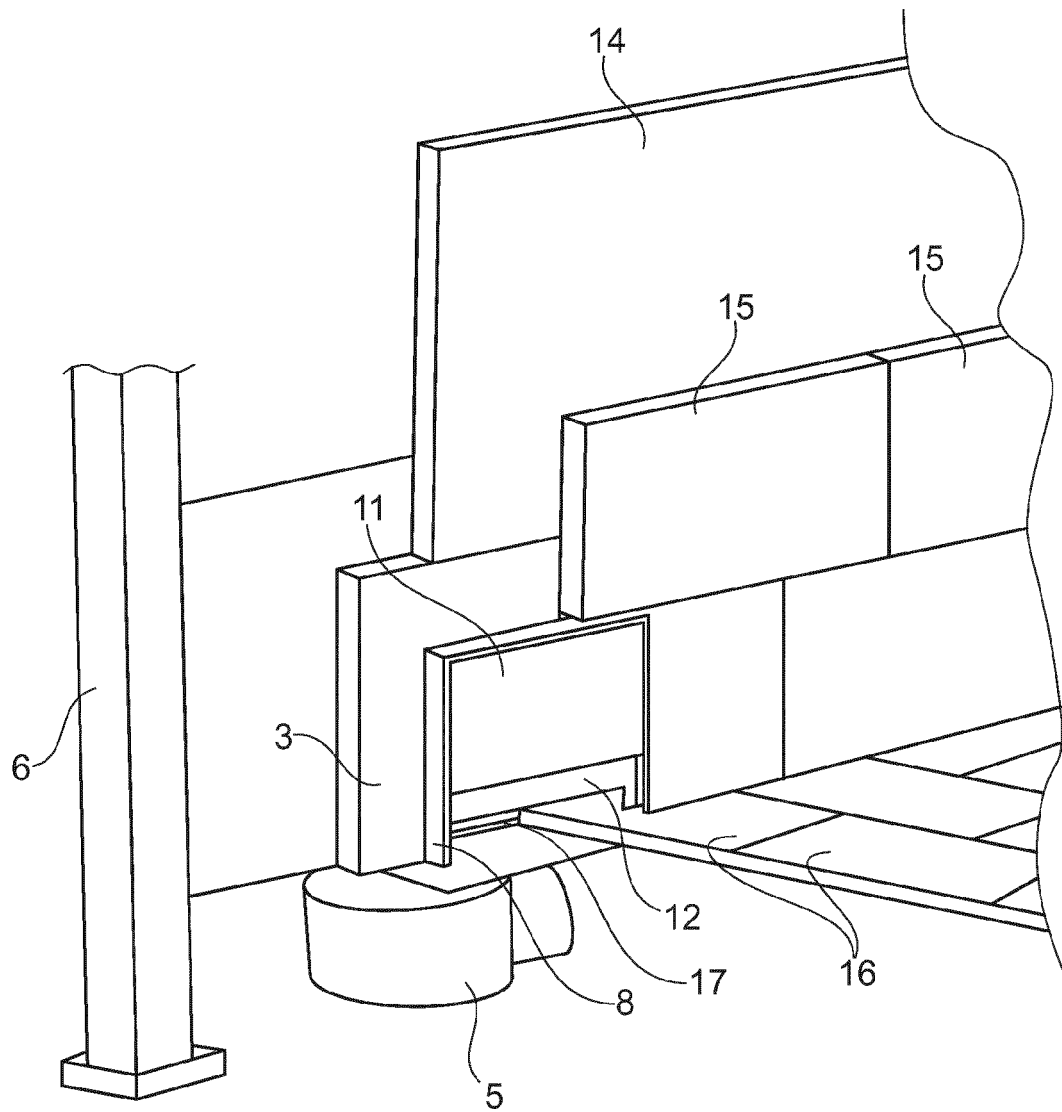


Fig. 2

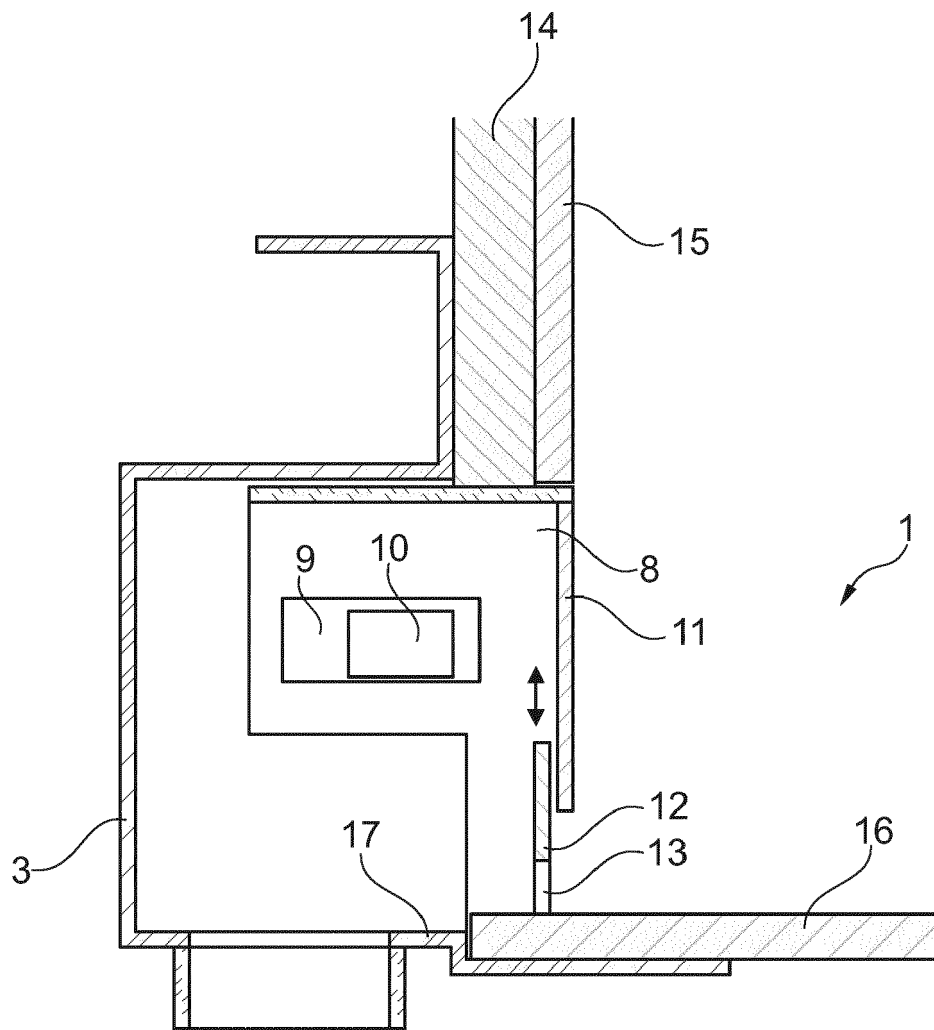


Fig. 3



EUROPEAN SEARCH REPORT

Application Number
EP 13 19 0853

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	EP 2 333 171 A1 (GEBERIT INT AG [CH]) 15 June 2011 (2011-06-15) * paragraph [0015] - paragraph [0028]; figures * -----	1-5	INV. E03F5/04
			TECHNICAL FIELDS SEARCHED (IPC)
			E03F
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 9 December 2013	Examiner De Coene, Petrus
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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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

REFERENCES CITED IN THE DESCRIPTION

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- EP 2009187 A [0003] [0007]