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(54) **HOUSING FOR A SANITARY PRODUCT DISPENSER**

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(75) Inventor: **Rainer Widmer, Diepoldsau (CH)**

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Correspondence Address:
RANKIN, HILL & CLARK LLP
23755 LORAIN ROAD, SUITE 200
NORTH OLMSTED, OH 44070 (US)

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(73) Assignee: **CWS-BOCO SUPPLY AG, Baar (CH)**

(57) **ABSTRACT**

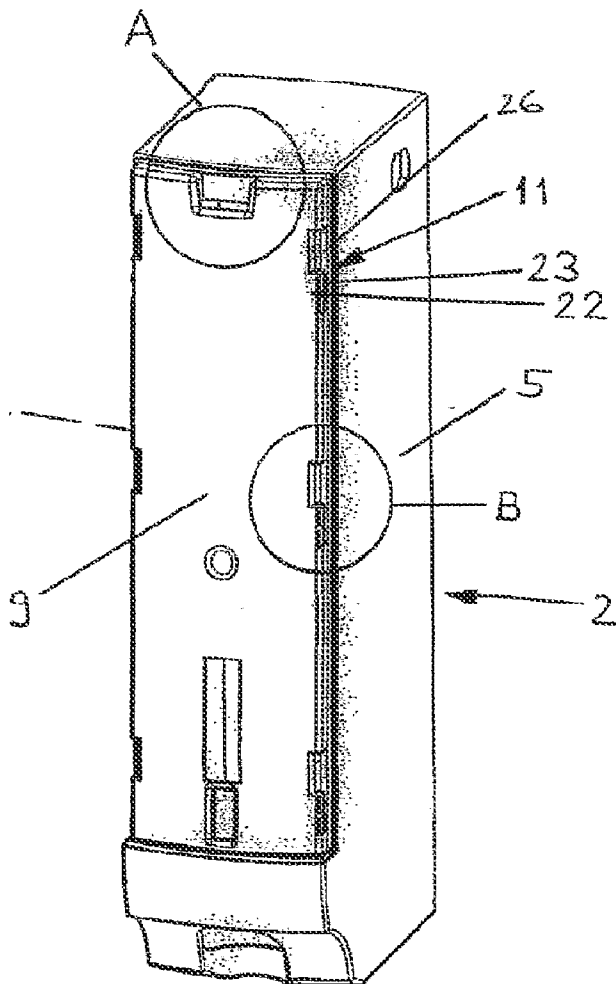
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A housing (1) for a sanitary product dispenser, wherein said housing can be detachably fastened to a wall or a wall plate (18), comprising A) a first box-shaped housing part (2) having a front (9), a back (10), two lateral sides (4, 5), a top (6), and a bottom (7), which surround a hollow space (8), in which a sanitary product dispenser can be accommodated, B) a second panel-shaped housing part (3), and C) locking means (12) for the detachable connection of the second housing part (3) at the front (9) of the first housing part (2), wherein D) the locking means (12) can only be detached from the hollow space (8).



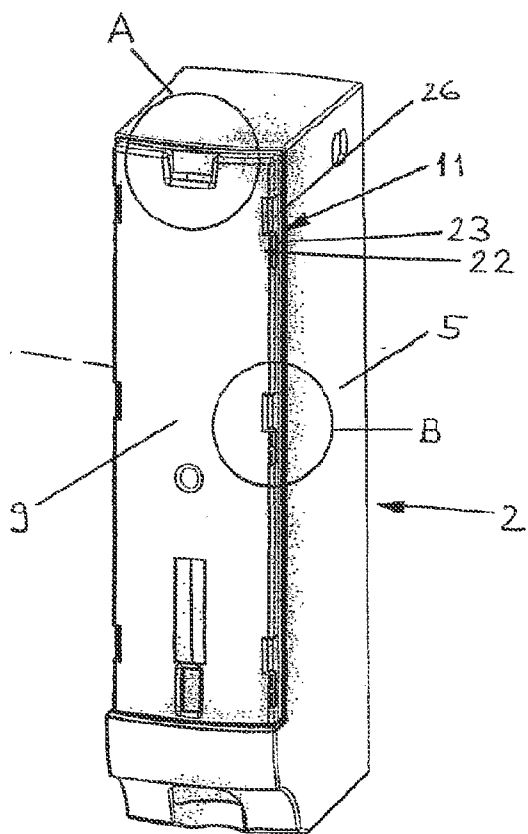


Fig. 2

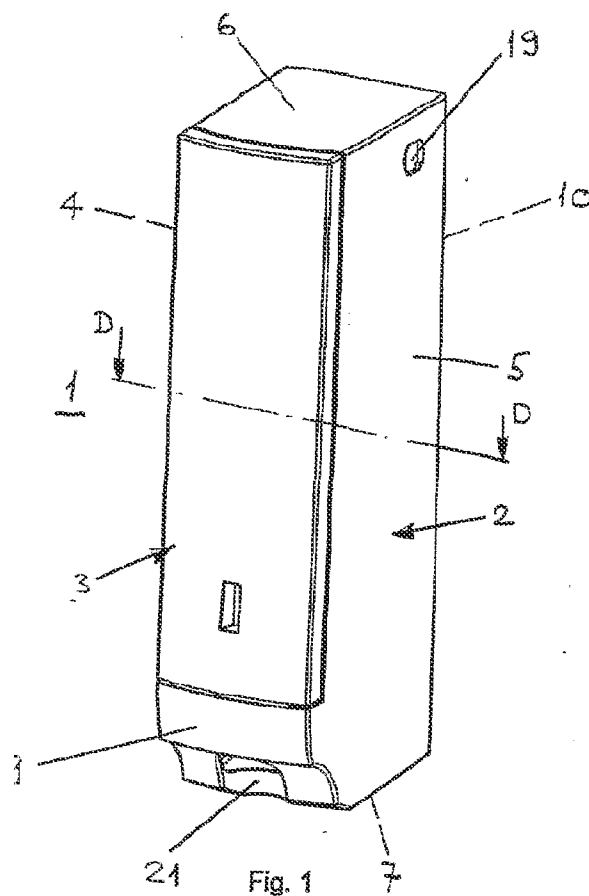


Fig. 1

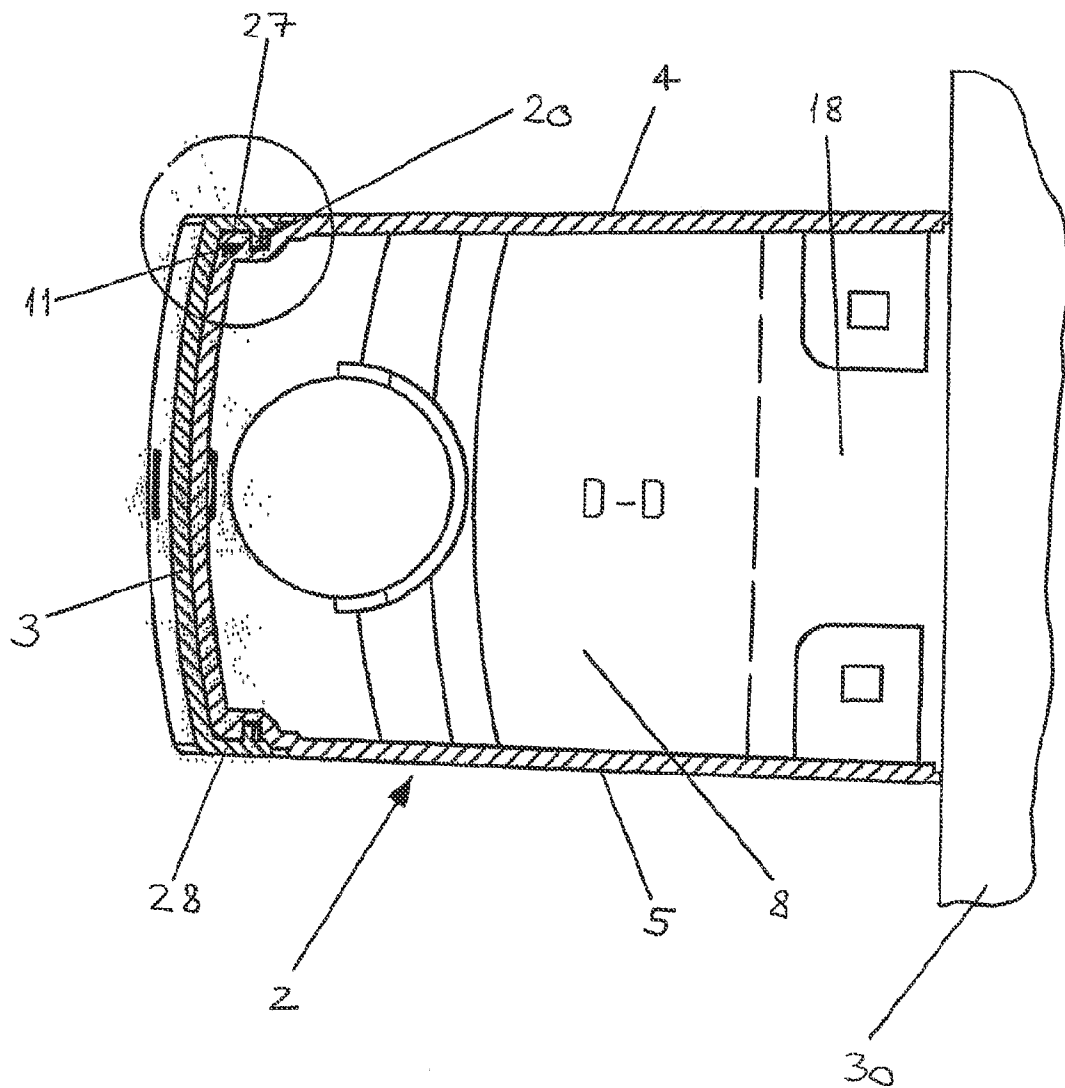
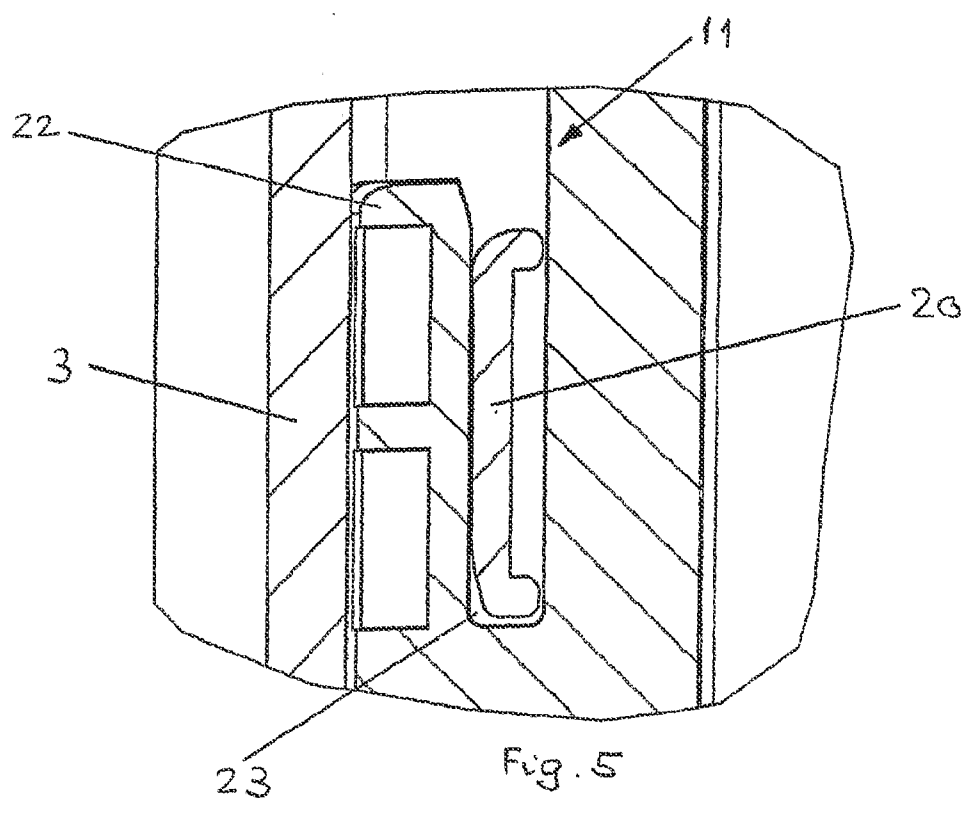
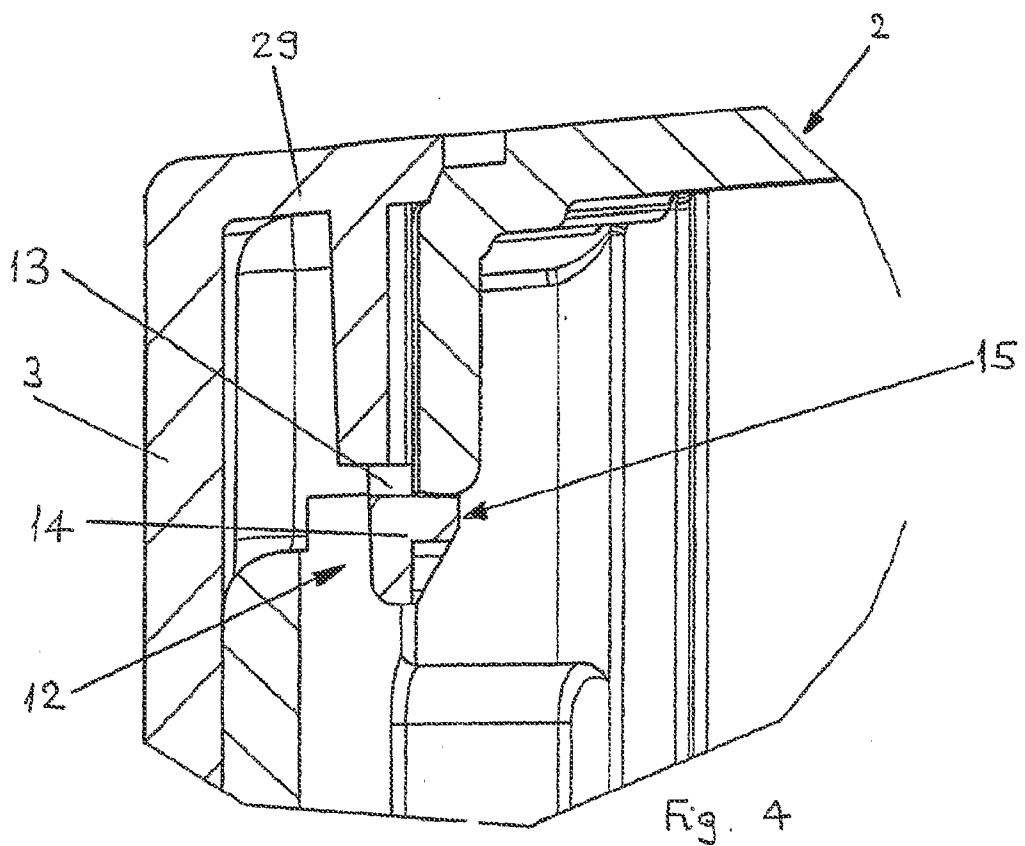


Fig. 3



HOUSING FOR A SANITARY PRODUCT DISPENSER

[0001] The invention relates to housing for a sanitary product dispenser of the introductory portion of claim 1.

[0002] For arranging restrooms in the sanitary or hygienic sector individually, modular, sanitary product dispensers are suitable, which, by means of exchangeable parts of the housing, especially of front plates or panels, make it possible to provide each restroom with its own character. The sanitary product dispensers, used in such restrooms, comprise essentially cloth hand towel dispensers, paper roll dispensers, foamed soap dispensers, toilet paper dispensers and fragrance dispensers.

[0003] A sanitary product dispenser with a multipart housing is known from U.S. Pat. No. 3,902,637 of SCHEELER. This known sanitary product dispenser comprises a housing, which can be mounted at a wall and has an exchangeable front plate. The front plate is introduced from the upper side of the housing on rails mounted at the housing. After the front plate is introduced into these rails, a lid can be fastened detachably on the upper side of the housing by means of ribs, which snap into one another, two first ribs being disposed at mutually opposite side walls of the lid and two second ribs at the inner wall of the housing. The lid is not secured at the housing so as to prevent dismantling by means of tensile forces and can readily be taken off without further aids. The mutually engaging ribs are constructed symmetrically with respect to tensile and compression forces and have the same shape in both directions. As a result, the lid can be mounted from the outside (simply by pressing it on the housing) and dismantled in the same way (simply by pulling it away from the housing), so that, for example, a valuable, panel-shaped housing part, disposed at the front side, could be stolen.

[0004] The invention is to provide a remedy here and is based on the objective of developing a housing with a panel-shaped housing part, which can be exchanged only by maintenance personnel.

[0005] The invention accomplishes the objectives set with a sanitary product dispenser, which has the distinguishing features of claim 1

[0006] The advantages, achieved by the invention, can be seen essentially therein that, due to the inventive housing:

[0007] the ability to exchange the second housing part (front panel) is ensured. Due to the ability to exchange the front panel of all sanitary product dispensers of a product line, the possibility exists of matching restroom products individually to the interior of the restroom of the client and, by using high-grade front panels, to provide the restroom with its own character;

[0008] simplified manufacturing and warehousing of the different parts. of the housing is possible;

[0009] safeguarding against unintentional removal of the front panel is provided;

[0010] the front panel can be exchanged only by the maintenance personnel and

[0011] customer-specific decorations and/or advertising inscriptions can be applied.

[0012] For a particular embodiment of the invention, the locking means comprise fixation elements, which can be snapped into place uniaxially and by means of which a simple configuration of the locking means results. Advantageously, the locking means can be snapped into place transversely to

the front side of the first housing part. A connection between the first and second parts of the housing, which is positive and can be loaded in tension, can be produced by locking elements parallel to the front side of the first housing part.

[0013] For a further embodiment, groove-shaped fastening means are disposed at the first housing part and, at the front side and on the lateral sides are open and embrace cams at the front side. Furthermore, elevations are provided at the second housing part and can be pushed parallel to the front side into the groove-shaped fastening means and subsequently, by shifting the second housing part against the underside of the elevations, brought into engagement with the cams, so that the second housing part can be fastened orthogonally to the front side and against the underside at the first housing part. The additional fixation of the front panel at the housing permits the locking mechanism to be configured simply.

[0014] For a further embodiment, the locking means can be snapped into place parallel to the front side of the first housing part. A connection between the first and second parts of the housing, which is positive and can be loaded in tension, can be produced by the locking elements orthogonally to the front side; in addition, the use of a hinge joint is possible. Advisably, the first and second housing parts can be connected with one another by means of a hinge, which can be swiveled about an axis of rotation parallel to the underside.

[0015] For a further embodiment, the housing comprises a wall plate, which can be fastened to a wall and the housing can be fixed detachably with its rear to the wall plate. This embodiment has the advantage that the housing can be removed easily from the wall for filling or for service work.

[0016] For a further embodiment, the housing can be secured to the wall plate by means of a lock, so that only the maintenance personnel can change anything at the sanitary product dispenser. Advisably, the second housing part can indicate the degree, to which the dispenser is filled. The first housing part may be constructed box-like and the second housing part preferably is panel-shaped.

[0017] In further embodiment forms, the second housing part may be curved convexly. By these means, the advantages of a component, which can be produced and cleaned more easily, can be achieved.

[0018] A film technique may be used for configuring the surface of the second housing part, constructed as a front panel, differently. On the other hand, applying a film on the whole of the housing would be a problem, because hulls are formed in the film. Such a film can also be decorated in the mold, that is, the film is placed in the mold and the plastic is injected subsequently. It is also possible to inlay a chromium edge simultaneously.

[0019] The invention and further developments of the invention are explained in even greater detail in the following by means of the partially diagrammatic representations of an example. In the representations,

[0020] FIG. 1 shows an embodiment of the inventive housing for a sanitary product dispenser, such as a foamed soap;

[0021] FIG. 2 shows a perspective view of the first housing part of the embodiment of the inventive housing, shown in FIG. 1;

[0022] FIG. 3 shows a cross-section along the line D-D in FIG. 1;

[0023] FIG. 4 shows an enlarged section A in FIG. 2 in longitudinal section, together with the second housing part and

[0024] FIG. 5 shows an enlarged section B in FIG. 2 in longitudinal section, together with the second housing part

[0025] An embodiment of the housing 1 for a sanitary product dispenser, constructed, for example, as a soap dispenser, is shown in FIGS. 1 to 5.

[0026] For fastening the housing 1, surrounding the soap dispenser (not shown) to a wall 30, a wall plate 18 (shown diagrammatically by broken lines in FIG. 3) is attached to a wall. The wall plate 18 may be screwed to the wall 30, for example, by means of screws (not shown) and connected permanently or detachably with the soap dispenser. The housing 1 is secured by means of a lock 19 and, if the lock 19 is opened, by means of fastening elements (not shown), which can be introduced detachably into one another, to the wall plate 18.

[0027] The housing 1 comprises a box-shaped housing part 2 and a second panel-shaped housing part 3, which can be connected detachably to the first housing part 2. By means of a front side 9, a back side 10, two lateral sides 4, 5, an upper side 6 and an underside 7, the first box-shaped housing part 2 forms a frame around a cavity 8 (FIG. 3). The cavity 8 is provided at the underside 7 with an opening 21, so that a soap dispenser (not shown), disposed in the cavity 8, can be serviced manually from the underside 7.

[0028] Groove-shaped fastening means 11 are disposed at the front side 9 of the first housing part 2 (FIG. 2). The second housing part 3 is constructed shell-like and comprises two lateral frame elements 27, 28 (FIG. 3), which protrude into the cavity 8 and are disposed parallel to the lateral sides 4, 5, and an upper frame element 29 (FIG. 4) parallel to the upper side 6 of the first housing part 2. At each of the lateral frame elements 27, 28, three elevations 20 are disposed in such a manner, that they protrude into the cavity 8 and can be brought into engagement with the groove-shaped fastening means 11 (FIGS. 3 and 5).

[0029] Each of the groove-shaped fastening means 11 comprises three recesses 26 at the front side, which extend parallel to the lateral sides 4, 5. The recesses 26 are open on the lateral sides 4, 5. Furthermore, the fastening means 11 comprise cams 22, which close off the recesses 26 parallel to the lateral sides 4, 5 and partially against the front side 9, so that undercut-like grooves 23 are formed (FIGS. 2, 3 and 5) at the lateral sides 4, 5. For attaching the second housing part 3 to the first housing part 2, the elevations 20 are introduced into the grooves 23 by shifting the second housing part 3 parallel to the front side 9.

[0030] For the installation of a second housing part 3, the elevations 20 can be pushed parallel to the front side 9 so far into the groove-shaped fastening means 11, that they are in contact with the ends of the recesses 26 directed against the underside 7, so that the second housing part 3 can be fastened at the front housing part 2 orthogonally to the front side 9, so that it cannot be shifted further at the first housing part 2.

[0031] Furthermore, the housing 1 comprises locking means 12 for detachably connecting the second housing part 3 to the front side 9 of the first housing part 2. The locking means 12 are configured in such a manner, that they automatically snap into place during the installation and can be detached only from the inside of the cavity 8.

[0032] The locking means 12 comprise a latch 13 (FIG. 4), protruding into the cavity 8 at the upper frame element 29 of

the second housing part 3 and having an asymmetrical nose 14. During the installation of the second housing part 3, the latch 13 can be bent elastically about an axis parallel to the front side 9 and to the upper side 6 and snapped into an asymmetric depression 15 in the front side 9. Due to the complementary, saw tooth-like, asymmetric formation of the nose 14 and the depression 15, the second housing part 3 is locked against being dismantled, that is, against a displacement in the direction of the upper side 6. Subsequently, this locking can be unlocked once again only from within the cavity 8, for example, by means of an instrument, by pressing on the latch 13 until the nose 14 disengages from the depression 15.

1. A housing for a sanitary product dispenser, which can be fastened detachably to a wall or a wall plate comprising:

a first housing part with a front side, a rear side, two lateral sides, an upper side and an underside, which frame a cavity, in which a sanitary product dispenser can be accommodated;

a second housing part, and

locking means for detachably connecting the second housing part to the front side of the first housing part, wherein the locking means can be unlocked only from within the cavity.

2. The housing of claim 1, wherein the locking means comprises fixation elements, which can be snapped into place uniaxially.

3. The housing of claim 1, wherein the locking means can be snapped into place transversely to the front side of the first housing part.

4. The housing of claim 1, wherein groove-shaped fastening means, which are open at the front side and on the lateral sides, are disposed at the first housing part and comprise cams at the front side, and in that elevations are mounted at the second housing part, so that the elevations can be pushed parallel to the front side into the groove-shaped fastening means and subsequently, by shifting the second housing part against the underside the elevations can be brought into engagement with the cams, so that the second housing part can be fastened at the first housing part orthogonally to the front guide and against the underside.

5. The housing of claim 1, wherein the locking means can be snapped into place parallel to the front side of the first housing part.

6. The housing of claim 5, wherein the first housing part and the second housing part are connected with one another by means of a hinge, so that they can be pivoted about an axis of rotation parallel to the underside.

7. The housing of claim 1, wherein the housing comprises a wall plate, wherein the wall plate can be fastened to a wall and the housing can be fixed with its rear side detachably to the wall plate.

8. The housing of claim 1, wherein the housing can be secured by means of a lock to the wall plate.

9. The housing of claim 1, wherein the second housing part is panel shaped and comprises an indicator showing the degree to which the housing is filled.

10. The housing of claim 1, wherein the first housing part is constructed box-shaped and the second housing part is constructed panel-shaped.

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