



(12) **EUROPEAN PATENT APPLICATION**

(21) Application number : **91309268.0**

(51) Int. Cl.⁵ : **A47K 3/022**

(22) Date of filing : **09.10.91**

(30) Priority : **11.10.90 GB 9022087**

(43) Date of publication of application :
13.05.92 Bulletin 92/20

(84) Designated Contracting States :
AT BE CH DE DK ES FR GR IT LI LU NL SE

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(54) **Hygiene cabinet.**

(57) The invention provides a cabinet (10) formed from a reinforced plastics material which is water tight. The cabinet (10) permits the washing of incontinent patients with a minimum risk of infection to the cleaner. In addition because the unit has an entry door (15) and internal smooth washable surface, the entry door (15) being sealable with a rim of a doorway (14), of the cabinet (10), there is a minimum risk of soiling of a bathroom or lavatory floor.

A self contained pumping unit (29, 30) pumps soiled water from within the cabinet to a lavatory bowl.

The cabinet may be static or mobile and a douche unit (25) may be provided, with a mixer tap (23) for cleaning a patient.

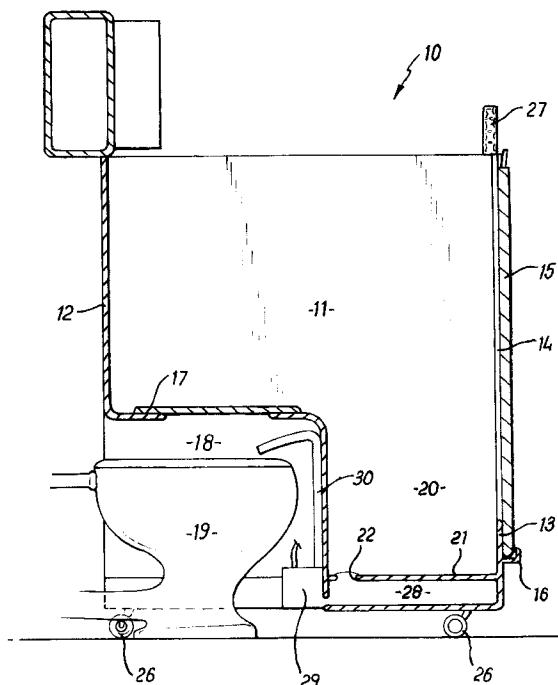


FIG. 1

This invention relates to a hygiene cabinet which is intended for use with seriously incontinent persons in hospital or a comparable establishment.

Heretofore, when a seriously incontinent person has become soiled, it has usually been necessary for carers to physically clean and bath the person, the person either being seated in or at a bed or in a cubicle such as a lavatory cubicle. Such a procedure has obvious disadvantages in that manual cleansing is both time consuming and not attractive for the carers concerned, as well as carrying an infection risk, and cleaning in a bathroom or toilet cubicle does present a problem of floor soiling and wall soiling which requires additional cleaning before the cubicle can be used again.

It is an object of the invention to provide a hygiene cabinet which can alleviate the problems to carers by seriously incontinent persons.

The invention provides a hygiene cabinet in the form of an enclosure having internal smooth washable surfaces, an entry door closable in sealing relationship with the enclosure, a floor arranged to collect fluid and lead it to an outlet, structure of the enclosure being arranged to define a lower rear recess such that the enclosure can be arranged to at least partly overlie a lavatory bowl, the enclosure further having a seat disposed above the bowl, said seat having a closable aperture disposed above the toilet bowl, a douch unit provided to allow a person within the cabinet to be cleaned by the application of water without contamination of the surroundings.

The unit can be mobile, e.g. wheeled for transfer from a place of soiling to a place of treatment, or can be installed as a permanent feature in combination with an existing lavatory, that lavatory being treated, thereafter, as a incontinent treatment cubicle.

The outlet from the enclosure can be an outlet directed to a drain below the enclosure, in a circumstance where a specified facility is provided in a building, enabling discharge from the cabinet directly to a gridded drain specially provided for the purpose.

Alternatively, the outlet can lead to a sump whence a pump can be provided for pumping fluid to enter the lavatory bowl for disposal.

In the case of a mobile unit, the douch unit can be provided not on the cabinet itself, but at a use location, for example a specified lavatory cubicle or comparable location. In the event that the sump is provided, the pump can be powered from the normal mains, appropriate provision being provided in the lavatory cubicle, wiring, of course, being accordance with regulations governing electricity in damp places.

In the case of the permanent installation, the douch unit can be connected to conventional plumbing of the establishment and a simple hot and cold mixer valve can be provided on the housing and connected to existing pipework. The douch unit can comprise a flexible hose emanating from a thermostatic or

comparable temperature controller and a spray head usable by a carer to clean the soiled person.

The invention will be described further, by way of example, with reference to the accompanying drawings wherein:-

Fig. 1 is a side view, partly in cross section illustrating a preferred hygiene cabinet of the invention;

Fig. 2 is a rear view of the said cabinet; and

Fig. 3 is a front view, partly in perspective illustrating the cabinet.

It should firstly be said, that although two types of cabinet are disclosed (mobile and static) the two drawings describe all the features which can be used in both or either.

Referring firstly to Fig. 1, a preferred cabinet of the invention has a body which is moulded from fibre reinforced plastics material, particularly glassfibre-reinforced acrylic plastics material. The body of the cabinet is moulded to have side walls 11, a rear wall 12 and a front wall 13. Although the cabinet is described as being generally rectangular, it can, of course, be any convenient shape. However, a rectangular shape would usually use the existing room in bathroom and/or lavatory cubicles to best effect. The front wall 13 has a generally U-shaped opening 14 which can constitute a doorway. The opening 14 can be sealed by a lightweight door 15. The door 15 is supported by rails 16 in such a relationship with the edge of the opening 14 that significant leakage does not occur if a spray of water is directed at the joint between the door and the opening. It will be appreciated that a pressure type seal is not necessary. Means can be provided on one or other side wall for storing the door 15 when it is not closing the opening 14.

The rear wall 12 terminates at a seat portion 17 beneath which is defined a recess 18 dimensioned snugly to surround and embrace a conventional lavatory pan 19. Between front portions of the wall 11 a foot well 20 is provided above a floor 21 which can be horizontal, but preferably slopes gently towards an outlet 22.

In the case of a static installation, the cabinet will be mounted securely upon the base of an existing lavatory or bathroom cubicle, or even within a specifically designed cubicle. In this case the outlet 22 will either be connected to or will discharge directly into a custom made drain outlet. Further in this case, a thermostatic mixer tap 23 will be provided connected (as indicated very schematically at 24) to existing hot and cold water supplies of the building. Mixer tap 23 will supply a flexible hose 24 connected to a manual douch or shower head 25.

However, in the case of a mobile unit, wheels or castors 26 can be provided which allow the cabinet to be wheeled to a soiled person at the location of the soiling, be it at a bed or elsewhere, the person introduced into the cabinet and the cabinet then wheeled

to a lavatory cubicle or comparable cubicle for cleansing. Handles 27 assist in moving of the cabinet in this embodiment. When the use cubicle or use facility is customised, or so provided, the outlet 22 of the mobile unit can still discharge directly to a drain, or into a specially provided gridded gulley in the bathroom or other facility. However, where such a facility is not provided, (and this is best illustrated in Figs. 1 and 2) the outlet 22 can empty into a sump 28, drainable by a pump 29 and hose 30 arranged to discharge into the lavatory 19. Although in Fig. 1 the sump 28 is shown as an integral part, the sump can, in fact, be made separate and removable for cleansing.

In the case of the mobile unit, it will be appreciated that it is not practical to have the douch unit incorporated in the cabinet, and in this embodiment the tap 23 and items 24 and 25 would be omitted.

Fig. 3 shows how a wall mounted panel 31 can be provided and mount, if necessary, an electrically powered douch/shower unit 32. Such a unit 32 can be connected to pipework 33 of the establishment (perhaps a single cold supply) and discharge via a hose 34 and douch head 35.

Use of the cabinet in either its static or its mobile embodiment allows heavily soiled incontinent persons to be cleansed in a manner which both facilitates the job, reduces the possibility of carers being infected due to contact with soiling material, and reduces the possibility of soiled lavatory cubicles needing to be thoroughly cleaned before re-use. After washing down, the person merely needs to be towelled and dressed before return to a ward or the like.

Of course, the invention is not limited to the foregoing and variations can be made thereto. The shape, of course, of the cabinet can be varied widely, and in the case of a brand new installation, the W.C. could, possibly, be actually incorporated within the cabinet. However, it is believed that servicing of and/or repair of the W.C. would be facilitated by the use of a cabinet which could relatively easily be moved. Of course, a portion of one of the side walls could perhaps be omitted so that when the unit was used in a corner of a larger room access to the W.C. could be easily obtained. A closure for the aperture is probably only needed in the case of the portable version, wherein soiling material should not exit via the aperture during transport to the treatment cubicle.

Many other variations are possible within the scope of the invention. For example as mentioned above the sump may be demountable or removable. The sump could comprise a tank, with a suitable opening, or tray-like structure which fits or slides into a suitably shaped support or rack. This modification to the sump removes the need for a pump as after washing the tank or tray may be removed and tipped into a lavatory bowl.

A lip may be formed in the tank or tray so as to facilitate pouring. Similarly the tray may have handles

or grips to assist removal from the cabinet, lifting and pouring. The tank or tray fits under the outlet of the cabinet and collects waste water. The tank or tray may be locked into place by a suitable latch or catch and a splash seal may be incorporated around its upper rim to prevent waste water from overflowing.

Claims

1. A hygiene cabinet in the form of an enclosure having internal smooth washable surfaces, an entry door closeable in sealing relationship with the enclosure, a floor arranged to collect fluid and lead it to an outlet, structure of the enclosure being arranged to define a lower rear recess such that the enclosure can be arranged to at least partly overlie a lavatory bowl, the enclosure further having a seat disposed over the bowl, said seat having a closable aperture disposed above the lavatory bowl, a douch unit provided to allow a person within the cabinet to be cleaned by the application of water without contamination of the surroundings.
2. A unit according to claim 1 wherein means are provided to permit the unit to be transferred from a place of soiling to a place of treatment.
3. A unit according to claim 1 wherein the unit may be installed as a permanent feature in combination with an existing lavatory the lavatory being treated, thereafter as an incontinent treatment cubicle.
4. A unit according to any preceding claim wherein the enclosure can be an outlet directed to a drain below the enclosure in a circumstance where a specified facility is provided in a building, such that discharge from the cabinet passes directly to a grid drain specially provided for the purpose.
5. A unit according to any of claims 1 to 3 wherein the outlet can lead to a sump whence a pump can be provided for pumping fluid to enter the lavatory bowl for disposal.
6. A unit according to claim 4 wherein a douche unit is connected to conventional plumbing.
7. A unit according to claim 5 wherein a douche unit is temporarily connected to a water supply unit.
8. A unit according to claim 6 or 7 wherein a mixer tap is provided so as to mix hot water with cold water.

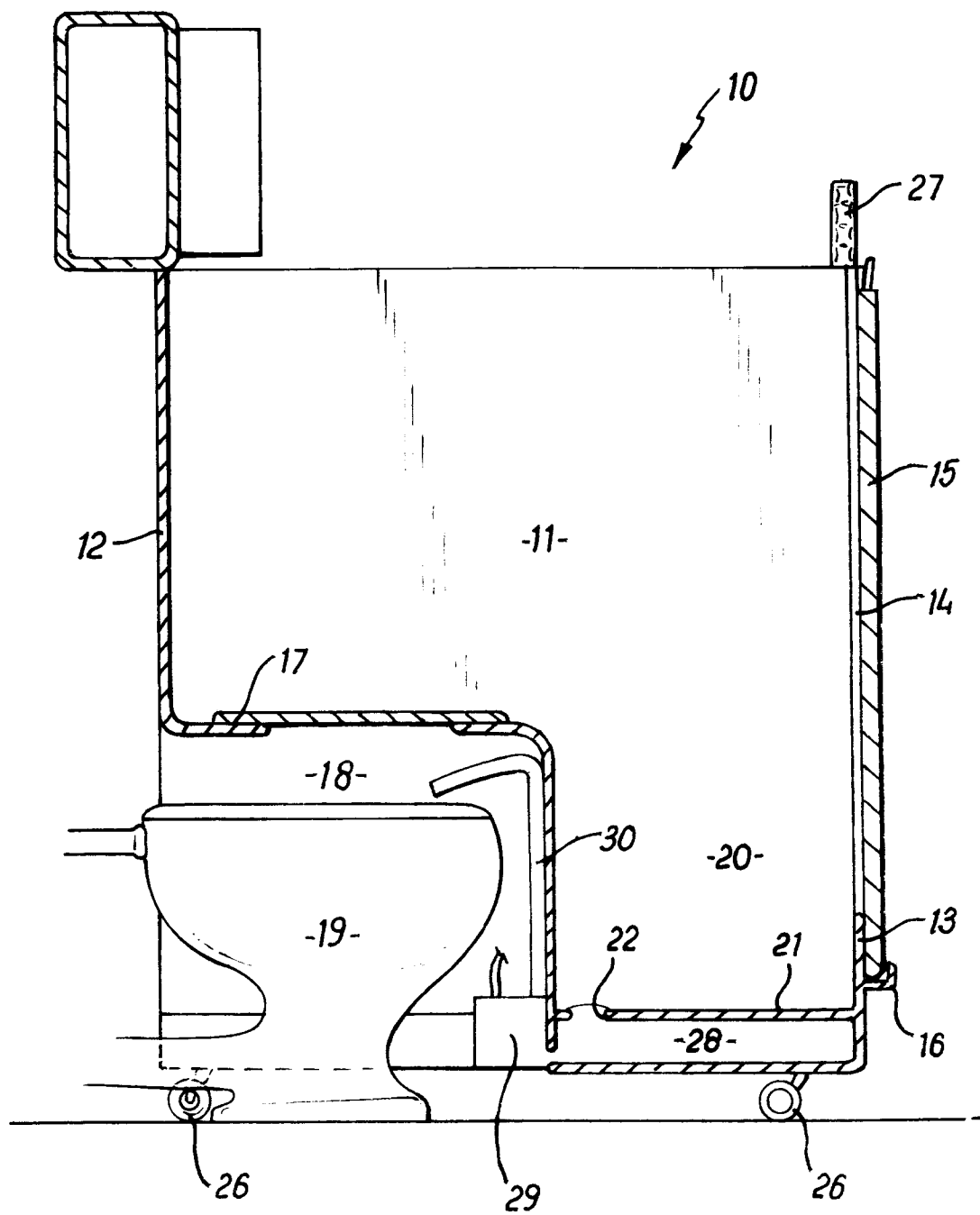


FIG. 1

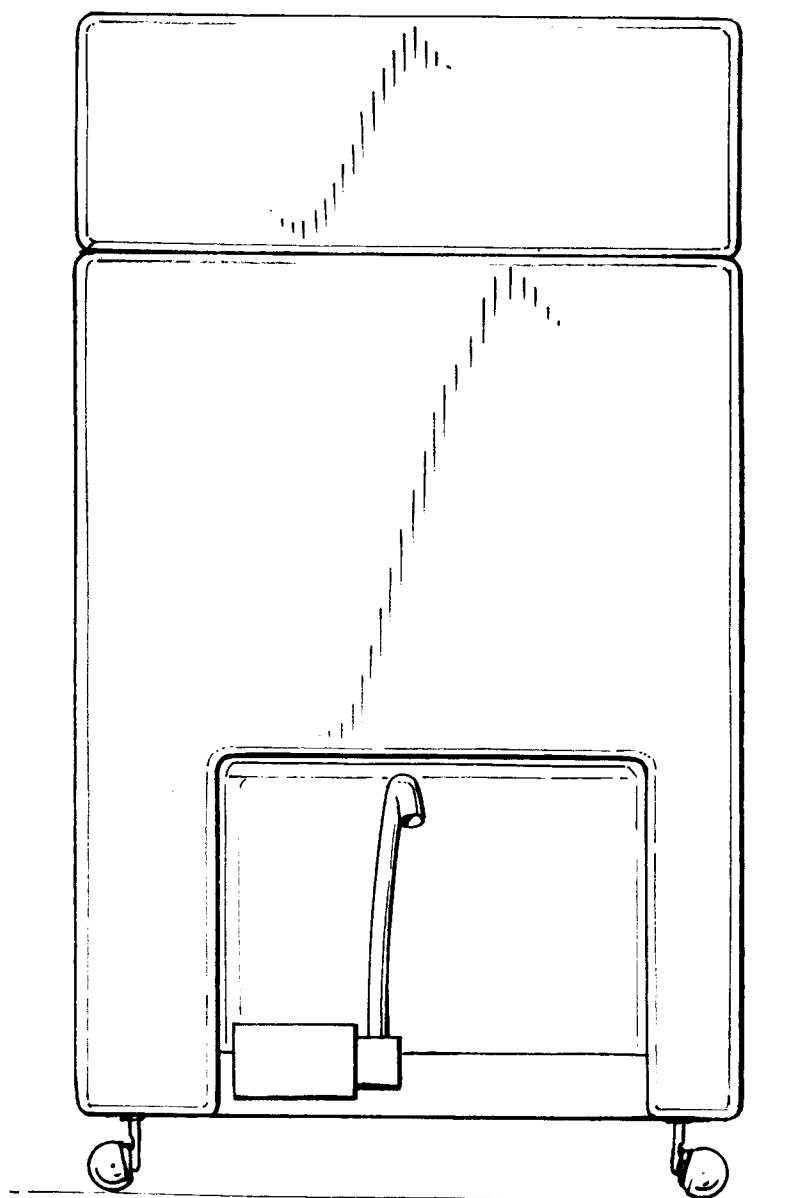


FIG. 2

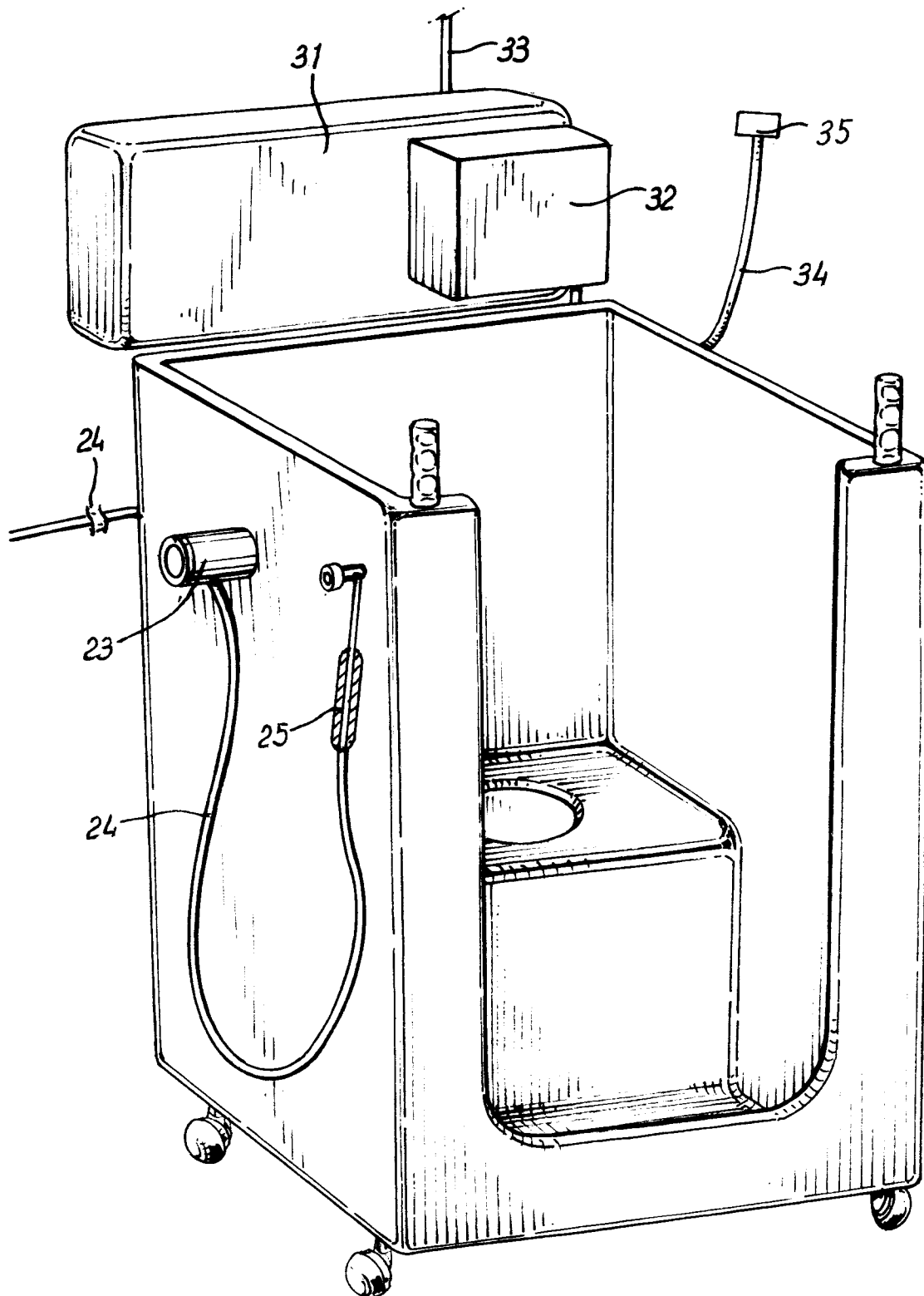


Fig. 3