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(54) **Holder for collecting waste.**

(57) A holder (1) for collecting waste, comprising a frame (4a,4b,4c) in which a waste bag can be placed, which frame is built up of at least one of vertical standard

(2), mounted on a chassis (3).

The frame forms a spatial construction which is screened on at least three sides by at least partially transparent wall parts.

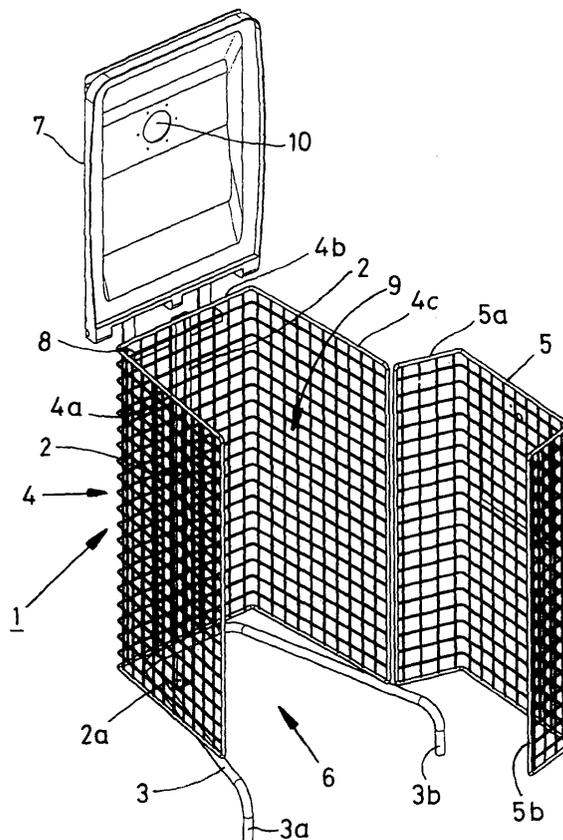


FIG. 1A

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Description

[0001] The invention relates to a holder for collecting waste, comprising a frame in which a waste bag can be placed, which frame is built up of at least one of vertical standard, which is mounted on a chassis.

[0002] Such a holder or waste container is known from European patent application No 1 083 127 A2 in the name of Hammerlit GmbH. This known holder is provided with a circular edge, around which a waste bag can be arranged. The bag is freely suspended within the frame and can thus be filled with waste products from above.

[0003] One drawback of such a construction, in which the waste bag is clamped down at the upper edge, is the fact that the waste will collect at the bottom of the waste bag, which may lead to the waste bag becoming torn.

[0004] Furthermore, such a holder is not very suitable for collecting light, voluminous waste products, such as empty soft drink bottles, also called PET bottles.

[0005] The object of the invention is to provide a holder which does not exhibit the aforesaid drawbacks.

[0006] According to the invention, the holder is to that end characterized in that the frame forms a spatial construction, which spatial construction is screened on at least three sides by at least partially transparent wall parts. As a result, the waste bag is prevented from tearing at the bottom thereof due to an accumulation of waste at that location, because the screened sides of the frame support the waste bag during the time that waste products are deposited therein.

[0007] In a specific embodiment, the wall parts are made in one piece, in which case the wall part forming the rear side of the frame may be connected to the vertical standard. In this way a construction which is stable and easy to handle is obtained.

[0008] According to the invention, the front side of the spatial construction is open so as to facilitate the placement and the removal (once filled) of the waste bags. In particular the removal of the full waste bags can be considerably improved in that, according to the invention, the distance between the two side wall parts increases from the rear side towards the front side.

[0009] In the specific embodiment of the holder according to the invention, the open front side of the spatial construction can be closed by a partially transparent further wall part for aesthetic reasons, and above all in order to prevent all kinds of vermin damaging the waste bag.

[0010] The vertical end edges of the further wall part may be flanged in that case, in order to obtain the best possible volumetric confinement of the waste bag.

[0011] In the specific embodiment, the wall parts are made of a metal mesh material or of a transparent sheet material. This makes it possible in particular to check the degree to which the waste bag is filled.

[0012] In another embodiment, the upper side and the

bottom side of the spatial construction are open, and the upper side can be closed by means of a lid which is hinged to the frame, which lid may be provided with at least one opening.

[0013] In the specific embodiment of the holder according to the invention, the standard rests on the ground. This provides a stable placement of the holder on the supporting surface, which stable placement can furthermore be considerably improved in that, according to another aspect of the invention, the frame comprises a tube connected to the vertical standard, which tube has bent ends that rest on the ground.

[0014] The holder may be movable on wheels.

[0015] According to the invention, in order to prevent the waste bag sagging and tearing, the chassis may be provided with a horizontally extending supporting plate. The supporting plate may function as a receptacle or a drip tray for catching liquid leaking from the waste bag (for example from empty soft drink holders), in that the supporting plate is provided with upright edges.

[0016] The invention will now be explained in more detail with reference to the drawing, in which:

Figures 1A-1B show a first embodiment of a holder according to the invention.

[0017] The embodiment of a holder according to the invention that is shown in Figure 1A is made up of a standard 2, which rests on a supporting surface with its end 2a. A chassis 3 is connected to the standard near the end 2a, which chassis is embodied as a tubular frame, whose ends 3ab are bent, thus forming two legs.

[0018] The construction of the holder as shown in Figure 1A thus rests on the supporting surface with three points of support. Also other constructions, in which the holder rests on the supporting surface with four or more points of support are conceivable, however. The points of support may be provided with wheels (castors), which make it possible to move from the (full) holder over the supporting surface.

[0019] According to the invention, the frame forms a spatial construction, which spatial construction is screened by wall parts 4a-4c on at least three sides 4a, 4b and 4c. The wall parts are at least partially open or transparent, and more in particular they are made of a metal mesh material, so that is possible to see the interior of the holder through the wall parts 4a-4c. In another embodiment, a transparent plate material may be used. A waste bag may be arranged round the upper edge of the wall parts 4a-4c, which waste bag will subsequently be freely suspended in the space 9 screened by the wall parts 4a-4c. Thus it is possible to check the degree to which the waste bag is filled through the open wall parts 4a-4c in connection with the possible replacement of the waste bag.

[0020] The wall part 4a-4c, which is in one piece in this embodiment, is connected to the vertical standard 2 with its wall part side 4b, so that an easily accessible

but above wall a light and stable construction is obtained.

[0021] The front side 6 of the frame is preferably open, thus enabling quick and easy placement and removal (once it is filled) of a waste bag. Thus a person need not lift the full waste bag from the holder via the open upper side. The holder according to the invention thus has an ergonomic aspect or advantage. In order to protect the waste bag against vermin, and in order to obtain an aesthetic appearance, the front side 6 of the holder can be closed by a further wall part 5, which is made of the same mesh material as used for the wall parts 4a-4c. Said further wall part 5 may be completely flat or, as shown in the embodiment of Figures 1A and 1B, be provided with flanged vertical edges 5a and 5b, so that a more volumetric confinement of the waste bag in the space 9 can be obtained.

[0022] A specific aspect of the holder that is shown in Figures 1A and 1B is the fact that the distance between the two side wall parts 4a and 4c increases from the rear side towards the front side 6. This enables easy removal of a full waste bag from the holder in forward direction by a person, without the waste bag getting wedged between the wall parts.

[0023] The holder according to the invention is in particular suitable for collecting light, voluminous waste products, such as empty soft drink bottles, also called PET bottles, whose collection requires visual inspection. The wall parts 4a-4c and 5 enable a proper, homogeneous filling of the waste bag that is present in the holder, with the waste bag and the waste products that are present therein being supported by the wall parts 4a-4c and 5. This prevents sagging and the consequent tearing of the waste bag, in contrast to the holder that is disclosed in European patent application No. 1 083 127.

[0024] In addition to that, the use of partially open wall parts, and more in particular the use of mesh material, enables visual inspection of the degree to which the waste bag present in the holder is filled, so that it can be replaced in time.

[0025] Furthermore, the holder 1 comprises a lid 7, by means of which the open upper side of the spatial construction can be covered. To that end, the lid 7 is connected to the vertical standard 2 by means of hinges 8.

[0026] As Figures 1A and 1B show, the lid 7 is provided with an opening 10, through which empty bottles can be deposited in the waste bag. This renders the holder quite suitable for collecting especially light, voluminous waste products, such as PET bottles, within the framework of a return and recycle system, which holders are in particular suitable for placement at schools or other public places where many people are present.

Claims

1. A holder for collecting waste, comprising a frame in

which a waste bag can be placed, which frame is built up of at least one of vertical standard, which is mounted on a chassis, **characterized in that** the frame forms a spatial construction, which spatial construction is screened on at least three sides by at least partially transparent wall parts.

2. A holder according to claim 1, **characterized in that** said wall parts are made in one piece.

3. A holder according to claim 1 or 2, **characterized in that** the wall part forming the rear side of the frame is connected to the vertical standard.

4. A holder according to any one or more of the preceding claims, **characterized in that** the front side of the spatial construction is open.

5. A holder according to claim 4, **characterized in that** the distance between the two side wall parts increases from the rear side towards the front side.

6. A holder according to claim 4 or 5, **characterized in that** the open front side of the spatial construction can be closed by a partially transparent further wall part.

7. A holder according to claim 6, **characterized in that** the vertical end edges of the further wall part are flanged.

8. A holder according to any one or more of the claims 1-7, **characterized in that** the wall parts are made of a metal mesh material.

9. A holder according to any one or more of the claims 1-7, **characterized in that** the wall parts are made of a transparent sheet material.

10. A holder according to any one or more of the preceding claims, **characterized in that** the upper side and the bottom side of the spatial construction are open.

11. A holder according to claim 10, **characterized in that** the upper side can be closed by means of a lid which is hinged to the frame.

12. A holder according to claim 11, **characterized in that** said lid is provided with at least one opening.

13. A holder according to any one or more of the preceding claims, **characterized in that** said standard rests on the ground.

14. A holder according to any one or more of the preceding claims, **characterized in that** the frame comprises a tube connected to the vertical stand-

ard, which tube has bent ends that rest on the ground.

15. A holder according to any one or more of the preceding claims, **characterized in that** the holder is movable on wheels. 5
16. A holder according to any one or more of the preceding claims, **characterized in that** the chassis is provided with a horizontally extending supporting plate. 10
17. A holder according to claim 16, **characterized in that** said supporting plate is provided with upright edges. 15

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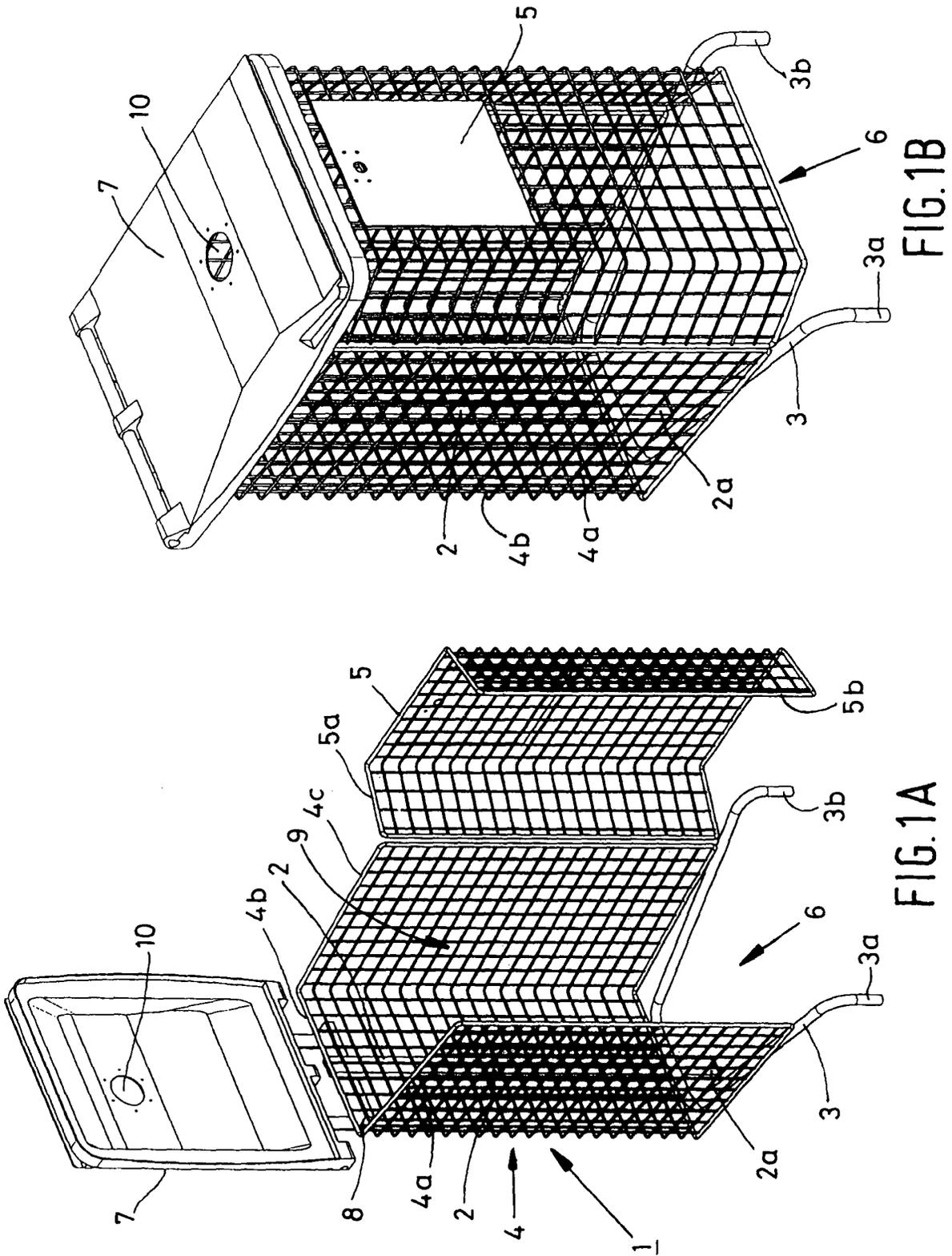
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EUROPEAN SEARCH REPORT

Application Number
EP 03 07 8111

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The present search report has been drawn up for all claims			
Place of search			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
THE HAGUE			B65F
Date of completion of the search		Examiner	
19 November 2003		Smolders, R	
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