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### (54) A container and a cover

(57) The present invention relates to a cover for a container for e.g. garbage, comprising at least a first gripping member for gripping of a sheet adjacent to a sidewall of the container to or which the gripping means engage in closed position.

Furthermore, the present invention relates to a container for e.g. garbage, comprising:

- at least one sidewall extending upwards,
- a second fastening member for fastening a cover, and
- a second gripping member for gripping of a sheet near the upper side of the sidewall.

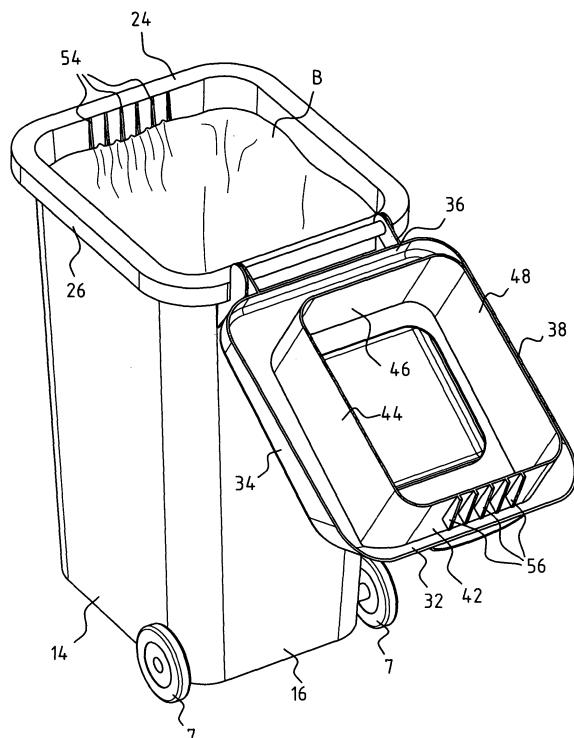


FIG. 2

## Description

**[0001]** In systems for collecting domestic and/or company refuse, frequent use is being made of collecting containers for temporary storing of the garbage at the collecting location. Subsequently, the garbage is collected by a garbage collecting service by means of garbage trucks. An advantage of the use of such containers is that a certain quantity of garbage can be temporarily stored and can be offered to the garbage collecting service in a practical manner. The garbage trucks are adapted to the use of the containers by means of lifting devices for lifting the containers and the garbage can therefore be transferred into the garbage truck without manpower. A known disadvantage of such containers is that they get dirty during use.

**[0002]** In order to improve the known garbage containers at least with regard to this aspect, the present invention provides a cover for a container for e.g. garbage, comprising at least a first gripping member for gripping of a sheet adjacent to a sidewall of the container to or which the gripping means engage in closed position.

**[0003]** In the application of collecting organic waste, the use of using a paper sheet, which is in a further embodiment part of a sack, has for example a positive effect on the composting of the garbage. Moreover, Use of this cover enables applying sacks in garbage containers for preventing or diminishing the becoming dirty of the inner side of the container. In a first preferred embodiment the first gripping member comprises at least one wall that reaches out from the rim or the wall of the cover when the cover is in the closed state on the container. Preferably the wall of the gripping member comprises ribs for clasping the sack.

**[0004]** These embodiments have as an advantage that they clasp a sack that is placed in an empty container, such that sagging out of the sack is prevented. Furthermore, a system applying the sacks is more comfortable in use because the containers are cleaner and are therefore less smelly and need less cleaning.

**[0005]** In a further preferred embodiment the cover comprises a lid for allowing access to the container in which the cover can remain closed. Such a lid offers several advantages. An advantage is that the relatively heavy and large cover is more difficult to open than a relatively small lid. A further advantage is that the clasping of the sack remains while adding garbage to the sack.

**[0006]** Preferably the lid is hingeably mounted to the cover at the opposite side of the fastening member. Such an embodiment has as an advantage that garbage can be added from the side where the wheels are. While placing the container in e.g. a barn or garage or under a side shelter, the container can in a very simple manner be ridden against a wall or into an alcove while the wheels are at the side of the user. In this way the placing and moving of the container is simpler than in the way

that the wheels are directed towards the wall, because garbage needs to be added by means of the cover while using the known containers. A container with a cover and a lid according to the present invention can simply

5 be placed with the wheels towards the user, such as is described in the above, where after garbage can be added by means of the small lid that is directed towards the user. In addition the lid remains in contact with the cover during opening of the cover by means of gravity. An unexpected slamming open of the lid is prevented because of this.

**[0007]** Preferably the lid comprises ventilation openings. By using ventilation openings, liquid from the garbage can evaporate. Furthermore, the application of 15 such ventilation openings prevents unwelcome odours.

**[0008]** For the opening of the lid, at least one handle is provided. Furthermore, the lid is preferably provided with a handle. The handle on the lid has, while it is designed as such that it is recognisable as such, the advantage that a user of a container will recognise that the lid is operable from this side, although the container is placed with the wheels and the first fastening member towards him. The container allows for two operable sides for adding garbage.

20 **[0009]** A further aspect of the present invention concerns a container for e.g. garbage, comprising:

- a bottom wall and at least a there from extending side wall,
- 30 - a second fastening member for fastening a cover, and
- a second gripping member for gripping a sheet near the upper side of the side wall.

35 **[0010]** Such a container has at least the advantages as described in the above. Furthermore, the second gripping member has the advantage that it can stabilise the sheet, which is preferably part of a sack by itself.

**[0011]** In a further preferred embodiment the second 40 gripping member comprises ribs for clasping the sack and the container furthermore comprises a cover such as described in the above. An advantage of this embodiment is that the first gripping member of the cover cooperates with the second gripping member of the container by means of which by closing of the cover the sack can be clasped in a very simple manner. Such ribs can be placed in horizontal or vertical position with regard to the normal position of use of the container. Furthermore, the ribs can have a growing or diminishing distance with 45 regard to the wall of the container seen from the above. Such orientations are furthermore possible in embodiments without ribs.

**[0012]** Furthermore, the container comprises ventilation openings for ventilating and/or drying of the contents. Such openings serve the same purpose and have the same advantages as ventilation openings in the cover such as is described in the above.

**[0013]** For draining liquids from the garbage, the con-

tainer is furthermore provided with a support grid near the bottom wall for supporting the sack. Possible superfluous liquid in the garbage, which in general is present in organic waste, can seep through the grid from the waste.

**[0014]** Furthermore, the container comprises at least one lock for locking of the container, the cover and or the lid.

**[0015]** A further aspect of the present invention concerns the use of a container such as is described in the above with liquid permeable or paper sacks.

**[0016]** Further advantages, features and details of the present invention will become clear by means of a detailed description with reference to the annexed figures, in which:

- figure 1 is a perspective view of a first embodiment according to the present invention;
- figure 2 is a perspective view of a further embodiment according to the present invention;
- figure 3 is a perspective view of a further preferred embodiment according to the present invention;
- figures 4A-C are representations of further embodiments along the line IV-IV of figure 3.

**[0017]** A first embodiment (fig. 1) according to the present invention concerns a waste container 2 with a cover 4 that is attached to the container 2 by means of a hinge 6 that is integrated with a handle 8.

**[0018]** The container comprises a bottom wall or bottom (not shown) from which four sidewalls 12, 14, 16, 18 that are each connected by means of bended corners, extend until the upper rim 24. Around upper rim 24 a gripper ridge 26 extends downward that serves as reinforcement and as a gripping means for a garbage truck. The front wall furthermore comprises a niche 22.

**[0019]** The cover 4 comprises an upper wall 40 as well as four sidewalls 32, 34, 36, 38 that extend downward from the top wall. The top wall is somewhat tilted towards the rear of the container. This feature is inviting to the user for approaching the container from the rear for adding waste.

**[0020]** In figure 2 a sack B is shown that is place able in the container 2. Alike parts in several embodiments of this description will be referred to with alike reference numerals. At the inner side of wall 12, ribs 54 for clasping are fitted. These ribs extend in a widening way seen from the above. These clasping ribs serve to the fixation of the sack B in the container during use thereof. In case the container is emptied and will be used again, the user places a sack in the container. The user takes good notice that the sack is positioned well for clasping by means of the ribs at the upper side. Thereafter, the user pivots the cover towards the closed position by means of which the sack will be clasped against the ribs 54. In the present embodiment this is achieved by means of the clasping ribs 56. Furthermore, in the present embodiment the ribs 56 extend between the ribs 54 by means

of which the sack between the ribs 54 and 56 gets a zigzag pattern. Such a pattern increases the friction force between the sack and the ribs from both sides.

**[0021]** In a further embodiment (fig. 4C) the ribs 54, 56 are alternately positioned in a similar manner as in the previous embodiment. In this embodiment the ribs 58 are, however, somewhat overlapping (see broken line 59). By means of this the sack is therefore pushed in a deeper zigzag shape than in the previous embodiment. The friction between the ribs and the sack will therefore be larger, so the sack will be fixed more firmly. In a further embodiment (fig. 4C), the ribs 54, 56 are positioned opposite each other, because of which the sack is actually clasped between the two opposite ribs.

15 This also enables a firm fixation of the sack.

**[0022]** The gripping means or ribs can be fitted to several and/or different sides of both the container and the cover in suitable embodiments. Also gripping means can be placed only at the cover or only at the container.

**[0023]** In a further embodiment (fig. 3) a grid 64 is present at the underside of the container 4 which is supported by grid support 62. A liquid permeable sack that is positioned on the grid enables that liquid seeps from moist garbage and accumulates in the space below the grid 64. Owing to this the remaining garbage will have a lower weight. Such a lower weight is especially advantageous during hauling of the waste by means of e.g. a garbage truck.

**[0024]** Containers for use with the present invention 30 preferably have a volume between 40 and 1000 litres. More specifically, containers for disposing of domestic waste have a volume of between 80 and 300 litres. The sack is preferably of a paper-like material or a fibre reinforced sort of paper. Preferably, the sack is liquid permeable when the embodiment with the grid is being used for draining of liquid. Furthermore, the containers and the covers should comply with standard sizes for disposal of garbage in the usual systems that are applying standardised garbage trucks and the lifting devices 35 that are fitted thereto.

**[0025]** For ventilating the garbage, the ventilation 40 openings are preferably at most 6 mm, which prevents mice from access to the container. Such ventilation prevents condensation of moist that is present. The ventilation openings are preferably present at two sides of the container.

**[0026]** In a further embodiment the lid is made of a transparent material which enables observing the present garbage without opening the lid. The garbage 50 system that is described in the above can be supplemented by kitchen garbage bins in which the garbage to be collected in the garbage container is pre-gathered by means of e.g. relatively small paper sacks. At the underside of such a kitchen garbage system preferably also a leaking grid is provided with e.g. a leakage reservoir underneath. A holder for the kitchen garbage bin is preferably made of a plastic that is suitable for cleaning in a (domestic) dishwasher.

**[0027]** The person skilled in the art will appreciate that several embodiments can be interpreted from the aspects described in the above by freely combining mutually usable aspects. The requested rights are defined by the annexed claims.

### Claims

1. Cover for a container for e.g. garbage, comprising at least a first gripping member for gripping of a sheet adjacent to a sidewall of the container to or which the gripping means engage in closed position.

2. Cover according to claim 1 in which the first gripping member comprises at least one wall that extends from the rim or the wall into the container when the cover is in a closed position on the container.

3. Cover according to claim 1 or 2 in which the wall of the gripping member is provided with ribs for clasping the sheet.

4. Cover according to claim 1, 2 or 3 comprising a lid for allowing access to the container while the cover remains closed.

5. Cover according to any of the foregoing claims comprising a first fastening member for fastening the cover to a container, in which the lid is hingeably attached to the cover at the opposite side of the fastening member.

6. Cover according to any of the foregoing claims comprising ventilation openings. 35

7. Cover according to any of the foregoing claims comprising a handle for the cover. 40

8. Cover according to any of the foregoing claims comprising a handle for the lid.

9. Container for e.g. garbage, comprising:

- at least one sidewall extending upwards,
- a second fastening member for fastening a cover, and
- a second gripping member for gripping of a sheet near the upper side of the sidewall.

10. Container according to claim 9 in which the second gripping member comprises ribs for clasping of the sack and in which the container comprises a cover according to one or more of the claims 1-8. 55

11. Container according to one or more of the foregoing claims 9-10, comprising a cover according to one

or more of the foregoing claims in which the first and second gripping means cooperate for clasping a sack.

5 12. Container according to any of the foregoing claims 9-11 comprising ventilation openings for ventilating and/or drying of the contents.

10 13. Container according to any of the foregoing claims 9-12 comprising a support grid near the bottom wall for supporting of the sack.

15 14. Container according to any of the foregoing claims 9-12 comprises at least one lock for locking of the container, the cover and or the lid.

15 15. Use of a container according to claims 9-14 in a garbage collecting system.

20 16. Use of a container according to claims 9-14 using liquid permeable or paper sacks.

15 17. Use of a container according to claims 9-14 using plastic or biodegradable plastic sacks.

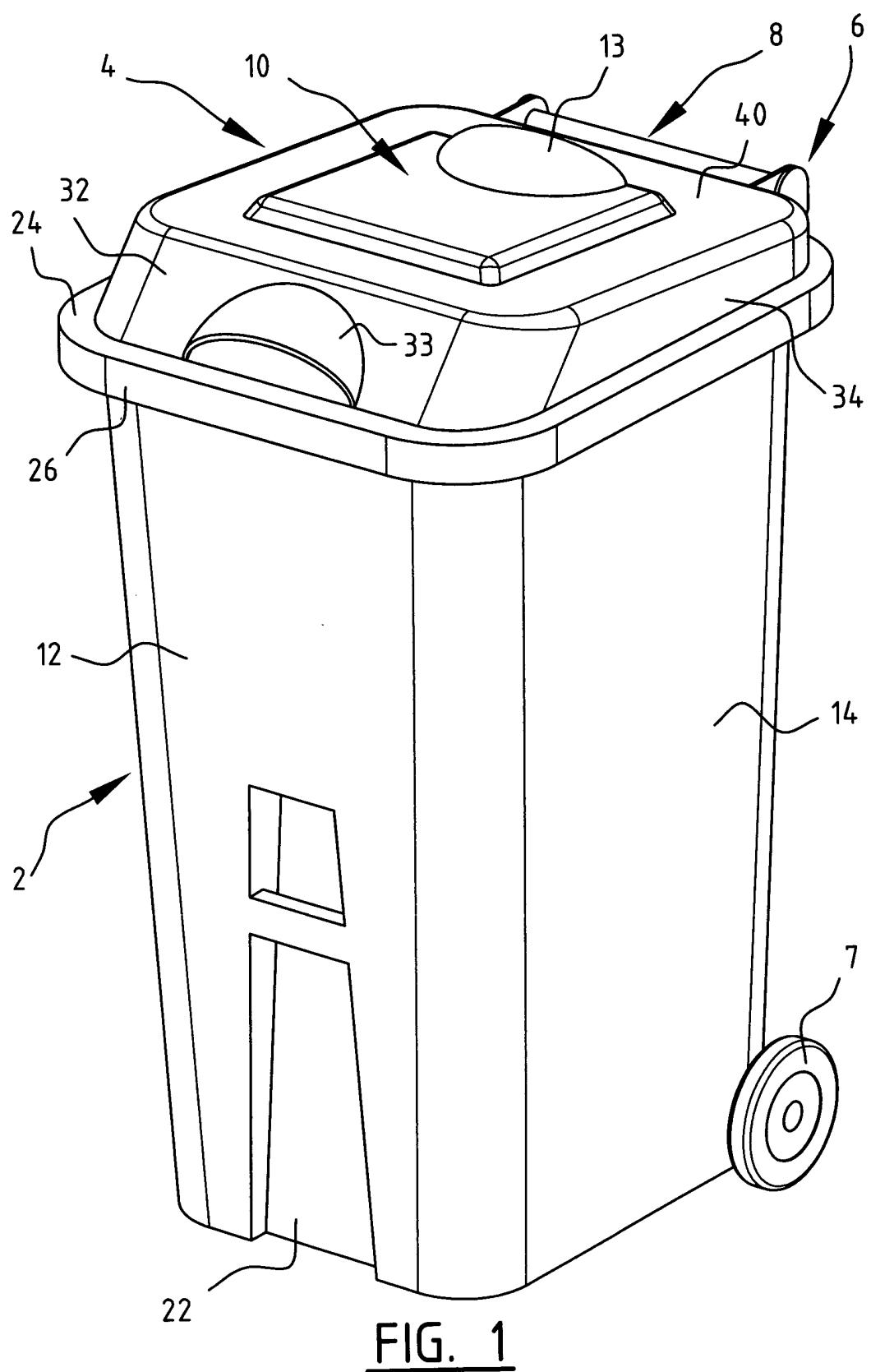
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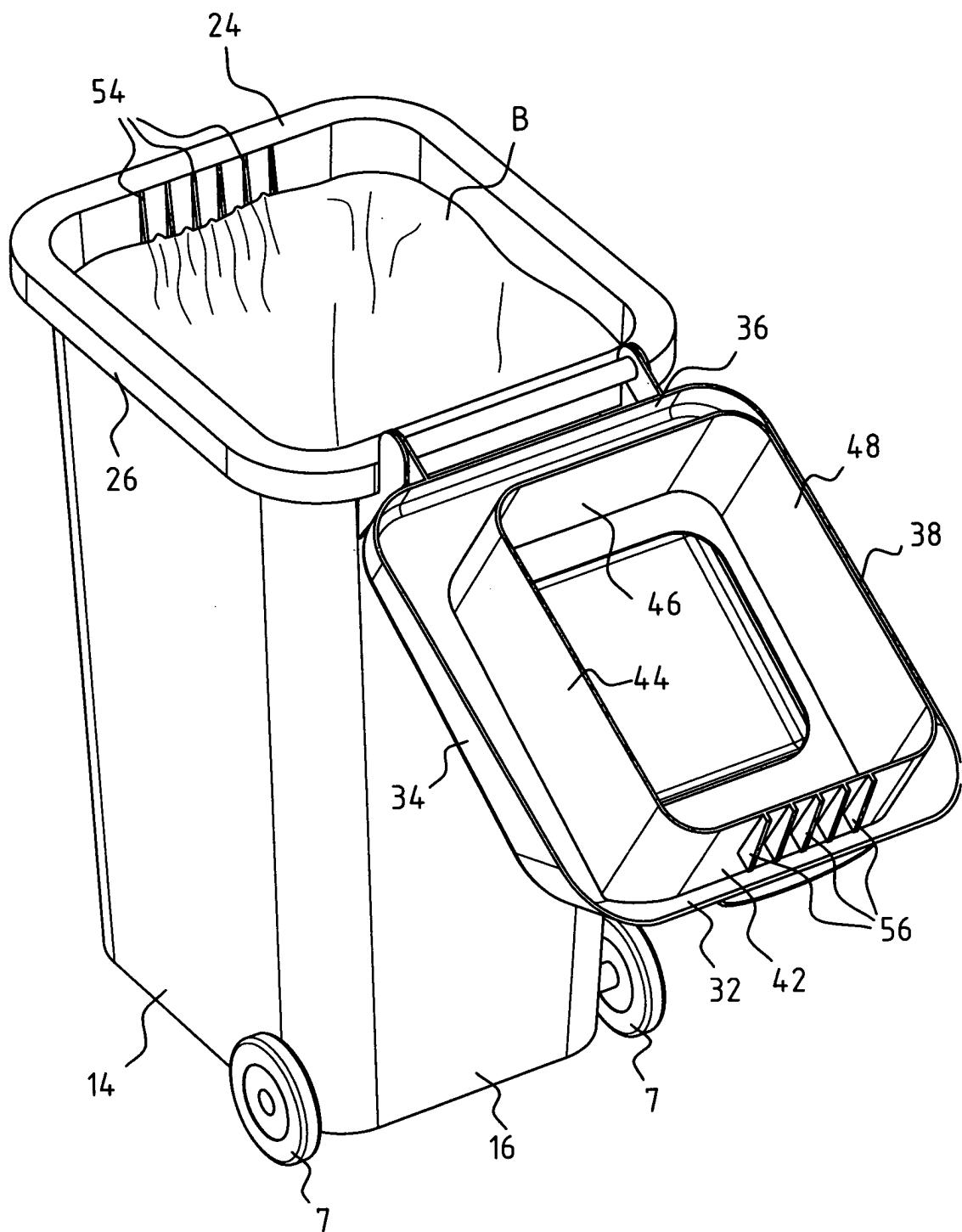


FIG. 2

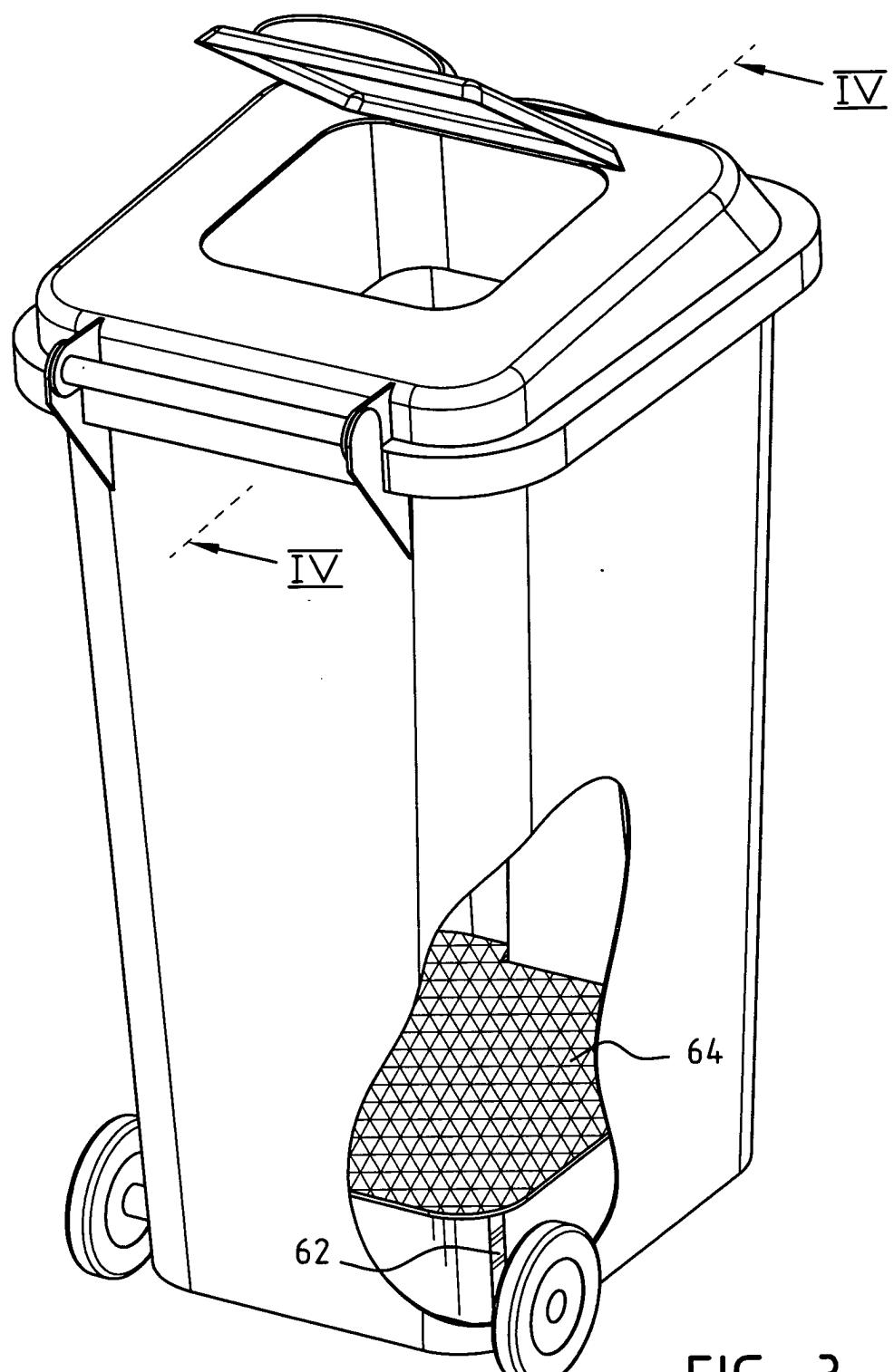
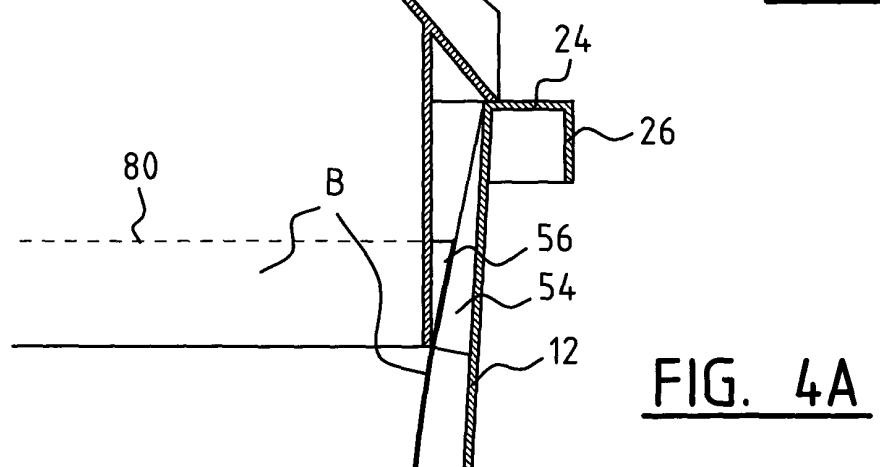
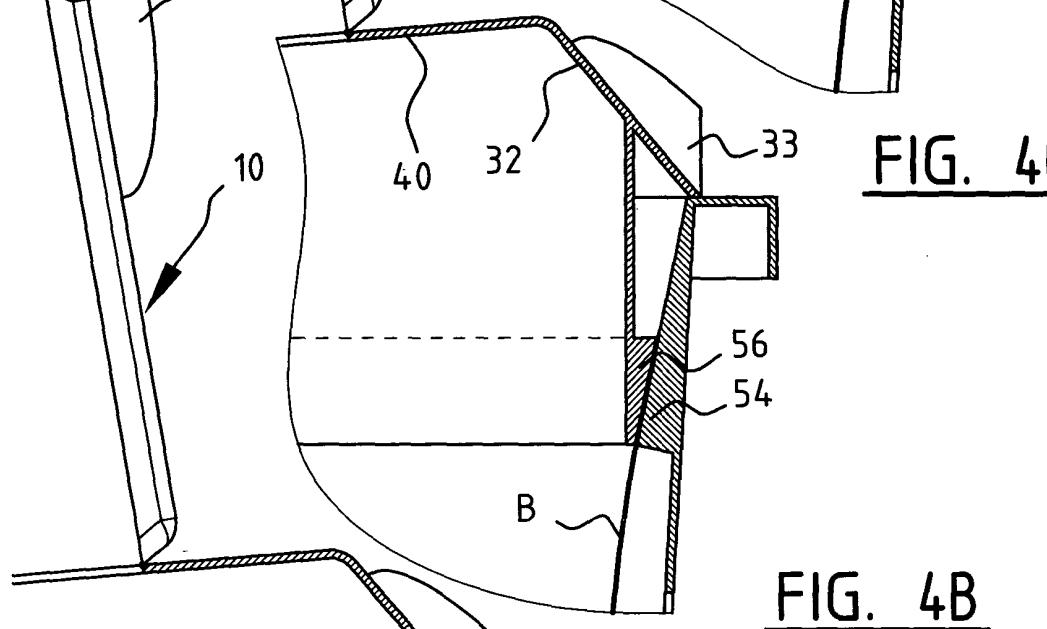
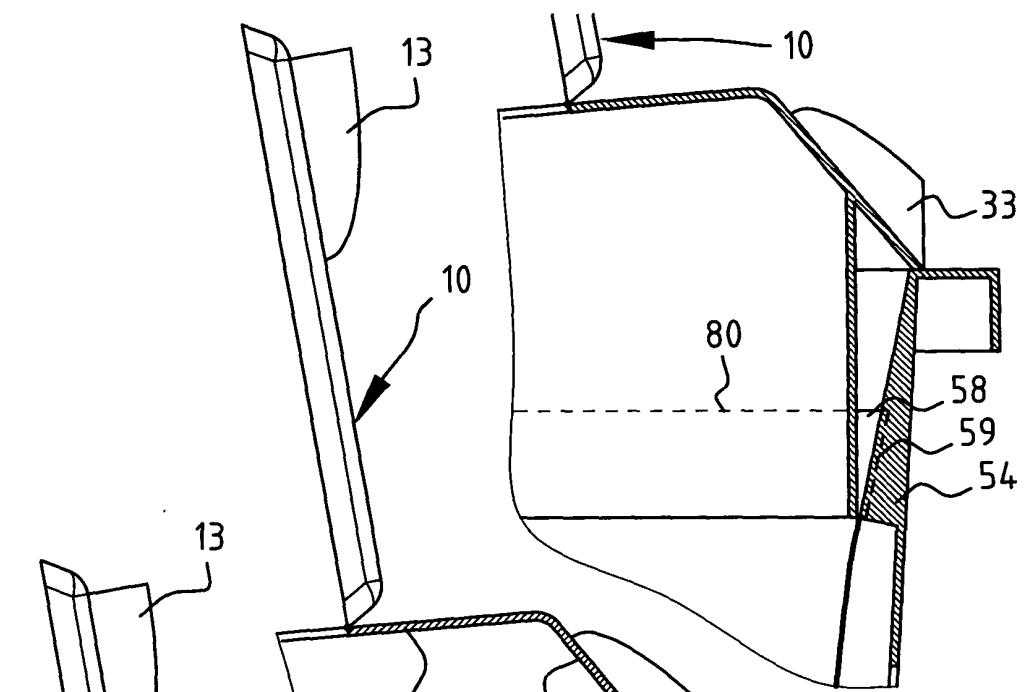


FIG. 3





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Application Number  
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The Hague		16 August 2004	Wartenhorst, F
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