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(54)

Waste container

(57)

The present invention relates to a waste container (10), said waste container (10) comprising a container body (11) and a container lid (12) for closing the container body (11), said container body (11) being arranged for separately picking up at least two waste fractions. The container lid (12) comprises at least two charging openings (17) for waste fractions, whereby one additional lid element (18,19,20,21) is provided for each charging opening (17). The additional lid elements (18,19,20,21) are mounted on the container lid (12).

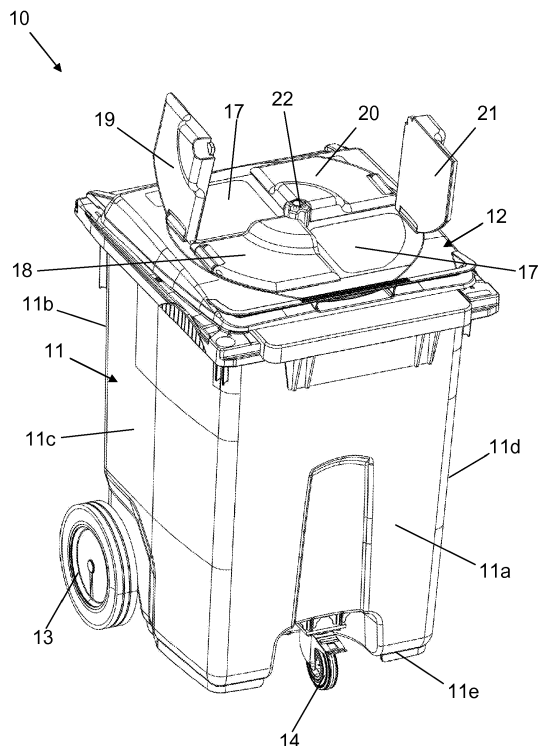


Fig. 1

Description

[0001] The present invention relates to a waste container, said waste container comprising a container body and a container lid for closing the container body said container body being adapted for separately picking up at least two waste fractions.

[0002] Such waste containers are well known in prior art. For example, DE 35 31 554 A1 describes a waste container, said waste container comprising a container body and a container lid for closing the container body. The interior space of the container body can be separated into at least two compartments each compartment being separated from the other(s). Each compartment is closed by its own compartment lid. Thus, the waste container comprises more than one container lid. It is a drawback of this known solution that such waste containers cannot be emptied automatically into a waste collecting vehicle, since each compartment lid is independent from the other compartment lids.

[0003] Document GB 2 447 474 A discloses a waste container with a number of compartments, said compartments being separated from one another. Each compartment is adapted for picking up a waste fraction. Each compartment is closed by its own individual compartment lid. Again, it is a drawback of such solutions, that they cannot be automatically emptied, since each compartment lid has to be handled individually and independently from the other compartment lids. Thus, such a multi compartment waste container cannot be emptied during one single work step.

[0004] It is also known in prior art, that large-scale refuse containers may comprise an additional lid within the main container lid. The whole container body is closed by a single first container lid, namely the main container lid. This first container lid comprises an additional second container lid. The waste container is charged via a charging opening, said charging opening being arranged within said first container lid. The charging opening closed per said second container lid. In such a case it is not necessary to open the single first container lid, which is generally heavy-weight, during a charging procedure. It is a drawback of this known solution, that only one waste fraction can be charged into the waste container.

[0005] It is the object of the present invention to provide a waste container, which is prevented from the above mentioned drawbacks, and which can be manufactured in constructional simple and cost-saving manner. In particular, such a waste container shall be easily charged and discharged with different waste fractions.

[0006] In accordance with the present invention, this object is solved by the waste container with the features according to independent claim 1. Additional features and details of the present invention become apparent from the dependent claims, from the description and from the drawings.

[0007] Pursuant to the present invention the object is solved by a waste container, said waste container comprising a container body and a container lid for closing

the container body, said container body being arranged or adapted for separately picking up at least two waste fractions. According to the present invention, the waste container is characterized in that the container lid comprises at least two charging openings for waste fractions, that one additional lid element is provided for each charging opening and that the additional lid elements are mounted on the container lid.

[0008] The present invention is based on the general finding that at least one charging opening is incorporated within the container lid. In particular, the container lid is the main lid or basic lid of the waste container. Those charging openings which are arranged within said container lid can be closed by additional lid elements. Those additional lid elements are allocated to those charging openings. In particular, each charging opening can be closed by its own additional lid elements. According to another embodiment, two or more charging openings can be closed by one common additional lid element. In particular each charging opening, and for example, each additional lid element, can be allocated to a waste fraction. Thus, different charging openings can be allocated to different waste fractions. Within the container body, which is closed by the first container lid, different waste fractions can be picked up separately from each other. In particular, the container lid comprises a charging opening for each waste fraction to be collected within the waste container. Each charging opening can be closed by its own lid element. In comparison to said first container lid, each lid element is an additional lid element. The charging openings are closed or can be closed via those additional lid elements. For that reason, the additional lid elements are mounted on the container lid.

[0009] The present invention is not limited to specific embodiments how the additional lid elements are arranged at the container lid. For example the additional lid elements can be pivot mounted on the container lid. In particular this can be achieved via a swivelling axis, a rotational axis, a pivot axis or the like.

[0010] In particular, a swivelling arrangement or connection is a connection that allows the connected object, the additional lid element for example, to rotate horizontally and/or vertically. In particular a swivelling connection is a kind of connection which allows the additional lid element(s) to turn round on a horizontal axis in relation to said container lid. In particular, a rotational arrangement or connection is a connection, which allows an object, the additional lid element for example, to turn around a centre or axis in a circular motion. In particular, a pivot axis is an axis consisting of a shaft that supports something that turns, for example an additional lid element.

[0011] For example, the container lid can comprise two charging openings, each charging opening being equipped with an additional lid element. Thus, two additional lid elements are provided, both additional lid elements being mounted on the container lid. According to a different embodiment, the container lid comprises four

charging openings. Four additional lid elements are provided for those four additional charging openings. Those four additional lid elements are mounted on the container lid. In the latter case, the container body can be arranged for separately picking up four waste fractions.

[0012] According to a preferred embodiment, each additional lid element can be handled independently and separately from the other additional lid elements. Thus, all charging openings within said container lid can be opened and closed independently and separately from the other charging opening. Thus, different waste fractions can be charged into said container body via said different charging openings. In addition the container lid can be opened and closed as well. For this reason the entire waste container, in particular the container body filled with waste, can be discharge into a waste collecting vehicle during a single work step.

[0013] In particular, a waste fraction is a specific sort of waste, and in particular, the lowest separable unit of a waste sort. For example, waste consists of a mix of very different material, waste fractions. Each material has its own characteristics, environmental impact, recycle and re-use options. For example, one waste fraction can be glass material, another can be paper material, another can be plastic material, another can be organic material, and so on.

[0014] Generally the present invention relates to a waste container, said waste container comprising a container body and a container lid for closing the container body said container body being arranged for separately picking up at least two waste fractions. The present invention is not limited to a specific number of waste fractions that can be picked up by said waste container. Therefore, the waste container according to the present invention can be referred to as some kind of a "multi select container". In a preferred embodiment the waste container is adapted for picking up four - preferably different - waste fractions. In such a case the waste container can be referred to as a "quattro select container".

[0015] The waste container according to the present invention comprises a container body. The container body preferably comprises a container base. A container side wall projects from said container base to the upper edge of said container body. Based on the container configuration, the waste container can comprise one single container side wall, for example if the waste container body is round shaped, oval shaped or the like. In case that the container body has a polygonal shape, for example a quadrangular shape, the container side wall comprises different, for example four, faces, which form container side wall segments. In case of a quadrangular shaped container body, the container side wall can comprise a front face, a back face and two side faces.

[0016] The container side wall and the container body border a container internal space, said internal space defining the space for picking up waste.

[0017] At the upper edge of the container side wall, which is opposite to the container base, the waste con-

tainer comprises a main container collecting opening for collecting waste. Preferably this container collecting opening is bordered by the container side wall. In such a case, the container collecting opening extends over the entire cross-section of the waste container at the upper ending of the container body.

[0018] The container body, and in particular the container collecting opening is closed or can be closed via the container lid. For this reason the container lid is arranged to/at the container body in a suitable manner. For example, the container lid can be pivot mounted on said container body. In particular this can be realised in a manner as mentioned above.

[0019] According to a preferred embodiment the container lid can be swung open and shut by use of a joint. In general, a joint is a device or a location at which two or more objects, for example the container body and the container lid make contact. Furthermore, the joint allows movement of the objects in relation to each other. For example, a joint can allow the container lid to pivot around a pivot point or pivot axis. According to the present invention the waste container is characterised in that the container lid comprises at least two charging openings for waste fractions, that one additional lid element is provided for each charging opening and that the additional lid elements are mounted on the container lid. In this case, the container lid is a first lid in form of the waste container basis lid or main lid. In comparison to this container lid, the lid elements which are mounted on said container lid are additional second lid elements.

[0020] According to a preferred embodiment, each charging opening is provided independently and separately from the other charging openings within said container lid. In such a case it is preferred that each charging opening can be closed by its own additional lid element. Therefore, each charging opening has an additional lid element allocated thereto. According to a different embodiment, each charging opening defines a portion or segment of one single charging opening. In the latter case such areas of the single charging opening which functionally define a charging opening as mentioned above, are closed or can be closed by an additional lid element accordingly. In this case, the entire single charging opening is closed or can be closed by more than one additional lid element.

[0021] The present invention is not limited to specific shapes for the additional lid elements. For example, the additional lid elements can have a polygonal shape, for example a quadrangular shape, in particular a square shape. In addition to the aforementioned configuration or according to another preferred embodiment the additional lid elements can comprise a rounded edge or a partially rounded edge. It is preferred that this rounded or partially rounded edge is this edge of the additional lid element, which is mounted to the container lid. In such a case the additional lid elements in their entirety can provide a circular shaped access to said container body. Several advantageous, but not delimiting embodiments

are described further below. It is self explaining that the additional lid elements can have different shapes as well, for example a round shape, an oval shape and the like.

[0022] Preferably, each additional lid element can comprise a handle or an area being shaped as a handle. The additional lid element can be handled, for example opened or closed via said handle. According to the design and arrangement of the additional lid elements to the container lid, the handles can be arranged or shaped at different sides of the additional lid elements. For example a handle can be arranged or shaped at a side of an additional lid element which is opposite to said side, which serves to mount the additional lid element on the container lid. According to an alternative embodiment or in addition to the aforementioned embodiment, a handle can be arranged or shaped at a side of the additional lid element, which serves to mount the additional lid element on the container lid. Such an embodiment can be realised for example, if the additional lid elements form the above mentioned circular access. In such a case, the handle is preferably arranged or shaped in a rounded portion of the side of the additional lid element whilst the additional lid element is mounted on the container lid via a non rounded portion of said side of the additional lid element. According to an alternative embodiment or in addition to the aforementioned embodiments, a handle can be arranged or shaped at a side of the additional lid element which is perpendicular to said side, which serves to mount the additional lid element on the container lid.

[0023] According to a preferred embodiment, four additional lid elements are mounted on said container lid. Via those additional lid elements access to a four-fraction-waste container can be realised.

[0024] According to a preferred embodiment the container body comprises or the waste container provides at least two, preferably four compartments for picking up different waste fractions. It is preferred that to each compartment a charging opening within the container lid is allocated. In addition to each compartment an additional lid element is allocated. However the present invention is not delimited to specific embodiments.

[0025] For example the container body can be constructed as a multi compartment container body. In such a case at least two compartments can be formed by use of a separating plate within the container body for example. The separating plate can function or can be formed as a separating wall. In case that the container body provides two compartments, a separating plate or wall can be perpendicularly incorporated within said container body. In such a case the internal space of the container body is separated into two compartments. For a container body with four compartments, two separation plates or walls can be used said plates or wall being arranged in cross-shape.

[0026] According to an alternative embodiment or in addition to the aforementioned embodiment at least one compartment is provided as an insertion container, said insertion container being placed or placeable within said

container body. Preferably, two compartments can be provided as an insertion container. Such a solution is described in WO 2004/087537 A1 for example. The insertion containers are fitted within the container body. For this reason the insertion containers are mounted on a frame. The frame itself is placed on the upper edge of the container body. In order to discharge such a waste container, the insertion containers are moved out of the container body. The insertion containers and the container body are gripped by a lifting device of a waste collecting vehicle and discharged therein.

[0027] The waste container according to the present invention preferably comprises a container body with two or more compartments for picking up different waste fractions. Furthermore, the waste container comprises a container lid for closing the container body. The container lid comprises a number of charging openings. Each waste fraction to be picked up by the waste container is allocated to a charging opening. Furthermore, each charging opening is closed or can be closed by an additional lid element. The additional lid elements are mounted on the container lid. For example, the additional lid elements are pivot mounted on the container lid. In particular, each compartment within the container body is allocated to a unique that is to its own charging opening with additional lid element.

[0028] According to a preferred embodiment the container lid is pivot mounted on the container body around a first axis; a swivelling axis, a rotational axis, a pivot axis or the like. For example, this can be realised via a pivot joint, a swivel joint, a rotational joint and the like. In particular the container lid is pivot mounted via a hinge, a knuckle joint and the like on the container body. The container lid can be swung up and shut closed. In its swung up state the container lid preferably releases the entire charging opening of the container body. In this case the waste container can be emptied in a single work step, by use of an adequate equipped waste collecting vehicle for example. Preferably the container lid can be mounted on the container body at the back face of said container body.

[0029] Preferably, each additional lid element for an additional charging opening is pivot mounted on the container lid around a second axis; a swivelling axis, a rotational axis, a pivot axis or the like. For example, this can be realised via a pivot joint, a swivel joint, a rotational joint and the like. In particular the additional lid elements are pivot mounted via a hinge, a knuckle joint and the like on the container lid. The additional lid elements can be swung up and shut closed. In its swung up state the additional lid elements preferably release the respective charging opening within the container lid. The present invention is not delimited to specific embodiments for attaching the additional lid elements to the container lid.

[0030] In a preferred embodiment, the first axis and at least one second axis are orientated in a parallel to one another. In particular, all axes, namely the first axis related to the container lid and all of the second axes related

to the additional lid elements are orientated in the pre-described manner. Thus, additional lid elements for the charging openings within the container lid can be opened forward and/or backward, that is in direction of the front face of the container body and/or in direction of the back face of the container body.

[0031] According to an alternative embodiment or in addition to the aforementioned embodiment the first axis and at least one second axis are orientated perpendicular to one another. In particular, all axes, namely the first axis related to the container lid and all of the second axes related to the additional lid elements are orientated in the pre-described manner. Thus, additional lid elements for the charging openings within the container lid can be opened sideward, that is in direction of at least one side face of the container body.

[0032] According to an alternative embodiment or in addition to the aforementioned embodiment the first axis and at least one second axis are orientated in an angle to one another. In particular, all axes, namely the first axis related to the container lid and all of the second axes related to the additional lid elements are orientated in the pre-described manner.

[0033] Preferably the waste container comprises a locking device for locking at least one additional lid element. It is the general function of the locking device that at least one additional lid element can be lockable mounted on the container lid. According to another preferred embodiment, the waste container comprises a locking device for locking the container lid as well.

[0034] In general, the locking device can be any kind of lock, catch and the like. It is the general purpose of such a locking device to lock up the additional lid element(s) and/or the container lid, in order that the additional lid element(s) and/or the container lid cannot be unintentionally opened. According to a preferred embodiment, each additional lid element can comprise its own locking device. Thus, each additional lid element can be individually and separately from the other additional lid elements locked up. According to a different embodiment, two or more additional lid elements are locked or can be locked via a single common locking device. According to yet another preferred embodiment, all additional lid elements, for example four additional lid elements are locked or can be locked via a single common locking device.

[0035] The present invention is not delimited to specific embodiments of locking devices or to a specific number of locking devices. For example, the locking device is a rotational locking device or a bayonet locking device. In particular, the locking procedure and the opening procedure can be realised that an actuating knob is pivoted, for example rotated or swivelled, around a defined angle, for example around 45 degrees. In its opening position the actuating knob releases the additional lid element(s). In such a case the additional lid element(s) as well as the actuating knob preferably comprise at least one projection, a locking nose for example. Preferably, a projec-

tion related to the actuating knob is provided above a projection related to at least one additional lid element. In closed state it is preferred that the projections of the actuating knob are located on the projections of the additional lid elements. Thus the additional lid elements are held in a closed position. In open state, by actuating the actuating knob, the projections of the actuating knob are switched in such a way, that they are located besides the projections of the additional lid elements, preferably between two adjacent projections of additional lid elements. Thus, the projections of the additional lid elements are released and the additional lid elements can be opened, swung open for example.

[0036] It is preferred that the locking device, the actuating knob for example, is related to the container lid. For example the locking device can be mounted on the container lid or it can be part of the container lid. For example, the container lid, which is the basic lid of the waste container, can comprise a number of charging opening, four charging openings for example. Preferably, the locking device is located within the centre of the cross of those charging openings. In the area of those charging opening, the container lid comprises the additional lid elements as well.

[0037] According to a preferred embodiment at least one additional lid element comprises a marking, particularly a colour marking, said marking specifying a waste fraction. For example the additional lid element can be equipped with such a marking.

[0038] It is the general purpose of such a marking to give notice to a user, what kind of waste fraction has to be charged via a respective charging opening into the container body of the waste container. For example a marking can be provided as a symbol, a label, an inscription, a sticker, an instruction plate, a tag and the like. In such a case the marking is mounted on the additional lid element or within the vicinity of an additional lid element. For example, the marking can be a colour marking. In such a case, an additional lid element can be entirely or partly equipped with such a colour marking. According to a preferred embodiment, the entire additional lid element can be held in a respective colour. In particular additional lid elements for different waste fractions are held in different colours.

[0039] According to yet another preferred embodiment, a marking can be represented by the configuration of the charging opening. In such a case the additional lid element does not have to be provided with a marking. Therefore it is also preferred that the waste container, particularly the container lid, comprises at least one marking as mentioned above.

[0040] The different types of markings can be realised separately or in any combination.

[0041] According to a preferred embodiment the waste container is a mobile waste container. Such a waste container preferably comprises a travelling gear, said travelling gear comprising a number of wheels. It is preferred that the mobile waste container comprises two wheels,

said wheels being mounted on a common first axis. According to another embodiment, each wheel can be mounted separately from the other wheel on an individual axis. According to a preferred embodiment, the mobile waste container comprises at least one additional wheel, a third wheel for example, said additional wheel being mounted on a second axis, said second axis being spaced from said first axis. The additional wheel can be mounted in such a way that it can change its rolling or running direction.

[0042] By use of such a travelling gear the waste container can be easily moved to a waste collection vehicle without any expenditure of energy. The waste container can be moved without the necessity of tilting the waste container. In addition it is much easier to align the waste container. If the first wheels on the first axis are arranged in the area of the back face of the container body, the additional wheel on the second axis is preferably arranged in the area of the front face of the container body. The additional wheel can be described as a kind of "front wheel" for manoeuvring the waste container.

[0043] According to yet another preferred embodiment, the waste container can comprise an illumination device. In particular, at least one additional lid element can be coupled with an illumination device. The present invention is not delimited to specific types of illumination devices or to a specific coupling of the illumination device or to a specific arrangement of the illumination device.

[0044] It is a general function of this illumination device that a user of the waste container can recognize in the dark which waste fraction has to be charged into which charging opening. Furthermore it can be a general function of the illumination devices to lead the user to the charging openings in order that no waste can fall alongside.

[0045] Preferably, the illumination device can comprise one or more light sources, for example a number of miniature light sources, which are arranged in a specific pattern, as a light band or light bar for example. For example, such light sources can be LEDs, OLEDs and the like.

[0046] The illumination device can be mounted on at least one additional lid element, on the outside and/or on the inside for example. Besides this, the illumination device can also be mounted on the container body, within one of the container compartments and the like. In general the illumination device can be provided anywhere inside and/or outside of the waste container.

[0047] Basically it is sufficient if one single illumination device is provided. According to a preferred embodiment, more than one illumination device is provided. For example, each additional lid element can be equipped with an illumination device.

[0048] According to a preferred embodiment, at least one illumination device can be coupled with at least one additional lid element and/or with the container lid.

[0049] For example the illumination device can be realised in a way that it can be activated and/or deactivated

automatically. According to a preferred embodiment, the illumination device comprises a switching device. Said switching device can be activated if the additional lid element is moved. Thus, if the additional lid element is moved the switching device is activated. If the additional lid element is opened, the switching device is activated and the illumination device is activated as well. For example if the additional lid is closed from its open state, the switching device is deactivated and the illumination device is deactivated as well, since the power supply is interrupted.

[0050] According to another embodiment, the illumination device can be activated and/or deactivated manually, for example by use of a switching device, by use of a light barrier and the like.

[0051] According to another preferred embodiment, at least one reflection device is provided at one outer face of the container body and/or at the outer face of the container lid and/or at the outer face of at least one additional lid element. In general such a reflection element can be provide anywhere at the outside of the waste container. The present invention is not delimited to a specific number of reflection elements or to a specific configuration of such reflection elements or to a specific location of such reflecting elements.

[0052] The reflection element can be detachably or non-detachably mounted. For example, it can be provided as a reflection strip, as a reflection foil strip, as a "cat's eye" reflector and the like. In general, a reflection element is some kind of passive illumination. The reflection element reflects impinging light beams. By use of such a reflection element it can be achieved, that the waste container is visible in the dark, for example if it is placed nearby the street for emptying reasons.

[0053] The waste container according to the present invention can preferably comprise additional features. For example, the waste container can comprise one or more elements for noise reduction. Those elements are preferably provided within the waste container, for example within the container body and/or at the inner side of the container lid and/or at the inner side of at least one additional lid element. The waste container can further comprise an additional container which is mounted on the container body or on the container lid, preferably from the outside. Such an additional container can be used for cigarettes, batteries and the like.

[0054] The waste container according to the present invention particularly comprises one or more features which become apparent from the claims, the description, the embodiments and from the drawings.

[0055] For a better understanding of the present invention, preferred embodiments of the present invention will now be described by way of an example with reference to the accompanying drawings, in which

Figures 1 and 2 depict a first embodiment of a waste container according to the present invention;

Figures 3 to 5 depict in greater detail a locking device used in the first embodiment;
 Figures 6 and 7 depict a second embodiment of a waste container according to the present invention; and
 Figures 8 and 9 depict a third embodiment of a waste container according to the present invention.

[0056] The figures depict a waste container 10, said waste container 10 comprising a container body 11 and a container lid 12. Container lid 12 represents the basic lid of waste container 10, the main container lid. Container body 11 comprises a container base 11e, a front face 11a, a back face 11b and two side faces 11c and 11d. The container base and the four faces define the container internal space.

[0057] The waste container 10 comprises two wheels 13. Furthermore, an additional, third wheel 14 is provided said wheel being some kind of a "front wheel" for manoeuvring waste container 10.

[0058] As being evident from figure 2, container lid 12 is pivot mounted on one edge of container body 12 by use of a joint along a first axis 16; a rotational axis, a swivelling axis, a pivot axis for example.

[0059] The waste container 10 serves for picking up four different waste fractions. For this reason, the internal space of container body 12 is divided into four compartments. For each waste fraction a charging opening 17 is provided. The embodiments show four charging openings 17. The charging openings 17 are arranged within container lid 12. To each charging opening 17 an additional lid element 18, 19, 20 and 21 is allocated, said additional lid elements being used to close charging openings 17. The additional lid elements 18, 19, 20 and 21 are mounted on the container lid 12.

[0060] It is preferred that the additional lid elements 18, 19, 20, 21 are pivot mounted with one of their edges 18a, 19a, 20a, 21 a on container lid 12 by use of a joint along a second axis 18b, 19b, 20b, 211 b, a rotational axis, a swivelling axis, a pivot axis for example.

[0061] In the embodiment according to figures 1 and 2 the additional lid elements 18, 19, 20, 21 comprise at their edges 18a, 19a, 20a, 21 a, by use of which they are mounted on container lid 12, a rounded area 18c, 19c, 20c, 21 c, Thus the additional lid elements 18, 19, 20, 21 in their entirety form a circular access.

[0062] It is preferred that that each additional lid element 18, 19, 20, 21, which is used to close a charging opening 17, comprises a handle or an area thereof is being shaped as a handle. The additional lid elements 18, 19, 20, 21 can be handled, for example opened or closed via said handle. According to the present embodiment the handle can be provided within the rounded area 18c, 19c, 20c, 21 c of each additional lid element 18, 19, 20, 21.

[0063] The additional lid elements 18, 19, 20, 21 can be locked by use of a common locking device 22. Such

a locking device is depicted in figures 3 to 5. For example the locking device 22 can be a rotational locking device or a bayonet locking device.

[0064] In particular, the locking procedure and the opening procedure can be realised in a way that an actuating knob 23 is pivoted, for example rotated or swivelled, around a defined angle, for example around 45 degrees around an axis 26. This is shown in figure 5. In its opening position the actuating knob 23 releases the additional lid element(s) 18, 19, 20, 21. In such a case the additional lid element(s) 18, 19, 20, 21 as well as the actuating knob 23 preferably comprise at least one projection 24, 25, a locking nose for example. Preferably, those projections 25 related to the actuating knob 23 are provided above those projections 24 related to the additional lid elements 18, 19, 20, 21. In closed state, which is depicted in figure 3, it is preferred that the projections 25 of the actuating knob 23 are located on the projections 24 of the additional lid elements 18, 19, 20, 21. Thus, the additional lid elements 18, 19, 20, 21 are held in a closed position. In open state, which is depicted in figure 4, by actuating the actuating knob 23, the projections 25 of the actuating knob 23 are switched in such a way, that they are located besides the projections 24 of the additional lid elements 18, 19, 20, 21, preferably between two adjacent projections 24 of additional lid elements 18, 19, 20, 21. Thus, the projections 24 of the additional lid elements 18, 19, 20, 21 are released and the additional lid elements 18, 19, 20, 21 can be opened, swung open for example.

[0065] It is preferred that the locking device 22, the actuating knob 23 for example, is related to the container lid 12. For example the locking device 22 can be mounted on the container lid 12 or it can be part of the container lid 12. For example, container lid 12, which is the basic lid of the waste container 10, can comprise four charging openings 17. Preferably, the locking device 22 is located within the centre of the cross of those charging openings 17.

[0066] Figures 6 and 7 depict a further embodiment according to the present invention. According to this embodiment, the additional lid elements 18, 19, 20, 21 are mounted on container lid 12 in a different way. According to this embodiment the second axes 18b, 19b, 20b, 21 b of additional lid elements 18, 19, 20, 21 are oriented in parallel to the first axis 16 of container lid 12. According to this embodiment all second axes 18b, 19b, 20b, 21 b of all additional lid elements 18, 19, 20, 21 are aligned in the same way. Thus, the additional lid elements 18, 19, 20, 21 for the charging openings 17 within the container lid 12 can be opened forward and/or backward, that is in direction of the front face 11a of the container body 11 and/or in direction of the back face 11b of the container body 11.

[0067] According to an alternative embodiment or in addition to the aforementioned embodiment it is depicted in figures 8 and 9 that the first axis 16 of container lid 12 and those second axes 18b, 19b, 20b, 21 b of those ad-

ditional lid elements 18, 19, 20, 21 are orientated perpendicular to one another. Thus, the additional lid elements 18, 19, 20, 21 for the charging openings 17 within container lid 12 can be opened sideward, that is in direction of at least one side face 11c, 11d of container body 11.

[0068] Additional features can be added to the waste container 10 according to figures 1 to 9. Such features are disclosed in the general description of the present invention above. Therefore, full reference is made to those features as well.

List of Reference Numerals

[0069]

10	Waste container
11	Container body
11a	Front face of the container body
11b	Back face of the container body
11c	Side face of the container body
11d	Side face of the container body
11e	Container base
12	Container lid
13	Wheel
14	Additional wheel
15	Joint
16	First axis
17	Charging opening
18	Lid element
18a	Edge of the lid element
18b	Second axis
18c	Rounded area
19	Lid element
19a	Edge of the lid element
19b	Second axis
19c	Rounded area

20	Lid element
20a	Edge of the lid element
20b	Second axis
20c	Rounded area
21	Lid element
21 a	Edge of the lid element
21 b	Second axis
21 c	Rounded area
22	Locking device
23	Actuating knob
24	Projection (locking nose)
25	Projection (locking nose)
25	26 Axis

Claims

1. A waste container (10), said waste container (10) comprising a container body (11) and a container lid (12) for closing the container body (11), said container body (11) being arranged for separately picking up at least two waste fractions, **characterized in that** the container lid (12) comprises at least two charging openings (17) for waste fractions, that one additional lid element (18, 19, 20, 21) is provided for each charging opening (17) and that the additional lid elements (18, 19, 20, 21) are mounted on the container lid (12).
2. The waste container according to claim 1, **characterized in that** the container body (11) is arranged for separately picking up four waste fractions, that the container lid (12) comprises four charging openings (17), that the four additional lid elements (18, 19, 20, 21) are provided for those four additional charging openings (17), and that those four additional lid elements (18, 19, 20, 21) are mounted on the container lid (12).
3. The waste container according to any one of claims 1 or 2, **characterized in that** the container body (11) comprises or that the waste container (10) provides at least two, preferably four compartments for picking up different waste fractions.
4. The waste container according to claim 3, **characterized in that** the container body (11) is arranged for separately picking up four waste fractions, that the container lid (12) comprises four charging openings (17), that the four additional lid elements (18, 19, 20, 21) are provided for those four additional charging openings (17), and that those four additional lid elements (18, 19, 20, 21) are mounted on the container lid (12).

- terized in that at least two compartments are formed by use of a separating plate within the container body (11) and/or that at least one compartment is provided as an insertion container, said insertion container being placed or placeable within said container body (11).
5. The waste container according to anyone of claims 1 to 4, **characterized in that** the container lid (12) is pivot mounted on the container body (11) around a first axis (16). 5
 6. The waste container according to anyone of claims 1 to 5, **characterized in that** each additional lid element (18, 19, 20, 21) for an additional charging opening (17) is pivot mounted on the container lid (12) around a second axis (18b, 19b, 20b, 21b). 10 15
 7. The waste container according to claim 6, as far as this claim is dependent on claim 5, **characterized in that** the first axis (16) and at least one second axis (18b, 19b, 20b, 21 b) are orientated to one another in parallel and/or perpendicularly and/or in an angle. 20 25
 8. The waste container according to anyone of claims 1 to 7, **characterized by** a locking device (22) for locking at least one additional lid element (18, 19, 20, 21). 30
 9. The waste container according to claim 8, **characterized in that** more than one additional lid element (18, 19, 20, 21), particularly that all additional lid elements are locked or can be locked via a single common locking device (22). 35
 10. The waste container according to anyone of claims 8 or 9, **characterized in that** the locking device (22) is a rotational locking device or a bayonet locking device. 40
 11. The waste container according to anyone of claims 1 to 10, **characterized in that** at least one additional lid element (18, 19, 20, 21) comprises a marking, particularly a colour marking, said marking specifying a waste fraction. 45
 12. The waste container according to anyone of claims 1 to 11, **characterized in that** the waste container (10) is a mobile waste container, and that the mobile waste container comprises two wheels (13), said wheels being mounted on a common first axis. 50
 13. The waste container according to claim 12, **characterized in that** the mobile waste container comprises at least one additional wheel (14), said additional wheel (14) being mounted on a second axis, said second axis being spaced from said first axis. 55
 14. The waste container according to anyone of claims 1 to 13, **characterized in that** at least one additional lid element (18, 19, 20, 21) is coupled with an illumination device.
 15. The waste container according to anyone of claims 1 to 14, **characterized in that** at least one reflection device is provided at one outer face of the container body (11) and/or at the outer face of the container lid (12) and/or at the outer face of at least one additional lid element (18, 19, 20, 21).

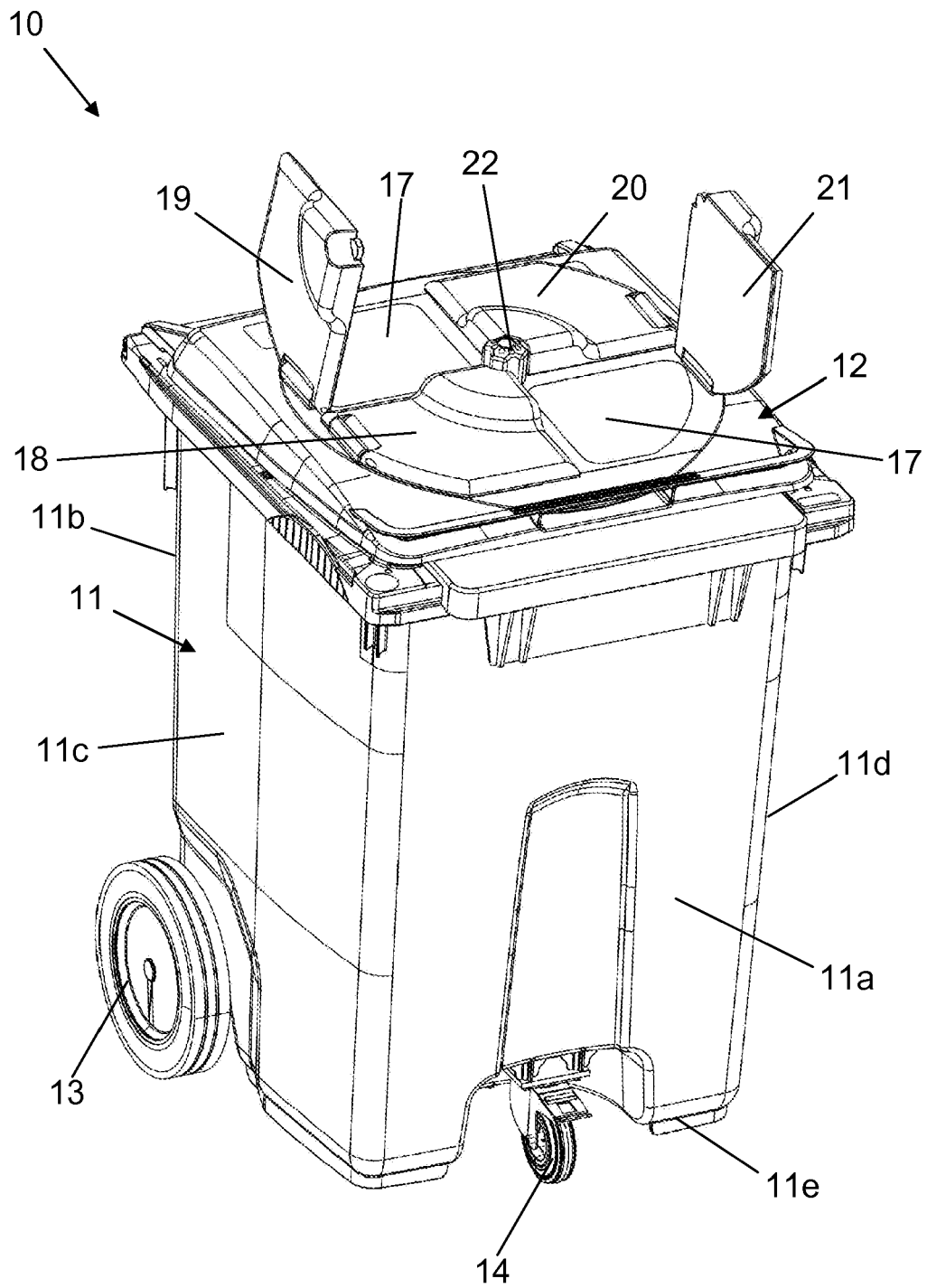


Fig. 1

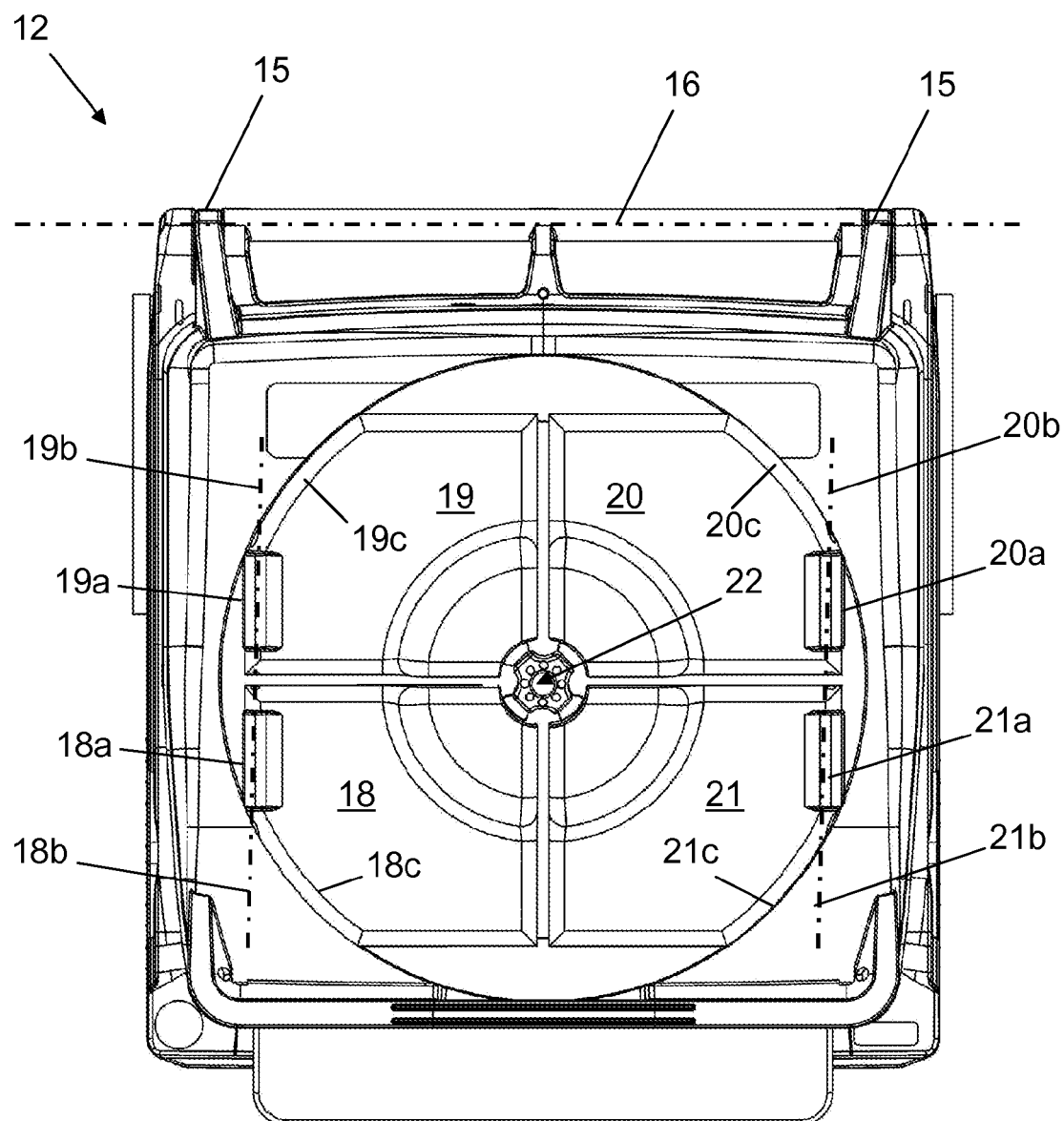


Fig. 2

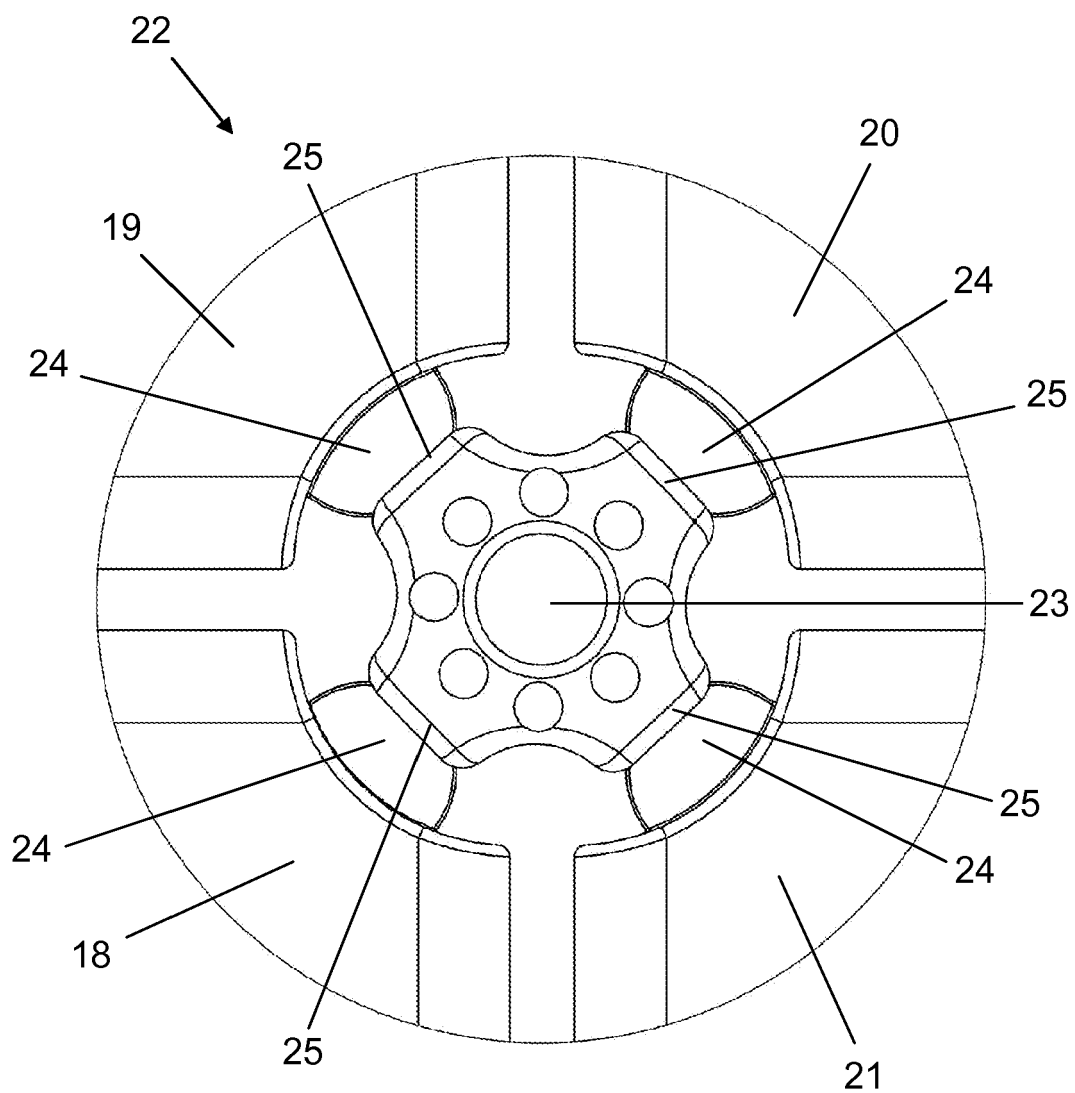


Fig. 3

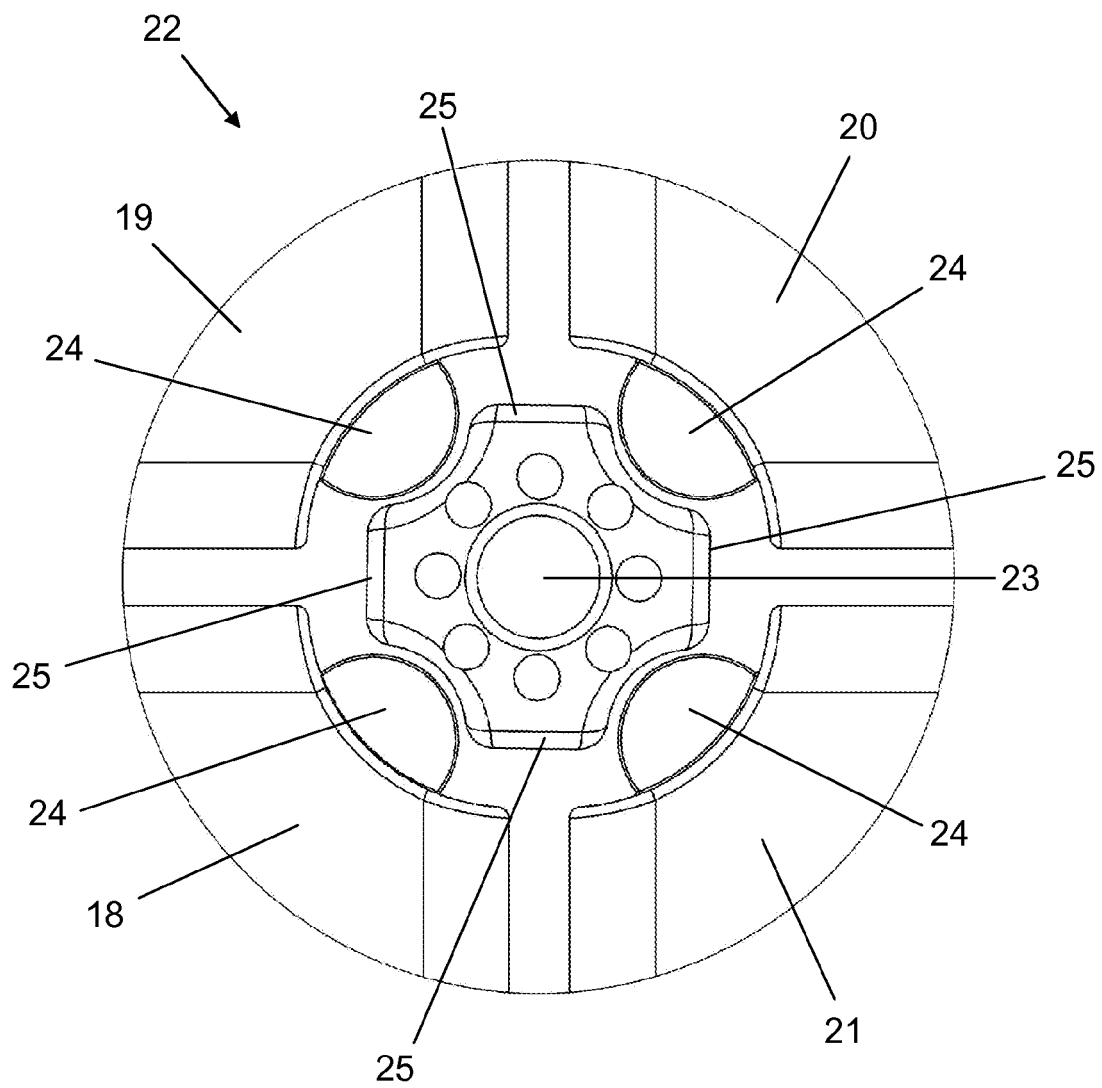


Fig. 4

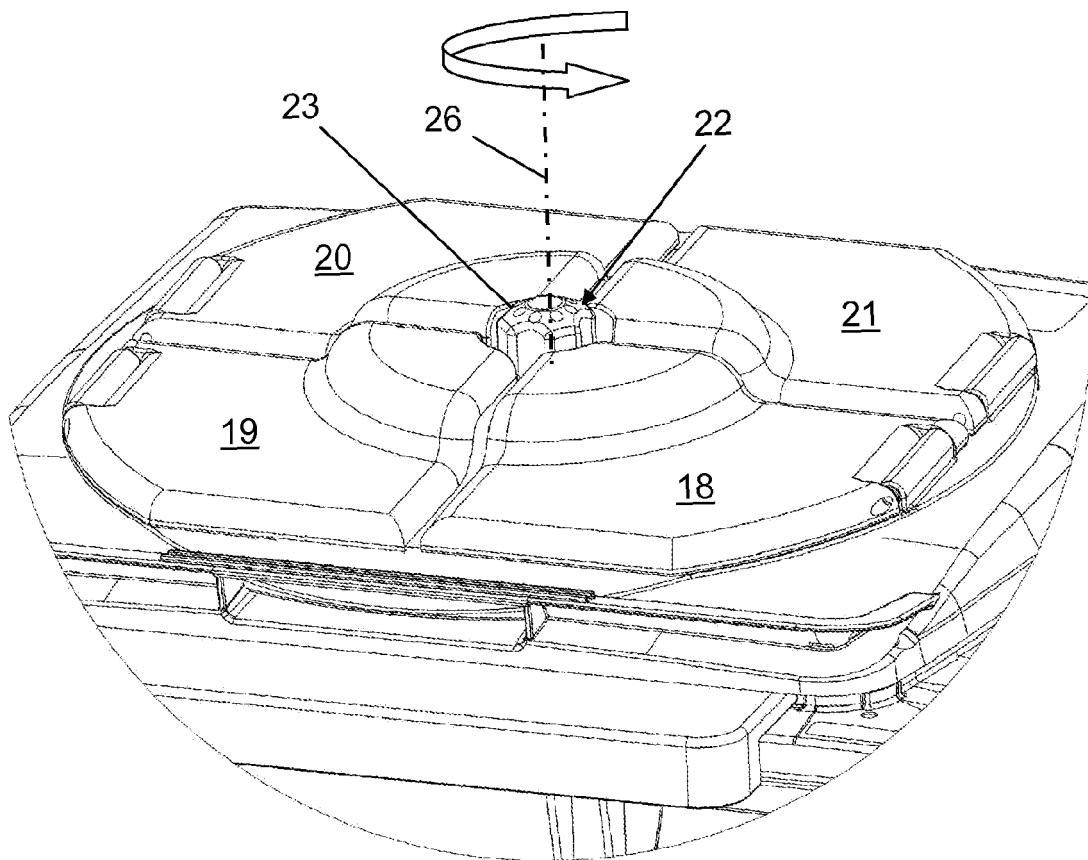


Fig. 5

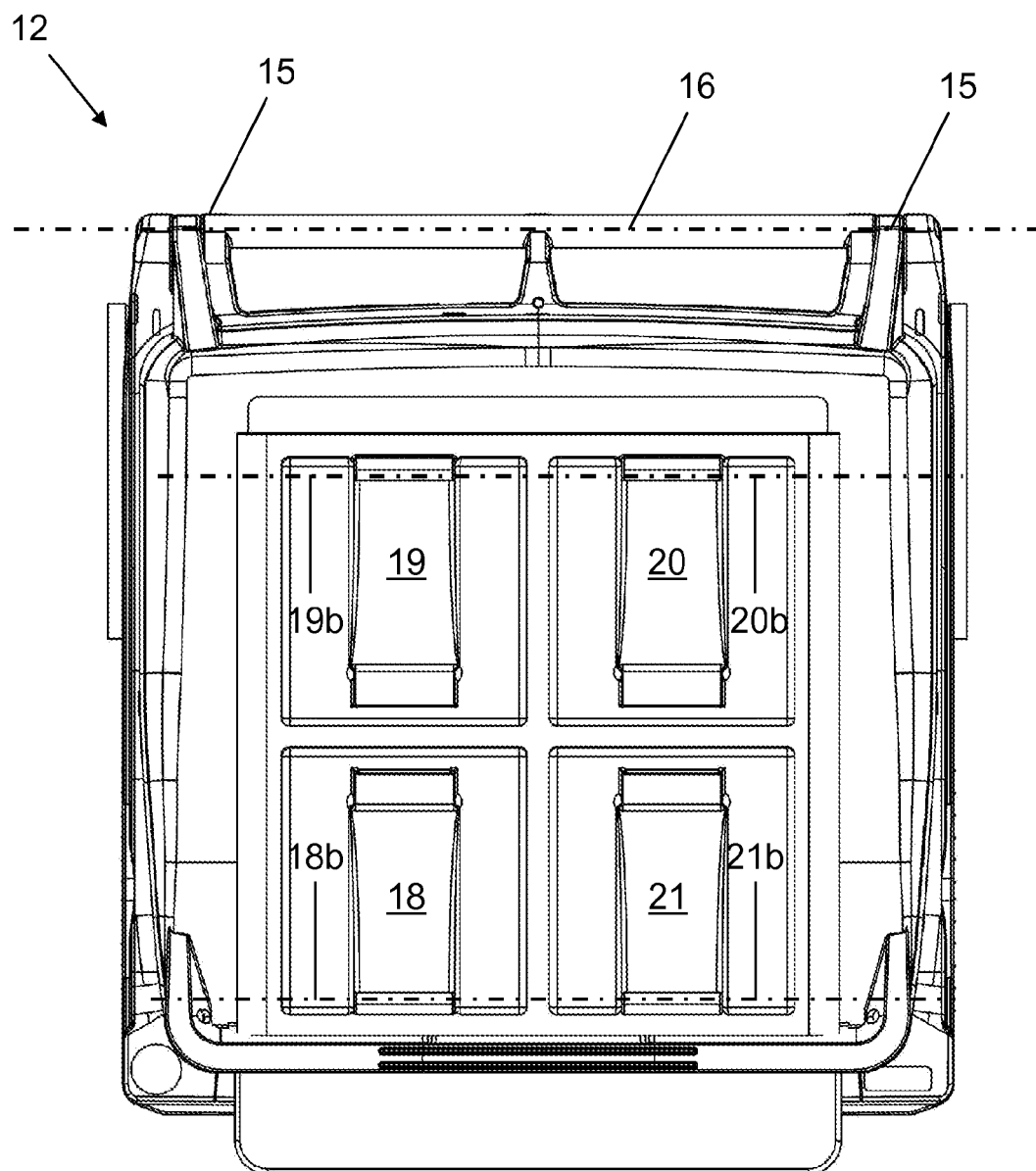


Fig. 6

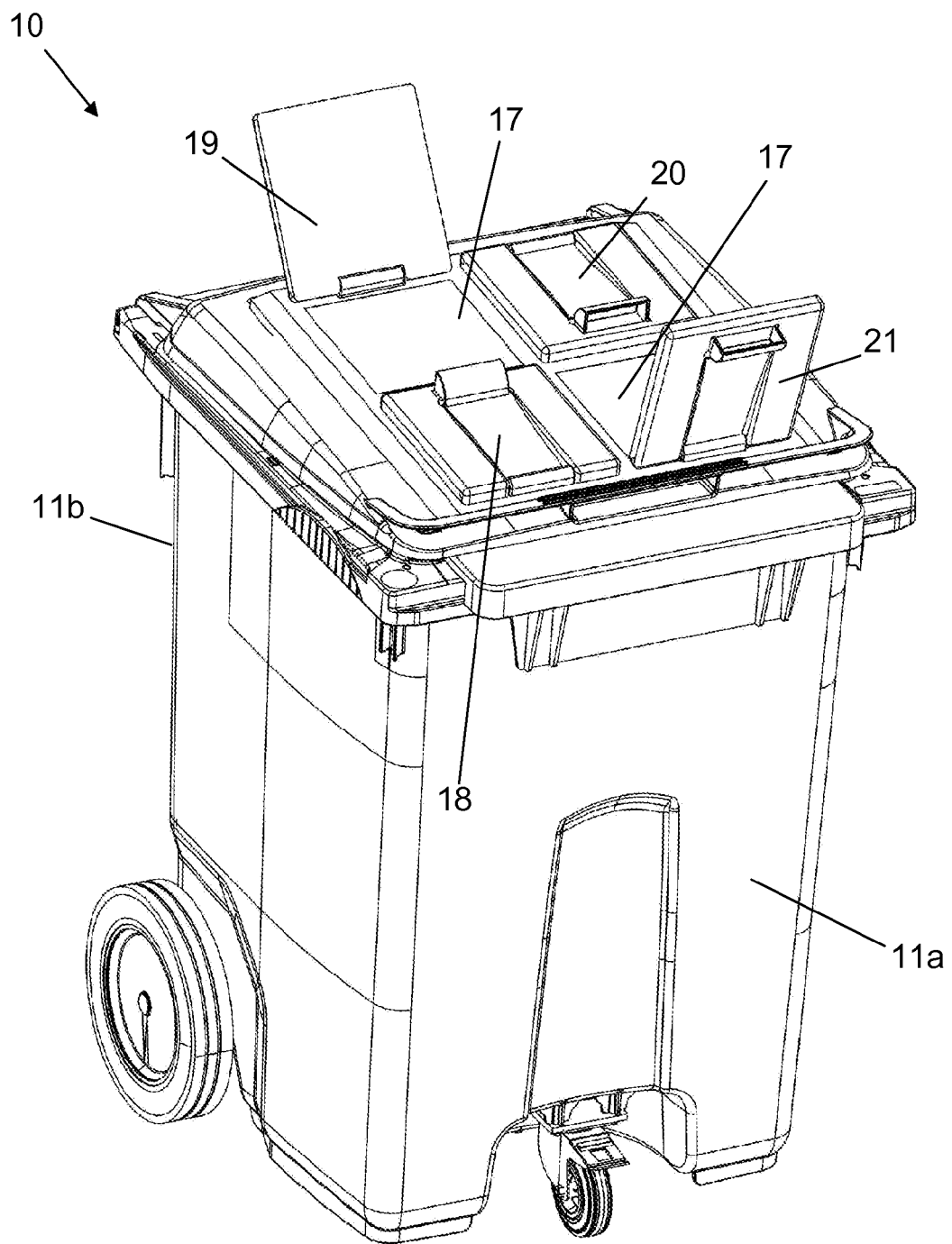


Fig. 7

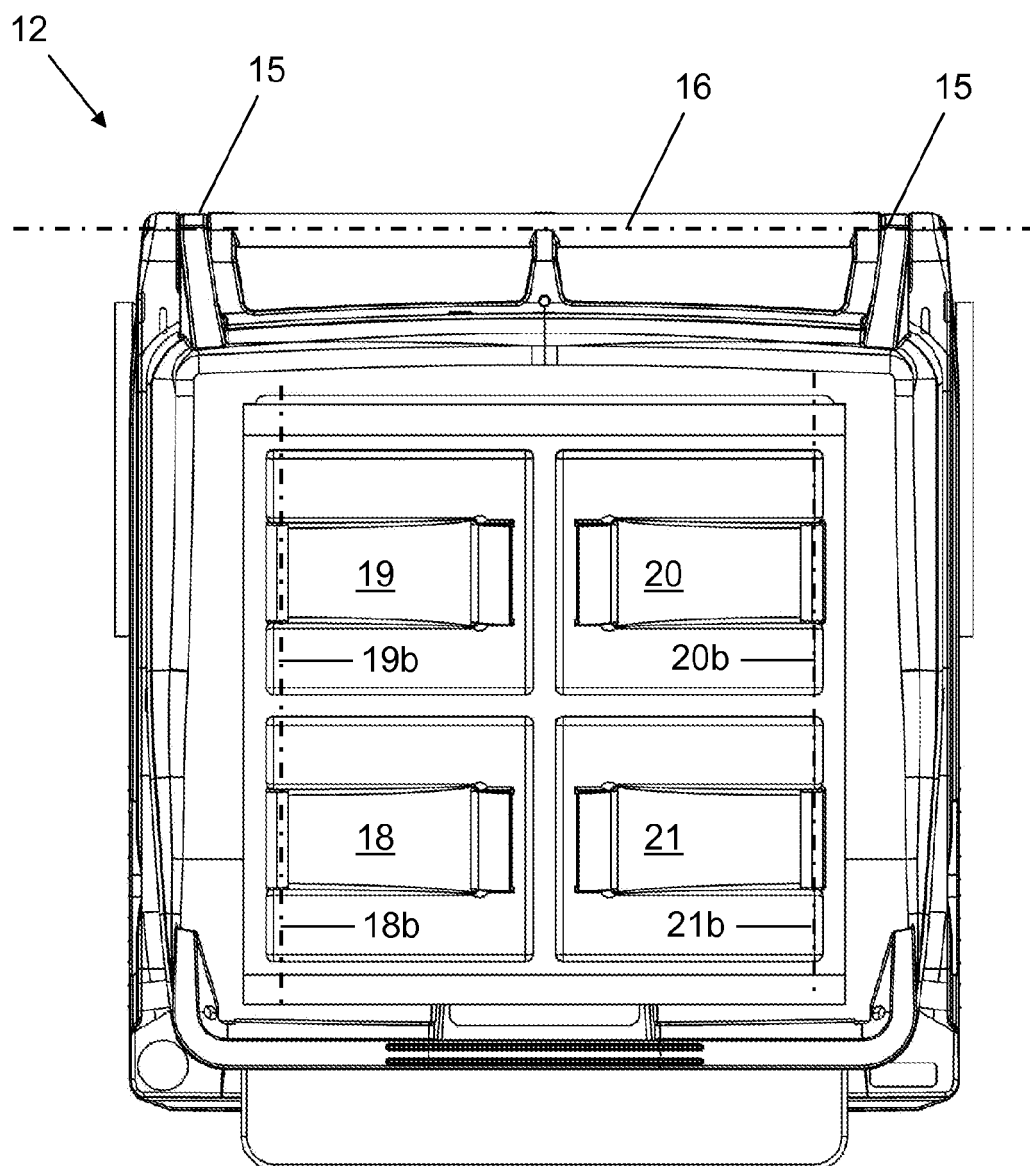


Fig. 8

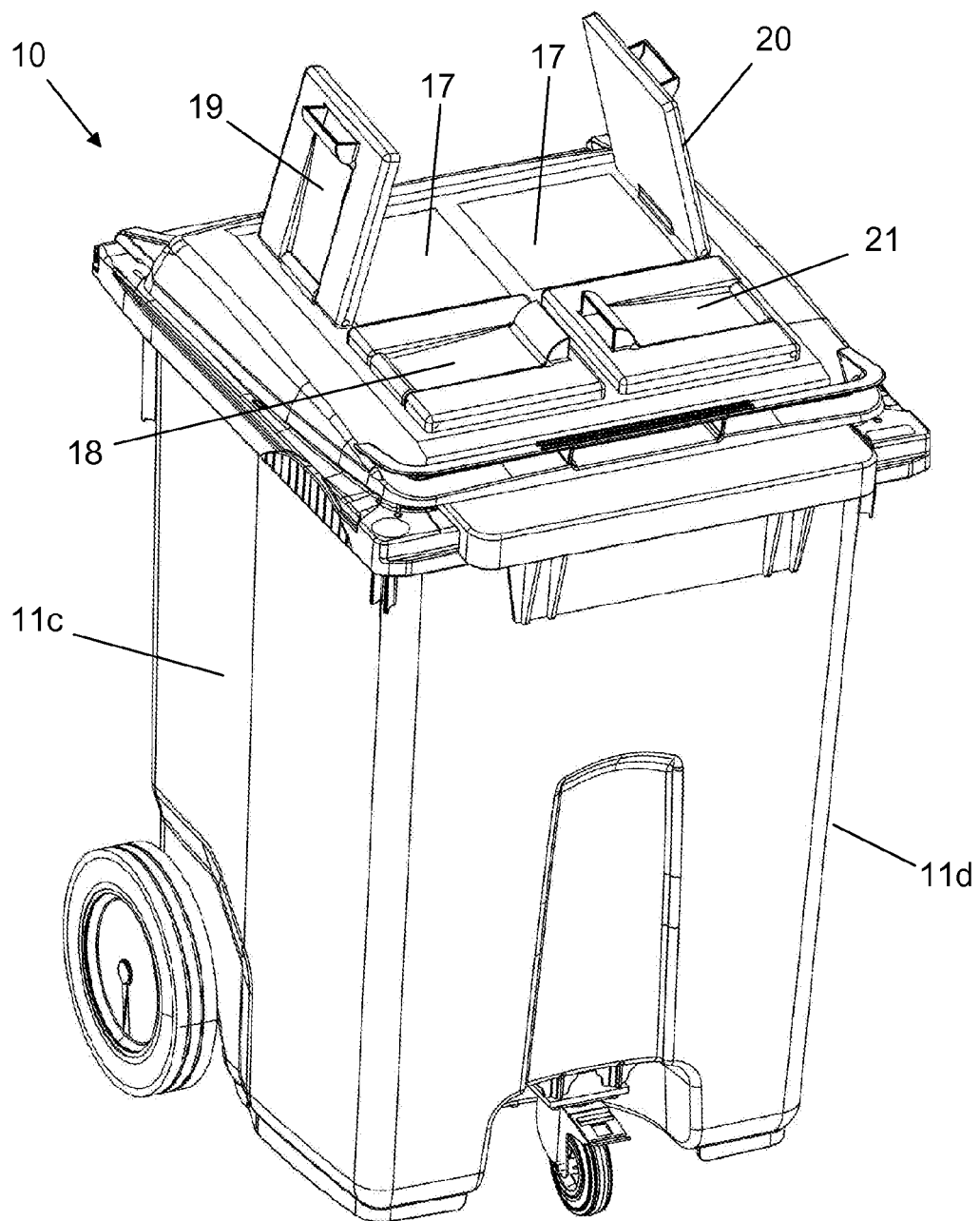


Fig. 9



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Application Number
EP 10 19 0707

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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 23 February 2011	Examiner Smolders, Rob
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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EPO FORM 1503 03/02 (P04/C01)



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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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