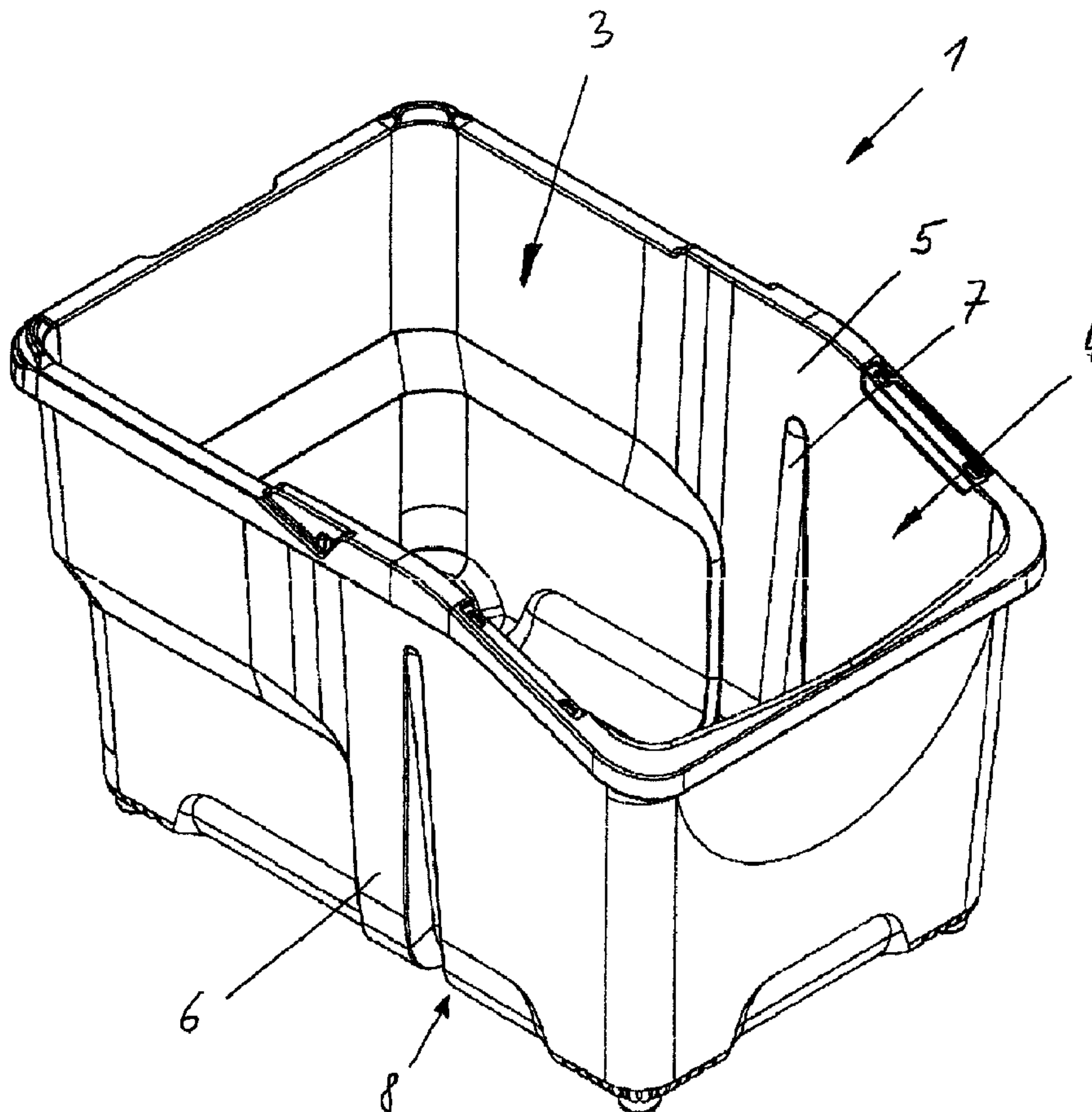




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(57) Abrégé/Abstract:

The invention relates to a cleaning bucket (1), the volume of which can be divided by means of a partition wall (2) into at least two compartments (3, 4). Projections (7) are disposed on at least two mutually opposing lateral walls (5, 6).

ABSTRACT

The invention relates to a cleaning bucket (1), the volume of which can be divided by means of a partition wall (2) into at least two compartments (3, 4). Projections (7) are disposed on at least two mutually opposing lateral walls (5, 6).

CLEANING BUCKET

Technical Field

The invention relates to a cleaning bucket, the volume of which can be divided by a device into two chambers.

Background Art

Such cleaning buckets are generally known. The device, especially a partitioning wall, divides the container volume of the cleaning bucket into two partial volumes. This allows for the separation of clean and dirty mopping water. A wringing device can be provided in the partial volume in which the dirty mopping water is kept. During the cleaning process, the soiled cleaning textile is then initially pre-rinsed in the dirty mopping water and wrung out and subsequently rinsed in the clean mopping water and again wrung out. One can thereby avoid that the clean mopping water is quickly soiled, for example, by coarse particles. In known cleaning buckets, a groove, which means a recess, is provided for the fixation of the partitioning wall, in which the, most of the time, flat and plate-shaped partitioning wall is guided and fixed. It is however, disadvantageous that because of the limited accessibility dirt and microbes can accumulate in the groove, which contaminate the mopping water.

Description of the Invention

It is an object of the invention to further develop the cleaning bucket in such a way that it can be more easily cleaned and protected from microbes.

This object is achieved with the features of claim 1. Preferred embodiments are dealt with in the dependent claims.

For the achievement of this object, protrusions are provided on two mutually opposite sidewalls of the cleaning bucket. The protrusions protrude from the sidewalls into the volume of the cleaning bucket. The cleaning bucket thereby has no dead space in which dirt or microbes could accumulate. Moreover, the protrusions are easily cleaned.

The floor can be provided with protrusions on the inside. All three adjacent boundary surfaces of the cleaning bucket are thereby provided with protrusions so that the

device, especially a partitioning wall, can be especially securely fixed and an optimal sealing of the partial volumes is guaranteed.

The protrusion can be continuous along the sidewalls and the floor. This results in a bulge which is positioned along the two sidewalls and the floor.

The protrusions can be shaped as a bulge. In cross-section, the bulge can thereby be especially convex, for example, triangular, trapezoid, rectangular or in the shape of a circular section, whereby triangular and trapezoid embodiments are preferred, since on the one hand the cross-section of a bulge with those shapes does not have any acute angle at which microbes could accumulate and on the other hand the partitioning wall is easily removable from the cleaning bucket. It is also conceivable that those shapes could be rounded. The triangular and trapezoid embodiments as well as their rounded variants thereby include lateral portions which are inclined towards one another.

The height and/or width of the bulge can decrease from the floor of the cleaning bucket towards the upper edge of the cleaning bucket. In that embodiment, the height and/or width of the bulge is highest in the region of the floor and decreases along the side portions in direction of the upper edge of the cleaning bucket. The device, especially a partitioning wall, is thereby especially easily removable since it is not continuously guided along the bulge during removal.

The device can be constructed as a partitioning wall, the edges of which that contact the sidewalls and the floor are shaped congruent to the bulge. The edges are therefor preferably concavely shaped. The edges of the partitioning wall therefore preferably, have depending on the shape of the bulge, a continuous recess in the shape of a triangle, or a trapezoid, a rectangle or a circle. In this manner, the partitioning wall covers the bulge so that even when the partitioning wall is inserted, very little dead space is present wherein microbes and dirt could accumulate. The edges of the partitioning wall with the recess are easily accessible and can therefore be well cleaned and disinfected, if desired.

The partitioning wall can include a release arrangement associated with respectively one sidewall. In a preferred embodiment, the release arrangement rests on the edge of the cleaning bucket and can be moved laterally, which means parallel to the floor. The displacement can be made against the biasing force of a spring. The lower edge of the release arrangement which at least partially rests on the edge of the cleaning bucket, is

slanted so that the partitioning wall, on displacement of the release arrangement, is lifted from the cleaning bucket. It is hereby advantageous that the removal of the partitioning wall can be carried out easily and even when only one partial volume of the cleaning bucket is filled so that a lateral force acts on the partitioning wall. The controlled lifting of the partitioning wall by the release arrangement has the further advantage that when the partial volumes are unevenly filled, spilling or splashing of the mopping water caused by a sudden fluid equalization is mostly prevented. If the release arrangement is missing, the required force for loosening and lifting of the partitioning wall from the sealing position is large, which makes the removal of the partitioning wall generally difficult.

The partitioning wall can be provided with latching means for the fixation of the partitioning wall in the cleaning bucket. These latching means can be constructed, for example, as snap-in hooks which snap onto the upper edge of the cleaning bucket and prevent an automatic release of the partitioning wall.

The partitioning wall can include a handle. With the handle, which is preferably centrally positioned at the upper edge of the partitioning wall, the partitioning wall can be easily removed and transported.

The edges of the partitioning wall can be provided with a seal. The seal can thereby be constructed as a continuous elastomer track and can be positioned directly in the concavely constructed region of the edge or immediately adjacent thereto. It is thereby conceivable that the partitioning wall can be manufactured in a multicomponent injection molding process, whereby the seal consists of an injection moldable elastomer material. It is also conceivable that the region of the partitioning wall which contacts the cleaning bucket, which means the complete edge region, is made of elastomeric material. The sealing means improves the seal in the edge region, so that a flow of liquid between the two volumes of the cleaning bucket can be avoided. Alternatively, it is also conceivable that the sealing means is positioned in a region of the protrusions of the cleaning bucket.

A further cleaning bucket can be positioned within the cleaning bucket, which then serves as the device. In that embodiment, the volume of the cleaning bucket is divided into two partial volumes by the additional cleaning bucket.

The further cleaning bucket can be held in its position by the protrusions. The further cleaning bucket can therefore include recesses congruent to the bulge or can be

dimensioned in such a way that it borders the bulge. It is thereby prevented that the further cleaning bucket moves around in the cleaning bucket.

Brief Description of the Drawings

Several exemplary embodiments of the cleaning bucket in accordance with the invention are described in the following with reference to the drawings. They respectively schematically show:

Fig. 1 shows the cleaning bucket in perspective;

Fig. 2 shows the cleaning bucket according to Fig. 1 in bottom view;

Fig. 3 shows the cleaning bucket according to Fig. 1 with inserted partitioning wall;

Fig. 4 shows the cleaning bucket with inserted partitioning wall including the release arrangement in cross-section;

Fig. 5 shows the cleaning bucket with inserted partitioning wall in cross-section;

Fig. 6 shows a cleaning bucket with a further cleaning bucket as device; and

Fig. 7 shows a cleaning bucket with wheels.

Embodiment of the Invention

Figure 1 shows a cleaning bucket 1 intended as part of a cleaning system which includes a cleaning bucket 1, a mop and a wringing device positioned on top of the cleaning bucket 1. The interior of the cleaning bucket, which means its volume, is dividable by a separate device 2 into at least two chambers 3 and 4. For the fastening of the device 2, internal projections are provided on the two mutually opposite sidewalls 5, 6 and on the floor 8 of the cleaning bucket 1. They extend continuously along the sidewalls 5, 6 and the floor 8 and are constructed as a bulge. The cross-section of the bulge is triangular, whereby the edges are rounded so that the bulge has two lateral parts which are inclined towards one another. The bulge is further constructed so that the height and the width of the bulge decreases in direction from the floor to the edge of the cleaning bucket 1.

Figure 2 shows the cleaning bucket 1 according to Figure 1 in bottom view.

Figure 3 shows the cleaning bucket 1 according to Figure 1 with the device 2, which in this embodiment is constructed as a partitioning wall. The edges 9 of the partitioning wall which engage the sidewalls 5, 6 and the floor 8, are constructed

congruent to the bulge, so that the partitioning wall snaps onto the bulge. Along its upper edge, the partitioning wall has a handle 11.

Figure 4 also shows a cleaning bucket 1 according to Figure 3. In this embodiment, the device 2, a partitioning wall, is provided with release arrangements 10, whereby a release arrangement 10 is associated with each of the sidewalls 5, 6. The release arrangement 10 rests on the edge of the cleaning bucket 1 and can be laterally displaced, which means parallel to the floor 8. The displacement occurs against the biasing force of a spring 14. The lower edge 15 of the release arrangement, which in part rests on the edge of the cleaning bucket 1, is inclined so that the partitioning wall, upon displacement of the release arrangement 10 is lifted. The edge 9 of the partitioning wall is provided with a seal 17 of elastomeric material.

Figure 5 shows a cleaning bucket according to Figure 3. The cleaning bucket is provided with latching means 13 in order to fix the device 2, here also a partitioning wall, onto the cleaning bucket 1. Latching hooks are therefor provided in the region of the edge of the cleaning bucket 1, which grip around the partitioning wall and therefore fix it to the cleaning bucket.

Figure 6 shows a cleaning bucket 1 according to Figure 1, whereby the device 2 in this embodiment is formed as a further cleaning bucket 12. The further cleaning bucket 12 is constructed in such a way that it is fixed in its position within the cleaning bucket 1 by the protrusion 7.

Figure 7 shows a cleaning bucket 1 according to Figure 1, further provided with wheels 16.

CLAIMS:

1. A cleaning bucket comprising:
 - two opposing sidewalls;
 - a bottom;
 - a dividing device for dividing an internal volume of the cleaning bucket into at least two compartments; and
 - protrusions arranged on the two opposing side walls and the bottom, the dividing device being engageable with the protrusions, wherein the protrusions on the opposing sidewalls and the bottom extend continuously into one another along the sidewalls and the bottom and are in a form of a single bulge, the bulge having a height that decreases from the bottom in the direction of the rim of the cleaning bucket.
2. The cleaning bucket according to claim 1, wherein the device is constructed as a partitioning wall, whereby the edges of the device which contact the two sidewalls and the floor are constructed congruent to the bulge.
3. The cleaning bucket according to claim 2, wherein the partitioning wall has a release arrangement respectively associated with one of the sidewalls.
4. The cleaning bucket according to claim 2 or 3, wherein the partitioning wall is provided with latch means for the fixation of the partitioning wall in the cleaning bucket.
5. The cleaning bucket according to any one of claims 2 to 4, wherein the partitioning wall includes a handle.
6. The cleaning bucket according to any one of claims 2 to 5, wherein the edges of the partitioning wall are provided with a sealing means.

7. The cleaning bucket according to claim 1, wherein in that a further cleaning bucket is positioned in the cleaning bucket, whereby the further cleaning bucket forms the device.

8. The cleaning bucket according to claim 7, wherein the further cleaning bucket is maintained in position by the protrusions.

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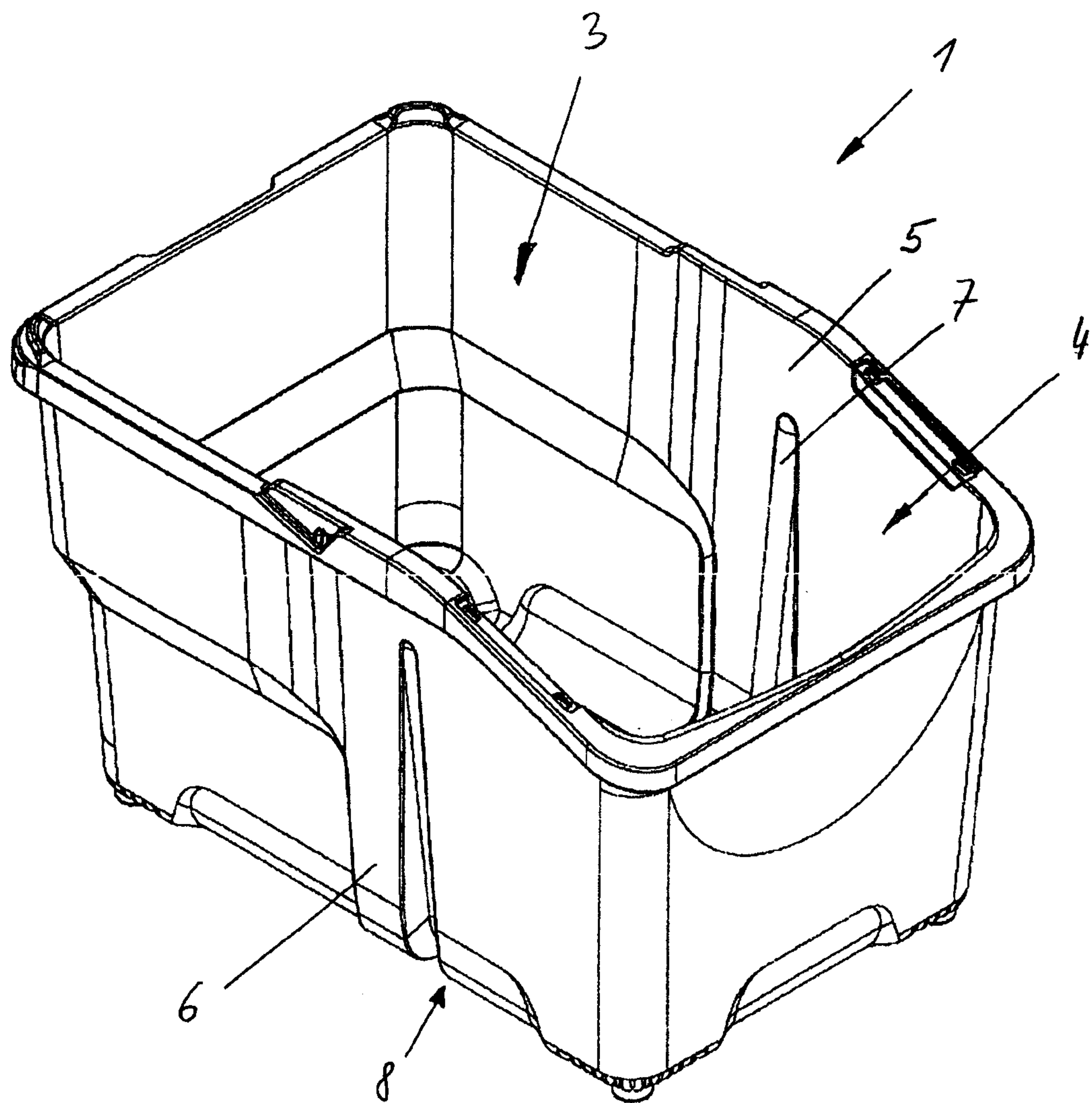


Fig. 1

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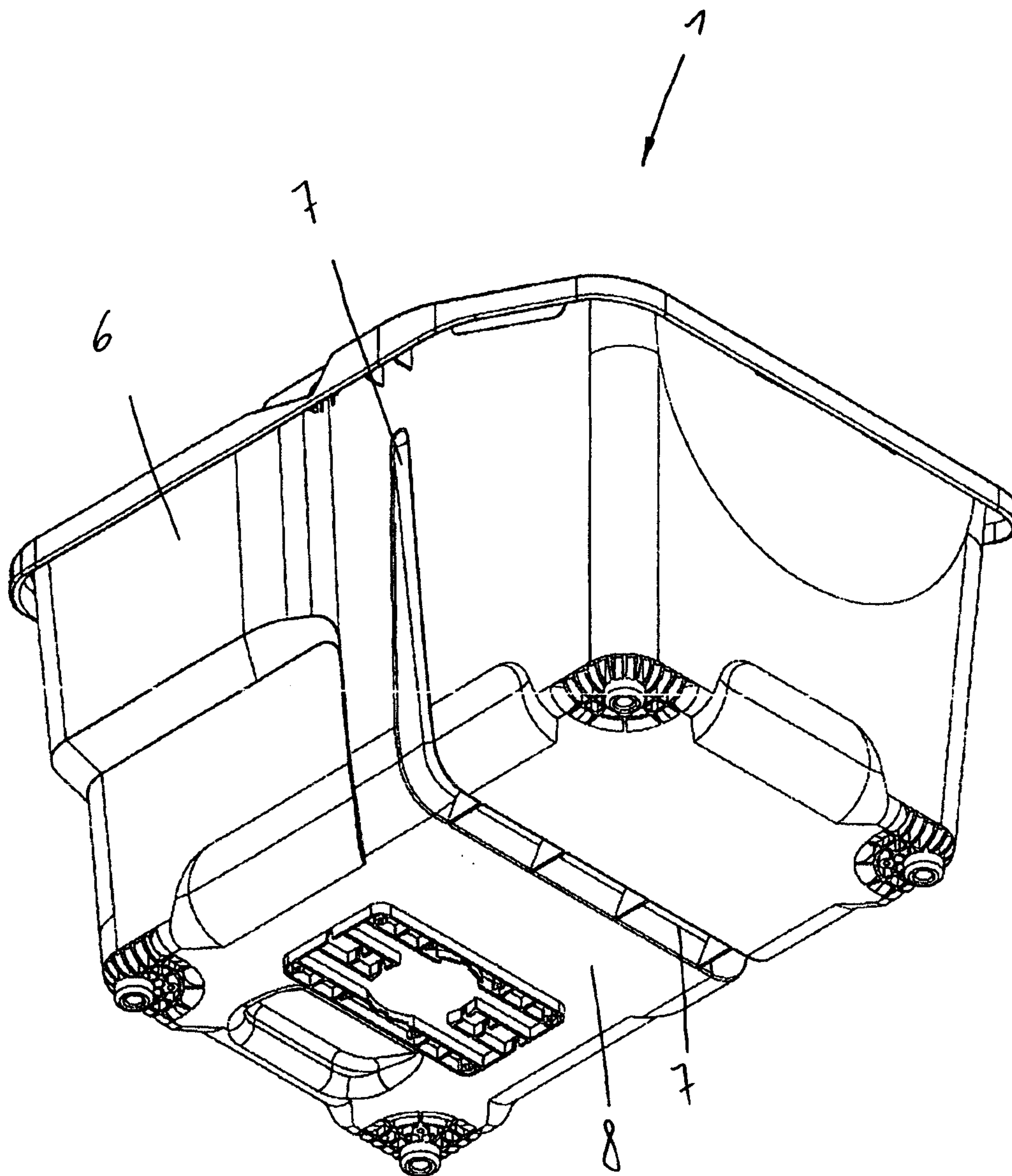


Fig. 2

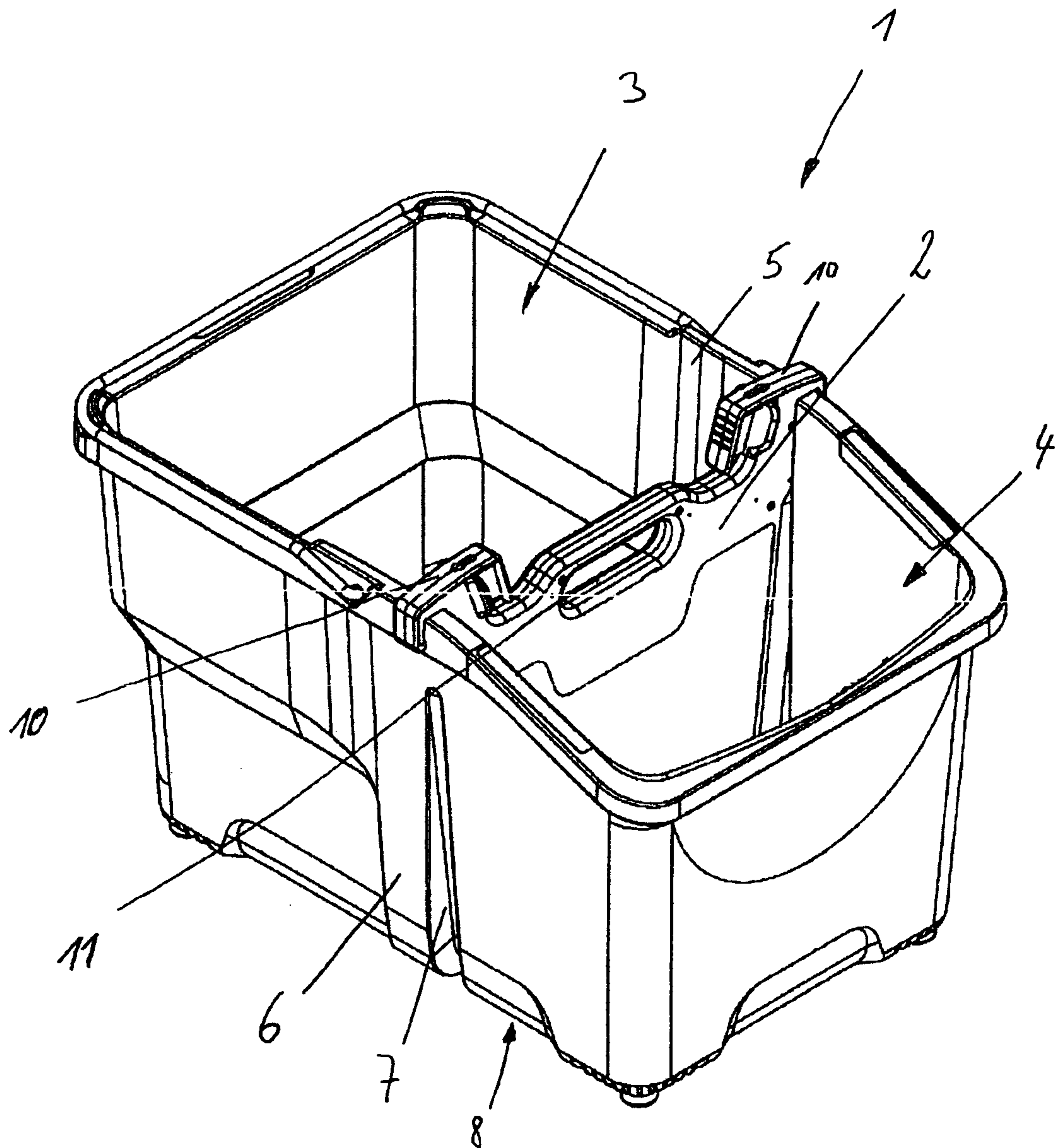


Fig. 3

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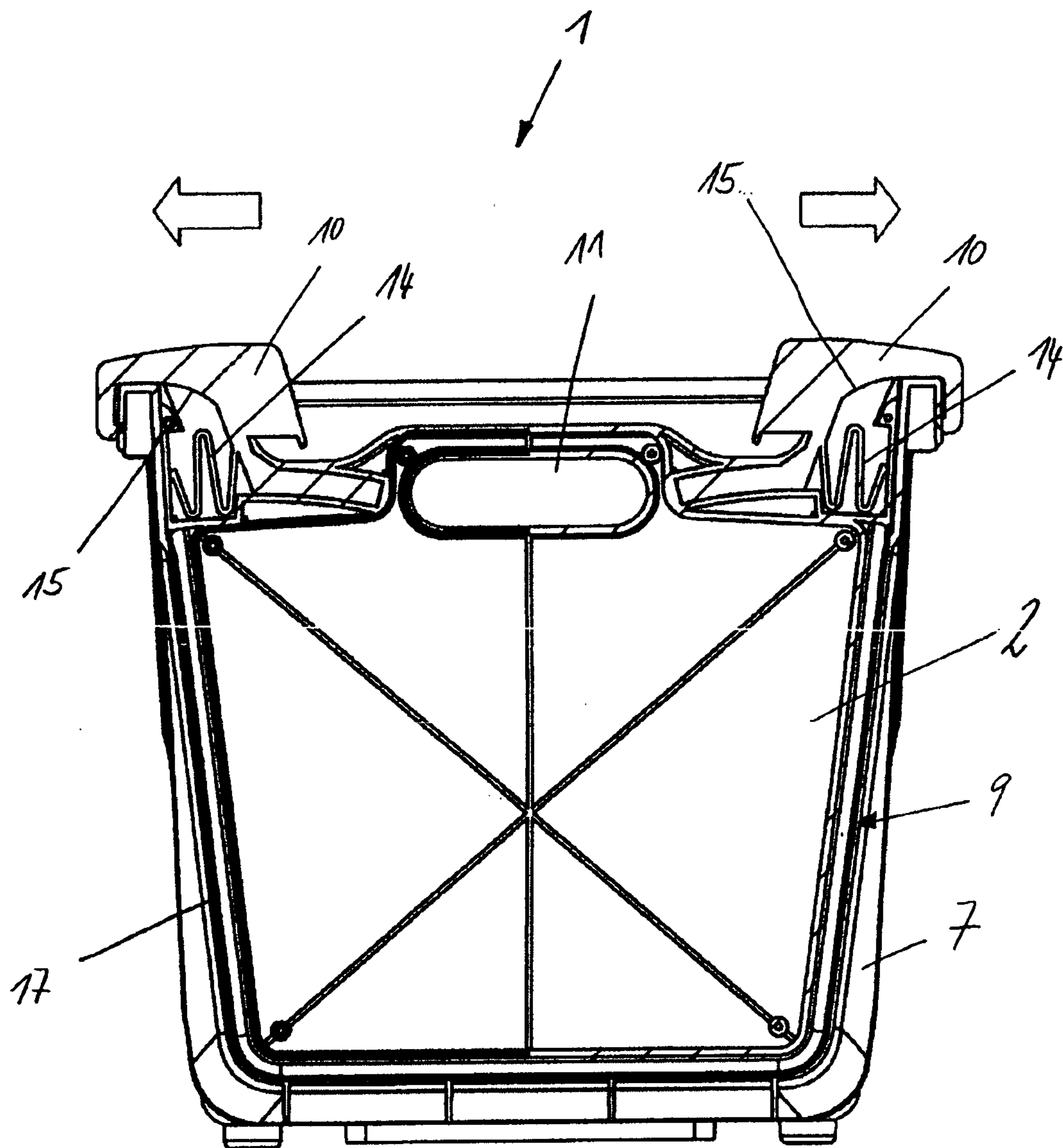


Fig. 4

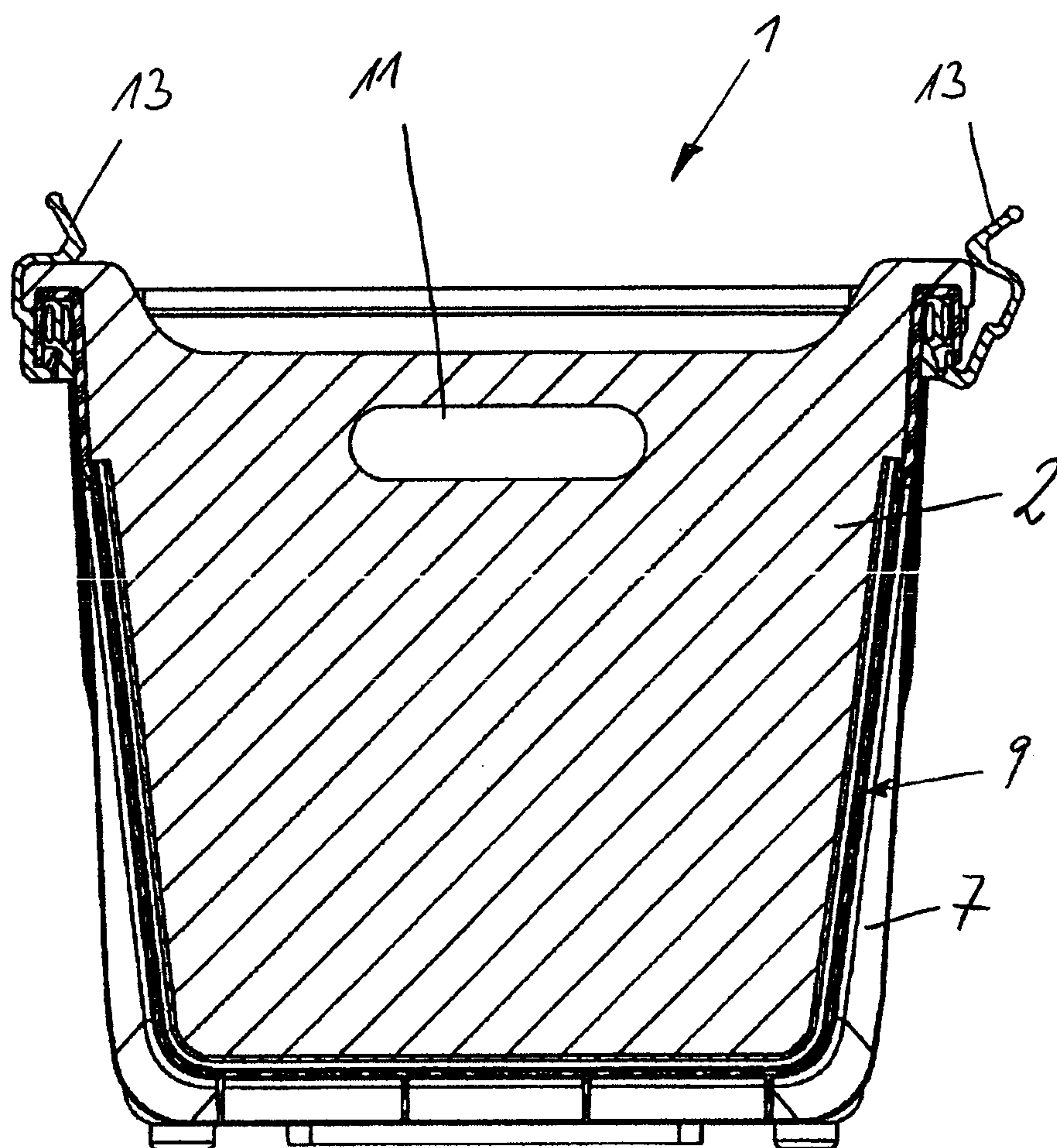


Fig. 5

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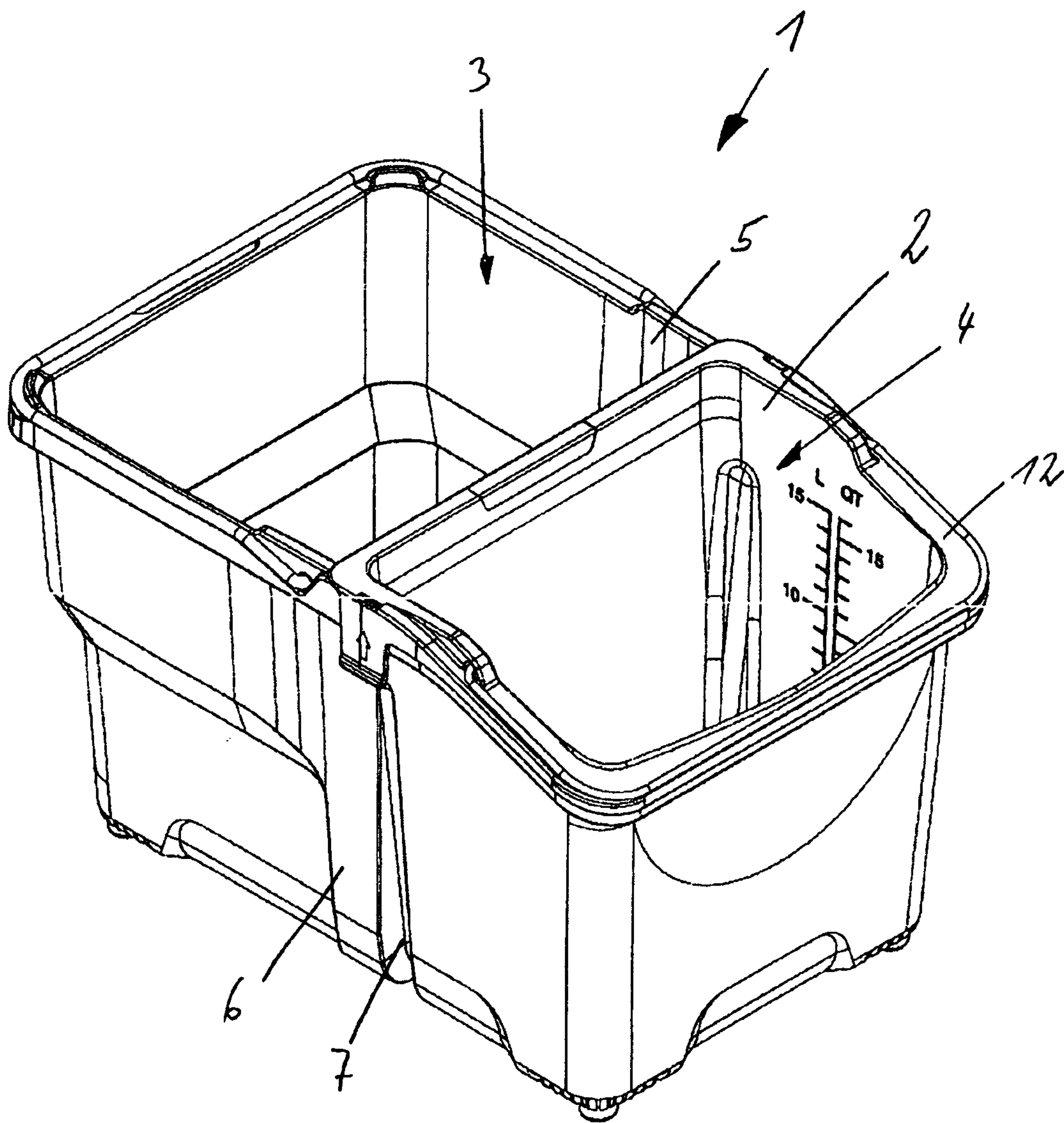


Fig. 6

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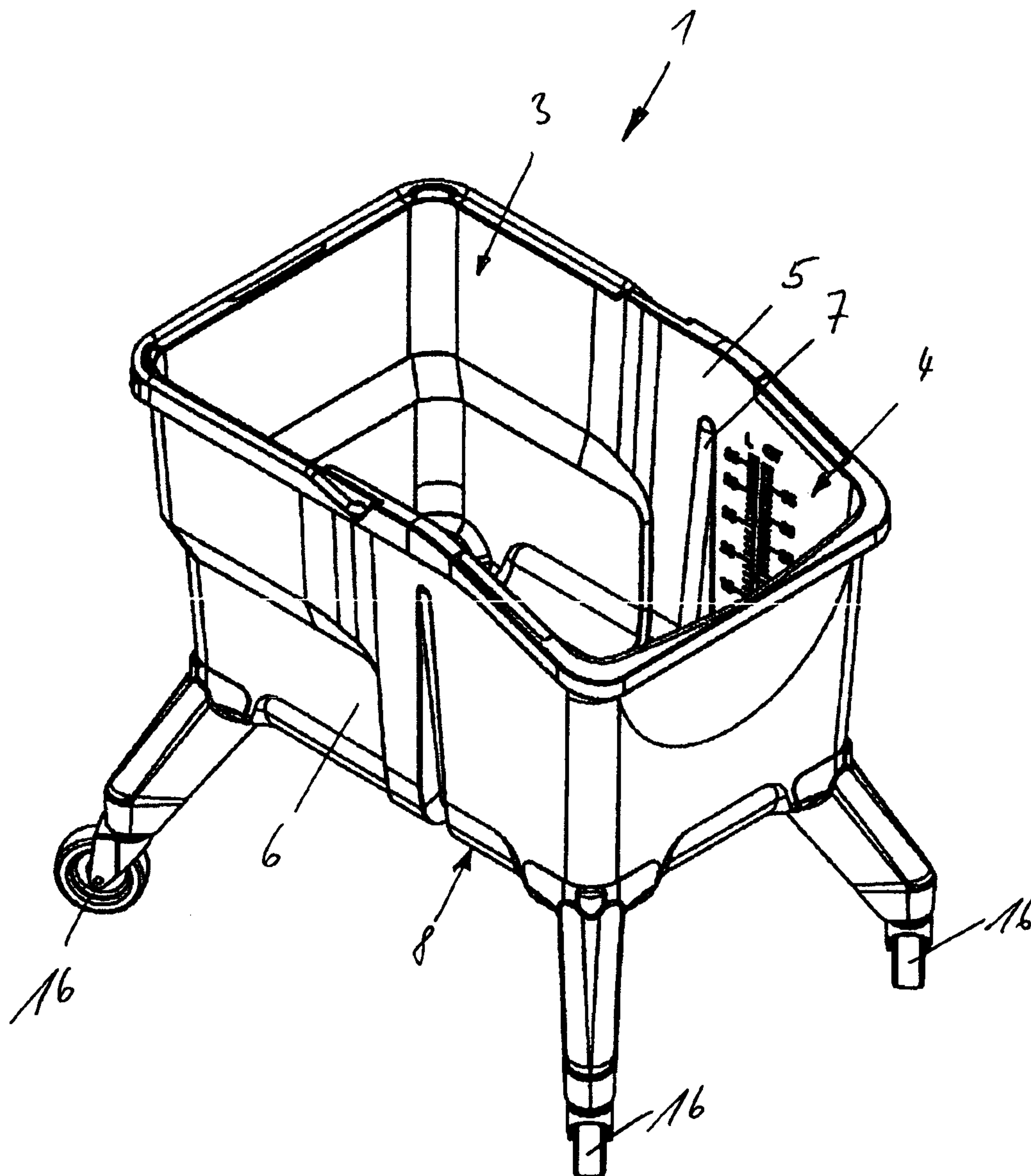


Fig. 7

