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(54) **DEWATERING BUCKET SET**

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(57) **ABSTRACT**

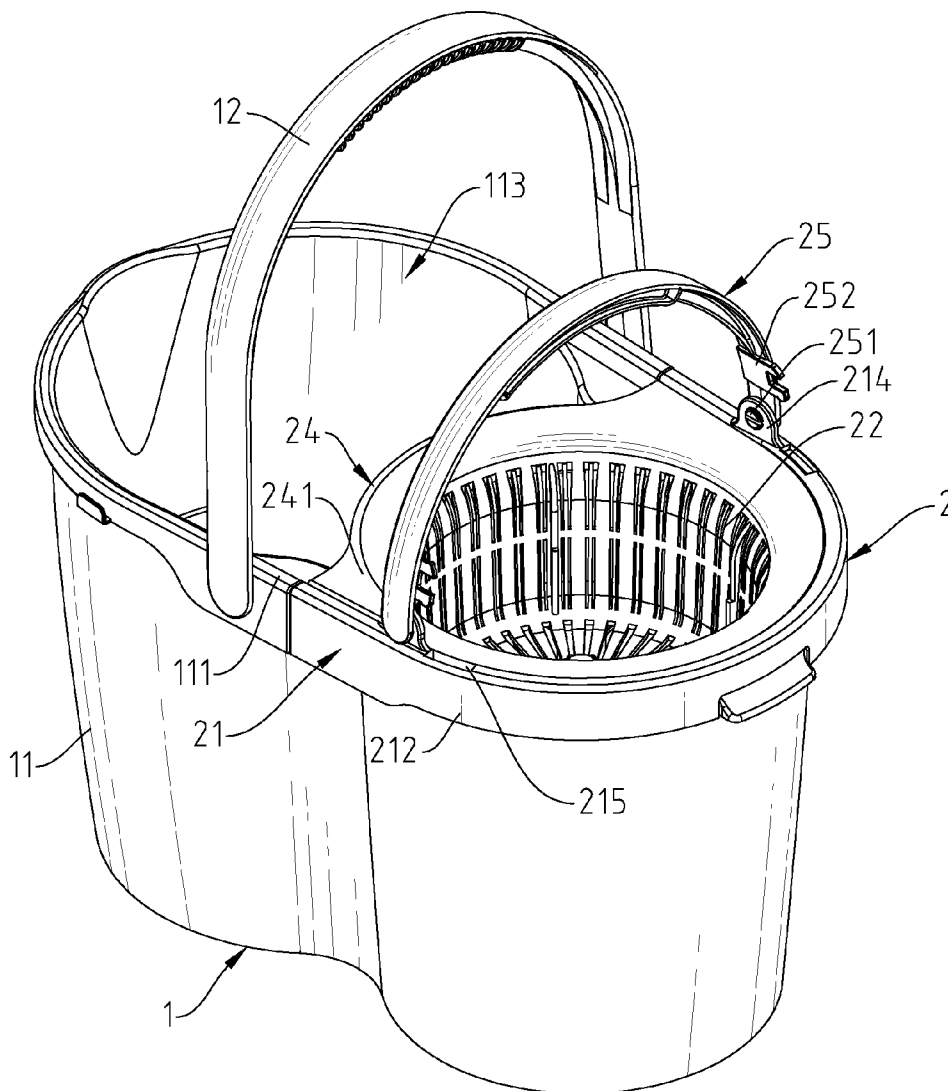
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A dewatering bucket set includes a main bucket including a main bucket body having a rim and defining therein a first accommodation chamber, and a dewatering basket unit including a dewatering bucket and a dewatering bucket rotatably mounted in the dewatering basket. The dewatering bucket has amounting flange extending around a top open side thereof and detachably fastened to the rim of the main bucket body to suspend the dewatering bucket in the first accommodation chamber of the main bucket body.



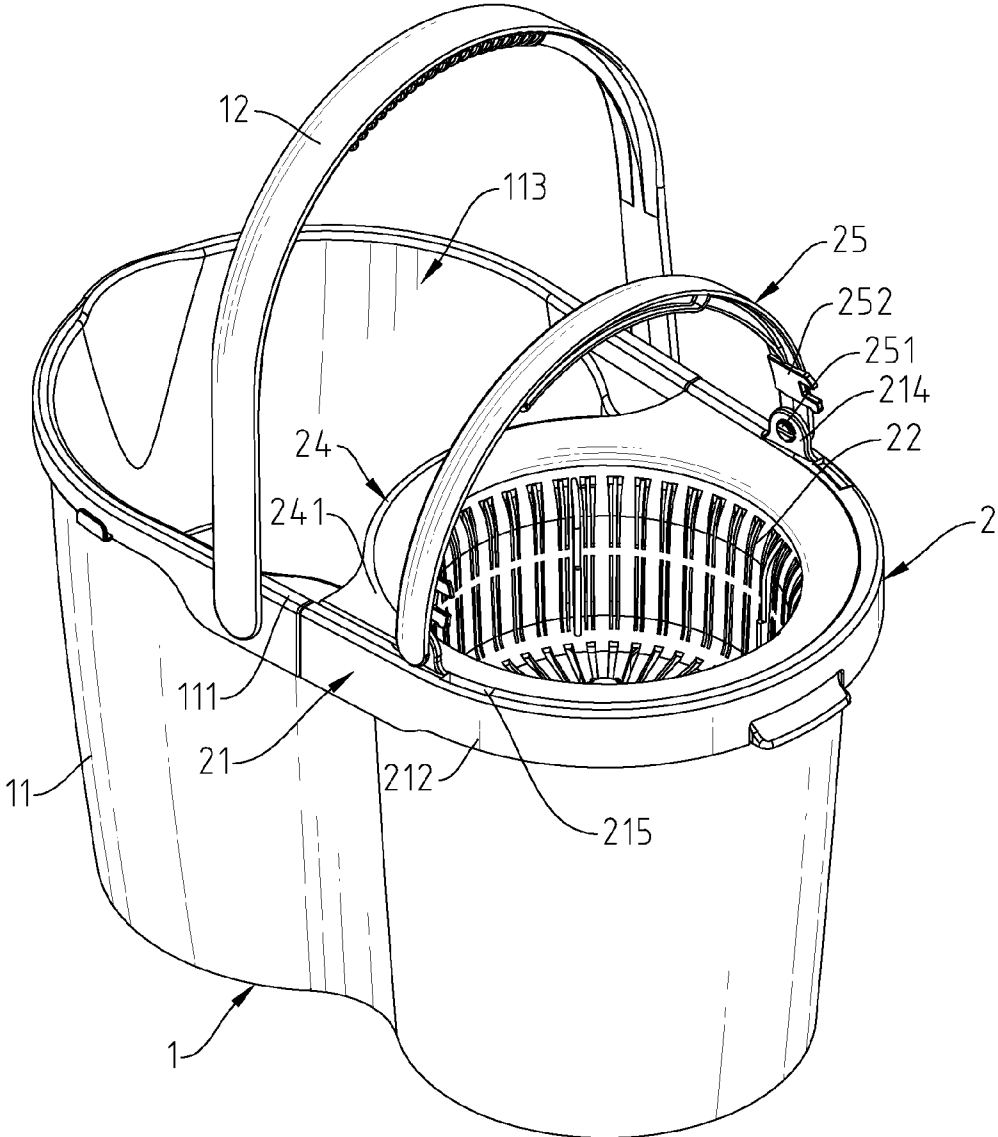


Fig.1

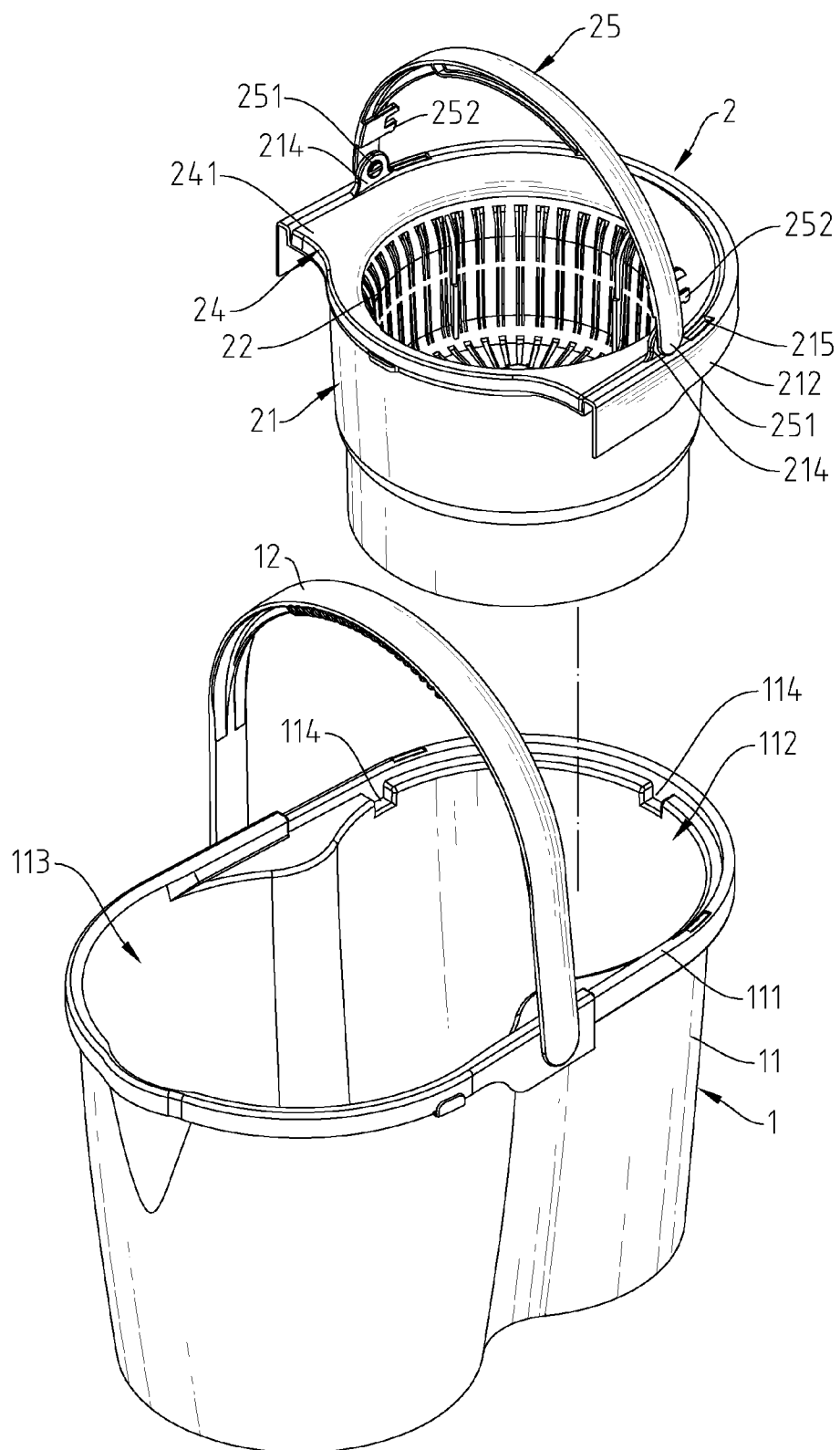


Fig.2

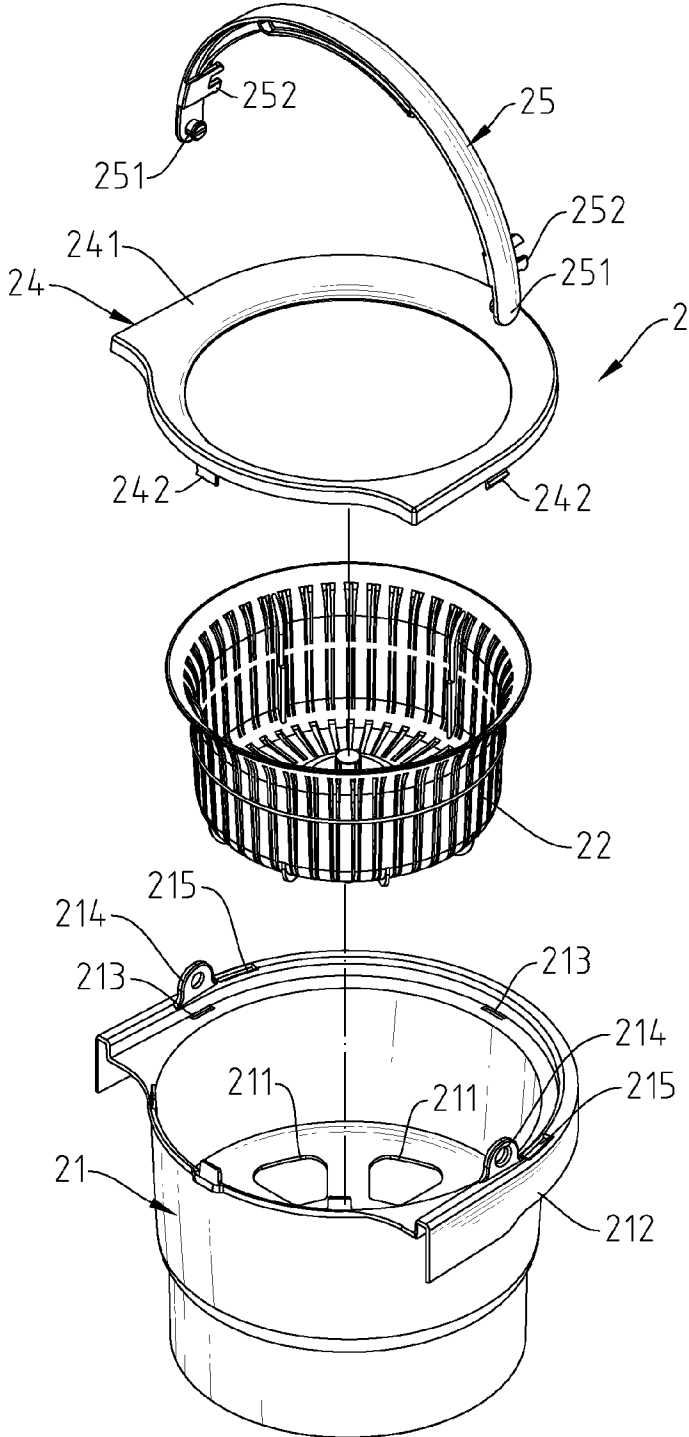


Fig.3

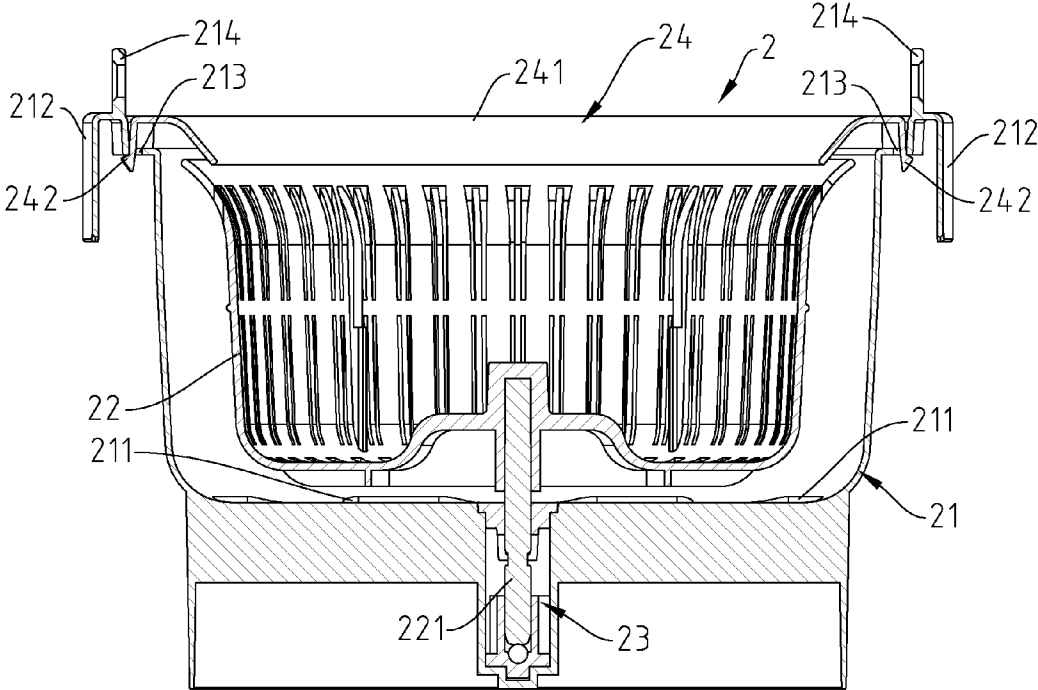


Fig.4

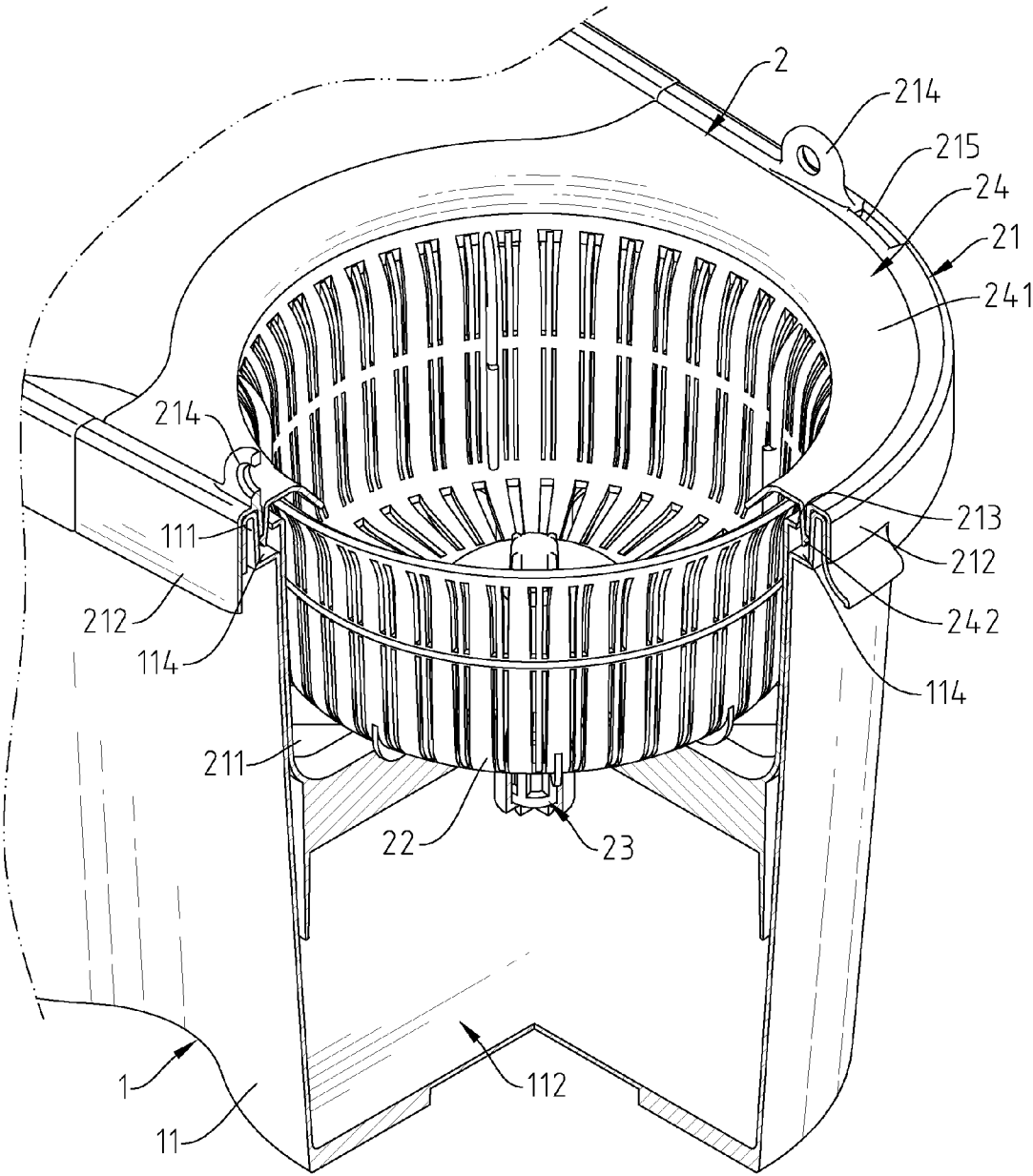


Fig.5

**DEWATERING BUCKET SET**

**BACKGROUND OF THE INVENTION**

[0001] 1. Field of the Invention

[0002] The present invention relates to dewatering bucket technology for removing water from a rotating spin mop through a centrifugal dewatering process, and more particularly to a dewatering bucket set having a dewatering basket unit detachably mountable in a main bucket.

[0003] 2. Description of the Related Art

[0004] A conventional dewatering bucket for removing water from a rotating spin mop through a centrifugal dewatering process is known comprising a bucket body, an axle housing fixedly mounted in the bucket body, and a dewatering basket rotatably supported on the axle housing. According to this prior art design, there is a dead space between the bucket body and the dewatering basket. Dirty water can be accumulated in the axle housing between the dewatering basket and the bucket body. It is difficult to clean this dead space. Newly supplied clean water or a clean rotating spin mop can be contaminated by dirty water that is accumulated in the dead space. Further, the dewatering basket is directly pivotally connected to the bucket body and not detachable. In application, the user must carry the whole assembly from place to place. Thus, using this design of dewatering bucket is time-consuming and labor-intensive.

**SUMMARY OF THE INVENTION**

[0005] The present invention has been accomplished under the circumstances in view. It is therefore the main object of the present invention to provide a dewatering bucket set, which comprises a main bucket, and a dewatering basket unit detachably mountable in the main bucket and separable from the main bucket for independent application.

[0006] To achieve this and other objects of the present invention, a dewatering bucket set in accordance with the present invention comprises a main bucket and a dewatering basket unit detachably mountable in the main bucket. The main bucket comprises a main bucket body having a rim extending around a top open side thereof and a first accommodation chamber defined therein. The dewatering basket unit comprises a dewatering bucket and a dewatering basket rotatably mounted in the dewatering bucket. The dewatering bucket comprises a plurality of discharge holes cut through a bottom wall thereof, and a mounting flange curved downwardly from the border of a top open side thereof and detachably attached to the rim of the main bucket body to position the dewatering bucket in the first accommodation chamber of the main bucket body and to keep the bottom wall of the dewatering bucket above a bottom wall of the main bucket body at a distance. When rotating a rotating spin mop in the dewatering basket unit to remove water, discharged dirty water from a rotating spin mop will be directly guided through the dewatering bucket into the main bucket body, avoiding contamination. Further, the dewatering basket unit can be detached from the main bucket body for independent use and clearing of the main bucket body.

**BRIEF DESCRIPTION OF THE DRAWINGS**

[0007] FIG. 1 is an oblique top elevation of a dewatering bucket set in accordance with the present invention.

[0008] FIG. 2 is an exploded view of the dewatering bucket set in accordance with the present invention.

[0009] FIG. 3 is an exploded view of the dewatering basket unit of the dewatering bucket set in accordance with the present invention.

[0010] FIG. 4 is a sectional view of the dewatering basket unit of the dewatering bucket set in accordance with the present invention.

[0011] FIG. 5 is a sectional elevational view of a part of the present invention, illustrating the dewatering basket unit positioned in the main bucket.

**DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT**

[0012] Referring to FIGS. 1-5, a dewatering bucket set in accordance with the present invention is shown. The dewatering bucket set comprises a main bucket 1, and a dewatering basket unit 2 detachably mountable in the main bucket 1.

[0013] The main bucket 1 comprises a main bucket body 11 comprising a rim 111 extending around a top open side thereof, a first accommodation chamber 112 and a second accommodation chamber 113 defined therein and a plurality of locating notches 114 spaced along an inner side of the rim 111, and a first carrying handle 12 having two opposite ends thereof respectively pivotally connected to the rim 111 of the main bucket body 11.

[0014] The dewatering basket unit 2 comprises a dewatering bucket 21, a dewatering basket 22, a bearing housing 23, a damper cover 24 and a second carrying handle 25. The dewatering bucket 21 comprises a plurality of discharge holes 211 cut through a bottom wall thereof, a mounting flange 212 curved downwardly from the border of the top open side thereof, a plurality of locating holes 213 located on the top-most edge thereof at selected locations, two eye lugs 214 upwardly extended from the mounting flange 212 at two opposite sides, and two retaining holes 215 located on the mounting flange 212 and respectively disposed adjacent to the eye lugs 214.

[0015] The dewatering basket 22 is rotatably accommodated in the dewatering bucket 21 above the discharge holes 211, comprising a bottom shaft 221 downwardly extended from a bottom center thereof and rotatably inserted through the center of the discharge holes 211. The bearing housing 23 is mounted in the bottom wall of the dewatering bucket 21 below the discharge holes 211 to support the bottom shaft 221, enabling the dewatering basket 22 to be rotated by an external force relative to the dewatering bucket 21.

[0016] The damper cover 24 comprises an annular cover body 241 covered over the upper peripheral edge of the dewatering basket 22, and a plurality of locating lugs 242 downwardly extended from the annular cover body 241 and respectively engaged into the locating holes 213 of the dewatering bucket 21. Thus, the damper cover 24, the dewatering basket 22 and the dewatering bucket 21 are assembled together. Thus, when rotating a rotating spin mop (not shown) in the dewatering basket 22 to remove water, the damper cover 24 effectively prohibits discharged dirty water from flying out of the dewatering basket unit 2 to contaminate the surroundings.

[0017] When connecting the dewatering basket unit 2 and the main bucket 1, fasten the mounting flange 212 of the dewatering bucket 21 to the rim 111 of the main bucket body 11 to keep the locating hole 213 and locating lug 242 of the dewatering basket unit 2 in the locating notches 114 of the main bucket body 11, and thus, the dewatering bucket 21 is positioned in the first accommodation chamber 112 of the main bucket body 11. At this time, the bottom edge of the

dewatering bucket 21 is spaced above the bottom wall of the main bucket body 11. Thus, when rotating a rotating spin mop in the dewatering basket 22 of the dewatering basket unit 2 to discharge water, discharged dirty water will be guided through the discharge holes 211 of the dewatering bucket 21 into the inside of the first accommodation chamber 112 of the main bucket body 11. Thus, the dewatering bucket set is ease of use.

[0018] As stated above, the dewatering bucket 21 of the dewatering basket unit 2 comprises two eye lugs 214. Further, the second carrying handle 25 of the dewatering basket unit 2 comprises two pivot pins 251 and two positioning blocks 252. The pivot pins 251 of the second carrying handle 25 are respectively pivotally coupled to the eye lugs 214 of the dewatering bucket 21. Thus, when wishing to use the dewatering basket unit 2 independently, pull the second carrying handle 25 to carry the dewatering basket unit 2 away from the main bucket 1 directly for independent use. When the second carrying handle 25 is not used, attach the second carrying handle 25 to the top edge of the dewatering bucket 21 to force the positioning blocks 252 of the second carrying handle 25 into the respective retaining holes 215 of the dewatering bucket 21, prohibiting the second carrying handle 25 from interfering with the application of the dewatering basket unit 2.

[0019] Further, as stated above, the main bucket 1 and the dewatering basket unit 2 are respectively equipped with the first carrying handle 12 and the second carrying handle 25. Thus, if the dewatering basket unit 2 and the main bucket 1 are assembled together, the user can hold the first carrying handle 12 of the main bucket 1 to carry the dewatering basket unit 2 and the main bucket 1. When wishing to use the dewatering basket unit 2 independently or to wash the main bucket 1, carry the second carrying handle 25 to take the dewatering basket unit 2 away from the main bucket 1, facilitating application.

[0020] In conclusion, the present invention has the technical features that: the dewatering basket 22 is pivotally connected to the dewatering bucket 21 to establish the dewatering basket unit 2; the mounting flange 212 is curved downwardly from the border of the top open side of the dewatering bucket 21 and fastenable to the rim 111 of the main bucket body 11, thereby securing the dewatering basket unit 2 and the main bucket body 11. Thus, the invention enables the dewatering basket unit 2 and the main bucket 1 to be conveniently and rapidly assembled together, allowing separation of the dewatering basket unit 2 from the main bucket 1 for independent

use. After separation of the dewatering basket unit 2 from the main bucket 1, the user can wash and clean the main bucket body 11 conveniently, satisfying common usage requirements

What the invention claimed is:

1. A dewatering bucket set, comprising:

a main bucket comprising a main bucket body, said main bucket body comprising a rim extending around a top open side thereof and a first accommodation chamber defined therein; and

a dewatering basket unit comprising a dewatering bucket and a dewatering basket rotatably mounted in said dewatering bucket, said dewatering bucket comprising a plurality of discharge holes cut through a bottom wall thereof and a mounting flange curved downwardly from the border of a top open side thereof and detachably attached to said rim of said main bucket body to position said dewatering bucket in said first accommodation chamber of said main bucket body and to keep the bottom wall of said dewatering bucket above a bottom wall of said main bucket body at a distance.

2. The dewatering bucket set as claimed in claim 1, wherein said main bucket further comprises a first carrying handle, said first carrying handle having two opposite ends thereof respectively pivotally connected to said rim of said main bucket body.

3. The dewatering bucket set as claimed in claim 1, wherein said dewatering basket comprises a bottom shaft downwardly extended from a bottom wall thereof and rotatably coupled to said dewatering bucket; said dewatering bucket comprises a bearing housing located at the bottom wall thereof and coupled with said bottom shaft to support said dewatering basket above said discharge holes.

4. The dewatering bucket set as claimed in claim 1, wherein said dewatering basket unit further comprises a damper cover, said damper cover comprises an annular cover body and a plurality of locating lugs downwardly extended from said annular cover body; said dewatering bucket comprises a plurality of locating holes adapted for receiving said locating lugs of said damper cover.

5. The dewatering bucket set as claimed in claim 1, wherein said main bucket comprises a first carrying handle, said first carrying handle having two opposite ends thereof pivotally connected to said rim of said main bucket body; said dewatering basket unit further comprises a second carrying handle pivotally connected to said dewatering bucket.

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