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(54) Title: CONTAINER FOR PAINT

(57) Abstract: A container (1) is formed by separating a pushed-in cup in which a lower portion (3) and an upper portion (7) of the side wall are more rigid than a flexible middle portion (9) present in between. The container (1) can be extracted in a simple manner by taking the upper portion (7) of the side wall with one hand and holding a protruding gutter (19) at the bottom (5) with the other hand. Furthermore, the container (1) has a cylinder (13) which is to be pushed downwards between the lower portion 3 and upper portion 7 of the side wall after the cup has been extracted.

[Continued on next page]
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DESCRIPTION

Field of the invention.

The invention relates to a container for paint comprising a cup open at the top which has a bottom and a vertical side wall connected therewith, which cup can be put into two conditions, that is a pushed-in condition of packaging in which the side wall of the cup is pushed in at least partially, and an extracted condition of use in which the side wall is extracted while a lower portion of the side wall which is attached to the bottom and an upper portion of the side wall which borders on the opening are more rigid than an intermediate flexible middle portion of the side wall, while in the condition of packaging the upper and lower portions are telescopic, the one portion being arranged concentrically around the other portion and the middle portion being present at least partially between the upper portion and the lower portion, and for obtaining the condition of use it being necessary to separate the upper and lower portions after which the middle portion extends tightly between the upper and lower portions.

State of the art.

A container of this type is known from DE-A-2 038 069. In this known container the strength of the material the middle portion is made of determines the strength of the side wall of the container. If a strong side wall is desired the material is to be sturdy as a result of which more force is needed to bring the container from the condition of packaging to the condition of use.

Summary of the invention.

It is an object of the invention to provide a container of the type defined in the opening paragraph, whose side wall in a condition of use is strong and rigid whereas the container can nevertheless be brought from a condition of packaging to a
condition of use with the application of only little force. To this end the container according to the invention is characterised in that the container further includes a cylinder which in a condition of packaging of the container is arranged concentrically between the lower and upper portions or around the upper portion of the container or inside the lower portion, and in a condition of use of the container is detained between the upper and lower portions and with its outside or inside is in contact with the inside or outside of the middle portion. In the container according to the invention the strength of the cylinder determines in essence the strength of the side wall of the container. The introduction of a longitudinally rigid cylinder can thus lead to a strong side wall. The middle portion of the side wall may thus be soft and pliable, so that only little force is needed to bring the container from the condition of packaging to the condition of use.

Preferably, in a condition of use of the container, an upper rim of the cylinder is in contact with a lower rim of the upper portion of the side wall and a lower rim of the cylinder is in contact with an upper rim of the lower portion of the side wall.

Furthermore, in the packaging condition of the container the upper portion of the side wall is preferably arranged concentrically around the lower portion and the middle portion is at least partially arranged between the inside of the upper portion and the outside of the lower portion, the cylinder preferably being accommodated between the middle portion and the upper portion, and in the condition of use of the container the outside of the cylinder preferably making contact with the inside of the middle portion of the side wall.

An embodiment of the container according to the invention is characterised in that the cylinder in circumferential direction is interrupted at at least one spot, so that a boundary rim is available in longitudinal direction of the cylinder on either side of the interruption.

At at least one of the boundary rims of the interruption the cylinder is then preferably provided with coupling means for coupling to the other boundary rim.

The coupling means are preferally formed by a component part having a U-shaped cross section and which is attached to the boundary rim, while the cylinder with the other boundary rim can be moved between the two parallel sides.

A further embodiment of the container according to the invention is characterised in that the lower portion of the side wall and/or the bottom has a gutter protruding outwards by which the container can be held during the separation.
Brief description of the drawings.

The following description relating to the appended drawings, the whole given by way of non-limiting example of the container according to the invention, will provide better understanding of how the invention can be realized, in which:

Fig. 1 shows a sectional view of the container according to the invention in pushed-in condition;

Fig. 2 shows a plan view of the container;

Fig. 3 shows a sectional view of the container in extracted condition with the cylinder at the top; and

Fig. 4 shows a side view of the container with the cylinder in final position.

Detailed description of the drawings.

Fig. 1 shows a sectional view of an embodiment of the container according to the invention in pushed-in condition. The container 1 is formed by a pushed-in cup of which a lower portion 3 of the side wall to which the bottom 5 is attached, and an upper portion 7 of the side wall that borders on the open top are more rigid than a flexible middle portion 9 of the side wall present in between. In pushed-in condition the upper portion 7 is arranged concentrically around the bottom portion 3. The middle portion 9 is arranged between the inside of the upper portion and the outside of the lower portion. There is a lid 11 present on top of the upper portion 7.

The container 1 further includes a cylinder 13 which is arranged between the middle portion 9 and the upper portion 7. In Fig. 2 the cylinder 13 is shown separately in plan view. The cylinder 13 has an interruption at one spot in circumferential direction, so that in longitudinal direction of the cylinder there is a boundary rim on either side of the interruption. On one of the boundary rims of the interruption there are coupling means for coupling to the other boundary side. These coupling means are formed by a component part 15 having a U-shaped cross section and being affixed to the boundary rim, while the cylinder can be moved with the other boundary rim 17 between the two parallel sides of the U shape. As a result,
boundary rims of the cylinder can thus move in and out of each other over a distance while they still continue to be coupled to each other.

Fig. 3 shows a sectional view of the container 1 in extracted condition with the cylinder 13 at the top. The container 1 can be extracted in a simple manner by holding with one hand the upper part 7 of the side wall and with the other hand a gutter 19 protruding at the bottom 5. Prior to the container being pulled out an air opening 21 in the lid 11 can be opened by tearing a lip 23 from the lid. In the condition of packaging (see Fig. 1) the upper portion 7 of the side wall is detained with its bottom rim in the protruding gutter.

For the container 1 to be put in the condition of use the cylinder 13 is first to be pushed downwards to between the lower and upper portions 3 and 7 of the side wall after which the cylinder 13 opens out against the inside of the flexible middle portion 9, see Fig. 4.

Albeit in the foregoing disclosure the invention has been explained with reference to the drawing figures, it should be pointed out that the invention is by no means restricted to the embodiments shown in the drawing figures. The invention also pertains to all embodiments deviating from the embodiments shown in the drawing figures within the spirit and scope defined by the claims.
CLAIMS:
1. A container for paint comprising a cup open at the top which has a bottom and a vertical side wall connected therewith, which cup can be put into two conditions, that is a pushed-in condition of packaging in which the side wall of the cup is pushed in at least partially, and an extracted condition of use in which the side wall is extracted while a lower portion of the side wall which is attached to the bottom and an upper portion of the side wall which borders on the opening are more rigid than an intermediate flexible middle portion of the side wall, while in the condition of packaging the upper and lower portions are telescopic, the one portion being arranged concentrically around the other portion and the middle portion being present at least partially between the upper portion and the lower portion, and for obtaining the condition of use it being necessary to separate the upper and lower portions after which the middle portion extends tightly between the upper and lower portions, characterised in that the container further includes a cylinder which in a condition of packaging of the container is arranged concentrically between the lower and upper portions or around the upper portion of the container or inside the lower portion, and in a condition of use of the container is detained between the upper and lower portions and with its outside or inside is in contact with the inside or outside of the middle portion.
2. A container as claimed in claim 1, characterised in that in a condition of use of the container an upper rim of the cylinder is in contact with a lower rim of the upper portion of the side wall and a lower rim of the cylinder is in contact with an upper rim of the lower portion of the side wall.
3. A container as claimed in claim 1 or 2, characterised in that in the packaging condition of the container the upper portion of the side wall is arranged concentrically around the lower portion and the middle portion is at least partially arranged between the inside of the upper portion and the outside of the lower portion, the cylinder being accommodated between the middle portion and the upper portion, and in the condition of use of the container the outside of the cylinder making contact with the inside of the middle portion of the side wall.
4. A container as claimed in claim 1, 2 or 3, characterised in that the cylinder in circumferential direction is interrupted at at least one spot, so that a boundary rim is available in longitudinal direction of the cylinder on either side of the interruption.
5. A container as claimed in claim 4, characterised in that at least one of the boundary rims of the interruption the cylinder is provided with coupling means for coupling to the other boundary rim.

6. A container as claimed in claim 5, characterised in that the coupling means are formed by a component part having a U-shaped cross section which is attached to the boundary rim, while the cylinder with the other boundary rim can be moved between the two parallel sides of the U shape.

7. A container as claimed in any one of the preceding claims, characterised in that the lower portion of the side wall and/or the bottom has a gutter protruding outwards by which the container can be held during the separation.
INTERNATIONAL SEARCH REPORT

According to International Patent Classification (IPC) or to both national classification and IPC

B. RELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
B65D B44D A47F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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Further documents are listed in the continuation of Box C

See patent family annex

* Special categories of cited documents

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Gal l i, Moni a

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