

When the bag is filled with liquid, the two telescopic parts of the box are in a retracted state, so that no space needs to be reserved, neither inside the box nor outside thereof, for permitting the bag to be stretched. Consequently, the box requires only little space during transport and storage. However, when the bag is being emptied, the elastic member causes the telescopic parts of the box to expand and thereby to stretch the bag into its flat state by drawing the opposite ends of the bag apart from outside. This not only prevents the bag from forming wrinkles but has the additional advantage that the amount by which the telescopic parts are expanded and, therewith, the amount to which the bag has been emptied, is readily visible from the outside.

Summary of Invention

In accordance with an aspect of the invention, a liquid container comprising a box and a flexible bag accommodated in the box and containing a liquid and having a first end and a second end is provided. The first end is fixed at a wall part of the box. The box has two parts that are telescopically movable relative to one another. An elastic member is provided for urging the two parts of the box apart, and said first end of the bag is fixed at one of the parts of the box and said second end of the bag is fixed at the other of the two parts of the box.

More specific optional features of the invention are indicated in the dependent claims.

In a preferred embodiment, the one of the two parts of the box that is arranged to be telescopically moved out of the other part may have a scale that indicates the relative position of the two parts and, accordingly, the quantity of liquid left in the bag.

An embodiment example will now be described in conjunction with the drawings, wherein:

Fig. 1 is a sectional view of a liquid container filled with liquid;

Fig. 2 shows the liquid container of Fig. 1 in the emptied state;

Fig. 3 is an exploded perspective view of a box of the liquid container; and

Figs. 4 and 5 are perspective views of the liquid container in the filled and emptied state, respectively.

Fig. 6 shows a supply cabinet of a printing system comprising a liquid container according to the present invention.

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The ink container shown in Fig. 1 comprises a box 10 that accommodates a flexible bag 12. The bag 12 is filled with a liquid, e.g. with liquid ink, maintenance liquid or media pretreatment liquid for an ink jet printer.

Claims

1. A liquid container comprising a box ~~(10)~~ and a flexible bag ~~(12)~~ accommodated
5 in the box and containing a liquid and having a first end ~~(28)~~ and a second end ~~(30)~~, the
first end being fixed at a wall part of the box ~~(10)~~, characterized in that the box ~~(10)~~ has
two parts ~~(14, 16)~~ that are telescopically movable relative to one another, an elastic
member ~~(32)~~ is provided for urging the two parts ~~(14, 16)~~ of the box ~~(10)~~ apart, and said
10 first end ~~(28)~~ of the bag ~~(12)~~ is fixed at one of the parts ~~(16)~~ of the box ~~(10)~~ and said
second end ~~(30)~~ of the bag ~~(12)~~ is fixed at the other of the two parts ~~(14)~~ of the box ~~(10)~~.

2. The liquid container according to claim 1, wherein a bottom part ~~(14)~~ of the box
~~(10)~~ has a bottom wall ~~(18)~~ and side walls ~~(20)~~, and a top part ~~(16)~~ of the box ~~(10)~~ has a
top wall ~~(22)~~ and side walls ~~(24)~~ held in sliding engagement with the side walls ~~(20)~~ of
15 the bottom part ~~(14)~~, and wherein the first end ~~(28)~~ of the bag ~~(12)~~ is fixed at the top wall
~~(22)~~ of the top part ~~(16)~~ and the second end ~~(30)~~ of the bag ~~(12)~~ is fixed at the bottom
wall ~~(18)~~ of the bottom part ~~(14)~~.

3. The liquid container according to claim 1 or 2, wherein each of the two parts ~~(14,~~
20 ~~16)~~ of the box ~~(10)~~ has a first side wall on a first side of the box and a second side wall
on a second side of the box, the first and second sides being opposite to one another,
the first end ~~(28)~~ of the bag ~~(12)~~ is attached to one of the parts ~~(14, 16)~~ of the box ~~(10)~~ in
a position that is closer to the first side than to the second side, and the second end ~~(30)~~
of the box is attached to the other of the parts ~~(14, 16)~~ of the box ~~(10)~~ in a position that
25 is closer to the second side than to the first side .

4. The liquid container according to any of the preceding claims, wherein one of the
first and second ends ~~(28, 30)~~ of the bag ~~(12)~~ is connected to a spout ~~(26)~~ that is formed
in a wall of one of the two parts ~~(14, 16)~~ of the box.

- 30 5. The liquid container according to any of the preceding claims, wherein the elastic
member ~~(32)~~ is a spring arranged to press the two parts ~~(14, 16)~~ of the box ~~10~~ apart.

6. The liquid container according to any of the preceding claims, -comprising an
35 indicator for the fill level of the bag ~~(12)~~, said indicator comprising a scale ~~(34)~~ on one

(16) of the two parts (14, 16) of the box (10) and an edge of a wall of the other part (14) of the box (10).