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(54) **Brush holder**

(57) What is provided is an assembly for the storage of at least one brush. The assembly comprises a holder having cross-sectional internal dimensions that are only slightly larger than the cross-sectional dimensions of the brush to be accommodated. A cover to be placed on the holder is provided with an opening for accommodating the brush handle substantially sealingly. Finally, a detachable base is provided, in the upper side of which a recess is formed for accommodating the lower end of the holder.

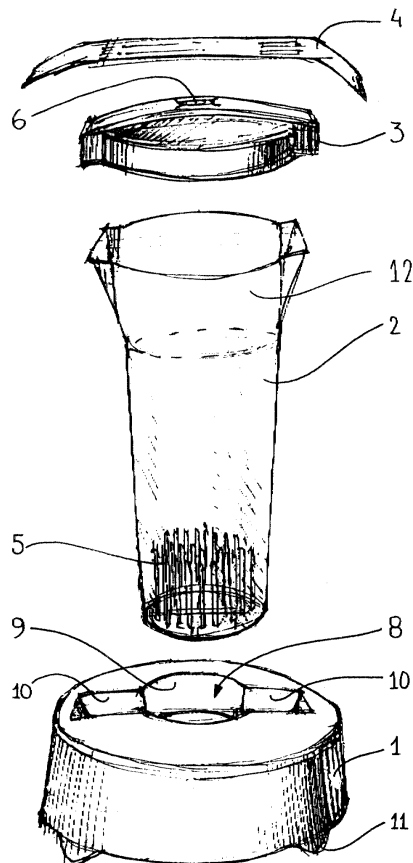


FIG. 1

Description

[0001] The invention relates to an assembly for the storage of at least one brush, comprising a holder for accommodating said brush and means for substantially sealing the holder.

[0002] In practice the storage of brushes after painting, lacquering and the like is problematic. Residual paint or lacquer on or in the brush will quickly dry out if no special measures are taken. This makes the brush less suitable for reuse, or it may even become unusable altogether. Consequently it is necessary in practice either to clean the brush or to store it in such a manner that the residual paint or lacquer will not dry out, or in any case less quickly.

[0003] In the past various assemblies for the temporary storage of brushes in accordance with the latter solution have been proposed. Thus Dutch patent application no. 1000426 discloses a system for protecting a brush, comprising a holder in which the brush hairs can be accommodated. The brush and the holder are provided with sealing means formed thereon, which can be brought into mating relationship so as to seal the holder in a gastight and/or liquid-tight manner. The essence of said system is that special brushes are used, which are already provided with said sealing means that fit the sealing means of the holder precisely. Said system is not suitable for use with any type of brush, therefore.

[0004] From the prior art there is also known a box-like holder which includes a cover in which openings are formed for accommodating the brush handle substantially sealingly. The brushes are suspended in said openings, as it were, with their hairs being submerged in an amount of a solvent that is present on the bottom of the box-like holder. One drawback of this prior art system, however, is the fact that a large amount of solvent is required, which is undesirable for ecological reasons.

[0005] The object of the invention is to provide an assembly of the kind referred to in the introduction, by means of which the above-described drawbacks can be overcome in a simple but nevertheless efficient manner.

[0006] In order to accomplish that objective, the assembly according to the invention is characterized in that the holder has cross-sectional internal dimensions that are only slightly larger than the cross-sectional dimensions of the brush to be accommodated, that the means for sealing the holder consist of a cover to be placed on the holder, in which an opening is present for accommodating the brush handle substantially sealingly, and wherein the assembly furthermore comprises a detachable base, in the upper side of which a recess is formed for accommodating the lower end of the holder.

[0007] The assembly according to the invention combines a number of advantageous effects. Since the holder has cross-sectional internal dimensions that are only slightly larger than the cross-sectional dimensions of the brush to be accommodated, the amount of solvent with which the holder is to be filled is very small. The use of

the cover including an opening for accommodating the brush handle substantially sealingly makes it possible to use various types of brushes, wherein it is not only one specific brush that leads to the desired sealing effect between the handle thereof and the cover or the holder. A final advantage of the detachable base is the fact that it is possible to place a holder containing a brush into said base, so that the holder will have a stable position.

[0008] A combination of the aforesaid systems as known from the prior art does not lead to the assembly according to the invention. Although system according to Dutch patent application no. 1000426 already includes a holder having cross-sectional internal dimensions that are only slightly larger than the cross-sectional dimensions of the brush to be accommodated, whilst the other prior art system comprising a box-like holder already includes a cover to be placed thereon, in which an opening is present for accommodating brush handles substantially sealingly, a combination of the two systems would lead to a holder of very small dimensions that would take up a very unstable position, which would make it necessary to store it in a horizontal position, which horizontal position is not possible, however, as the seal between the brush handles and the cover is not complete. According to the invention, however, the aforesaid base is used, as a result of which the holder having the aforesaid advantages can be used without any difficulty, since it can have a stable position in the base in spite of its small cross-sectional dimensions, so that there is no risk of solvent flowing out of the interior of the holder.

[0009] In a preferred embodiment of the assembly according to the invention the recess is shaped to accommodate the holder substantially in a vertical position.

[0010] When this embodiment is used, a vertical position is chosen for the holder. It is also conceivable, however, to opt for a recess that is shaped to accommodate the holder in an inclined position. It must be ensured thereby, however, that no solvent can flow out through the opening in the cover with a desired solvent level in the holder (with a brush being present therein).

[0011] Furthermore it is possible for the recess in the base to have a compound shape for accommodating holders having varying cross-sectional shapes with a proper fit therein.

[0012] An example thereof is an embodiment wherein the recess is a combination of a circular recess and an elongate recess. The circular recess is capable of receiving a holder which is suitable for round brushes. The elongate recess, on the other hand, is capable of receiving a holder which is suitable for flat brushes.

[0013] Any other combination of recesses having varying cross-sectional shapes is conceivable, however. Also an embodiment comprising several circular recesses having varying diameters is conceivable, wherein said recesses may be arranged concentrically and at stepped levels in the base.

[0014] In order to obtain a proper abutment between the cover and the brush handle, the opening in the cover preferably has a flexible edge.

[0015] As a possible constructional embodiment thereof it is proposed that the flexible edge of the opening consists of substantially radially extending lips of a flexible material. Said flexible lips move out when the brush handle is passed through the opening. Owing to their inherent resilience, they abut properly against the brush handle and adapt automatically to varying diameters thereof.

[0016] Furthermore it is possible for the holder to include pins that extend upwards from the bottom thereof. These pins make it possible, by suitably manoeuvring the brush, to remove material (paint residue, lacquer residue or the like) from between the brush hairs.

[0017] A special variant of the assembly according to the invention is furthermore characterized by a strip that can be affixed over the opening in the cover so as to provide a leakproof seal of said opening. When the brush has been definitively removed from the holder, for example, and the holder is to be discarded together with the solvent that is present therein, the strip can be arranged over the opening, thus preventing the outflow of solvent. In this manner the residue, which consists of solvent containing paint residue or the like, can be stored (for example in a chemical waste box) or be discarded in a sound manner.

[0018] Within this framework it is highly advantageous if said strip consists of a self-adhesive material.

[0019] Finally, an embodiment of the assembly is possible wherein On the one hand this makes it easier to strike paint off the brush hairs, whilst at the same time an insert guide for said hairs is provided, as it were.

[0020] The invention will be explained in more detail hereafter with reference to the drawing, which shows an embodiment of the assembly according to the invention.

[0021] Fig. 1 is a schematic and perspective view of the component parts of an embodiment of the assembly according to the invention; and

[0022] Fig. 2 is a schematic top plan view of the cover for use in the assembly according to Fig. 1.

[0023] Fig. 1 shows an assembly for storing a brush (not shown). In the illustrated embodiment the assembly consists of the following parts: a base 1, a holder 2, a cover 3 and a sealing strip 4.

[0024] Holder 2 is intended for accommodating a brush, and its internal cross-sectional dimensions are only slightly larger than the cross-sectional dimensions of the brush to be accommodated. In this manner only a very small amount of solvent is required in order to effect that the brush hairs are fully submerged in said solvent. In the illustrated embodiment holder 2 is substantially circular, seen in cross-sectional view, so that said holder 2 is suitable for accommodating round brushes. It is also conceivable, however, that the holder 2 is intended for accommodating flat brushes, in which case it must be substantially rectangular, seen in cross-

sectional view.

[0025] Holder 2 is internally provided with pins 5 that extend upwards from the bottom thereof. Said pins 5 perform a cleaning function when the brush (not shown) is moved with its hairs with respect to said pins 5.

[0026] The shape of cover 3 is adapted to fit the upper side of holder 2, so that cover 3 can be fitted substantially sealingly to holder 2. Possibly, holder 2 and cover 3 are provided with snap means which are known per se for this purpose. An opening 6 is formed in cover 3 for substantially sealingly accommodating the handle of the brush that has been placed into holder 2. To this end the opening 6 in cover 3 may be provided with a flexible edge, for example consisting of substantially radially extending lips 7 of a flexible material as shown in Fig. 2. Cover 3 may also be made of such a flexible material as a whole, of course.

[0027] A recess 8 is present in the upper side of the base 1 that is shown in Fig. 1, which recess has a compound shape in the illustrated embodiment, consisting of a circular recess 9 and an elongate recess 10. Recess 8 is intended to accommodate the lower end of holder 2 with a proper fit. If holder 2 is substantially circular in cross-section, as shown in Fig. 1, the circular part 9 of the recess 8 will mate with holder 2. If a holder of substantially rectangular cross-section is used, however, the bottom side of said holder will mate with the elongate part 10 of recess 8.

[0028] It should be noted that also other shapes of recess 8 are possible, depending on the specific cross-sectional shapes of the holders to be used.

[0029] After holder 2 has been placed into base 1, a highly stable position is obtained, so that there will be no risk of the holder with the brush falling over and solvent flowing out unintentionally. In other words, the base makes it possible to use the smallest possible dimensions for holder 2 (minimum use of solvent), without this having an adverse effect on the stable position of the holder.

[0030] Whilst in the embodiment that is shown in the figures the shape of recess 8 in base 1 is adapted to accommodate the holder substantially in vertical position therein, it would also be conceivable for the shape of recess 8 to be adapted to accommodate holder 2 in an inclined position therein.

[0031] In order to enhance the stability of base 1 on a supporting surface (for example a surface which is not flat), said base may be provided with legs 11. Said legs may be made of an anti-slip material.

[0032] Sealing strip 4 is intended to provide a leakproof seal of the opening 6 when solvent is present in holder 2 and the brush in question has been removed. In this manner the holder containing the solvent can be discarded in a sound manner. Preferably the sealing strip 4 consists of a self-adhesive material.

[0033] Although the primary task of the sealing strip 4 is to provide a leakproof seal of opening 6 in cover 3, it is also conceivable for sealing strip 4 to have a length

such that it can also be fixed to holder 2 with its ends, so that a firm connection between cover 3 and holder 2 is effected and the two are prevented from becoming detached from one another. In this manner the sealing strip 4 performs a dual function.

[0034] The illustrated holder 2 has a funnel-shaped widening portion 12 at its upper end. Said portion functions both as a strike-off aid for removing paint or lacquer residue from the brush hairs and as an insert guide for the for the brush into holder 2.

[0035] Although the invention has been described in the above on the basis of an assembly including a holder 2 for accommodating only one brush, it is also conceivable to use a holder which is capable of accommodating more than one brush.

[0036] The invention is not restricted to the embodiment as described above, which can be varied in several ways without departing from the scope of the invention as defined in the claims.

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terial.

7. An assembly according to any one of the preceding claims, **characterized in that** the holder includes pins that extend upwards from the bottom thereof.
8. An assembly according to any one of the preceding claims, **characterized by** a strip that can be affixed over the opening in the cover so as to provide a leakproof seal of said opening.
9. An assembly according to claim 8, **characterized in that** said strip consists of a self-adhesive material.
10. An assembly according to any one of the preceding claims, **characterized in that** the holder includes a funnel-shaped widening portion at its upper end.

Claims

1. An assembly for the storage of at least one brush, comprising a holder for accommodating said brush and means for substantially sealing the holder, **characterized in that** the holder has cross-sectional internal dimensions that are only slightly larger than the cross-sectional dimensions of the brush to be accommodated, that the means for sealing the holder consist of a cover to be placed on the holder, in which an opening is present for accommodating the brush handle substantially sealingly, and wherein the assembly furthermore comprises a detachable base, in the upper side of which a recess is formed for accommodating the lower end of the holder.
2. An assembly according to claim 1, **characterized in that** the recess is shaped to accommodate the holder substantially in a vertical position.
3. An assembly according to claim 1 or 2, **characterized in that** the recess in the base has a compound shape for accommodating holders having varying cross-sectional shapes with a proper fit therein.
4. An assembly according to claim 3, **characterized in that** the recess is a combination of a circular recess and an elongate recess.
5. An assembly according to any one of the preceding claims, **characterized in that** the opening in the cover is provided with a flexible edge.
6. An assembly according to claim 5, **characterized in that** the flexible edge of the opening consists of substantially radially extending lips of a flexible ma-

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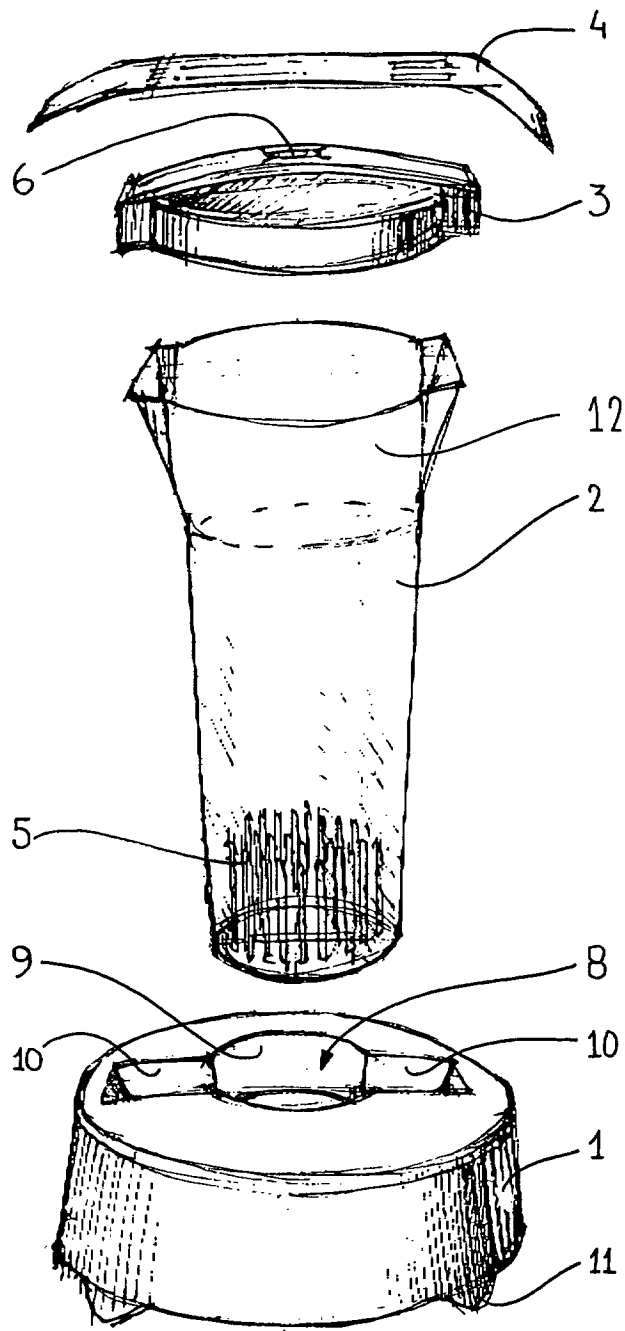


FIG. 1

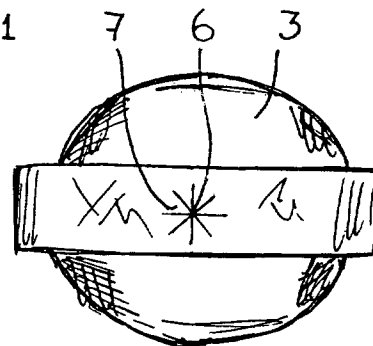


FIG. 2



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 01 20 0098

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	US 5 007 553 A (CURTIS LEE J) 16 April 1991 (1991-04-16) * column 1, line 27 - line 38 * ---	1	B44D3/12
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A	US 2 782 909 A (MCNAMARA, P. E.) 26 February 1957 (1957-02-26) * claims * ---	1	
A	NL 8 303 436 A (THEODORUS JOHANNUS GERARDUS LI) 1 May 1985 (1985-05-01) * page 2, line 5 - line 12 * ---	1	
A	WO 95 02976 A (HAKKER JOHANNES CORNELIS) 2 February 1995 (1995-02-02) * figure 5 * -----	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
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Place of search		Date of completion of the search	Examiner
THE HAGUE		9 March 2001	Herrmann, J
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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**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 01 20 0098

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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