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(54) **Container with stopper.**

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Description

This invention relates to a container, in particular a bottle or the like suitable for holding perfume, facial lotion, cosmetic lotion, or other similar fluid. The invention is more specifically directed to a novel combination of a container of globular or generally spherical shape, and a stopper therefor which also serves as the base on which the container rests.

A container having all the features defined in the first part of Claim 1 is known from GB—A—260261.

Heretofore, a bottle for dispensing perfume has usually comprised a bottle and a stopper therefor, the stopper fitting a neck at the top of the bottle. Although such a bottle can have a decorative appearance, it is necessary and unescapably has the appearance of a bottle. Thus, know bottles must rely in their ornateness of design to decorate a surface on which they rest. For example a cosmetic bottle for a ladies' dressing table is often given a fancy stopper or an elaborate bottle design in an attempt to led attractiveness to the dressing table's appearance.

It is an object of this invention to provide a container suitable for use as a perfume bottle which provides a novel and surprising decorative appearance without detracting from its basic function of containing perfume or other fluid, and which also permits simple dispensing of the perfume or other fluid.

It is another object of this invention to provide a bottle which is elegantly simple in its structure and appearance.

Accordingly, many desirable embodiments of this invention are constituted by the combination of a spheroid container and a mating stopper. The preferred spheroid container, which can be a sphere, an ovoid or egg shaped container, an elongated ellipsoidal container or a "squashed" spheroidal container, is formed of blown glass and has a spheroid outer wall and a spheroid inner wall of similar shape. The container has a round opening therein at the position forming the bottom of the container in its normal or resting orientation. The mating stopper has a stem fitting the opening and a flat surface forming a base on which the container assembly rests after the stopper is placed in the opening. In several preferred embodiments, the stopper includes a disc member integrally or unitarily formed with the stem, with the stem extending axially from the disc member.

When the container of this invention is used as a bottle for perfume, a cosmetic liquid, or another similar fluid, the invention can comprise, in combination, the container formed as a spheroid of transparent material, the stopper/base member, and a fill of the perfume or other fluid, preferably a substantially transparent fluid. If the stem and the opening in the container have mating ground-glass surfaces, a good, reliable seal will be formed, and the perfume can be reliably stored without leakage with the container in its normal, stopper-downward resting orientation. In that orientation, the bottle, filled with perfume or similar liquid, gives a unique, attractive appearance, and adds beauty to a ladies' dressing table or other place where it might be situated.

When it is desired to use the perfume or other fluid stored in the bottle, the bottle can be simply lifted and inverted, and the stopper removed. Then, the stopper, which will be wet from having been immersed in the fluid, can be used to dab the perfume or other fluid directly onto the face or neck, or onto the finger to apply the perfume or other fluid. Thereafter, the stopper can be returned to the bottle and the bottle inverted and replaced on the dressing table. The weight of the bottle is sufficient to ensure that there is a good seal, and that there is no leakage past the ground-glass surfaces of the stopper and opening.

The above and many other objects, features, and advantages of this invention will be more fully understood from the ensuing description, which should be considered in connection with the accompanying drawings, in which:

Fig. 1 is a sectional elevational view of a perfume bottle according to a preferred embodiment of this invention;

Fig. 2 is an exploded view showing the bottle (inverted) and the stopper therefor;

Fig. 3 is a bottom plan view of this embodiment; and

Fig. 4 is a top plan view thereof.

With reference to the drawings, including all of Figs. 1—4, a perfume bottle assembly according to this invention includes a bottle 10 of generally spherical shape having a spherical outer surface 12 and a generally spherical inner surface 14, the latter defining an inner spherical chamber 16, here shown about three-quarters filled with a liquid, such as perfume 18. A round opening 20 is disposed at the bottom of the bottle 10, if the latter is considered in its normal, resting orientation as shown in Fig. 1. As shown in the exploded view in Fig. 2, this opening 20 has a frusto-conical surface. Preferably, the bottle 10 is a blown glass, and the frusto-conical surface of the opening 20 is ground so that it forms a good seal with a stopper 22 now to be described.

The stopper 22, as shown in Fig. 1, forms a base for the perfume bottle assembly, on which the spheroid bottle 10 rests. The stopper 22 is preferably formed of glass, of the same type as used in the perfume bottle 10. The stopper 22 has a frusto-conical stem 24 with a ground-glass surface, as shown in Fig. 2, which mates with the corresponding surface of the opening 20. The stopper also includes a glass disc 26 formed integrally or unitarily with the stem 24 and orientated such that the stem 24 extends axially from one side of the disc 26. A flat surface of the disc 26 opposite the stem 24 forms the base on which the assembly rests. The spheroid bottle 10 thus has this position as its unique, stable position.

As shown in Figs. 1 and 2, a section of the perfume bottle 10 surrounds the opening 20 is formed as a flat or planar surface 28. However, this surface 28 is an optional feature.

Normally, the bottle 10, filled with the perfume

or other fluid 18, rests in the stopper-downward position as shown in Fig. 1. To apply the perfume, the bottle is picked up and inverted to the orientation shown in Fig. 2. Thereafter, the stopper 22 is twisted slightly and is removed from the opening 20. The perfume or other fluid can then be applied directly from the end of the stem 24 of the stopper 22 and the stopper 22 replaced in the opening 20.

The sealing of the bottle is obtained with glass-to-glass mating of bottle with stoppers which can be interchangeable with one another. For opening and closing the bottle, all that is needed is a slight twist of the stopper without pressing or knocking.

Although a specific embodiment is offered as an example, it will be understood that the bottle assembly of this invention can be any container which is transparent and generally spherical, possibly of an ovoid or flattened shape, or even of an onion shape, and which opens from the bottom. In other words, with this invention, the closure forms the base of the round bottle. If the bottle is used as a perfume bottle, he closure can be a ground-glass stopper and to apply the perfume, a user would merely pick up the bottle and invert it (so that the stopper is up) and remove the stopper. The stopper will have a drop or two of the perfume on it and the user can touch this and apply the perfume with her (or his) finger to the body where desired.

The design of this invention eliminates the need to shake the bottle to wet the stopper. Also, since the bottle rests on the stopper, it is impossible to leave the closure slightly ajar, as the bottle weight itself closes it. Thus, any problem about evaporation of the perfume or other fluid is minimized. Moreover, the ground glass seal is kept wet because it is at the bottom, and there is a better seal that would otherwise be provided.

Although the invention has been described hereinabove with reference to a single preferred embodiment, it should be apparent to those of ordinary skill in the art that many modifications and variations thereof could manifest themselves without departure from the scope of this invention as defined in the appended claims.

Claims

1. A container assembly comprising a hollow container (12) having an opening (20) therein and a stopper (22) having a stem (24) fitting the opening (20) and a flat outer surface forming a base (26) on which the container assembly (10) rests when the stopper (22) is in place in the opening (20), the stopper (22) thus forming a pedestal support for the container (12) in a normal, stopper-down position of the assembly, characterised in that the container (12) is spheroidal and transparent and of such shape that said normal, stopper-down position is a unique stable position of the assembly.

2. A container assembly as claimed in claim 1, characterized in that the spheroidal container (12) has a flattened surface (28) surrounding the opening (20) but a round surface extending elsewhere around the container (12).

3. A container assembly as claimed in claim 1 or 2, characterized in that the stopper (22) has a ground-glass stem (24) which mates with a ground-glass surface of the opening (20).

4. A container assembly as defined in any preceding claim, characterised by a fill of a generally transparent liquid (18) within an inner chamber (14) of the container (12).

Patentansprüche

1. Behälter, bestehend aus einem eine Öffnung (20) aufweisenden Hohlkörper (12) und einem Verschlußteil (22), das einen in die Öffnung (20) passenden Stöpsel (24) und eine flache, eine Basis (26) bildende Außenfläche, auf welcher der Behälter (10) bei in die Öffnung (20) eingesetztem Verschlußteil (22) ruhut, aufweist, und das Verschlußteil (22) somit in einer normalen Anordnung, in welcher das Verschlußteil nach unten zeigt, einen Standfuß für den Hohlkörper (12) bildet, dadurch gekennzeichnet, daß der Hohlkörper (12) kugelförmig und durchsichtig und von solcher Form ist, daß die normale Anordnung mit dem Verschlußteil nach unten die einzige stabile Stellung des Behälters bildet.

2. Behälter nach Anspruch 1, dadurch gekennzeichnet, daß der kugelförmige Hohlkörper (12) um die Öffnung (20) herum eine Abflachung (28), ansonsten überall eine gerundete Oberfläche aufweist.

3. Behälter nach Anspruch 1 oder 2, dadurch gekennzeichnet, daß das Verschlußteil (22) einen Schliffglastöpsel (24) aufweist, der auf einem Schliffglasfläche der Öffnung (20) paßt.

4. Behälter nach einem der Ansprüche 1 bis 3, dadurch gekennzeichnet, daß er eine Füllung aus einer im wesentlichen lichtdurchlässigen Flüssigkeit (18) in einem Innenraum (14) des Hohlkörpers (12) aufweist.

Revendications

1. Ensemble formant conteneur comprenant un conteneur (12) définissant une cavité portant un orifice (20) et un obturateur (22) constitué par un fût (24) s'adaptant à l'orifice (20) et une surface extérieure platte formant une embase (26) sur laquelle l'ensemble formant conteneur (10) repose quand l'obturateur (22) est en place dans l'orifice (20), l'obturateur (22) formant ainsi un pied d'estale pour le conteneur (12) dans une position normale de l'ensemble formant conteneur, obturateur en bas, caractérisé en ce que le conteneur de forme sphérique est transparent et la position obturateur en bas, dite position normale, est l'unique position stable de l'ensemble formant conteneur.

2. Ensemble formant conteneur selon la revendication 1, caractérisé en ce que le conteneur (12) de forme sphérique possède une surface plane entourant l'orifice (20) et d'autre part une surface arrondie autour du conteneur (12).

3. Ensemble formant conteneur selon la revendication 1 ou 2, caractérisé en ce que l'obturateur (22) possède un fût en verre dépoli (24) qui s'accouple avec une surface en verre dépoli de l'orifice (20).

4. Ensemble formant conteneur selon l'une quelconque des revendications, caractérisé par un remplissage de liquide généralement transparent (18) à l'intérieur d'une chambre interne (14) du conteneur (12).

FIG.1

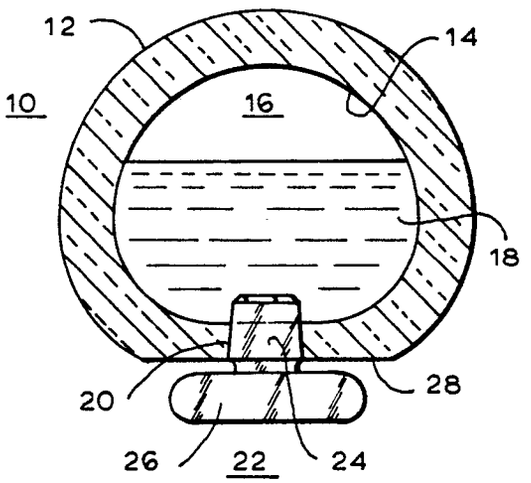

FIG.3

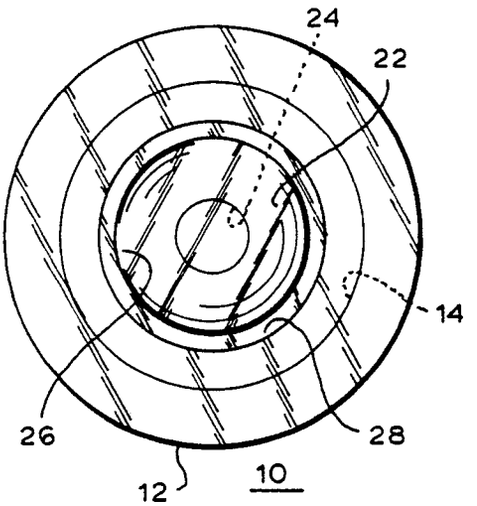

FIG.2

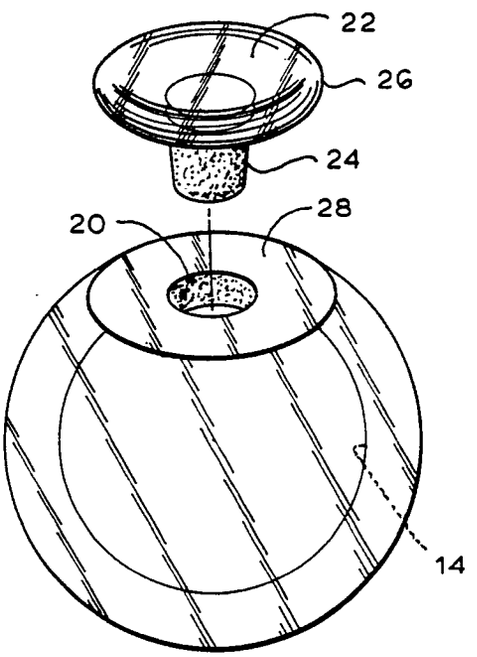

FIG.4