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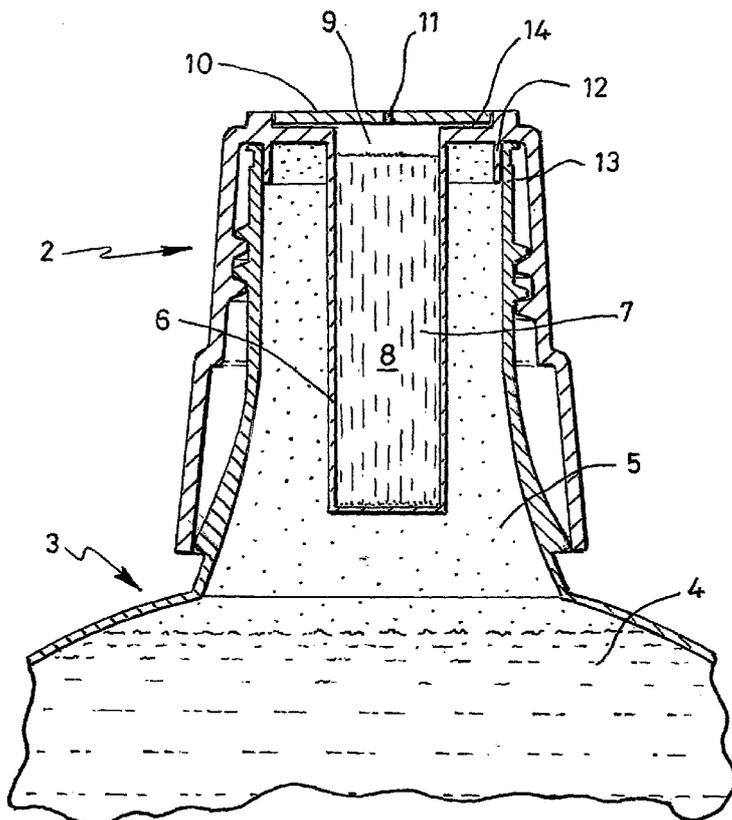
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(54) Title: CLOSURE FOR DISPENSING FRAGRANCE FROM THE CLOSURE



(57) Abstract: A closure (2) for a container (3), the closure (2) being engageable with a container (3) to close the container (3) and/or having a first part engageable with a second part to close a container (3), wherein the closure (2) has an orifice (11) and has a source of fragrance (8), and includes a chamber (9), or, when the first part is engaged with the second part, forms a chamber (9), the chamber (9) containing the source of the fragrance (8), the closure (2) being arranged such that, when used to close a container (3), the chamber (9) is separated from an internal space of the container (3) and vented to the surroundings of the container (3) by the orifice (11), and compression applied to the chamber (9) causes a puff of the fragrance to be emitted from the chamber (9) through the orifice (11) into the surroundings of the container (3).

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CLOSURE FOR DISPENSING FRAGRANCE FROM THE CLOSURE

Field of the Invention

This invention relates to delivering fragrance from a consumer product, and in particular to a closure for a container, to packaging for a consumable product, to a consumer product and to a method of dispensing fragrance from a consumer product.

Background to the Invention

For the purposes of this specification “consumer product” means packaging for a consumable product, the packaging comprising a container and a closure for the container and containing a consumable product, typically a liquid consumable product, such as a shampoo, shower gel, laundry detergent or lavatory cleaning preparation, and typically including a fragrance. Such consumable products are also referred to as “active substances”.

Fragrance plays an important part in the promotion and sales of a consumer product by reinforcing the product brand. In supermarkets selling consumer products with removable caps, it is known for customers to take a product from a shelf and remove its cap so that they can sample a fragrance included in the consumable product before they purchase the consumer product. If a loosened cap is not properly re-tightened, there is a risk of spillage or contamination of, or damage to, the consumable product. Also, there are some consumable products, e.g., liquid cleaning products, that may contain an aggressive constituent, such as bleach, in order to perform their function. The headspace (air) above the consumable product in the container may then contain less attractive odours or odours which quickly disperse in use and are thus not representative of the fragrance which lingers after use. Some consumer products have tamper-proof or tamper-evident closures removal of which can render the product unsaleable.

For these reasons, sampling the fragrance of a consumable product by releasing some of the product, or some of the air in the headspace above the product, has a number of disadvantages which the invention aims to overcome.

Summary of the Invention

According to a first aspect of the invention there is provided a closure for a container, the closure being engageable with a container to close the container and/or having a first part engageable with a second part to close a container, wherein the closure has an orifice and, in use, has a source of fragrance, and includes a chamber, or, when the first part is engaged with the second part, forms a chamber, the chamber, in use, containing the source of the fragrance, the closure being arranged such that, when used to close a container, the chamber is separated from an internal space of the container and vented to the surroundings of the container by the orifice, and, in use, compression applied to the chamber causes a puff of the fragrance to be emitted from the chamber through the orifice into the surroundings of the container.

The invention encompasses the closure when the closure has the source of the fragrance.

According to a second aspect of the invention, therefore, there is provided a closure for a container, the closure being engageable with a container to close the container and/or having a first part engageable with a second part to close a container, wherein the closure has an orifice and a source of fragrance, and includes a chamber, or, when the first part is engaged with the second part, forms a chamber, the chamber containing the source of the fragrance, the closure being arranged such that, when used to close a container, the chamber is separated from an internal space of the container and vented to the surroundings of the container by the orifice, and compression applied to the chamber causes a puff of the fragrance to be emitted from the chamber through the orifice into the surroundings of the container.

The invention can provide a closure that, when used to close a container containing a consumable product that includes a fragrance, enables the fragrance of the consumable product to be sampled (by applying compression to the chamber of the closure to cause a

puff of a fragrance similar to, or identical with, the fragrance of the product to be emitted through the orifice into the surroundings of the container) without opening the container. Compression can repeatedly be applied to the chamber to cause repeated puffs of the fragrance to be emitted through the orifice.

Since the closure of the invention avoids the need to open the container, the risk of spillage or contamination of or damage to the consumable product contained in the container is reduced, as is the likelihood of removal of a tamper-proof or tamper-evident closure.

Moreover, where the consumable product contained in the container is such that the headspace contains odours that are not representative of the fragrance that lingers after use of the consumable product, the closure of the invention enables the fragrance that lingers after use of the consumable product to be sampled.

Of course, it is not essential that the fragrance of the source of the fragrance be representative of a fragrance included in the consumable product contained in the container. The fragrance of the source of the fragrance may, for example, be a fragrance included in a consumable product other than that contained in the container.

Where the closure has a first part engageable with a second part to close a container, it is envisaged that the closure may be integrally formed with the container, for example by moulding. Preferably, however, the closure is adapted to be engageable with a container.

In preferred embodiments of the invention the closure is provided with a screw threaded portion for engagement with a corresponding screw threaded portion of a container.

In first, second and third embodiments of the invention the closure is a screw cap comprising a first wall, which, when the screw cap is used to close a container, separates the chamber from an internal space of the container, and a second wall in which the orifice is formed and which, but for the orifice, separates the chamber from the surroundings of the screw cap.

In the first and third embodiments, the first wall is flexible, such that when the closure is used to close a container, and the container is squeezed to increase an internal pressure within the container, the increased internal pressure results in compression of the flexible first wall and consequently compression of the chamber and emission of a puff of the fragrance from the chamber through the orifice into the surroundings of the container.

In the second embodiment, the second wall is flexible and accessible to be squeezed, such that squeezing of the closure results in compression of the flexible second wall and consequently compression of the chamber and emission of a puff of the fragrance from the chamber through the orifice into the surroundings of the closure.

In a fourth embodiment of the invention the closure is a flip-top lid assembly comprising a nozzle through which, when the assembly is attached to a container, a consumable product contained in the container can be dispensed, and a flip-top lid engageable with the nozzle to close the nozzle, the nozzle forming a first wall, which, when the flip-top lid is engaged with the nozzle, separates the chamber from an internal space of the container, and the flip-top lid forming a second wall in which the orifice is formed and which, but for the orifice, separates the chamber from the surroundings of the flip-top lid assembly.

The first wall may advantageously be permeable by the fragrance of the source of fragrance.

In this way, where the closure is used to close a container containing a consumable product that would otherwise cause the headspace above the consumable product to contain less attractive odours or odours which quickly disperse in use and are thus not representative of the fragrance which lingers after use of the consumable product, the closure can introduce a fragrance into the headspace so that, when the container is opened, the headspace contains the fragrance rather than the less attractive odours or odours which quickly disperse in use.

In the fourth embodiment the flip-top lid is formed with a resiliently deformable blister such that compression of the blister results in compression of the chamber and emission of a puff of the fragrance from the chamber through the orifice into the surroundings of the closure.

The invention includes within its scope a consumer product before the latter has been filled with active substance or charged with the fragrance.

According to a third aspect of the invention, therefore, there is provided packaging for a consumer product, the packaging comprising a container having an internal space for holding an active substance of the product, the container having an opening, a closure which in use closes the opening and is removable from the container for the purpose of dispensing the substance from the container, the closure including a chamber defined by a first wall separating the chamber from the internal space of the container and by a second wall which has an orifice therein and which separates the chamber from the surroundings of the product, the chamber in use holding a source of fragrance such that compression applied to the chamber causes a puff of fragrance to be emitted from the chamber through the orifice and into the surroundings without the emission of any active substance.

The invention also includes within its scope packaging for a consumable product, the packaging comprising a container and a closure for the container, before the former has been filled with a consumable product.

According to a fourth aspect of the invention there is provided packaging for a consumable product, the packaging comprising a container and a closure for the container, the closure being engageable with the container to close the container and/or having a first part engageable with a second part to close the container, wherein the closure has an orifice and a source of fragrance, and includes a chamber, or, when the first part is engaged with the second part, forms a chamber, the chamber containing the source of the fragrance, the closure being arranged such that, when used to close the container, the chamber is separated from an internal space of the container and vented to the surroundings of the container by the orifice, and compression applied to the chamber causes a puff of the fragrance to be emitted from the chamber through the orifice into the surroundings of the container.

The invention further includes within its scope a container and a closure for the container not only before the former has been filled with a consumable product, but also before the latter has been charged with a fragrance.

According to a fifth aspect of the invention there is provided packaging for a consumable product, the packaging comprising a container and a closure for the container, the closure being engageable with the container to close the container and/or having a first part engageable with a second part to close the container, wherein the closure has an orifice and, in use, has a source of fragrance, and includes a chamber, or, when the first part is engaged with the second part, forms a chamber, the chamber, in use, containing the source of the fragrance, the closure being arranged such that, when used to close the container, the chamber is separated from an internal space of the container and vented to the surroundings of the container by the orifice, and, in use, compression applied to the chamber causes a puff of the fragrance to be emitted from the chamber through the orifice into the surroundings of the container.

Where the closure has a first part engageable with a second part to close the container, the first part of the closure may advantageously be integrally formed with the container.

Preferably, however, the closure is engageable with the container, and more preferably still, engageable by means of screw threads.

According to a sixth aspect of the invention there is provided a consumer product comprising a container having an internal space holding an active substance of the product, the container having an opening, a closure which closes the opening and is removable from the container for dispensing the substance from the container, the closure including a chamber defined by a first wall separating the chamber from the internal space of the container and by a second wall which has an orifice therein and which separates the chamber from the surroundings of the product, the chamber holding a source of fragrance such that compression applied to the chamber causes a puff of the fragrance to be emitted from the chamber through the orifice and into the surroundings without the emission of any active substance.

Thus, sampling of the fragrance does not deplete the consumable product or involve breaking the seal enclosing the space accommodating the consumable product so the risk of spillage of the latter is avoided.

This means that there is complete freedom to choose the nature of the fragrance in relation to the consumable product. Normally, the fragrance will be representative of the fragrance of the consumable product, but it is possible for the fragrance not to be so representative. For example, the fragrance could promote a complementary or contrasting product.

Preferably the consumable product is a consumable liquid product.

The consumer product may be designed so that the compression applied to the chamber may result from direct manual squeezing of a chamber wall, for example, by making the chamber wall flexible and accessible to be squeezed, either as a result of the chamber projecting from the container or being withdrawable from the container. It is preferred, however, for the chamber to be located within the container in such manner that the container is squeezed to increase the internal pressure within the container, this raised internal pressure resulting in the compression of the flexible first wall of the chamber and the consequent emission of a puff of fragrance.

In some embodiments the chamber is located in a headspace at the top of the container, enabling the invention to be put into effect with modification of the closure but without modification of a conventional container or its consumable product and without significant change in appearance. Preferably, the closure is a screw cap and the container has a neck onto which the cap is screwed, the circular disc-like top of a conventional cap being modified so that the first wall depends from the top of the cap into the neck of the container and the second wall spans the top of the cap. The first wall is conveniently tubular, having a tubular side wall and a closed lower end and being positioned in the neck of the container, with all round clearance between the side wall and the neck of the container.

Although in one embodiment the tubular side wall is cylindrical, so that the side wall is circular in plan, the side wall may advantageously be flattened, so that the side wall is, e.g., elliptical in plan. This may facilitate compression of the first wall and hence emission of a puff of fragrance.

According to a seventh aspect of the invention there is provided a consumer product comprising a container having an internal space holding a consumable product of the consumer product, the container having an opening for dispensing the consumable product from the container and a closure which closes the opening, the closure being engageable with the container to close the opening and/or having a first part engageable with a second part to close the opening, wherein the closure has an orifice and a source of fragrance, and includes a chamber, or, when the first part is engaged with the second part, forms a chamber, the chamber containing the source of the fragrance, the closure being arranged such that, when used to close the opening, the chamber is separated from an internal space of the container and vented to the surroundings of the container by the orifice, and compression applied to the chamber causes a puff of the fragrance to be emitted from the chamber through the orifice into the surroundings of the container.

According to an eighth aspect of the invention there is provided a method of dispensing a fragrance from a consumer product having a container with an internal space holding an active substance of the product and with a chamber holding the fragrance, the method comprising squeezing the product and consequently causing a puff of fragrance to be emitted without the emission of any active substance from the internal space.

It is preferred, as previously mentioned, for the user to squeeze the container and for the resulting increased pressure within the container to cause a puff of fragrance to be emitted from a source of fragrance held within a chamber separate from the space within the container.

The invention is particularly applicable to products such as hair shampoos and shower gels where the fragrance may be closely similar to, or identical with, the fragrance of the active substance. In the case of products that include more aggressive constituents such as bleach (e.g. certain cleaning or laundry preparations), the fragrance may be representative of the fragrance that lingers or remains after the active substance has been put into use and left for a period of time.

Brief Description of the Drawings

A consumer product and four closures forming preferred embodiments of the invention will now be described, by way of example, with reference to the accompanying drawings, in which:-

Figure 1 is a fragmentary cross-sectional view through the upper part of the consumer product,

Figure 2 is a cross-sectional view of a closure cap of the consumer product;

Figure 3 is a cross-sectional view of the closure cap of Figure 2 in use to measure a dose of a consumable product of the consumer product;

Figure 4 is a cross-sectional view of a second closure cap;

Figure 5 is a cross-sectional view of the second closure cap being squeezed so as to cause a dose of fragrance to be dispensed from the cap;

Figure 6 is a cross-sectional view of a third closure cap;

Figure 7 is a cross-sectional view of the third closure cap with compression being applied to the chamber of the cap so as to cause a dose of fragrance to be dispensed from the cap;

Figure 8 is a cross-sectional view of a flip-top lid assembly in a closed position;

Figure 9 is a cross-sectional view of the flip-top lid assembly in an open position; and

Figure 10 is a cross-sectional view of the flip-top lid assembly with compression being applied to the chamber of the lid so as to cause a dose of fragrance to be dispensed from the lid.

Detailed Description of the Drawings

The consumer product, a household cleaning preparation, comprises a plastics container 3 holding a consumable liquid product 4 (cleaning liquid) above which is a headspace 5 extending into the neck 13 of the container. A closure cap 2 has a main plastics body screwed onto threads integrally moulded onto the external surface of the neck 13.

The body of the cap 2 has a depending cylindrical wall 12 which sealingly engages against the internal surface of the upper extremity of the neck 13. Integrally moulded with, and depending from the top of, the cap body is a flexible tubular wall 6 terminating in a closed lower end and defining a chamber 9. The chamber 9 accommodates a substrate 7 impregnated with a fragrance (indicated by the reference 8) representative of the fragrance of the consumable liquid product 4. The substrate 7 consists of wadded crinkled polyester fibres. Use of the wadded crinkled polyester fibres gives rise to a substrate that expands substantially to fill the chamber 9, but is easily deformable when the flexible tubular wall 6 is compressed. The circular top of the cap body (and the top of the chamber 9) is closed by a disc-shaped wall 10 having a central orifice formed by a pinhole 11. Thus, the wall 6 projects downwardly into the headspace, being sealed therefrom, and being surrounded with all round radial clearance by the neck 13.

When the consumer product is on a shelf in a supermarket, a potential purchaser can squeeze the container 3 which causes an increase in pressure in the headspace 5. This in turn compresses the wall of the chamber 9 and increases the pressure in the chamber, causing a small pulse or puff of fragrance from the substrate to be emitted through the pin hole 11, without the emission of any fragrance from the consumable product or from the headspace 5. The consumable product 4 remains sealed in the container until the closure cap 2 is unscrewed from the container neck 13, when the consumable product 4 can then be poured through the open neck. This action is generally performed after the consumer product has been purchased and taken home and the action of unscrewing the cap 2 will cause a puff of fragrance from the substance to be emitted as a result of the compression applied to the container to resist the turning moment applied to the cap.

It will be appreciated that the container 3 (and the consumable product) can be conventional, only the closure cap 2 requiring modification to put the invention into effect.

In Figure 3 a dose of the consumable product 4 has been poured from the container 3 into the cap 2. The closed end of the flexible wall 6 (denoted in Figure 3 by reference numeral 15) is used to determine when the correct dose of the consumable product 4 has been poured into the cap. When the surface of the consumable product 4 is level with the closed end 15 of the flexible wall 6, the correct dose has been measured. It is believed that more consistent dosing of the consumable product is possible using the closed end 15 because no meniscus can form against the flexible wall 6, and there is not the ambiguity as to the level of the surface of the consumable product surface that would arise if the level of the surface were measured against the outer wall of the cap.

Turning to Figure 4, a second closure cap 20 comprises an outer portion 22, an inner portion 24 and a source of a fragrance in the form of an annular paper substrate 26 impregnated with a fragrance. The outer portion 22 of the cap is cup-shaped and has a pin hole 28 in the centre of its closed end. The open end of the outer portion 22 is formed with an external screw threaded portion 30 for engagement with screw threads inside the neck of a container (not shown). The outer portion 22 is formed with a radially inwardly projecting annular lip 32 approximately half way along its length. The inner portion 24 of the cap is also cup-shaped and is formed with a radially outwardly projecting annular lip 34. The substrate 26 is fastened to the centre of the external surface of the closed end of the inner portion 24, then the inner portion 24 is introduced closed end first into the open end of the outer portion 22. The inner portion 24 is pushed into the outer portion 22 until the lip 34 of the inner portion abuts the lip 32 of the outer portion, whereupon the lips 32 and 34 are bonded together to form a generally cup-shaped chamber between the internal surface of the closed end of the outer portion 22 and the external surface of the inner portion 24.

Figure 5 shows the closed end 38 of the outer portion 22 of the cap 20 being squeezed so as to cause a puff of fragrance to be dispensed from the chamber 38 through the orifice 28. The outer portion 22 of the cap is resilient and returns to the shape shown in Figure 4 when released.

Figure 6 shows a third closure cap 40 comprising a cup-shaped outer portion 42, a dish-shaped inner portion 44 and an annular paper substrate 46 impregnated with a fragrance. A sleeve 48 extends from the external surface of the outer portion 42 towards the open end of the outer portion. The internal surface of the sleeve is screw threaded for engagement with screw threads on the exterior of a neck of a container (not shown). A radially outwardly projecting lip 43 extends from the open side of the dish-shaped inner portion 44 and is bonded to the internal surface of the closed end of the outer portion 42, so as to form a chamber 50 between the internal surface of the closed end of the outer portion 42 and the internal surface of the closed side of the inner portion 44. A pin hole 52 in the centre of the closed end of the outer portion 42 vents the chamber 50. When the cap 40 is screwed onto the neck of a container, the open end of the neck of the container is sealed by the closed end of the sleeve 48.

Figure 7 shows the inner portion 44 being subjected to compression as a result of a container (not shown), which the cap is being used to close, being squeezed, so as to increase an internal pressure in the container. Compression of the inner portion 44 reduces the volume of the chamber 50, causing a puff of fragrance to be expelled from the chamber through the orifice 52. The inner portion 44 is resilient and returns to the shape shown in Figure 6 when the container is released or the cap 40 is removed from the container. The inner portion 44 is a membrane formed from polyethylene and is sufficiently porous that fragrance from the substrate 46 can diffuse through the inner portion 44 into the headspace of the container, but the membrane is still deformed when the internal pressure of a container closed by the cap 40 is increased by squeezing the container.

Turning to Figure 8, a flip-top cap assembly 60 comprises a generally cup-shaped nozzle portion 62 attached by means of a living hinge 64 to a flip-top lid 66, to which is attached a paper substrate impregnated with a fragrance. An internal surface of the nozzle portion is provided with screw threads for engagement with screw threads on an external surface of the neck of a container (not shown). The closed end of the nozzle portion 62 is formed with an aperture (denoted in Figure 9 by reference numeral 70) through which a consumable product can be dispensed from the container when the flip-top lid is open, as shown in Figure 9. The flip-top lid 66 is generally dish-shaped and is formed with a plug (denoted in Figure 9 by

reference numeral 72), which projects from the internal surface of the lid and forms a sealing fit in the aperture 70 when the lid is closed, as shown in Figure 8.

When the flip-top lid 66 is closed, as shown in Figure 8, a chamber 74 is formed between the external surface of the closed end of the portion 62 and the internal surface of the lid 66, around the aperture 70 and plug 72. The substrate 68 is contained in the chamber 74. The flip-top lid 66 is formed with an orifice 76, which vents the chamber 74, and a flexible blister 78. The blister 78 can be compressed so as to reduce the volume of the chamber 74 to cause a dose of the fragrance to be emitted through the orifice 76. This is shown in Figure 10 with a compressive force exerted on the blister 78 by a finger being represented by an arrow denoted by reference numeral 80. The blister 78 is resiliently flexible and therefore returns to the shape shown in Figures 8 and 9 when the compressive force is removed from the blister.

Conventional flip-top lid assemblies for consumer products (i.e. flip-top lid assemblies without the substrate 68, orifice 76 and blister 78) are often provided with a tamper-evident seal in the form of a shrink-wrapped sleeve that encloses the join between the screw threaded portion and the flip-top lid, so as to prevent the flip-top lid from being opened. In order to sample a fragrance of a consumable product contained in a container closed by a conventional flip-top lid assembly, the tamper-evident seal must be broken. The flip-top lid assembly of the invention can be used to sample the fragrance of the consumable product contained in a container closed by the flip-top lid assembly without breaking the tamper-evident seal, which is a feature of considerable value.

It will be apparent that the above description relates only to four embodiments of the invention, and that the invention encompasses other embodiments as defined by the appended claims.

Claims

1. A closure for a container, the closure being engageable with a container to close the container and/or having a first part engageable with a second part to close a container, wherein the closure has an orifice and, in use, has a source of fragrance, and includes a chamber, or, when the first part is engaged with the second part, forms a chamber, the chamber, in use, containing the source of the fragrance, the closure being arranged such that, when used to close a container, the chamber is separated from an internal space of the container and vented to the surroundings of the container by the orifice, and, in use, compression applied to the chamber causes a puff of the fragrance to be emitted from the chamber through the orifice into the surroundings of the container.
2. A closure according to claim 1, wherein the closure is provided with a screw threaded portion for engagement with a corresponding screw threaded portion of a container.
3. A closure according to claim 2, wherein the closure is a screw cap comprising a first wall, which, when the screw cap is used to close a container, separates the chamber from an internal space of the container, and a second wall in which the orifice is formed and which, but for the orifice, separates the chamber from the surroundings of the screw cap.
4. A closure according to claim 3, wherein the first wall is flexible, such that when the closure is used to close a container, and the container is squeezed to increase an internal pressure within the container, the increased internal pressure results in compression of the flexible first wall and consequently compression of the chamber and emission of a puff of the fragrance from the chamber through the orifice into the surroundings of the container.
5. A closure according to claim 3, wherein the second wall is flexible and accessible to be squeezed, such that squeezing of the closure results in compression of the flexible

second wall and consequently compression of the chamber and emission of a puff of the fragrance from the chamber through the orifice into the surroundings of the closure.

6. A closure according to claim 1 or 2, wherein the closure is a flip-top lid assembly comprising a nozzle through which, when the assembly is attached to a container, a consumable product contained in the container can be dispensed, and a flip-top lid engageable with the nozzle to close the nozzle, the nozzle forming a first wall, which, when the flip-top lid is engaged with the nozzle, separates the chamber from an internal space of the container, and the flip-top lid forming a second wall in which the orifice is formed and which, but for the orifice, separates the chamber from the surroundings of the flip-top lid assembly.
7. A closure according to any of claims 3 to 6, wherein the closure has a source of fragrance and the first wall is permeable by the fragrance of the source of fragrance.
8. A closure according to claim 6 or claim 7 when dependent from claim 6, wherein the flip-top lid is formed with a resiliently deformable blister such that compression of the blister results in compression of the chamber and emission of a puff of the fragrance from the chamber through the orifice into the surroundings of the closure.
9. Packaging for a consumable product, the packaging comprising a container and a closure for the container, the closure being engageable with the container to close the container and/or having a first part engageable with a second part to close the container, wherein the closure has an orifice and, in use, has a source of fragrance, and includes a chamber, or, when the first part is engaged with the second part, forms a chamber, the chamber, in use, containing the source of the fragrance, the closure being arranged such that, when used to close the container, the chamber is separated from an internal space of the container and vented to the surroundings of the container by the orifice, and, in use, compression applied to the chamber causes a

puff of the fragrance to be emitted from the chamber through the orifice into the surroundings of the container.

10. A consumer product comprising a container having an internal space holding a consumable product of the consumer product, the container having an opening for dispensing the consumable product from the container and a closure which closes the opening, the closure being engageable with the container to close the opening and/or having a first part engageable with a second part to close the opening, wherein the closure has an orifice and a source of fragrance, and includes a chamber, or, when the first part is engaged with the second part, forms a chamber, the chamber containing the source of the fragrance, the closure being arranged such that, when used to close the opening, the chamber is separated from an internal space of the container and vented to the surroundings of the container by the orifice, and compression applied to the chamber causes a puff of the fragrance to be emitted from the chamber through the orifice into the surroundings of the container.
11. A method of dispensing a fragrance from a consumer product having a container with an internal space holding an active substance of the product and with a chamber holding the fragrance, the method comprising squeezing the product and consequently causing a puff of fragrance to be emitted without the emission of any active substance from the internal space.

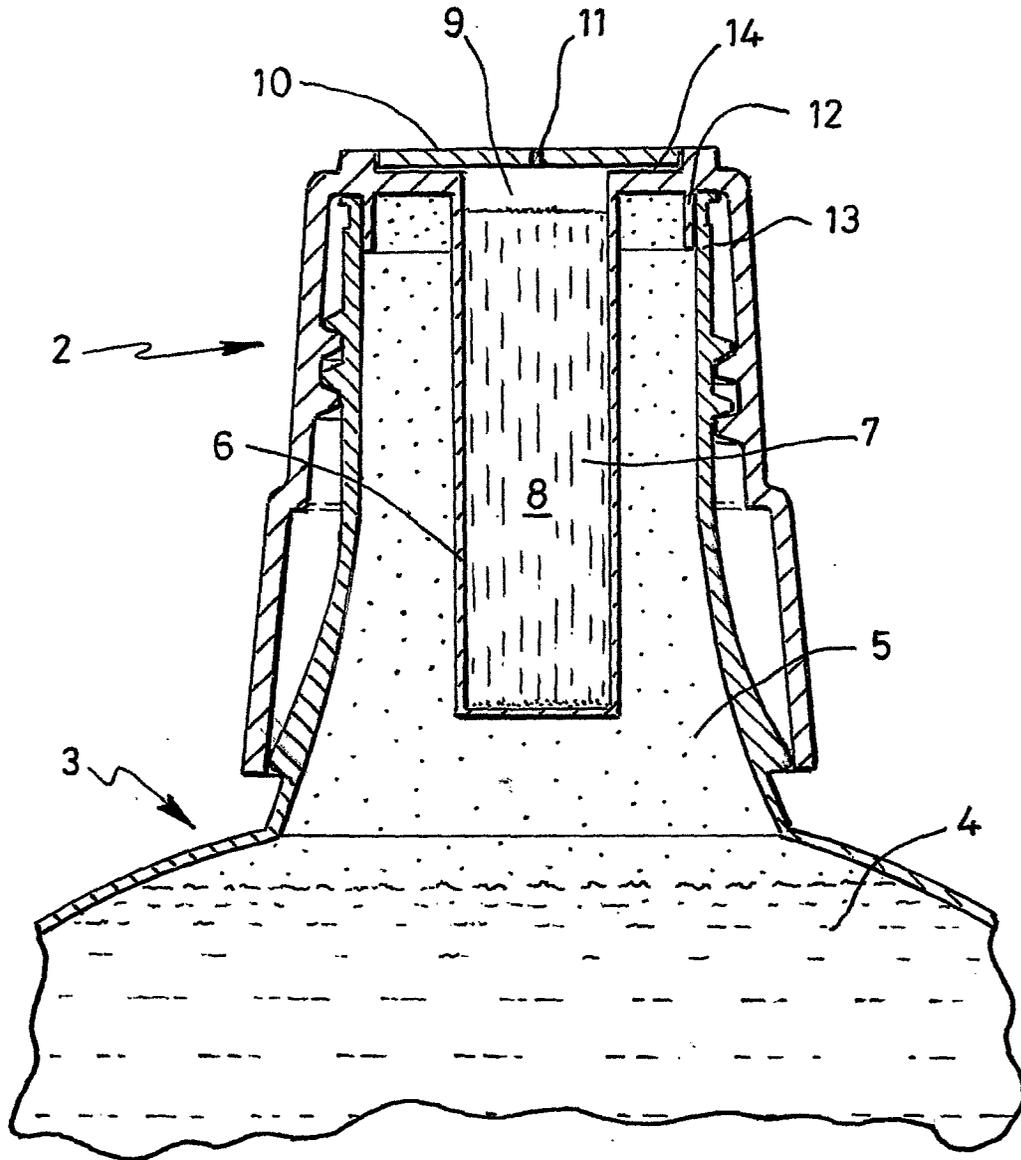


Fig. 1

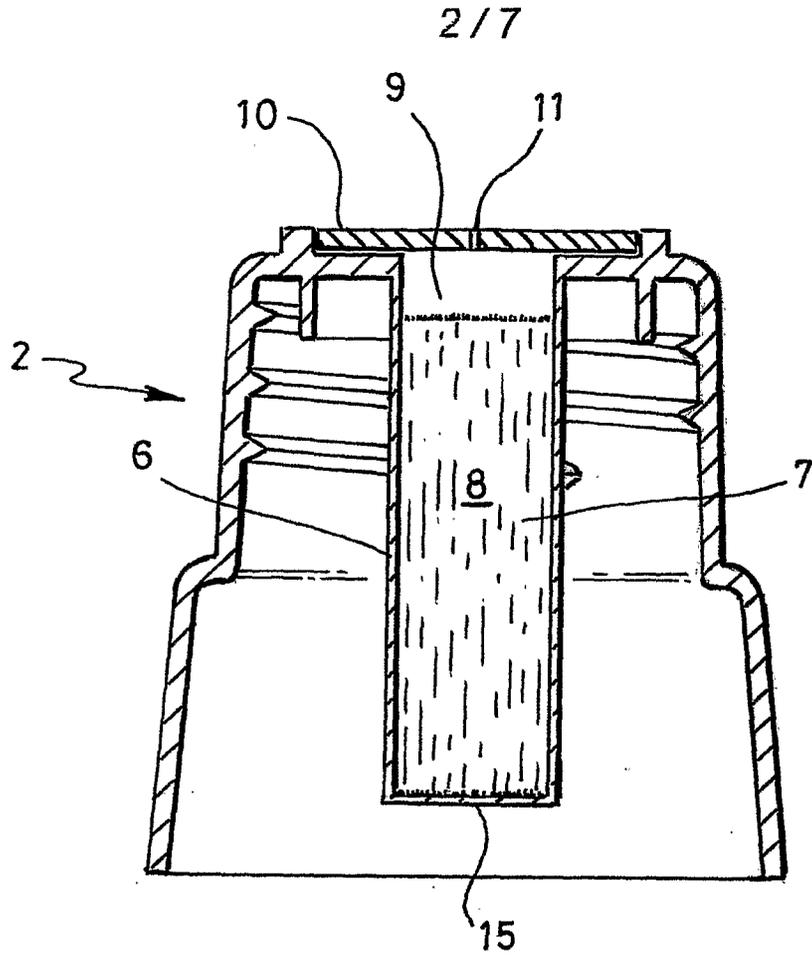


Fig. 2

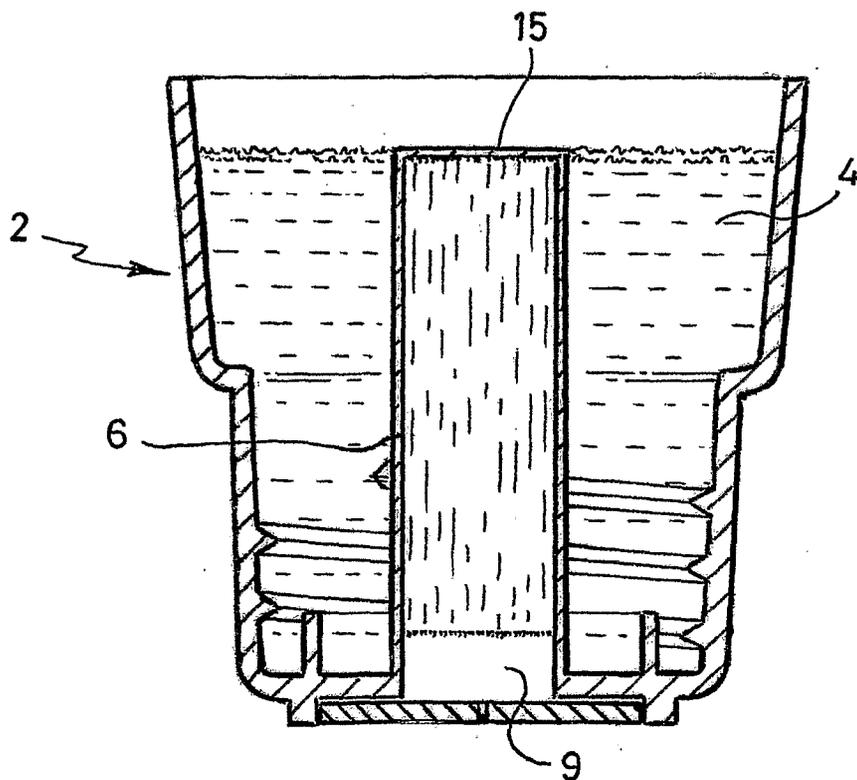


Fig. 3

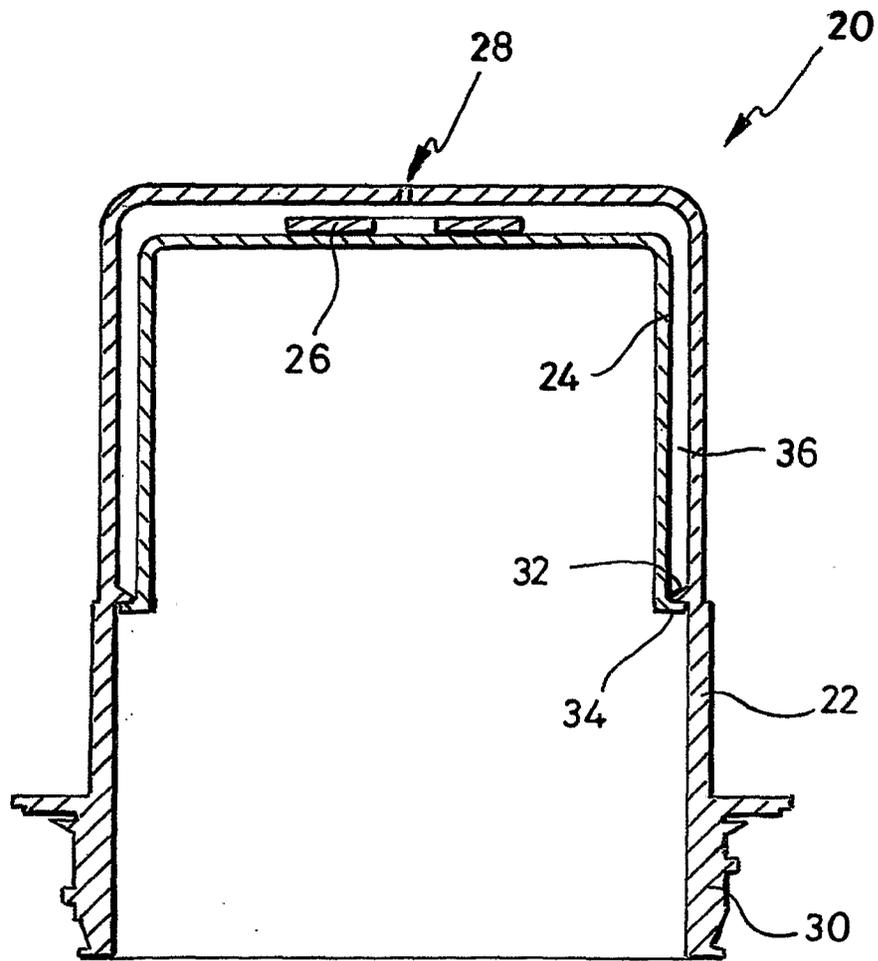


Fig. 4

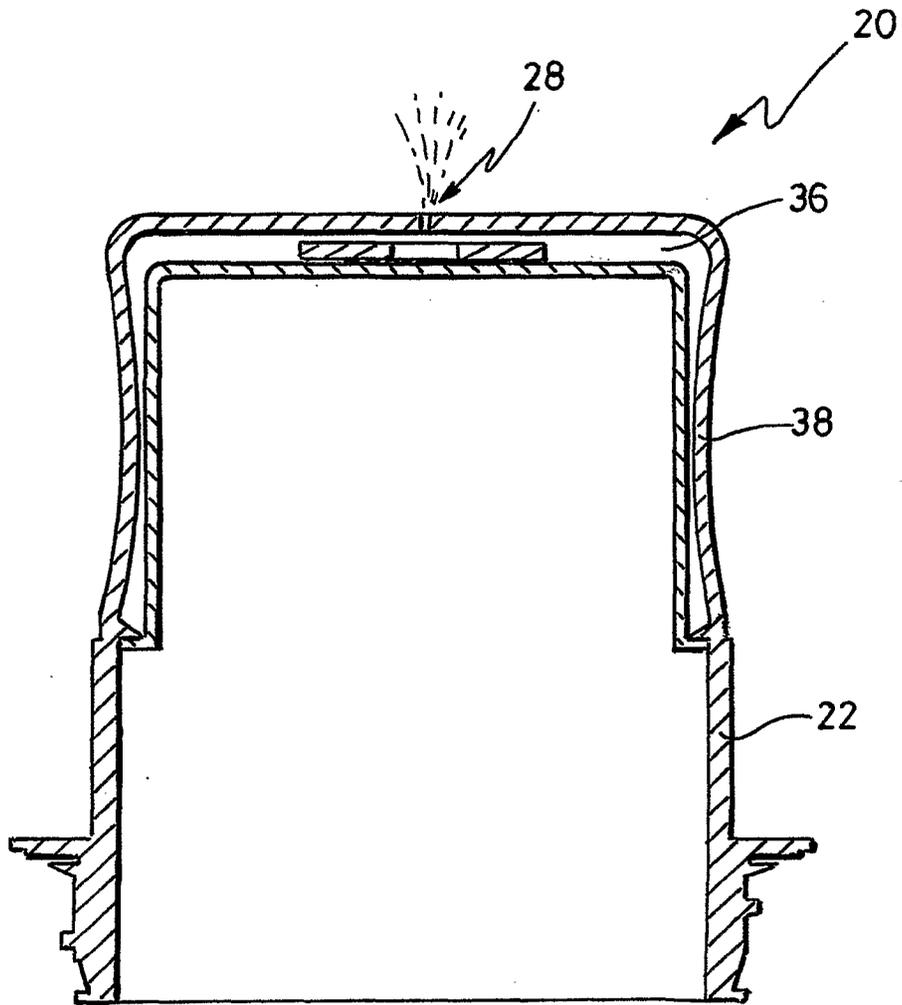


Fig. 5

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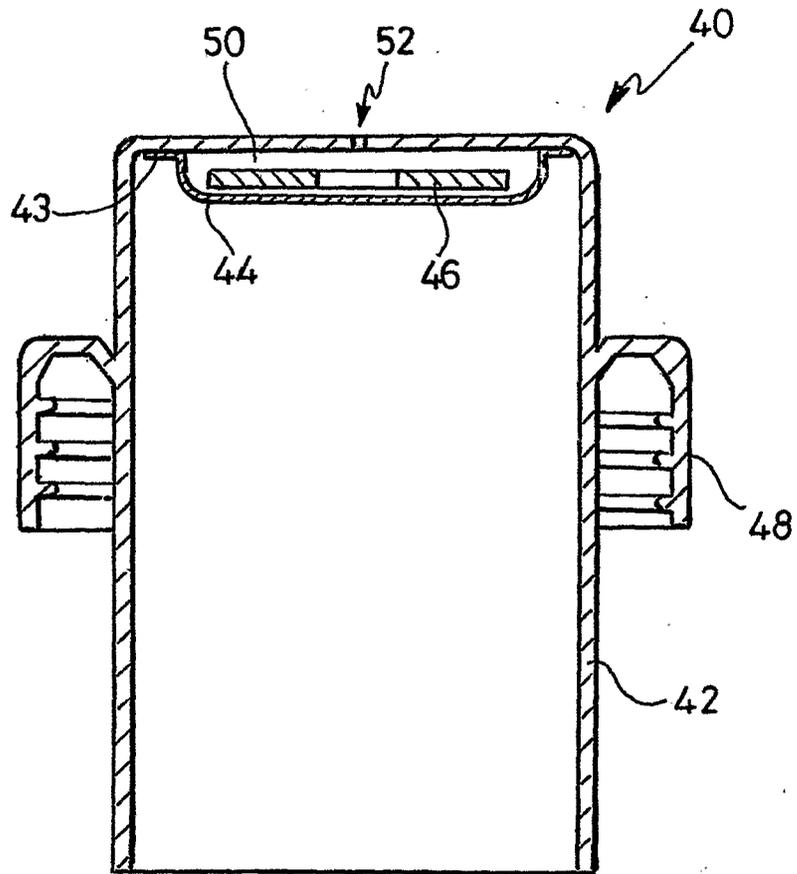


Fig. 6

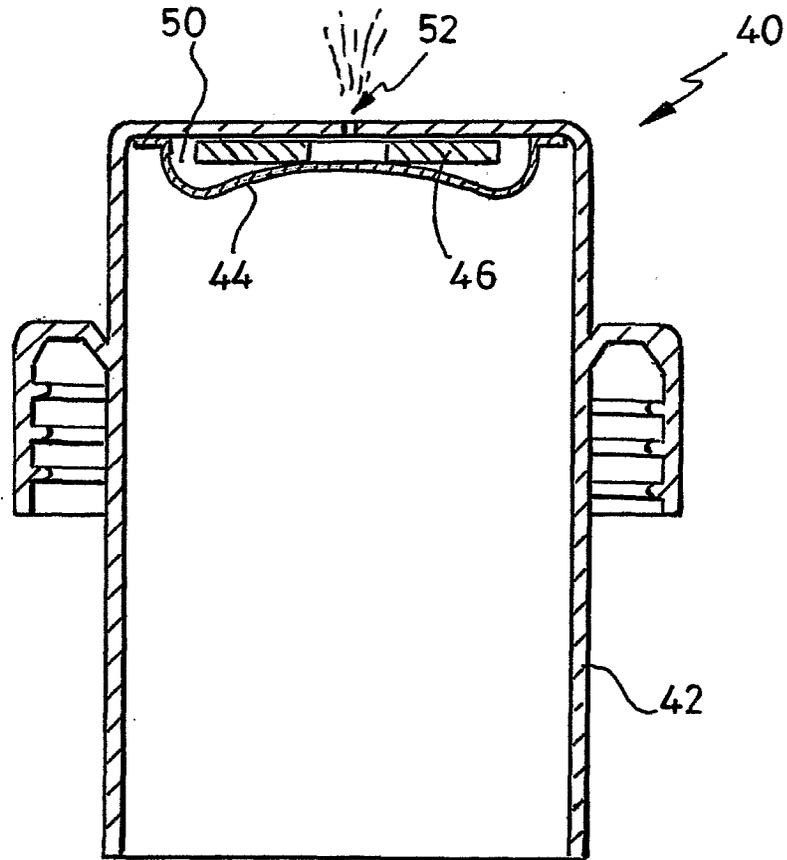


Fig. 7

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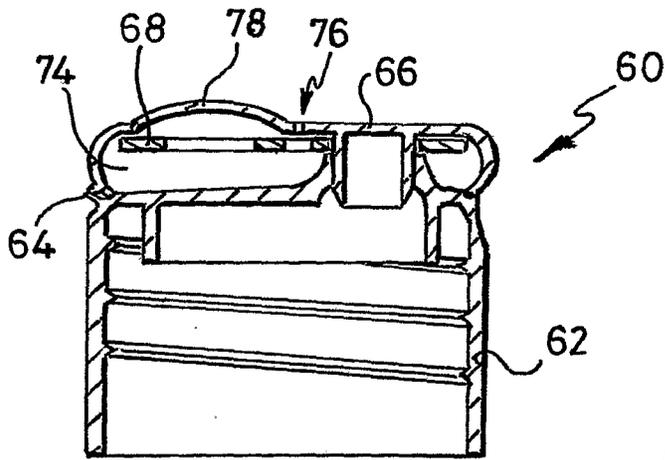


Fig. 8

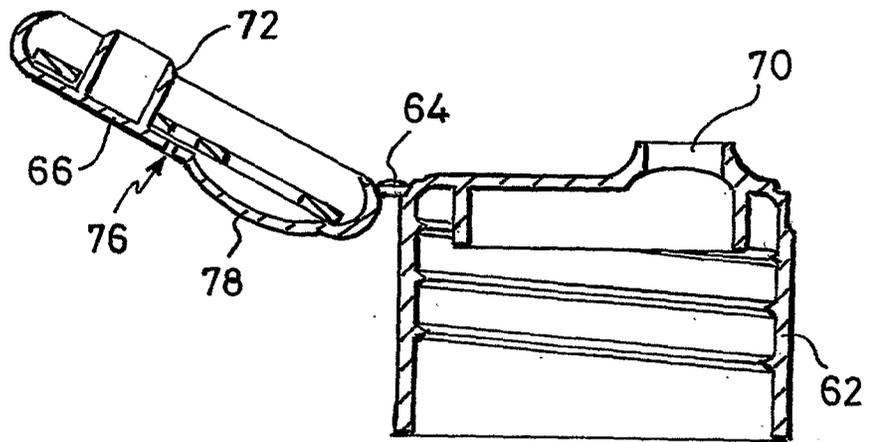


Fig. 9

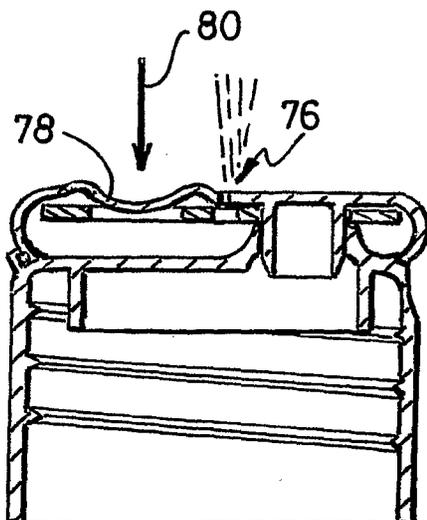


Fig. 10

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2007/001042

A. CLASSIFICATION OF SUBJECT MATTER INV. B65D51/24 A61L9/12		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) A61L B65D		
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		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 1 136 015 A1 (GIVAUDAN SA [CH]) 26 September 2001 (2001-09-26) paragraphs [0004], [0005], [0010], [0020]; figures 1,1a,1b -----	1,9-11
A	DE 197 26 179 A1 (WELLA AG [DE]) 24 December 1998 (1998-12-24) column 3, lines 21-25; figure 6 -----	1,9-11
A	WO 01/68470 A (SLADE BRIAN [GB]) 20 September 2001 (2001-09-20) page 5, lines 5,6; figure 1 -----	1,9-11
A	US 6 422 912 B1 (SUMMERS ETHAN [US]) 23 July 2002 (2002-07-23) column 3, line 37 - last line -----	1,9-11
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents : *A* document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *&* document member of the same patent family		
Date of the actual completion of the international search 13 June 2007		Date of mailing of the international search report 20/06/2007
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer Sunde11, 0111

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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