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(54) Kit of monodose fluid capsules

(57) A kit of monodose perfume capsules comprising two or more of said capsules, each capsule consisting of a material that is impermeable to the components of the perfume, having a region of weakness that breaks under pressure, and a non-permanent adhesion material, that may be removed form the kit of capsules (1) individually or in any quantity for immediate or later use.

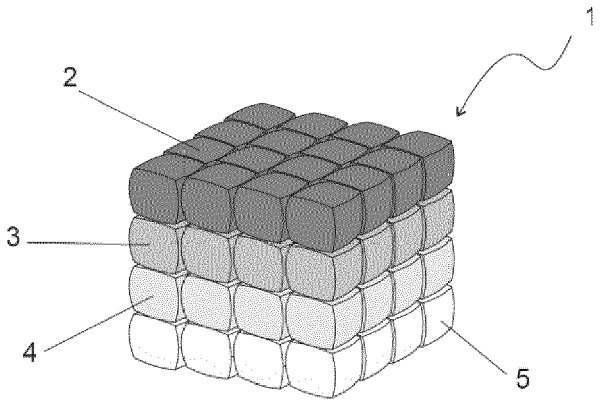


FIG. 1

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Description

[0001] The present invention relates to a kit of monodose fluid capsules, specifically perfume. In particular, said monodose capsules may be individually detached or be detached in any quantity from the kit of capsules for immediate or later use.

BACKGROUND OF THE INVENTION

[0002] In the text that follows, the reference to "perfume" is representative of "fluids", and it is disclosed that way only for illustrative purposes, without imposing any limitation.

[0003] The reference to "fluid" includes gases, high and low viscosity liquids (including creams) and groups of solid particles solid that may flow over each others (fine granulates, powders, etc.).

[0004] The use of perfumes is generally made from a glass bottle that is in a closet or dressing table, and having a volume sufficient to be used for several times. Usually it is not a small, portable package. Additionally, in order to transfer the perfume from said bottle into the body of the user it is typically used a spray - which wastes a lot of perfume - or the bottle is shaken so that the perfume moistens the inner surface of the glass stopper, which is then removed and leaned by the user against her/his skin- which is not so hygienic, since skin particles may be carried into the bottle.

DISCLOSURE OF THE INVENTION

[0005] Thus, there is a demand for practical packaging alternatives for the use of perfume and the inventors of the present invention have achieved such development providing a packaging inspired by the concept of biomimicry. Biomimicry, as known to those skilled in the art, is the science which draws on nature to produce products that mimic their actions.

[0006] The invention generically refers to a kit of monodose units of fluid, specifically perfume, attached to each others in a non-permanent manner.

[0007] The reference to "monodose" refers to small amounts, sufficient to perform its function, such as for example, perfuming or odorizing the body of the female or male user (skin, hair, etc.) in a single use.

[0008] The reference to "perfume", according to a broader context of the invention, is generic, and includes alternatives such as essence, cologne, milk, cream and any agents or formulations of topical use, particularly those for perfuming or odorizing, even if they might contain other ingredients directed to other functions, such as moisturizers, dyes, antiperspirants, etc.

[0009] The reference to "user' is merely an example, including both female and male users.

[0010] According to the invention, the monodose units of perfume are typically capsules, which are impermeable to the components of the perfume, which contains, for example, water, alcohol, essence, etc. Suitable constituent materials of said impermeable capsules, without excluding any other, are gelatin films, silicon, plastic, rubber, compounds of these materials combined with each others or with others.

[0011] The reference to "capsules" in a broader context of the invention is not limiting and it is used as a synonym of globules, pearls, cells or any other designation which denotes a casing (preferably flexible) of small dimensions for um a small volume of fluid.

[0012] The surface of said perfume capsules has a region that can brake at a specific spot without great effort, as for example, under pressure of the hands and fingers of a user. Particularly, said breakable region is a region of weakness (or frangible region) of the surface of the capsule - for example, one or more punched points, one or more weakened lines, etc. A region of weakness is obtained by any means known by a person skilled in the art, for example, reduced thickness imposed by punching, creasing of the material, weakness produced by chemical means, etc.

[0013] The surface of said perfume capsules is totally or partially provided with a non-permanent adhesion material in a sufficient amount to, upon contact, keep them cohesive to each others, and to similar material carriers, thus transmitting little or no sensation of adhesion to the touch of the user. Said permanent adhesion material can be any material known by the person skilled in the art, for example, chemical (an adhesive composition) or physical (Velcro®-type system). The adhesion of the perfume capsules to each others or to other surfaces does not prevent them from being separated from each others with a minimum effort by the user.

[0014] As the perfume capsules adhere to each others, mimicking the action of honeycombs that are in contact with each other in hives form a kit of said capsules when some or many of them are placed in contact, so that said kits are more or less ordered. Without excluding any other alternative, the kits of perfume capsules of the invention, attached to each others, have generally a cubic or parallelepiped shape, inspired by honeycomb structures.

[0015] In particular, and without excluding any other alternative, a kit of perfume capsules, according to the invention, contains 10 to 100 capsules, preferably 10 to 500 capsules, and more preferably 30 to 100 capsules.

[0016] The kits of perfume capsules of the invention may be structured with help of physical carriers. For example, a cube of plastic material may serve as a basic structure for a kit of perfume capsules, said capsules being disposed on the faces of the cube, in one or more layers, all in contact with each other.

[0017] Said physical carriers may have any desired shape, including tridimensional structures with protrusions and recesses, along which the perfume capsules are accommodated.

[0018] Without excluding any other alternative, said physical carriers for the kits of perfume capsules of the invention may have generally flat, cubic or parallelepiped

structures.

[0019] The materials of said physical carriers are preferably compatible with the material of the perfume capsules, in the sense of providing an adhesion with the capsules of an intensity equivalent to the intensity that they have to each other.

[0020] Different perfume capsules of a kit, according to the invention, may contain different perfumes or products. That is, the invention includes alternatives wherein a quantity of capsules of a kit contains a certain perfume, e and the other quantity of capsules of the same kit contains a different perfume, or other cosmetic product. In particular, said different groups of capsules have different colors, so they can be distinguished.

[0021] Thus, a kit may have a quantity of green capsules identifying a perfume A, and another quantity of blue capsules identifying a perfume B. Each individual capsule of a group of capsules contains respectively a monodose of perfume. In the same kit, capsules of a certain color may, as desired, be isolated or mixed with capsules of other colors.

[0022] The use of colored capsules, according to a broader sense of the invention, may be only a choice of visual presentation, even if is used only a single perfume.

[0023] As the perfume capsules of the kits of the invention may have different colors and different contents, they may also have:

- different shapes, geometric or not;
- different volumes.

[0024] Specifically regarding the use of perfume capsules that constitute the kits, according to the invention, a user could choose one or more capsules of the kit, remove them and then use them by pressing the, for example, between the fingers or against the skin. The pressure breaks the capsules, providing their content.

[0025] The capsules which were chosen and removed form the set may, obviously, be used later, without the need of immediate use. It is, for example, the case in which some capsules are given as a gift by the user to another person, for later use.

[0026] Within a possibility of using the kit of the invention, a user could press the kit itself against her skin to cause the rupture of many perfume capsules at the same time.

DESCRIPTION OF THE DRAWINGS

[0027]

Figure 1 shows a kit of perfume capsules in accordance with an embodiment of the invention;
Figure 2 shows the kit of perfume capsules of Figure 1 with a perfume capsule removed; and
Figure 3 shows the use of an individual capsule by pressing between the fingers.

EXAMPLE

[0028] It is given an example of embodiment of the invention, without limiting the invention to only this example. As well known, the limitations to the protection of the invention are only those dictated by the content of the claims disclosed ahead.

[0029] This is a use of the invention in which the kit is used as a form of stock of single doses of perfume, for example, as a sampler or repository of various perfumes.

[0030] Figure 1 shows a kit 1 of perfume capsules, comprising groups of capsules of different colors, namely, group 2, group 3, group 4 and group 5.

[0031] Each group of capsules contains a different perfume.

[0032] Each capsule has sufficient adhesion to the other capsules with which they are in contact in order to provide the formation of the group shown in Figure 1.

[0033] Each capsule may be individually removed (as shown in Figure 2) and subsequently used, for example, by pressing said individual capsule (20) between the fingers (as shown in Figure 3), pressing it against the skin or the hair, or giving the capsule to somebody for later use.

[0034] The removal of one ore more capsules form the kit does not cause the detachment of the remaining capsules, which continue attached to each other.

[0035] The information and the figures contained herein allow a person skilled in the art to carry out the invention in manners which are not specifically described, but are equivalent and perform the same function in order to achieve the same result, in case they are not covered by the appended claims.

Claims

1. A kit of monodose fluid capsules, **characterized in that** they comprise two or more of said capsules, each capsule consisting of a material that is impermeable to the components of the fluid, having a region that breaks under pressure and a non-permanent adhesion material.

2. A kit of monodose fluid capsules according to claim 1, **characterized in that** it consists of 10 to 1000 said capsules, preferably 10 to 500 capsules, and more preferably between 30 to 100 capsules.

3. A kit of monodose fluid capsules according to claim 1 or 2, **characterized in that** said capsules are made off materials chosen from gelatin, plastic, silicon, rubber, combinations between these materials or with other materials.

4. A kit of monodose fluid capsules according to any preceding claim, **characterized in that** said non-permanent adhesion material is chemical, especially

an adhesive composition, or physical, especially a Velcro®-type system.

5. A kit of monodose fluid capsules according to any preceding claim, **characterized in that** said kit (1) has generally a cubic or parallelepiped shape.

6. A kit of monodose fluid capsules according to any preceding claim, **characterized in that** said kit (1) additionally comprises a physical carrier.

7. A kit of monodose fluid capsules according to any preceding claim, **characterized in that** said physical carrier is chosen among the generally flat, cubic or parallelepiped structures.

8. A kit of monodose fluid capsules according to any preceding claim, **characterized in that** said capsules have different colors, content, dimensions and/or shapes.

9. A kit of monodose fluid capsules according to any preceding claim, **characterized in that** said breakable region is a region of weakness chosen between a point, points, lines or lines of weakness.

10. A kit of monodose fluid capsules according to any preceding claim, **characterized in that** said fluid is a perfume.

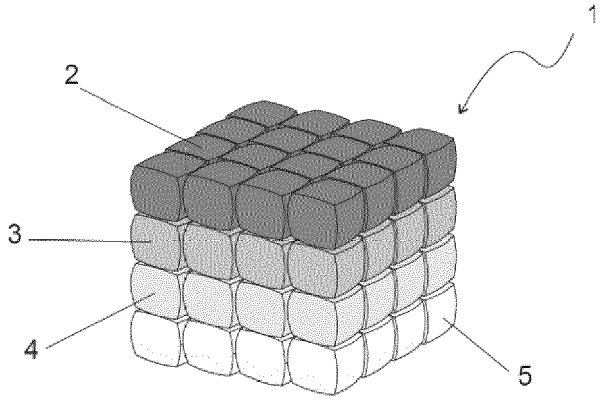


FIG. 1

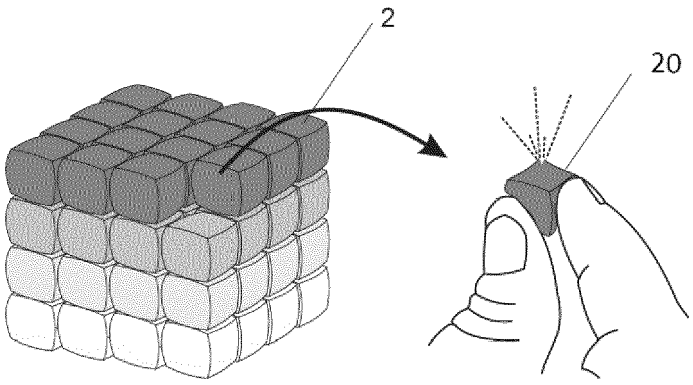


FIG. 2

FIG. 3

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EUROPEAN SEARCH REPORT

Application Number
EP 14 16 3194

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	DE 42 39 082 C1 (HEINEMANN HERBERT [DE]) 23 June 1994 (1994-06-23) * column 2, line 37; figures 1,2 * -----	1-10	INV. A45D37/00 A45D34/00 B65D33/00
X	EP 0 019 010 A1 (HYMAN SY) 26 November 1980 (1980-11-26) * page 6, line 33 - page 12, line 35; figures 1-4 * -----	1-8,10	
X	FR 2 834 468 A1 (ASHRAF MAHTAB [FR]) 11 July 2003 (2003-07-11) * page 1; figures 1,2 * -----	1-4,6,9, 10	
A	WO 03/047989 A1 (KIMBERLY CLARK CO [US]) 12 June 2003 (2003-06-12) * the whole document * -----	1-10	

TECHNICAL FIELDS SEARCHED (IPC)

A45D
B65D

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	1 July 2014	Ionescu, C

CATEGORY OF CITED DOCUMENTS

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 14 16 3194

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