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[Continued on next page]

(54) Title: PRINTED STRUCTURE FOR MAKING VARIOUS PRODUCTS, CONTAINERS FOR PRODUCTS, TAGS, LABELS AND THE LIKE

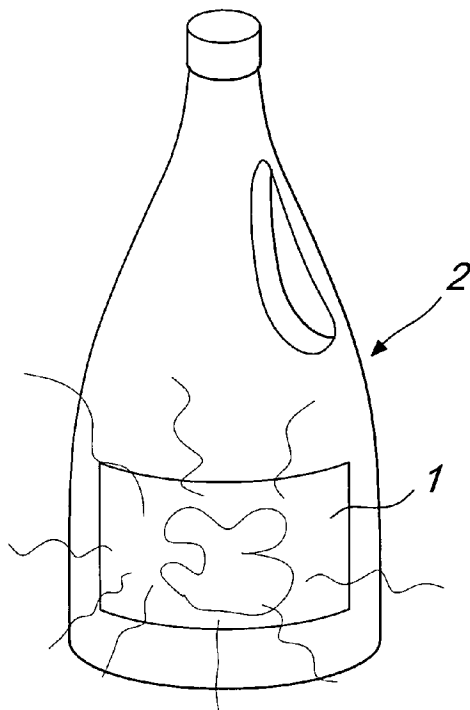


Fig. 1

(57) Abstract: A printed structure, for making various products, containers for products, tags, labels (1) and the like, characterized in that it has a fragrance, i.e., the structure releases a scent or perfume that corresponds to the specific product (2). The released scent or perfume can be the same one of the corresponding product or a perfume that in some way is tied to the product itself, by analogy, convention, tradition, et cetera.



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PRINTED STRUCTURE FOR MAKING VARIOUS PRODUCTS, CONTAINERS FOR PRODUCTS, TAGS, LABELS AND THE LIKE

The present invention relates to a printed structure for making various products, containers for products, tags, labels and the like.

5 The sense of smell, despite being present in lower animals, reaches its maximum development in vertebrates and especially in mammals.

However, as is known, the modern man uses very little his sense of smell, or refuses entirely to accept to use it, perhaps because it is a legacy of the primitive man, who used it for hunting, to find animals, or for defense and for reproduction.

10 Nonetheless, the ability to convert odorous stimuli into sensations remains a matter of fact, and the sense of smell is the one capable of working at the most instinctive level in man, causing impulse decisions.

Olfactory sensation in fact accesses directly the primitive reptilian brain, bypassing the rational brain.

15 The aim of the present invention is to provide a printed structure which, used in the manufacture of various products, of containers for products, of tags, labels and the like, allows to utilize this faculty of converting an odorous stimulus into a sensation in order to induce to purchase the product.

A particular object of the invention is to provide a printed structure that allows the
20 consumer to make a choice based not only on tactile or visual sensations but also on olfactory sensations.

Another object of the invention is to provide a structure that can be used in any sector both for the product itself and for its packaging.

Another object of the invention is to provide a structure that optionally can be
25 integrated with an anti-counterfeiting system.

Another object of the present invention is to provide a structure which, by virtue of its particular constructive characteristics, is capable of giving the greatest assurances of reliability and safety in use.

Another object of the present invention is to provide a structure that can be provided
30 easily by using commonly commercially available elements and materials and is also

competitive from an economic standpoint.

This aim and these and other objects that will become better apparent hereinafter are achieved by a printed structure for making various products, containers for products, tags, labels and the like, characterized in that it has a fragrancing, i.e., said structure
5 releases a scent or perfume that corresponds to the specific product.

The perfume or scent that is released can be the same one of the corresponding product or it can be a perfume in some way linked to the product itself by analogy, convention, tradition, etcetera.

Further characteristics and advantages will become better apparent from the
10 description of preferred but not exclusive embodiments of the invention, illustrated by way of non-limiting example in the accompanying drawings, wherein:

Figure 1 is a perspective view of a bottle provided with a label according to the present invention;

Figure 2 is a view of a so-called shopper according to the present invention;

15 Figure 3 is a view of a holy picture according to the present invention;

Figure 4 is an identification tag according to the present invention;

Figure 5 is a view of a bottle with a label according to the present invention;

Figure 6 is a view of a box according to the present invention;

Figure 7 is a perspective view of a Wood's lamp that is switched off and of a label
20 according to a further aspect of the present invention;

Figure 8, similar to the preceding one, is a view of the Wood's lamp switched on, illustrating the anti-counterfeiting markers incorporated in the label according to the present invention.

With reference to the cited figures, the invention relates in particular to printed
25 elements such as labels and wrappers, also for food, which are normally produced on a paper or plastic medium.

According to the present invention, the printed structure has a dedicated fragrance, i.e., the structure releases a pleasant odor that corresponds to the specific product.

The expression "corresponding perfume" is understood to reference a perfume or,
30 more generically, an odor that can be the same as the corresponding product or a

perfume that in some way is tied to the product itself by analogy, convention, tradition, etcetera.

The printed structure according to the present invention can be used advantageously for marketing a wide range of products.

5 By way of example, the printed structure can be used to provide labels, wrappers for food, identification tags, shopping bags, bags and packaging in general, as well as the products themselves, such as for example holy pictures and postcards.

The structure can be used for example to provide labels for packages of detergents, softeners and/or other household products, which can be provided so as to release the
10 same perfume as the detergent contained in the package.

Deodorants and other products for personal hygiene can have labels that are perfumed so as to correspond to the content, with the advantage of preventing the consumer from opening the package to check its perfume.

Food products of course also can be packaged with structures according to the
15 present invention, such as for example labels or wrappers that wrap chocolate with the perfume of the chocolate contained in the wrapper.

Labels or tags that are hung on flowers of nurseries or cut flowers or plants for the home in order to be able to distinguish the type of plant can have the perfume of the flower shown on the tag.

20 Other examples are labels for fruit juices with the perfume of the juice, strawberry juice with strawberry perfume, etcetera. Labels for wines or spirits, olive oil or others, with the perfume of the spirit/wine contained in the bottle. Labels for fruit or vegetables with the perfume of the fruit and/or vegetable contained in the package. Labels for yogurt with the perfume of the contained flavor. Labels, sleeves or booklets for CDs, DVDs,
25 optical discs in general and the like, with a perfume that is optionally correlated to the illustrated subject or to the title of the work.

Fragrancing of the printed structure according to the present invention can be performed by special painting on the medium of the printed product. Microcapsules, each containing perfumed essences, are mixed into the paint that is used.

30 This special paint, usually applied solid to the entire surface of the label or also in a

smaller region, contains microcapsules which, if rubbed or touched and therefore broken, release the given fragrance.

The range of fragrances that can be produced very broad, and in any case is the one determined by ordinary commercially available essences or essences provided specifically with the perfume/essence required by the user, which corresponds to the marketed or otherwise advertised product.

Since, as is known, counterfeit products are increasingly often commercially available, and the counterfeited products are typically the ones that offers a certain added value, the printed structure according to the present invention can include an anti-counterfeiting system.

The anti-counterfeiting system is provided by using, during the printing process, a special paint that is invisible to the human eye when it is lit by natural light or by ordinary artificial light but is evident when it is lit with an ultraviolet (UV) lamp or Wood's lamp.

The lack of these "invisible" insert highlights the counterfeiting.

The structure of the printed item according to the present invention can also have anti-counterfeiting systems of a different type, which can be special inks with different optical or chemical reactions or holograms, numberings of various kinds, both numeric and alphanumeric.

The accompanying figures exemplify some of the many possible applications of the printed structure according to the present invention.

Figure 1 is a view of a bottle 2 provided with a label 1 according to the present invention.

Figure 2 illustrates a so-called shopper, designated by the reference numeral 3.

Figure 3 is a view of a holy picture, designated by the reference numeral 4, according to the present invention.

Figure 4 is a view of an identification tag, according to the present invention and used for example to sell a particular plant, and for subsequent application to the pot or to the soil, which might also be an envelope that contains the seeds for subsequent applications in a pot or in soil.

Figure 5 is a view of a bottle provided with a label according to the present invention.

Figure 6 is a view of a box provided with a label or with a region 101 according to the present invention.

Figures 7 and 8 illustrate a label provided with an anti-counterfeiting system.

The authenticity of the label, and therefore of the product, is verified by using a
5 Wood's lamp 8, which, once switched on, highlights symbols or other markers, designated schematically by the reference numeral 9, which are incorporated in the label.

The printed structure according to the present invention can be provided in practice according to one or more manufacturing methods as exemplified hereinafter.

10 According to a first embodiment, the structure is provided by printing initially the image with a per se known method.

Subsequently, the optional anti-counterfeiting system is printed, either inline or offline, for example with lettering or logos that represent the trademark of the manufacturer or other images or writing. It is possible to use an offset printing method, with yellow UV
15 Wood's paint 129934, manufactured by the company COLORGRAF, code 3151.

Subsequently, printing is performed, either inline or offline, with the flexographic or rotogravure or screen printing method, spreading the glossy or matt and fragranced paint, adding fragranced microcapsules produced by the company Druckefarben of Albino (BG) mixed with the paint and/or with the colored ink and printed, with a
20 fragrance, for example apple fragrance type XSYS produced by Akzo Nobel, Milan, code UVD01021-408.

Depending on the printing process used, the code of the ink used will change.

According to another manufacturing system, both the Wood's ink and the microcapsules are mixed together with the glossy or matt beauty and/or protective paint
25 and/or with the ink and then, while the work is printed online or offline, in the subsequent inline or offline step the paint mixed with the fragrance and Wood's ink is printed.

In practice it has been found that the invention achieves the intended aim and objects, providing an important social and technological innovation that guides the consumer in a choice that is based no longer only on tactile or visual sensations but also
30 on olfactory ones.

The present invention offers a new dimension to all printed matter, especially in the packaging sector, integrating therein also the perfume related to the product that is contained therein or otherwise represented or that one seeks to evoke.

5 The printed structure according to the present invention can be applied to all labels normally used, made of paper or plastics, of the paper-and-paste, wraparound, R.O.S.O. self-adhesive heat-shrink type, individual or in reels, to so-called sleeves, to plastics or cardboard cases, to bags of the shopper type and in so-called "mold labels" in bags (for example for seeds).

10 In the case of a shopper, advantageously the fragrance can be applied both internally and externally thereto, so that it is diffused upon opening the bag and upon insertion or extraction of the content, predisposing well the person who removes its content.

15 An important advantage of the present invention is constituted by the fact that the fragrancings of the labels or of the external part of the container prevents the purchaser of the product from opening the package to check its perfume, which occurs frequently in department-store shops, allowing to provide exactly the same fragrance with the same essences as the content, and in this context the testing of the fragrance remains free from the contamination from the sweat of the skin, where it would be normally tested on the hand as usual.

20 This application claims the priority of Italian Patent Application No. MI2008A001146, filed on June 25, 2008, the subject matter of which is incorporated herein by reference.

CLAIMS

1. A printed structure for making various products, containers for products, tags, labels and the like, characterized in that it has a fragrancing, i.e., said structure releases an odor or perfume that corresponds to the specific product.

5 2. The printed structure according to claim 1, characterized in that the perfume or odor that is released can be the same perfume or odor of the corresponding product or a perfume or odor that in some way is tied to said product by analogy, convention, tradition, etcetera.

3. The printed structure according to claim 1 or 2, characterized in that it constitutes a
10 label, wrapper for food, identifying tag, shopper, bag and packaging in general, as well as the product itself, such as holy picture, postcard, hanging tag for fashion clothing, package, label for perfumes.

4. The printed structure according to one or more of the preceding claims, characterized in that it constitutes a label for packages of detergents or softeners, or
15 any household product which releases the same fragrance as the detergent contained in the package.

5. The printed structure according to one or more of the preceding claims, characterized in that it constitutes a fragranced label for a container of deodorant and other products for personal and home hygiene or foods of any kind, clothing, etcetera.

20 6. The printed structure according to one or more of the preceding claims, characterized in that it constitutes a package for food products such as for example labels or wrappers that wrap around chocolate with the perfume of the chocolate contained in the wrapper.

7. The printed structure according to one or more of the preceding claims,
25 characterized in that it constitutes a label or tag that is hung from flowers or plants in order to be able to distinguish their plant type and have the perfume of the very flower/fruit shown on the tag, this being also applicable to seed bags.

8. The printed structure according to one or more of the preceding claims, characterized in that it constitutes a package or label for fruit juices with the perfume of
30 the juice contained therein, strawberry juice with strawberry perfume, etcetera; labels for

wines or spirits, olive oil or others, with the perfume of the spirit/wine contained in the bottle; labels for fruit or vegetables with the perfume of the fruit and/or vegetables contained in the package; labels for yogurt with the perfume of the contained flavor; labels, sleeves or booklets for CDs, DVDs, optical discs in general and similar means for
5 storing music, sounds, images with a perfume that is optionally correlated to the subject of the work.

9. The printed structure according to one or more of the preceding claims, characterized in that the fragrancing of the structure is performed with a special paint on the medium of the printed matter; microcapsules, each containing perfumed essences,
10 are mixed into the paint that is used; said paint, applied solid to the entire surface of the label or also in a smaller region, containing microcapsules which, if rubbed or touched and therefore broken, release the given fragrance.

10. The printed structure according to one or more of the preceding claims, characterized in that it comprises an anti-counterfeiting system.

15 11. The printed structure according to one or more of the preceding claims, characterized in that said anti-counterfeiting system comprises a special paint applied during the printing process, said paint being invisible to the human eye when it is lit by natural light or by ordinary artificial light but is evident or changes color when it is lit with an ultraviolet (UV) lamp or Wood's lamp.

20 12. The printed structure according to one or more of the preceding claims, characterized in that it is provided by printing initially the image; then the optional anti-counterfeiting system is printed, either inline or offline, for example with lettering or logos that represent the trademark of the manufacturer or other writing; then printing is performed, either inline or offline, with the flexographic or rotogravure or screen printing
25 process, spreading the glossy and fragranced paint, adding fragranced microcapsules mixed to the paint and/or to the colored ink and printed, with a fragrance.

13. The printed structure according to one or more of the preceding claims, characterized in that an offset printing method is used, with yellow UV Wood's paint 129934, manufactured by the company COLORGRAF, code 3151.

30 14. The printed structure according to one or more of the preceding claims,

characterized in that an apple fragrance type XSYS produced by Akzo Nobel, Milan, code UVD0I021-408, is used.

15. The printed structure according to one or more of the preceding claims, characterized in that it is provided by mixing together said Wood's ink, said
5 microcapsules and a matt or glossy beauty and/or protection paint and/or ink, and then by printing at the end of the line or offline, in a second pass, the paint mixed with the perfume and the Wood's ink.

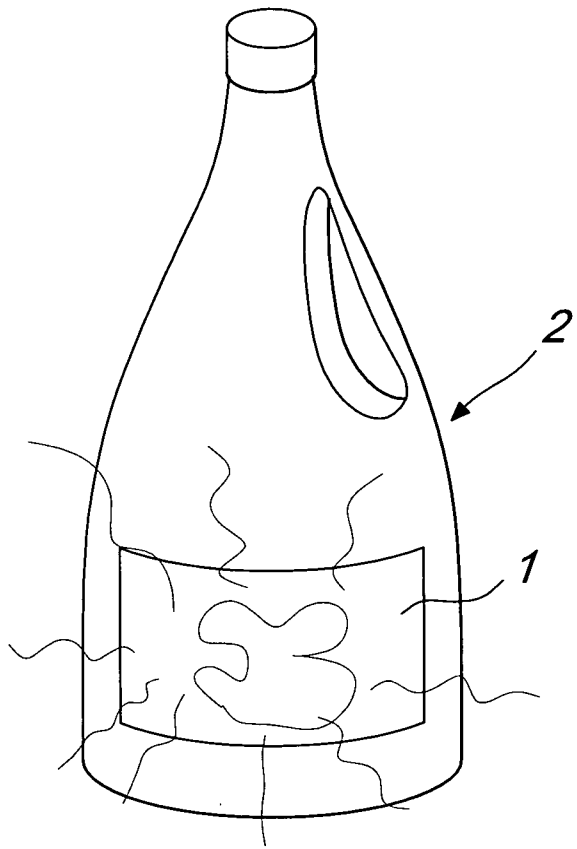


Fig. 1

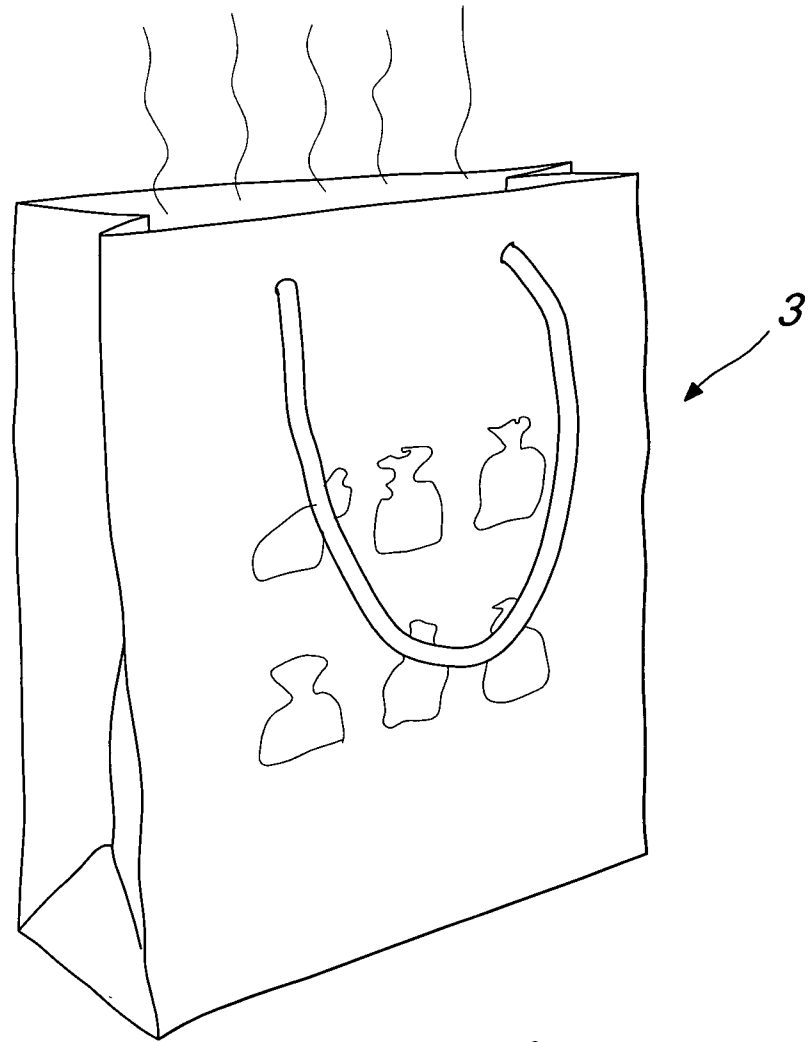


Fig. 2

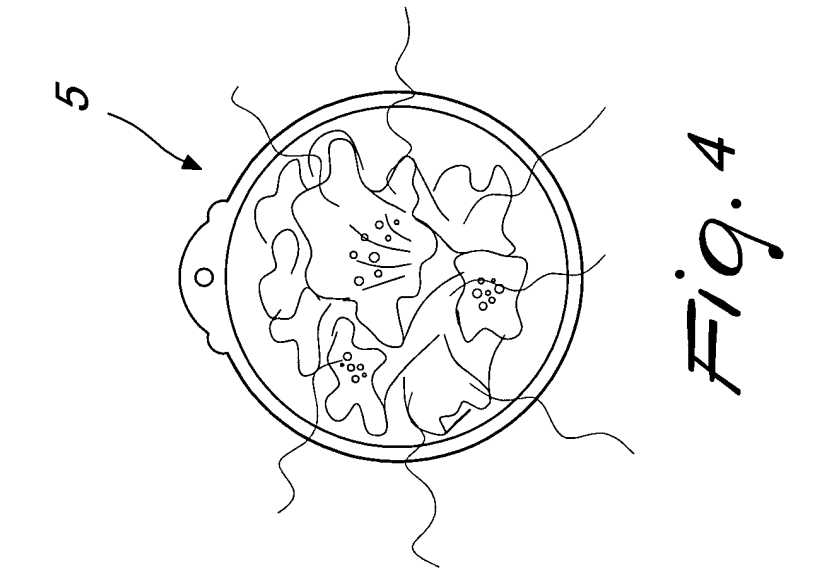


Fig. 4

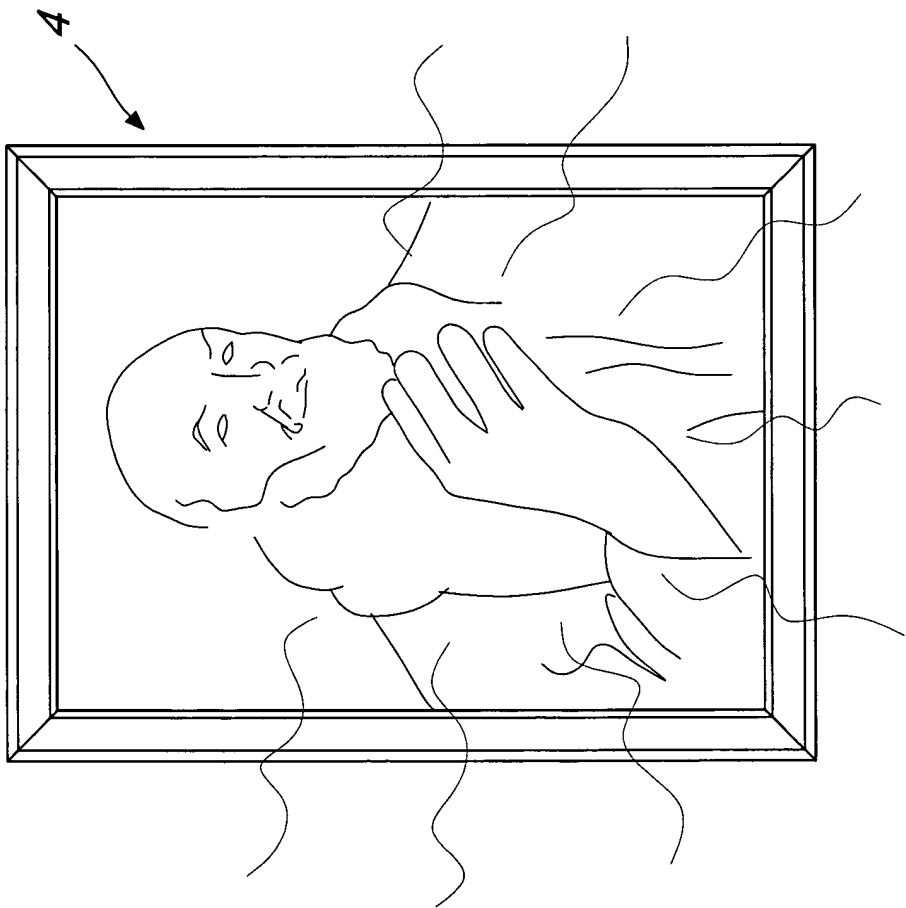


Fig. 3

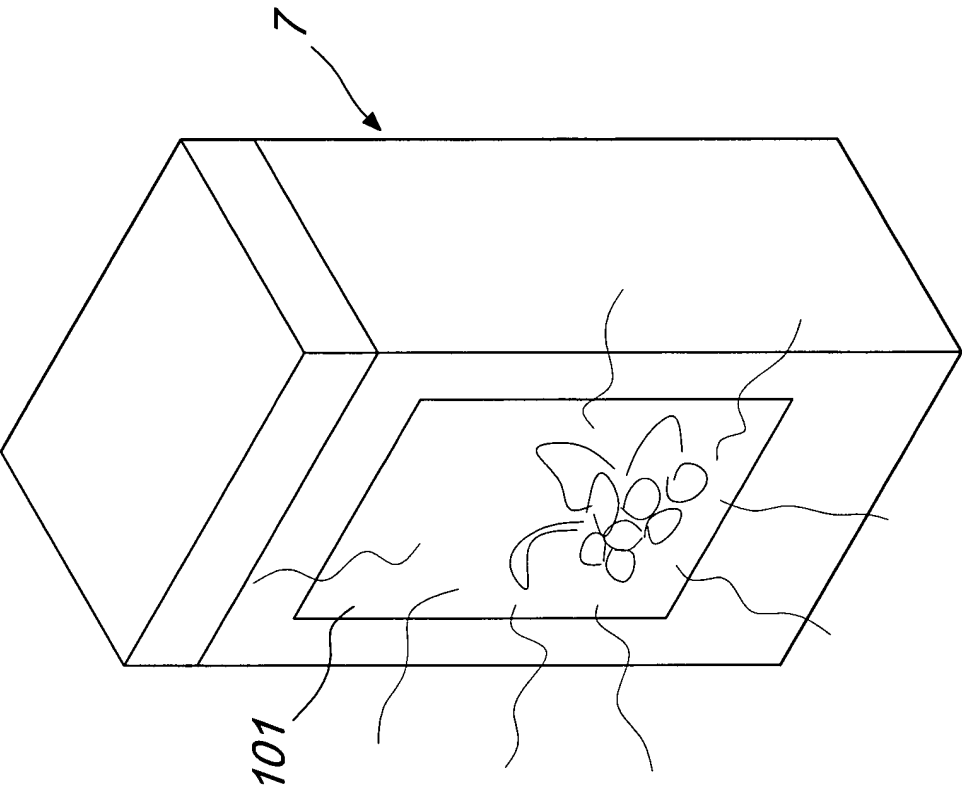
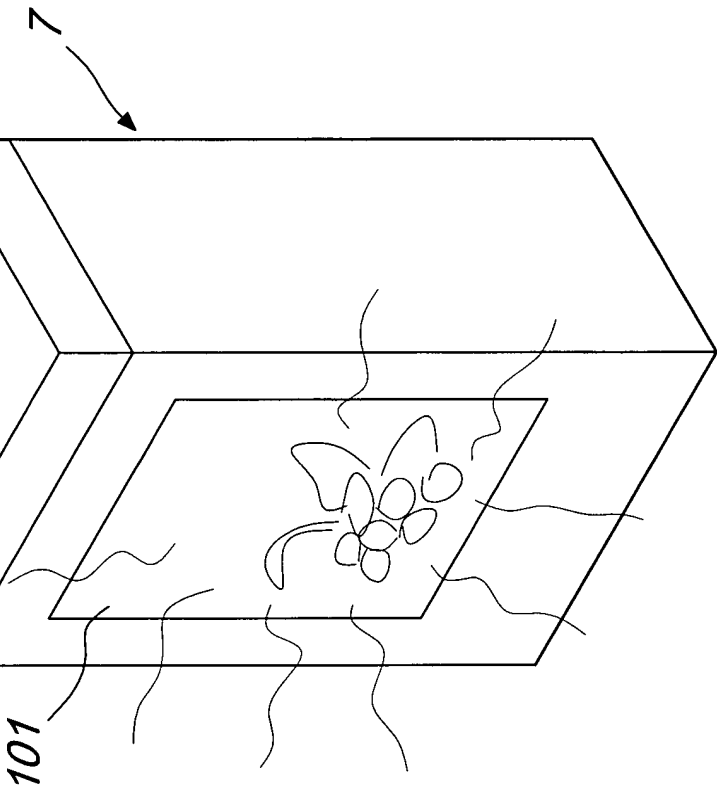


Fig. 5

Fig. 6



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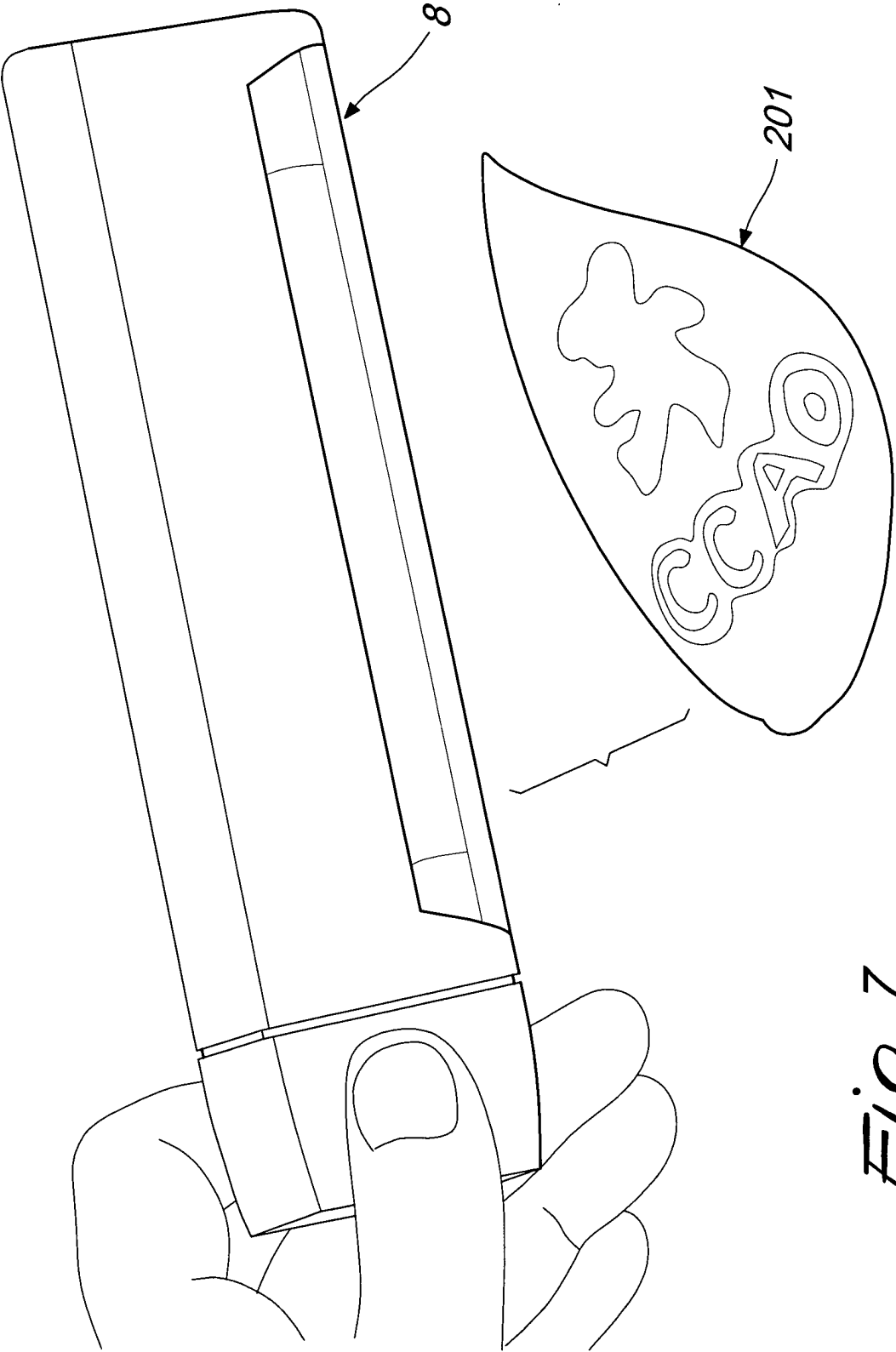


Fig. 7

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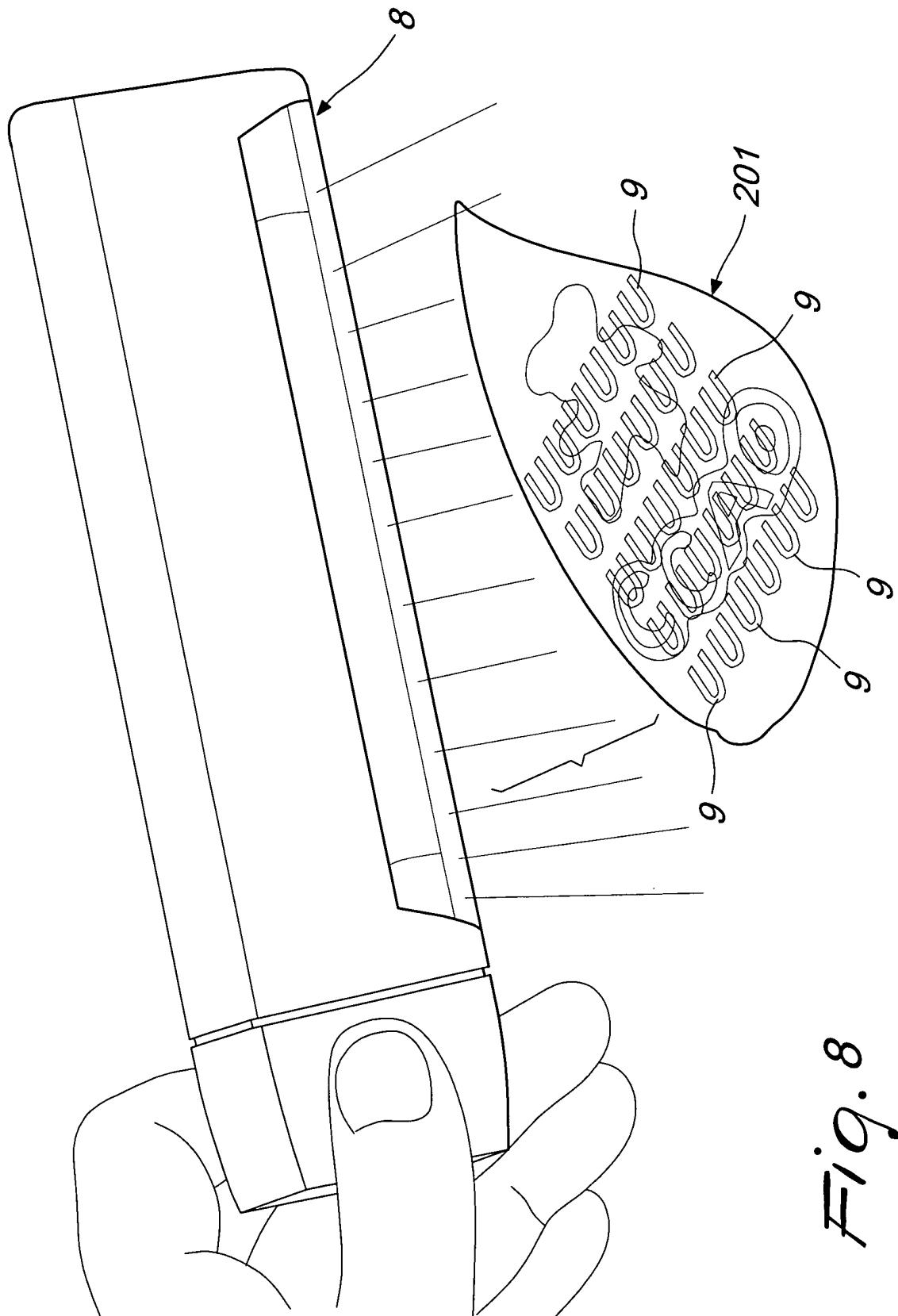


Fig. 8

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2009/004502

A. CLASSIFICATION OF SUBJECT MATTER
INV. G09F3/02 G09F23/06

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)
G09F

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, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/122371 A1 (ROCHFORD WILLIAM T [US] ET AL) 3 July 2003 (2003-07-03) paragraphs [0026], [0030] - [0033], [0035], [0036], [0095], [0106]	1-6,8,9,12
X	FR 2 767 597 A (EDITIONS BENOIT FRANCE [FR]) 26 February 1999 (1999-02-26) page 1, line 10 - line 29 page 2, line 6 - line 24	1-3,6,8,9,12
X	CN 2 298 573 Y (ZHOU ZHEN [CN]) 25 November 1998 (1998-11-25) abstract figures	1,3,10,11
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☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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Date of the actual completion of the international search

1 October 2009

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09/10/2009

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Lechanteux, Alice

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2009/004502

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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