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(54) **Modular textile carpet**

(57) A modular textile carpet whose peculiarity consists in being obtained using a plurality of modular elements of different shape and size, of various colours, of different material and finishes and in which each module

constituting the carpet is provided at least on one side with a connection means with an adjacent module which is also provided of a corresponding connection means. The modules are sold in various combinations in pallets.

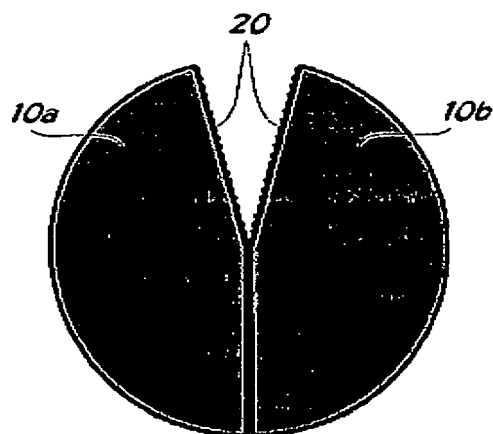


Fig.10

Description

Field of the invention

[0001] The present invention relates to the textile furnishing, particularly to a modular carpet.

[0002] A carpet is a fabric drapery made through a particular procedure, used in furnishing to cover floors or tables; usually it is made of wool, silk, cotton and it is obtained through knot handwork or knot mechanical working.

[0003] The old origins of the carpet (dating back to V or VI century) are found in the East, where the experts of this field, according to the decorations, sizes and materials, are able to determine the place of origin and approximately also the age of a carpet; in some oases, the sizes and the types of the decorations belong to a determined family and are transmitted from one generation to another; moreover, according to the dimensions and the decorations, it is possible to know if the use of the carpets is related to a religious or poetic symbolism or if they have merely a design purpose, i.e. space decoration and furnishing.

[0004] For the understanding of the problem and the historical background and to better understand the field to which the present invention is related, it should be taken into account the carpets Anadol or Turkish which do not have human or animal images, but they are non-symmetrical, and in which there are a prevalent presence of colours like light blue, Nile green, sepia, yellow, ivory, because colours come from vegetal dyes; the Berbers carpets are characterized by vivid colours such as red, light blue and gold, with geometrical drawings which are usually non-symmetrical and obtained by wool of yarn with a high carat weight; Caucasian carpets have mainly arabesques images and geometrical drawings; Transcaspio carpets are known for their best designs under the name "Bukara"; the Turkestan carpets have a dominating pattern constituted by an octagon replicated in columns; famous Persian carpets have floral images with hunting scenes and - in the particular old ones - have some stories pictures; Chinese carpets have patterns and colours typically present on pottery, like dragons and phoenix.

[0005] Usually, sheep wool was used in the Oriental carpets, but also the use of goat or camel wool was diffused, with different thinness depending from the originating region; this determined also the use of natural colours, according to the available vegetal materials.

[0006] Carpets are classified also upon the knots used for their weaving: the type "Turkibaft" is famous, that means "knotted by Turkish" and "Farsibaft", that means "knotted by Persians"; the kind of knots is primary also for the accomplishment of the drawings, because poorly dense knots allow simple and geometrical decorative patterns, whereas a high density of knots allows a more complex decoration with sinuous and winding designs.

[0007] The different decoration possibilities - full field,

central medallion, for prayers, with trees, with animals and floral elements - allow to identify the use and purpose of the carpet.

[0008] All the above is referred to the traditional carpets which, thanks to the presence of figurative decorations, have pre-arranged dimensions which can not be modified in no manner, except in the case when the carpet is customize for the space where it is aimed to be used.

[0009] To this extent, it should be noted that the carpet is placed in a space - both private or public - usually when such space is already defined from an architectural point of view and when the design of the furnishing has been already done.

[0010] Together with the types of traditional carpets, modern carpets or "design" carpets developed, which usually do not bear particular decorative elements based on images, but they have their decorative value in the colours, in the textures, in the manufacturing procedures, in the features of the fibres, in geometrical elements which can be easily combined among each other.

[0011] However, there is still a relevant inconvenient related to the sizes, because even if they can be of various dimensions, they are usually medium or big; some dimensions are usually fit for being used in the central space of the room or at the maximum to be placed centrally in determined areas (waiting areas, dining rooms, sleeping rooms etc.).

[0012] It should be however taken into account that there are spaces, mainly common spaces like in a hotel or an expositive space, where there are projections and recesses, as well as areas where there are different chromatic aspects and use of a miscellaneous of fabrics or textile elements - for example, wall or sitting coverings etc. - in these cases, a great advantage would be the possibility to use a carpet, irrespective of rigid size elements, with a system of modular elements which can be freely combined among each other, which give broad possibilities to achieve particular chromatic effects, particular combination of textures, working procedures, so that the designer can have the maximum freedom both concerning the architectural space and the free coordination with the other furniture which is already present in the same space.

[0013] An other great advantage would be the possibility to use industrially manufactured modules which, thanks to their pre-arranged and basic modularity (square, rectangle, triangle, semicircle etc.) can be provided upon simple request - for example 4 rectangles, 2 semicircles etc. - in order to perform patterns, drawings and figures with maximum freedom about dimensions and sizes and by combination of different types of modules.

[0014] Last but not less important advantage would be the economical production, by taking advantage of the univocity of the modules and their repetitiveness.

Summary of the Invention

[0015] Aim of the present invention is to obtain a new carpet, in which by starting from finished elements, industrially manufactured in great number, the carpet is obtained with the maximum size and composition freedom, by using the combination through matching of modules having medium/small sizes connected among each other by a means of easy manufacture which can be also pre-arranged in the phase of manufacturing, by leaving to the user only the simple burden to dry join the modules.

Brief description of the drawings

[0016] A better understanding of the invention will clearly arise from the following description and from the drawings referred to the preferred embodiment and to some other embodiments reproduced in the attached drawings in which:

- table 1/3 shows some types of modules in various shapes, fit for a free combination;
- table 2/3 shows the connection means of two adjacent modules and an example of a basic combination of modules;
- table 3/3 shows in a schematic way and only by way of example some carpets obtained through the combination of modules in their heterogeneous individuality.

Detailed description of the invention

[0017] In table 1 in figures from 1 to 7 some basic modular elements are showed, respectively two semicircular modules 1a and 1b, whose diameters respectively 11a and 11b coincide with the greater sides 12 and 13 of two rectangles 2 and 3; the smaller side 23 than the rectangle 3 results of double length of the smaller side 22 of the rectangle 2.

[0018] The same table also shows respectively two semicircular modules 4a and 4b, of smaller dimensions with respect to the two semicircular modules 1a and 1b, whose diameters respectively 14a and 14b coincide with the greater side 15 of the rectangular module 5, said diameters also coincide with the side 16 of the square module 6 which in turn coincide with the side 15b of the rectangular module 5; the side 26 of the square module 6 has double length than the smaller side 25 of the rectangular module 5.

[0019] Always table 1 shows two triangular modules 7 and 8 in which the corresponding sides 17 and 18 coincide with sides 15, 15a of the rectangular module 5, as well as with the sides 16 and 16a of the square module 6.

[0020] The hypotenuse 17b of the triangle 7 coincides with the hypotenuse 18b of the triangle 8.

[0021] The diameters 14a and 14b of the semicircular modules 4a and 4b coincide with the sides 15 and 15a of the rectangular module 5 and with the sides 16 and

16a of the square module 6, they further coincide with the sides 17 and 18 respectively of the triangular modules 7 and 8.

[0022] All the cited modules can be combined among each other through the approaching of the coincident sides and they can further be joined through the presence on each of said sides of a connection means such as a zipper 20, divisible, constituted by two strips of fabric tapes 30a and 30b, each having one side firmly fixed to a first textile modular element 28 and an other side fixed to a second textile modular element 29, said two strips are provided with a nylon coil 31a and 31b, having shaped metal or plastic teeth (chain) said coils can be joined between each other through a slider 32, guided by a pull tab 33 provided with a wedge having an angle such to allow, during the sliding upwards or downwards, the engagement or the opening of the teeth.

[0023] Figure 11 shows a circular carpet obtained by the combination of two semicircular modules 10a and 10b, joined by the two equal diameters 10c and 10d through the zipper 20 represented as partially closed in figure 10 and as completely closed in figure 11.

[0024] The two modules could be of the same colour and material like in figure 11 or of different colours and materials like in figure 12.

[0025] Figure 13 shows a carpet obtained through the use of two semicircular modules 1a and 1b between which the rectangular modules 3 and 2 are placed; the semicircular modules are connected to the rectangular modules through the respective diameters combined with the greater sides provided with the zipper 20.

[0026] Figure 14 shows a carpet obtained through the use of two semicircular smaller modules 4a and 4b between which two square modules 5a and 5b are placed; the semicircular modules are connected to the square modules through the respective diameters combined with the sides provided with the zipper 20.

[0027] Figure 15 shows a carpet obtained by the combination of three pairs of triangular modules 17 and 18 where the two hypotenuses are joined with the zipper 20 to form a square and said squares are in turn joined among each other by the adjacent sides through said zipper 20.

[0028] Figure 16 shows a carpet obtained through the combination of three triangular modules 3, 3a and 3b and a smaller rectangular module 2; said modules are joined by the greater adjacent sides through the zipper 20.

[0029] In all the figures the modules are represented with a different texture, such symbology means that each module - by free choice of the user - can be virtually of different colour, material, texture etc. Furthermore, this means that the modules can be purchased in pre-arranged pallets of the same colour and type or even of combined colours and types, according to a catalogue of predetermined combinations, and each pallet can have a number of elements freely defined.

[0030] It is evident the number of advantages in manufacturing, use and selection for the obtaining of a carpet,

by using the modules according to the invention, which overcome the inconvenients described in the state of the art and which allow to obtain a product that can be manufactured through high modern working procedures, but that moreover can be commercialized in the more different combinations, therefore it can be easily adopted for different markets, geographical situations or purposes showing the highest flexibility.

Claims

1. A modular textile carpet, suitable for any size and composition need concerning colours, materials, finishes, **characterized by** the fact that it is obtained at the moment by the user matching and joining at least two basic finished modular textile elements 1a and 1b, also having different colours, materials, finishes, wherein said elements have at least one side provided with a connection means 20 between said modules or obtained in case of bigger dimensions by a plurality of said elements having in such a case - the central elements - at least two aides provided with a connection means 20 between said modules and the peripheral elements one side provided with said connection means.
2. Modular textile carpet according to claim 1 **characterized by** the fact that said connection means 20 is of the type of a divisible zipper constituted by two strips of fabric tapes 30a and 30b, preferably textile tapes, each having a side firmly fixed to a first modular textile element 28 and an other side fixed to a second modular textile element 29, said two strips 30a and 30b provided with a nylon coil 31a and 31b halving shaped metal or plastic teeth (chain), said coils being joinable between each other through a slider 32 guided by a pull tab 33, said slider 32 provided with a wedge with an angle such to allow, during the sliding upwards or downwards, the engagement or the opening of the teeth.
3. Modular textile carpet according to claim 1 **characterized by** the fact to have circular shape and to be obtained from two basic semicircular modular elements 1a and 1b joined by the diameters 11a and 11b, wherein a first element is provided on the diameter of a strip of fabric tape with coil 31a joinable to a second strip of fabric tape with coil 31b placed on the diameter of the second element, said second strip provided with a slider 32 for the connection and a pull tab 33 for the operating.
4. Modular textile carpet according to claim 1 **characterized by** the fact to have rectangular shape with semicircular ends and to be obtained through the use of two semicircular peripheral modules 1a and 1b and at least two central rectangular modules 3 and 2 of different sizes, said semicircular peripheral modules having the respective diameters 11a and 11b coincident with the greater sides respectively 13 and 14 of the two rectangles 3 and 2, said diameter 11a coincident with one side 13 of the rectangle provided with a first strip of fabric tape 30a with coil joinable to a second strip of fabric tape 30b with coil present on the adjacent side of a first rectangle corresponding module, said first rectangular module having in turn on the opposite side a strip of fabric tape 30a with coil which engages itself into a corresponding strip of fabric tape 30b with coil present on the adjacent side of a second corresponding rectangular module 2, having substantially said rectangular modules of different sizes strips of fabric tape with coils which can be engaged between each other to form a zipper 20, on the two greater opposite sides.
5. Modular textile carpet according to claim 4 **characterized by** the fact to have rectangular shape with semicircular ends and to be obtained through the use of two semicircular peripheral modules 4a and 4b and at least two central square modules 5a and 5b of same size, said semicircular peripheral modules 4a and 4b having the diameter coincident with one side of the square provided with a first strip of fabric tape 30a with coil which can be joined to a second strip of fabric tape 30b with coil present on the adjacent side of a corresponding first square module 5, said first square module 5 having in turn on the opposite side a strip of fabric tape 30b with coil which engages itself into a corresponding strip of fabric tape 30a with coil present on the adjacent side of the second corresponding square module 5b, having substantially said square modules strips of fabric tape with coil which can be engaged between each other to form a zipper 20, on the two greater opposite sides.
6. Modular textile carpet according to claim 1 **characterized by** the fact to have rectangular shape resulting from the combination of three pairs of triangular modules 17 and 18, 17a and 18a, 17b and 18b, wherein the pairs of hypotenuses are connected by the zipper 20 to form a square and said squares are in turn joined between each other by the adjacent sides through said zipper 20.
7. Modular textile carpet according to claim 1 **characterized by** the fact to have rectangular shape resulting by the combination of three rectangular greater modules 3, 3a and 3b and one smaller rectangular module 2; said modules are joined by the greater adjacent sides through said zipper 20.
8. Modular textile carpet according to claim 1 and any of the previous claims **characterized by** the fact to be obtained by pre-arranged textile modules of dif-

ferent colour, shape, material and finishes, sold in pallets where each module is equal to an other or different and each pallet has a number of modules equal or different.

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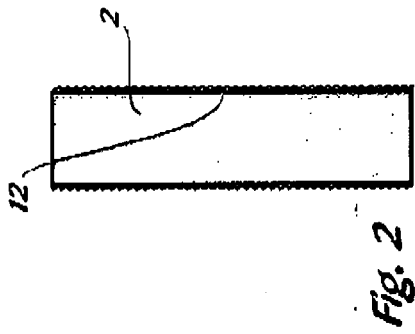
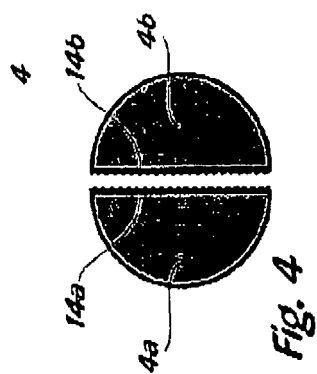
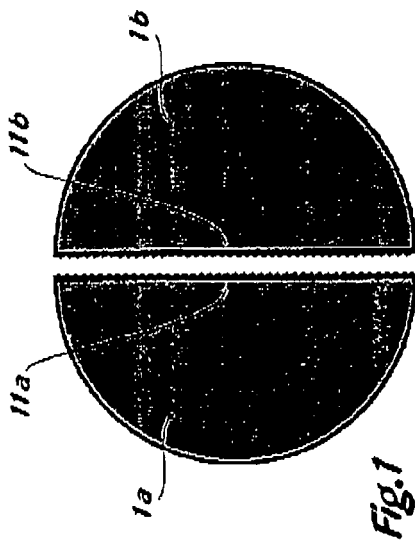


Fig. 3

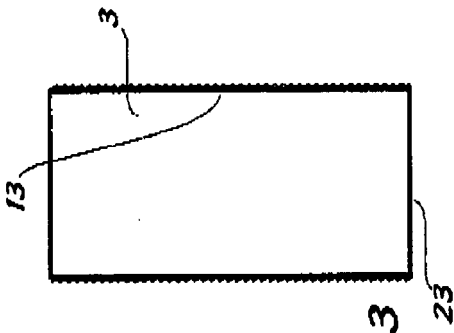


Fig. 5

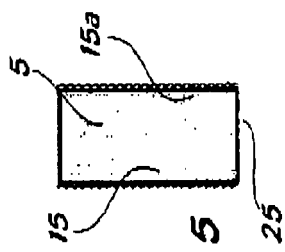
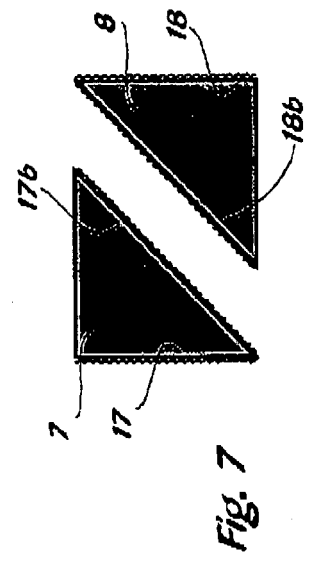
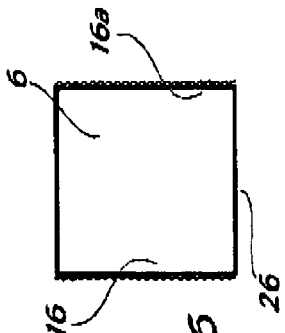
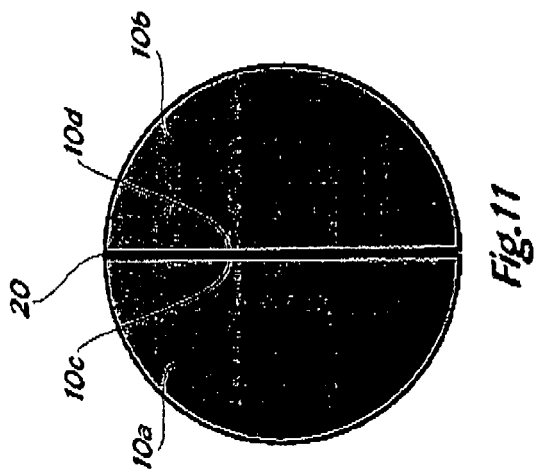
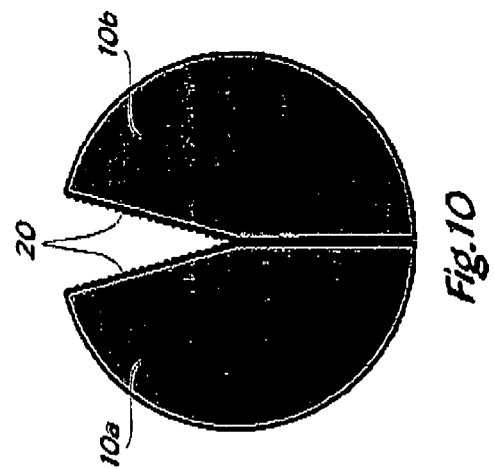
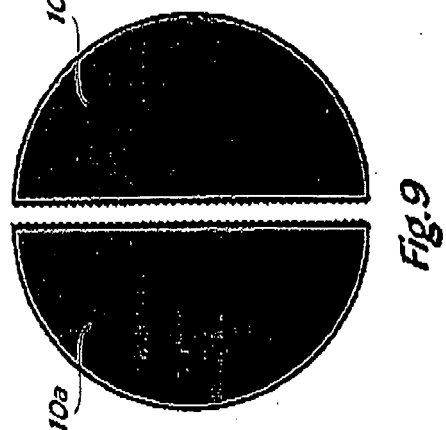
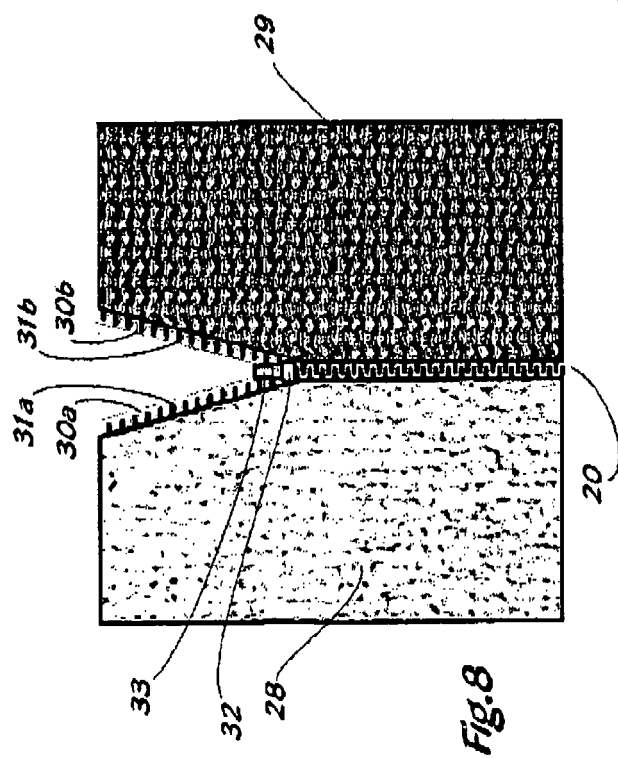
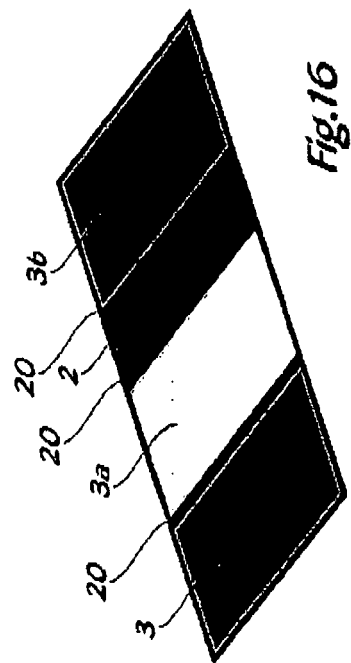
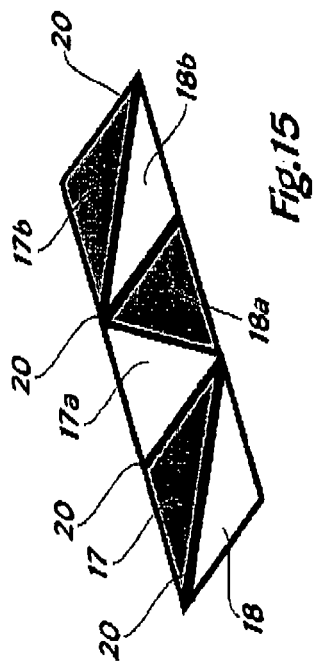
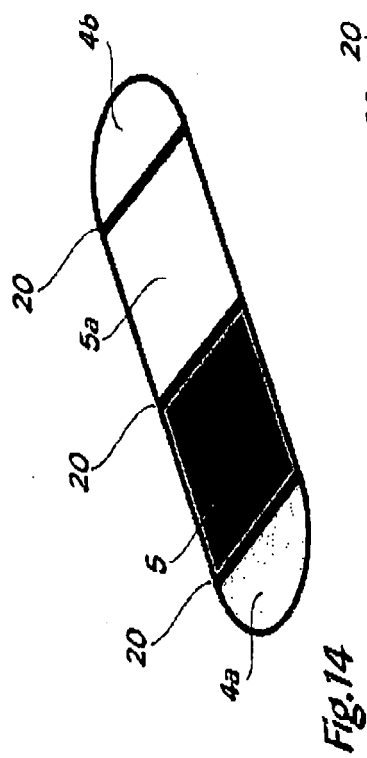
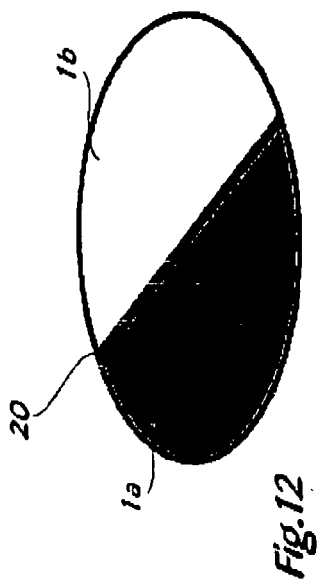
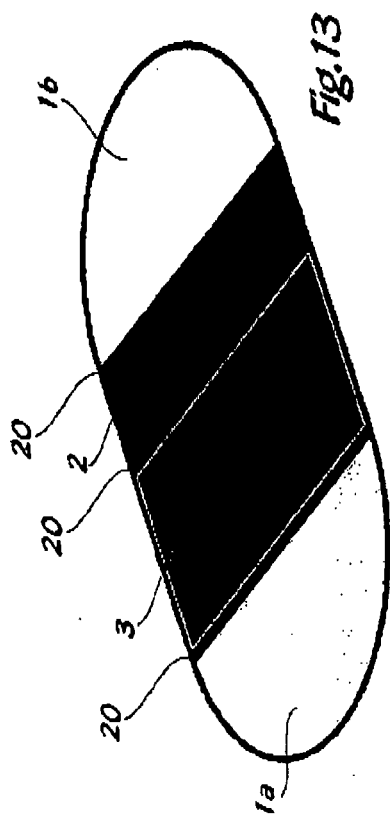


Fig. 6









EUROPEAN SEARCH REPORT

Application Number
EP 09 00 9576

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The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		18 December 2009	Beugeling, Leo
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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EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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