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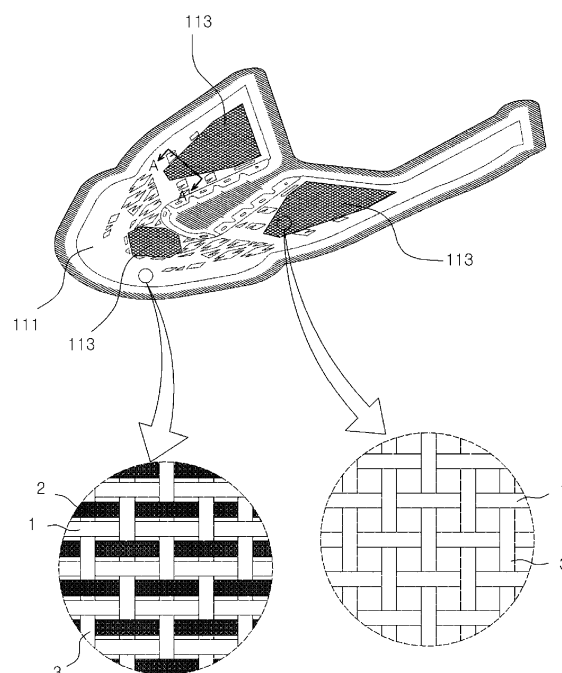
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(54) **Upper of footwear and manufacturing method thereof**

(57) There are provided a shoe upper and a method of manufacturing the shoe upper, in which a mesh part is not manufactured separately from the upper when the shoe upper is made, but the mesh part is formed simultaneously with the upper when fabric for the upper is woven, so that an additional operation of sewing or gluing the mesh part on or to the upper is not required. The

mesh part may be formed simultaneously with the base part when the shoe upper is manufactured, so that an additional operation of attaching the base part to the mesh part by sewing or adhesion is not required, thus being capable of enhancing productivity, keeping quality consistent, and improving marketability.

Fig. 2



Description**BACKGROUND****Technical Field**

[0001] The present invention relates, in general, to a shoe upper and a method of manufacturing the shoe upper, and, more particularly, to a shoe upper and a method of manufacturing the shoe upper, in which a mesh part is not manufactured separately from the upper when the shoe upper is made, but the mesh part is formed simultaneously with the upper when fabric for the upper is woven, so that an additional operation of sewing or gluing the mesh part on or to the upper is not required.

Background Art

[0002] Generally, a shoe is composed of an outsole and an upper, with a midsole and an insole provided therein. The outsole, the insole and the midsole serve to protect the sole of the foot and ensure comfortable walking, while the upper serves to protect the top of the foot and provide aesthetically pleasing appearance to the shoe, thus it plays an important role in improving the marketability of the shoe. Particularly, a manufacturer name or a brand name formed on the upper has the function of advertising a product as well as aesthetic effect.

[0003] On the upper are formed a vamp, various strips including ornamental side strips and reinforcing side strips, and a manufacturer logo or brand name (hereinafter referred to as 'logo'). These not only enhance the functionality of the shoe, but also provide a good appearance.

[0004] In the past, various members which will be attached to the upper are separately made of various shapes and materials, for example, synthetic resin such as PVC, leather, artificial fiber, artificial leather or metallic pieces, and then are attached to the shoe upper by sewing or adhesion or by compressing or riveting.

[0005] In order to achieve the lightness of the shoe and enhance the functionality thereof, the shoe upper is mainly made of fabric. Particularly, in order to provide good design and high air permeability, a mesh part made of fabric is attached. Such a mesh part is made as follows: a portion for forming the mesh part is cut out of the upper that is made of synthetic resin, leather, artificial fiber or artificial leather; and the mesh part is attached to a cut portion of the upper by sewing or adhesion. The conventional upper is disclosed in Korean Patent Laid-Open Publication No. 10-2012-0103580 (Sep. 19, 2012) and Korean Patent Laid-Open Publication No. 10-2012-0091112 (Aug. 17, 2012).

[0006] As such, if the mesh part is additionally attached to the shoe upper, a process of forming the mesh part is very complicated, and besides, the quality of the shoe varies depending on a worker's skill or the performance of a machine. Further, the use of chemicals such as an adhesive, negatively affecting workers' health, makes the working environment undesirable.

[0007] Therefore, there is urgently needed technology for manufacturing a shoe upper, which is capable of increasing productivity and keeping quality consistent when the shoe upper having the mesh part is manufactured; in addition to realizing an environmentally-friendly manufacturing process.

[0008] The foregoing is intended merely to aid in the understanding of the background of the present invention, and is not intended to mean that the present invention falls within the purview of the related art that is already known to those skilled in the art.

SUMMARY**Technical Problem**

[0009] Accordingly, the present invention has been made keeping in mind the above problems occurring in the related art, and an object of the present invention is to provide a shoe upper, in which a mesh part is simultaneously woven onto the upper when the shoe upper is manufactured, thus being capable of forming the mesh part without an additional attaching operation.

[0010] Another object of the present invention is to provide a shoe upper, in which a mesh part and a logo part placed thereunder are separately formed at the same time when the shoe upper is manufactured, thus achieving the lightness of a shoe, securing functionality such as air permeability, and providing improved design to a shoe.

Solution to Problem

[0011] In order to accomplish the above objects, an aspect of the present invention is to provide a shoe upper, comprising a base part formed by weaving at least one strand of weft and at least one strand of warp; and a mesh part

formed by weaving at least one strand of weft and at least one strand of warp. Preferably, the weft and the warp of the base part and the mesh part may be continuously connected to each other.

[0012] Preferably, some of the weft of the base part may be continuously connected to all of the weft of the mesh part, and/or at least some of the warp of the base part may be continuously connected to all of the warp of the mesh part.

[0013] Preferably, the weft of the base part may comprise colored weft and transparent weft, and the warp of the base part may comprise transparent warp. The weft of the mesh part may be transparent weft to which the transparent weft of the base part is continuously connected, and the warp of the mesh part may be transparent warp to which the transparent warp of the base part is continuously connected.

[0014] After the colored weft of the base part is continuously positioned on the mesh part without being woven with the warp of the mesh part and then the transparent weft and the transparent warp of the mesh part are woven with each other, it may preferably be cut at an edge of the mesh part.

[0015] Another aspect of the present invention is to provide a shoe upper, comprising a base part formed by weaving a plurality of strands of weft and a plurality of strands of warp; and a mesh part formed by weaving transparent weft and transparent warp. The transparent weft and the transparent warp of each of the base part and the mesh part are continuously connected to each other, and/or the transparent weft of the base part and the transparent weft of the mesh part are continuously connected to each other.

[0016] According to an embodiment of the present invention, the strands of weft and/or the strands of warp may comprise, respectively, colored and/or transparent weft and/or warp. In the shoe upper of the present invention, the strands of weft and/or the strands of warp may be all weft and/or all warp of the base part.

[0017] According to a preferred embodiment of the present invention, the transparent weft of the base part may be continuously connected to the transparent weft of the mesh part. According to another preferred embodiment of the present invention, the transparent warp of the base part may be continuously connected to the transparent warp of the mesh part. According to another preferred embodiment of the present invention, the transparent weft of the base part may be continuously connected to the transparent weft of the mesh part, and the transparent warp of the base part may be continuously connected to the transparent warp of the mesh part.

[0018] According to a preferred embodiment of the present invention, in the mesh part, the colored weft of the base part may not be woven with the transparent warp of the mesh part. According to another preferred embodiment of the present invention, the colored weft of the base part may be cut at an edge of the mesh part.

[0019] According to another preferred embodiment of the present invention, the mesh part may form an upper plate, and a lower plate may be further provided under the mesh part and comprise a logo formed by weaving colored warp and colored weft. Both the upper and lower plates of the mesh part may form a logo part. The upper and lower plates may be simultaneously woven in such a way as to be vertically separated from each other.

[0020] The shoe upper may further comprise a colored part, and the colored part may comprise an upper plate and a lower plate which are simultaneously woven in such a way as to be vertically separated from each other. The upper plate of the colored part may be formed by weaving colored weft and colored warp of the base part, weaving colored weft and transparent warp of the base part, or weaving transparent weft and colored warp of the base part. The lower plate of the colored part may be formed by weaving a portion of the weft and a portion of the warp of the base part, which are not used to form the upper plate.

[0021] Another aspect of the present invention is to provide a method of manufacturing a shoe upper, comprising forming a base part by weaving weft and warp; and forming a mesh part by weaving weft that is continuously connected to at least some of the weft of the base part, and warp that is continuously connected to at least some of the warp of the base part.

[0022] All or some of the weft of the base part may be continuously connected to all of the weft of the mesh part, and all or some of the warp of the base part may be continuously connected to all of the warp of the mesh part, and a total number of the weft and warp of the mesh part may be less than a total number of the weft and warp of the base part.

[0023] Preferably, the method may further comprise forming a logo part having a logo, under the mesh part that is an upper plate, the logo part and the mesh part being simultaneously formed in such a way as to be separated from each other.

[0024] Another aspect of the present invention is to provide a method of manufacturing a shoe upper, comprising forming upper fabric by weaving weft comprising colored weft and transparent weft that are arranged in parallel, and transparent warp; skipping a mesh-part forming region such that the colored weft is not woven with the transparent warp; and cutting and removing both ends of the colored weft that skips the mesh part after the upper fabric has been woven, so that the mesh part is formed in a net shape by weaving only the transparent weft and the transparent warp.

[0025] A further aspect of the present invention is to provide a method of manufacturing a shoe upper, comprising forming a base part by weaving weft and warp; forming a mesh part by weaving weft that is continuously connected to some of the weft of the base part and warp that is continuously connected to at least some of the warp of the base part, and continuously positioning weft of the base part, which is not woven when the mesh part is formed, on the mesh part; and cutting and removing weft positioned on the mesh part at an edge of the mesh part, after the mesh part has been finished.

Advantageous effect of invention

[0026] As is apparent from the above description, embodiments of the present invention are advantageous in that the mesh part may be formed simultaneously with the base part when the shoe upper is manufactured, so that an additional operation of attaching the base part to the mesh part by sewing or adhesion is not required, thus being capable of enhancing productivity, keeping quality consistent, and improving marketability.

[0027] Further, embodiments of the present invention are advantageous in that it is unnecessary to use chemicals such as adhesives when the mesh part is formed on the shoe upper, so that the environment of a worksite is improved and thereby a worker's health may be enhanced.

[0028] Furthermore, embodiments of the present invention are advantageous in that the transparent or translucent mesh part is formed integrally with the logo part on the base part in such a way that the mesh part is separated from the logo part when the shoe upper is manufactured, thus allowing a logo to be delicately exposed and achieving a desired aesthetic effect, and in that an adhesion process is not required; thus increasing productivity.

[0029] Further, embodiments of the present invention are advantageous in that the upper plate and the lower plate are separately provided when the logo part is formed, so that the lower plate serves to prevent the adhesive from escaping when the lining of the shoe upper is attached using the adhesive, thus preventing the adhesive from leaking out through a loose structure of the mesh part that is associated with the upper plate. Therefore, the present invention prevents the production of a defective product resulting from the leakage of the adhesive, in addition to improving marketability.

BRIEF DESCRIPTION OF THE DRAWINGS

[0030] The above and other objects, features and advantages of the present invention will be more clearly understood from the following detailed description taken in conjunction with the accompanying drawings, in which:

FIG. 1 is a perspective view showing fabric on which a shoe upper is formed, according to an embodiment of the present invention;

FIG. 2 is a perspective view showing the shoe upper according to the embodiment of the present invention;

FIGS. 3A and 3B are sectional views taken along line A-A' of FIG. 2;

FIG. 4 is a perspective view showing fabric on which a shoe upper is formed, according to another embodiment of the present invention;

FIG. 5 is a perspective view showing the shoe upper according to the embodiment of the present invention;

FIG. 6 is a sectional view taken along line B-B' of FIG. 5; and

FIG. 7 is a sectional view taken along line C-C' of FIG. 5.

DETAILED DESCRIPTION

[0031] Hereinafter, preferred embodiments of the present invention will be described in detail with reference to the accompanying drawings.

[0032] Like reference numerals are used to identify like elements throughout different drawings. Further, in the following description, if it is decided that the detailed description of known function or configuration related to the invention makes the subject matter of the invention unclear, the detailed description is omitted.

[0033] Further, when describing the components of the present invention, terms such as first, second, A, B, (a) or (b) may be used. Since these terms are provided merely for the purpose of distinguishing the components from each other, they do not limit the nature, sequence or order of the components. If it is described that a component is formed on another component, it should be understood that a component is provided on a top or bottom of another component. Further, a component may be directly provided on another component, or a component may be interposed between components.

[0034] The shoe upper of the present invention may be applied to various types of athletic shoes, for example, running shoes, training shoes, hiking shoes, basketball shoes, volleyball shoes, cross training shoes, cycling shoes, football shoes, tennis shoes, and soccer shoes. Furthermore, the upper of this invention may also be applied to non-athletic shoes, for example, dress shoes, casual shoes, sandals, and work boots. Thus, the shoe upper of this invention may be applied to a variety of types of shoes.

[0035] Generally, a shoe comprises an upper and a sole structure attached to the upper. The sole structure may comprise a midsole, an outsole and an inner sole, and the upper creates a space in the shoe to firmly and comfortably support the foot. The space defined inside the upper is shaped to receive the foot, and extends from the top of the foot to the tiptoe, to surround the sides of the foot, the bottom of the foot, and the heel.

[0036] The shoe upper according to an embodiment of the present invention is manufactured using an upper member that is made by a loom, and comprises a base part and a mesh part having a vertically-separated double structure. That

is, the shoe upper according to the embodiment of the present invention is fabricated using a cloth member that is formed by weaving weft passing horizontally and warp passing vertically.

[0037] The base part is part other than the mesh part, and the weft and warp of the base part integrally form a single structure. Additionally, the mesh part is configured such that the upper and lower plates thereof are separated from each other by separating the weft and warp of the base part from each other. Thus, the upper or lower plate of the mesh part is less compact than that of the base part, such that the mesh part serves as a ventilating part. Meanwhile, in order to enhance air permeability and cause the shoe to look visually cooling, the lower plate of the mesh part may be removed.

[0038] Each of the weft and the warp may comprise one or more strands in view of the design or function of the shoe, and may have a combination of various colors. For example, the base part may be formed by weaving two strands of weft and one strand of warp or formed by four strands of weft and two strands of warp. Here, multiple strands of weft and warp may have the same color or different colors, and the weft and the warp are different from each other in number of the strands.

[0039] The weft and the warp used in the weaving may be natural fiber such as cotton, bast fibers, or wool, or may be various kinds of synthetic fiber such as: nylon, polyester, acryl, vinyl, promix, thermoplastic urethane (TPU), ethylene vinyl acetate (EVA), polypropylene (PP), polyethylene (PE), Polyvinyl chloride (PVC), carbon fiber or aramid fiber.

[0040] Thus, the number, material, thickness, and weaving method of the weft and warp may be determined according to the design or functionality of the upper. As a weaving method and a weaving apparatus are developed, the upper may assume various structures.

[0041] Hereinafter, the preferred embodiment of the present invention will be described with reference to the accompanying drawings.

[0042] FIG. 1 is a perspective view showing fabric on which a shoe upper is formed, according to an embodiment of the present invention, and FIG. 2 is a perspective view showing the shoe upper according to the embodiment of the present invention. To be more specific, FIG. 2 is a perspective view of a member for forming the shoe upper.

[0043] Referring to FIGS. 1 and 2, the shoe upper 110 according to the embodiment of the present invention is formed on the upper fabric 100, and comprises a base part 111 and a mesh part 113. The base part 111 is part that defines a main body of the shoe upper 110, and the mesh part 113 may be formed at a predetermined position on the base part 111. Here, the mesh part 113 is not coupled to the base part 111 by an additional attaching operation such as sewing or adhesion, but is integrally woven with the base part 111 by the weft and warp used in weaving the base part 111.

[0044] The configuration of the base part and the mesh part will be described in detail with reference to the enlarged view of FIG. 2.

[0045] The base part 111 is formed by weaving two strands of weft 1 and 2 and one strand of warp 3. In this regard, one 2 of the two strands of weft is colored, while the other 1 has a transparent color. The weft of the base part 111 is colored weft 2 and alternates with the transparent weft 1. The warp 3 of the base part 111 is formed by one strand of transparent fiber, and is woven with the colored weft 2 and the transparent weft 1 which are arranged in parallel, thus forming the base part 111.

[0046] Meanwhile, the mesh part 113 is formed by weaving one strand of transparent warp 3 and one strand of transparent weft 1. Since the colored weft 2 of the two strands of weft constituting the base part 111 does not participate in forming the mesh part 113, the mesh part 113 is less compact than the base part 111. As such, since the mesh part 113 is less compact than the base part 111, it is possible to enhance the air permeability of the shoe and to provide a cooling appearance, in addition to affording an aesthetically pleasing appearance in terms of design.

[0047] In this way, the weft and the warp of the mesh part 113 are formed using some of the weft of the base part 111 and the warp of the base part 111. Since the mesh part 113 and the base part 111 are integrally woven, an additional process of attaching the mesh part 113 to the base part 111 is not required. Therefore, according to an embodiment of the present invention, the process of manufacturing the shoe upper is improved, thus increasing productivity, and a defective product resulting from the use of an adhesive is prevented, thus improving marketability, keeping the quality of a product consistent, and preventing workers health impairment.

[0048] Next, the method of forming the mesh part will be described with reference to FIGS. 3A and 3B. FIGS. 3A and 3B are sectional views taken along line A-A' of FIG. 2. To be more specific, FIG. 3A is a sectional view taken along line A-A' of FIG. 2, in which the colored weft 2 is present on the section. FIG. 3B is a sectional view taken along line A-A' of FIG. 2, in which the colored weft 2 is cut from the mesh part 113 of FIG. 3A.

[0049] As shown in the drawings, first, two strands of weft 1 and 2 are woven with one strand of warp 3, thus forming the base part 111.

[0050] Subsequently, at a point where the base part 111 ends, one strand of transparent fiber 1 of two strands of weft used to form the base part 111 is woven with one strand of transparent warp 3, thus forming the upper plate of the mesh part 113. The other strand used to the form the base part 111, namely, the colored weft 2 is solely positioned under the upper plate without being woven with the transparent warp 3. That is, the colored weft 2 does not participate in weaving in the mesh part 113, and then participates in weaving in the base part 111 again.

[0051] Therefore, at a point where the mesh part 113 ends, the colored weft 2 participates in weaving again. Conse-

quently, the transparent weft 1, the colored weft 2 and the transparent warp 3 are integrally woven together, thus forming the base part 111.

[0052] Finally, as shown in FIG. 3B, the colored weft 2 placed on the mesh part 113 is cut and removed at both ends of the mesh part 113.

[0053] As such, if the colored weft 2 is cut and removed, it is possible to form the mesh part 113 of a single structure that is made by weaving only the transparent weft 1 and the transparent warp 3. The transparent weft 1 and the transparent warp 3 may be continuously connected to each other. Since the base part 111 and the mesh part 113 are integrally woven, the additional process of attaching the mesh part 113 to the completed base part 111 is not required. Further, the structure of the mesh part 113 is looser than that of the base part 111, thus improving functionality such as the air permeability, and providing a cooling and aesthetically pleasing appearance.

[0054] Hereinbefore, although FIG. 2 and FIGS. 3A and 3B illustrate that the base part is formed by two strands of weft (one strand of colored weft and one strand of transparent weft) and one strand of transparent warp and the mesh part is formed by one strand of transparent weft and one strand of transparent warp, the number and color of the weft and warp may vary in view of the design and functionality of the upper. Thus, the scope of the present invention is not limited to the above-described embodiment. Further, although the colored weft is disposed under the mesh part in the embodiment, the colored weft may be disposed on the mesh part.

[0055] Next, another embodiment of the present invention will be described with reference to FIGS. 4 to 7.

[0056] FIG. 4 is a perspective view showing fabric on which a shoe upper is formed, according to another embodiment of the present invention, FIG. 5 is a perspective view showing the shoe upper according to the embodiment of the present invention, FIG. 6 is a sectional view taken along line B-B' of FIG. 5, and FIG. 7 is a sectional view taken along line C-C' of FIG. 5. To be more specific, FIG. 5 shows an upper member for manufacturing the shoe upper.

[0057] A plurality of shoe uppers may be formed on a breadth of fabric at regular intervals. FIG. 5 shows the fabric on which one upper is formed. The fabric may be jacquard fabric. A support may be provided on a portion of the fabric having no upper to prevent the fabric from being bent or twisted.

[0058] As shown in FIGS. 4 and 5, the shoe upper according to another embodiment of the present invention comprises base parts 211 and 211', a colored part 212, and a logo part 213. The base part 211 and the colored part 212 are integrally woven together, while the base part 211 and the logo part 213 are integrally woven together. However, the base part 211 takes the form of a single structure, whereas each of the colored part 212 and the logo part 213 takes the form of a double structure configured such that upper and lower plates thereof are separated from each other.

[0059] All of the base part 211, the colored part 212 and the logo part 213 are formed by weaving weft and warp having various colors. The transparent fiber and the colored fiber may appropriately combine with each other according to the design of the upper.

[0060] For example, four strands of weft 1, 2, 11 and 21 which are arranged in parallel cross with two strands of warp 3 and 4 which are arranged in parallel, thus forming the base part 211. In this regard, the weft forming the base part 211 may comprise four strands of weft 1, 2, 11 and 21, in which colored fibers 2 and 21 and transparent fibers 1 and 11 are alternately arranged in parallel, and the warp forming the base part 211 may comprise one strand of colored fiber 4 and one strand of transparent fiber 3. Of course, the strand number, material, and color of each of the weft and the warp may depend on the design of the upper. Since the base part 211 is formed by weaving all weft 1, 2, 11 and 21 and all warp 3 and 4 that are used to manufacture the shoe upper, the base part 211 is the most compact and dense part in the upper.

[0061] The base part 211 and the transversely extending colored part 212 may have a double-layered structure, layers 212a, 212b of which are vertically separated from each other. When the colored part 212 is in the double-layered structure having the vertically separated layers 212a and 212b, it is advantageous to secure the air permeability. Further, the colored part 212 is formed at several positions on the upper, thus affording the aesthetically pleasing appearance of the shoe.

[0062] Since the upper plate 212a of the colored part 212 contains the colored fiber, the upper plate 212a may be formed by weaving the colored weft and the colored warp. Alternatively, when forming the upper plate 212a by weaving the weft and the warp, either of the weft or the warp may have a certain color and the remaining one may be transparent (or translucent). Since the lower plate of the colored part 212 may have any color, it may be formed by weaving colored weft and colored warp, colored weft and transparent warp and/or transparent weft and transparent warp.

[0063] The color, material, thickness and other factors of the weft and warp may be determined in consideration of the design of the colored part 212. Thus, the colored part 212 may be formed in various types of double-layered structures. The upper plate 212a and the lower plate 212b of the colored part 212 may be simultaneously woven by a jacquard weaving method or the like.

[0064] The colored part 212 secures the air permeability, and is provided at several positions on the upper, thus affording the aesthetically pleasing appearance of the shoe. Further, a lining is attached to the lower plate of the colored part 212 via the adhesive, thus preventing the adhesive from penetrating the upper plate.

[0065] Meanwhile, the logo part 213 may be formed on each of left and right sides of the shoe. The logo part 213 has

a double-layered structure having layers 213a and 213b which are vertically separated from each other, similarly to the colored part 212. The upper plate 213a and the lower plate 213b of the logo part 213 are vertically separated from each other but are simultaneously woven.

[0066] A logo is formed on the lower plate 213b of the logo part 213, and the logo part 213 comprises colored fiber. Thus, the lower plate may be formed by weaving the colored weft 2 and 21 and the colored warp 4, weaving the colored weft and the transparent warp, or weaving the transparent weft and the colored warp.

[0067] Preferably, the upper plate 213a of the logo part 213 may be formed of the transparent fiber (or translucent fiber) to expose the logo of the lower plate 213b to the outside. Therefore, the transparent weft 1 and 11 and the transparent warp 3 may be woven to form the upper plate 213a.

[0068] As such, when the logo part 212 is formed using the upper and lower plates 213a and 213b, the logo is delicately and elegantly exposed to the outside, thus achieving very aesthetically pleasing effect in terms of design. Subsequently, when cloth of the lining or the like is attached to the logo part 212 via the adhesive, the adhesive is blocked by the lower plate 213b, thus preventing the adhesive from escaping out from the upper plate 213a and thereby preventing an increase in defective ratio resulting from the leakage of the adhesive. Consequently, it is possible to maintain a clean appearance.

[0069] Hereinafter, the method of forming the base part, the colored part and the logo part will be described with reference to FIGS. 6 and 7.

[0070] First, the method forming the colored part will be described with reference to FIG. 6.

[0071] As shown in FIG. 6, the base part 211 is formed by weaving four strands of weft 1, 2, 11 and 21 and two strands of warp 3 and 4. The four strands of weft 1, 2, 11 and 21 comprise the colored fibers 2 and 21 and the transparent fibers 1 and 11 which are alternately arranged in parallel. The warp comprises one strand of colored fiber 4 and one strand of transparent fiber 3.

[0072] Two strands of transparent weft 1 and 11 and two strands of colored weft 2 and 21 forming the base part 211 are separated from each other at a position where the colored part 212 starts. The two separated strands of colored weft 2 and 21 are woven with the colored warp 4 to form the upper plate 212a, and the two separated strands of transparent weft 1 and 11 are woven with the transparent warp 3 to form the lower plate 212b. Subsequently, at a point where the colored part 212 ends, the separated weft and warp are integrally woven again to form the base part 211. As such, the upper plate 212a and the lower plate 212b of the colored part are simultaneously woven in such a way as to be formed integrally with the base part 211.

[0073] Next, the method of forming the logo part will be described with reference to FIG. 7.

[0074] Similarly to the method of forming the colored part 212, the base part 211 is formed by the four strands of weft 1, 2, 11 and 21 and the two strands of warp 3 and 4. The four strands of weft 1, 2, 11 and 21 and the two strands of warp 3 and 4 are integrally woven to form the base part 211.

[0075] The two strands of transparent weft 1 and 11 and the two strands of colored weft 2 and 21, which form the base part 211, are separated from each other at a position where the logo part 213 starts. The two separated strands of transparent weft 1 and 11 are woven with the transparent warp 3 to form the upper plate 213a, and the two separated strands of colored weft 2 and 21 are woven with the colored warp 4 to form the lower plate 213b. Subsequently, at a point where the logo part 213 ends, the separated weft and warp are integrally woven again to form the base part 211. As such, the upper plate 213a and the lower plate 213b of the logo part 213 are simultaneously woven in such a way as to be formed integrally with the base part 211.

[0076] Hereinbefore, although FIGS. 6 and 7 illustrate four strands of weft and two strands of warp as an example, the strand number, color, material, and thickness of the weft and warp may be variously determined in consideration of the shoe design.

[0077] Although the preferred embodiments of the present invention have been disclosed for illustrative purposes, those skilled in the art will appreciate that various modifications, additions and substitutions are possible, without departing from the scope and spirit of the invention as disclosed in the accompanying claims.

Explanation of reference signs

1,11: transparent weft	2,21: colored weft
3: transparent warp	4: colored warp
100, 200: a perspective view showing fabric on which a shoe upper is formed	
110, 210: shoe upper	
111, 211: base part	113: mash part
212: colored part	213: logo part
212a, 213a: upper plate	212b, 213b: lower plate

Claims**1.** A shoe upper, comprising:

5 a base part formed by weaving a plurality of strands of weft and a plurality of strands of warp, wherein the strands of weft comprise colored weft and/or transparent weft, and the strands of warp comprise transparent warp and/or colored warp; and
 a mesh part formed by weaving transparent weft and transparent warp,
 10 wherein the transparent weft and the transparent warp of each of the base part and the mesh part are continuously connected to each other, and/or the transparent weft of the base part and the transparent weft of the mesh part are continuously connected to each other.

2. The shoe upper as set forth in claim 1, wherein the plurality of strands of weft and/or the plurality of strands of warp comprise all weft and/or all warp.**3.** The shoe upper as set forth in claim 1 or 2, wherein the transparent warp of the base part is continuously connected to the transparent warp of the mesh part.**4.** The shoe upper as set forth in any one of claims 1 to 3, wherein, in the mesh part, the colored weft of the base part is not woven with the transparent warp of the mesh part.**5.** The shoe upper as set forth in any one of claims 1 to 4, wherein the colored weft of the base part is cut at an edge of the mesh part.**6.** The shoe upper as set forth in any one of claims 1 to 3, wherein the mesh part forms an upper plate, and a lower plate is further provided under the mesh part and comprises a logo formed by weaving colored warp and colored weft, the upper plate and the lower plate of the mesh part being simultaneously woven in such a way as to be vertically separated from each other, thus forming a logo part.**7.** The shoe upper as set forth in claim 6, further comprising:

a colored part,
 wherein the colored part comprises an upper plate and a lower plate which are simultaneously woven in such a way as to be vertically separated from each other.

8. The shoe upper as set forth in claim 7, wherein the upper plate of the colored part is formed by weaving colored weft and colored warp of the base part, weaving colored weft and transparent warp of the base part, or weaving transparent weft and colored warp of the base part.**9.** The shoe upper as set forth in claim 7 or 8, wherein the lower plate of the colored part is formed by weaving a portion of the weft and a portion of the warp of the base part, which are not used to form the upper plate.**10.** A method of manufacturing a shoe upper described in any one of claims 1 to 4, comprising:

45 forming upper fabric by weaving weft comprising colored weft and transparent weft that are arranged in parallel, and transparent warp;
 skipping a mesh-part forming region such that the colored weft is not woven with the transparent warp; and
 cutting and removing both ends of the colored weft that skips the mesh part after the upper fabric has been woven, so that the mesh part is formed in a net shape by weaving only the transparent weft and the transparent warp.
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Fig. 1

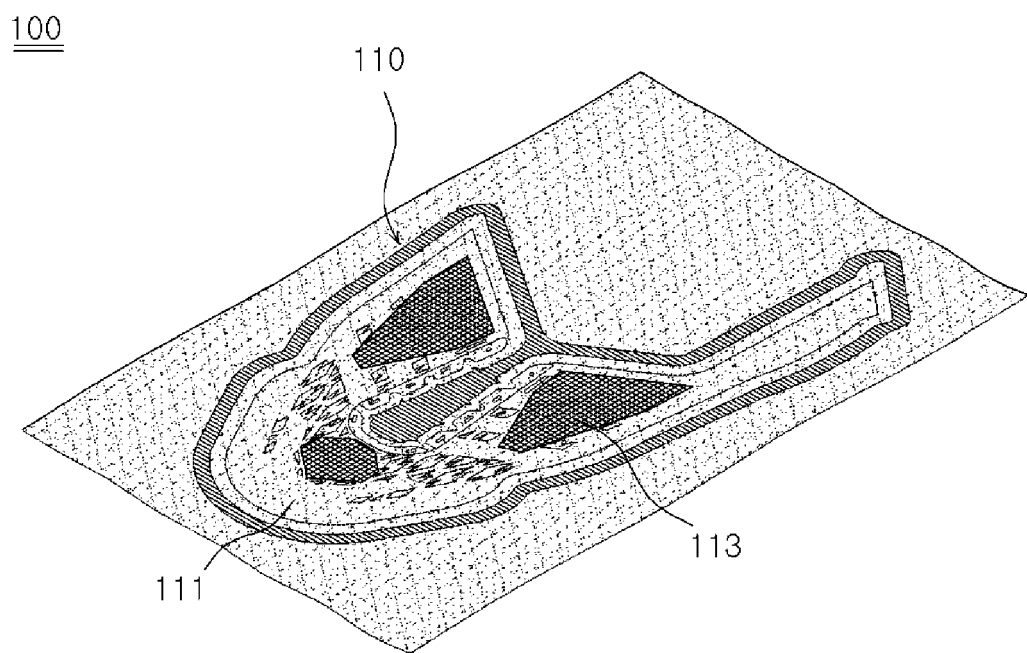


Fig. 2

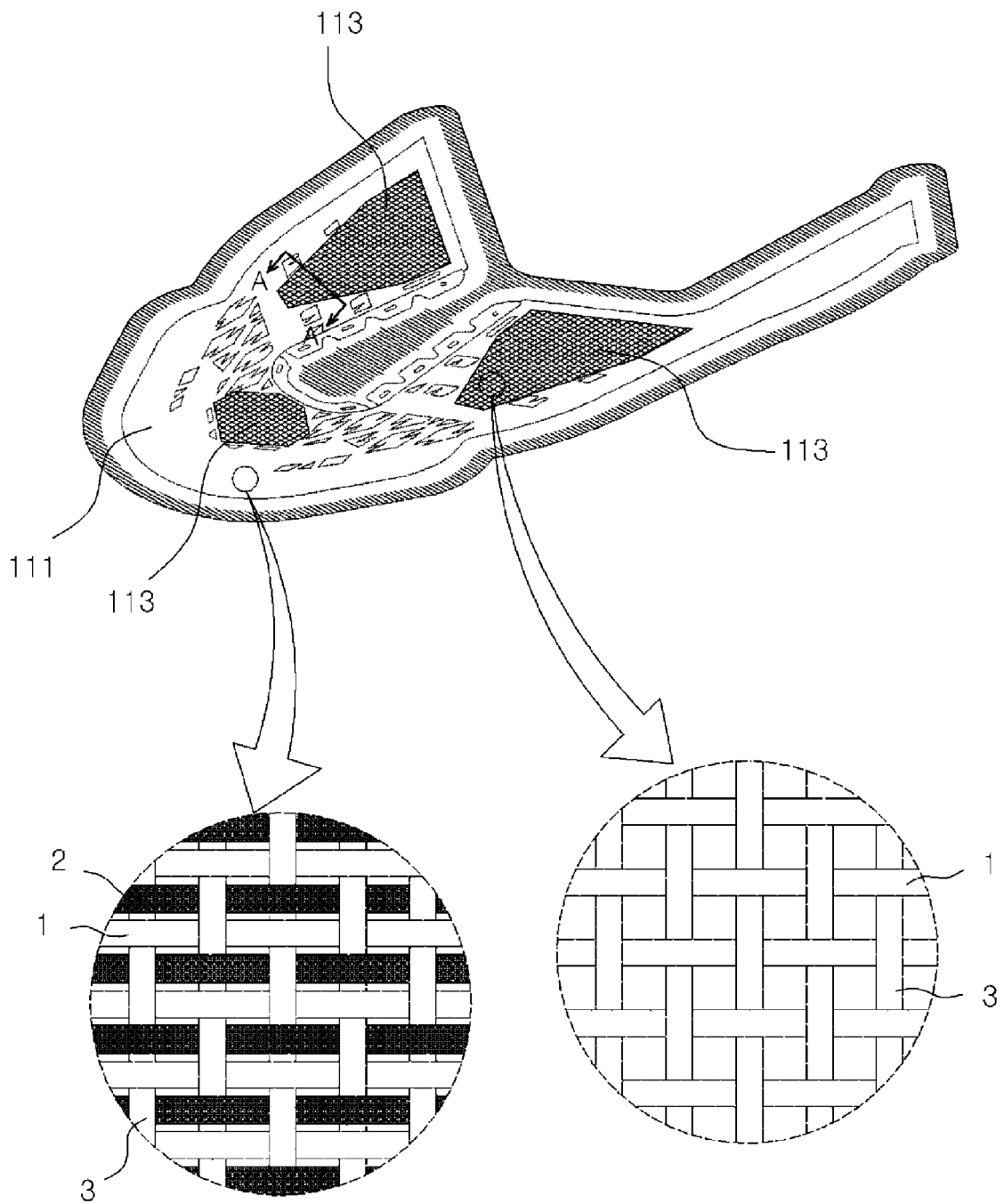


Fig. 3

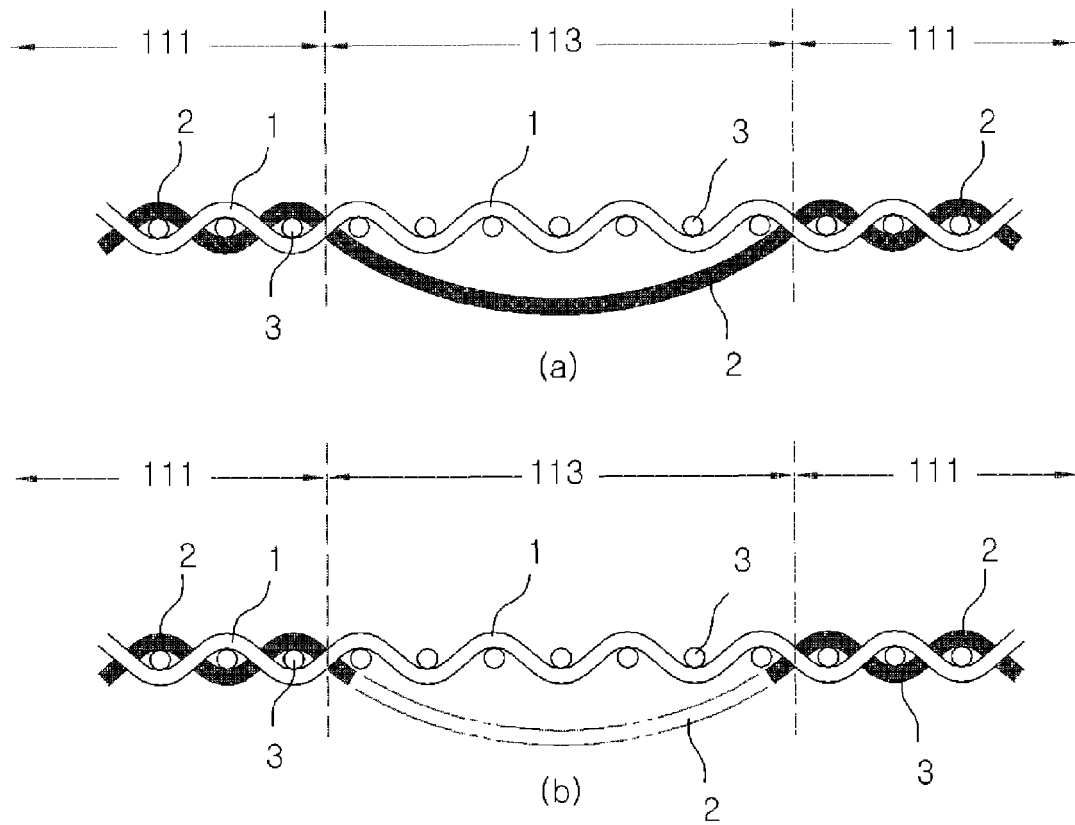


Fig. 4

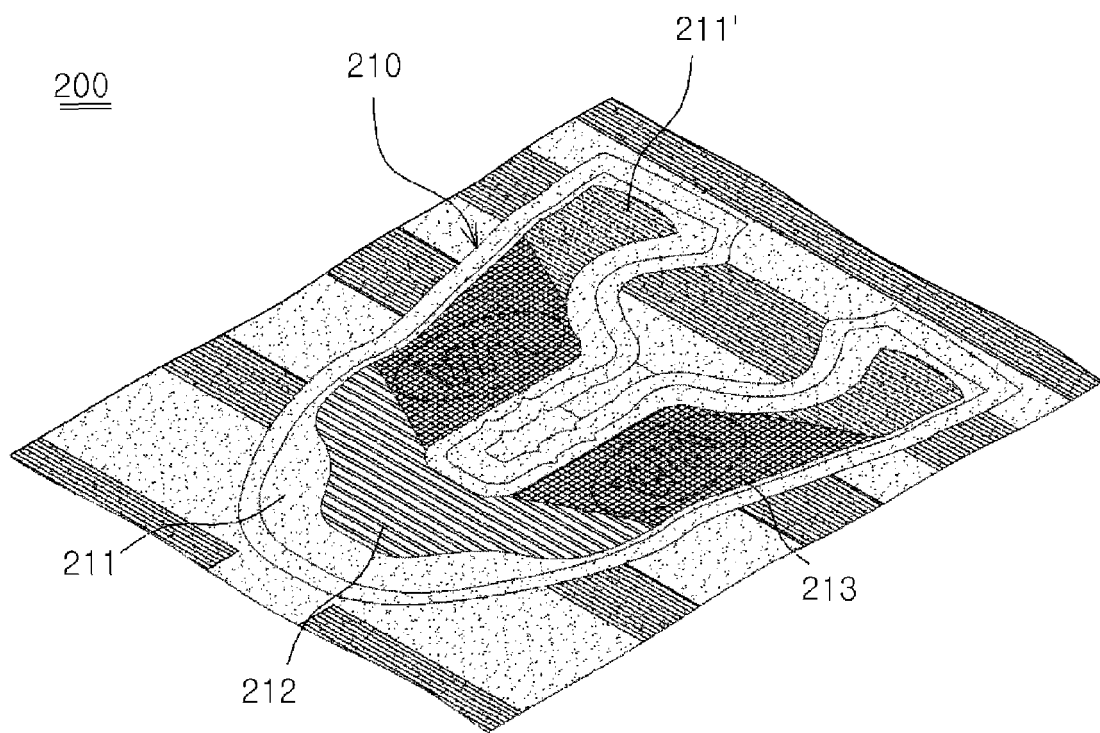


Fig. 5

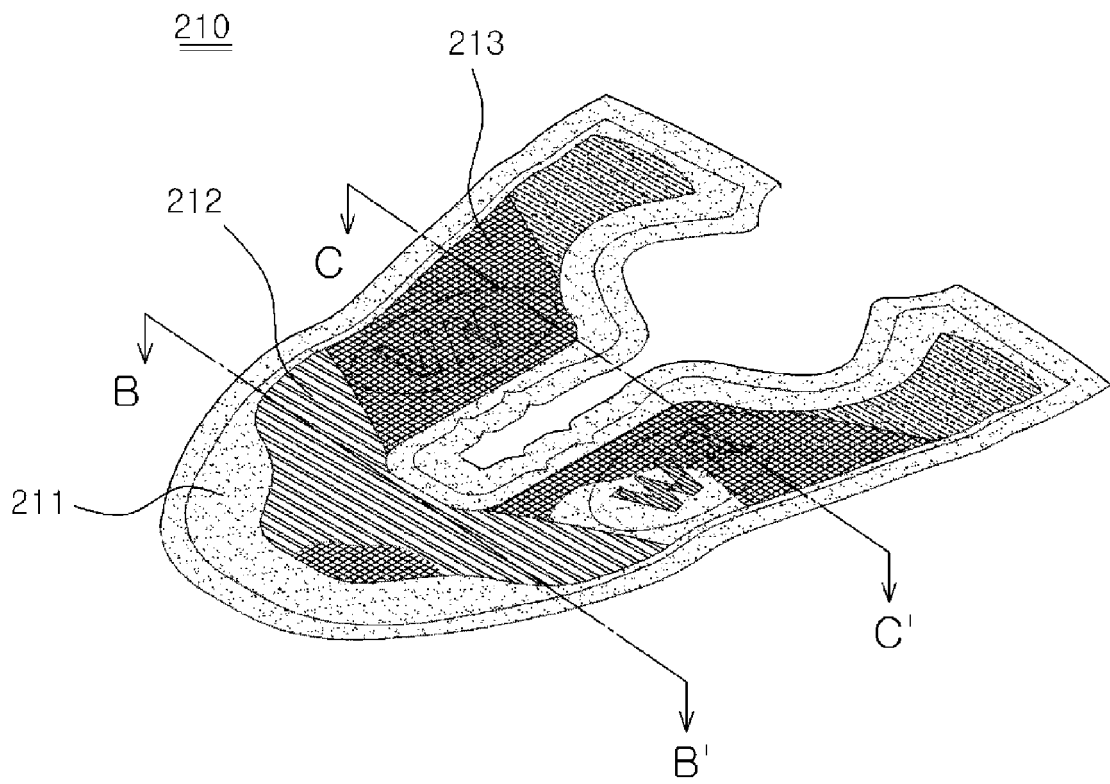


Fig. 6

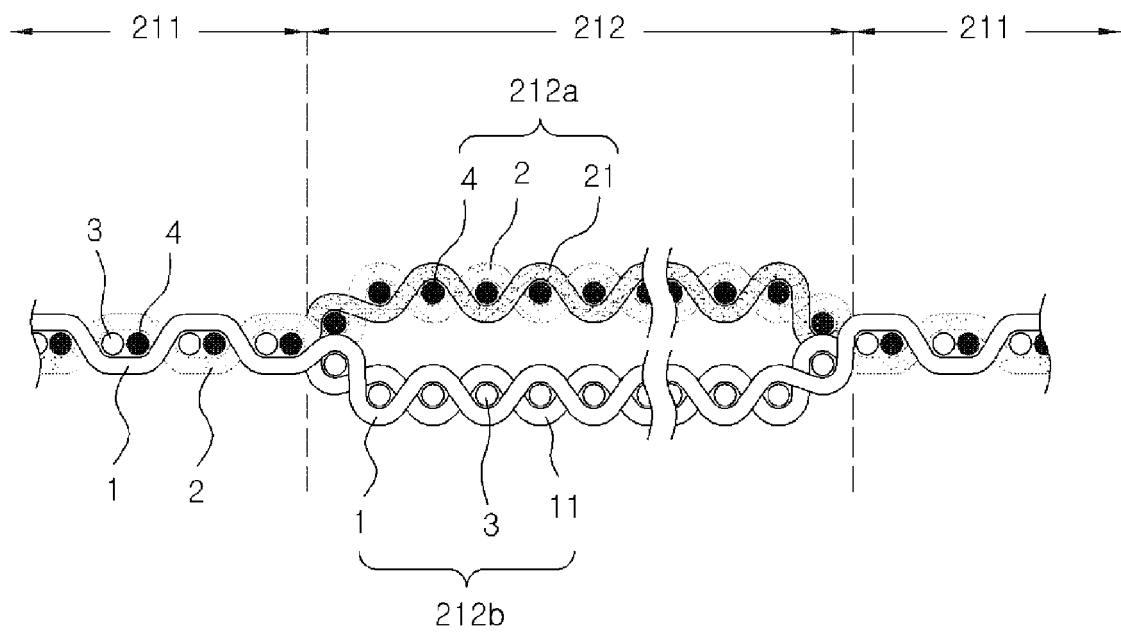
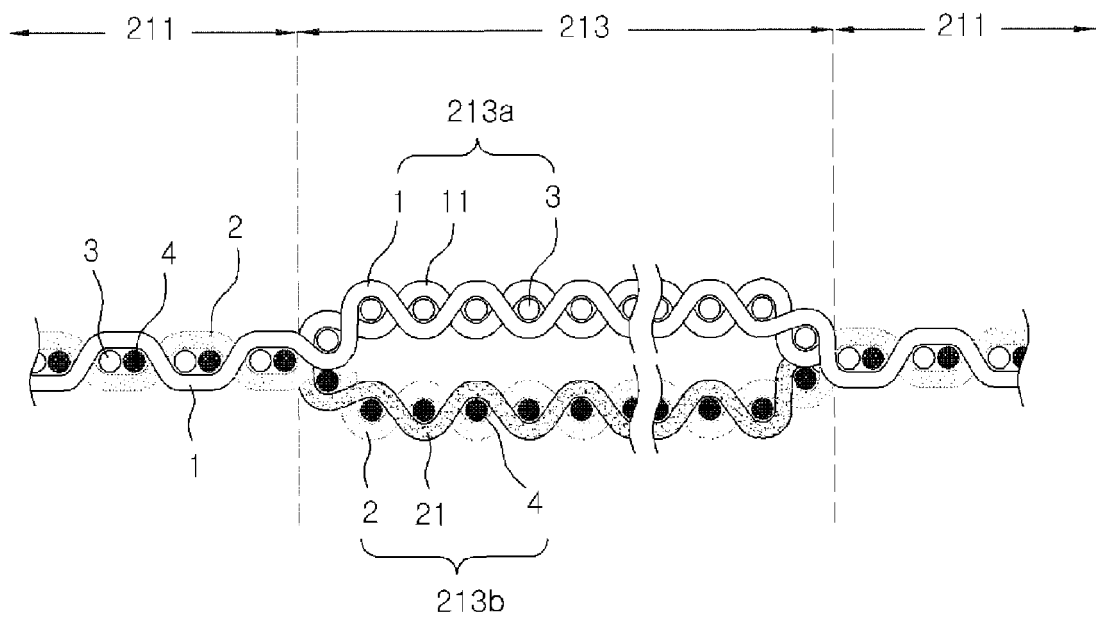


Fig. 7





EUROPEAN SEARCH REPORT

Application Number
EP 14 16 8695

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A	* paragraphs [0068], [0089], [0094], [0114] * * figures 1-29 *	10	
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A	* paragraphs [0002] - [0009]; claim 1; figures 1-3 * -----	10	
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			A43B D03D
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 29 October 2014	Examiner Louter, Petrus
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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