(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 2 143 350 A2

(12) EUROPEAN PATENT APPLICATION

(43) Date of publication:
13.01.2010 Bulletin 2010/02

(51) Int Cl.:
A41D 19/00 *(2006.01)*

(21) Application number: **09164719.8**

(22) Date of filing: **07.07.2009**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

(30) Priority: **12.07.2008 KR 20080067846**

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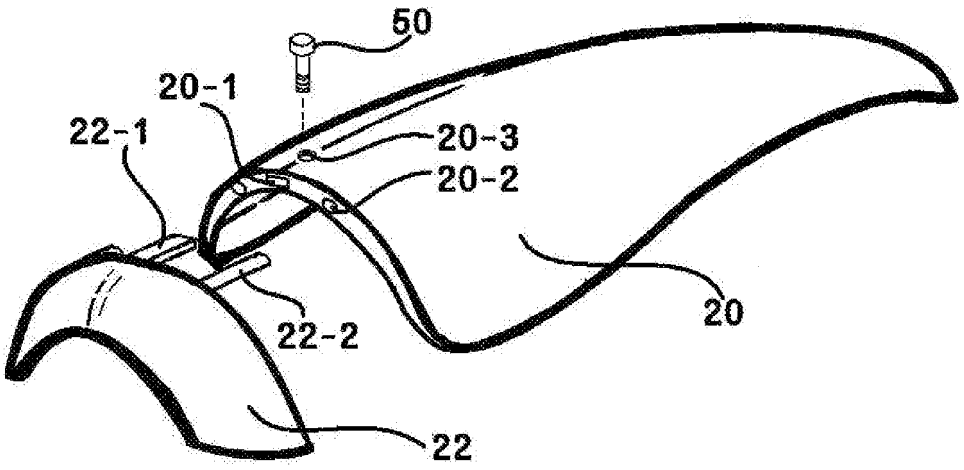
(54) Magnetic nail for use on a glove and manufacturing method thereof

(57) A magnetic nail (10, 20) for a glove is fixed or detachably attached onto a finger of a glove so as to make it easy to pick up a small, metallic object such as a needle, a nut, a bolt, a screw, a clip, a pin, or the like using magnetism, and so as to make it easy to pick up a flat, non-metallic object using the functionality of the nail, thereby considerably improving the functionality and workability of the glove.

[Fig. 5]



EP 2 143 350 A2

Description

[0001] The present invention relates, in general, to a magnetic nail for use on a glove and, more particularly, to a magnetic nail which is mounted on the area of the back of the fingertips of gloves.

[0002] Generally, gloves are classified into sewn and knit types according to the manufacturing method. Sewn gloves are manufactured by sewing the palm-side plate and the back-side plate together along their edge lines, whereas the knit gloves are integrally manufactured without forming a separate sewing line.

[0003] However, when the object to be picked up is in a narrow place, it is very difficult for one wearing such a sewn or knit glove to pick up an object such as a nut, a screw, a bolt or the like, or to do work.

[0004] Furthermore, one wearing such a glove cannot easily pick up an object such as a nut, a screw, a bolt or the like at corners or places which are difficult to see.

[0005] To solve this problem, magnetic gloves have been proposed, disclosed in US Patent Publication No. 2006/0185057. The magnetic gloves are constructed such that, as illustrated in FIG. 1, a circular magnet 110 is fixedly attached onto the palm side of a fingertip of a finger glove 100, which is worn on a forefinger of hand 70, or as illustrated in FIG. 2, a circular magnet 210 is fixedly attached onto the back side of a fingertip area of a forefinger 201 of gloves 200.

[0006] However, in the case of the magnet 110 of the finger of glove 100, the magnetic force is obstructive while work is being performed, so that the finger glove should be worn only if needed, and furthermore, it cannot contribute to picking up a non-metallic object.

[0007] Further, in the case of the magnet 210 of the glove 200, while the magnetic force is not obstructive to work, if one wearing the glove wants to use the magnetic force, one must turn over his hand or flex his forefinger, and like the magnet 110 of the finger glove 100 it also cannot contribute to picking up non-metallic objects.

[0008] Accordingly, the present invention has been made keeping in mind the above problems occurring in the related art, and the present invention is intended to propose a magnetic nail for use on a glove which is detachably attached onto the back side of a fingertip of a glove so as to easily attach itself to and pick up a metallic object such as a needle, a nut, a bolt, a screw, a clip, a pin, or the like using the property of magnetism, and to make it easy to pick up a flat, non-metallic object using the nail-like functionality.

[0009] In order to achieve the above object, according to one aspect of the present invention, there is provided an injection-molded magnetic nail for use on a glove which is attached onto the one or more finger sections at the back of the fingertips by bonding or sewing means.

[0010] In an embodiment, there is provided an injection-molded magnetic nail for use on a glove which integrally includes a magnetic body on a leading side thereof and is attached onto the back of one or more of the finger sections of the glove at the fingertip location by bonding or sewing means.

[0011] In an embodiment, there is provided a magnetic nail for a glove having a magnetic body detachably mounted on a leading side thereof which is attached onto the back of the fingertips of one or more finger sections of the glove by bonding or sewing means.

[0012] According to the present invention, the magnetic nail for use on a glove is fixed or detachably attached onto the finger of a glove so as to make it easy to pick up a small, metallic object such as a needle, a nut, a bolt, a screw, a clip, a pin, or the like using magnetism, and easy to pick up a flat, non-metallic object using a nail-like function, thereby considerably improving the functionality and workability of the glove.

[0013] The above and other objects, features and advantages of the present invention will be more clearly understood from the following detailed description when taken in conjunction with the accompanying drawings, in which:

FIGS. 1 and 2 are constructional views illustrating magnetic gloves according to the prior art;

FIG. 3 is a perspective view illustrating an embodiment of a magnetic nail for a glove according to the present invention;

FIG. 4 is a perspective view illustrating another embodiment of a magnetic nail for a glove according to the present invention; and

FIGS. 5 to 8 are perspective views illustrating further embodiments of magnetic nails for gloves according to the present invention.

[0014] Reference will now be made in greater detail to a preferred embodiment of the invention, an example of which is illustrated in the accompanying drawings.

[0015] FIG. 3 is a perspective view illustrating an embodiment of a magnetic nail for a glove according to the present invention, FIG. 4 is a perspective view illustrating another embodiment of a magnetic nail for a glove according to the present invention, and FIGS. 5 to 8 are perspective views illustrating further embodiments of magnetic nails for a glove according to the present invention.

[0016] As illustrated in FIGS. 3 and 4, a magnetic nail 10 and 20 is attached onto the back of the fingertip area of a glove such as on the backs of the thumb, fore, middle, ring, and little fingers.

[0017] Here, as shown in FIG. 3, the magnetic nail 10 is composed of a magnetic body, which is injection-molded into the shape of nail using magnetic plastics in which a magnetic material and a plastic material are mixed together in a certain composition, so that the entire magnetic nail is magnetic.

[0018] Particularly, when composing the magnetic plastics, selection of either a hard or soft type material is made to the plastic material, so that the magnetic nail 10 can be selectively fabricated to be soft or hard.

[0019] Further, as shown in FIG. 4, the magnetic nail 20 is injection-molded to integrally include a magnetic body 21 on a leading side thereof, so that only the leading side is magnetic.

[0020] Here, while the whole magnetic nail 20 is composed of common soft or hard plastics, the first magnetic body 21 on the leading side of the magnetic nail comprises a metallic magnet or the magnetic plastics.

[0021] The magnetic nails 10 and 20 may be attached onto the back of the fingertip areas of the fingers of the glove by means of bonding by an adhesive, or otherwise, if it comprises a soft material like rubber, it may be attached by means of e.g. sewing.

[0022] Further, as shown in FIG. 5, the magnetic nail 20 may include a second magnetic body 22 composed of a metallic magnet or magnetic plastics which is detachably mounted on the leading side of the magnetic nail. The second magnetic body 22 is mounted onto the leading side of the magnetic nail 20 such that a main mounting pin 20-1 and two auxiliary mounting pins 20-2 of the magnetic body are respectively fitted into a main mounting groove 22-1 and two auxiliary mounting grooves 22-2 of the leading side, and a fixing bolt 50 is screwed to a screw hole 20-3 so as to fix the main mounting pin into the main mounting groove.

[0023] Further, the magnetic nail 20 may include a third magnetic body 23 composed of a metallic magnet or magnetic plastics, which is detachably mounted on the leading side of the magnetic nail. The third magnetic body 23 is mounted onto the leading side of the magnetic nail 20 such that a wedge pin 23-1 and two auxiliary pins 23-2 of the magnetic body are respectively fitted into a main groove 23-1 and two auxiliary grooves 23-2 of the leading side so that a wedge projection of the wedge pin is elastically engaged with a wedge hole 20-4 to thereby fix the wedge pin into the main wedge groove.

[0024] Meanwhile, as shown in FIG. 7, a hook type magnetic nail 30 includes an elastic hook 31 which, upon being mounted, elastically expands and contracts depending upon the thickness of the finger of the glove so as to be detachably mounted on the back of the area corresponding to the fingertip of the finger of the glove.

[0025] Further, as shown in FIG. 8, a band type magnetic nail 40 includes a ring type elastic band 41, which is elastically and detachably mounted on the back of the fingertip area of the finger of the glove, in a manner similar to that of the hook type magnetic nail 30.

[0026] Here, the elastic hook or the elastic band may be adapted to both the magnetic nail 20 having the magnetic body 21, 22, or 23 as shown in FIGS. 7 and 8, and the magnetic nail 10 as shown in FIG. 4.

[0027] In brief, according to the present invention, the magnetic nail 10, 20, 30, or 40 is fixed or elastically and detachably mounted onto the back of the fingertip area of one or more fingers of the glove by means of bonding or sewing so as to make picking up a small object easy.

[0028] Although preferred embodiments of the present invention have been described 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.

Claims

1. A magnetic nail (10, 20) for use on a glove which is injection-molded and attached onto a back of a fingertip area of one or more fingers of a glove by means of bonding or sewing.

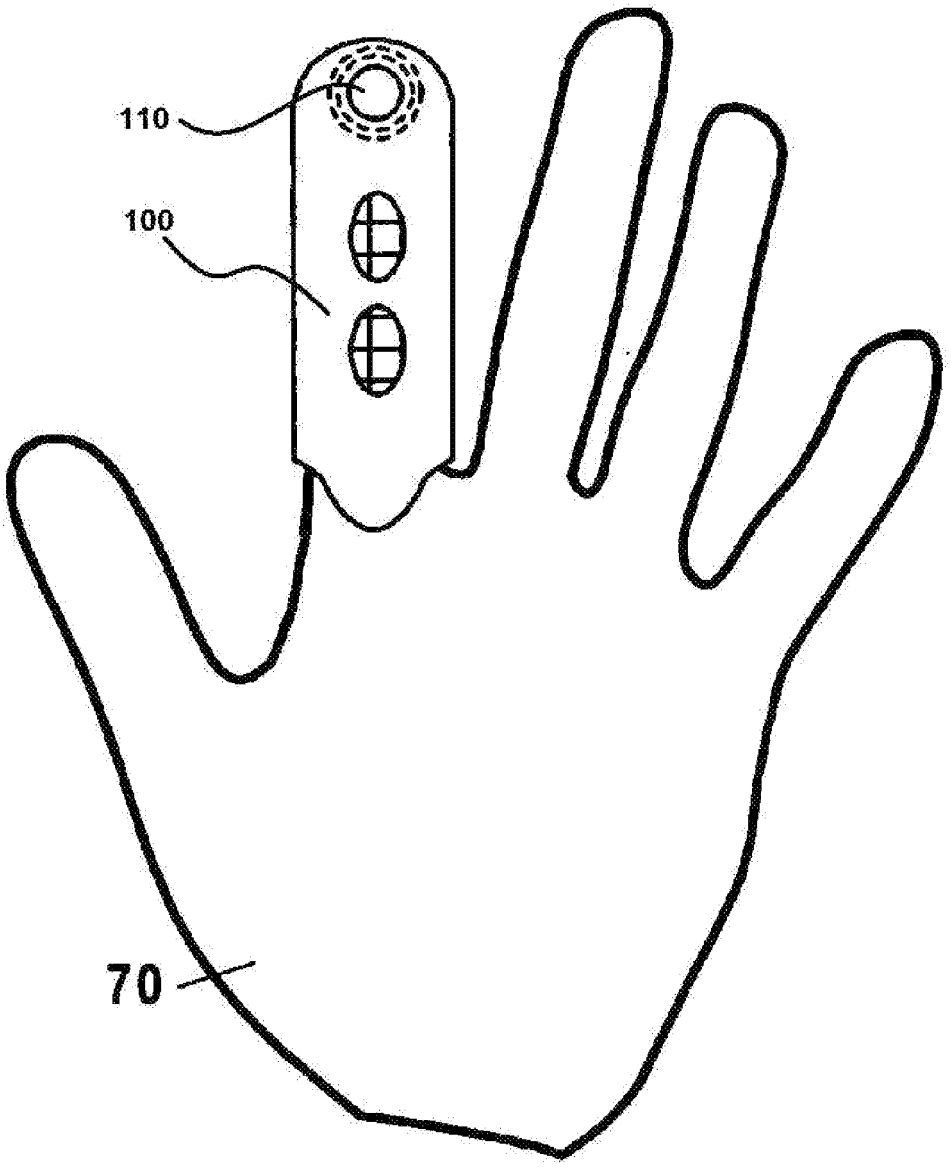
2. A magnetic nail (10, 20) for use on a glove which is injection-molded, integrally includes a magnetic body on a leading side thereof, and is attached onto a back of a fingertip area of one or more fingers of a glove by means of bonding or sewing.

3. A magnetic nail (10, 20) for use on a glove which has a magnetic body (22) detachably mounted on a leading side thereof and which is attached onto an area corresponding to a back of a fingertip area of one or more fingers of a glove by means of bonding or sewing.

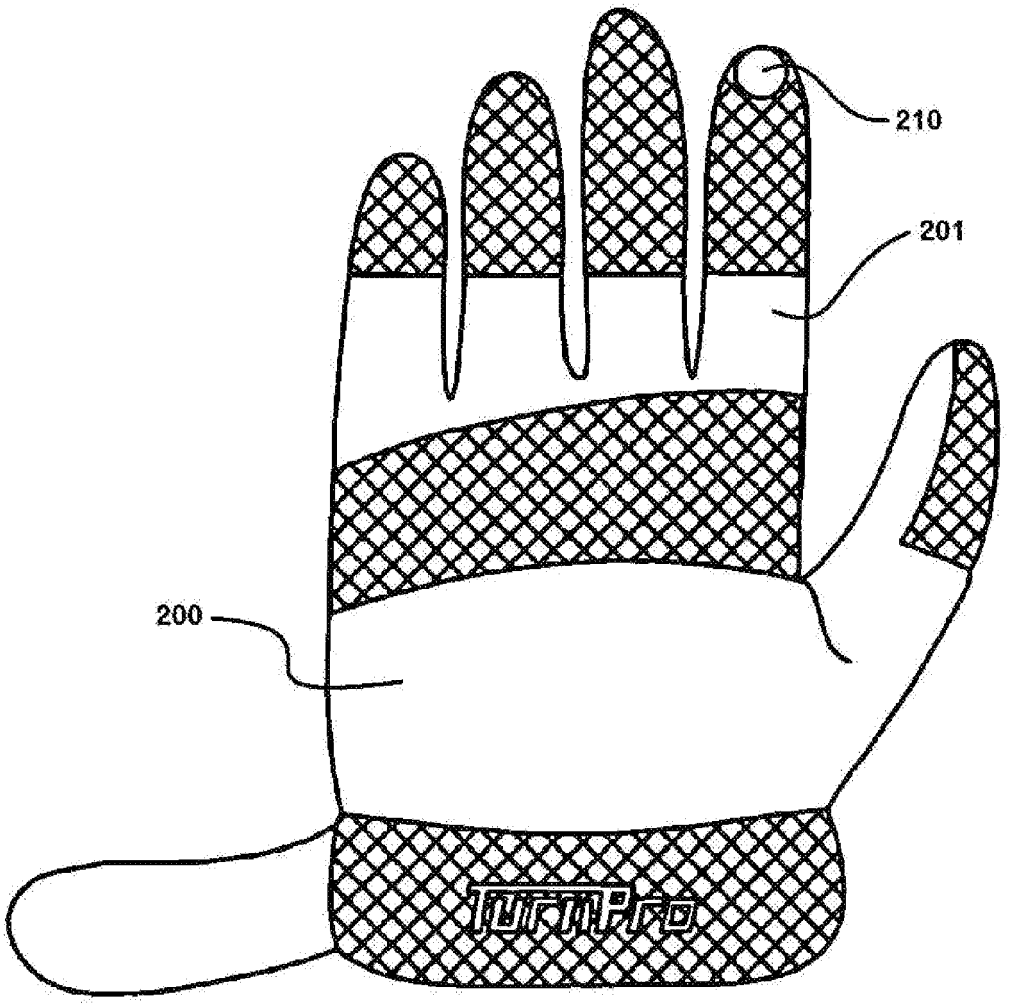
4. The magnetic nail for use on a glove according to any one of claims 1 to 3, wherein an elastic hook (31) or an elastic band (41) is provided so as to elastically and detachably mount the magnetic nail onto the back of the fingertip area of one or more fingers of the glove.

5. The magnetic nail (10, 20) for use on a glove according to claim 2 or 3, wherein the magnetic body is composed of a metallic magnet or magnetic plastics.

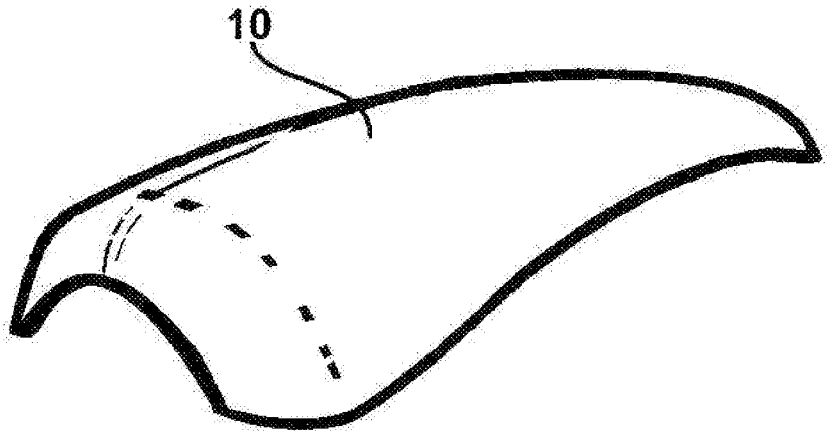
[Fig. 1]



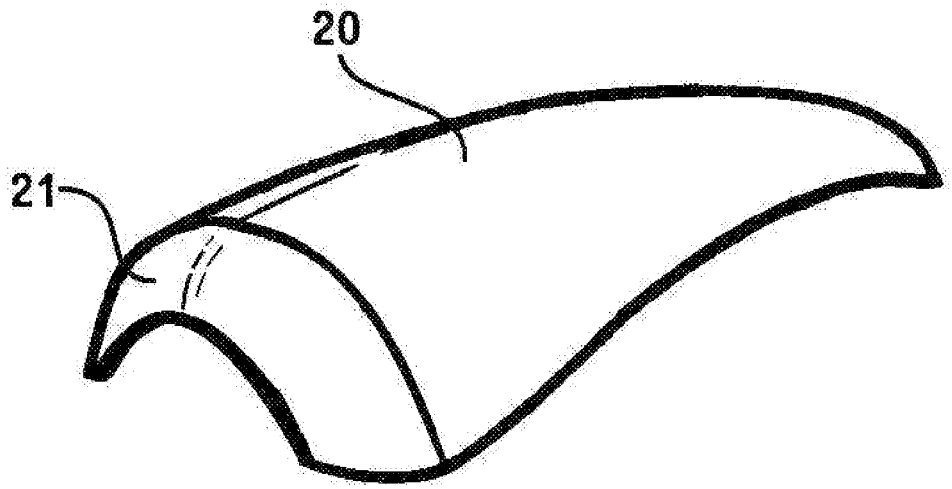
[Fig. 2]



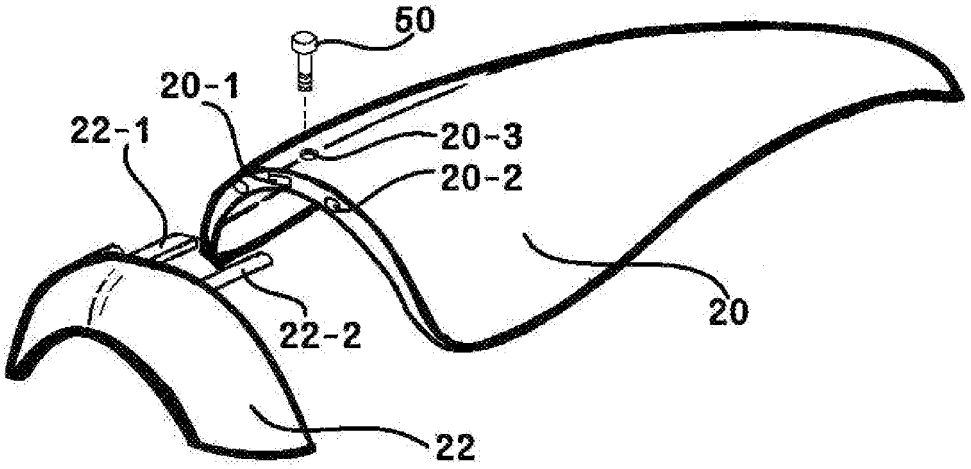
[Fig. 3]



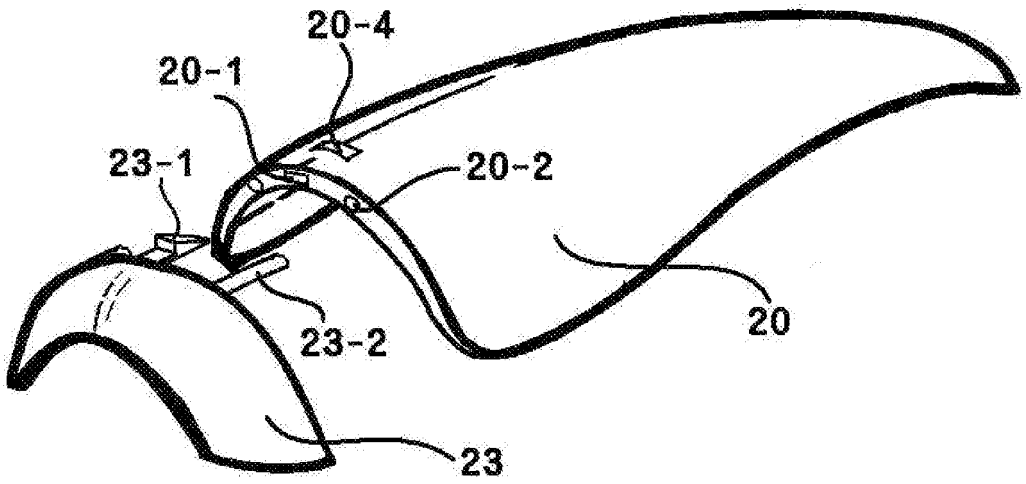
[Fig. 4]



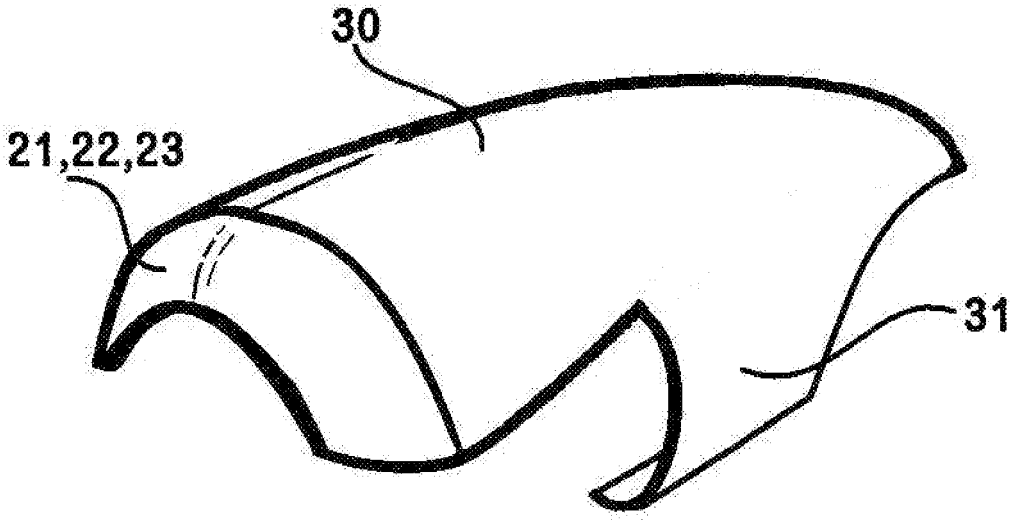
[Fig. 5]



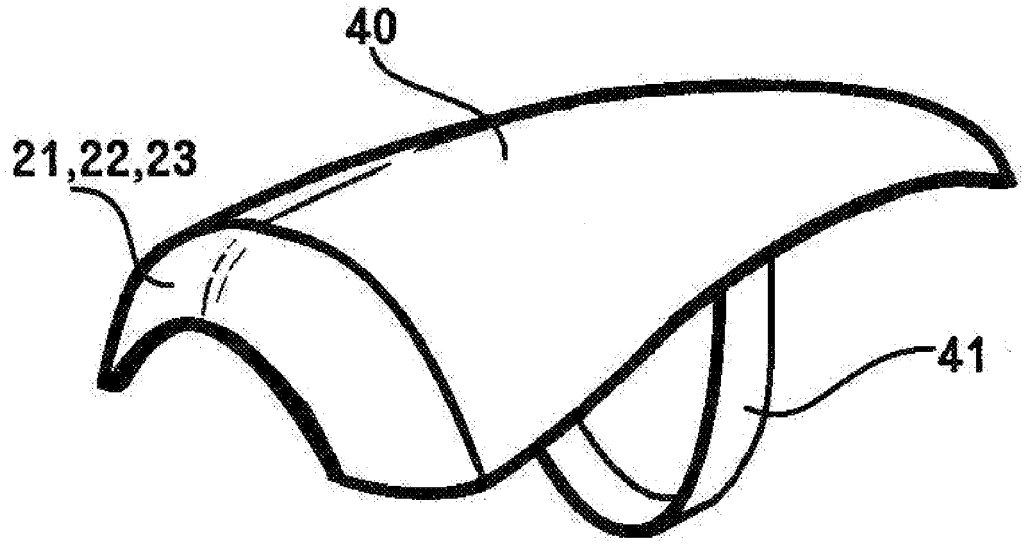
[Fig. 6]



[Fig. 7]



[Fig. 8]



REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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