TITLE OF INVENTION

WIG BASE WITH ADJUSTING MECHANISM IN TRIFURCATE SHAPE

FIELD OF INVENTION

[0001]

The present invention relates to a wig base which covers a whole portion of a user's head. More specifically, it relates to a wig base which can improve mountability to a user's head by having an adjusting mechanism in a trifurcate shape. The wig base according to the present invention is suitable for making a whole head wig mounted on a user's head in which a part or all of own hairs are lost due to a congenital reason or an acquired reason such as disease treatment, and a dimension of the head is changed due to increase or decrease of the volume of hairs on the head during the disease treatment.

[0002]

DESCRIPTION OF RELATED ART

A ready-made or custom made base for a whole head wig generally has a hat-like shape with a peripheral portion according to the shape of a user's head so far. Such wig base is generally made of cloth in which a synthetic fiber is woven into a mesh. For making the wig base, a whole head portion is divided into several portions and such several portions are connected together, thereby forming the wig base.

[0003]

As a wig considering wearability, for example in a Patent Document 1, it is disclosed that a metallic or resinous ear stiffener is inserted into a side protector of a wig base to prevent the side protector from being lifted up in order to correspond to a shape or a size of a user's head.

In the Patent Document 1, in order to prevent the wig base from being lifted up, a rigid member such as a metallic wire rod and a resin member, or a steel member is inserted into a portion of the wig base along a shape around the ear and then hardened by a resin material, thereby preventing the portion along the shape around the ear from being extended or deformed.

[0004]

In a wig described in a Patent Document 2, a plurality of fine wire rods are arranged sideways and formed into a curved shape, thereby forming a bone, and the bone is placed at a position to contact and press a portion corresponding to the hollow at a nape portion in order to prevent the nape portion from being lifted up and improve a fit feeling.

In a wig described in a Patent Document 3, a part of a side portion, a part of a side protector connected to a front side of the side portion or a center portion of a nape portion of a wig base is formed by a flexible net such as a polyurethane net, thereby preventing the lift up or slide up.

[0005]

In a wig described in a Patent Document 4, a wig base is

formed in a hat-like shape so as to fit a shape of a user's head, and an adjuster is provided at a nape portion of the wig base to adjust a length of the adjuster, thereby making the wig base fit a shape of a user's head.

In a Patent Document 5, there is disclosed a wig which can prevent a nape portion or a side portion from being lifted up or sliding up, thereby obtaining a comfortable wearability.

PRIOR ARTS

PATENT DOCUMENT

[0006] Patent document 1: JU S57(1982)-143218A

Patent document 2: JP 2001-81618A

Patent document 3: JP 2007-321298A

Patent document 4: JP 2007-239153A

Patent document 5: JP 2008-63696A

SUMMARY OF INVENTION

PROBLEM TO BE SOLVED

[0007]

As stated above, relating to a wig base, various ideas had been proposed to fit a shape of a user's head, thereby enhancing wearability. A purpose of the present invention is to provide a wig base which can achieve a finer adjustment than a conventional wig base, thereby obtaining a high fit feeling.

MEANS FOR SOLVING PROBLEM AND EFFECT OF INVENTION

[0008]

In the wig base according to the present invention, one end

of a first adjusting belt which can expand and contract, one end of a second adjusting belt which can expand and contract and one end of a third adjusting belt which can expand and contract are fixed to arbitrary three positions on an inner surface of the wig base respectively. Other ends of the first to third adjusting belts are coupled at one position in a trifurcate shape.

[0009]

The wig base having the above mentioned configuration can be adjusted finely so as to make the wig base fit a wearer's head with using a pull from three directions by the three adjusting belts, thereby obtaining a high fit feeling to the head.

[0010]

In the wig base according to the present invention, as the above mentioned three positions, it is preferable to select "two positions located at an interval along a circumferential direction of a wearer's head" and "remaining one position located at an inner location of the wig base". In this case, both "an adjustment in a circumferential direction of the head" and "an adjustment in a front-back direction of the head" can be achieved.

[0011]

In the wig base according to the present invention, at least one of the first to third adjusting belts is preferably

configured such that a reference length thereof to which no external force is applied can be adjusted (for example, using a buckle or the like).

If such configuration is applied, size adjustment in a large scale can also be possible in comparison with the case of fine adjustment simply with using an adjustment belt which can expand and contract.

[0012]

According to the present invention, a wig in which a fine adjustment thereof is achieved can be provided by planting artificial or natural hairs to the above mentioned wig base.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013]

Fig. 1 is a drawing for describing a basic configuration of a wig base according to one embodiment of the present invention.

Fig. 2 illustrates an inner surface side (back surface side) of the wig base of Fig.1, and also illustrates an adjusting mechanism coupled in a trifurcate shape.

Fig. 3 is a detailed drawing for illustrating an enlarged view of a portion around a ring member of the adjusting mechanism of Fig.2.

Fig. 4 is a drawing for describing an embodiment to engage a first adjusting belt and a third adjusting belt with a flexible band.

Fig. 5 is a drawing for describing an embodiment to cover the adjusting mechanism with a covering member.

DESCRIPTION OF EMBODIMENT

[0014]

Embodiments of the present invention are explained below, with reference to the accompanying drawings. Fig. 1 is a drawing for describing a basic configuration of a wig base according to one embodiment of the present invention. Fig.1(a) illustrates a wig base 1 seen from the side and Fig.1(b) illustrates the wig base 1 seen obliquely from the rear respectively.

[0015] <<Basic Configuration of Wig Base>>

The wig base 1 includes four portions as described below, and the wig base 1 is formed by stitching these portions together:

(a) an occipital base A which covers the occipital region of a wearer's head,

(b) a parietal base B connected to the occipital base A, which covers an area from the parietal region to the sinciput region of the wearer's head

(c) a side base C connected to the occipital base A and the parietal base B, which covers the temporal region of the wearer's head (it is noted that if the side base C is connected at least to the parietal base B, the side base C is not necessarily stitched with the occipital base A), and

(d) a nape portion base D connected to the occipital base A, which covers a wearer's neckline.

[0016]

A side base C which is similar to the above mentioned embodiment is also provided at a side located opposite to the side as shown in Fig. 1(a).

Each of the bases A to D can be formed by a net member, a resin material and another suitable material, which are generally used for a wig base. While it is not illustrated in the drawing, a wig product can be provided by planting artificial or natural hairs to the wig base 1.

[0017] <<Configuration of Adjusting Mechanism>>

An adjusting mechanism with a trifurcate construction is placed to the wig base 1 as shown in Fig.1 (refer to Fig.2). In Fig.2, the wig base of Fig.1 is shown inside out. Thus, a surface of the wig base illustrated in Fig.2 is a surface of the side which contacts a wearer's head (thus, inner surface side).

[0018]

The adjusting mechanism is formed by three of first to the third adjusting belts which can expand and contract elastically, a ring member 40 which makes these adjusting belts coupled together in a trifurcate shape. Fig. 3 illustrates an enlarged view of a portion around the ring member 40 of Fig.2 in detail.

[0019]

One end of the first adjusting belt 10 is fixed to the side base C and another end of the first adjusting belt 10 has a loop portion 11 into which the ring member 40 is inserted.

One end of the second adjusting belt 20 is fixed to the parietal base B and another end of the second adjusting belt 20 has a loop portion 21 into which the ring member 40 is inserted.

One end of the third adjusting belt 30 is fixed to the nape portion base D and another end of the third adjusting belt 30 has a loop portion 31 into which the ring member 40 is inserted.

[0020]

In the illustrated embodiment, the first to third adjusting belts are configured to have the loop portions 11, 21, 31 by folding back and stitching the other ends of the adjusting belts respectively. Then the ring member 40 is inserted into each of the loop portions, thereby forming the connecting portion in a trifurcate shape.

If the other ends of the three adjusting belts 10, 20, 30 are connected at one position in a trifurcate shape, any arbitrary way can be applied for specific embodiments. For example, three of the other ends can be stitched together at one position in a trifurcate shape.

[0021]

Since three of the adjusting belts which can expand and contract are connected at one position in a trifurcate shape,

the wig base can be adjusted finely so as to make the wig base fit a user's head with using a pull from three directions. Specifically, an adjustment in a circumferential direction of the head can be achieved by pulling with each other between the first adjusting belt 10 and the third adjusting belt 30. Additionally, an adjustment in a front-back direction of the head can also be achieved by applying a pulling up force by the second adjusting belt 20.

If the adjustment in a circumferential direction of the head is performed, it can give a delicate effect to the front-back direction via the second adjusting belt 20. At the same time, if the adjustment in a front-back direction is performed, it can give a delicate effect to the circumferential direction via the first and third adjusting belts 10, 30. Accordingly, an extremely fine adjustment to the wig base can be achieved by applying "the three adjusting belts which can expand and contract" and "the connection at one place in a trifurcate shape", thereby realizing a very high fit feeling.

[0022]

Especially, as an embodiment of "connection at one place in a trifurcate shape", if the loop portions 11, 21, 31 are provided at the end of each adjusting belt and the ring member 40 is inserted into the loop portions 11, 21, 31, the following advantage is obtained. Specifically, each of the adjusting belts 10, 20, 30 and the ring member 40 are coupled together

such that each of the adjusting belts 10, 20, 30 can slide freely along the circumferential direction of the ring member 40.

Therefore, when a length of the adjusting belt is adjusted with using a known mechanism such as a buckle, or a position of the wig base to the head is adjusted, the adjusting belts can flexibly move relative to the ring. Accordingly, a stress applied to the wig base 1 can effectively be released, (thus, a strain of the wig base can be released), and consequently a comfortable wearability can be achieved at a high level.

[0023]

A specific embodiment that the loop portions 11, 21, 31 are formed at the end of the adjusting belts is not limited to the illustrated embodiment, and any arbitrary configuration can be applied. As a shape of the ring member 40, while a circular shape is preferable, an approximately triangle shape or others can also be applied.

[0024] <<Embodiment to Adjust Length of Adjusting Belt>>

The first to third adjusting belts 10, 20, 30 are formed by flexible members and can expand and contract. Further, a total length of the second adjusting belt can be adjusted by providing a buckle 25 (thus, a reference length to which no external force is applied can be adjusted).

By applying such configuration, size adjustment in a large scale can be achieved in comparison with the case of adjustment only with using an adjusting belt which can expand and contract.

[0025]

As far as a reference length to which no external force is applied can be adjusted, an embodiment is not limited to the illustrated one. While only the second adjusting belt 20 has the buckle 25 and a total length thereof can be adjusted in the illustrated embodiment, a similar configuration can be applied to the other adjusting belts accordingly.

[0026] <<Embodiment to Change Location of Adjusting Belt>>

As an enlarged view is shown in Fig.2, a belt member 60 which extends along a circumferential direction of the head is stitched with the nape portion base D. The belt member 60 is stitched and connected with the nape portion base D at a plurality of locations at a certain interval. Thus, a plurality of inserting portions 65 (belt end connecting portions) are formed between a plurality of seams 61 in Fig.2.

On the contrary, a hooking member 35 (connecting portion) for inserting and fixing is connected at the end of the third adjusting belt 30. Accordingly, a relative position of the third adjusting belt 30 to the wig base can be changed by changing the inserting portions 65 into which the hooking member 35 is inserted. Therefore, a size of the wig base along a circumferential direction of the head can be changed. Thus, a size adjustment can be achieved in a large scale in comparison with the case of adjustment only with using an adjusting belt which can expand and contract.

It is not limited to the illustrated embodiment, and as far as the position where the end of the third adjusting belt 30 is connected to the nape portion base D can be changed by providing some kind of connecting portion at the end of the third adjusting belt 30 and a plurality of corresponding connecting portions at the nape portion base D, any other configuration can be applied, and a similar effect can be obtained.

[0027]

While in the illustrated embodiments, the configuration to achieve the position change is applied only to the third adjusting belt 30 as mentioned above, it is not limited thereto, and a similar configuration can be applied to the other adjusting belts.

[0028] <<Embodiment to Suppress Displacement of First and Third Adjusting Belts>>

Referring to Fig.4, relating to the first adjusting belt 10 and the third adjusting belt 30, an embodiment to suppress an upward displacement thereof is described. This is a measure to prevent the first adjusting belt 10 and the third adjusting belt 30 from being excessively displaced in the upward direction according to a tensile force in the upward direction by the second adjusting belt 20, thereby enhancing wearability.

Fig 4(a) illustrates an outline of this embodiment, and Fig 4(b) illustrates a partial exploded view for describing the construction thereof.

[0029]

At first, a belt member 70 is connected (for example, stitched) along a periphery of the occipital base A. The first adjusting belt 10 and the third adjusting belt 30 are placed along the belt member 70, and the belt member 70 and the first adjusting belt 10 are coupled by placing a band 75a (flexible member) which can expand and contract around the belt member 70 and the first adjusting belt 10, and fixing both ends of the band 75a. Similarly, the belt member 70 and the third adjusting belt 30 are coupled by placing a band 75b which can expand and contract around the belt member 70 and the third adjusting belt 30, and fixing both ends of the band 75b. Thus, the first adjusting belt 10 and the third adjusting belt 30 are engaged with the occipital base A via the band member 70.

[0030]

The bands 75a, 75b have flexibility. Therefore, when the first adjusting belt 10 and the third adjusting belt 30 are pulled upwardly by the second adjusting belt 20, the belts 10 , 30 can be displaced upwardly at some level, but they are prevented from being excessively displaced upwardly (refer to Fig.4c). A degree of such effect can be set according to a material or configuration of the flexible bands 75a, 75b.

When a size of the wig base 1 is adjusted by making a length of the second adjusting belt 20 shorter, the first adjusting belt 10 and the third adjusting belt 30 are displaced upwardly.

If the first adjusting belt 10 and the third adjusting belt 30 are excessively displaced upwardly, a pressure is applied to the wearer's head, thereby lowering wearability. However, it can be prevented by using the bands 75a, 75b.

[0031]

While the bands 75a, 75b are applied to both the first adjusting belt 10 and the third adjusting belt 30 in the illustrated embodiment, the band can be applied to either of them. It is not limited to the illustrated embodiment, and if the first adjusting belt 10 or the third adjusting belt 30 can be engaged with the occipital base A with using some flexible member, a similar effect will be obtained.

[0032] <<Embodiment to Enhance Gripping Force with Anti-slip Coating>>

While it is not illustrated, in the present invention, an anti-slip coating can be applied to inner surfaces (thus, surfaces which contact a wearer's scalp) of the adjusting belts 10 to 30. The coating are provided for preventing slippage relative to the wearer's scalp, and the coating can be applied to all of the adjusting belts 10 to 30, and also to a part of the adjusting belts 10 to 30.

As a material for the coating, while silicone, urethane, latex or the like is generally used, it is not limited thereto as far as it has an effect to prevent slippage.

[0033] <<Embodiment to Cover Adjusting Mechanism Having

Trifurcate Shape with Covering Member>>

As shown in Fig.5, an adjusting mechanism having a trifurcate shape can be covered with covering members 81, 82. The covering members 81, 82 are provided for lowering uncomfortable feeling due to the contact of the wearer's scalp with the ring member 40 or the like.

The covering member 81 covers all of the ring member 40 and the first to third adjusting belts 10, 20, 30 in Fig.5(a). The covering member 82 covers only a portion around the ring member 40 in Fig.5(b). An area covered with the covering member is not limited to the illustrated one, and it can be arbitrarily determined.

[0034] <<Others>>

In the illustrated embodiments, three of the adjusting belts which forms the adjusting mechanism having a trifurcate shape are fixed to the parietal base B, the side base C and the nape portion base D. However, since an essential feature of the present invention is to achieve a fine adjustment of the wig base with using a pull from three directions by three adjusting belts, such three adjusting belts can be fixed to any arbitrary three positions on the inner surface of the wig base, in addition to the illustrated embodiments.

As for a basic configuration of the wig base, any arbitrary configuration can be adopted in addition to the illustrated embodiments in which the wig base is divided into four bases

A, B, C, D.

[0035]

In the illustrated embodiment, since the first adjusting belt 10 and the third adjusting belt 30 are placed along circumferential direction of the head, and the second adjusting belt 20 is extended upwardly as crossing the first and third adjusting belts 10, 30, "an adjustment in a circumferential direction of the head" and "an adjustment in a front-back direction of the head" can be achieved.

<<DESCRIPTION OF REFERENCE NUMBERS>>

A Occipital base

B Parietal base

C Side base

D Nape portion base

1 Wig base

10 First adjusting belt

11 Loop portion

20 Second adjusting belt

21 Loop portion

25 Buckle

30 Third adjusting belt

31 Loop portion

35 Hooking member

40 Ring member

60 Belt member

61 Seam

65 Inserting portion

70 Belt member

75a,b Flexible band

81,82 Covering member

CLAIMS

1. A wig base, wherein:
one end of a first adjusting belt (10) which can expand and contract, one end of a second adjusting belt (20) which can expand and contract and one end of a third adjusting belt (30) which can expand and contract are fixed to arbitrary three positions on an inner surface of the wig base respectively, and other ends of the first to third adjusting belts are coupled at one position in a trifurcate shape.

2. The wig base according to claim 1, wherein:
said three positions includes two positions located at an interval along a circumferential direction of a wearer's head, and remaining one position located at an inner location of the wig base.

3. The wig base according to claim 2, comprising:
an occipital base (A) which covers the occipital region of a wearer's head,
a parietal base (B) connected to the occipital base (A), which covers an area from the parietal region to the sinciput region of the wearer's head,
a side base (C) connected to the parietal base (B), which covers the temporal region of the wearer's head,
a nape portion base (D) connected to the occipital base (A), which covers a neckline of the wearer,
wherein:
said one end of the first adjusting belt (10) is fixed to the side base (C), said one end of the second adjusting belt (20) is fixed to the parietal base (B), and said one end of the third adjusting belt (30) is fixed to the nape portion base (D) respectively.

4. The wig base according to any one of claims 1 to 3, wherein:
at least one of the first to third adjusting belts (10, 20, 30) is configured such that a reference length thereof to which no

external force is applied can be adjusted.

5. The wig base according to any one of claims 1 to 4, wherein: loop portions (11, 21, 31) are formed at said other ends of the first to thirds adjusting belt (10, 20, 30) respectively, and said other ends are coupled at one position in the trifurcate shape by inserting a ring member (40) into the loop portions.

6. The wig base according to any one of claims 3 to 5, wherein: in said nape portion base (D), a plurality of belt end connecting portions (65) are provided along a circumferential direction of the wig base, and
said one end of the third adjusting belt (30) is position-changeably fixed to the nape portion base (D) by coupling a connecting portion (35) provided at said one end of the third adjusting belt (30) to any one of the belt end connecting portions (65).

7. The wig base according to any one of claims 3 to 6, wherein: at least one of said first and third adjusting belts is engaged with the occipital base (A) by flexible member (75a, 75b).

8. The wig base according to any one of claims 1 to 7, wherein: an anti-slip coating is applied to an inner surface of at least one of said first to third adjusting belts (10, 20, 30).

9. The wig base according to any one of claims 1 to 7, further comprising a covering member (81, 82) which covers at least a part of said first to third adjusting belts (10, 20, 30) and a ring member (40).

10. A wig, which is formed by planting artificial hairs on the wig base according to any one of claims 1 to 9.