

US 20060065280A

(19) United States

(12) **Patent Application Publication** (10) **Pub. No.: US 2006/0065280 A1 Cheung** (43) **Pub. Date: Mar. 30, 2006**

(54) HAIR EXTENSION KIT AND METHOD OF USING SAME

(76) Inventor: Maggie Cheung, Hong Kong (HK)

Correspondence Address: JAMES E. BRUNTON, ESQ. P. O. BOX 29000 GLENDALE, CA 91209 (US)

(21) Appl. No.: 10/952,892

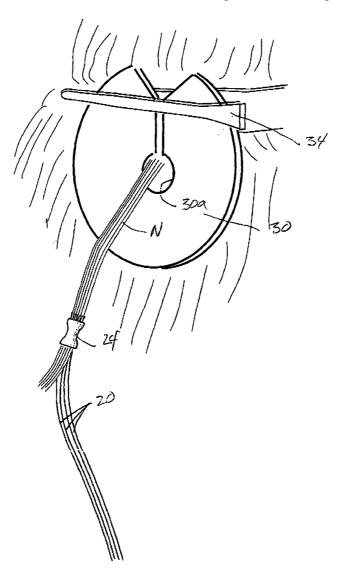
(22) Filed: Sep. 28, 2004

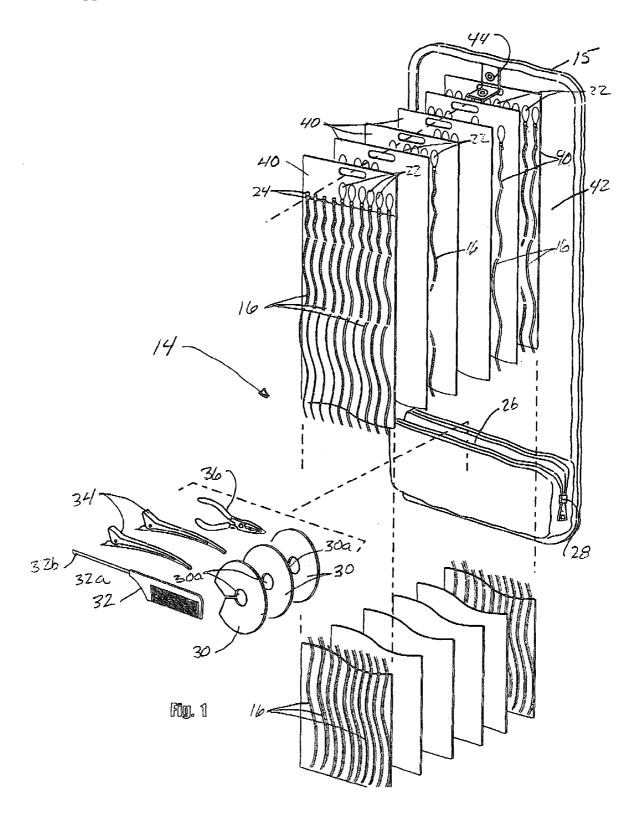
Publication Classification

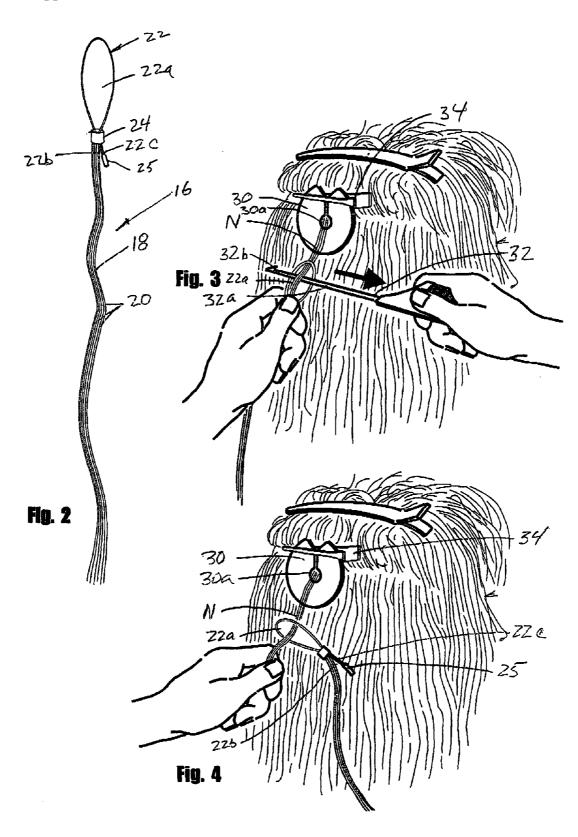
(51) **Int. Cl.** *A41G* 3/00 (2006.01)

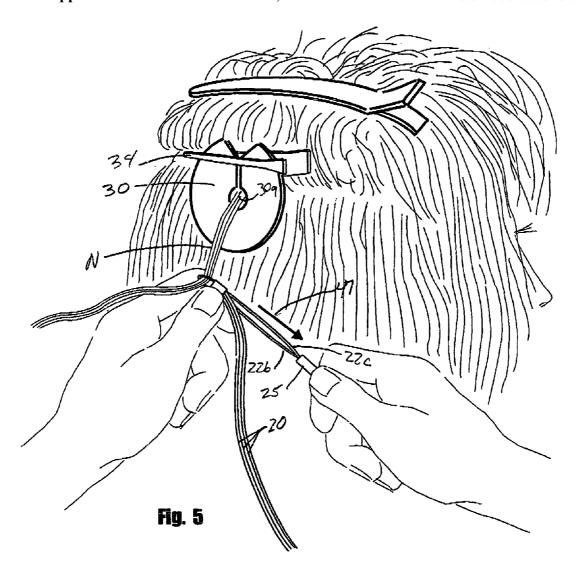
(57) ABSTRACT

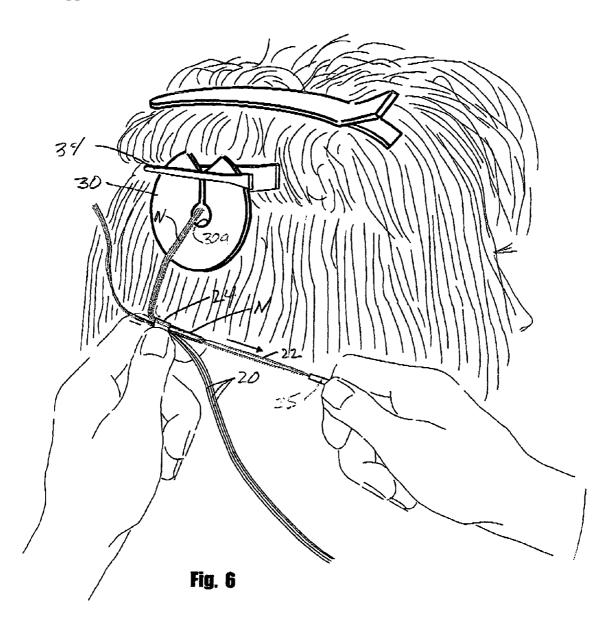
A hair extension kit, which includes a plurality of hair extensions of novel construction and a method of attaching the hair extensions onto a wearer's natural hair using an easy-to-use attachment system. Each of the hair extensions of the hair extension kit includes a malleable or deformable ring, which circumscribes the legs of an extension loop and an elongated strand of supplemental hair. The method of attaching each of the hair extensions to the wearer's natural hair includes the steps of placing the extension loop of each hair extension on top of an existing strand of hair of the wearer; pulling the existing strand of hair through the extension loop so that the strand of hair is disposed inside the extension loop; pulling the extension loop through the malleable or deformable ring in order to draw the extension loop and the strand of supplemental hair through the ring; and securing the strand of supplemental hair and the existing strand of hair within the ring by crimping the malleable or heating the deformable ring.

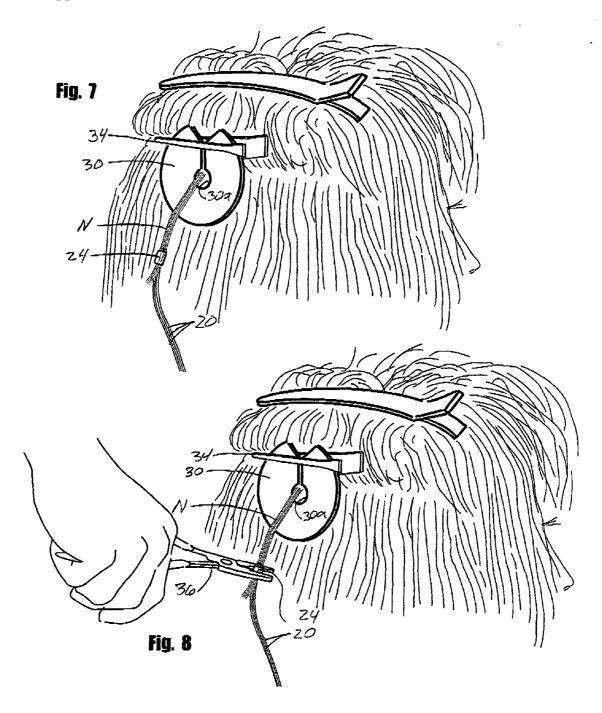


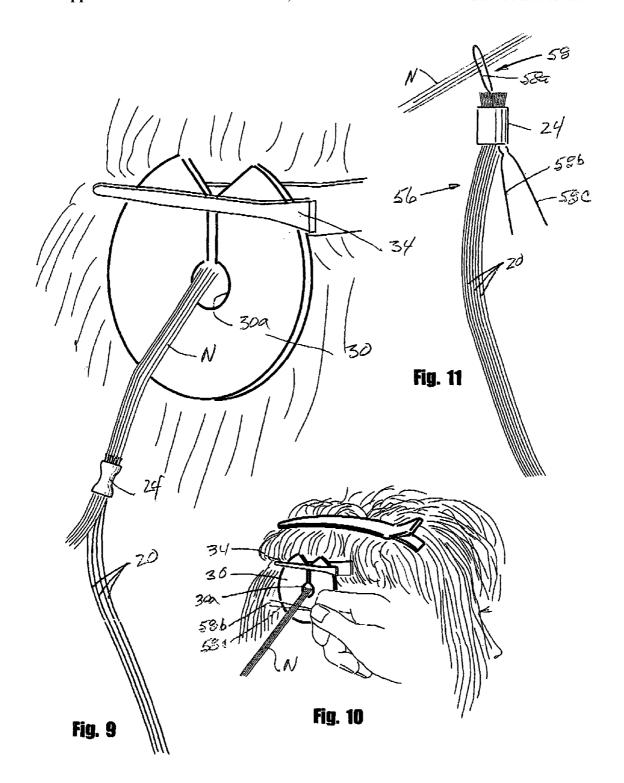


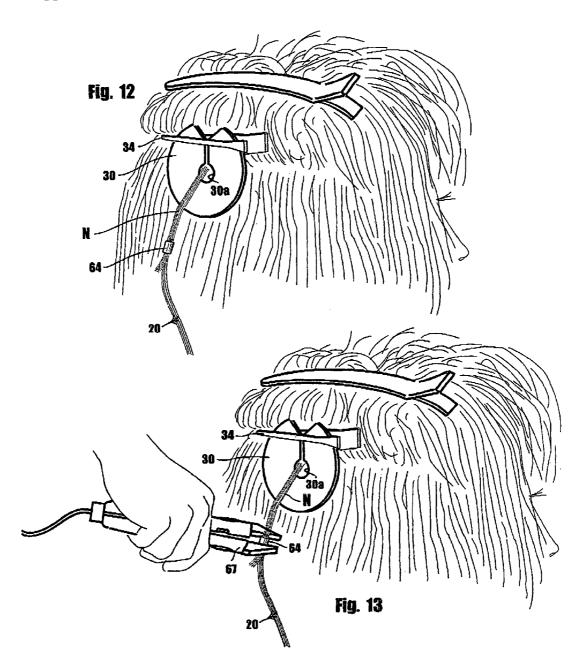


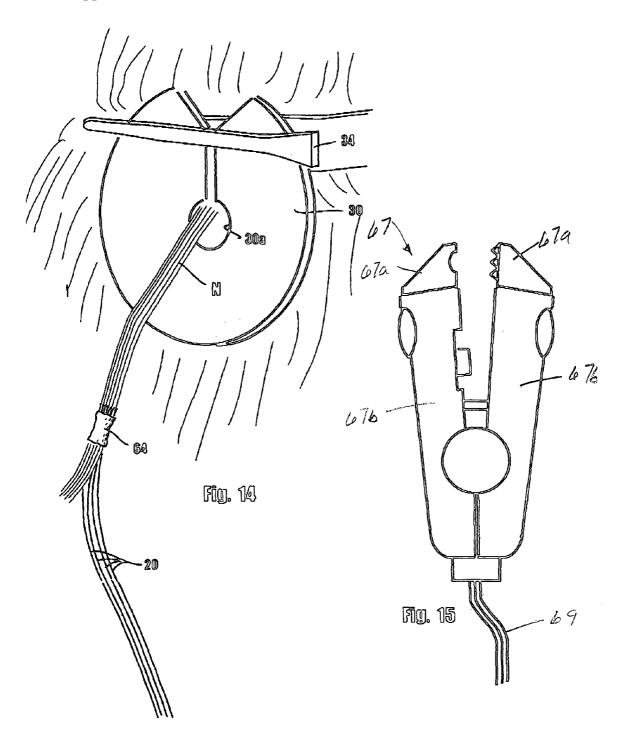












HAIR EXTENSION KIT AND METHOD OF USING SAME

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

[0002] The present invention relates generally to hair extensions and the method of attaching the hair extensions to an existing, natural strand of hair of the wearer. More particularly, the hair extension of the invention comprises a malleable or deformable ring that circumscribes an extension loop and an elongated strand of supplemental hair, while the method of the invention comprises the step of using the extension loop to draw a strand of the natural hair of the wearer through the malleable or deformable ring and the step of then crimping the malleable or heating the deformable ring to secure the strand of supplemental hair to the strand of natural hair.

[0003] 2. Discussion of the Prior Art

[0004] The use of hair extensions to supplement and lengthen the natural hair, particularly by women, has become quite popular. In some cases the hair extensions are used to supplement hair loss or thinning of the hair. In other cases, the hair extensions are used merely to enhance the appearance of the wearer. In this regard, the use of hair extensions of different, sometimes very bright colors, are used by younger women to make unique fashion statements.

[0005] Various mechanisms have been suggested in the past to interconnect the hair extensions with the natural hair of the wearer. For example, hair extensions have been attached to the head of the wearer by means of adhesives, artificial skin materials, clips and the like. In this regard, U.S. Pat. No. 6,446,636 issued to Vittallo discloses a method of attaching supplemental hair to natural human hair in which the supplemental hair is attached to natural human hair a bonding composition, including a non-toxic, non-thermoplastic resin that is soluble in an organic solvent, and a colorant, and then bonding a weft of supplemental hair to the portion of natural human hair.

[0006] U.S. Pat. No. 6,688,315 issued to Harrison discloses a hair extension device comprising a skin-simulating layer of artificial skin material having an interface for attachment to a wearer's scalp and an outer face. The skin-simulating layer has an opening through which a portion of the wearer's existing hair can be pulled. A plurality of strands of hair are secured to the skin-simulating layer around the opening to extend from the outer face of the layer in order to imitate naturally growing hair when integrated with the natural hair pulled through the opening.

[0007] In a somewhat different approach, U.S. Pat. No. 5,899,209 issued to McDonald, et al., describes a hair extension, which includes hair strands affixed to a ring assembly. The ring assembly comprises an inner ring and an outer ring. The inner ring is configured to nest within the outer ring, with distal ends of the hair strands impinged between the inner and outer rings. A plait of the wearer's hair is inserted through the ring assembly of the hair extension. The hair extension is attached to the plait with a band, or by sewing the hair extension to the plait.

[0008] In a still different approach, U.S. Pat. No. 6,634, 366 issued to Simmons, et al., discloses a hair piece assem-

bly for allowing a wearer to prevent hairstyles from going flat during high humidity or wet weather. The hairpiece assembly includes a clip assembly that is adapted for securing to the hair of the wearer. A plurality of filler hairs is coupled to the clip assembly. The filler hairs are adapted for being combed into the hair of the wearer for providing volume to the hair of the wearer.

[0009] Common drawbacks of the prior art hair extensions include difficulties in attaching the hair extensions to the natural hair, a failure to provide a natural looking appearance when the hair extensions are in place and a failure to adequately secure the hair extensions to the natural hair to prevent accidental displacement of the hair extensions during use. It is these drawbacks that the hair extensions of the present invention seek to overcome.

SUMMARY OF THE INVENTION

[0010] It is an object of the present invention to provide a hair extension kit, which includes a plurality of hair extensions of novel construction and a method of attaching the hair extensions onto a wearer's natural hair using an easy-to-use attachment system.

[0011] In one embodiment of the invention, each of the hair extensions of the hair extension kit comprises an attachment mechanism that includes a malleable ring, which circumscribes the legs of an extension loop and an elongated strand of supplemental hair. In this form of the invention, the method of attaching each of the hair extensions to the wearer's natural hair includes the steps of placing the extension loop of each hair extension on top of an existing strand of hair of the wearer; pulling the existing strand of hair through the extension loop so that the strand of hair is disposed inside the extension loop; pulling the extension loop through the malleable ring so as to draw the extension loop and the strand of supplemental hair through the malleable ring; and securing the strand of supplemental hair and the existing strand of hair within the malleable ring by crimping the malleable ring.

[0012] Another object of the invention is to provide a hair extension attachment system as described in the preceding paragraph, which includes a sectioning disc having a central aperture through which the strand of natural hair can be threaded. The sectioning disc can be interconnected with the wearer's hair in a manner so as to hold the strand of natural hair in position during the hair extension attachment process.

[0013] Another object of the invention is to provide a hair extension attachment system as described in the preceding paragraph, which further includes a control clip for interconnecting the sectioning disc with the wearer's natural hair.

[0014] Another object of the invention is to provide a hair extension attachment system of the class described which further includes a hooking element for pulling the strand of natural hair through the extension loop.

[0015] Another object of the invention is to provide a hair extension attachment system of the aforementioned character, which insures that the supplemental hair is securely attached to the wearer's natural hair in a manner to prevent accidental displacement of the supplemental hair.

[0016] In an alternate embodiment of the invention, each of the hair extensions of the hair extension kit comprises an

attachment mechanism that includes a heat deformable, plastic ring, which circumscribes the legs of an extension loop and an elongated strand of supplemental hair. In this form of the invention, the method of attaching each of the hair extensions to the wearer's natural hair includes the steps of placing the extension loop of each hair extension on top of an existing strand of hair of the wearer; pulling the existing strand of hair through the extension loop so that the strand of hair is disposed inside the extension loop; pulling the extension loop through the plastic ring so as to draw the extension loop and the strand of supplemental hair through the plastic ring; and securing the strand of supplemental hair and the existing strand of hair within the plastic ring by controllably heating the plastic ring using a specially configured heating iron.

[0017] Another object of the invention is to provide a hair extension attachment system, which can be used by a hair stylist with a minimum of training to provide a natural looking appearance.

[0018] These and other objects and advantages of the present invention will be apparent from the following description, the accompanying drawings and the appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

[0019] FIG. 1 is a generally perspective, exploded view of one form of the hair extension kit of the present invention.

[0020] FIG. 2 is a generally perspective view of one form of the hair extension assembly of the hair extension kit of the present invention.

[0021] FIG. 3 is a generally perspective, diagrammatic view illustrating the initial steps in the performance of one form of the method of the invention.

[0022] FIG. 4 is a generally perspective, diagrammatic view illustrating a further step in the performance of one form of the method of the invention.

[0023] FIG. 5 is a generally perspective, diagrammatic view illustrating another of the steps of one form of the method of the invention.

[0024] FIG. 6 is a generally perspective, diagrammatic view illustrating yet another of the steps of one form of the method of the invention.

[0025] FIG. 7 is a generally perspective, diagrammatic view illustrating a strand of supplemental hair of the invention initially interconnected with a strand of natural hair of the wearer.

[0026] FIG. 8 is a generally perspective, diagrammatic view illustrating the final step in one form of the method of the invention by which the strand of supplemental hair of the invention is securely interconnected with a strand of natural hair of the wearer.

[0027] FIG. 9 is a generally perspective, diagrammatic view illustrating a strand of supplemental hair of the invention securely interconnected with a strand of natural hair of the wearer.

[0028] FIG. 10 is a generally perspective, diagrammatic view of one of the initial steps of an alternate form of the method of the invention.

[0029] FIG. 11 is a generally perspective, diagrammatic view illustrating a further step in the accomplishment of the alternate form of the method of the invention.

[0030] FIG. 12 is a generally perspective, diagrammatic view illustrating a strand of supplemental hair of the invention initially interconnected with a strand of natural hair of the wearer in accordance with an alternate form of the invention.

[0031] FIG. 13 is a generally perspective, diagrammatic view illustrating the final step in the alternate form of the method of the invention by which the strand of supplemental hair of the invention is securely interconnected with a strand of natural hair of the wearer using a heat deformable plastic ring.

[0032] FIG. 14 is a generally perspective, diagrammatic view illustrating a strand of supplemental hair of the invention securely interconnected with a strand of natural hair of the wearer.

[0033] FIG. 15 is a front view of the electric heating iron of the present invention.

DESCRIPTION OF THE INVENTION

[0034] Referring to the drawings and particularly to FIG. 1, one form of the extension kit of the present invention is there illustrated and generally designated by the numeral 14. The hair extension kit here comprises a carrying case 15 having a plurality of compartments, one of said compartments housing a hair extension assembly of novel construction. Another of the compartments carries the various tools of the invention for use in interconnecting the hair extension assembly to a strand of natural hair of the wearer.

[0035] Considering first the hair extension assembly of the invention, as best seen in FIG. 2, this important assembly 16 here comprises a hair extension 18 that is made up of a plurality of strands 20 of supplemental hair, an extension loop 22 and a malleable ring 24 that circumscribes the strands of supplemental hair. Extension loop 22 includes a loop portion 22a and first and second legs 22b and 22c respectively. Malleable ring 24 circumscribes the strands 20 of supplemental hair as well as the first and second legs of the extension loop. As illustrated in FIGS. 2 and 5, first and second legs 22b and 22c pass-through ring 24 and are interconnected together by means of a pull tab 25.

[0036] The strands of supplemental hair can be of different colors and can comprise natural hair, or synthetic hair made from a variety of different types of synthetic filaments of a character well known to those skilled in the art. Ring 24 can be constructed from various malleable metals, including aluminum and brass.

[0037] Turning once again to FIG. 1 of the drawings, the tools of the invention are stored within a compartment 26 located at one end of the carrying case. As indicated in FIG. 1, storage compartment 26 is closed by a conventional zipper assembly 28. In addition to the tools, compartment 26 is adapted to a hold a plurality of split, sectioning discs 30 each having a central aperture 30a for receiving a plurality of strands of the natural hair of the wearer. The tools of the present form of the invention for use in the method of the invention, here include a comb 32 having a handle 32a provided with a hook extremity 32b (see also FIG. 3). The

tools of the invention further comprise a pair of clips 34 for interconnecting the sectioning discs 30 with the hair of the wearer, pincher means, shown here as a pair of pliers 36, for crimping malleable ring 24, and a heating means, shown here as an electric heating iron 67 for heat deformation of the deformable plastic ring 64.

[0038] In the present embodiment of the invention, a plurality of hair extension assemblies 16 are packaged within a plurality of transparent packaging assemblies 40, which, in turn, are carried within upper compartment 42 of the carrying case 15. Packaging assemblies 40 are secured in position within carrying case 15 by a conventional snap type assembly 44 (FIG. 1).

[0039] Referring to FIGS. 3 through 9 of the drawings, one form of the method of the invention is there illustrated. As shown in FIG. 3, the first step in the method of one form of the invention comprises collecting together a plurality of strands of the wearer's natural hair and entraining the strands "N" through the central opening 30a of one of the sectioning discs 30. This done, the sectioning disc 30 is secured to a lock of the wearer's hair using one of the clips 34. With the strand of hair "N" thusly secured in place, the loop portion 22a of the extension loop 22 is overlaid over the lower portion of the natural strands "N" of hair of the wearer in the manner illustrated in FIG. 3. Using the hook portion 32b of the comb 32, the natural strands of hair of the wearer are then pulled through the loop portion 22a of the extension loop so that the natural strands of hair "N" reside within the loop portion. Next, the extension loop is pulled through the malleable ring 24 in the manner shown in FIG. 5. This is accomplished by gripping tab 25 and exerting a pulling pressure thereon in the direction of the arrow 47 of FIG. 5. As illustrated in FIG. 6, as the extension loop 22 is pulled through the malleable ring 24, the strands of natural hair "N" will also be pulled through the ring into a position adjacent the strands of supplemental hair 20. A continued pulling force exerted on the pull tab 25 will cause the extension loop to pull free of the ring 24 so that the strand of natural hair neatly overlays the strand of supplemental hair in the manner shown in FIG. 7.

[0040] The final step in the present form of the method of the invention involves the step of securing the strands of supplemental hair and the natural strands of hair in position within the malleable ring. This is accomplished by using the crimping means, or pliers 36, in the manner illustrated in FIG. 8 to securely crimp the malleable ring about the natural and supplemental strands of hair. As illustrated in FIG. 9, this results in the neat, attractive and secure interconnection of the supplemental strands of hair 20 with the natural hair of the wearer. At such time as it is desired to disconnect the supplemental strands of hair from the strands of hair of the wearer, the pliers can be used to reform the connector ring in a manner to permit the ring 24 and the supplemental strands of hair 20 to be disconnected from the strands of natural hair of the wearer.

[0041] Turning next to FIGS. 10 and 11 of the drawings, an alternate form of the hair extension apparatus of the invention is there illustrated. This alternate form of apparatus is similar in many respects to that earlier described and illustrated in FIGS. 1 through 9 of the drawings and like numerals are used in FIGS. 10 and 11 to describe like components.

[0042] The primary difference between this second embodiment of the invention and the earlier described embodiment concerns the slightly differently configured hair extension assembly portion of the hair extension kit. This second form of hair extension assembly, which is generally designated in FIGS. 10 and 11 by the numeral 56, comprises a differently configured extension loop 58. Extension loop 58 here includes a hairpin-like member having loop portion 58a and first and second leg portions 58b and 58c respectively. Unlike the earlier described embodiment of the invention, leg portions 58b and 58c are not interconnected by a pull-tab.

[0043] In accomplishing the alternate method of the invention illustrated in FIGS. 10 and 11, the first step in the method once again comprises collecting together a plurality of strands of the wearer's natural hair and entraining the strands "N" through the central opening 30a of one of the sectioning discs 30. This done, the sectioning disc 30 is secured to a lock of the wearer's hair using one of the clips 34. With the strand of hair "N" thusly secured in place, the lower portion of the natural strands "N" of hair of the wearer is inserted between leg portions 58b and 58c of extension loop 58 in the manner illustrated in FIG. 10. Next, with the natural strands of hair positioned within the loop portion 58a of the extension loop as shown in FIG. 11, the leg portions 58b and 58c are inserted through the ring 24. Pulling downwardly on the leg portions of the extension loop will then cause the natural strands of hair of the wearer to be pulled through the ring 24 into a position adjacent the strands of supplemental hair 20. As before, during this step the extension loop will pull free of the ring 24 leaving the strand of natural hair neatly overlaying the strand of supplemental hair and a manner shown in FIG. 7.

[0044] The final step in this second form of the method of the invention involves the step of securing the strands of supplemental hair and the natural strands of hair in position within the malleable ring 24. This is accomplished in the same manner as previously described by using the crimping means, or pliers 36, to securely crimp the malleable ring about the natural and supplemental strands of hair.

[0045] Referring to FIGS. 12, 13 and 14 of the drawings, still another form of the hair extension apparatus of the invention is there illustrated. This latter form of apparatus is similar in many respects to those earlier described and illustrated in FIGS. 1 through 11 of the drawings and like numerals are used in FIGS. 12, 13 and 14 to describe like components.

[0046] The primary difference between this latest embodiment of the invention and the earlier described embodiments concerns the use of a heat deformable plastic hair capture ring 64 instead of the manually malleable crimp ring. As before, the first step in the method of this alternate form of the invention comprises collecting together a plurality of strands of the wearer's natural hair and entraining the strands "N" through the central opening 30a of one of the sectioning discs 30. This done, the sectioning disc 30 is secured to a lock of the wearer's hair using one of the clips 34. With the strand of hair "N" thusly secured in place, the extension loop portion 22 is overlaid over the lower portion of the natural strands "N" of hair of the wearer in the manner illustrated in FIG. 3. Using the hook portion 32b of the comb 32, the natural strands of hair of the wearer are then

pulled through the loop portion 22a of the extension loop so that the natural strands of hair "N" reside within the loop portion. Next, the extension loop is pulled through the heat deformable plastic ring 64 shown in FIG. 12. This is accomplished by gripping tab 25 and exerting a pulling pressure thereon. As the loop 22a is pulled through the plastic ring 64, the strands of natural hair "N" will also be pulled through the ring into a position adjacent the strands of supplemental hair 20. A continued pulling force exerted on the pull tab 25 will cause the extension loop to pull free of the plastic ring 64 so that the strand of natural hair neatly overlays the strand of supplemental hair and a manner shown in FIG. 12.

[0047] The final step in this second alternate form of the method of the invention involves the step of securing the strands of supplemental hair and the natural strands of hair in position within the heat deformable ring 64. This is accomplished by using the heating means, or electric heating iron 67 of the extension kit of the invention, in the manner illustrated in FIG. 13 to deform the plastic ring in a manner to secure the ring about the natural and supplemental strands of hair. Electric heating iron 67, which is of a conventional construction well understood by those skilled in the art, comprises a connector cord 69 and electrically heated ring gripping jaws 67a which can be manipulated relative to the plastic ring 64 by hand grips 67b (see FIG. 15). As illustrated in FIG. 14, the controlled heat deformation of ring 64 results in the neat, attractive and secure interconnection of the supplemental strands of hair 20 with the natural hair of the wearer. As previously mentioned, in this alternate form of the apparatus of the invention, the heating iron 67 forms a part of the novel extension kit of the invention.

[0048] At such time as it is desired to disconnect the supplemental strands of hair from the strands of hair of the wearer, two or three drops of a suitable solvent can be placed on the plastic ring 64 to appropriately soften the ring so that it can be pealed away from the natural and supplemental strands of hair to enable the supplemental strands of hair 20 to be disconnected from the strands of natural hair of the wearer.

[0049] Having now described the invention in detail in accordance with the requirements of the patent statutes, those skilled in this art will have no difficulty in making changes and modifications in the individual parts or their relative assembly in order to meet specific requirements or conditions. Such changes and modifications may be made without departing from the scope and spirit of the invention, as set forth in the following claims.

I claim:

- 1. A hair extension kit for use in attaching a hair extension to the natural strands of hair of the wearer, said hair extension kit including a hair extension assembly comprising:
 - (a) a hair extension comprising a plurality of strands of supplemental hair;
 - (b) an extension loop having a loop portion and first and second legs; and
 - (c) a ring circumscribing said strands of supplemental hair of said hair extension and said first and second legs of said extension loop.

- 2. The hair extension kit as defined in claim 1, in which said ring is constructed from a malleable or deformable material.
- 3. The hair extension kit as defined in claim 1, in which said ring is constructed from a heat deformable plastic material
- **4**. The hair extension kit as defined in claim 1, further including a comb having a handle provided with a hook extremity.
- 5. The hair extension kit as defined in claim 1, further including a sectioning disc having a central aperture for receiving a plurality of strands of the natural hair of the wearer.
- **6**. The hair extension kit as defined in claim 5, further including a clip for interconnecting said sectioning disc with the hair of the wearer.
- 7. The hair extension kit as defined in claim 6, further including means for deforming said ring.
- **8**. A hair extension kit for use in attaching a hair extension to the natural strands of hair of the wearer, said hair extension kit including a hair extension assembly comprising:
 - (a) a hair extension comprising a plurality of strands of supplemental hair;
 - (b) an extension loop having a loop portion and first and second legs;
 - (c) a malleable ring circumscribing said strands of supplemental hair; and
 - (d) a sectioning disc having a central aperture for receiving a plurality of strands of the natural hair of the wearer.
- **9**. The hair extension kit as defined in claim 8, further including a comb having a handle provided with a hook extremity.
- 10. The hair extension kit as defined in claim 8, further including a clip for interconnecting said sectioning disc with the hair of the wearer.
- 11. The hair extension kit as defined in claim 8, further including a pull tab for interconnecting together said and first and second legs of said extension loop.
- 12. The hair extension kit as defined in claim 8, further including pincher means for crimping said malleable ring.
- 13. The hair extension kit as defined in claim 12 in which said pincher means comprises a pair of pliers.
- 14. The hair extension kit as defined in claim 13, further including a carrying case having a plurality of compartments, one of said compartments housing said hair extension assembly
- 15. The hair extension kit as defined in claim 14 in which one of said compartments of said carrying case houses said comb.
- 16. The hair extension kit as defined in claim 15 in which one of said compartments of said carrying case houses said sectioning disc.
- 17. The hair extension kit as defined in claim 15 in which one of said compartments of said carrying case houses said pair of pliers.
- 18. A method for attaching a hair extension of a hair extension kit to the natural strands of hair of a wearer, the hair extension of the hair extension kit comprising a plurality of strands of supplemental hair, an extension loop having a loop portion and first and second legs and a deformable

ring circumscribing the strands of supplemental hair and the legs of the extension loop, the method comprising the steps of:

- (a) placing the loop portion of the extension loop over the natural strands of hair of the wearer:
- (b) pulling the natural strands of hair of the wearer through the loop portion of the extension loop so that the natural strands of hair reside within the loop portion;
- (c) pulling the extension loop through the deformable ring so as to draw the strands of natural hair through the deformable ring into a position adjacent the natural strands of hair; and
- (d) securing the strands of supplemental hair and the natural strands of hair in position within the deformable ring by deforming the deformable ring.
- 19. The method as defined in claim 18 wherein the hair extension kit further includes a hooking element and wherein said step of pulling the strands of natural hair through the extension loop includes the step of interconnecting the strands of natural hair with said hooking element and pulling said hooking element through the loop portion of the extension loop.
- 20. The method as defined in claim 18 wherein the hair extension kit further includes a heating iron and wherein the step of crimping the deformable ring is accomplished using said heating iron.
- 21. The method as defined in claim 18, in which said hair extension kit further includes an apertured sectioning disc and wherein the method includes the further step of pulling the strands of natural hair through a sectioning disc prior to placing the loop portion of the extension loop over the natural strands of hair of the wearer.
- 22. The method as defined in claim 20, further including the step of securing the sectioning disc to the hair of the

wearer prior to placing the loop portion of the extension loop over the natural strands of hair of the wearer.

- 23. A method for attaching a hair extension of a hair extension kit to the natural strands of hair of a wearer, the hair extension of the hair extension kit comprising a plurality of strands of supplemental hair, an aperture sectioning desk, an extension loop having a loop portion and first and second legs and a ring circumscribing the strands of supplemental hair, the method comprising the steps of:
 - (a) threading a plurality of natural strands of hair of the wearer through the aperture sectioning disc;
 - (b) connecting the apertured sectioning disc to the hair of the wearer;
 - (c) placing the natural strands of hair of the wearer through the loop portion of the extension loop so that they reside within the loop portion;
 - (d) inserting the legs of the extension loop through the ring;
 - (e) pulling the legs of the extension loop and the strands of natural hair residing there within through the ring in a manner to position the natural strands of hair adjacent the strands of supplemental hair; and
 - (f) securing the strands of supplemental hair and the natural strands of hair in position within the ring by crimping the ring.
- 24. The method as defined in claim 19 wherein the hair extension kit further includes a pair of pliers and wherein the step of crimping the ring is accomplished using said pair of pliers.
- 25. The method as defined in claim 19 wherein the hair extension kit further includes a heating iron and wherein the step of deforming the ring is accomplished using said heating iron.

* * * * *