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### (54) HAIR CLIP WITH ATTACHABLE DECORATIVE OR ORNAMENTAL ASSEMBLY

(76) Inventor: Rachel Taylor, Baltimore, MD

Correspondence Address: Ober, Kaler, Grimes & Shriver Attorneys at Law 120 East Baltimore Street Baltimore, MD 21202-1643 (US)

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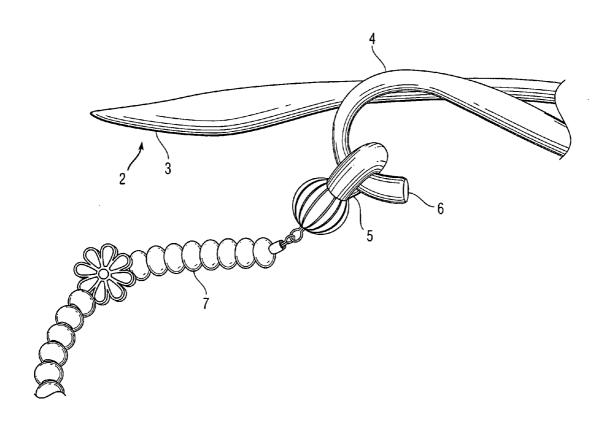
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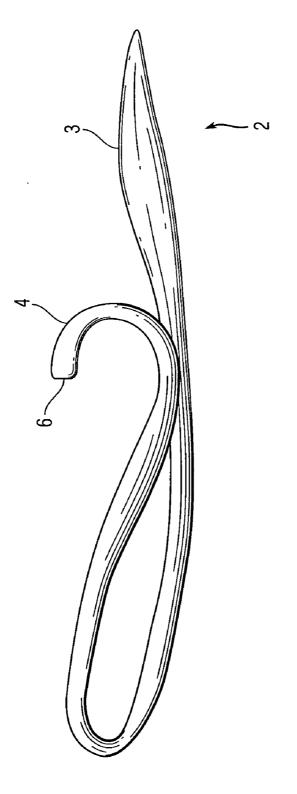
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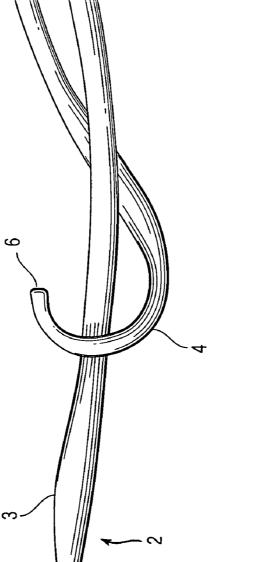
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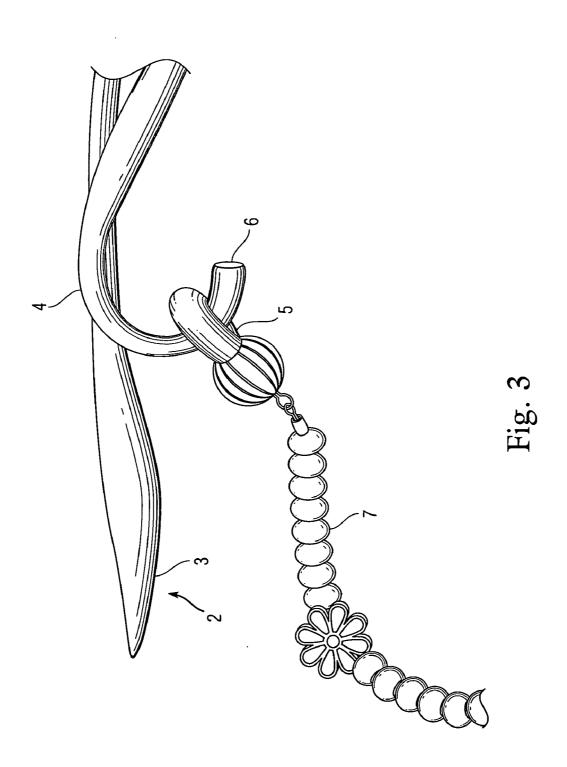
(57) ABSTRACT

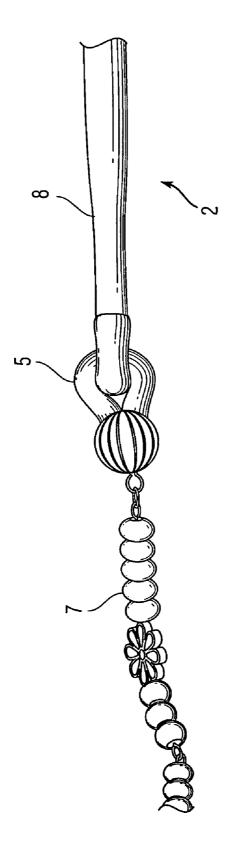
A hair clip formed of a molded shape-memory plastic body having an elongate protruding tail with a pronounced bulge tapering to a distal point, the inward length of the tail following a slight arcuate curve to a sharp elbow, which doubles back on itself to a curved hook positioned approximately midway along the tail. The upwardly-turned hook terminates at a blunt point and generally defining a semi-circle. In use, the distal point of the elongate protruding tail is inserted under a lock of hair, and the bulged portion of the tail biased up and over the curved hook end such that the bulged portion of the tail seats itself within the contour of the open hook, firmly clamping the lock of hair therein. In addition, an ornamental assembly is removably attached to the curved hook end of said molded plastic body and extends from the device for aesthetics



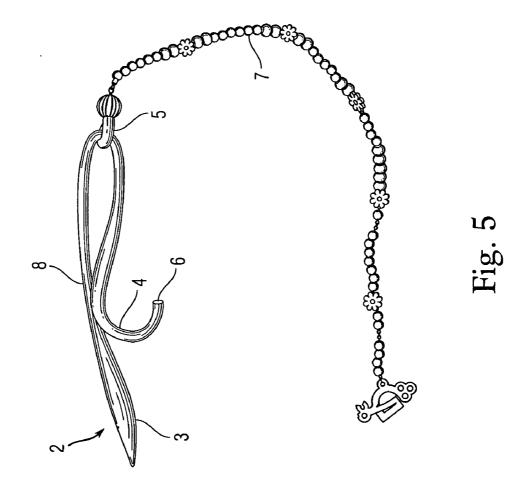


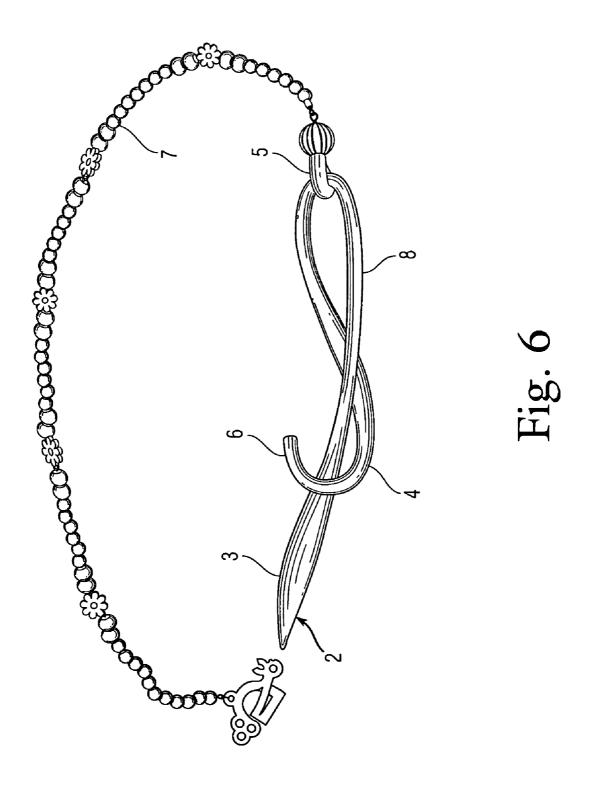






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### HAIR CLIP WITH ATTACHABLE DECORATIVE OR ORNAMENTAL ASSEMBLY

## CROSS-REFERENCE TO RELATED APPLICATION(S)

[0001] The present application derives priority from U.S. provisional application Ser. No. 61/123,110 filed Apr. 4, 2008.

#### BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The present invention relates generally to hair ornaments, and more particularly to a hair clip with an enhanced clipping mechanism that reduces or eliminates damage to the hair, and also that attaches a decorative or ornamental jewelry assembly to the invention.

[0004] 2. Description of the Background

[0005] Individuals use many varied hair clips for securing their hair and/or for decorative purposes. Conventional hair clips are generally comprised of two opposing curved gripping plates or tines joined at one end by a hinge, and equipped with a clasping element at the other end. Both gripping plates of conventional hair clips have smooth curved outer surfaces that are "pinched" around the hair. Traditionally, the gripping area is narrow and this results in a gripping force that is unevenly distributed. Moreover, the clasping element (or interlocking mechanism) can trap and even break the hair. Interestingly, as a result of this situation, some more recent devices attempt to provide the user with the opportunity to manage the amount of force applied to the clip. Unfortunately, these devices tend to slip or slide off of the hair. Moreover, the clip's clasping mechanism tends to degrade over time and, if not preserved properly, may become difficult to apply or prone to detaching from the hair surface causing the wearer undue pain and harm. In order to overcome such drawbacks, the tendency is to increase the spring force to increase the gripping effect. However, with the current designs a high gripping force can hurt the hair or even distort the desired hair style. Therefore, the challenge within the hair clip industry is to enhance the gripping effect without damaging the hair when attaching a hair clip designed to support an ornamental assembly.

[0006] For example, U.S. Pat. No. 1,272,209 by Burke issued Jul. 9, 1918 and U.S. Pat. No. 1,996,588 by McVicker issued Apr. 2, 1935, both show a locking hair pin device comprising two bent metal prongs and without an ornamental assembly.

[0007] U.S. Pat. No. 5,566,690 by Shih-Ming issued Oct. 22, 1996 shows a hair clip device with interlocking male and female clasps. The hair is inserted into the hole which requires a rolling of the hair in an upward motion and interlocking of the male and female clasps which renders the device unviewable within the "Bundt" of rolled hair.

[0008] U.S. Pat. No. 5,758,672 by Chou issued Jun. 2, 1998 shows a hair clip with elongated upper and lower portions whereby the upper and lower leaves have respectively alternating recessed and protruding ridges, which when deployed in the "closed" position form a clamp around the hair.

[0009] U.S. Pat. No. 6,041,792 by Kennedy issued Mar. 28, 2000 shows a hair ornament and method of ornamenting hair. The device is comprised of a number of resilient intercon-

nected rings which are generally arranged sequentially along a first axis whereby the retention of the device comprises a comb.

[0010] Despite such attempts to make hair clips attach more firmly, the prior art is still flawed in the composite nature and design including bulkiness and fragility. They are not well-suited for securely anchoring decorative accessories in place. While the above and other known hair clips may provide the materials and the means for assembling a hair clip and the means for ornamental accessorizing, none provide the means for easily attaching a hair clip with minimal detrimental impact to the hair while simultaneously providing a means for quickly adding or interchanging a decorative assembly.

#### SUMMARY OF THE INVENTION

[0011] It is, therefore, a primary object of the present invention to provide a hair clip that can be easily attached for anchoring interchangeable decorative-ornamental accessories.

[0012] Another object of the present invention is to provide a clip capable of securely holding hair without the tearing or breaking the hair, and which will not leave marks in the user's hair.

[0013] Another object of the present invention is to provide a clip that has form memory so as to hold hair with reverse tension, eliminating pulling on the user's scalp.

[0014] It is still another object of the present invention to provide a hair clip suitable for all types of hair and lengths, and for securing any amount of hair desired to be clipped.

[0015] Yet another object of the present invention is to provide a clip that is inexpensive and easy to manufacture.

[0016] It is still another object of the present invention to provide a hair clip that provides a secure anchor for attaching an ornamental accessory assembly.

[0017] In accordance with the foregoing objects, the present invention is a hair clip formed of a molded shapememory plastic body having an elongate protruding tail with a pronounced bulge tapering to a distal point, the inward length of the tail following a slight arcuate curve to a sharp elbow, which doubles back on itself to a curved hook positioned approximately midway along the tail. The upwardly-turned hook terminates at a blunt point and generally defining a semi-circle. In use, the distal point of the elongate protruding tail is inserted under a lock of hair, and the bulged portion of the tail biased up and over the curved hook end such that the bulged portion of the tail seats itself within the contour of the open hook, firmly clamping the lock of hair therein.

[0018] In addition, an ornamental assembly is removably attached to the curved hook end of said molded plastic body and extends from the device for aesthetics.

### BRIEF DESCRIPTION OF THE DRAWINGS

[0019] Other objects, features, and advantages of the present invention will become more apparent from the following detailed description of the preferred embodiments and certain modifications thereof when taken together with the accompanying drawings in which:

[0020] FIG. 1 is a top perspective view of the hair clip 2 according to one embodiment of the present invention.

[0021] FIG. 2 is top perspective view of the hair clip 2 as in FIG. 1 illustrating the closed/attached position of the hook clasp 4 to the hair clip body 8

[0022] FIG. 3 is a perspective view of the hair clip 2 with attached ornamental accessory 7 illustrating how the accessory device 7 is attached to hair clip 2 with elastic loop 5.

[0023] FIG. 4 is a perspective view of the hair clip 2 with attached ornamental accessory 7 in the appropriate attached to the hair position.

[0024] FIG. 5 is a perspective view of the hair clip 2 with attached ornamental accessory 7 in a non-attached to the hair position

[0025] FIG. 6 is a perspective view of the hair clip 2 with attached ornamental assembly 7 in an attached hair position.

## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0026] The present invention is a hair clip that easily attaches to hair with a self clasping hook mechanism, preferably for securing an ornamental assembly to the hair. In use, the ornamental assembly and the hair clip are designed for relative ease of attachment to each other and insertion in the hair, or removal so that users can quickly remove the hair clip from the user's hair and quickly change out the ornamental assembly if so desired.

[0027] FIG. 1 is a top perspective view of the hair clip 2 according one embodiment of the present invention with an ornamental assembly 7. The hair clip 2 attaches to hair with a self clasping hook mechanism 4. The hair clip body is comprised of an elongate body permanently-deformed into a curvilinear shape, inherently resilient, and yet retaining shape memory characteristics back to said permanently-deformed curvilinear shape. The entirety of the hair clip 2 is preferably formed from a unitary piece of resilient shape-memory plastic by molding and/or thermosetting into the curvilinear shape, thereby providing the requisite degree of resiliency with shape-memory.

[0028] The permanent curvilinear shape of hair clip 2 is defined by a resilient protruding tail running to a blunt distal point 3, the tail having a pronounced bulge tapering to the point 3, and the point 3 being slightly downturned. The inward length of the tail runs along a slight arcuate curve to a sharp elbow, wherein it doubles back on itself to a curved hook end 6 located approximately midway along the tail. The curved hook end 6 includes an upwardly-turned hook terminating at a blunt point and generally defining a semi-circle. An ornamental assembly (described below with regard to FIG. 3) includes an elastic loop that is tethered around the curved hook end 6 of the hair clip 2, thereby anchoring the ornamental assembly at the hook end 6.

[0029] In use, the hair clip body is inserted under a lock of hair via the distal point 3 of the elongate protruding tail, and the bulged portion of the tail 6 is biased up and over the open hook 4 of curved hook end 6 (the elbow serving as a hinge). Owing to the reverse-tension imparted by the shape-memory plastic, the bulged portion of the tail 6 will tend to seat itself within the contour of the open hook 4, firmly clamping the lock of hair therein.

[0030] FIG. 2 illustrates the closed/clamped position of the invention with the open hook 4 interlocked around the body  $\bf 8$ . The memory plastic retains the tension of the previous position.

[0031] One skilled in the art will readily see that the hair clip 2 provides relative ease of attachment and removal, which is essential to the function of allowing users to quickly remove the hair clip 2 from the user's hair and change out the ornamental assembly 7 if so desired.

[0032] The bulged portion of the tail is wider than the entry point 6 to ensure that the ornamental attachment 7 will not slide off.

[0033] FIG. 3 is a perspective view of the ornamental assembly 7 which includes an elastic loop 5 that is tethered around the curved hook end 6 or the elbow of the hair clip 2, thereby anchoring the ornamental assembly at the hook end 6. The elastic loop element 5 is preferably a short length of stretch-cord formed of internal rubber cord(s) sheathed in a braided cotton or nylon shell with both ends secured in a beaded ornament. The ornamental assembly 7 further comprises a short segment of ornamental chain such as a beaded strand, attached to the elastic loop element 5, and dangling from the hook end 6 or elbow of the hair clip 2.

[0034] FIG. 4 is a perspective view of the ornamental assembly 7 with loop 5 attached to the hair clip 2.

[0035] FIG. 5 is a full perspective view of the hair clip 2 in an open position with attached ornamental assembly 7, and FIG. 6 is a perspective view of the hair clip 2 in a closed position with the open hook 2 interlocked around the body 8. [0036] The open position of the hair clip 2 shows how easy it is to thread the hair clip through the loop opening 5 of the ornamental assembly 7 which makes is easy to attach and remove.

[0037] It should now be apparent that the above described hair clip 2 can be readily attached to an ornamental assembly 7 and attached to one's hair with relative ease and simplicity, and just as easily removed for replacement with another different ornamental assembly 7. Moreover, the assembled device is lightweight, durable, easy to wash, made of memory plastic to retain tension the attached position for long hours and the device can be expeditiously attached or detached to an ornamental assembly with minimal effort

[0038] The above-described embodiment is for the purpose of promoting an understanding of the principles of the invention. It should nevertheless be understood that no limitation of the scope of the invention is thereby intended, such alternations and further modifications in the illustrated device, and such further applications of the principles of the invention as illustrated herein being contemplated as would normally occur to one skilled in the art to which the invention relates.

I claim:

1. A hair clip, comprising:

a molded elongate body permanently-deformed into a curvilinear shape, resilient, with a shape memory characteristic back to said permanently-deformed curvilinear shape, said elongate body defined by an elongate tail extending lengthwise along an arcuate curve and having a pronounced bulge at one end tapering to a blunt distal point, another end of said elongate tail being turned inward along a sharp elbow and doubling back to a curved hook end positioned approximately midway along the tail and including an upturned hook terminating at a blunt end and generally defining a semi-circle, said tail protruding past said hook;

whereby the distal point of the elongate protruding tail is adapted for insertion under a lock of hair, and the curved hook end biased over the elongate tail such that said tail seats itself within a contour of the hook, firmly clamping the lock of hair therein.

2. The hair clip according to claim 1, further comprising an ornamental assembly removably attached to the curved hook end of said molded plastic body and extending from the device.

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