(11) EP 2 522 242 A2

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:

14.11.2012 Bulletin 2012/46

(51) Int Cl.: **A43B 23/24** (2006.01)

(21) Application number: 12167562.3

(22) Date of filing: 10.05.2012

(84) Designated Contracting States:

AL 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 RS SE SI SK SM TR

Designated Extension States:

BA ME

(30) Priority: 11.05.2011 US 201161518764 P

(71) Applicants:

 Plekker, Elizabeth Ann Butler, PA 16022 (US) Plekker, Marinus J. Butler, PA 16022 (US)

(72) Inventors:

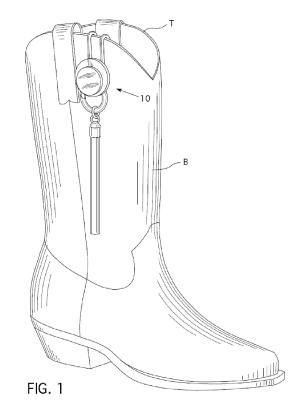
 Plekker, Elizabeth Ann Butler, PA 16022 (US)

 Plekker, Marinus J. Butler, PA 16022 (US)

 (74) Representative: Elzaburu Marquez, Alberto et al Elzaburu S.L.P.
 Miguel Angel 21, 28010 Madrid (ES)

(54) Decorative clip assembly

(57)Decorative clip assemblies attachable to an item of wear, e.g. a boot, are disclosed. The decorative clip assembly includes a bent portion having a first free end portion and a second end portion for draping the clip assembly onto an edge of the item of wear; a mounting portion connected to the second end portion for selectively mounting a first decorative embellishment; and a ring portion connected adjacent to the mounting portion for selectively receiving and carrying a second decorative embellishment. The ring portion includes a spring loaded open end section or a hinged gate ring. The decorative clip assembly may be made of spring wire, spring steel, or rigid plastic or it may be made from a single sheet of spring steel wherein the clip assembly is an integral one piece assembly. Methods for forming the decorative clip assembly are also disclosed.



35

40

Description

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims priority to U.S. Provisional Patent Application Serial No. 61/518,764, filed May 11,2011, the disclosure of which is incorporated herein by reference in its entirety.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The invention relates to a decorative clip assembly attachable to an item of wear, such as, for example, a boot, e.g. a Western style cowboy boot. The decorative clip assembly optionally includes a decorative embellishment affixed to a mounting portion of the clip assembly and/or one or more hanging decorative embellishments, such as, for example, a cluster of charms which hang down alongside the item of wear when the decorative clip assembly is secured to an edge of the item. The decorative clip assembly comprises a ring portion having a spring loaded open end or a gate ring adjacent to the mounting portion for slideably receiving and carrying the hanging decorative embellishments.

[0004] 2. Description of Related Art

[0005] It is known to add decorative features to an item of footwear by attaching a charm to a fixed location on the outside of the footwear. Such an attachment may be permanently affixed to the footwear or it may be detachable.

[0006] Examples of ornamental articles for a shoe are disclosed in the following patents. Mathews, U.S. Patent No. 5,673,502 filed March 18, 1996 illustrate ornaments which snap to a shoe. Solo, U.S. Patent No. 5,596,821 filed June 21, 1995 discloses an article that rests on and attaches to the top of the shoe. Rowland, U.S. Patent No. 6,412,151 B1 filed September 29, 2000 discloses a shoe ornamentation system comprising a detachable locking clip that has a shoe ornament affixed to it and a bar, the center of which the locking clip attaches, and the ends of the bar are fastened to the shoe in the shoe manufacturing process.

[0007] Further examples of ornaments for footwear are disclosed in the following documents: White, U.S. Patent Publication 2006/0260153 published on November 23, 2006 discloses a decorative composite convertible ornamental memory triggering device that is slideably attachable/detachable to a shoelace on a shoe or boot. As shown in Fig.2, the device includes a primary loop 1 connected to an attachment 2 which is connected to any suitable expressive jewelry piece 3. The device is slideably attachable/detachable to a single shoelace or a single Velcro-style fastener on a shoe or boot as shown in Figs. 3 and 4; or alternatively, the loop may be an openable/closeable loop as shown in Fig. 6, which may be attached/detached from a tied shoelace as shown in Figs. 7 and 8.

[0008] Fromm, U.S. Patent Publication 2008/0271348 Al published November 6, 2008 discloses a shoe snap for attaching embellishments to shoes. The shoe snap 20 includes a first section 30 which is coupled to the shoe 10 and a cooperating second section 40 which may be fitted with an ornamental object and which is received by the first section 30.

[0009] Nordstrom-Wehner, U.S. Patent Publication 2009/0300948 Al discloses a footwear adornment system. As shown in Figs. 2 and 3, the adornment 20 includes a clip 50 which, in turn, includes a legged structure 40 and a mounting 30. A decorative accessory 22 is attached to mounting 30 with fastener 24.

[0010] Ferrante, et al., U.S. Patent Publication 2010/0058619 published on March 11, 2010 discloses a removably attachable charm that may optionally be attached to the strap of a sandal. Figures 5A-5C and 6A-6C show different types of connectors for removably connecting a charm to the strap of a sandal.

[0011] None of these prior art patent documents discloses a decorative clip assembly for an item of wear that is designed to be secured around an edge or rim of an item of wear, such as, for example, a boot and comprising a mounting portion for optionally supporting a decorative embellishment and a ring portion adjacent to the mounting portion and comprising a spring loaded open end or a gate ring for slideably receiving the hanging decorative embellishments, for example, a cluster of charms or elongated tassel-like ornaments.

SUMMARY OF THE INVENTION

[0012] The present invention provides such a unique decorative clip assembly. A decorative clip assembly is securely positioned to a rim or an outer edge of an item of wear, such as, for example the top of a boot, e.g. a Western style cowboy boot. In particular, an aspect of the invention is to provide a decorative clip assembly, comprising a bent portion having a first free-end portion and a second end portion for positioning and attaching the decorative clip assembly around an edge of an item of wear; a mounting portion connected to the second end portion for selectively mounting a first decorative embellishment; and a ring portion connected adjacent to the mounting portion for selectively receiving and carrying a second decorative embellishment.

[0013] The ring portion comprises a spring loaded open end or a gate ring adjacent to the mounting portion for slideably receiving one or more second decorative embellishments, e.g. charms or a tassel-like ornament. The decorative clip assembly may be manufactured from a spring wire which provides a spring pressure action or it may be manufactured from a flat rolled piece of spring steel which provides a spring pressure action. Both the spring wire and the flat rolled piece of spring steel are bent into the desired shape for forming the decorative clip assembly.

[0014] The first decorative embellishment may take

one of several forms. For example, the first decorative embellishment may contain a bezel with a round glass stone, a rhinestone or a turquoise stone, which may be glued or welded to the mounting portion, or the first decorative embellishment may be a metal disk with an etched or tooling design. In some embodiments, the first decorative embellishment may have the same configuration as the mounting portion and this configuration may be circular, triangular, rectangular, or other configurations. [0015] If the decorative clip assembly is made of spring wire, then the ring portion preferably includes a hinged gate ring. The hinged gate ring is pushed inwardly relative to the ring portion thereby allowing the second decorative embellishments to be slideably received on the ring portion and which hinged gate ring once released springs back to its original position to close the ring portion for securing and carrying the second decorative embellishments.

[0016] If the decorative clip assembly is made of spring steel, then the ring portion preferably includes a spring loaded open end. The spring loaded open end is pushed away from the mounting portion to open the ring portion thereby allowing the second decorative embellishment to be slideably received on the ring portion and which spring loaded open end section once released returns to its original position in order to secure and carry the decorative embellishment.

[0017] The second decorative embellishment may be a hanging accessory and may be designed to aesthetically complement and/or match the first decorative embellishment mounted to the mounting portion of the decorative clip assembly.

[0018] A further aspect of the invention provides a method for forming a decorative clip assembly. The steps include: (a) bending a straight piece of spring wire in a first plane to form a first free end portion; (b) bending the spring wire of step (a) into a second plane that is perpendicular to the first plane to form a bent portion which is located between the first free end portion and the second end portion; (c) fixedly attaching the second end portion of step (b) to a mounting portion; and (d) fixedly attaching a ring portion to the mounting portion of step (c). Additional steps optionally include attaching a first decorative embellishment to the mounting portion, and/or inserting a second decorative embellishment onto the ring portion so that the second decorative embellishment hangs freely from the ring portion.

[0019] A still further aspect of the invention is to provide a method for forming a decorative clip assembly, the steps comprising: (a) using a single flat sheet metal made of spring steel and cutting the flat sheet metal into a desired pattern wherein the decorative clip assembly comprises a first free end portion, a second end portion connected to the first free end portion, a mounting portion connected to the second end portion, and a ring portion connected to the mounting portion; (b) bending the first free end portion in a first plane; and (c) bending the second end portion along with the mounting portion and the

ring portion in a second plane perpendicular to the first plane to form a bent portion which is located between the first free end portion and the second end portion. Additional steps after forming the decorative clip assembly may include tumbling, heat treating give a spring ac-

tion effect to the decorative clip assembly, and burnishing to smooth the rough edges. A first decorative embellishment may be attached to the mounting portion, and/or a second decorative embellishment may be inserted onto the ring portion.

[0020] These and other aspects of the invention will be better appreciated and understood when the following description is read in light of the accompanying drawings.

DESCRIPTION OF THE DRAWINGS

[0021] FIG. 1 is a front perspective view of a decorative clip assembly of a first embodiment of the invention attached to a top edge of a boot.

[0022] FIG. 2 is a front view of a decorative clip assembly shown in FIG. 1.

[0023] FIG. 3 is a rear view of the decorative clip assembly of FIG. 2.

[0024] FIG. 4 is a right side view of the decorative clip assembly of FIG. 2.

[0025] FIG. 5 is a front view of an unformed decorative clip assembly of a second embodiment of the invention.
[0026] FIG. 6 is a front perspective view of a formed decorative clip assembly of FIG. 5.

0 [0027] FIG. 7 is a front view of the decorative clip assembly of FIG.6 and includes a first decorative embellishment.

[0028] FIG. 8 is a left side view of the decorative clip assembly of FIG. 6.

[0029] FIG. 9 is a rear view of the decorative clip assembly of FIG.6.

DESCRIPTION OF THE INVENTION

[0030] The invention relates to a decorative clip assembly for decorating an item of wear. FIGS. 1 through 4 illustrate a first embodiment of the invention. As shown in FIG. 1, decorative clip assembly 10 fits securely and drapes over the top edge T or rim of a boot B.

[0031] Decorative clip assembly 10 comprises a bent portion 12 having a first free end portion 14a (FIG. 4) and a second end portion 14b connected to bent portion 12 and opposite to the first free end portion 14a; a mounting portion 16 connected to the second end portion 14b; and a ring portion 18 connected to mounting portion 16. As shown in FIG. 1, bent portion 12 attaches the decorative clip assembly 10 over the top T of boot B and even though not shown in FIG. 1, the first free end portion 14a extends down inside boot B with bent portion 12, mounting portion 16, and ring portion 18 being visible. Bent portion 12, first free end portion 14a, and second end portion 14b are made from a continuous piece of spring wire that may first be bent along its body in a first plane to form first

30

35

40

45

free end portion 14a and then bent in a second plane perpendicular to the first plane to form bent portion 12 and second end portion 14b.

[0032] Mounting portion 16 is fixedly attached to the free ends 20, 22 (FIG. 4) of the second end portion 14b. This can be done via a suitable process, such as a welding or soldering process. With particular reference to FIGS. 1 and 4, mounting portion 16 has a circular configuration and a front flat support surface 24 for supporting a first decorative embellishment 26. First decorative embellishment 26 is concentric relative to mounting portion 16 and may comprise a precious stone or gem, such as, for example, opal, diamond, turquoise, and tanzanite. Or first decorative embellishment 26 may comprise a metal disk containing an etched or tooling design. Even though mounting portion 16 has a circular configuration, this configuration may take another form, such as, for example, a rectangle, an oval, or a triangle, and the first decorative embellishment may have a configuration coinciding with the configuration of mounting portion 16. Even though mounting portion 16 includes decorative embellishment 26, the front flat support surface 24 may instead contain a logo and/or a trademark.

[0033] Referring to FIGS. 2 and 3 and as disclosed herein above, decorative clip assembly 10 further comprises ring portion 18. Ring portion 18 is fixedly attached to a lower portion 28 (FIG. 3) of mounting portion 16 via a suitable process, such as, for example, a welding process or a soldering process. Ring portion 18 comprises a hinged gate ring 30 which is spring loaded and which gate ring 30 is pushed inwardly so that ring portion 18 can slideably receive a second decorative embellishment which may be in the form of an elongated ornament 32 which is carried by a ring 34. Gate ring 30 is spring loaded so that it returns to its initial position to close ring portion 18 as shown in FIGS. 2 and 3 so as to securely carry the elongated ornament 32. Instead of elongated ornament 32, one or more other kinds of freely hanging decorative embellishments may be carried by ring portion 18. These hanging decorative embellishments may take the form of a cluster of charms that may be carried by a single ring, which ring is slid onto ring portion 18 for aesthetically embellishing decorative ring assembly 10.

[0034] Mounting portion 16 and ring portion 18 may be made of the same material, which may be metal. In some instances, this metal may be the same material as that of the wire spring used for bent portion 12, first free end portion 14a, and second end portion 14b of decorative clip assembly 10. The first free end portion 14a and the second end portion 14b of bent portion 12 are spaced apart a sufficient distance so that decorative clip assembly 10 can be positioned around an edge of an item of wear, where after portions 14a and 14b can be pressed together so as to secure decorative clip assembly 10 to the item of wear.

[0035] FIGS. 5-9 illustrate a further embodiment of a decorative clip assembly 40 of the invention. As illustrated in FIGS. 6-9, decorative clip assembly 40 comprises

a bent portion 42 having a first free end portion 44a (FIG. 8) and a second end portion 44b, a mounting portion 46 connected to second end portion 44b, and a ring portion 48 connected to mounting portion 46. Decorative clip assembly 40 may be used to embellish the boot B of FIG. 1. Similar to decorative clip assembly 10 of FIGS. 1-4, bent portion 42 of decorative clip assembly 40 will contact the top edge T of boot B with the first free end portion 44a extending down inside boot B and bent portion 42, second end portion 44b, mounting portion 46, and ring portion 48 being visible outside boot B.

[0036] As shown in FIG. 5, decorative clip assembly 40 is made from a flat single sheet metal, which metal preferably is spring steel. The pattern of decorative clip assembly 40 of FIG. 5 can be made via a laser cutting process wherein the first free end portion 44a is bent in a first plane and the second end portion 44b along with mounting portion 46 and ring portion 48 is bent in a second plane perpendicular to the first plane to form bent portion 42. As is apparent, decorative clip assembly 40 is one continuous integral piece instead of several separate pieces that are connected together to form decorative clip assembly 10 of FIGS. 1-4.

[0037] Referring particularly to FIGS. 6-8, mounting portion 46 has a circular configuration and a front flat support surface 46a for optionally supporting a first decorative embellishment 50 (FIG. 7) in a manner similar to that disclosed herein above with regard to decorative clip assembly 10. First decorative embellishment 50 is a metal disk, is concentric to mounting portion 46, and contains a tooling design. In other embodiments, the first decorative embellishment which can be fixedly attached to mounting portion 46, may be a metal disk; may comprise a precious stone or gem, such as, for example, opal, diamond, turquoise, or tanzanite; and/or may comprise an etched design.

[0038] Even though mounting portion 46 has a circular configuration, this configuration may take another form, such as, for example, a rectangle, an oval, or a triangle, and the first decorative embellishment may coincide with this configuration for mounting portion 46. Instead of the decorative embellishment 50 of FIG. 7, front flat support surface 46a of mounting portion 46 may contain a logo and/or a trademark. Or front flat support surface 46a may contain a precious stone or gem, such as, for example, opal, diamond, turquoise, or tanzanite; or it may comprise an etched design.

[0039] Referring again to FIGS. 5-9, decorative clip assembly 40 further comprises ring portion 48. Ring portion 48 is an integral part of mounting portion 46. Ring portion 48 is located adjacent to mounting portion 46 and comprises a spring loaded open end 52. Spring loaded open end 52 is slightly spaced away and separated from mounting portion 46. In operation, spring loaded open end 52 is pushed in a direction away from mounting portion 46 so that a second decorative embellishment may be slideably received and carried by ring portion 48. Even though not shown in FIGS. 5-9, this second decorative

embellishment may be similar to elongated ornament 32 of FIGS. 1-4. Spring loaded open end 52 of ring portion 48 is constructed to return to its original position adjacent to but slightly separated away from mounting portion 46 so as to securely carry the second decorative embellishment. The second decorative embellishment may comprise one or more freely hanging decorative embellishments. These freely hanging decorative embellishments may take the form of a cluster of charms that may be carried by a single ring which, in turn, is slid onto ring portion 48 for aesthetically embellishing decorative ring assembly 40.

[0040] When decorative clip assembly 40 is formed into the form of FIGS. 6-9, the first free end portion 44a and the second end portion 44b are spaced apart a sufficient distance so that these portions 44a and 44b can be positioned around an edge of an item of wear; where after first free end portion 44a and second end portion 44b may be pressed together so that decorative clip assembly 40 is securely attached to the item of wear.

[0041] The first decorative embellishment for clip assemblies 10 and 40 may include a bezel portion for securing decorative ornaments, such as, for example, diamonds, cabochons, glass beads, precious stones and gems, such as, for example, opal, diamond, turquoise and tanzanite. If the bezel portion is mounted on mounting portion 16, 46 of clip assembly 10, 40 respectively, then this bezel portion may have a circular configuration or it may take another form, such as, for example, a rectangle, an oval, and a triangle. Also, as disclosed herein above, front flat support surface 24, 46a of mounting portion 16, 46, respectively may comprise a logo and/or a trademark.

[0042] The second decorative embellishment for clip assembly 40 may include any variety of ornaments, such as a cluster of charms or the elongated ornament 32 of FIGS. 1-4.

[0043] A method for forming decorative clip assembly 10 includes the steps of: (a) bending a straight piece of spring wire in a first plane to form a first free end portion 14a; (b) bending the spring wire of step (a) into a second plane that is perpendicular to the first plane to form bent portion 12 and the second end portion 14b for draping clip 10 over the top of an item of wear, such as boot B in FIG. 1; (c) fixedly attaching the second end portion 14b of step (b) to mounting portion 16; (d) and fixedly attaching ring portion 18 including gate ring 30 to mounting portion 16 of step (c). Additional steps optionally include attaching a first decorative embellishment 26 to mounting portion 16 and/or inserting a second decorative embellishment 32 through gate ring 30 so that the second decorative embellishment 32 is securely carried by and freely hangs from ring portion 18.

[0044] A method for forming decorative clip assembly 40 includes the steps of: (a) using a single flat sheet metal made of spring steel and cutting the flat sheet metal into a pattern or configuration representing a decorative clip assembly similar to that of FIG. 5 wherein decorative clip

assembly 40 comprises a first free end portion 44a, a second end portion 44b, a mounting portion 46 connected to the second end portion 44b; and a ring portion 48 connected to the mounting portion 46; (b) bending the first free end portion 44a in a first plane; and (c) bending the second end portion 44b along with mounting portion 46 and ring portion 48 in a second plane perpendicular to the first plane to form bent portion 42 which is now located between the first free end portion 44a and the second end portion 44b. Additional steps optionally include attaching a first decorative embellishment to mounting portion 46 and/or inserting a second decorative embellishment onto ring portion 48 so that the second decorative embellishment is securely carried by and freely hangs from ring portion 48. Additional steps may also include tumbling, heat treating the form of FIGS. 6-9 so as to give a spring effect to the decorative clip assembly 40, and burnishing the form to remove rough edges.

[0045] The mounting portion 16, 46 of decorative clip assembly 10, 40 respectively may also be comprised of a precious metal, such as, for example, gold, silver, or bronze or a combination thereof.

[0046] Even though the invention has been described with respect to a decorative clip assembly for decorating a boot by being attached to the top of a boot, it is to be understood that decorative clip assembly 10, 40 may be attached to any item of wear, such as, for example, a shoe, a sandal, a purse, a belt, an edge of a pocket, a shirt, and a saddle. Additionally, the ring portion 18, 48 of decorative clip assembly 10, 40, respectively may be used to carry other items, such as, for example, keys. [0047] While the present invention has been described in connection with preferred embodiments of the figures, it is to be understood that other similar embodiments may be used or modifications and additions may be made to the described embodiment for performing the same function of the present invention without deviating there from. Accordingly, it is intended by the appended claims to cover all such changes and modifications as come within the

Claims

40

50

45 **1.** A decorative clip assembly, comprising:

spirit and scope of the invention.

a bent portion having a first free end portion and a second end portion for attaching the decorative clip assembly around an edge of an item of wear;

a mounting portion connected to the second end portion and constructed to selectively mount a first decorative embellishment thereon; and a ring portion connected to and located adjacent to the mounting portion and constructed to selectively receive and secure a second decorative embellishment.

15

25

30

40

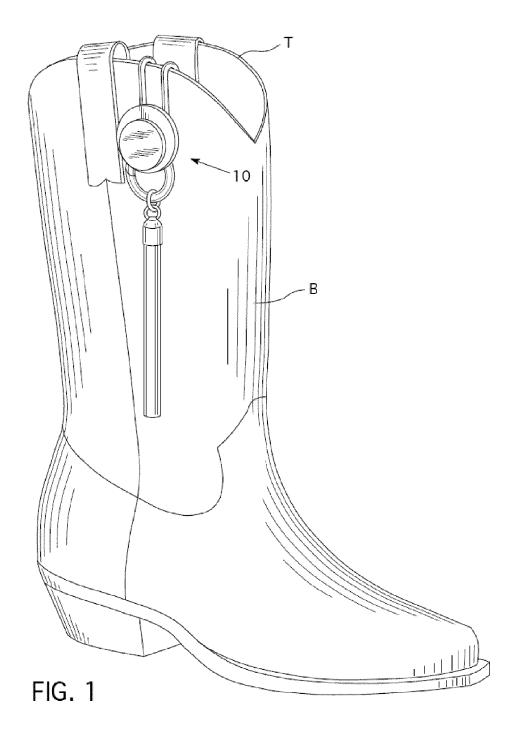
45

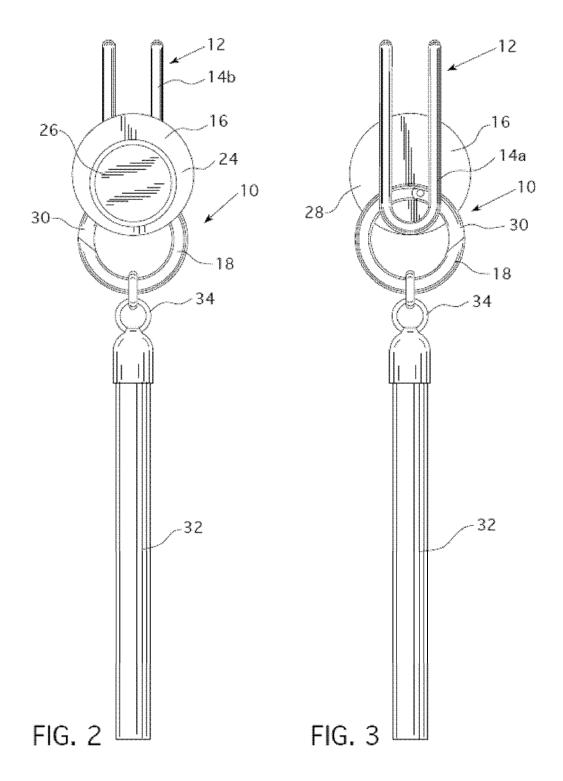
50

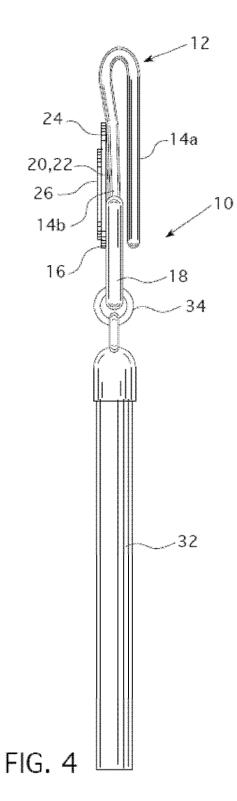
- The decorative clip assembly of claim 1, wherein the decorative clip assembly is comprised of a material selected from the group consisting of rigid plastic and metal.
- The decorative clip assembly of claim 2, wherein the material is metal.
- **4.** The decorative clip assembly of claim 3, wherein the material is metal and wherein the metal includes spring steel.
- **5.** The decorative clip assembly of claim 3, wherein the metal is a precious metal selected from the group consisting of gold, silver, bronze and a combination thereof.
- **6.** The decorative clip assembly of claim 1, wherein at least the bent portion and the ring portion are made of spring wire.
- 7. The decorative clip assembly of claim 1, wherein the ring portion is made of spring steel and comprises a spring loaded open end section spaced away from the mounting portion.
- **8.** The decorative clip assembly of claim 1, wherein the ring portion comprises a spring loaded open end section.
- **9.** The decorative clip assembly of claim 1, wherein the ring portion comprises a hinged gate ring.
- **10.** The decorative clip assembly of claim 1, wherein the decorative clip assembly is made from a flat rolled metal sheet.
- 11. The decorative clip assembly of claim 1, wherein the bent portion, the first free end portion, the second end portion, the mounting portion and the ring portion are one integral piece and made from a single metal sheet.
- **12.** The decorative clip assembly of claim 11, wherein the single metal sheet is comprised of spring steel.
- **13.** The decorative clip assembly of claim 1, wherein the first decorative embellishment is fixedly secured to the mounting portion.
- **14.** The decorative clip assembly of claim 1, wherein the second decorative embellishment comprises at least one hanging ornament.
- **15.** A method for forming a decorative clip assembly for an item of wear, comprising the steps of:
 - (a) bending a straight piece of a first spring wire

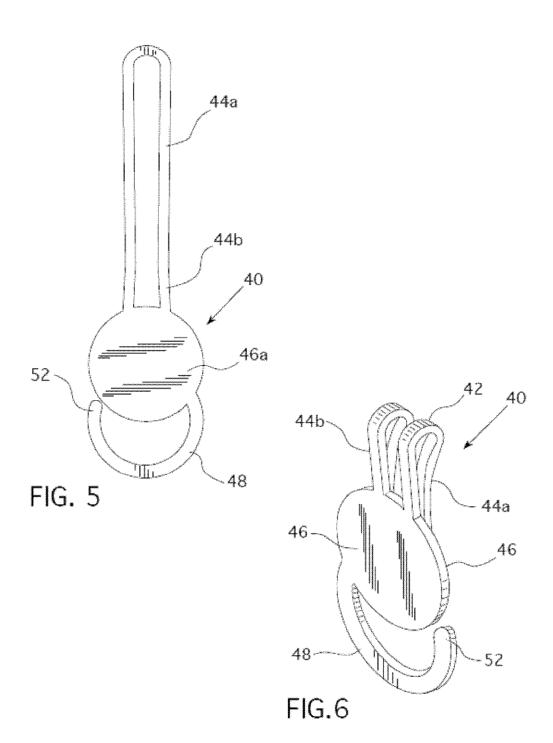
- in a first plane to form a first free end portion;
- (b) bending the first spring wire of step (a) into a second plane that is perpendicular to the first plane to form a bent portion including a second end portion for draping the decorative clip assembly over the top of an item of wear;
- (c) fixedly attaching the second end portion of step (b) to a mounting portion; and
- (d) fixedly attaching a ring portion including a gate ring to the mounting portion of step (c).
- **16.** The method of claim 15, the steps further comprising:
 - (e) optionally attaching a first decorative embellishment to the mounting portion, and optionally inserting a second decorative embellishment onto the ring portion of the decorative clip assembly.
- 17. A method for forming a decorative clip assembly for an item of wear, comprising the steps of:
 - (a) using a single flat sheet metal made of spring steel and cutting the flat sheet metal into a pattern representing a decorative clip assembly and comprising a first free end portion, a second end portion connected to the first free end portion, a mounting portion connected to the second end portion, and a ring portion connected to the mounting portion;
 - (b) bending the first free end portion in a first plane; and
 - (c) bending the second end portion along with the mounting portion and the ring portion in a second plane perpendicular to the first plane to form a bent portion between the first free end portion and the second end portion.
- **18.** The method of claim 17, the steps further comprising: providing the ring portion with a spring loaded open end which is separated from the mounting portion of the decorative clip assembly.
- **19.** The method of claim 17, the steps further comprising:
 - (e) optionally attaching a first decorative embellishment to the mounting portion, and optionally inserting a second decorative embellishment onto the ring portion of the decorative clip assembly.

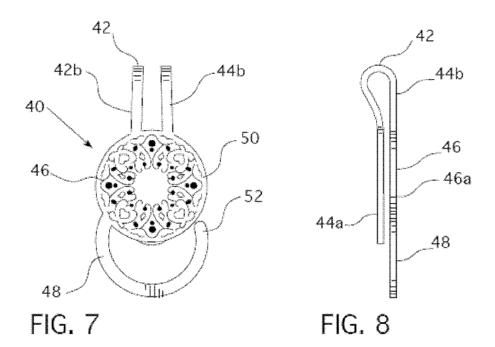
6

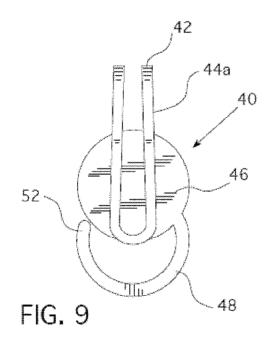












EP 2 522 242 A2

REFERENCES CITED IN THE DESCRIPTION

This list of references cited by the applicant is for the reader's convenience only. It does not form part of the European patent document. Even though great care has been taken in compiling the references, errors or omissions cannot be excluded and the EPO disclaims all liability in this regard.

Patent documents cited in the description

- US 61518764 A [0001]
- US 5673502 A, Mathews [0006]
- US 5596821 A, Solo [0006]
- US 6412151 B1, Rowland [0006]

- US 20060260153 A, White [0007]
- US 20080271348 A1, Fromm [0008]
- US 20090300948 A1, Nordstrom-Wehner [0009]
- US 20100058619 A, Ferrante [0010]