US 20030172672A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2003/0172672 A1**

Trupiano (43) **Pub. Date: Sep. 18, 2003**

(54) **ONE- PIECE GLASS BODY JEWELRY**

(76) Inventor: **Daniel R. Trupiano**, Los Angeles, CA (US)

Correspondence Address:
MARK PILGRIM
7 PICA FLOR
RANCHO SANTA MARGARITA, CA 92688
(US)

(21) Appl. No.: **10/098,786**

(22) Filed: **Mar. 14, 2002**

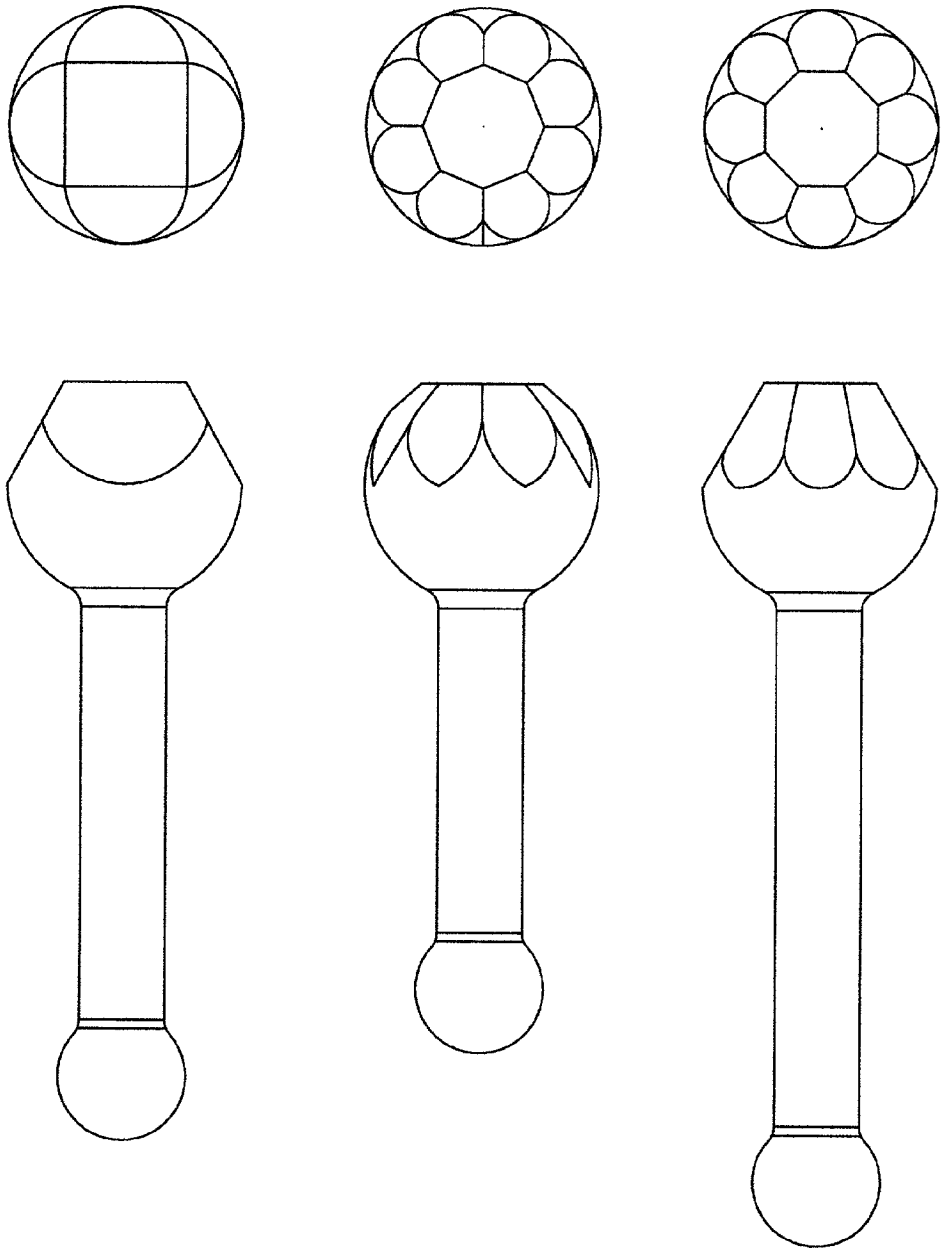
Publication Classification

(51) **Int. Cl.**[7] **A44C 7/00**

(52) **U.S. Cl.** **63/12**

(57) **ABSTRACT**

Comfortable body jewelry is formed from glass; a non-allergenic, lightweight, rigid, ultra smooth material, easily cleaned and sanitized with light transmitting properties. A post portion is located between a decorative bud and a retaining nub to form a single integral unit without seams, welds, clips, clasps, clutches or threaded ball.



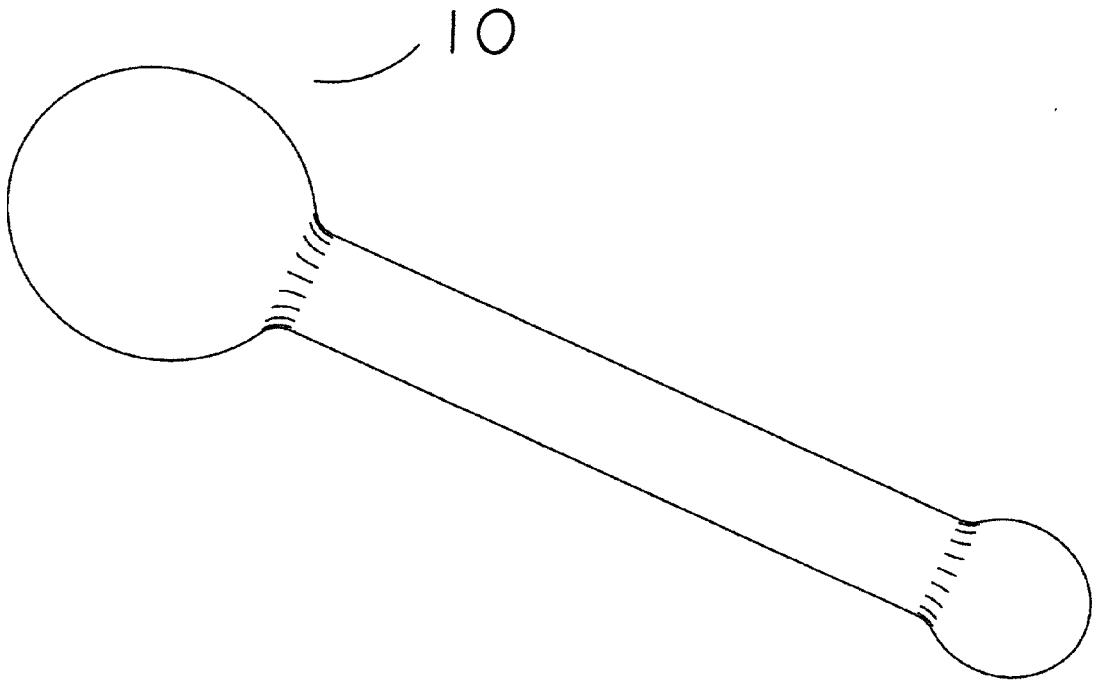


FIG. 1

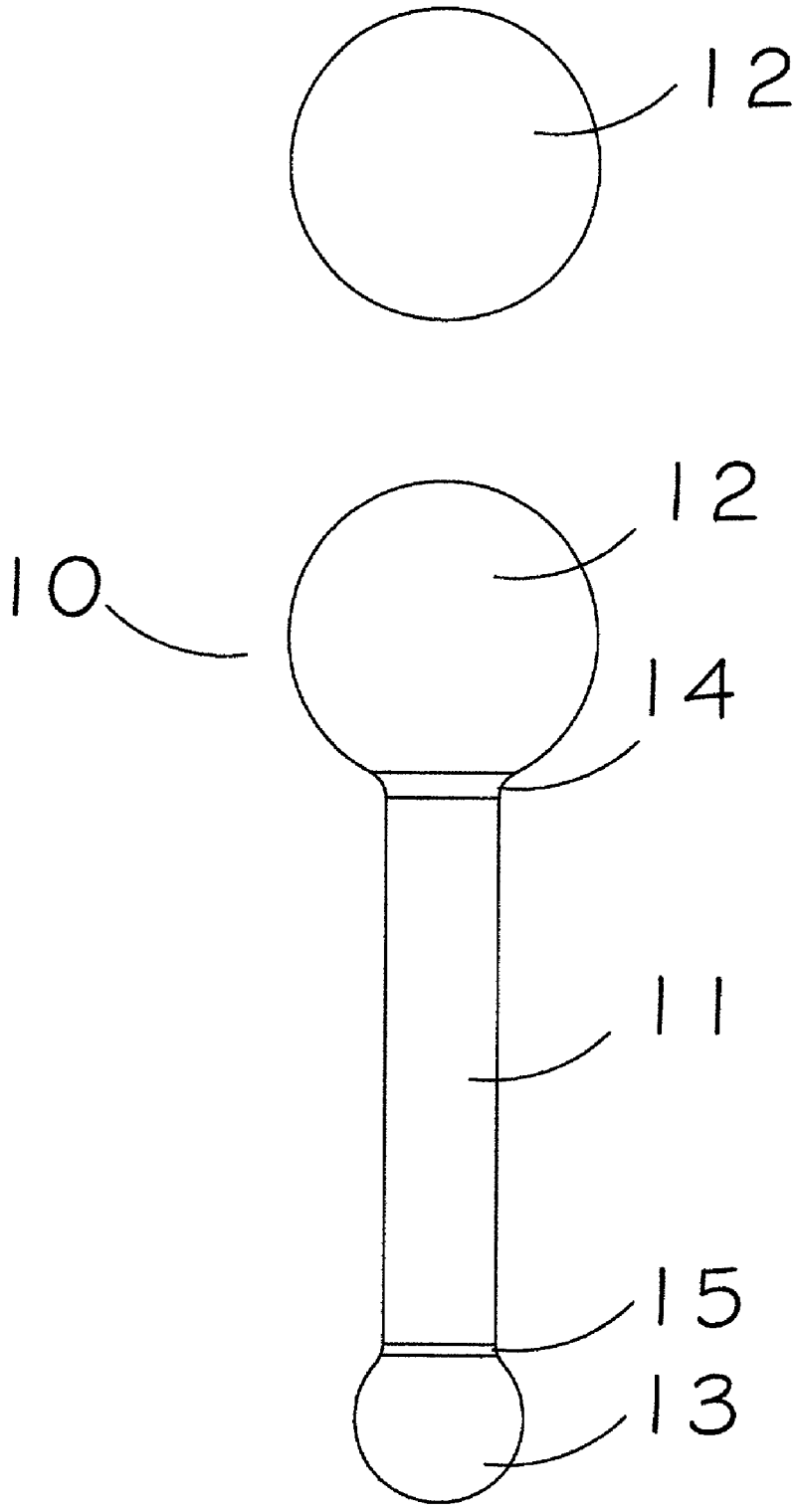


FIG. 2

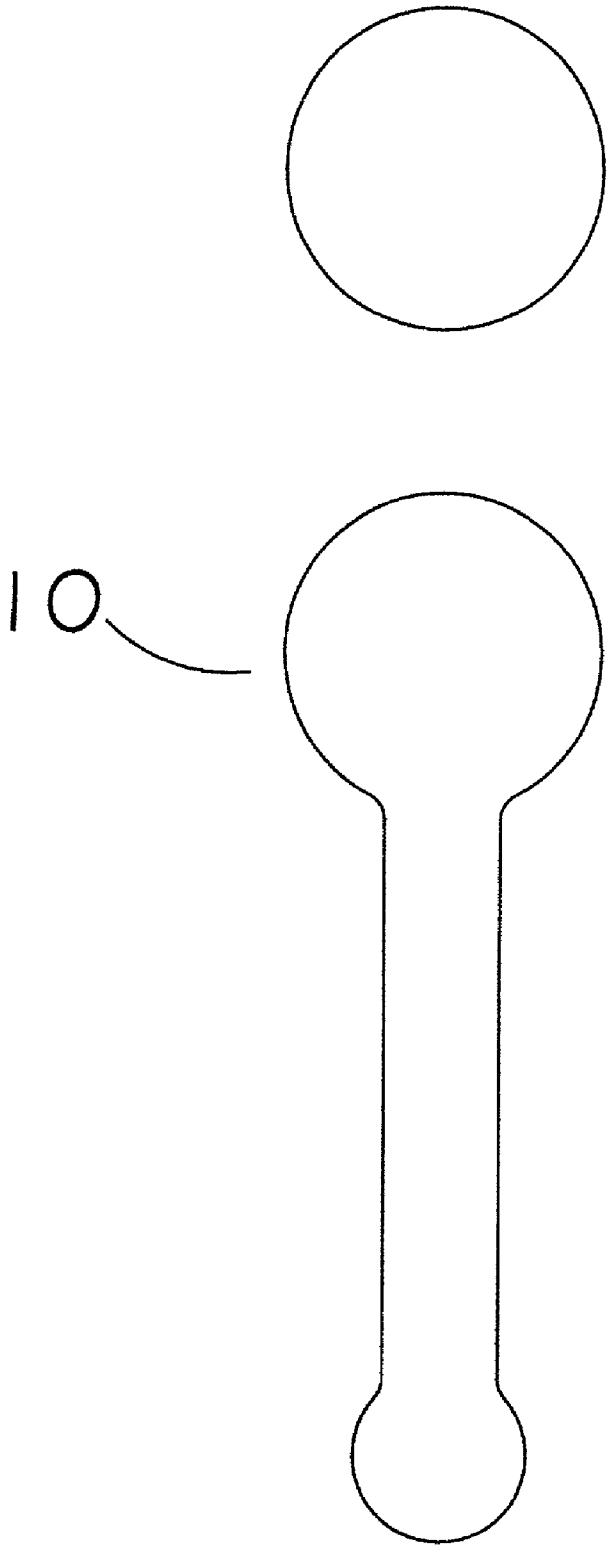


FIG. 3

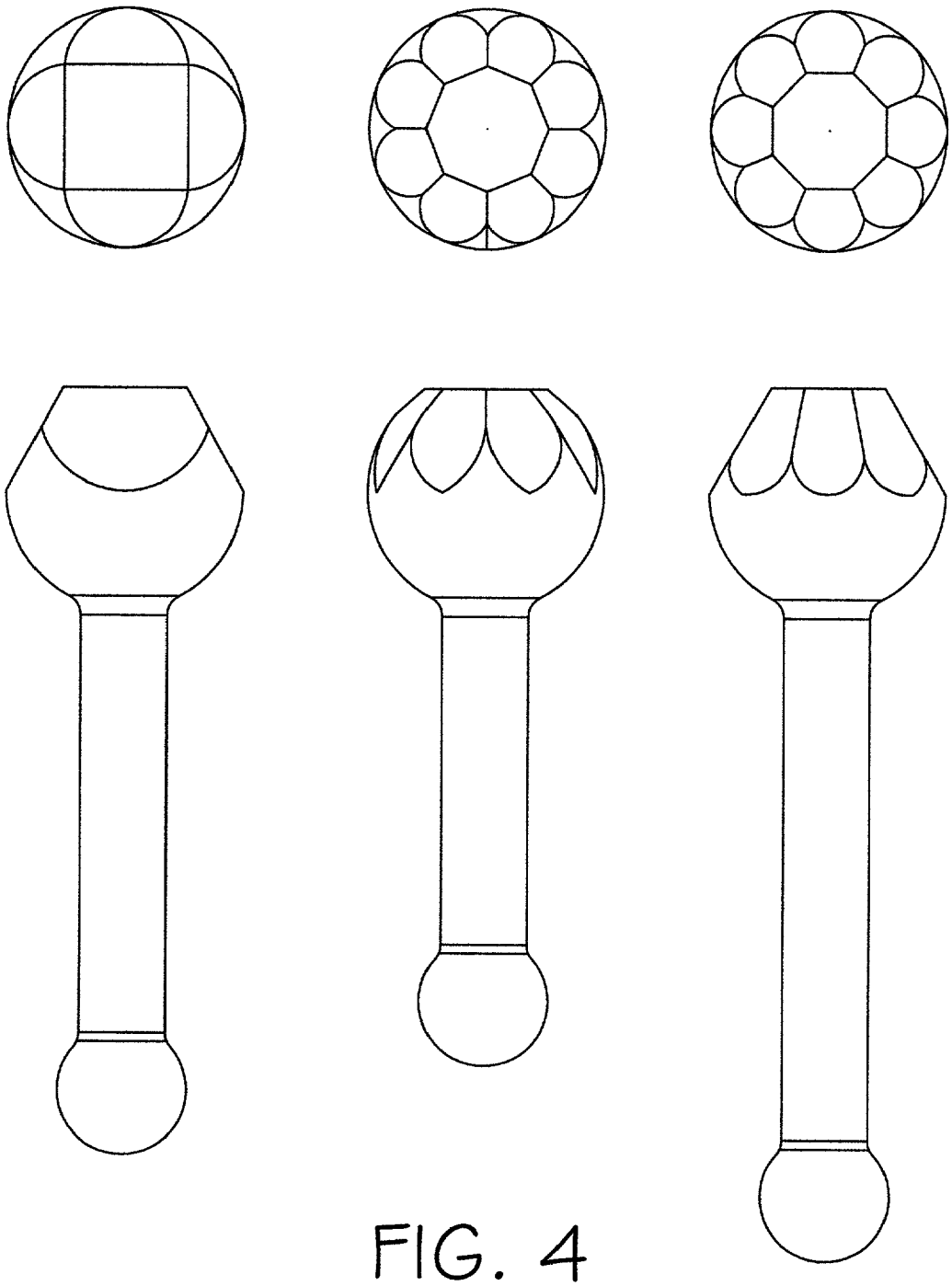


FIG. 4

ONE- PIECE GLASS BODY JEWELRY

FEDERALLY SPONSORED RESEARCH

[0001] Not Applicable

SEQUENCE LISTING OR PROGRAM

[0002] Not Applicable

BACKGROUND OF THE INVENTION

[0003] 1. Field of Invention

[0004] This invention relates generally to the field of ornamental jewelry, and more specifically to a form of body jewelry that is made of an entirely non-allergenic material that promotes body tissue healing while maintaining a body pierce, embodies comfort qualities, and provides for enhanced decorative features afforded by the materials inherent properties.

[0005] 2. Description of the Prior Developments

[0006] Jewelry for adorning a body pierce has been used for many years. There are problems that exist with this type of jewelry. First, many people have experienced difficulty and discomfort in wearing body jewelry due to irritation and infection caused by the jewelry's material composition. Another source of discomfort with existing body jewelry is the use of a securing means such as a clip, clasp, clutch or threaded ball. A second disadvantage existing in the body jewelry presently available is the jewelry's limited abilities to use natural light in order to enhance the jewelry's decorative qualities. During manufacturing, existing body jewelry's decorative attributes are further inhibited by the difficulty encountered when trying to vary color combination and hue. Finally, existing body jewelry does not provide for the combination of a durable, lightweight, non-allergenic material, easily capable of being imbued or fused with coloring, that uses natural light to enhance its decorative value and is economically feasible to manufacture. These concerns have been long felt, and numerous unsuccessful attempts have been made to provide for this type of universally acceptable body jewelry.

[0007] One source of discomfort and difficulty in wearing existing body jewelry can be attributed to the skin sensitivity of individual's when body jewelry composed of certain metals come into contact with the skin. Metals used for jewelry posts, having nickel, react upon contact with the skin resulting in irritation or more commonly, during the healing of a recent piercing, painful infection and even illness. Over time the metal will degrade causing the metal composition to pit allowing perspiration and moisture to react with the metal resulting in skin irritation. Metal pitting allows debris to accumulate, thereby providing a breading ground for bacteria.

[0008] Posts formed from pure gold or titanium are often a prohibitively expensive alternative. Skin sensitivity to various metals can require that even the ornament base attached to the post of the body jewelry be formed from a non-allergenic material. This can significantly increase the earring cost and make it difficult to attach an ornament to that base. Furthermore, a significant number of people suffer an allergic response to tissue contact with any type of metal.

[0009] Another unsuccessful attempt at overcoming the skin's sensitivity to metals while at the same time keeping costs to a minimum is seen in the use of body jewelry made of plastic. Unfortunately, plastic materials used in earrings and such have also been a source of irritation and discomfort due to their relatively coarse surface textures, production methods, or material permeability. Similar to metal, the chemical degradation of plastic results in bacteria rich environment. Sharp edged seams, inherent in the molding process of plastics, inhibit the skin's healing process by cutting or scraping delicate recently pierced tissue. It is important to eliminate all sharp edges or points from the body jewelry in order to expedite the skin's natural healing process.

[0010] Finally, discomfort and difficulty in wearing existing body jewelry can be attributed to the use of a means for securing the jewelry in place. Typically, a clip, clasp, clutch, or threaded ball will be used. The additional components needed to secure the jewelry in place require the wearer to blindly add the securing means to the back of the post. Along with the use of metals, additional components add weight to the jewelry that tends to limit the wearing of body jewelry to short periods of time. Additionally, gold, a soft material; it is not strong enough to properly support the ornament unless considerably thickened. Similarly, plastic is difficult to mold into thin, rod-like posts without considerable loss of strength and rigidity. These post materials are often uncomfortable to wear due to the extra tissue compression they require within the pierced opening.

[0011] Moving now to the decorative limitations of existing body jewelry. Due to the difficulty in working with metals body jewelry made from metal are greatly restricted in color combinations and variety. In order to add color to the metal post or metal findings that attach to the metal post, the metal post would have to be alloyed with other metals or surface treatments would have to be used that are not suitable for this purpose. Currently, metals are soldered, brazed, or screwed together in order to add color variations. These methods of adding decorative color variations to the metal introduce seams, edges, or connection points that invariable lead to the first problem with using metals for body jewelry, irritation and infection.

[0012] Metals tend to tarnish. Plastics fade or discolor and will inherently dull and lack reflective abilities. These characteristics limit the aesthetic presentation of the body jewelry by inhibiting the original reflective abilities of the material in light.

[0013] The final problem with existing body jewelry is that it does not provide for the combination of a strong, durable, lightweight, non-allergenic material, easily capable of being imbued or fused with coloring, that uses natural light to enhance its decorative value, will not degrade, and is economically feasible to manufacture. Metals are strong and durable, but they are dense, causing the metal to be heavy and uncomfortable when worn for an extended period of time. Additionally, certain metals are expensive. Plastics and other composites are generally lightweight and inexpensive, but tend to degrade over time. Metal, plastics and composites as previously noted are not the ideal post material for body jewelry to combat irritation and infection. Additionally, metals, plastics and composites are unable to optimally transmit, reflect, or use natural light as a means to enhancing the body jewelry's decorative qualities.

OBJECTS AND ADVANTAGES

[0014] Accordingly, one object of the present invention is to provide an earring formed entirely from a non-allergenic material.

[0015] This invention also provides for a non-allergenic material that is easily capable of being imbued or fused with similar material in order to provide an infinite variety of decorative color combinations and hue.

[0016] Another object of this invention addresses the need for an earring that can be faceted and has inherent light transmitting and reflective properties that provide enhanced decorative qualities. Still another object of this invention is to provide an earring that is has a distinctive feel and texture to the wearer and is easy to insert and comfortable to wear for extended periods of time. Another object of this invention is to provide an earring that is lightweight, strong, durable, and is economically feasible to manufacture.

[0017] Additional objects and advantages and novel features will become readily apparent from consideration of the following detailed description of the invention when considered in conjunction with the accompanying drawings.

SUMMARY OF THE INVENTION

[0018] The invention's glass material is hygienically more desirable because it is a non-reactive, non-irritating, and non-allergenic material. Because the present invention is entirely made of glass, i.e., decorative bud, post portion, and retaining nub, irritation and infection is virtually eliminated. The smooth, seamless integral design of the present invention improves its ability to be cleaned and sterilized, thereby promoting healing by eliminating microscopic debris and moisture.

[0019] The present invention provides distinctive advantages over prior earrings in terms of comfort and decorative qualities. The present invention's greater level of comfort is achieved through the use of glass, a nonabrasive, ultra smooth surface, lightweight material capable of securely being worn without a clip, clasp, clutch or threaded ball. The present invention's glass material is lighter than most metal. The structural integrity of glass allows it to be drawn thin and has properties more rigid than plastic.

[0020] The present invention's decorative enhancing abilities are provided by the unique inherent qualities of glass that include: permitting light to be transmitted from the front bud of the earring to the retaining nub at the back of the post; varying degrees of translucency of the glass that enable light to be absorbed or reflected; and during forming the ease of imbuing, permeating or fusing with other colored glass provides an infinite variety of color combinations and hues. Finally, glass can be faceted in order to reflect or redirect light providing for gem-like decorative qualities.

BRIEF DESCRIPTION OF THE DRAWINGS

[0021] In the drawings:

[0022] **FIG. 1** is a side view of the present invention illustrating the smooth integral single-piece glass construction of the body jewelry.

[0023] **FIG. 2** shows the preferred size relationship between the structural elements of the present invention.

[0024] **FIG. 3** is a cross sectional view of the present invention emphasizing the uniform contiguous nature of its glass construction.

[0025] **FIG. 4** shows alternative preferred embodiments of the present invention that take advantage of the inherent light transmitting and reflective properties of glass.

DESCRIPTION OF THE PREFERRED EMBODIEMENT

[0026] The first embodiment of the present invention, representative of body jewelry in general, is illustrated in **FIGS. 1, 2** and **3**, and indicated by reference number **10**. The present invention comprises broadly a post portion indicated by reference character **11**, a decorative bud **12** and a retaining nub **13**.

[0027] **FIG. 1** is a side view of the present invention illustrating the smooth integral single-piece glass construction of the body jewelry. The body jewelry is devoid of any retaining clip, clasp, or clutch. The present invention can be produced using any method that shapes glass. The preferred embodiment of the present invention is produced using a glass technique commonly referred to as "lamp working." In using the "lamp working" technique a torch is used to melt and shape glass rods that are preferably composed of borasilicate or soda lime. The glass rods used may be transparent or opaque, consist of a single color or a multitude of colors. The glass rods are heated to their melting point and then stretched out to form a glass thread. The optimum thickness for the thread is about 0.035 inches in diameter, plus or minus 0.005 inches, but the thread size may vary depending upon the present inventions intended application. The thread end is then heated and shaped in the flame by tilting and rotating the thread in order to allow the molten glass to coalesce into a generally spherical shape as indicated in **12**. Structural stability is optimal when the diameter of the decorative bud **12** and the diameter of the post portion **11** remain in a 3 to 1 proportion. After the thread and decorative bud **12** have cooled the glass thread is cut to the desired post length **11** with enough additional material to form the smaller retaining nub **13**.

[0028] The glass thread is reintroduced into the torch's flame and the retaining nub **13** is formed using the same technique that was used for the decorative bud **12**. The retaining nub is generally spherical in shape and only slightly larger in diameter than that used for the glass thread. Upon formation the glass thread center portion, between the decorative bud **12** and the retaining nub **13** becomes the post portion **11**. A slight smooth fillet or ring **14** will be formed at the intersecting point of the decorative bud and post portion **11**. A similar smooth fillet or ring **15** will be formed at the intersecting point of the retaining nub and the post portion **11**.

[0029] The present invention is then ready to be inserted into an existing body pierce. The retaining nub **13** is first inserted into the existing body pierce until the retaining nub **13** exits the body pierce and the post portion **11** sets comfortably within the pierce. The smooth seamless exterior of the present invention combined with the low surface resistance of glass allows the retaining nub **13** and post portion **11** to easily slip into place. Medication, to promote healing of the existing body pierce, may be applied prior to

insertion. Only the decorative bud **12** and retaining nub **13** remain visible after proper insertion in the existing body pierce.

[**0030**] **FIG. 3** is a cross sectional view of the present invention emphasizing the uniform contiguous nature of its glass construction. The glass material of the present invention enables it to transmit light from the front decorative bud **12** through the post portion **11** to the opposite end where the retaining nub **13** is located. Varying the translucent properties of the glass used in the present invention enhances the use of glass as a decorative medium by offering characteristics unique to the glass and unlimited opportunity to change color and hue.

[**0031**] **FIG. 4** shows alternative preferred embodiments of the present invention that take advantage of the inherent light transmitting and reflective properties of glass. The decorative bud may be faceted in an unlimited number of ways in order to reflect or redirect light in varies directions to enhance the visual presentation of the body jewelry.

[**0032**] While the invention has been described in connection with what is presently considered to be the most practical and preferred embodiment, it is to be understood by those skilled in the art that various changes and modifications may be found by those skilled which are within the spirit and scope of the invention.

I claim:

1. Body jewelry, comprising:

a decorative bud;

a retaining nub, and

a post portion located between and interconnecting said decorative bud and said retaining nub wherein said decorative bud, retaining nub and post portion form a single seamless integral piece.

2. The body jewelry of claim 1 wherein said body jewelry is a non-allergenic material.

3. The body jewelry of claim 2, further characterized in that said non-allergenic material is glass.

4. The body jewelry of claim 3, in which said body jewelry is generally formed by means of glass blowing whereby said decorative bur, said retaining nub, and said post portion form said single seamless integral piece.

5. The body jewelry of claim 4, in which said decorative bud and retaining nub are of a generally spherical in shape.

6. The body jewelry of claim 5, wherein said decorative bud and said post portion have a preferred diameter ratio of 3:1.

7. The body jewelry of claim 6, wherein said body jewelry is worn in the ear.

8. The body jewelry of claim 6, wherein said body jewelry is worn in the nose.

9. The body jewelry of claim 7, wherein said decorative bud is characterized by facets cut into the spherical shape.

10. The body jewelry of claim 8, wherein said decorative bud is characterized by facets cut into the spherical shape.

11. Body jewelry, comprising:

a decorative bud;

a retaining nub, and

a post portion located between and interconnecting said decorative bud and said retaining nub wherein said decorative bud, retaining nub and post portion form a single seamless integral piece.

12. The body jewelry of claim 11 wherein said body jewelry is a non-allergenic material.

13. The body jewelry of claim 12, further characterized in that said non-allergenic material is glass.

14. The body jewelry of claim 13, in which said body jewelry is shaped by a process known as "lamp working" whereby said decorative bud, said retaining nub, and said post portion form said single seamless integral piece.

15. The body jewelry of claim 14, in which said decorative bud and retaining nub are of a generally spherical in shape.

16. The body jewelry of claim 15, wherein said decorative bud and said post portion have a preferred diameter ratio of 3:1.

17. The body jewelry of claim 16, wherein said body jewelry is worn in the ear.

18. The body jewelry of claim 16, wherein said body jewelry is worn in the nose.

19. The body jewelry of claim 17, wherein said decorative bud is characterized by facets cut into the spherical shape.

20. The body jewelry of claim 19, wherein said decorative bud is characterized by facets cut into the spherical shape.

* * * * *