



US 20140090418A1

(19) **United States**

(12) **Patent Application Publication**  
**MIHALYO**

(10) **Pub. No.: US 2014/0090418 A1**

(43) **Pub. Date: Apr. 3, 2014**

(54) **BRACELET OR THE LIKE HAVING INTERCHANGEABLE PIECES**

**Publication Classification**

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(51) **Int. Cl.**  
*A44C 5/00* (2006.01)

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(52) **U.S. Cl.**  
CPC ..... *A44C 5/0084* (2013.01)  
USPC ..... **63/3**

(21) Appl. No.: **14/040,669**

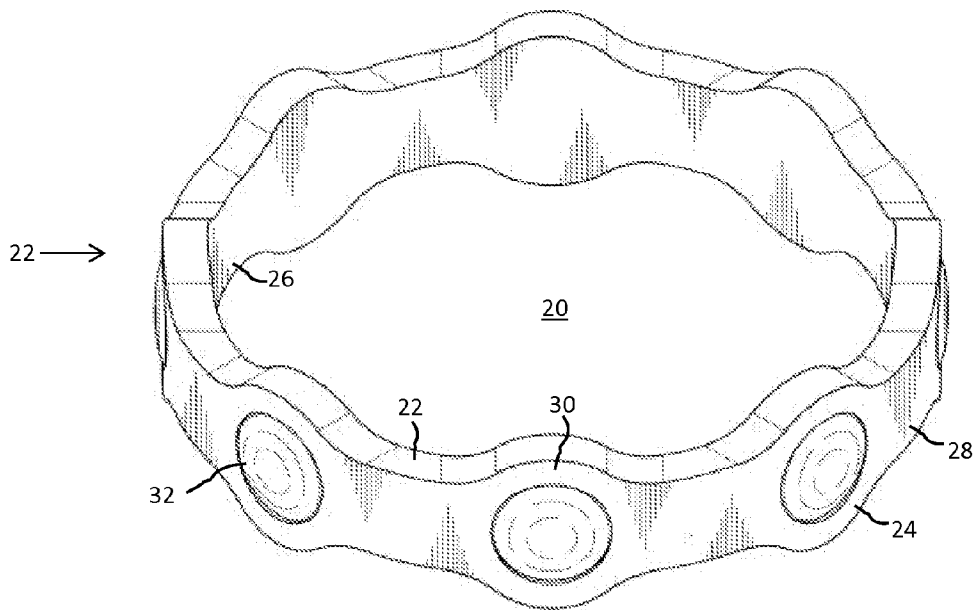
(57) **ABSTRACT**

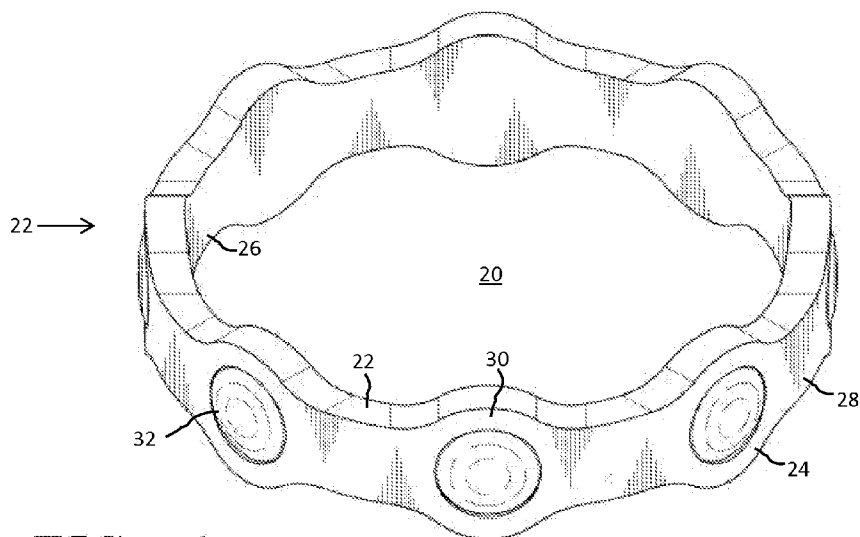
(22) Filed: **Sep. 28, 2013**

A bracelet includes a plastic body having socket portions. Customizing pieces, with or without underlying filling bodies, are lodged in the socket portions. The customizing pieces may be transparent. Visible or audible effects are provided by ornamental elements associated with the customizing pieces, the filling bodies, or both. Interactions of these structures; mutually or with supplied external bodies; optical, mechanical, or magnetic; augment the effects.

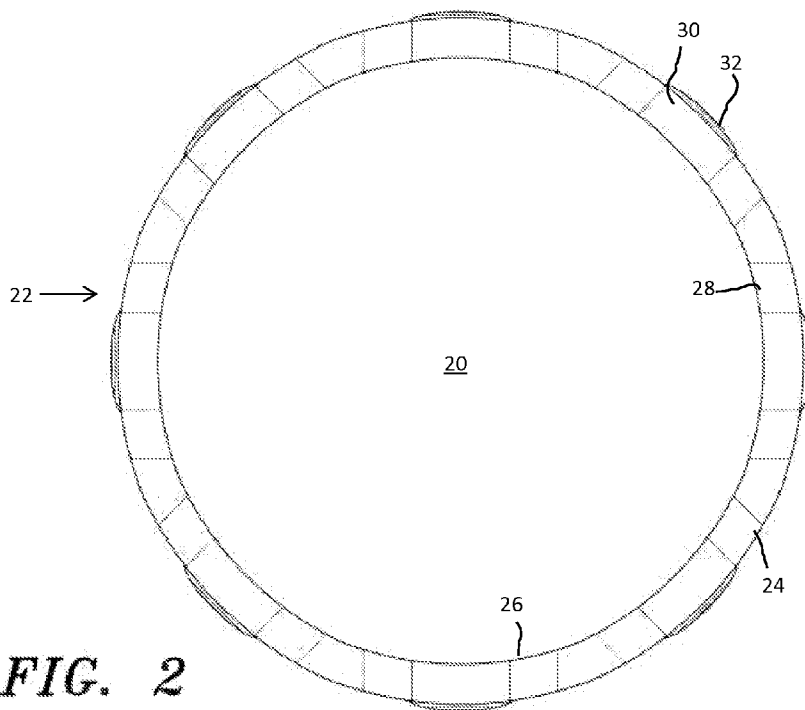
**Related U.S. Application Data**

(60) Provisional application No. 61/706,942, filed on Sep. 28, 2012.

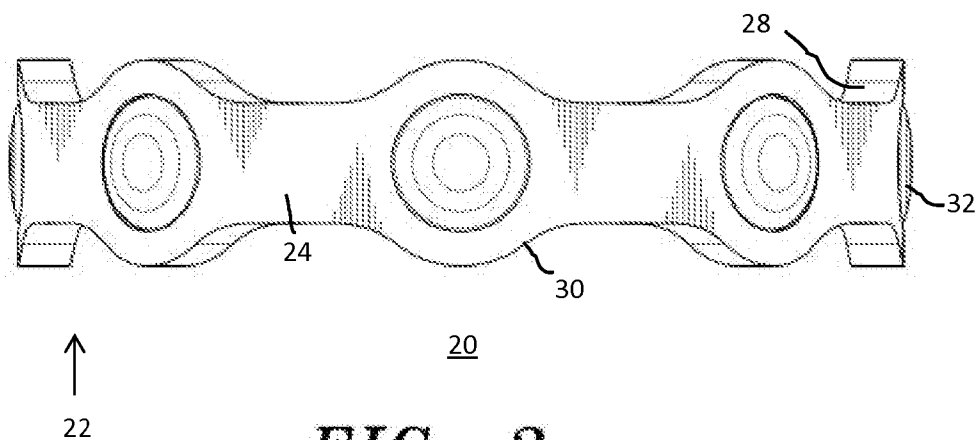




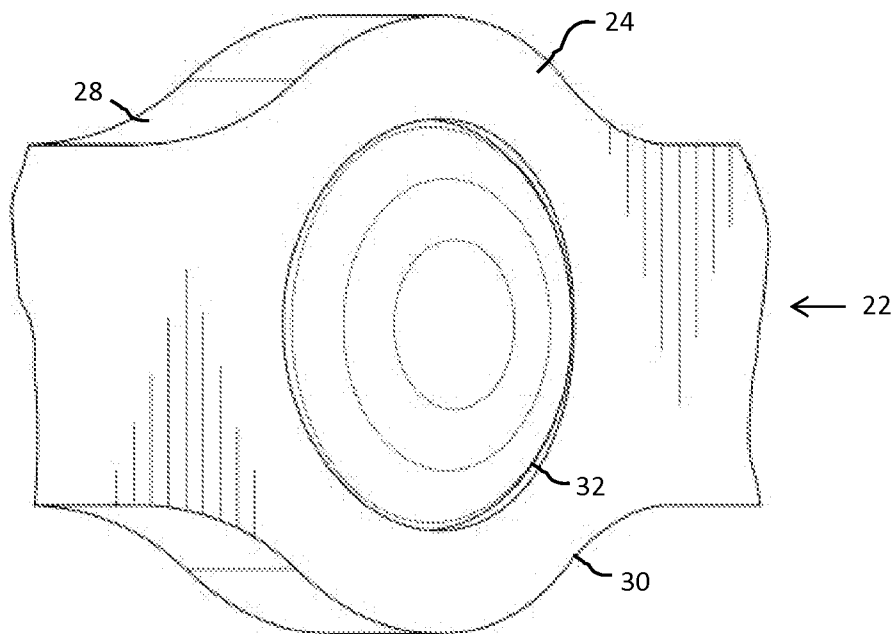
**FIG. 1**



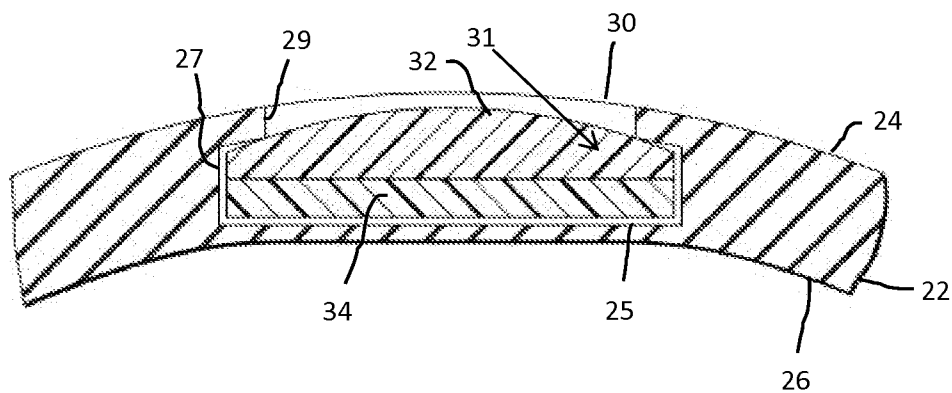
**FIG. 2**



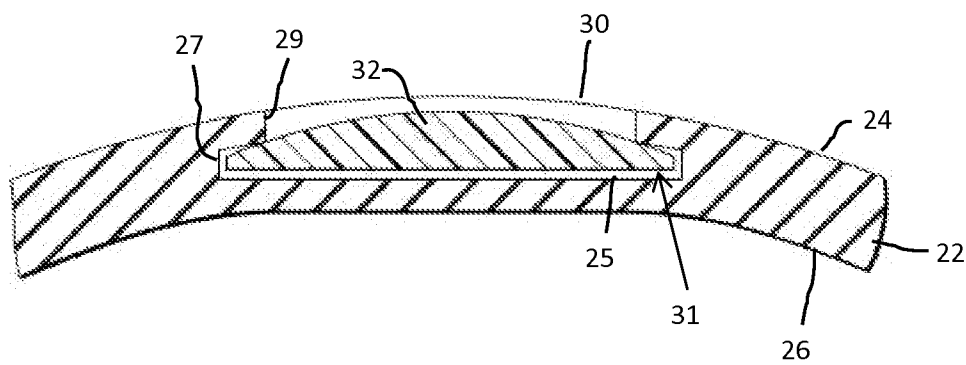
**FIG. 3**



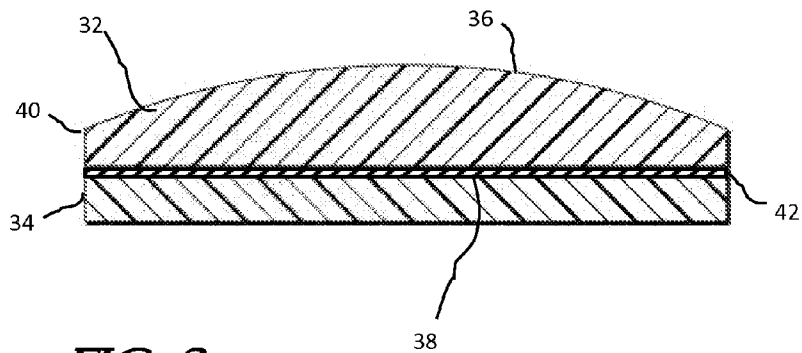
**FIG. 4**



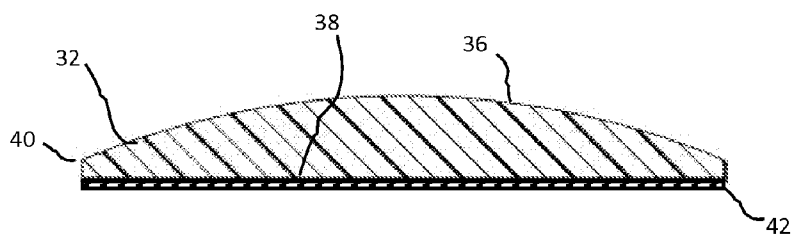
**FIG. 5**



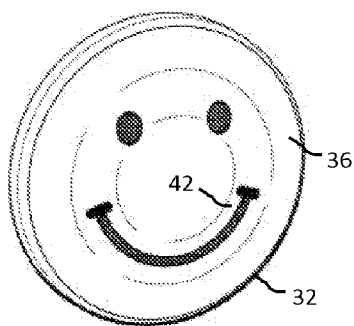
**FIG. 6**



*FIG. 8*



*FIG. 7*



*FIG. 9*

## BRACELET OR THE LIKE HAVING INTERCHANGEABLE PIECES

**[0001]** This application claims the benefit of earlier-filed U.S. Provisional Patent Application No. 61/706,942, filed 28 Sep. 2012, "Facebracelets," inventor Thomas Michael MIHALYO.

### BACKGROUND OF THE INVENTION

**[0002]** 1. Field of the Invention

**[0003]** The present invention relates generally to the field of bracelets, more specifically to a bracelet with interchangeable pieces allowing a user to customize it.

**[0004]** 2. General Background and State of the Art

**[0005]** Bracelets, though marketed with various styles, seem mostly limited to one specific look or limited in the customization they offer a user. The inventor surmised that consumers might well appreciate a bracelet which a user could customize, as with a variety of different pieces.

### INVENTION SUMMARY

**[0006]** It is an object of the present invention to provide a customizable bracelet or the like.

**[0007]** In accordance with these objects and with others which will be described and which will become apparent, an exemplary embodiment of the bracelet in accordance with the present invention comprises a bracelet body having at least one socket portion and a customizing piece operatively coupled with said socket portion.

**[0008]** An ornamental element may be operatively coupled with said customizing piece. A plurality of ornamental elements may be operatively coupled with said customizing piece and mutually operatively coupled.

**[0009]** A filling body may be disposable within said socket portion and operatively coupled with said customizing piece. The ornamental element may be operatively coupled with said filling body. At least one of said plurality of ornamental elements may be operatively coupled with said filling body.

**[0010]** A first and second plurality of ornamental elements may be mutually operatively coupled in manually manipulable rotational relation with visible optical effect, as, for example, in manually manipulable magnetic relation with visible optical effect.

**[0011]** The filling body and said customizing piece may be mutually magnetically coupled with visible effect.

**[0012]** Also in accordance with these objects and with others which will be described and which will become apparent, an exemplary embodiment of a bracelet or personal decorative amusement item in accordance with the present invention comprises a first body having at least one socket portion; a customizing piece operatively coupled with said socket portion; and a second body, in manipulable relation to said first body, said first and second bodies being mutually operatively coupled with visible effect on at least one of said bodies.

**[0013]** The second body may be magnetically active (attractive) and an ornamental element may be disposed in said socket portion in operative relation with said customizing piece, said second body and said ornamental element being mutually magnetically coupled.

**[0014]** A filling body may be disposed in said socket portion and be operatively coupled with said customizing piece.

**[0015]** The second body may be magnetically active (attractive) and an ornamental element may be disposed in said socket portion in operative relation with said customizing

piece, said second body and said ornamental element being mutually magnetically coupled.

### BRIEF DESCRIPTION OF THE DRAWINGS

**[0016]** For a further understanding of the objects and advantages of the present invention, reference should be had to the following detailed description, taken in conjunction with the accompanying drawing, in which like parts are given like reference numbers and wherein:

**[0017]** FIG. 1 is a perspective view of a bracelet in accordance with the present invention;

**[0018]** FIG. 2 is an edgewise elevational view thereof;

**[0019]** FIG. 3 is a side elevational view thereof;

**[0020]** FIG. 4 is an enlarged partial perspective view thereof;

**[0021]** FIGS. 5 and 6 are side sectional views of socket portions of embodiments thereof;

**[0022]** FIGS. 7 and 8 are side sectional views of components of embodiments thereof thereof; and

**[0023]** FIG. 9 is a perspective view of a component thereof

### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

**[0024]** The invention will now be described with reference to FIG. 1, a perspective view of a FIRST EXEMPLARY EMBODIMENT of the bracelet in accordance with the present invention, shown generally at 20, having a generally band-like bracelet body 22 which has a front surface 24, a back surface 26, lateral surfaces 28, and at least one socket portion 30 (typically a plurality thereof) in which is disposed a customizing piece 32.

**[0025]** FIG. 2, an edgewise view of the embodiment of FIG. 1, shows the bracelet body 22, back surface 26, lateral surface 28, front surface 24, and socket portion 30 with customizing piece 32 disposed therein. The bracelet body 22 is formed of silicone rubber in sizes ranging from small (having six socket portions 30 spaced apart), medium (seven socket portions 30) and large (eight) to accommodate different wrist sizes and different preferences for looseness of fit. The bracelet body 22 has an overall thickness (front surface 24 to back surface 26) of between approximately 0.4 cm and approximately 1.0 cm and a width (lateral surface 28 to lateral surface 28) of between approximately 1.0 cm and approximately 5.0 cm.

**[0026]** FIG. 3, a side view of the embodiment of FIG. 1, shows the bracelet body 22, front surface 24, lateral surface 28, and socket portion 30 with customizing piece 32.

**[0027]** FIG. 4, an enlarged perspective view of a portion of the bracelet body 22, shows one socket portion 30, the front surface 24, lateral surface 28, and customizing piece 32.

**[0028]** FIG. 5, a side cross-sectional view of the embodiment of FIG. 1, shows the bracelet body 22, back surface 26, and front surface 24. The front surface 24 has a backward-recessed portion 25, a sidewall 27 extending frontward from the backward-recessed portion 25, and a retaining lip 29 extending centrally from the sidewall 27 to partially cover the backward-recessed portion 25. The backward-recessed portion 25 has a diameter or overall size of between approximately 1.0 cm and approximately 4.5 cm. The sidewall 27, which surrounds the backward-recessed portion 25, has a height of between approximately 0.3 cm and 0.6 cm. The retaining lip 29 extends centrally from the sidewall 27 for between approximately 0.2 cm and approximately 0.5 cm and has a thickness of approximately 0.1 cm to 0.3 cm. The

backward-recessed portion 25, sidewall 27, and retaining lip 29 together form a socket space pointed to by arrow 31. A filling body 34 partially occupies the socket space. A customizing piece 32 partially occupies the socket space 31 above the filling body 34. The retaining lip 29 and customizing piece 32 cooperate to achieve an interference fit which holds the customizing piece 32 and the filling body 34 in the socket space 31.

[0029] With continued reference to the side cross-sectional view of FIG. 5, the socket space 31, filling body 34 and customizing piece 32 are shaped and sized so that, when the filling body 34 and the customizing piece 32 are placed together in the socket space 31 as shown, they are held securely therein. The filling body 34 as shown in this embodiment has a substantially cylindrical form, a diameter of between approximately 1.0 cm and approximately 4.5 cm, and a height of between 0.3 cm and 0.6 cm, and is formed of any material suitable for supporting the customizing piece 32 against the retaining lip 29. Such materials include silicone rubber, thermoplastic or other resinous material, wood, paper, vitreous material, metal, and magnetic materials. The customizing piece 32 as shown in this embodiment has a somewhat lenticular discoid form, a diameter of between approximately 1.0 cm and approximately 4.5 cm, and a height of between 0.1 cm and 0.6 cm centrally, tapering to approximately 0.1 cm peripherally. In the embodiment shown, the customizing piece 32 is formed of a transparent resinous material. In alternative embodiments considered to be within the scope of the present invention, the socket space 31, customizing piece 32, and filling body 34 may take other shapes, such as ovoid, polygonal, or the like, and be dimensioned so that a good mutual fit is achieved.

[0030] FIG. 6, a side cross-sectional view of a SECOND EXEMPLARY EMBODIMENT of the bracelet in accordance with the present invention, shows a bracelet body 22 having a lateral surface 28, a back surface 26, a front surface 24, a backward-recessed portion 25 of the front surface 24, a sidewall 27 extending frontward from the backward-recessed portion 25, and a retaining lip 29 extending centrally from the sidewall 27 to partially cover the backward-recessed portion 25. The backward-recessed portion 25, sidewall 27, and retaining lip 29 together form a socket space 31. A customizing piece 32 occupies the socket space 31. The retaining lip 29 and customizing piece 32 cooperate to achieve an interference fit which holds the customizing piece 32 in the socket space 31. The customizing piece 32 in this second exemplary embodiment has the dimensions and other physical characteristics described herein with reference to the first exemplary embodiment of the bracelet in accordance with the present invention. The socket space 31 in this second exemplary embodiment has the dimensions described with reference to the first exemplary embodiment, except that sidewall 27 has a height of only between approximately 0.1 cm and approximately 0.4 cm, resulting in a somewhat flatter socket space 31 and potentially a flatter overall bracelet body 22.

[0031] FIG. 7, a side cross-sectional view of a customizing piece 32 in accordance with the first exemplary embodiment and the second exemplary embodiment of the present invention, shows the customizing piece 32 having a displaying portion 36, an ornament interfacing portion 38, and a retaining portion 40. The retaining portion 40 is indicated in this figure as being the periphery of the customizing piece 32, consistent with an interference fit involving the sidewall 27; however, the operative coupling of the customizing piece 32

with the retaining lip 29 can be seen in FIG. 5 and FIG. 6 to involve the displaying portion 36 peripherally as well. The displaying portion 36 is transmissive of light. Optionally, the displaying portion 36 includes a lensing feature such as, for example, a Fresnel lens, a plurality of miniature lenses, any combination of positive and negative cylindrical and spherical lenses, such as may economically be produced in the process of molding of a customizing piece 32 from a light-transmissive resinous or vitreous material. Also optionally, the displaying portion 36 may include a light-modifying feature such as a chemical optical filter, a polarizing filter, or a reflective, antireflective or color-scattering interferometric optical coating, such as can be applied to or incorporated in the displaying portion 36 through common commercial methods. The ornament interfacing portion 38 is transmissive of light. Optionally, the ornament interfacing portion 38 includes a lensing or light-modifying feature as described herein with reference to the displaying portion 36. An ornamental element 42 is operatively coupled with the customizing piece 32. As shown in this figure, the ornamental element 42 is operatively coupled with the customizing element 32, such as by being illuminated by ambient light through the displaying portion 36 and by being visible through the displaying portion 36. The ornamental element 42 is operatively coupled with the ornament interfacing portion 38, such as by adhesion thereto. The ornamental element 42 includes a sheet of metal, magnetic material, paper, resinous material, or other material and bears a graphic design or other visible feature or color. Alternatively, the ornamental element 42 includes a graphic or colored element printed directly on the ornament interfacing portion 38 or contained within the customizing piece 32. Optionally, the ornamental element 42 may include a fluorescent or phosphorescent body or material.

[0032] FIG. 8, a side cross-sectional view of a customizing piece 32 in accordance with a THIRD EXEMPLARY EMBODIMENT of the present invention and the second exemplary embodiment of the present invention, shows the customizing piece 32 having a displaying portion 36, an ornament interfacing portion 38, and a retaining portion 40. The retaining portion 40 is indicated in this figure as being the periphery of the customizing piece 32, consistent with an interference fit involving the sidewall 27; however, the operative coupling of the customizing piece 32 with the retaining lip 29 can be seen in FIG. 5 and FIG. 6 to involve the displaying portion 36 peripherally as well. The displaying portion 36 is transmissive of light. Optionally, the displaying portion 36 includes a lensing feature such as, for example, a Fresnel lens, a plurality of miniature lenses, any combination of positive and negative cylindrical and spherical lenses, such as may economically be produced in the process of molding of a customizing piece 32 from a light-transmissive resinous or vitreous material. Also optionally, the displaying portion 36 may include a light-modifying feature such as a chemical optical filter, a polarizing filter, or a reflective, antireflective or color-scattering interferometric optical coating, such as can be applied to or incorporated in the displaying portion 36 through common commercial methods. The ornament interfacing portion 38 is transmissive of light. Optionally, the ornament interfacing portion 38 includes a lensing or light-modifying feature as described herein with reference to the displaying portion 36.

[0033] With continued reference to FIG. 8, also shown is a filling body 34 having an ornament interfacing portion 38. An ornamental element 42 is operatively coupled with the filling

body 34 (such as by adhesion or even by mere confinement along with the filling body 34). The ornamental element 42 is operatively coupled with the customizing piece 32, such as optically by virtue of incidence, reflection or emission of light. As shown in this figure, the ornamental element 42 is adherent to the ornament interfacing portion 38 of the filling body 34, is illuminated by ambient light through the displaying portion 36 of the customizing piece 32, and is visible through the displaying portion 36 of the customizing piece 32. The ornamental element 42 includes materials, graphics, or the like as described elsewhere herein.

[0034] FIG. 9, a perspective view of a customizing piece 32 in accordance with the present invention, shows an ornamental element 42 (smiley face) visible through the displaying portion 36 of the customizing piece 32.

[0035] With dual reference to FIG. 8 and to FIG. 7, the customizing piece 32 having ornamental element 42 as shown in FIG. 7 is combinable with the filling body 34 having another ornamental element 42 as shown in FIG. 8, resulting in yet a FOURTH EXEMPLARY EMBODIMENT of the present invention. In this embodiment, an operative relation may be established in the relative positions of the ornamental element 42 operatively coupled with the filling body 34 and the ornamental element operatively coupled with the customizing piece 32, such that a user may alter the outwardly observable appearance of the customizing piece 32 by rotating same relative to the filling body 34.

[0036] The first through fourth exemplary embodiments of the present invention may be modified to result in a FIFTH EXEMPLARY EMBODIMENT, in which the ornamental element 42 (wherever located), the filling body 32, or the customizing piece 32 itself includes a cavity (not shown) and the cavity includes a gas, liquid, solid, liquid crystal, or other item for generating visual or audible effect (audible as, for example, granules or beads interacting with what confines it to make a rattling or jingling sound).

[0037] In a SIXTH EXEMPLARY EMBODIMENT of the present invention, the socket portion 30, filling body 34, customizing piece 32, or any ornamental element 42 included therewith may include a magnetic body or magnetic material, or a magnetically attractable body, embedded or enclosed therein or adherent or adjacent thereto. Such included items (magnetic, magnetically attractable) may be present in various combinations in a plurality of these recited structures (socket portion 30, filling body 34, customizing piece 32, any ornamental element 42), resulting in further operative coupling between said structures and between the items they enclose. For example, depending on the position of a visible, magnetically attractable body associated with one of these structures relative to a magnetic body associated with another of them, the visible body may alter its appearance. In particular, for example, iron filings or the like will organize themselves relative to a magnetic field. Additionally, magnetic interactions may enhance retention of the customizing piece 32 in the socket space 31. Additionally, an external magnet or magnetically attractable body (visible or not) may be provided along with the bracelet in accordance with the present invention (such as, for example, by including a magnet in a ring to be worn on the opposite hand); a wearer may seek amusement by manipulating the external magnetic body relative to the bracelet to modify the behavior of items contained in one or both thereof.

[0038] With reference to the first through sixth exemplary embodiments of the present invention, a user may procure a

bracelet body 22, at least one customizing piece 32, and at least one ornamental element 42 (perhaps already incorporated in the customizing piece 32), may affix the ornamental element 42 to the ornament interfacing portion 38 of the customizing piece 32 if desired, and then may insert the customizing piece 32 in a socket portion 30 of the bracelet body 22 (along with a filling body, in the case of the first exemplary embodiment), resulting in a customized bracelet.

[0039] As can be seen from the drawing figures and from the description, each embodiment of the bracelet in accordance with the present invention solves a problem by addressing the need to customize a bracelet in various ways with interchangeable components.

[0040] While the specification describes particular embodiments of the present invention, those of ordinary skill can devise variations of the present invention without departing from the inventive concept.

[0041] Although specific embodiments have been illustrated and described herein, those of ordinary skill in the art will appreciate that any arrangement calculated to achieve same purposes can be substituted for the specific embodiments shown. This disclosure is intended to cover any and all adaptations or variations of various embodiments of the invention. It is to be understood that the above description has been made in an illustrative fashion, and not a restrictive one. Combinations of the above embodiments, and other embodiments not specifically described herein will be apparent to those of skill in the art upon reviewing the above description. The scope of various embodiments of the invention includes any other applications in which the above structures and methods are used. Therefore, the scope of various embodiments of the invention should be determined with reference to the appended claims, along with the full range of equivalents to which such claims are entitled.

[0042] In the foregoing description, if various features are grouped together in a single embodiment for the purpose of streamlining the disclosure, this method of disclosure is not to be interpreted as reflecting an intention that the claimed embodiments of the invention require more features than are expressly recited in each claim. Rather, as the following claims reflect, inventive subject matter lies in less than all features of a single disclosed embodiment. Thus the following claims, and such other claims as may later be added, are hereby incorporated into the description of the embodiments of the invention, with each claim standing on its own as a separate preferred embodiment.

We claim:

1. A bracelet, comprising:
  - a bracelet body having at least one socket portion; and
  - a customizing piece operatively coupled with said socket portion.
2. Apparatus as set forth in claim 1, comprising an ornamental element operatively coupled with said customizing piece.
3. Apparatus as set forth in claim 1, comprising a plurality of ornamental elements operatively coupled with said customizing piece and mutually operatively coupled.
4. Apparatus as set forth in claim 2, comprising a filling body disposable within said socket portion and operatively coupled with said customizing piece.
5. Apparatus as set forth in claim 4, wherein said ornamental element is operatively coupled with said filling body.

6. Apparatus as set forth in claim 5, wherein at least one of said plurality of ornamental elements is operatively coupled with said filling body.

7. Apparatus as set forth in claim 3, wherein at least a first and second of said plurality of ornamental elements are mutually operatively coupled in manually manipulable rotational relation with visible optical effect.

8. Apparatus as set forth in claim 7, wherein at least a first and second of said plurality of ornamental elements are mutually operatively coupled in manually manipulable magnetic relation with visible optical effect.

9. Apparatus as set forth in claim 4, wherein said filling body and said customizing piece are mutually magnetically coupled with visible effect.

10. A personal decorative amusement item, comprising:  
a first body having at least one socket portion;  
a customizing piece operatively coupled with said socket portion; and

a second body, in manipulable relation to said first body, said first and second bodies being mutually operatively coupled with visible effect on at least one of said bodies.

11. Apparatus as set forth in claim 10, wherein said second body is magnetically active (attractive) and an ornamental element is disposed in said socket portion in operative relation with said customizing piece, said second body and said ornamental element being mutually magnetically coupled.

12. Apparatus as set forth in claim 10, wherein a filling body is disposed in said socket portion and is operatively coupled with said customizing piece.

13. Apparatus as set forth in claim 11, wherein said second body is magnetically active (attractive) and an ornamental element is disposed in said socket portion in operative relation with said customizing piece, said second body and said ornamental element being mutually magnetically coupled.

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