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(54) ATHLETIC MEDICAL BRACELET

(76) Inventor: **John Mendes**, South Jordan, UT (US)

Correspondence Address:
RADER, FISHMAN & GARAUER PLLC
10653 SOUTH RIVER FRONT PARKWAY
SUITE 150
SOUTH JORDAN, UT 84095 (US)

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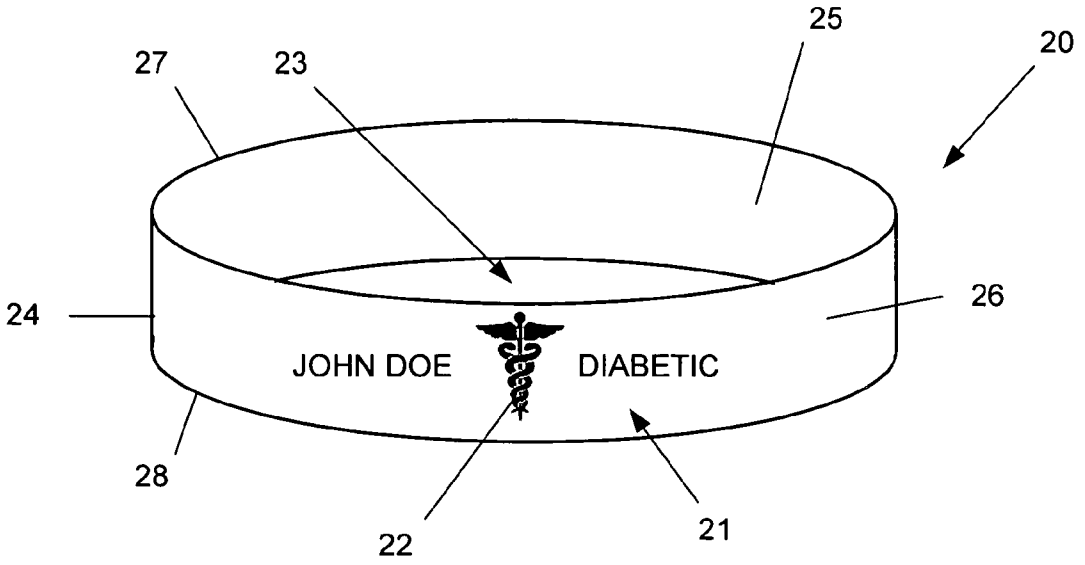
(57) **ABSTRACT**

A medical information bracelet includes a one piece continuous member, the continuous member including an elastic, hypoallergenic material, wherein the bracelet further includes an individual's medical information affixed to the bracelet.



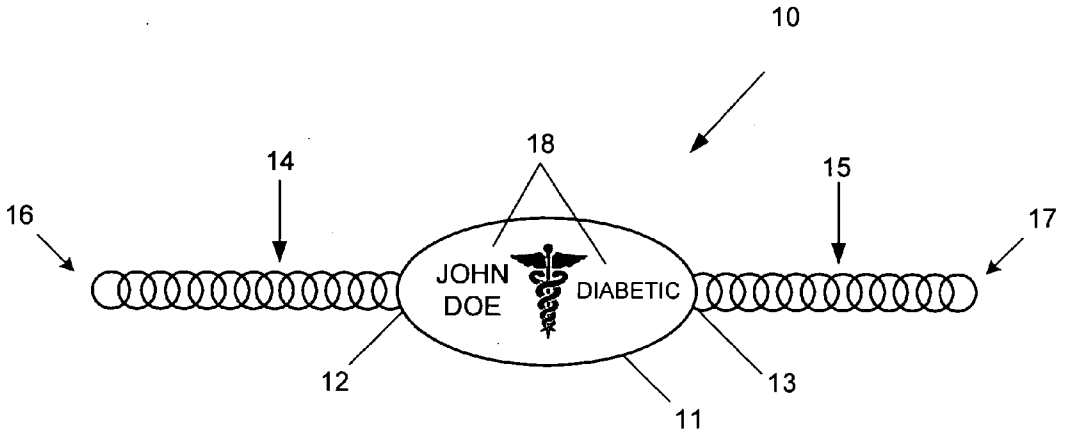


FIG. 1
PRIOR ART

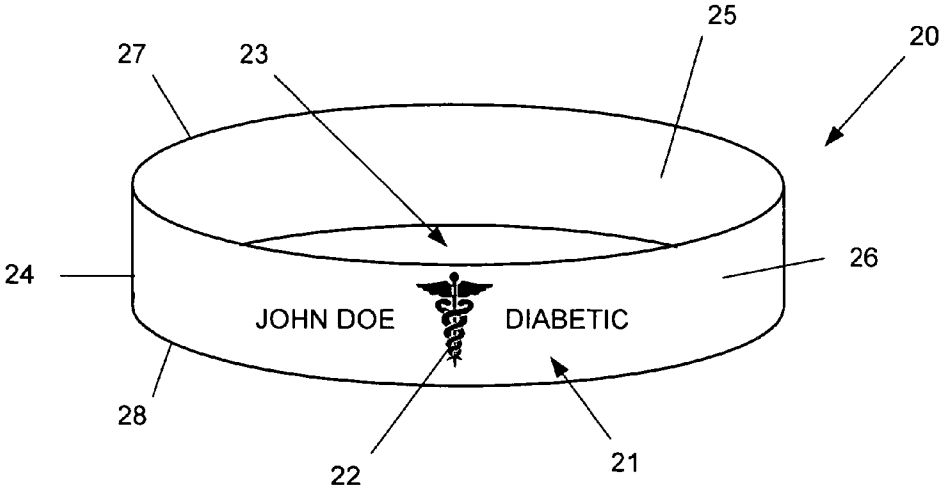


FIG. 2

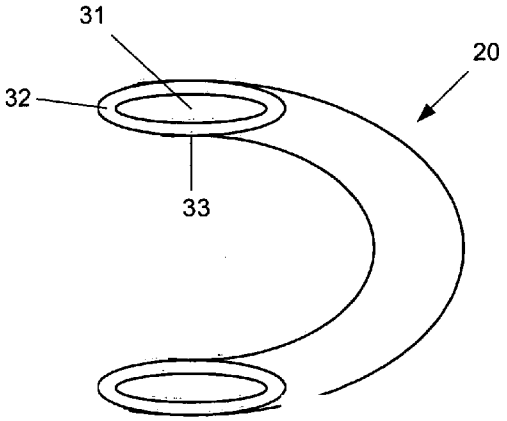


FIG. 3a

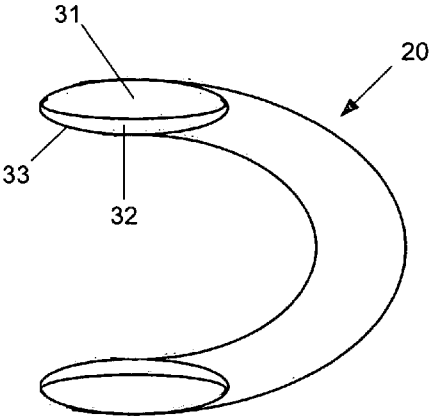


FIG. 3b

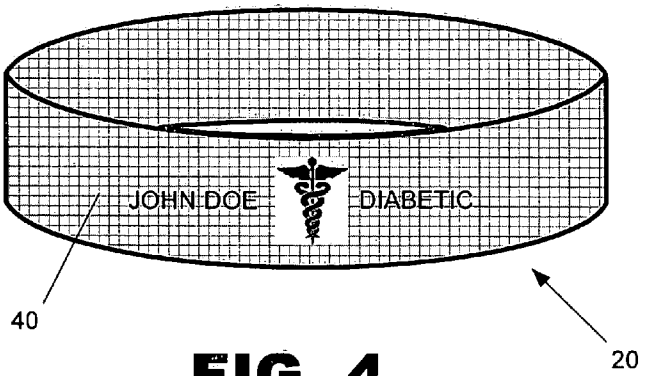


FIG. 4

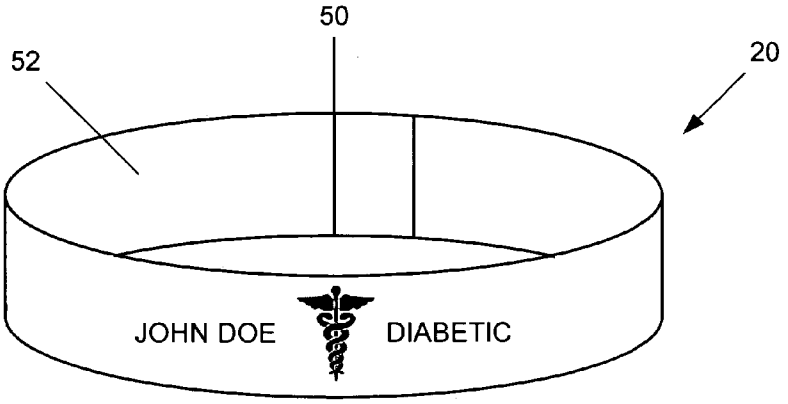


FIG. 5

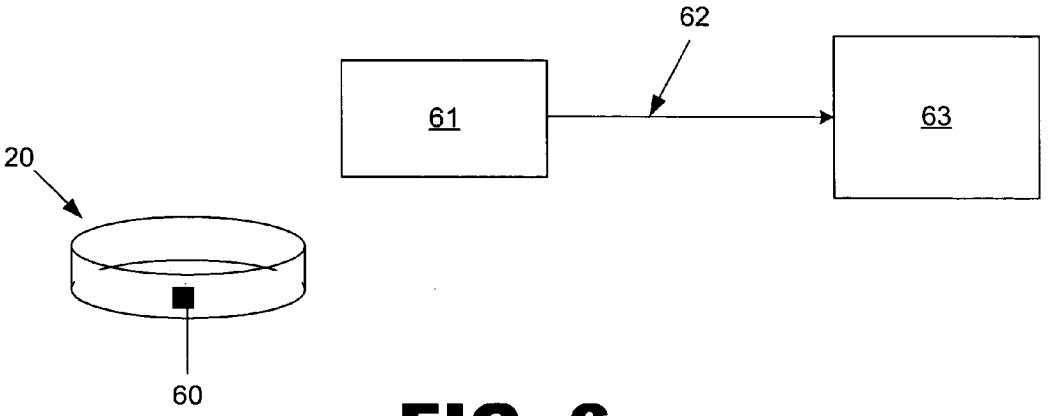


FIG. 6

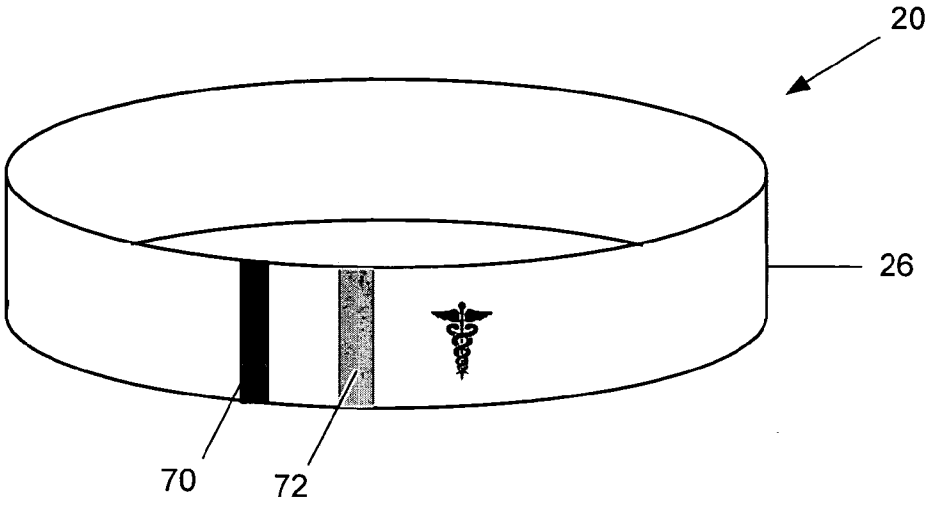


FIG. 7

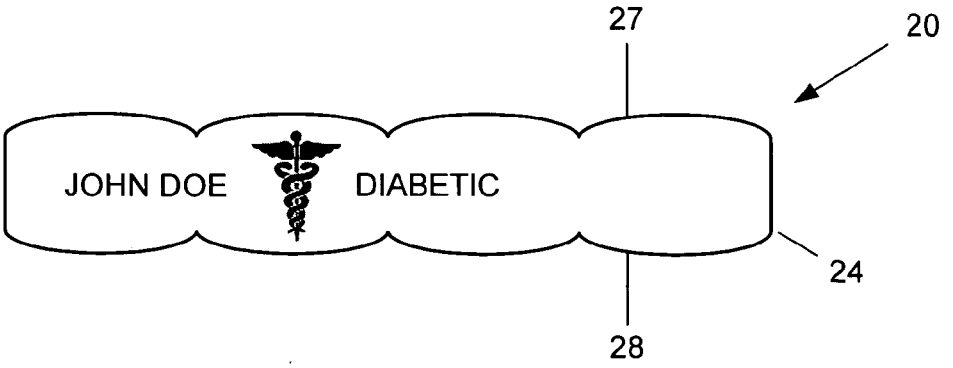


FIG. 8

ATHLETIC MEDICAL BRACELET

BACKGROUND

[0001] Millions of individuals suffer from certain medical illnesses that at times require emergency medical care. Often, these individuals suffer attacks where medical information is not readily available to those who must render assistance to these individuals. In order to inform the public of special medical symptoms that must be respected during emergencies, these people are provided with medical alert tags with indicia thereon that identify the individual's illness, medical history, or condition and gives instructions as to the proper procedure to follow if the individual should be stricken with an attack. Ambulance and medical personnel are trained to look for such medical alert tags and to follow the instructions thereon.

[0002] These tags, however, are very inconvenient, and some times unusable, for athletes and individuals participating in sports activities. Sports subject individuals to the risks of injury or medical attacks. Medical alert tags such as cards, record books, and electronic devices cannot be conveniently carried on an athlete's person when participating in active sports or sports requiring special attire or uniforms.

[0003] The most common solution to these problems has been the use of metal bracelets worn around ankles or wrists. These metal bracelets are also unsatisfactory for many reasons. Many people are allergic to metals, and thus maintaining a metal bracelet in close contact with skin can many times cause severe allergic reactions. The metal bracelets can also be very uncomfortable due to their weight, bulk, and rigidity. Metal bracelets can also be susceptible to corrosion, especially when worn in water sports or when exposed to perspiration. These bracelets are also capable of causing skin burns when the bracelets themselves become hot due to exposure to heat or sunlight. Finally, metal bracelets pose a danger to others participating in athletic events with a person wearing a metal bracelet, and for this reason many sports do not permit athletes to wear metal jewelry, such as a medical alert bracelet, during competition.

SUMMARY

[0004] A medical information bracelet includes a one piece continuous member, the continuous member including an elastic, hypoallergenic material, wherein the bracelet further includes an individual's medical information affixed to the bracelet.

BRIEF DESCRIPTION OF THE DRAWINGS

[0005] The accompanying drawings illustrate various embodiments of the present system and method and are a part of the specification. The illustrated embodiments are merely examples of the present system and method and do not limit the scope thereof.

[0006] **FIG. 1** depicts a convention medical alert metal bracelet.

[0007] **FIG. 2** illustrates a perspective view of the present medical bracelet, according to one exemplary embodiment.

[0008] **FIG. 3***a* depicts a cut-away view of an exemplary embodiment of the medical bracelet.

[0009] **FIG. 3***b* depicts a cut-away view of an exemplary embodiment of the medical bracelet.

[0010] **FIG. 4** illustrates a perspective view of the medical bracelet, according to one exemplary embodiment.

[0011] **FIG. 5** depicts illustrates a perspective view of the medical bracelet, according to one exemplary embodiment.

[0012] **FIG. 6** is a block diagram illustrating the medical bracelet and manner of using it, according to one exemplary embodiment of.

[0013] **FIG. 7** illustrates a perspective view of the medical bracelet, according to one exemplary embodiment.

[0014] **FIG. 8** shows a side view of one embodiment of the medical bracelet.

[0015] Throughout the drawings, identical reference numbers designate similar, but not necessarily identical, elements.

DETAILED DESCRIPTION

[0016] An exemplary athletic medical bracelet, and a method of using it, is disclosed herein. More specifically, a bracelet is disclosed that is hypoallergenic, comfortable, corrosion-resistant, pliable or elastic, and safe for use in participating in sports and athletics.

[0017] In the following description, for purposes of explanation, numerous specific details are set forth in order to provide a thorough understanding of the present athletic medical bracelet and method for using it. It will be apparent, however, to one skilled in the art, that the present method may be practiced without these specific details. Reference in the specification to "one embodiment" or "an embodiment" means that a particular feature, structure, or characteristic described in connection with the embodiment is included in at least one embodiment. The appearance of the phrase "in one embodiment" in various places in the specification are not necessarily all referring to the same embodiment.

[0018] As used in the present specification and the appended claim, the term "continuous" is meant to be understood broadly as having no free or loose ends, thus forming a complete, one piece loop or ring. Additionally, the term "elastic" is meant to be understood as a characteristic of a material or substance that allows the material or substance to stretch and then return substantially to its pre-stretched shape or size.

[0019] Turning now to the Figures, **FIG. 1** illustrates a traditional metal medical alert bracelet (**10**). The metal bracelet (**10**) contains an identification tag (**11**) attached at each side (**12, 13**) by two chains (**14, 15**). When worn by an individual, the chains (**14, 15**) are fastened to each other at each of their ends (**16, 17**), typically by clasps, in order to form a complete loop, thereby preventing the bracelet (**10**) from falling off an individual's wrist or ankle. Only the identification tag (**11**) is able to display information (**18**) regarding the individual.

[0020] **FIG. 2** illustrates an exemplary embodiment of the athletic medical bracelet (**20**) described herein in detail. The athletic medical bracelet (**20**) illustrated in **FIG. 2** forms a thin band (**24**) that is continuous and substantially circular. The band (**24**) has an inside surface (**25**) and an outside surface (**26**), and defines a central opening (**23**) through

which an individual's arm, wrist, hand, ankle, leg or foot passes. Medical and/or personal information **(21)** regarding the individual is affixed to either the outside surface **(26)** or inside surface **(25)** of the bracelet **(20)** such that it can be easily read or accessed by a person rendering assistance. A caduceus **(22)** or other medical symbol may also be displayed to alert other persons that the bracelet **(20)** contains medical information.

[0021] According to one exemplary embodiment, the athletic medical bracelet **(20)** is made from an elastic material that allows the bracelet to slide over a hand or foot and fit around an individual's wrist, arm, ankle or leg without causing significant discomfort or restriction to blood flow. Further, the bracelet **(20)** is made from a hypoallergenic material in order to reduce discomfort and adverse skin reactions. Suitable hypoallergenic elastomers that may be used include, but are in no way limited to, natural rubber latex, Guayule latex, synthetic latex, butyl rubber, silicone, neoprene, polyurethane, nitrile rubber, polyvinylchloride (PVC), styrenic elastomers, vinyl, nylon, polypropylene, polyester and thermoplastic elastomer (TPE).

[0022] In another exemplary embodiment, as shown in **FIGS. 3***a* and **3***b,* the bracelet **(20)** is made of any elastomer **(31)** known to those of skill in the art, while the outer skin-contacting surfaces **(33)** of the bracelet are coated with a hypoallergenic material **(32)**, such as the hypoallergenic elastomers described above.

[0023] In another embodiment, shown in **FIG. 4**, the bracelet **(20)** is made from an elastic fabric **(40)**. Elastic fabrics are made from fibers that are knitted, woven, laced or braided. Fibers that may be used in the elastic fabric **(40)** include, but are not limited to, natural and regenerated fibers such as cotton, wool, silk, hair, fur, rayon, cashmere, linen, ramie and acetate. Suitable synthetic or manufactured fibers that may be used in the elastic fabric **(40)** include, but are not limited to, those made from polyurethane, spandex, nylon (polyamide), polyester, acrylic, tri-acetate and olefins (polypropylene and polyethylene). Any combination or blend of natural, regenerated, synthetic and manufactured fibers may also be used to increase or alter the elasticity of the fabric **(40)**. In sum, the bracelet **(20)** may be made from any polymer, material or fabric that is elastic and hypoallergenic at the skin-contacting surface(s).

[0024] In another embodiment, as shown in **FIG. 5**, the elastic portion **(50)** of the bracelet **(20)** is substantially smaller than the circumference of the bracelet **(20)**. In this embodiment, the non-elastic portion **(52)** is made from any material that is hypoallergenic, or that is coated with a hypoallergenic coating. Suitable materials for the non-elastic portion **(52)** include plastics, metals, and alloys. The elastic portion **(50)** may be made of any elastomer or elastic fabric that is hypoallergenic or coated with a hypoallergenic coating. The elastic portion **(50)** may be attached to the non-elastic **(52)** portion by any means, such as by gluing, taping, welding, stapling, chemical bonding, and other techniques known to those of skill in the art. In another embodiment, the bracelet **(20)** may contain two or more non-elastic portions **(50)** to provide more flexibility, and also for visual design enhancements.

[0025] The material used for the bracelet is also burn-resistant such that it does not burn the individual when the bracelet is exposed to heat and/or sunlight. Metal bracelets often become extremely hot to the touch when exposed to heat, and can cause severe burns when worn in direct contact with skin. This result can frequently occur when the individual is participating in outdoor sports; often resulting in the individual removing the bracelet when outdoors. The severity of burn injury is related to the rate at which heat is transferred from the heated substance to the skin, which depends on the heat capacity (specific heat) of the substance, temperature of the substance, duration of contact with the substance, and specific heat and conductivity of the local tissues. Human skin can tolerate temperatures as high as 40° C. (104° F.) for a relatively long time before irreversible injury occurs. Temperatures greater than this level cause an almost logarithmic increase in tissue destruction. Thus, a bracelet made from the materials described above, including plastics, elastomers, fabrics and similar coatings over metals and alloys, are not likely to become excessively hot because they have relatively high heat capacities and specific heat values. In accordance with the principles described herein, the bracelet can be made from any material that is burn-resistant, even when exposed to heat and/or sunlight.

[0026] Again referring to **FIG. 2**, the athletic medical bracelet **(20)** may be marked with medical and/or personal information **(21)** sufficient to allow emergency personnel and other persons to render appropriate and vital assistance in cases of emergency. Such information **(21)** may include the individual's name, illnesses, medical history, condition, required medications, allergies, personal physician(s) or doctor(s), emergency contact information and/or insurance information. In one embodiment, as shown in **FIG. 2**, the information **(21)** is affixed to a portion substantially smaller than the circumference of the bracelet. However, the information may be affixed substantially around the entire circumference of the bracelet, and may be affixed to both the inside and outside surfaces of the bracelet **(20)**.

[0027] The above-mentioned information may be affixed to the athletic medical bracelet **(20)** in any method known to those of skill in the art. For example, the information may be affixed to cloth or fabric bracelets by stitching, embroidery, iron-on, coloring, screen printing, sewing on a badge, and other techniques known to those of skill in the art. For polymeric bracelets the information may be affixed by painting, printing, embossing, engraving, etching, stitching, adhesive decals, adhesive labels, stickers, holographs, graphic overlays, screen printed decals, laminating, doming, stamping, writing, molding, imprinting, branding, casting, inscribing, molding, rubber-block printing, and the like.

[0028] The information may also be affixed in forms other than words and letters. In one exemplary embodiment, as shown in **FIG. 6**, the medical and/or personal information is encoded into a digital storage medium **(60)** embedded in the bracelet **(20)**. The digital storage medium includes, but is not limited to, a bar code, microchip or other electronic device capable of storing the individual's information. The information can be retrieved from the bracelet **(20)** by a digital retrieval device **(61)** and then routed through an interface circuit **(62)** which would connect directly to an output display module **(63)** for viewing and interpretation of the data by medical personnel. The digital retrieval device **(61)** may include a laser scanner head, a serial or parallel computer port, a digital phono jack, wireless AM or FM transmission, or fiber optic transmission, bar code scanner, inductive wand scanner or any other rapid and appropriate

digital means to retrieve the data in the event of an emergency. The output display module **(63)** includes, but is not limited to, an existing patient monitor, a personal computer or other computer or printing device capable of displaying the individual's information. In this manner vast amounts of information can be encoded onto the medical bracelet **(20)**. Bar codes or other scannable information can be affixed to the bracelet by any of the above-described methods, as well as other methods known to those of skill in the art.

[0029] In another exemplary embodiment illustrated in **FIG. 7**, the information may be affixed by color-coding the bracelet such that different colors represent different information, according to a specified color-coding scheme. For example, a green stripe may indicate a person is diabetic, a red stripe may indicate a person is anemic, etc. In one embodiment, as depicted in **FIG. 7**, the colors are displayed as colored stripes **(70, 72)** on the outer surface **(26)** of the bracelet **(20)**. In other embodiments the entire bracelet may be colored, contain horizontal stripes or contain other colored designs according to a color-coding scheme. The colored designs may be affixed to the bracelet by any of the above-described methods, as well as other methods known to those of skill in the art.

[0030] The athletic medical bracelet may also contain further additional components to improve its functionality and enhance its appearance. In one exemplary embodiment, the bracelet contains reflectors, reflective paint, glitter, or any other component known to those of skill in the art to make the bracelet reflective when used at night. When used at night, such as while biking or jogging, an automobile's headlights reflect off the bracelet to alert oncoming drivers of the user's presence. In another embodiment portions or all of the bracelet glow-in-the-dark. This is done by the use of glow-in-the-dark paint, stickers, thread, plastics, and any other technique known to those of skill in the art to make objects glow-in-the-dark.

[0031] As shown in **FIG. 2**, the bracelet **(20)** can be a solid, circular band **(24)** with straight upper and lower edges **(27, 28)**. However, the bracelet **(20)** is not limited to this design. In one exemplary embodiment, as shown in **FIG. 8**, the upper and lower edges **(27, 28)** of the band **(24)** of bracelet **(20)** contain curves and other designs to enhance or alter its visual appeal and appearance. Indeed, the design and shape of the bracelet is not limited to those shown in the Figures, but may include any design and/or shape desired.

[0032] The preceding description has been presented only to illustrate and describe exemplary embodiments of the present system and method. It is not intended to be exhaustive or to limit the system and method to any precise form disclosed. Many modifications and variations are possible in light of the above teaching. It is intended that the scope of the system and method be defined by the following claims.

1. A medical information bracelet comprising:

a one piece continuous member;

said continuous member including an elastic, hypoallergenic material;

wherein said bracelet further includes an individual's medical information affixed to said bracelet.

2. The bracelet of claim 1, wherein said medical information comprises one of said individual's illnesses, medical history, condition, required medications, allergies, a personal physician or doctor, emergency contact information, or insurance information.

3. The bracelet of claim 1, wherein said bracelet comprises an elastomer.

4. The bracelet of claim 3, wherein said elastomer is hypoallergenic.

5. The bracelet of claim 3, wherein said elastomer is coated with a hypoallergenic elastomer.

6. The bracelet of claim 1, wherein said bracelet comprises an elastic fabric.

7. The bracelet of claim 6, wherein said information is affixed by stitching, embroidery, iron-on, coloring, screen printing, sewing on a badge, or a combination thereof.

8. The bracelet of claim 1, wherein said bracelet comprises a metal or metal alloy coated with a hypoallergenic polymer.

9. The bracelet of claim 1, wherein said information is affixed by embossing, engraving, etching or printing.

10. The bracelet of claim 1, wherein said information is stored in a digital medium, a bar code, or a color-coding scheme.

11. The bracelet of claim 1, wherein said bracelet is burn-resistant.

12. A medical information bracelet comprising:

a one piece continuous member;

said continuous member including an elastic, hypoallergenic material configured to be allowed during sporting events;

wherein said bracelet further includes an individual's medical information affixed to said bracelet by engraving, printing, embossing, stitching, molding, or imprinting;

said medical information including one of said individual's name, illnesses, medical history, condition, required medications, allergies, a personal physician or doctor, emergency contact information, or insurance information.

13. The bracelet of claim 12, wherein said bracelet is configured to fit snugly around an individual's wrist, arm, leg or ankle.

14. The bracelet of claim 12, wherein said bracelet comprises a thermal insulator.

15. The bracelet of claim 12, wherein said elastic, hypoallergenic material comprises one of an elastomer, an elastic fabric, or a metal or metal alloy coated with a hypoallergenic polymer.

16. A method for forming a medical information bracelet configured to display an individual's medical information, comprising:

forming a one piece continuous member;

said continuous member including an elastic, hypoallergenic material configured to be allowed during sporting events;

wherein said bracelet further includes an individual's medical information affixed to said bracelet;

said medical information including one of said individual's, illnesses, medical history, condition, required

medications, allergies, a personal physician or doctor, emergency contact information, or insurance information.

17. The method of claim 16, wherein said bracelet is configured to fit snugly around an individual's wrist, arm, leg or ankle.

18. The method of claim 16, wherein said medical information is affixed by engraving, printing, embossing, stitching, molding, or imprinting said bracelet.

19. The method of claim 16, wherein said medical information is affixed to said

bracelet by a digital storage medium;

further comprising retrieving data from said digital storage medium; and

readably displaying said data.

* * * * *