



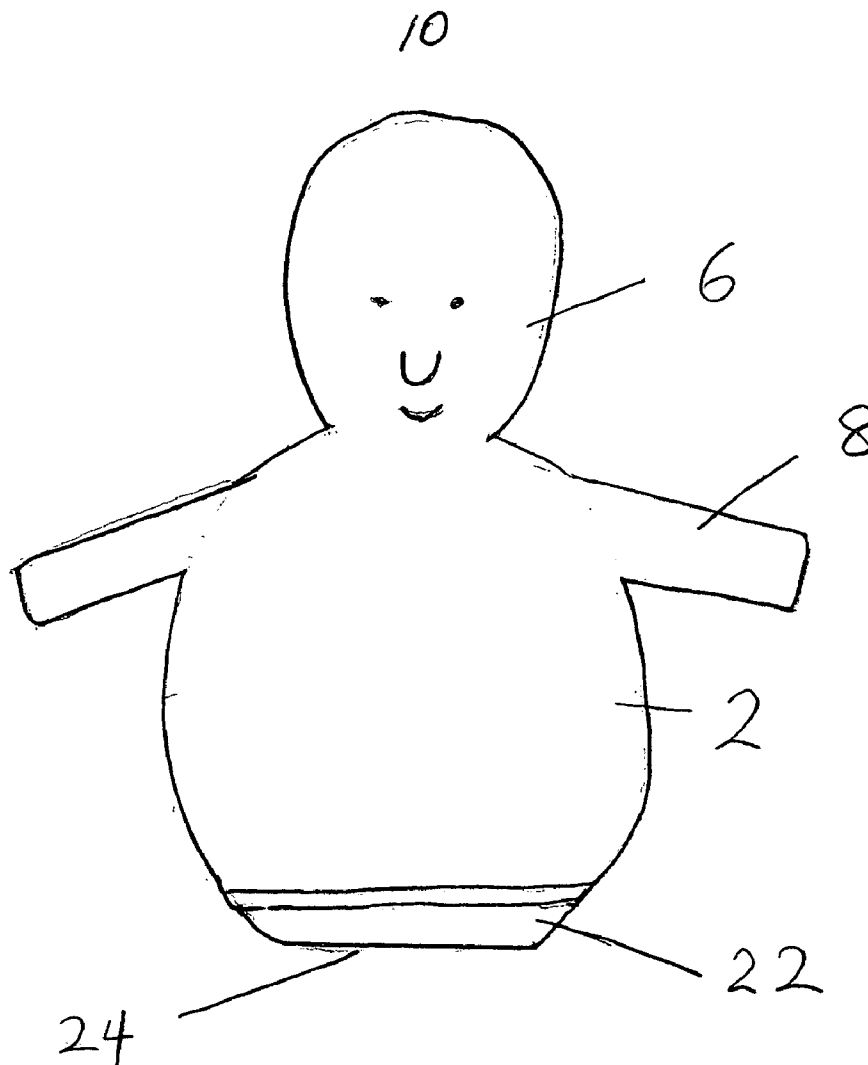
US 20050250412A1

(19) **United States**(12) **Patent Application Publication**(10) **Pub. No.: US 2005/0250412 A1****Yang**(43) **Pub. Date: Nov. 10, 2005**(54) **COLLAPSIBLE AND INFLATABLE TOY FIGURES**(76) Inventor: **Chin-Hua Yang**, Shenzhen (CN)

Correspondence Address:

S. Alex Liao**12 South First Street, Suite 905****San Jose, CA 95113 (US)**(21) Appl. No.: **10/840,063**(22) Filed: **May 5, 2004****Publication Classification**(51) **Int. Cl.⁷** **A63H 3/06**(52) **U.S. Cl.** **446/226**(57) **ABSTRACT**

A collapsible and inflatable fabric-covered toy figure having a fabric casing and a collapsible and inflatable inner tube therewithin. The fabric casing has a bottom opening through which the inner tube can be inserted into the fabric casing. The fabric casing has a head and torso portion while the inner tube has a top portion and a bottom portion conforming to the contours of the head and torso portions of the fabric casing, respectively. An air inlet is placed near the bottom of the inner tube. The inner tube has a flat bottom on which the inner tube or the toy figure can stand up. The head portion of the casing may additionally have a pair of eyes, nose, beard, and ears. Arm appendages with compressible padding materials are attached on the fabric casing, whereby after manufacturing the inner tube can be deflated and detached from the fabric casing for the ease of packing, storing, and transporting. When use, consumers can inflate the inner tube and put the fabric casing onto the inner tube for entertainment.



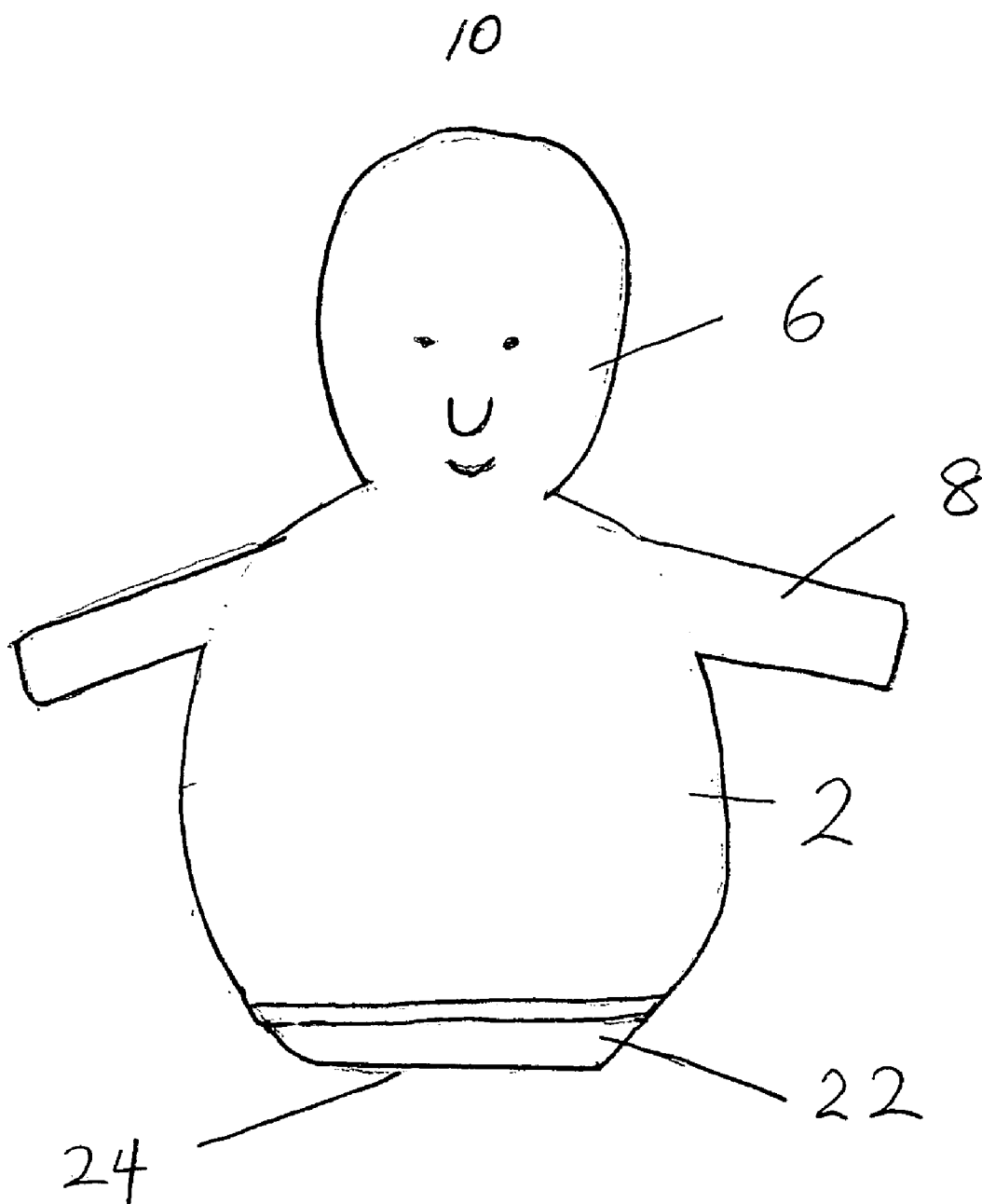


FIG 1

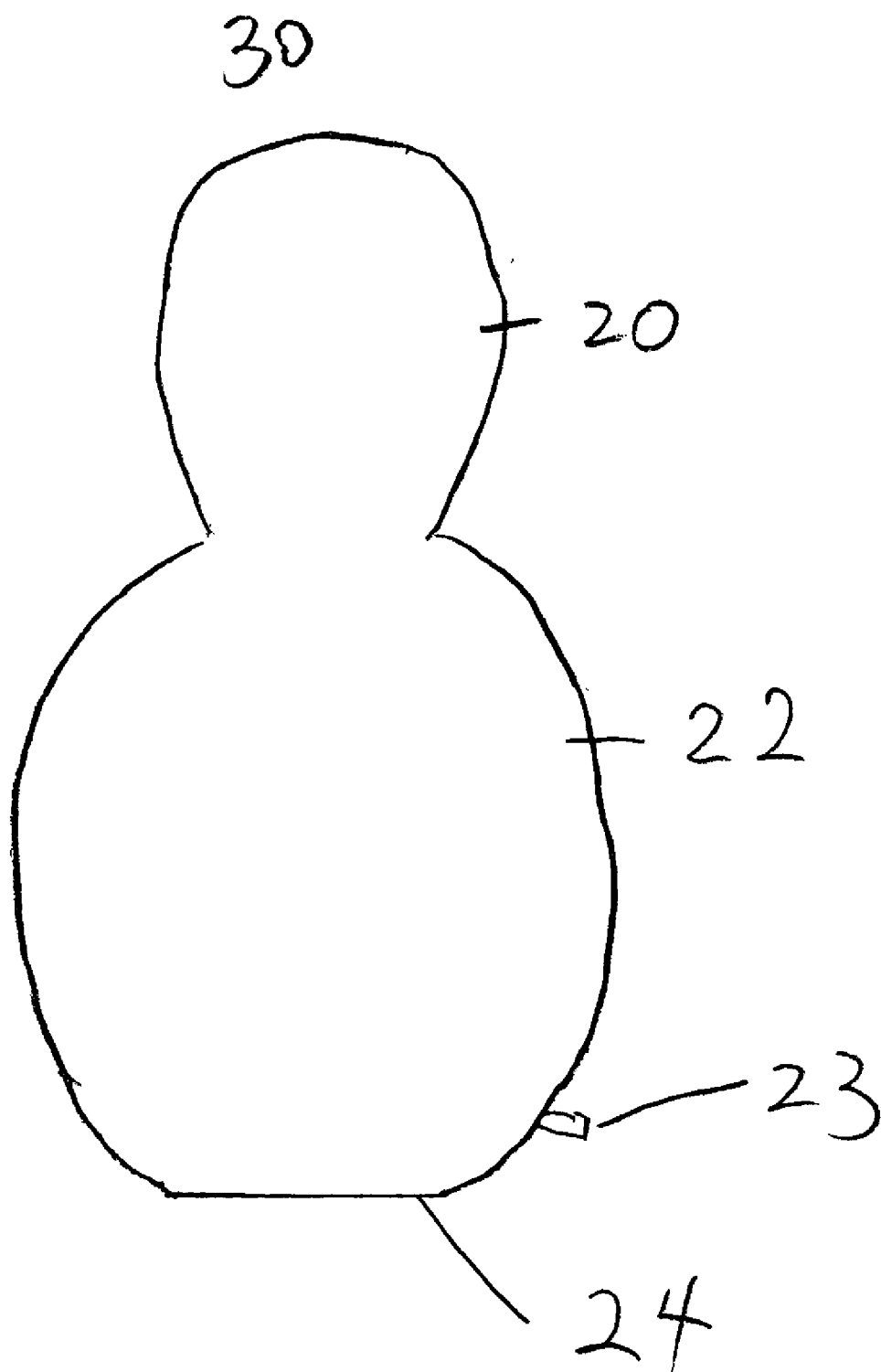


FIG 2

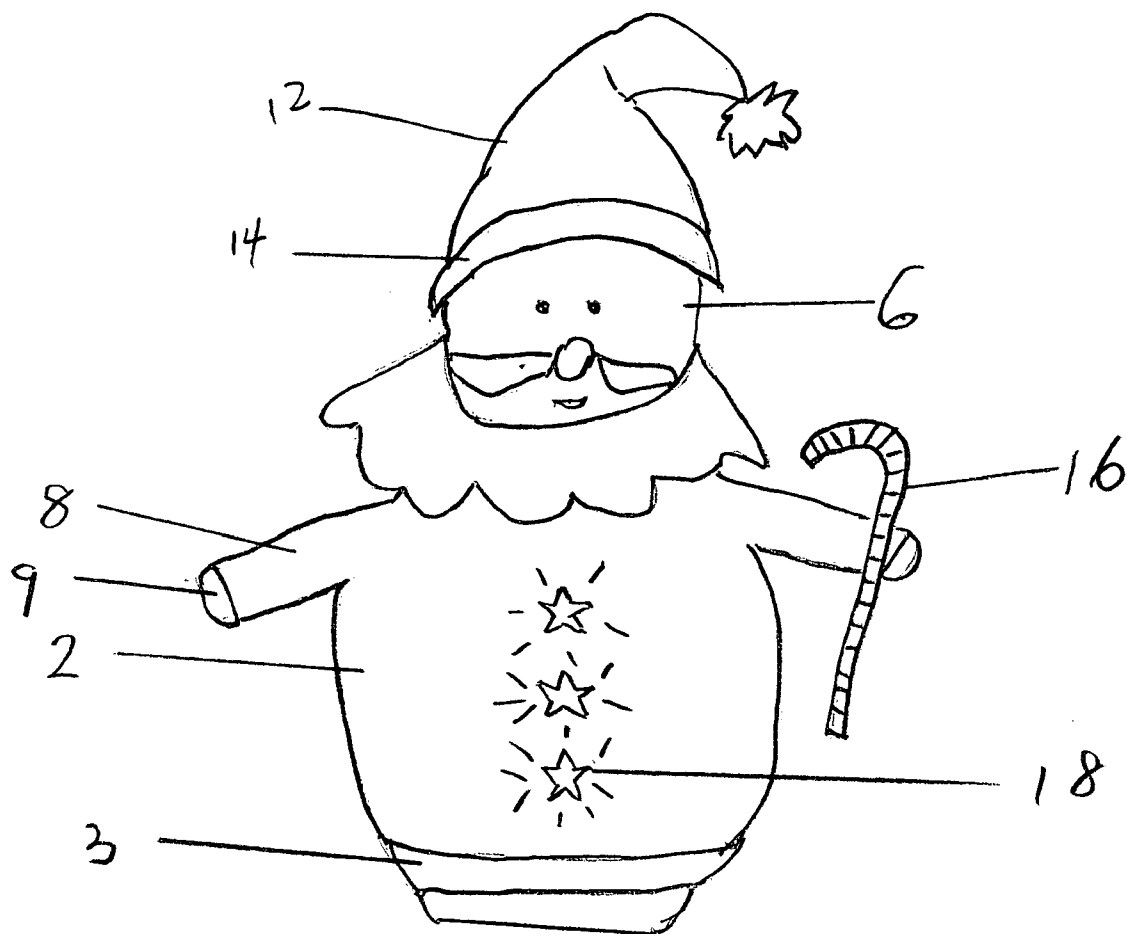


FIG 3

COLLAPSIBLE AND INFLATABLE TOY FIGURES

BACKGROUND OF THE INVENTION

[0001] 1. Field of Invention

[0002] This invention relates generally in fabric-covered toy figures, which are collapsible and inflatable for the convenience of packaging, storing, and transporting. The invention utilizes an inflatable inner tube configured to resemble a head portion and torso portion of the toy figure, while a fabric-casing with arm appendages and corresponding head and torso portions covers the inner tube.

[0003] 2. Description of the Prior Art

[0004] Toy figures, such as dolls and stuffed animals, are popular among children around the world. Conventional stuffed dolls generally have fabric exterior and compressible stuffing within the toy's body, including the head and limbs. However, manufacturing and marketing of stuffed toy figures can face some issues of costs and inconvenience. For example, there are relatively higher costs associated with stuffing materials used in the stuffed toy figures.

[0005] In addition, bulkiness of conventional toy figures can potentially become an issue in manufacturing and marketing. When conventional stuffed toy figures are made and packaged, they will take up higher storage and shipping costs because of the volume of the stuffed toy figures. Likewise, the stuffing inside the toy figures will also add to the total weights of the toys and hence, higher shipping costs.

[0006] There is another drawback in a conventional toy figure related to the issue of bulkiness. When a conventional toy figure in a packaging box is displayed in retail stores, it will take up shelf space because of its volume. As a result, retailers may not be willing to display a toy figure with a larger volume as opposed to collapsible toy figures with a lesser volume.

[0007] Finally, conventional fabric toy figures always face an issue of laundering. It is a common knowledge that stuffed fabric toy figures can get soiled easily from playing by children. Cleaning a stuffed toy in a washing machine may not be easy because conventional stuffed toys may use absorbent padding. In addition, a soiled and moist stuffed toy may also create health issues because bacteria may reside inside the padding.

[0008] A U.S. Pat. No. 2,685,758, issued to Oches, entitled Humpty Dumpty Inflatable Toy describes a toy formed by an outer fabric casing having an oval shape and an inflatable balloon is placed inside the casing. The face of the Humpty Dumpty is printed on the fabric casing and its arms and legs are extending from the casing. The Oches figure does not resemble a humanoid figure because it has no head or torso portions, but a face printed on the casing.

[0009] A U.S. Pat. No. 5,813,896 issued to Spector describes a collapsible stuffed toy figure. The stuffed toy figure has a fabric casing having a head portion, a neck portion, and a torso portion. There are also arm and legs appendages outside the casing. The essence of the invention was that the head portion and torso portion were filled by two inflatable balloons. The inflated balloons will assume the shape of the fabric casing. Also, the air inlets of the balloons project from slits on the fabric casing.

[0010] Nevertheless, there are drawbacks in Spector's invention. First, the balloons used may not be able to withstand outside pressures. For example, the balloons may burst if a child accidentally steps on the toy figure. Additionally, it is somewhat complex in manufacturing the fabric casing with two slits and closed chambers to store two balloons within the casing. Finally, Spector's toy figure cannot stand on its own because of its inherent design.

SUMMARY OF THE INVENTION

[0011] It is therefore the main object of this invention to provide a fabric covered toy figure having a head portion, a torso portion, and an inflatable inner tube therein conforming to the contours of the head and torso portions, whereby the toy figure may be collapsed when the inner tube is deflated.

[0012] It is another object of the invention to provide a fabric covered toy figure that can be deflated for compact packaging and whose fabric cover is readily removable for laundering.

[0013] It is yet another object of the invention to provide a toy figure that can be mass manufactured in a more cost-effective way than those toys stuffed with padding, and in a more efficient way than those stuffed with balloons.

[0014] It is yet another object of the invention to provide a fabric cover toy figure with the ability to stand on its own and to withstand exterior pressure when inflated.

[0015] In summary, these objects can be achieved in a fabric covered toy figure having a fabric casing with a head portion, a torso portion, arm appendages, and an inflatable inner tube conforming to the contours of said head and torso portions of said casing. Said casing having an opening at the bottom of said torso portion through which said inner tube is readily inserted therein. Said inner tube has a flat surface at the bottom to enable the toy figure to stand up. Finally, said inner tube may be deflated through an air inlet for the ease of packaging, storing, and transporting of said toy figure.

BRIEF DESCRIPTION OF THE DRAWINGS

[0016] The following drawings are presented for a better understanding of the invention and other objects and features thereof. The following detailed description is to be read in conjunction with the following drawings:

[0017] **FIG. 1** is a front perspective view of a collapsible and inflatable stuffed toy figure in accordance with the invention.

[0018] **FIG. 2** is a frontal perspective view of an inner tube having a head and torso portion.

[0019] **FIG. 2** is a frontal perspective view of a Santa Clause toy figure made according to the present invention.

DESCRIPTION OF PREFERRED EMBODIMENTS

[0020] The present invention describes a collapsible and inflatable fabric covered toy figure. Referring to **FIG. 1**, a fabric covered toy **FIG. 10** consists of two main parts, the fabric casing and an inner tube **22**. The fabric casing has a head portion **6**, a torso portion **2**, and arm appendages **8**. The

fabric casing defines the shape of the toy **FIG. 10**. The arm appendages **8** can be sewed on the fabric casing and stuffed with compressible padding materials, e.g., cottons or artificial materials. Other decorative ornaments, such as illuminating optic fibers may be shaped and attached to the fabric casing. A power supply, such as a battery case may be contained in a back pocket on the back of the torso portion **2** of the fabric casing. Other seasonal toy figures, such as Santa Clause can be made according to the present invention.

[0021] Referring to **FIG. 2**, an inflatable inner tube **30** has a head portion **20**, a torso portion **22**, and an air inlet **23**. Preferably, the head portion **20** is smaller than the torso portion **22**. The inner tube **30** is made of materials like plastic, which can withstand some exterior pressure, e.g., accidental crushing by human foot or body. The bottom **24** of the torso portion **22** of the inner tube **30** is made flat so that the inner tube **30** can stand up on its own.

[0022] In a preferred embodiment, the head portion **20** and torso portion **22** are made in a round shape. The air inlet **23** is placed on the back near the bottom of the torso portion **22**. The fabric casing is sewed according to the contours of the inner tube **30**, so that the fabric casing is snugly fitted onto the inner tube **30**. For example, referring to **FIG. 3**, a Santa Clause toy figure with a belly can be made using the preferred embodiment. A red color fabric is used in the torso portion **2** and the arm appendages **8**. The torso portion **2** of the casing has a white color rim **3** at the bottom opening of the torso portion **2**. Also, the terminal of the arm appendages **8** uses a white color rim **9**. The head portion **6** of the casing uses white color fabric. Two eyes, a nose, smiling lips, a white beard and mustache can be sewed on the appropriate portion of the head portion **6** of the casing. A red hat **12** with a white rim **14** is also sewed on top of the head portion **6** of the casing. A candy cane **16** can also be attached to the terminal of an arm appendage **8**. Finally, illuminating optic fibers **18** can be shaped, e.g., to stars, and attached on the exterior of the fabric casing. A power source, such as a battery pack can be stored in a pocket on the back of the torso portion **2**. The wires connecting the optic fibers and power source is hidden beneath the fabric casing. The bottom half of the torso **22** of the inner tube **30** may also be painted red to match the casing's fabric color.

[0023] Therefore, the fabric casing and the inner tube **30** can be deflated or detached for the ease of packaging, storing, and transporting. After consumers purchase the collapsible and inflatable toy figure, they can blow up the inner tube **30** through the air inlet **23** and put the fabric casing onto the inner tube **30** for their entertainment uses.

[0024] It is therefore to be understood that the present invention is not limited to the embodiments described above, but encompasses any and all embodiments within the scope of the following claims.

I claim:

1. A collapsible and inflatable toy figure, comprising:
a fabric casing having a head portion, a torso portion having a bottom opening, and arm appendages to said torso;

an inflatable inner tube having an air inlet, a top portion conforming to the size and shape of said head portion of said casing, a bottom portion conforming to the size and shape of said torso portion, said bottom portion having a flat end, whereby said inner tube can be deflated and inserted through said bottom opening of said torso portion, whereby when said inner tube is inflated inside said casing by injecting air through said air inlet, said inner tube can stand up on said flat end of said bottom portion to impart a three dimensional figure, whereby said inner tube can be deflated for a minimum packaging volume.

2. A collapsible and inflatable toy figure according to claim 1, wherein said arm appendages consist of compressible padding materials.

3. A collapsible and inflatable toy figure according to claim 2, wherein said top portion and bottom portion have a substantially oval shape.

4. A collapsible and inflatable toy figure according to claim 3, further comprising a pair of eyes, a nose, a pair of ear, a mouth, a red and white color hat, a white beard on said head portion of said casing and decorative ornaments on said torso portion of said casing.

5. A collapsible and inflatable toy figure according to claim 4, wherein said fabric casing consists of red and white color fabrics.

6. A collapsible and inflatable toy figure according to claim 5, wherein said inner tube is made of rubber or plastic materials of some elasticity.

7. A collapsible and inflatable toy figure according to claim 6, further comprising a illuminating fiber optic ornaments, a power supply connected to said ornaments, said power supply being enclosed in a pocket on said fabric casing.

8. A collapsible and inflatable toy figure, comprising a red and white color fabric casing having a head portion, a torso portion having a bottom opening, arm appendages, illuminating ornaments on said torso portion, a power supply connected to said ornaments, and an inflatable plastic inner tube, said power supply being contained in a pocket on said fabric casing, said inner tube having an air inlet, a top portion conforming to the size and shape of said head portion and a bottom portion conforming to the size and shape of said torso portion, said arm appendages having compressible padding materials, said bottom portion having a flat end, said top portion and said bottom portion having a substantially oval shape, whereby when said plastic inner tube is injected with air, it can stand up on its flat end of said bottom portion, whereby when said inner tube is deflated, said inner tube can be detached from said casing for the ease of packaging, storing, and transporting, whereby after purchase, a consumer can inflate said inner tube and put said red and white color casing on said inner tube.

* * * * *