US 20070133195A1

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2007/0133195 A1

Gorton (43) Pub. Date: Jun. 14, 2007

(54) CONTAINER WITH AN LED-FORMED SURFACE PATTERN

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(21) Appl. No.: **11/387,247**

(22) Filed: **Mar. 22, 2006**

Related U.S. Application Data

(60) Provisional application No. 60/749,111, filed on Dec. 12, 2005.

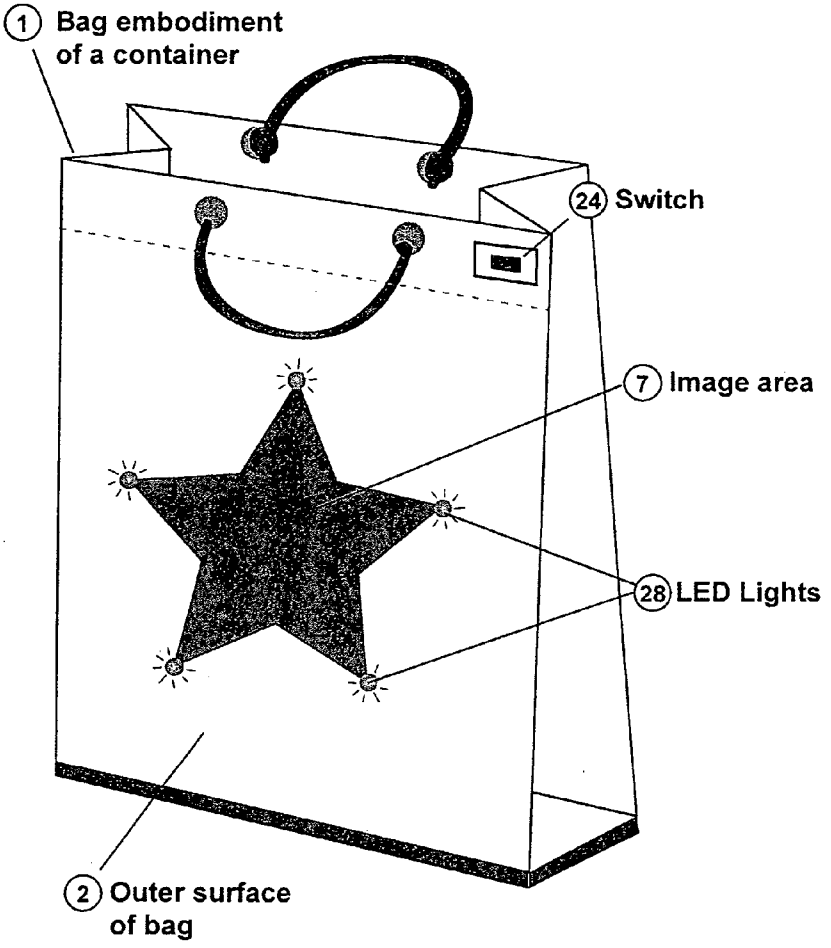
Publication Classification

(51) **Int. Cl.**
A45C 15/06 (2006.01)

(52) **U.S. Cl.** **362/156**

(57) **ABSTRACT**

The described invention provides a container such as a gift bag or box, with an LED light-enhanced decorative or informative pattern on the surface of the container, such pattern including light emitting diode (LED) lights. The LED-lit bags and boxes are functional as well as decorative, as they can transport or serve as storage for a range of items including Halloween candy and Christmas gifts. The LED lights are part of a larger LED circuit which is substantially affixed to an inner surface of the container, while the lights are configured on the outer surface of the bag, being connected to the circuit by circuit wires that traverse from the inner surface of the container to the outer surface through a hole in the substrate material of the container, which may be re-enforced.



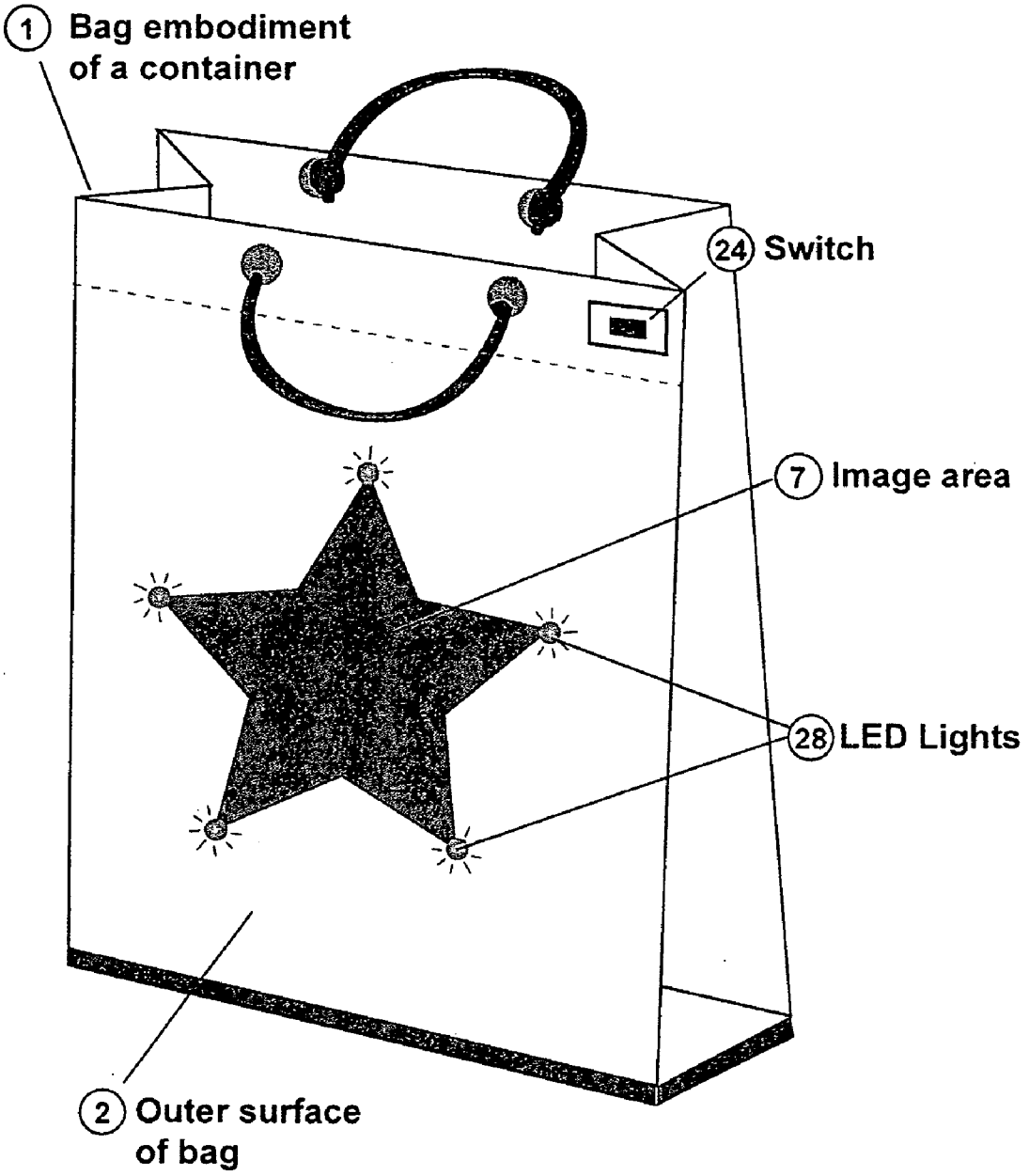

1 Bag embodiment of a container
24 Switch
7 Image area
28 LED Lights
2 Outer surface of bag

Figure 1

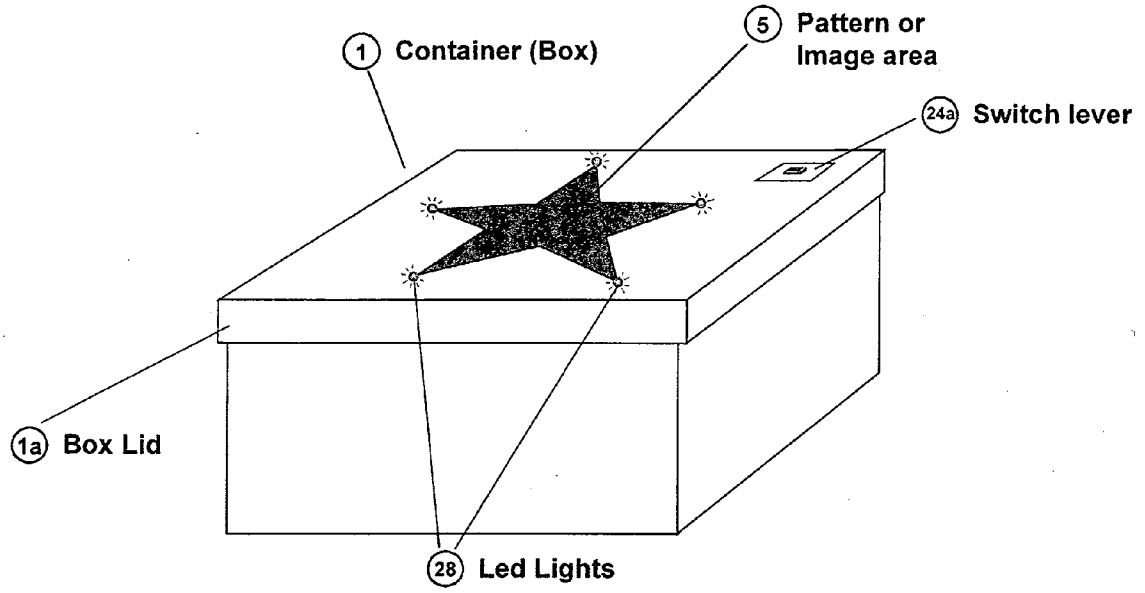

1 Container (Box)
5 Pattern or Image area
24a Switch lever
1a Box Lid
28 Led Lights

Figure 2

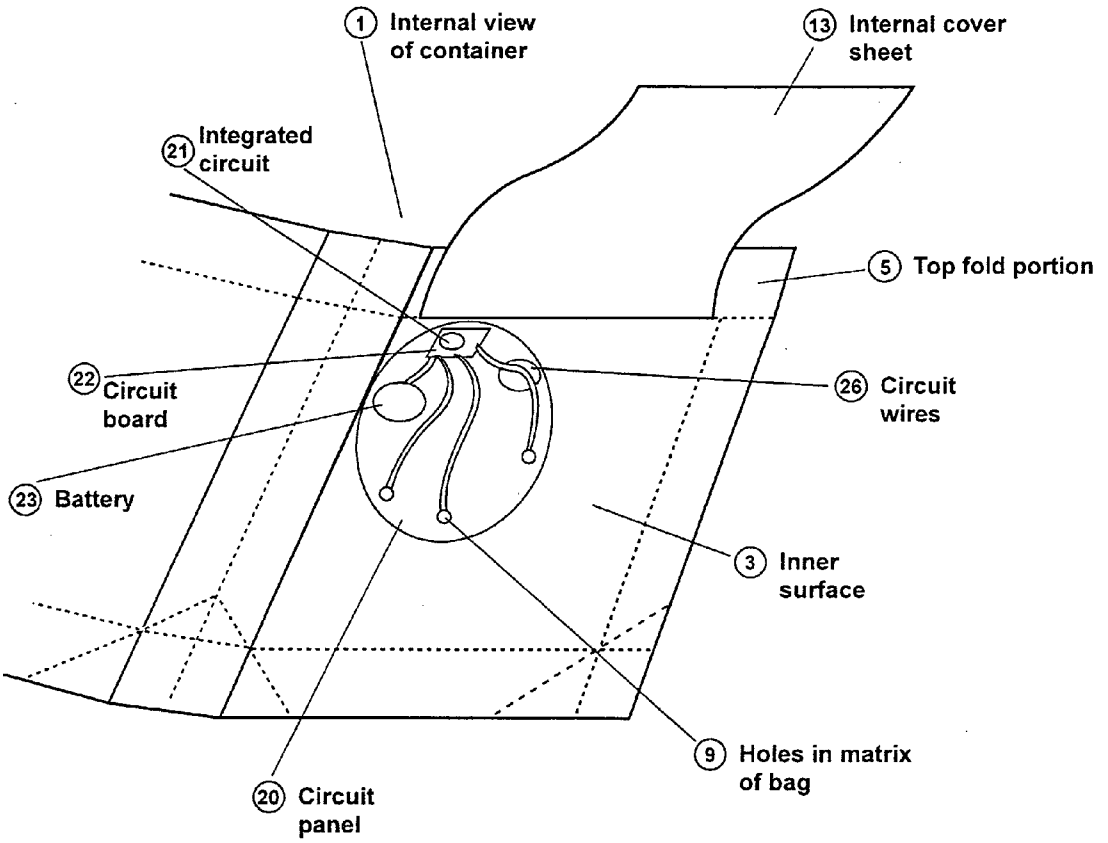

1 Internal view of container
13 Internal cover sheet
21 Integrated circuit
5 Top fold portion
22 Circuit board
26 Circuit wires
23 Battery
3 Inner surface
9 Holes in matrix of bag
20 Circuit panel

Figure 3

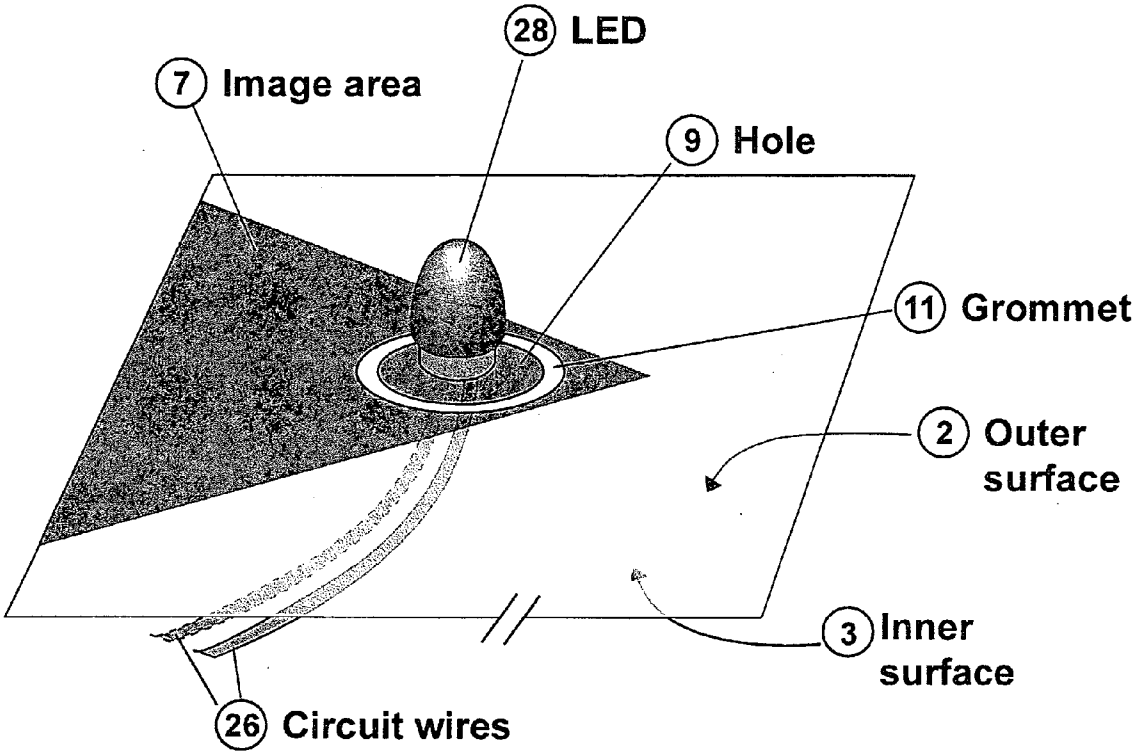

28 LED
7 Image area
9 Hole
11 Grommet
2 Outer surface
3 Inner surface
26 Circuit wires

Figure 4

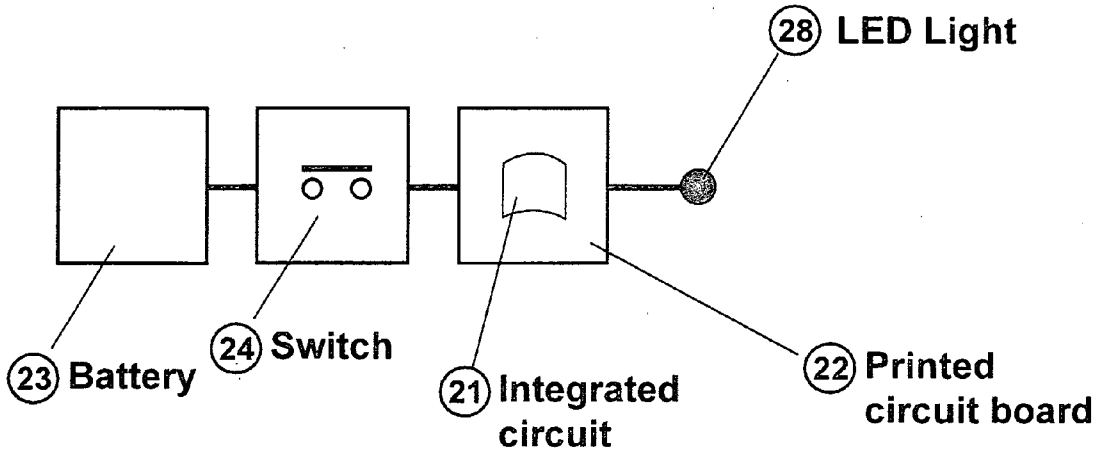

28 LED Light
23 Battery
24 Switch
21 Integrated circuit
22 Printed circuit board

Figure 5

CONTAINER WITH AN LED-FORMED SURFACE PATTERN

RELATED APPLICATION

[0001] This non-provisional patent application claims priority to a U.S. Provisional Patent Application Ser. No. 60/749,111 of Gorton, filed on Dec. 12, 2005, which is hereby incorporated by this reference.

FIELD OF THE INVENTION

[0002] A container with LED formed pattern on its surface is provided. An exemplary embodiment is a theme-based bag, such as for use in carrying Halloween candy or holiday gifts.

BACKGROUND OF THE INVENTION

[0003] Containers to hold other articles may serve the purpose of holding them in a stationary location, or be used to transport the articles being held in the container. The holding of articles by containers is done for any of a variety of purposes, such as keeping them in a single location, where they may be variously organized, sorted, out of sight, or secure against loss or theft; whether the container remains stationary or is used to transport the contained articles. Additionally, some containers serve a ceremonial purpose, in which they hold precious items, and the aesthetic or traditional decorative features of the article serve to honor or call attention to the articles contained inside. Another purpose of containers is hold or wrap gifts, in which case the aesthetics of the container serve to enhance the occasion of gift giving. Containers come in a variety of forms, dimensions, and materials, depending on their function or historical origin. Large wooden chests, for example, are heavy and rigid, even though one of their primary purposes, historically, was to hold articles while they are being transported. Another example of a type of container is represented by bags or sacks, which although they are made from a wide variety of materials, have in common the features of lightness and flexibility. Bags, though generally used for transporting articles contained therein, can also be used for storing articles, in a stable location.

[0004] The placing of patterns or designs on containers has long been associated with cultural and religious traditions, and commerce. Such designs or patterns can enhance the sense of value, sentiment, respect, or excitement associated with articles within the container, and further, can convey information about the articles, or the owner of the articles. Accordingly, bags used for shopping, or conveying gifts, or collecting goods, such as candy, on a traditional holiday, such as Halloween, are often decorated with color and patterns that are appropriate for the occasion, or appropriate for those who are carrying such bags. Lighting effects may also be incorporated into containers, either for illumination of the interior, and for pattern or decorative effect on the exterior. Light elements are very effective at attracting and holding attention. Additionally, lighting effects on the exterior may serve the purpose of conveying information, or may provide visual notice for the purpose safety or identification.

[0005] Examples of containers that have been enhanced by various lighting effects have been described by Blume in U.S. Patent No. **4,926,296**, by Knopick in U.S. Pat. No. 6,059,423, and by Rodgers in U.S. Pat. No. 6,267,485. The invention of Blume is of relatively complex plastic construction; it requires a transparent wall, and uses conventional light bulbs. The invention of Knopick for a bag of a 2-ply design, and includes lights of conventional design, screwed into sockets. The invention of Rodgers is directed toward making a bag visible while in motion, and accordingly has a motion-sensitive or acceleration-sensitive switch.

BRIEF SUMMARY OF INVENTION

[0006] Embodiments of the invention include a container such as a gift bag or box, with a decorative or informative pattern on the surface, the pattern including light emitting diode (LED) lights. The LED lights may constitute the pattern, or they may contribute to or enhance a pattern supported by other visual elements. Bags and boxes each come in a wide variety of forms; bags are generally more flexible in form, whereas boxes are typically more rigid. Other examples of containers included as embodiments of the invention include sacks, chests, cases, and articles of furniture. As a whole, containers may vary broadly in the composition of the substrate of which they are made, their weight, structure, and transportability, but they all have in common the property that they are articles designed to hold other articles. Bag and box embodiments may be designed and manufactured in many sizes to hold a range of articles including, for example, candy, food items, or any manner of gifts, including apparel to houseware items. These particular container embodiments are closely associated with gift giving; they are inventively enhanced through an integrated light emitting diode (LED) technology that creates or contributes to a pattern on the surface of the container. Other embodiments of the invention are more particularly adapted to holding or carrying articles that have a perceived value, or are noteworthy or special in some way, but not necessarily constituting a gift.

[0007] Patterns included on various embodiments of the invention are typically decorative in design, but some embodiments of the invention include patterns that are more simply informative in nature, as they may, for example, spell out words or provide visual emphasis to symbols that can be read or understood by a person viewing the container. Patterns, as provided by embodiments of the invention, may include elements that both decorative and informative, or a mix of elements, some decorative, and other informative. Embodiments of the invention may include containers designed for any cultural or religious holiday, or for commercial purposes, or individualized, customized, or for one-time occasions. The audience to whom such containers appeal includes people of any age, and of any cultural, ethnic, or religious tradition. In addition to serving as a container for articles, embodiments of the invention, themselves, be articles valued for their design or beauty, and as such may be displayed as articles of intrinsic interest, or kept as memorabilia.

[0008] In summary, embodiments of the inventive container include an LED pattern, comprising one or more LED lights on its surface, that contributes to an overall design on the container. Typical container embodiments include bags and boxes, but embodiments include any type of container that holds other articles. The LED lights are a part of a larger LED circuit panel that includes components such as an

integrated circuit, a switch, a battery, and other components necessary for the operation of a circuit; such components are typically attached to the inner surface of the container, while the lights are located on the outer surface. The lights, while wired from the inner surface of the bag, are located on the outer surface of the bag, being connected by wiring of the circuit which penetrates or traverses the surface or substrate material of the bag through holes that may be re-enforced by grommets. Typically, the switch lever is operable from the outer surface of the bag, but some embodiments include the complete switch and associated lever on the inner surface of the bag. The LED lights of typical embodiments are operated by the circuit panel in a flashing or blinking mode (blinking mode may be alternatively referred to as flashing or oscillating), but in some embodiments the lights may be on continuously. Some embodiments of the invention include a kit with one or more pattern-forming LED circuit panels that may be applied to a container. Other embodiments include a kit with one or more pattern-forming LED circuit panels as well as one or more containers to which the LED circuit panel(s) may be applied.

BRIEF DESCRIPTION OF DRAWINGS

[0009] FIG. **1** depicts an LED light-based pattern on a bag embodiment; the pattern is on the outer surface, the integrated circuit is affixed to the inner surface of the bag.

[0010] FIG. **2** depicts the design of an LED-lit box embodiment. The circuit panel is affixed to the interior-facing side of the box top.

[0011] FIG. **3** shows an exposed view from the internal aspect of a bag embodiment, showing the configuration of an exemplary pattern-forming LED circuit panel.

[0012] FIG. **4** shows a close up view of an LED light on the outer surface of a container, configured within a hole in the substrate of a container.

[0013] FIG. **5** is a block diagram of an exemplary LED circuit panel.

DETAILED DESCRIPTION OF THE INVENTION

Container With an LED Pattern

[0014] Embodiments of the present invention include such holiday-associated bags, with LED lights incorporated onto the outer surface of the bag, forming a visually enhanced pattern thereon. Holidays are ceremonial and festive occasions that are often associated with specific thematic images such as a Christmas tree or a star during the Christmas season, or a witch or a ghost at Halloween. The incorporation of such images into a decorative, functional container such as a holiday bag or box that uses lighting technology enhances the atmosphere and spirit of the holiday. In some embodiments, these lights contribute to a larger design, to which printed or applied elements also contribute. In other embodiments, the lights may represent a design in a stand-alone manner, without the support of additional printed elements. "Pattern", as used herein, refers to the entirety of the visually apparent pattern on the surface of the bag, including, as it may, separate elements or sub-patterns on the surface.

[0015] In some embodiments, a bag that is lit by LED lights also provides a safety feature or signal by virtue of enhance visibility of the bag, and consequently, the visibility of the user or person carrying the bag, in the dark. Halloween bags, with flashing or blinking LED lights, provide such an example. This lighting effect provides light in the dark and the blinking effects sends a visual signal to drivers of passing cars as children walk their neighborhoods for candy.

[0016] The integration of LED lighting modules into a pattern on the surface of bags and boxes, as provided by embodiments of this invention, enhances the overall aesthetics of these gift-supportive products. The underlying functionality of the bag and box is maintained, while its decorative appeal is significantly enhanced. Moreover, the lighting effects are particularly appropriate for nighttime or evening use, and the enhanced visibility provides a safety feature. The designs of the bags or boxes, as provided by embodiments of the invention, may be rendered to convey holiday messages, or they may be rendered to evoke cultural or popular images not associated with any particular holiday. Vibrant imagery, as provided by embodiments of the invention, is enhanced through lighting technology, the color and intensity of the lights, and particularly supported by blinking frequency of the LED modules.

[0017] Some embodiments of the invention take the form of a holiday bag or box that has blinking LED lights that can be turned on and off with a switch as shown in FIG. **1**. The substrate material (i.e., the main or primary material, or collective mix of materials) of the bag may be formed of any material commonly used to construct bags, including, merely by way of example, paper, cardboard, plastics, fibers, fabrics, leather, beads, metallic elements, and the like, or of any combination of such materials. Fabrics may be of natural materials such as cotton and wool, or synthetic materials such as plastics. Bags may include any of these materials; they may be based on a single material or they may include a multiplicity of such materials, which may be joined together in segments or layers. The substrate materials of boxes may include much the same materials as the substrate of bags, although the overall form and substance of a box is typically stiffer, heavier, and more formed, and may include materials, or a greater preponderance of materials such as wood, metal, and glass that are heavier and more substantive than materials commonly used in the construction of bags or sacks.

[0018] Some embodiments of the bags and boxes, as provided by the invention, are sized to standard marketplace specifications. In one particular embodiment, by way of example, a bag decorated for Halloween measures about 10.25 inches wide by about 12.5 inches high. Other bag designs are consistent with typical grocery and tote bag sizes, as well as specialty bags designed for wine or liquor bottles, as well as a various small gift sizes. Some embodiments of the invention are not of standard or conventional size or form, and may be custom-designed, to accommodate particular individual or specialized items. Some embodiments of the invention may not themselves, constitute a complete bag or box, but rather form a portion of a container, or be adapted to engage or be attached to an underlying basic container.

[0019] LED lights are appropriate technology for the invention as they are physically robust, they come in colors that span the visible spectrum, ranging from red to violet wavelengths; they are of varying intensity, and of varying

voltage. More particularly in comparison to incandescent lights, LEDs use a very low amount of power, light up quickly, generate little heat, have a plastic lens rather than a glass bulb, and are inexpensive. The brightness of lights is very effective at commanding the attention of viewers, as human beings are highly responsive to visual stimulation. The effectiveness of the attention-drawing effects of LEDs may further be supported by blinking or flashing, which is another form of visual stimulation to which people are highly attentive. The rate or frequency of blinking is predetermined by the electrical features of the LED circuit panel.

[0020] Returning to FIG. **1**, showing a bag embodiment of a container **1**, a pattern or image area **5** is depicted on the outer surface **2** of the bag. From this external view of the bag **1**, LED lights **28** are seen to be incorporated into the image area **5**. By "incorporated into" or "incorporated onto" is meant that the lights are visibly apparent on the container's surface, and within an image area, or they are defining of an image. Further visible in FIG. **1** is an on/off switch lever **24***a* on the upper aspect of the bag, which serves to operate the LED circuit **20** (disposed on the inner surface of the bag, and not shown) that serves the LED lights **28**.

[0021] FIG. **2** depicts an alternative embodiment of the invention, a gift box container **1**, with an LED-based pattern **7** on the outer surface **2**, in this case on the lid **1***a* of the box within the pattern or image area **7** are LED lights **28**, contributing to the image. On one corner of the lid **1***a* is an on/off switch lever **24***a* that controls the function of the LED circuit panel (not shown) that serves the LED light **28**. This is merely an example of an embodiment of the invention in the form of a box. In other embodiments, the pattern may be placed on any external surface of the box, including the sides and bottom. Further, in other embodiments, the LED lights are disposed on an inner surface of a box.

[0022] In some embodiments, merely by way of a specific example, apparel type boxes, as shown in FIG. **2**, which typically are sized starting at 11 inches by 8.5 inches by 1.75 inches deep are configured with the LED-pattern described herein. The primary substrate material of boxes may include any material typically used for this purpose, by way of examples, including paper, cardboard, plastics, fabrics, leather, and/or metallic elements. Embodiments of box construction includes boxes with a tuck top, a 2 piece top and a bottom and bottom boxes with lids. Wiring and circuit platforms may be embedded into the bottom of the bag or box, and concealed or protected by a layer of paper or cardboard.

[0023] FIG. **3** depicts an exposed view of a portion of the inner side **3** of a container (in this case, a bag), showing an exemplary configuration of the LED circuit, including an integrated circuit **22** on a printed circuit board **21**, a switch **24**, a battery **23**, and the connecting circuit wires **26**, within a bag embodiment **1** of the invention. In typical embodiments of the invention, the LED light is on the outer surface of the bag, while the wires of the LED panel are on the internal surface of the bag; in these embodiments the wires of the circuit panel that connect to the LED lights penetrate the bag through a reinforced opening (see FIG. **4**). In some embodiment, the inner aspect **3** of the bag may be covered by a protective sheet **13** attached to the inner surface of the bag to protect the electrical components from direct contact or entanglement with articles contained within the container, or from the movement of the hand of a user of the container, as the user makes use of the bag.

[0024] In some embodiments of the invention, the LED-lit container includes a single battery, LED circuit, and switch, as well as typically, a multiplicity of LED lights. There is no practical constraint on the number of LED lights, except that more lights require more power. Typical embodiments may include between 1 and about 10 lights, other embodiments may include about 20 lights, still other embodiments may include about 30 lights, and still other embodiments may contain more than 30 lights. In some embodiments, the container may contain any of multiple LED circuits, multiple batteries, and multiple switches, in addition to multiple lights. The LED lights and the switch trigger, themselves, are not seen in FIG. **3**, because they are disposed on the outer surface of the bag. Although an external location for the switch trigger **24***a* is typically convenient, in other embodiments, the switch trigger may be configured to be within the bag, exposed on an internal surface **2**.

[0025] FIG. **4** shows a detailed view of a portion of the external surface **2** of a container **1** embodiment, in this case a paper bag. The surface of the container is rendered as a single flat sheet, but as described above, this is merely an illustrative example of a substrate that may assume a variety of thicknesses or textures, and be formed of various materials. It can be seen that the LED light **28** is located on the outer aspect **2** of the bag, "emerging", in a sense, through a hole **9** that traverses from the inner surface to the out surface, and held in place by the circuit wires **26** disposed on the inner aspect **3** of the bag to which the wires are attached. Additionally, in some embodiments, the hole **9**, is reenforced by a grommet **11**. The LED light is very lightweight, and needs little in the way of securing beyond being held by the circuitry wires **26**. The wires, themselves, as described above, may be secured to the inner aspect **3** of the bag by glue. The glue, may additionally serve to hold down the cover sheet **13**, which protects the circuit panel as a whole.

[0026] As may be seen in FIG. **3**, there is no practical constraint on the positioning of the LED lights, as indicated by the holes **9** on the surface of the container **1**, their position primarily being determined by the pattern as it appears on the external surface (not shown). Any and all of the components of the circuit **20** (including the printed circuit board **22** with the integrated circuit **21**, the battery **23**, the switch **24**, and the wires **26** may be attached to the internal surface **3** by any conventional means, for example, by spots of resin or epoxy glue. The wires **26**, may, in some embodiments not be specifically attached to the inner surface of the container, but are held in place by the components to which their ends are attached. In some embodiments of the invention, the battery **23** is a 3 volt DC battery that can run continuously for 24 hours. Other embodiments may have batteries of different voltages, in general, more lights require higher voltage for satisfactory operation.

[0027] Further depicted in FIG. **3** is a fold-over portion **5** of the bag **1**, which serves both to re-enforce the structure and strength of the bag across its upper-most aspect, but also to cover and protect some components of the circuit panel **20** that are disposed on the inner surface **3**. In some embodiments, an internal cover sheet **13** is also present, configured

to lay over the components of the LED circuit **20**, and conveniently secured by attachment to a surface of the bag within the fold over portion **5** across the top of the bag.

[**0028**] FIG. **5** depicts an LED circuit in a very simple block form, where a battery **23** provides power across a switch **24** when the switch is open or "on", to an integrated circuit **21** mounted on a printed circuit board **22**, which, in turn, provides power to LED lights **28**, causing them to illuminate. LED circuits are well known in the art, and may exist in nearly infinite variety, and may be configured to operate the lights in innumerable ways, varying the voltage and amperage directed to the lights, and the blink rate in a predetermined manner, accordingly. On the front of bag and box cover, as provided by embodiments of the invention, there is an on-off switch lever **24***a* to turn the circuit, and consequently, the lights on and off. A standard 3V DC battery can support up to 24 hours of continuous operation. Embodiments of the invention include circuits that are configured to operate the LED lights **28** in a blinking or flashing mode. Other embodiments may include circuit panels that operate the LED lights in a continuous mode. An advantage associated with the blinking LED is that the lifetime of a battery powering a blinking light may be considerably longer than that of a battery powering a continuously lit LED.

[**0029**] Some embodiments of the invention include replaceable components. The LED circuit battery, for example, is a replaceable component of the LED system, and accordingly some embodiments of the invention provide for a replaceable battery, while other embodiments do not provide such replaceability. Each of these embodiments (the battery being replaceable or not) have their practical advantages and, under different circumstances, either embodiment may be appropriate for particular types of containers. Many of the embodiments of this invention are of the inexpensive variety, made in large quantity, perhaps even given away for free to facilitate a larger commercial plan. Containers of this type could be disposable, or single-use, even if they are not necessarily disposed of after a single use. With inexpensive articles, the incremental cost of providing an LED pattern on the surface of the container needs to be low in order for commercial feasibility. In other embodiments of the invention, where a container is a more highly valued or durable item, a higher cost per unit may be appropriate, and such a higher cost unit can support the larger absolute cost associated with a replaceable battery. Durable containers with the LED-lit pattern could, in some cases, be considered collectibles, or articles of an artistic nature, or historic or personal memorabilia, worthy of saving for any number of reasons, showing, framing, or honoring in any manner accorded items of perceived value. And, a replaceable battery may, in turn, also be appropriate in an embodiment with the increased expected life time of a more expensive and durable container.

LED Pattern Kits

[**0030**] One embodiment of the invention is an LED-based kit configured-for or adapted to be applied to a container, and to form an LED-lit visual pattern on the surface of the container. Other embodiments of the kit may be appropriate for application to other articles, such as personal or household items. The kit comprises one or more LED lights included within an LED panel that further includes a battery, a switch, and other components necessary to complete an operable circuitry. The kit may include other materials as well, to facilitate the integration of the kit into a host article, typically in the form of incorporation of LED lights onto the outer surface of the article, with other components of the panel integrated into or affixed to the inner surface of the container. Such materials may include, for example, grommets, glue, or attachment resins. In some embodiments of the invention, the LED kit may be used by a manufacturer or a home hobbyist to integrate into a pattern on another article, such as a container, into a pattern of his own choosing.

[**0031**] Kits, as provided by some embodiments of the invention, provide a user the ability to create decorated articles or containers with minimal design constraints, and no presumption of the final form of the pattern it forms on the surface of the article. Other embodiments of the invention are made with the intention that they be applied to an article in order to create a specific pattern; such embodiments may include specific numbers of components, with predetermined specifications, and the kit may further include written and/or visual instructions as to how to create a pattern. An LED kit may comprise one LED circuit panel, or it may contain multiple LED circuit panels. On the whole, the LED lighting kit is adapted-to and configured for integration onto the surface of a container, such that the integration forms or contributes to a visual pattern on the surface of the container.

[**0032**] Another embodiment of the invention provides a complete kit for the assembly of a LED-lit container. In this embodiment, in addition to the LED circuit panel components of the kit described above, the kit further includes a container, such as a bag or a box, the container being an appropriate host for the installation of an LED-lighting kit, to create or contribute to a pattern on the surface of the container, with a completed pattern affixed to its outer surface. Various embodiments of these kits may contain a multiplicity of LED circuit panels, as well as a multiplicity of containers:

EXAMPLE 1

Halloween Candy Bag

[**0033**] A child looks forward to Halloween because he or she can dress up in costumes and go "trick or treating" an old custom whereby young people visit neighbor's houses and receive candy. The holiday is popular with children, because they can dress up in costumes, go out with friends and family and receive free candy. This activity often occurs in the dark time hours. A Halloween bag is essential for carrying candy that children receive from all the houses they visit. As it is often dusk or the dark of night when children venture out to "Trick or Treat," having a Halloween bag that lights up with blinking lights provides a safety factor. The inventive bag provides a light source and the blinking lights keep people safe from nearby drivers as groups of people walk the neighborhood soliciting candy from homes. The holiday LED-lit boxes also enhance Holiday joy. The have festive designs with holiday images. Manufacturing these boxes with LED lighting technology increases the beauty of the gift box and makes the gift inside much more memorable.

EXAMPLE 2

Jewelry Box

[0034] An LED-lit jewelry box is another embodiment of the invention. Young girls love to emulate their parents or older children or teenagers that they know and admire. Costume jewelry is an important item for children, allowing them to play and act out characters they admire or hope to become. Jewelry is thus a valued item, and a decoratively lit with blinking LED lights enhances the excitement of such play acting, and further, encourages the storage of children's jewelry in a central location.

EXAMPLE 3

Shopping Bag

[0035] The late-December/early-January holiday season (Christmas, Hanukkah, Kwanza, New Years Day), or many other traditional holidays (for example, Chinese New Year) is a time of shopping for gifts. The shopping trip, itself, can be an occasion for fun and sociality, mingling in crowds, and doing downtown things. Decorative shopping bags from high end department stores and specialty stores become very much a part of the scene, providing excitement, and conveying brand consciousness that appeals to customers; and, or course, stores and brands also benefit from the public exposure. Embodiments of the invention thus include shopping bags and boxes with designs that are enhanced by the blinking lights as described herein, as such visually- or visibility-enhanced bags stand out in a crowd and on the public streets.

EXAMPLE 4

LED Circuit Panel Kit to be Applied to Bags

[0036] A manufacturer of paper bags receives an order for a large number of bags for a major department store, which is gearing up for the winter holiday season. The department store asks the bag manufacturer to create a line of bags that revolves around a set of images, and is particularly eye-catching. The bag manufacturer does not have its own capability to assembly LED circuit panels, so it contracts with a manufacturer of electrical components. The two manufacturers coordinate their creative and production efforts and settle on a set of ten kits, according to specifications, that fit a set of images and visually enhance them with blinking lights of different colors. These LED-lighting kits are assembled by the electrical equipment manufacturing company and shipped to the bag manufacturing company. There, factory workers take preprinted bags and incorporate the LED lighting kits into the bags, to create a set of holiday bags that turn out to be a big hit during the upcoming holiday shopping season.

EXAMPLE 5

Kit Including an LED Circuit Panel and a Bag

[0037] Valentine's Day is an occasion that prompts many classroom valentine-making projects. An embodiment of the invention is represented by a kit that comprises a large paper bag and an LED circuit panel kit. The kit further may includes instructions and examples of images that students may use as models of images to render onto the bags using any of a variety of appropriate materials, such as crayons, paint, applied elements such as sparkles. Other embodiments of the kit include multiple bags and multiple LED circuit panel kits in a single kit unit.

[0038] As part of the image creating process, the students may decide where to place the LED lights included in the circuit panel kit. At these sites, the student punches a small hole in the paper bag, and may re-enforce the hole with a grommet. The LED lights are then inserted through the array of holes the student has punched, and the wires of the panel are secured to the inner surface of the bag. Similarly, the battery and switch are secured to the bag. As a final step, the student may also lay a coversheet, also included in the kit, over the LED circuit panel, securing it with glue. Valentines collected during the day are placed in the bag, the LED switch lever is flipped by children as they mingle in the school lunch room thereby kicking their Valentine bag into visual action, and a wonderful time is had by all.

What is claimed is:

1. A container comprising:

an outer surface, and

an LED circuit comprising at least one LED-light, a battery, a switch comprising a switch lever, and a printed circuit board comprising an integrated circuit,

wherein the at least one LED-light is incorporated onto the outer surface of the container, forming a pattern thereon.

2. The container of claim 1, wherein the container is selected from the group consisting of a bag and a box.

3. The container of claim 1, wherein the circuit panel is configured to operate the at least one LED-light in a blinking mode.

4. The container of claim 1, wherein the at least one LED-light provides a visual signal that enhances safety of a user at night.

5. The container of claim 2, wherein the container is a bag, the surface of the bag comprising one or more substrate materials selected from the group consisting of paper, cardboard, plastic, fabric, fiber, leather, and metal.

6. The container of claim 2, further comprising a folded portion at the top of the bag, and wherein the LED circuit panel and the LED switch are contained within the folded portion.

7. The container of claim 2, wherein the LED switch lever is disposed on the outer surface of the container.

8. The container of claim 2, wherein the battery is a 3 Volt DC battery.

9. The container of claim 2, wherein the battery is replaceable.

10. An LED lighting kit comprising an LED circuit, the circuit comprising at least one LED light, wherein the LED lighting kit is adapted for application to a container to form an LED-lit pattern on the container.

11. An LED-lit container kit comprising:

a container, and

an LED circuit, the circuit comprising at least one LED light, wherein the LED circuit is adapted for application to the container to form an LED-lit pattern on the container.

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