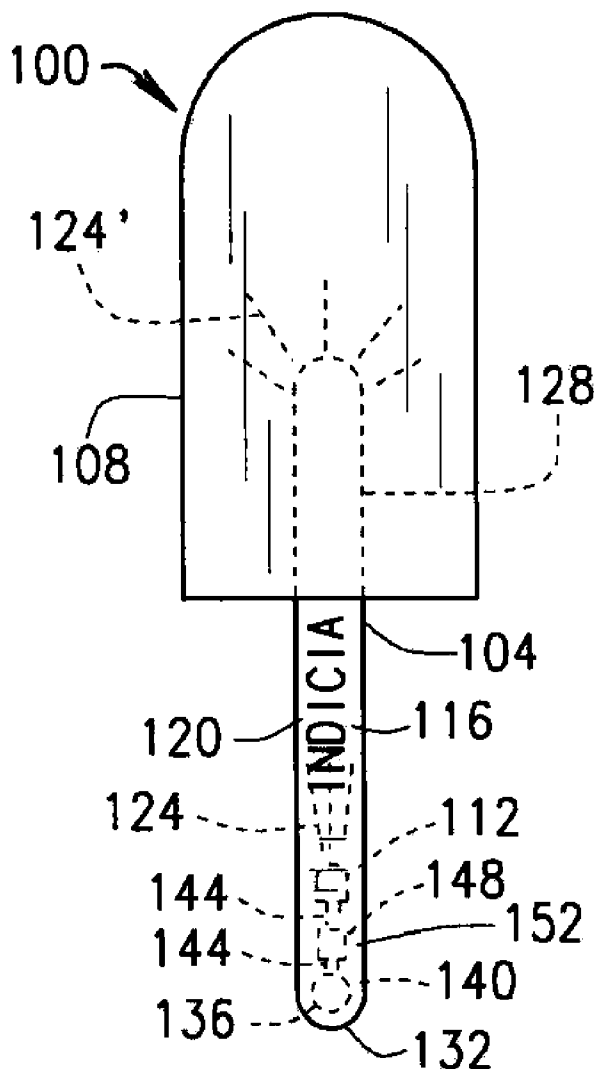


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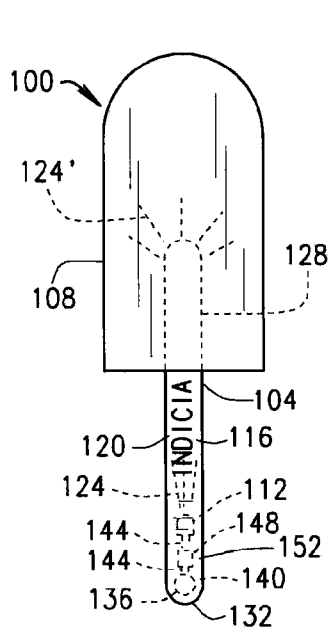


FIG. 1

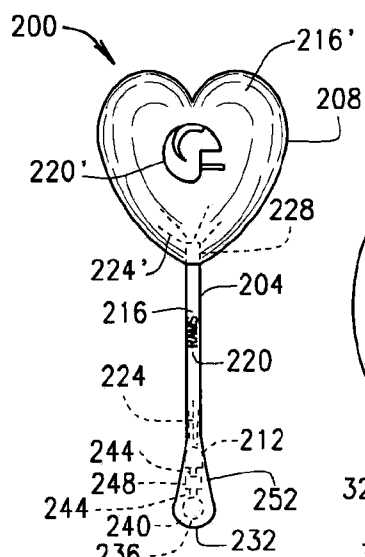


FIG. 2

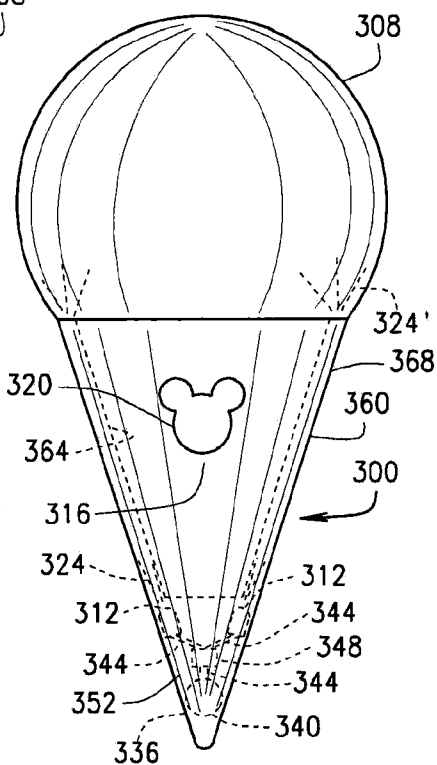


FIG. 3

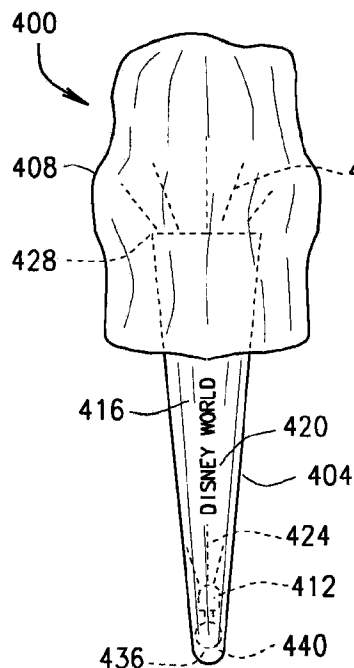


FIG. 4

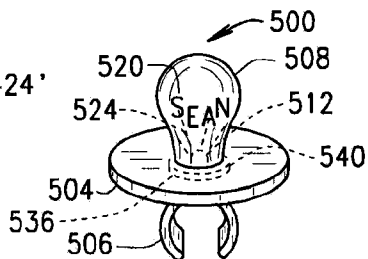


FIG. 5

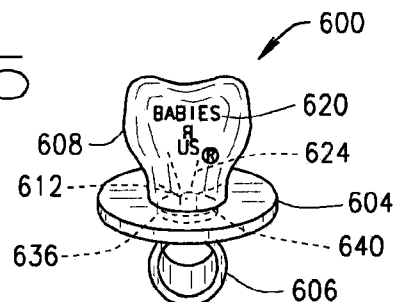


FIG. 6

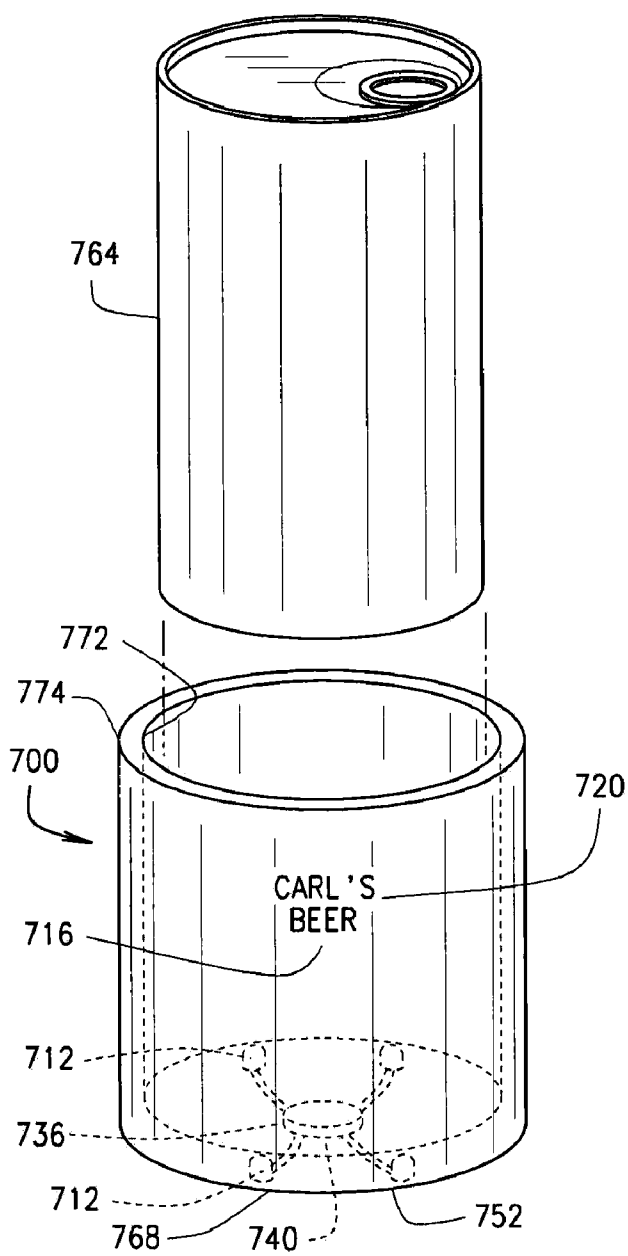


FIG. 7A

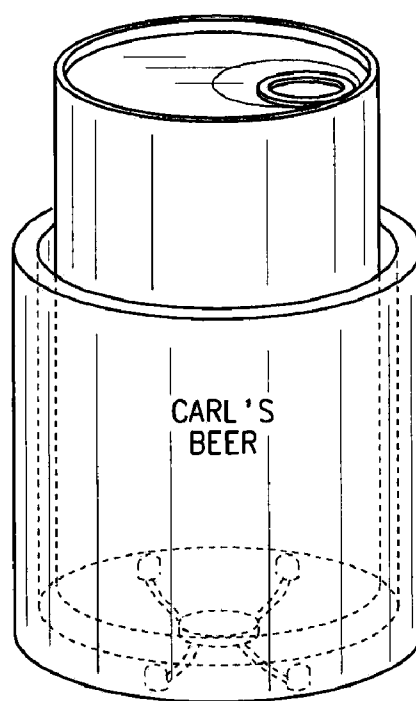


FIG. 7B

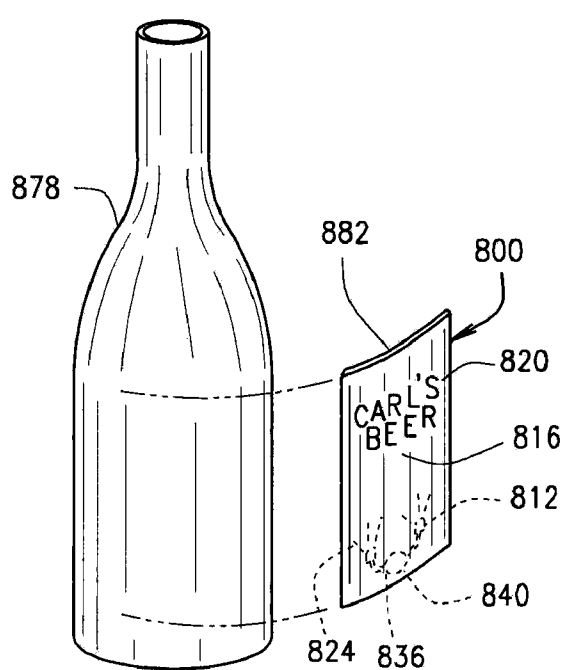


FIG. 8A

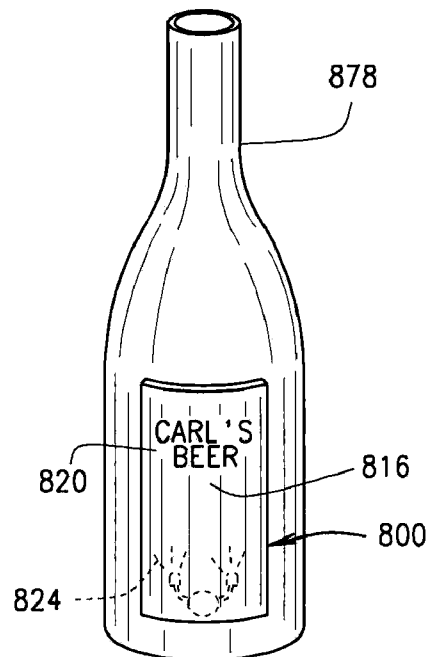


FIG. 8B

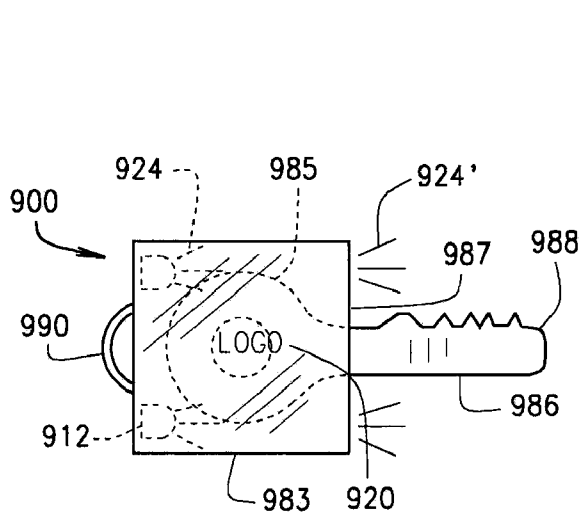


FIG. 9

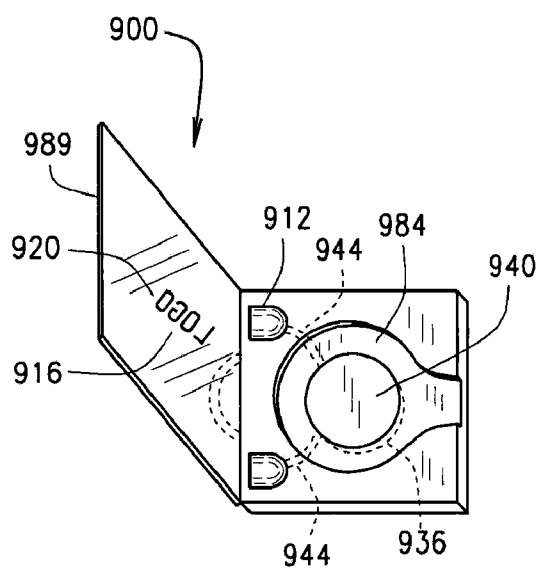


FIG. 10

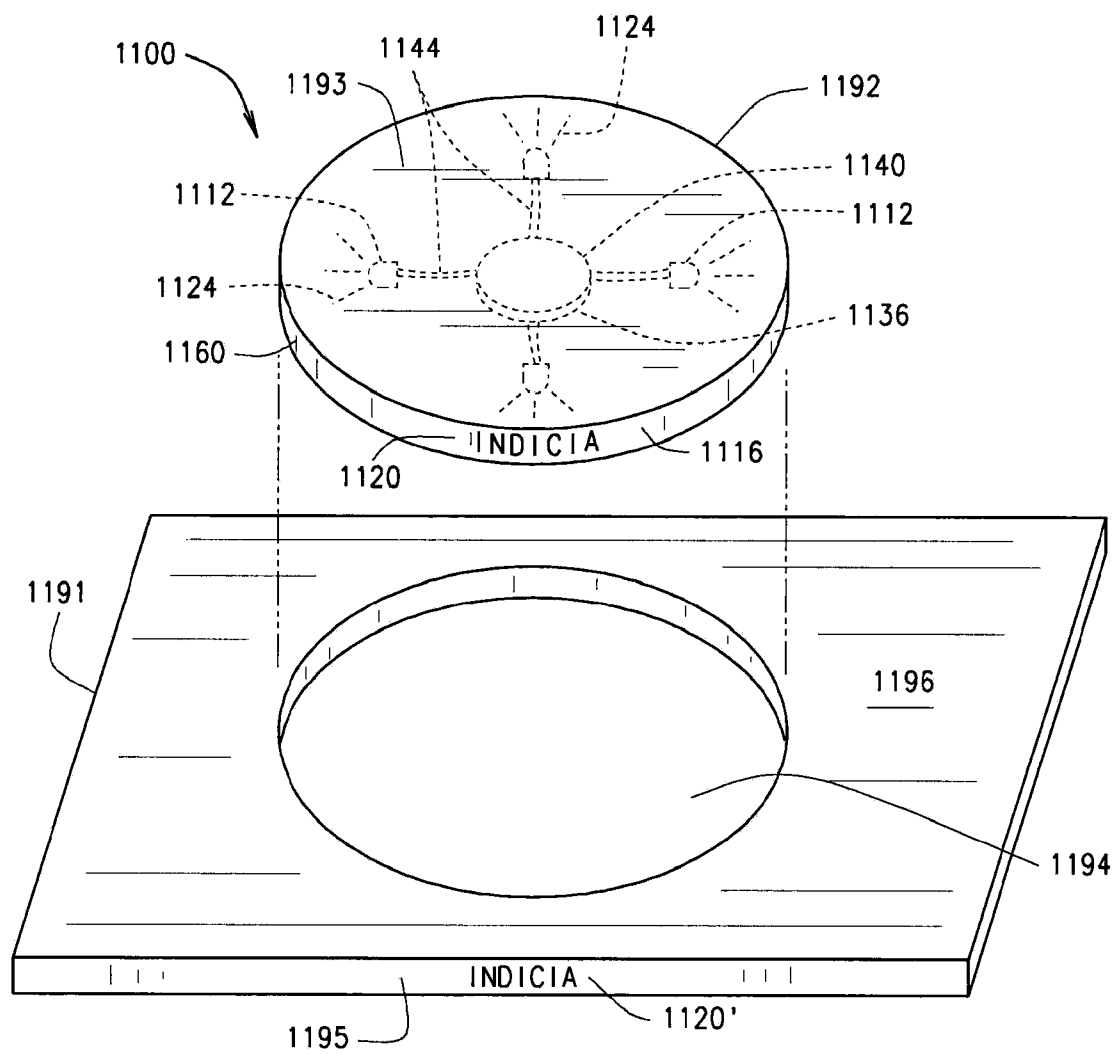


FIG. 11

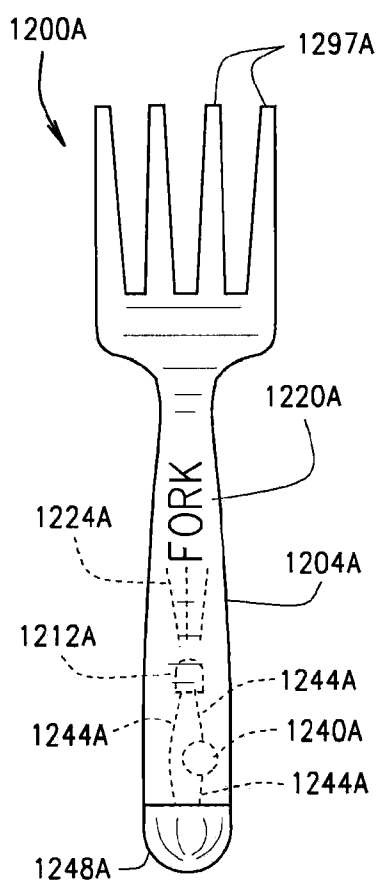


FIG. 12A

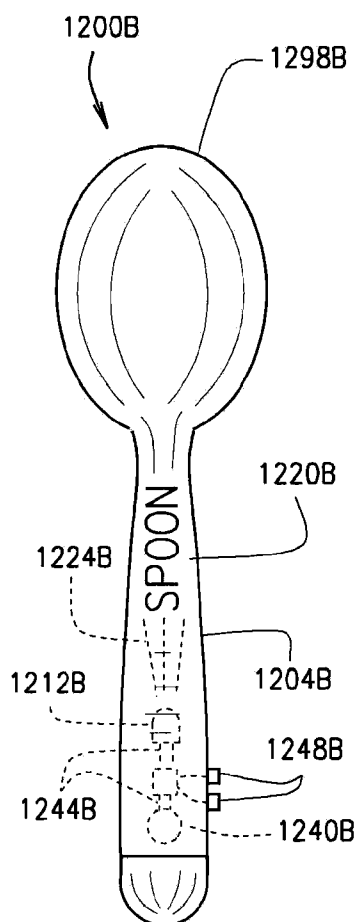


FIG. 12B

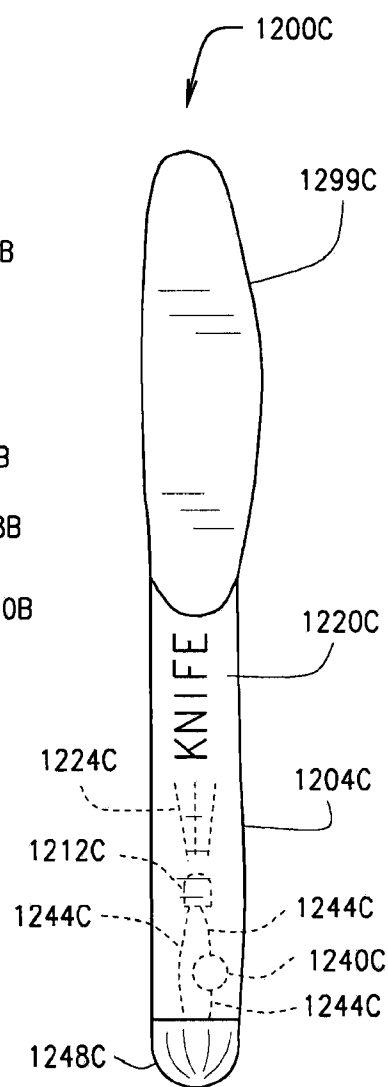


FIG. 12C

LIGHTED ITEMS

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation of presently allowed U.S. patent application Ser. No. 10/961,364 filed Oct. 8, 2004, which claims priority to U.S. Provisional Application 60/510,778, filed Oct. 10, 2003. The disclosures of the above applications are incorporated herein by reference.

FIELD

[0002] The present invention relates generally to lighted items, and more particularly (but not exclusively) to items having lighted indicia.

BACKGROUND

[0003] The statements in this section merely provide background information related to the present disclosure and may not constitute prior art.

[0004] Lighted items are available in a wide variety of designs, colors, sizes, and shapes. Despite the wide variety of existing lighted items, the inventor hereof has recognized a need for, among other things, lighted items having one or more indicia that are illuminated or highlighted in a visually stimulating and pleasing manner.

SUMMARY

[0005] Exemplary embodiments are provided of lighted items. A lighted item according to exemplary embodiments may generally include a light-conducting/light-transmission portion, which, in turn, may include and/or integrally define one or more indicia. The lighted item may also include a light-transmissive portion. The lighted item may also include at least one light source positioned to emit light into the light-conducting/light-transmission portion, which, in turn, may then conduct or transmit light to the one or more indicia for highlighting the one or more indicia. Light may also be conducted or transmitted through the light-conducting/light-transmission portion to the light-transmissive portion for highlighting an element (e.g., edible, drinkable, confection, non-consumable, etc.).

[0006] Further areas of applicability of the present invention will become apparent from the detailed description provided hereinafter. It should be understood that the detailed description and specific examples below, while indicating exemplary embodiments of the invention, are intended for purposes of illustration only and are not intended to limit the scope of the invention.

DRAWINGS

[0007] The drawings described herein are for illustration purposes only and are not intended to limit the scope of the present disclosure in any way.

[0008] FIG. 1 is a side elevation view of a lighted frozen confection according to one embodiment of the invention;

[0009] FIG. 2 is a side elevation view of a lighted lollipop according to another embodiment of the invention;

[0010] FIG. 3 is a side elevation view of a lighted snow cone cup according to another embodiment of the invention;

[0011] FIG. 4 is a side elevation view of a lighted cotton candy holder according to another embodiment of the invention;

[0012] FIG. 5 is a perspective view of a lighted candy ring pop according to another embodiment of the invention;

[0013] FIG. 6 is a perspective view of a lighted pacifier according to another embodiment of the invention;

[0014] FIGS. 7A and 7B are perspective views of a lighted receptacle for a beverage container according to another embodiment of the invention;

[0015] FIGS. 8A and 8B are perspective views of a lighted label according to another embodiment of the invention;

[0016] FIG. 9 is a side elevation view of a lighted key holder according to another embodiment of the invention;

[0017] FIG. 10 is a perspective view of the lighted key holder in FIG. 9;

[0018] FIG. 11 is a perspective view of a lighted coaster and placemat combination according to another embodiment of the present invention; and

[0019] FIGS. 12A, 12B, and 12C are respective views of a lighted fork, spoon, and knife according to another embodiment of the present invention.

DETAILED DESCRIPTION

[0020] The following description is merely exemplary in nature and is not intended to limit the present disclosure, application, or uses.

[0021] A lighted item according to one aspect of the invention generally includes a light-conducting or light-transmission portion. The lighted item also includes at least one light source positioned to emit light into the light-conducting portion, which, in turn conducts or transmits light to at least one predetermined portion (e.g., a portion having or integrally defining one or more indicia, a portion having or integrally defining a graphic element, etc.) for highlighting the predetermined portion. Light may also be conducted or transmitted through the light-conducting portion to a light-transmissive portion for highlighting an element (e.g., edible, confection, drink, consumable, an object not intended for human consumption, etc.) that is engaged to the light-conducting portion.

[0022] In various embodiments of the invention, a lighted item can take on various shapes and forms. Exemplary embodiments of the invention include a lighted iced or frozen confection 100 (FIG. 1), a lighted lollipop 200 (FIG. 2), a lighted snow cone cup 300 (FIG. 3), a lighted cotton candy holder 400 (FIG. 4), a lighted candy ring pop 500 (FIG. 5), a lighted pacifier 600 (FIG. 6), a lighted receptacle 700 (FIGS. 7A and 7B), a lighted label 800 (FIGS. 8A and 8B), a lighted key holder 900 (FIGS. 9 and 10), a lighted coaster and placemat combination 1100 (FIG. 11), and lighted tableware, such as a lighted fork 1200A (FIG. 12A), a lighted spoon 1200B (FIG. 12B), a lighted knife 1200C (FIG. 12C), lighted chopsticks, lighted plates, lighted dishes, lighted glassware, among other tableware and eating utensils, etc.

[0023] In various embodiments of the invention, a lighted item includes one or more indicia that are highlighted (e.g., illuminated, backlit, etc.) by light from a light source. This indicia can include a wide range of graphic images, graphic elements, designs, artwork, distinctive marks, identifying symbols, company logos, company contact information, text, alphanumeric characters, advertisements, trademarks, trade names, service marks, sports teams insignias, names, monograms, photographs, among others. In yet other embodiments, the lighted item may not include any such indicia, but instead include a predetermined portion without any indicia that is highlighted by light from a light source.

[0024] FIG. 1 illustrates an exemplary lighted iced or frozen confection 100, such as a popsicle or ice cream bar. As shown in FIG. 1, the lighted frozen confection 100 includes a popsicle stick 104 and an edible 108 coupled to the popsicle stick 104. The edible 108 can include a variety of frozen confections, including popsicles, fudgsicles, ice cream, flavored ice, among others. The lighted frozen confection 100 also includes at least one light source 112 coupled to the popsicle stick 104.

[0025] At least a portion 116 of the popsicle stick 104 is light-transmissive. The light-transmissive portion 116 defines one or more indicia 120 which are highlighted by light 124 from the light source 112. In an exemplary embodiment, the light-transmissive portion 116 includes a translucent plastic material into which is etched "INDICIA" 120. Alternatively, the popsicle stick 104 can include one or more indicia which are light-blocking such that the indicia contrast with the surrounding portions of the popsicle stick 104 through which light 124 passes.

[0026] In some embodiments, the light-transmissive portion 116 of the popsicle stick 104 has a higher light transmissibility (allows more light to pass therethrough) than the adjacent portions of the popsicle stick 104. The light-transmissive portion 116 allows light 124 from the light source 112 to pass therethrough, thus becoming externally visible.

[0027] In an exemplary embodiment, the indicia 120 are etched or carved (e.g., with a cutting tool, knife, razor blade, laser, chemically etched, drilled, etc.) into the material forming the popsicle stick 104. This etching can increase the light transmissibility of the etched indicia and/or allow the indicia to alter (e.g., capture, refract, disperse, diffuse, diffract, etc.) light traveling within the popsicle stick 104. Etching the indicia 120 can affect the way that the light 124 interacts with the etched indicia 120. For example, with relative deeply carved or etched indicia, the light 124 can be captured in the edges of and thus highlight the indicia 120.

[0028] Preferred angle(s) and/or thickness dimensions (e.g., height or depth, etc.) at which the indicia are formed in the popsicle stick material may depend on the particular application. In exemplary embodiments, the indicia can be formed (e.g., etched, carved, etc.) into the popsicle stick material at an acute angle of about ± 45 degrees relative to the direction of travel of the light 124.

[0029] The indicia can be etched into an outer or external surface of the popsicle stick material. Additionally, or alternatively, the indicia can be etched into an internal surface of the popsicle stick material. For example, in one exemplary embodiment, the popsicle stick may comprise a two-piece construction. In which case, indicia can be etched into a surface of either or both pieces. Next, the pieces can be arranged such that the surface into which the indicia were etched faces the opposing piece and such that the light source, power source, and conductors are positioned between the pieces. The pieces can then be joined to form the lighted popsicle stick. These exemplary manners by which the indicia can be provided (e.g., etched internally or externally into the popsicle stick) can also be applied to other embodiments of the invention such as those shown in FIGS. 2 through 12.

[0030] Alternatively, indicia may be provided in any of the various embodiments disclosed herein using other suitable methods, such as silk-screening, pad printing, optical fibers, adhesive stickers, molding (e.g., indicia formed during an injection molding process, etc.), among other suitable methods.

[0031] Alternatively, or additionally, the light-transmissive portion 116 may be defined by one or more openings or holes through the popsicle stick 104. The holes can be arranged to form the indicia 120. Accordingly, light 124 from the light source 112 can pass through the holes and becomes visible external to the popsicle stick 104. The visible light passing through the holes will thus appear in the form of the indicia 120.

[0032] Portions of the popsicle stick 104 adjacent the light-transmissive portion 116 may have means for inhibiting light from inadvertently escaping out of those portions of the popsicle stick 104. For example, portions of the popsicle stick 104 may be substantially opaque, reflective, faceted, etc. in order to help direct light through the popsicle stick 104 and/or towards the indicia 120. Additionally, or alternatively, the popsicle stick 104 can be configured (e.g., shaped, sized, and formed of suitable materials, etc.) so that the popsicle stick 104 functions to guide or conduct at least some of the light 124 through the interior of the popsicle stick 104, for example, by successive internal reflections. Accordingly, the selection of material(s) for the popsicle stick 104 can depend at least in part on the material's ability to channel or transmit light 124 from the light source 112 through the popsicle stick 104 and/or the material's ability to at least reduce the amount of light that inadvertently escapes out of the popsicle stick 104. In these exemplary manners (which can also be applied to other embodiments of the invention including the embodiments shown in FIGS. 2 through 12), at least some light 124 from the light source 112 can remain within the popsicle stick 104 at least until the light 124 reaches the indicia 120. This, in turn, can increase the amount of available light for highlighting the indicia 120 and/or edible 108.

[0033] A wide range of materials, preferably light-weight and chemically non-reactive to the edible 108, can be used for the popsicle stick 104 and its light-transmissive portion 116. Further, the same materials do not have to be used for the light-transmissive portion 116 and the other popsicle stick portions. Exemplary materials that can be used for the lighted popsicle stick include transparent materials, translucent materials, other light-altering materials (e.g., materials that alter light by refraction, diffraction, diffusion, and/or dispersion), flexible materials, plastic materials, vinyl materials, polystyrene, polyvinylchloride (PVC) (e.g., environmentally PVC, medical grade PVC, etc.) and materials capable of being mass produced with relatively low manufacturing costs, among other materials suitable for the intended purpose. The type of material used for the light-transmissive portion 116 may depend at least in part on the particular type and intensity of light produced by the light source. In addition, various manufacturing processes can be used for forming the popsicle stick, including injection molding and casting (e.g., casting poly resin, casting acrylic, etc.).

[0034] Optionally, the edible 108, or at least a portion thereof, can also be light-transmissive. In the illustrated embodiment of FIG. 1, the light source 112 directs light 124 generally upwardly through the popsicle stick 104. At least a portion 124' of the light 124 travels through the popsicle stick 104 out its end 128 and into the edible 108. In this exemplary manner, light 124' from the light source 112 can illuminate the edible 108, or at least a portion thereof.

[0035] Popsicles and other ice confections can be colored consistent with their flavoring. For example, a lime-flavored ice confection can be green in color, a banana-flavored ice confection can be yellow, a grape-flavored ice confection can

be purple, and so on. Therefore, when light radiates through the popsicle stick **104** and into the edible **108**, the light also radiates through the edible **108** to create a colorful glow.

[0036] In other embodiments, however, the edible can be generally clear or transparent. To produce a colorful glow consistent with the edible's flavor, the light source may produce light having a particular color and/or produce broadband light that travels through a colored filter within the popsicle stick. In yet other embodiments, the edible, or at least a portion thereof, can be ultraviolet-reactive (e.g., include an ultraviolet-reactive food additive, etc.), and the light source can produce ultraviolet light for illuminating the ultraviolet-reactive edible. For example, the edible, or at least a portion thereof, can be responsive to the ultraviolet A (UVA) radiation component of black light produced by the light source, which, in turn, produces a visually stimulating effect.

[0037] While not shown in FIG. 1, the edible **108** can also define one or more indicia, which are the same as or different than the indicia **120** defined by the popsicle stick **104**. For example, the lollipop stick **204** and candy piece **208** in FIG. 2 both define indicia **220** and **220'**, respectively, which are highlighted by light **224**, **224'** from the light source **212**.

[0038] With further reference to FIG. 1, the light source **112** includes a single LED coupled to the popsicle stick **104**. Alternatively, other quantities of LEDs and/or other suitable light sources can be employed such as incandescent, laser, fluorescent, phosphorescent, chemiluminescent, halogen, fiber optics, electroluminescent, neon light sources, ultraviolet lights, black lights, and the like.

[0039] In the illustrated embodiment, the light source **112** is disposed entirely within the popsicle stick **104** adjacent an end portion **132** of the popsicle stick **104**. Alternatively, the light source **112** need not be positioned entirely within the popsicle stick **104**. Instead, the light source **112** may be partially or entirely disposed external to the popsicle stick **104**. The light source **112** can also be disposed at other locations within the popsicle stick **104** besides the end portion **132**.

[0040] The lighted item **100** also includes a power source compartment or receptacle **136** defined within the end portion **132** of the popsicle stick **104**. The power source receptacle **136** is adapted to receive at least one power source **140** therein and to electrically connect the power source **140** to the light source **112** via conductive leads **144**. Alternatively, the power source **140** need not be positioned entirely within the popsicle stick **104**. Instead, the power source **140** may be partially or entirely disposed external to the popsicle stick **104**. The power source compartment **136** can reside elsewhere, such as at other locations within the popsicle stick **104**.

[0041] In FIG. 1, the power source **140** is a single watch battery, although other suitable types and numbers of power sources can be used depending on the particular application. The power source **140** can include any suitable means of providing energy to the light source **112** such as renewable batteries, rechargeable batteries, disposable batteries, power cells, solar cells, watch batteries, and other suitable power sources, including kinetic power sources. If rechargeable, such power source **140** could be rechargeable by solar, magnetic, electrical, and chemical means, and the like or any combination thereof.

[0042] To allow a user internal access to the power source compartment **136**, for example, to install, replace, or remove batteries, the power source container **136** may include a removable portion. The removable portion may be engaged with the power source compartment **136** using a suitable

fastening system or method (e.g., a threaded connection, an interference fit, resilient ribs, among others).

[0043] In the illustrated embodiment, the lighted popsicle stick **104** includes a push-button switch **148** for switchably connecting the light source **112** to the power source **140**, although other switching means can also be employed. The switch **148** is positioned within the popsicle stick **104** and is coupled to an externally flexible surface portion **152** of the stick **104** such that application of external pressure upon the externally flexible surface portion **152** activates the switch **148** thereby causing operation of the light source **112**. The external pressure may, for example, be applied by the user squeezing the stick **104** at the externally flexible surface portion **152**. The switch **148** may also allow the user to cycle through the various display modes or select a particular color of light to be emitted by the light source **112** by successively squeezing the stick **104** at about the externally flexible surface portion **152**. Additionally, the switch **148** may also allow the user to dim or brighten the intensity of the light, for example, by holding down the switch **148** with continuously applied pressure to the popsicle stick **104** at about the externally flexible surface portion **152**. This exemplary means for switchably connecting the light source **112** to the power source **140** can also be applied to other embodiments of the invention such as those shown in FIGS. 2 through 12.

[0044] In another embodiment, the switching means can include electrical terminals located externally on the popsicle stick **104** (e.g., at about portion **152**, etc.) such that the user's hand, upon grasping the stick **104**, electrically connects the terminals to one another, thus completing a circuit for power delivery from the power source **140** to the light source **112**.

[0045] In various embodiments, the light source **112**, power source **140**, switch **148**, and/or conductors **144** can be encapsulated by the material forming the popsicle stick **104** in a fluid-tight fashion. This, in turn, can help prevent liquid (e.g., the iced-confection after it begins to melt, a user's perspiration, rain, etc.) from contacting (and potentially causing problems with the operation of) the various components encapsulated within the popsicle stick **104**. In addition, this encapsulation can also at least help support and retain the positioning of the light source **112**, power source **140**, switch **148**, and/or conductors **144**. Further, this exemplary means for encapsulating the light source **112**, power source **140**, switch **148**, and/or conductors **144** can also be applied to other embodiments of the invention such as the embodiments shown in FIGS. 2 through 12. In one exemplary embodiment, this encapsulation can be accomplished by applying a substantially liquid resin (e.g., a food grade liquid resin) over the light source **112**, power source **140**, switch **148**, and/or conductors **144**, and then allowing the resin to solidify.

[0046] In various embodiments, the inside of the popsicle stick **104** can be generally hollow such that a cavity is defined therein. Alternatively, the popsicle stick **104** can be substantially solid.

[0047] FIG. 2 illustrates a lighted lollipop **200** embodying several aspects of the invention. As shown in FIG. 2, the lighted lollipop **200** includes a lollipop stick **204** and a confection, such as a piece of candy **208**. The candy piece **208** is coupled to the lollipop stick **204**. At least one light source **212** is also coupled to the lollipop stick **204**. The lighted lollipop stick **204** can be disposable or reusable, as can other embodiments of the invention including the embodiments shown in FIGS. 1 and 3-12.

[0048] The lollipop stick **204** and the candy piece **208** can both include light-transmissive portions **216** and **216'** which respectively define indicia **220** and **220'**. In the illustrated embodiment, the lollipop stick's light-transmissive portion **216** defines indicia **220** as "RAMS", which can be highlighted by light **224** from the light source **212**. The candy piece **208** defines indicia **220'** resembling a football helmet. Alternatively, other suitable indicia can be defined (e.g., etched into, etc.) by the light-transmissive portions **216** and **216'**.

[0049] When connected to the power source **240**, the light source **212** directs light **224** generally through the lollipop stick **204**. At least a portion **224'** of the light **224** travels through the lollipop stick **204** out its end portion **228** and into the candy piece **208**. In this exemplary manner, light **124'** from the light source **112** can illuminate the candy piece **208** and the indicia **220'** defined thereby.

[0050] Portions of the lollipop stick **204** adjacent the light-transmissive portion **216** may have means for inhibiting light from inadvertently escaping out of those portions of the lollipop stick **204**. For example, portions of the lollipop stick **204** may be substantially opaque, reflective, faceted, etc. in order to help direct light through the lollipop stick **204** and/or towards the indicia **220**. Additionally, or alternatively, the lollipop stick **204** can be configured (e.g., shaped, sized, and formed of suitable materials, etc.) so that the lollipop stick **204** functions to guide or conduct at least some of the light **224** through the interior of the stick **204**, for example, by successive internal reflections. Accordingly, the selection of material(s) for the lollipop stick **204** can depend at least in part on the material's ability to channel or transmit light **224** from the light source **212** through the stick **204** and/or the material's ability to at least reduce the amount of light that inadvertently escapes out of the lollipop stick **204**. In this exemplary manner, at least some light **224** from the light source **212** can remain within the lollipop stick **204** at least until the light **224** reaches the indicia **220**. This, in turn, can increase the amount of available light for highlighting the indicia **220** and/or the candy piece **208**, thereby enhancing the illumination or highlighting effect.

[0051] A wide range of materials, preferably light-weight and chemically non-reactive to the candy piece **208**, can be used for the lollipop stick **204** and its light-transmissive portion **216**. Further, the same materials do not have to be used for the light-transmissive portion **216** and the other lollipop stick portions. Exemplary materials that can be used for the lollipop stick **204** include transparent materials, translucent materials, other light-altering materials (e.g., materials that alter light by refraction, diffraction, diffusion, and/or dispersion), flexible materials, plastic materials, vinyl materials, polystyrene, polyvinylchloride (PVC) (e.g., environmentally PVC, medical grade PVC, etc.) and materials capable of being mass produced with relatively low manufacturing costs, among other materials suitable for the intended purpose. The type of material used for the lollipop stick **204** may depend at least in part on the particular type and intensity of light produced by the light source. In addition, various manufacturing processes can be used for forming the lollipop stick, including injection molding and casting (e.g., casting poly resin or acrylic, etc.).

[0052] Because the candy piece **208** can also be colored consistent with its flavoring (e.g., an orange-flavored candy piece can be orange in color, etc.), the light **224'** radiating through the edible **208** can create a colorful glow. The candy

piece **208**, however, can also be transparent and/or be ultra-violet-reactive (e.g., responsive to the UVA radiation component of black light). To provide and/or enhance a colorful glow consistent with the candy piece's flavor, the light source may produce light having a particular color and/or produce broadband light that travels through a colored filter within the lollipop stick. This exemplary means for producing thematic light can be applied to other embodiments of the invention including the embodiments shown in FIGS. 1 through 12.

[0053] In the illustrated embodiment, the light source **212** is disposed entirely within the lollipop stick **204** adjacent an end portion **232** of the lollipop stick **204**. Alternatively, the light source **212** need not be positioned entirely within the lollipop stick **204**. Instead, the light source **212** may be partially or entirely positioned external to the lollipop stick **204**. The light source **212** can also be positioned at other locations within the lollipop stick **204** besides the end portion **232**.

[0054] The lighted item **200** can also include a power source compartment or receptacle **236** within the end portion **232** of the lollipop stick **204**. The power source receptacle **236** is adapted to receive at least one power source **240** therein and to electrically connect the power source **240** to the light source **212** via conductive leads **244**. Alternatively, the power source compartment **236** can reside elsewhere, such as at other locations external to or within the lollipop stick **204**.

[0055] In the illustrated embodiment, the lighted lollipop **200** includes a push-button switch **248** for switchably connecting the light source **212** to the power source **240**, although other switching means can also be employed. The switch **248** is positioned within the lollipop stick **204** and is coupled to an externally flexible surface portion **252** of the lollipop stick **204** such that application of external pressure upon the externally flexible surface portion **252** activates the switch **248** thereby causing operation of the light source **212**. The external pressure may, for example, be applied by the user squeezing the lollipop stick **204** at the externally flexible surface portion **252**. The switch **248** may also allow the user to cycle through the various display modes or select a particular color of light to be emitted by the light source **212** by successively squeezing the lollipop stick **204** at about the externally flexible surface portion **252**. Additionally, the switch **248** may also allow the user to dim or brighten the intensity of the light, for example, by holding down the switch **248** with continuously applied pressure to the lollipop stick **204** at about the externally flexible surface portion **252**.

[0056] FIG. 3 illustrates a lighted cup **300** which embodies several aspects of the invention. As shown in FIG. 3, the lighted cup **300** is generally cone-shaped and can be used as a snow cone cup. As with other embodiments of the invention, the lighted cup **300** can be disposable or reusable. Alternatively, the lighted cup **300** can include other suitable shapes, such as a coffee mug, beverage cup or glass, wine glass, etc.

[0057] The lighted cup **300** includes a light-transmissive portion **316** defining one or more indicia **320**. In the exemplary embodiment, the indicia **320** resemble a mouse's head, although other indicia can also be employed.

[0058] The lighted cup **300** also includes at least one light source **312**, such as one or more LEDs or other suitable light source. The light source **312** is switchably connectable to at least one power source **340** (e.g., a watch battery, etc.) received within a power source compartment **336** defined by the lighted cup **300**. In the illustrated embodiment of FIG. 3,

conductive leads **344** connect the LEDs **312** with the **340** within the power source compartment **336** defined by the lighted cup **300**.

[0059] When connected to the power source **340**, the light source **312** emits light **324** which highlights the indicia **320**. Light **324** from the light source **312** can be guided or conducted by the cup's sidewalls **360** such that the light travels generally between the inner and outer surfaces **364** and **368** of the cup's sidewalls **360** and into the flavored ice or snow portion **308**. In this exemplary manner, the flavored ice, or at least a portion thereof, can be illuminated by light **324** from the light source **312**.

[0060] Portions of the cup's sidewalls **360** adjacent the light-transmissive portion **316** have means for inhibiting light from inadvertently escaping out of those portions of the cup's sidewalls **360**. For example, portions of the cup's sidewalls **360** may be substantially opaque, reflective, faceted, etc. in order to help guide light **324** generally upwardly between the inner and outer surfaces **364** and **368** of the cup's sidewalls **360** and/or towards the indicia **320**. Additionally, or alternatively, the cup's sidewalls **360** can be configured (e.g., shaped, sized, and formed of suitable materials, etc.) so that the cup's sidewalls **360** function and/or operate to guide or conduct at least some of the light **324** generally between the inner and outer surfaces **364** and **368** of the cup's sidewalls **360**, for example, by successive internal reflections. Accordingly, the selection of material(s) for the cup's sidewalls **360** can depend at least in part on the material's ability to channel or transmit light **324** from the light source **312** generally between the inner and outer surfaces **364** and **368** of the cup's sidewalls **360** and/or its ability to at least reduce the amount of light that inadvertently escapes inwardly or externally from within the cup's sidewalls **360**. This, in turn, can increase the amount of available light for highlighting the indicia **320** and/or flavored snow **308**, thereby enhancing the illumination or highlighting effect.

[0061] A wide range of materials, preferably light-weight and chemically non-reactive to the edible **308**, can be used for the cup's sidewalls **360** and its light-transmissive portion **316**. Further, the same materials do not have to be used for the light-transmissive portion **316** and the other popsicle stick portions. Exemplary materials that can be used for the cup **300** include transparent materials, translucent materials, other light-altering materials (e.g., materials that alter light by refraction, diffraction, diffusion, and/or dispersion), flexible materials, plastic materials, vinyl materials, polystyrene, polyvinylchloride (PVC) (e.g., environmentally PVC, medical grade PVC, etc.) and materials capable of being mass produced with relatively low manufacturing costs, among other materials suitable for the intended purpose. The type of material used for the cup **300** and light-transmissive portion **316** may depend at least in part on the particular type and intensity of light produced by the light source. In addition, various manufacturing processes can be used for forming the cup **300**, including injection molding and casting (e.g., casting poly resin or acrylic, etc.).

[0062] The snow cone cup **300** can also include an externally flexible surface portion **352**, and at least one switching device **348** (e.g., a push button switch, among other suitable switching means, etc.) coupled to the externally flexible surface portion **352** such that application of external pressure upon the externally flexible surface portion **352** activates the switching device **348**. Activation of the switching device **348** connects the light source **312** to the power source **340**.

[0063] In other embodiments, the snow cone cup **300** can include electrical terminals for switchably connecting the light source **312** to the power source **340**. For example, the electrical terminals can be located within the snow cone cup **300** such that flavored ice or liquid (after ice has melted) within the snow cone cup **300** causes electrical contact between the terminals to complete the circuit for power delivery to the light source **312** from the power source **340**. In a preferred implementation, the terminals are located within the snow cone cup **300** at a bottom portion thereof. In this exemplary manner, the electrical terminals can be electrically connected to one another by the flavored ice or liquid until all (or at least substantially all) of the flavored ice or liquid has been removed (e.g., consumed by the user or dumped out) from the snow cone cup **300**. Or for example, the electrical terminals can be located externally on the snow cone cup **300** such that the user's hand, upon grasping the snow cone cup **300**, electrically connects the terminals to one another, thus completing the circuit for power delivery to the light source **312** from the power source **340**. The exemplary means for switchably connecting the light source **312** to the power source **340** described above can also be applied to other embodiments of the invention such as those shown in FIGS. 1 through 12.

[0064] FIG. 4 illustrates a lighted cotton candy holder **400** which embodies several aspects of the invention. As shown in FIG. 4, the lighted cotton candy holder **400** comprises a generally cone-shaped member **404**, which may be used to receive and retain cotton candy **408**. As with other embodiments of the invention, the lighted cotton candy holder can be disposable or reusable. Alternatively, other suitable shapes can be employed for the lighted cotton candy holder.

[0065] The lighted cotton candy holder **400** includes a light-transmissive portion **416** defining one or more indicia **420** (e.g., "WALT DISNEY WORLD"® theme park, etc.). For example, indicia **420** can be etched or carved into the holder **400**.

[0066] The lighted cotton candy holder **400** also includes at least one light source **412**, such as one or more LEDs and/or other suitable light sources. The light source **412** is switchably connectable with at least one power source **440** (e.g., a watch battery, etc.) within a power source compartment **436** defined by the lighted cotton candy holder **400**.

[0067] When connected to the power source **440**, the light source **412** emits light **424** which highlights the indicia **420**. Light **424** from the light source **412** also passes through the cotton candy holder **400**, out an end **428** thereof, and into the cotton candy **408**. Because the cotton candy **408** is porous, light **424** radiating from within the cotton candy **408** causes the cotton candy **408** to emanate a colorful glow. In this exemplary manner, the cotton candy **408**, or at least a portion thereof, can be illuminated with light **424** from the light source **412**.

[0068] The cotton candy holder **400** may have means for inhibiting light from inadvertently escaping out of the cotton candy holder **400**. For example, the cotton candy holder **400** may be configured (e.g., shaped, sized, have opaque portions, formed of suitable materials, etc.) so as to at least help direct light through the holder **400** and/or towards the indicia **420** and/or to at least reduce the amount of light escaping from the holder **400**. In this exemplary manner, the amount of light available for highlighting the indicia **420** and/or the cotton candy **408** can be increased, thereby enhancing the illumination or highlighting effect.

[0069] The indicia 420 may be formed with a sufficient thickness relative to (e.g., at a sufficient height or depth into, etc.) the holder 400 and/or at an acute angle relative to the direction of travel of the light 424 so as to increase the light transmissibility of the indicia 420 and/or allow the indicia 420 to alter (e.g., capture, refract, disperse, diffuse, diffract, etc.) light traveling within the holder 400. Etching the indicia 420 can affect the way that the light 424 interacts with the etched indicia 420. For example, with relative deeply carved or etched indicia, the light 424 can be captured in the edges of the indicia 420, which, in turn, highlights the indicia 420 relative to its surrounding environment.

[0070] In some embodiments, the cotton candy holder can also include an externally flexible surface portion and at least one switching device coupled to the externally flexible surface portion such that application of external pressure upon the externally flexible surface portion activates the switching device. This, in turn, electrically connects the light source 412 to the power source 440. Alternatively, other switching means can be employed for the cotton candy holder.

[0071] FIG. 5 illustrates a lighted candy ring pop 500 that embodies several aspects of the invention. As shown in FIG. 5, the lighted candy ring pop 500 includes a base portion 504 and a ring or annular portion 506 for placing the candy ring pop 500 on a user's finger. The lighted candy ring pop 500 also includes a piece of candy 508 coupled to the base portion 504.

[0072] At least one of the base portion 504 and the candy piece 508 define one or more indicia. In the illustrated embodiment, the candy piece 508 is light-transmissive and defines one or more indicia 520 (e.g., "SEAN", etc.)

[0073] The lighted candy ring pop 500 also includes at least one light source 512, such as one or more LEDs and/or other suitable light sources. The light source 512 is switchably connectable with at least one power source 540 (e.g., a watch battery, etc.) within a power source compartment 536 defined by the lighted candy ring pop 500.

[0074] When connected to the power source 540, the light source 512 emits light 524 which highlights the indicia 520. Light 524 from the light source 512 also passes through and illuminates the candy piece 508, or at least a portion thereof. Because the candy piece 508 can be colored consistent with its flavoring (e.g., a cherry-flavored candy piece can be red, etc.), light 524 radiating through the edible 508 can create a colorful glow. Additionally, or alternatively, the light source may produce light having a particular color and/or produce broadband light that travels through a colored filter to create or further enhance the colorful glow.

[0075] The base portion 504 can be disposable or reusable. The indicia 520 may be formed with a sufficient thickness (e.g., with a sufficient height or depth, etc.) and/or acute angle relative to direction of travel of the light 524 so as to increase the light transmissibility of the indicia 520 and/or allow the indicia to alter (e.g., capture, refract, disperse, diffuse, diffract, etc.) light 524. This, in turn, can enhance the illuminating or highlighting effect imparted to the indicia 520 by light 524.

[0076] FIG. 6 illustrates a lighted pacifier 600 that embodies several aspects of the invention. As shown in FIG. 6, the lighted pacifier 600 includes a base portion 604 and a portion 606 adapted to be readily grasped or coupled to a baby's finger. The lighted pacifier 600 also includes a nipple 608 coupled to the base portion 604.

[0077] At least one of the base portion 604 and the nipple 608 define one or more indicia. In the illustrated embodiment, the nipple 608 is light-transmissive and defines one or more indicia 620.

[0078] The lighted pacifier 600 also includes at least one light source 612, such as one or more LEDs or other suitable light source. The light source 612 is switchably connectable with at least one power source 640 within a power source compartment 636 defined by the lighted pacifier 600.

[0079] When connected to the power source 640, the light source 612 emits light 624 which highlights the indicia 620. Light from the light source 612 also passes through and illuminates the nipple 608, or at least a portion thereof.

[0080] The indicia 620 may be formed with a sufficient thickness relative to (e.g., sufficient height or depth into, etc.) the nipple 608 and/or at an acute angle relative to a direction of travel of the light 624 so as to increase the light transmissibility and/or accentuation of the indicia 620 and/or allow the indicia 620 to alter (e.g., capture, refract, disperse, diffuse, diffract, etc.) light 624.

[0081] The nipple 608 may have means for inhibiting light from inadvertently escaping out of the nipple 608. For example, the nipple 608 may be configured (e.g., shaped, sized, have opaque portions, formed of suitable materials, etc.) so as to at least help direct light through the nipple 608 and/or towards the indicia 620. In this exemplary manner, the amount of light available for highlighting the indicia 620 can be increased.

[0082] FIGS. 7A and 7B illustrate a lighted receptacle 700 embodying several aspects of the invention. The lighted receptacle 700 is sized to receive a beverage container, such as a beer can 764, beer bottle, a beverage glass, cup, etc. At least a portion 716 of the lighted receptacle 700 is light-transmissive and defines one or more indicia 720 (e.g., "CARL'S BEER", etc.).

[0083] The indicia 720 can be positioned so as to accentuate certain portions of the beverage container. For example, the indicia 720 can be positioned to accentuate or draw attention to the brewery name or brand of beer on a preexisting label attached to the beer can 764. In this exemplary manner, the lighted receptacle 700 and highlighted indicia 720 can serve an advertising purpose for the brewery name or brand of beer.

[0084] As shown, the lighted receptacle 700 includes four LEDs 712, although other quantities of LEDs and/or other suitable light source types can be employed. The LEDs 712 are switchably connectable with at least one power source 740 (e.g., a watch battery, etc.) within a power source compartment 736 defined by a bottom portion 768 of the lighted receptacle 700. Alternatively, the power source compartment 736 can be defined by other portions of the lighted receptacle.

[0085] When connected to the power source 740, the LEDs 712 emit light which highlights the indicia 720. Light from the LEDs 712 can be guided or conducted by the receptacle sidewalls 772 and 774 such that the light travels generally upwardly between the sidewalls 772 and 774. The indicia 720 may be formed with a sufficient thickness relative to (e.g., height or depth into, etc.) the receptacle 700 and/or at an angle relative to a direction of travel of the light so as to increase the light transmissibility and/or accentuation of the indicia 720 and/or to allow indicia 720 to alter (e.g., capture, refract, disperse, diffuse, diffract, etc.) light from the LEDs 712.

[0086] Portions of the sidewalls 772 and 774 adjacent the light-transmissive portion 716 may have means for inhibiting

light from inadvertently escaping out of those portions of the sidewalls **772** and **774**. For example, portions of the sidewalls **772** and **774** may be substantially opaque, reflective, faceted, etc. in order to help guide light generally upwardly between the sidewalls **772** and **774** and/or towards the indicia **720**. Additionally, or alternatively, the sidewalls **772** and **774** can be configured (e.g., shaped, sized, and formed of suitable materials, etc.) so that the sidewalls **772** and **774** cooperate to guide or conduct light generally between the sidewalls **772** and **774**, for example, by successive internal reflections. Accordingly, the selection of material(s) for the receptacle **700** and its sidewalls **772** and **774** can depend at least in part on the material's ability to channel or transmit light from the LEDs **712** generally between the sidewalls **772** and **774** and/or the material's ability to at least reduce the amount of light that inadvertently escapes from within the sidewalls **772** and **774**. This, in turn, can increase the amount of available light for highlighting the indicia **720**.

[**0087**] A wide range of materials, preferably light-weight and thermally-insulating (for example, to help keep a beverage cool while it is being consumed) can be used for the receptacle **700**. Further, the same materials do not have to be used for the light-transmissive portion **716** and the other receptacle portions. Exemplary materials that can be used for the receptacle **700** include transparent materials, translucent materials, other light-altering materials (e.g., materials that alter light by refraction, diffraction, diffusion, and/or dispersion, etc.), flexible materials, plastic materials, vinyl materials, polystyrene, polyvinylchloride (PVC) (e.g., environmentally PVC, medical grade PVC, etc.) and materials capable of being mass produced with relatively low manufacturing costs, among other materials suitable for the intended purpose. The type of material used for the receptacle **700** may depend at least in part on the particular type and intensity of light produced by the light source.

[**0088**] In some embodiments, light from the LEDs **712** can also pass through the receptacle **700** into a transparent or translucent beverage container (e.g., beer or soda bottle, etc.) at least partially positioned within the receptacle **700**.

[**0089**] In this exemplary manner, the beverage within the beverage container may be illuminated with light emitted by the LEDs **712**.

[**0090**] The lighted receptacle **700** can also include an externally flexible surface portion **752**, such as a flexible bottom portion, and at least one switching device coupled to the externally flexible surface portion **752**. Application of external pressure upon the externally flexible surface portion activates the switching device and switchably connects the light sources **712** to the power source **740**.

[**0091**] Optionally, one or more of the various LEDs **712** may produce light that has at least one attribute (e.g., color, intensity, blink speed, hue, saturation, brightness, etc.) different than the light produced by the other LEDs **712**. By way of example, one or more LEDs **712** may produce blue-colored light, whereas the other LEDs **712** may produce red-colored light, among other colors and color combinations. Rather than producing colored light, one or more of the LEDs **712** can produce broadband light that travels through a colored filter, which may but need not be the light-transmissive portion **716**.

[**0092**] The receptacle **700** can also define a cavity therein. For example, a cavity may be defined between the inner walls **772** and outer walls **774** of the receptacle **700**. Filler may be disposed within the cavity. This filler can be adapted to retain

heat when the receptacle is heated and/or retain cold when the receptacle is cooled. Exemplary fillers include commercially available materials bearing cold-retaining and/or heat-retaining properties such as, but not limited to, materials generally used in re-usable ice-packs, re-usable heating pads, hot/cold gel packs, single-use hand and toe warmers, among other suitable known (and presently unknown) materials.

[**0093**] Additionally, light-altering particles (e.g., glitter, reflective particles, refractive particles, translucent particles, glass-like prisms, colored particles, clear particles, etc.) may be disposed within the cavity defined by the receptacle **700**, with or without the filler. For example, light-altering particles may be suspended within a hot/cold gel or other suitable substance within the cavity. Or, for example, light-altering particles may be contained within a separate container (e.g., tube having etched sidewalls, etc.), which, in turn, is suspended by a filler within the cavity. The light-altering particles can receive and alter light from a light source to create a visibly pleasing or sparkling light effect. Light-altering particles can also be used with other embodiments of the invention including the embodiments shown in FIGS. **1-6** and **8-12**).

[**0094**] FIGS. **8A** and **8B** illustrate a lighted label **800** embodying several aspects of the invention. The lighted label **800** is adapted to be coupled to a beverage container, such as a beer bottle **878**. In an exemplary embodiment, a back surface **882** of the label **800** has an adhesive thereon which is suitable for attaching the label **800** to a glass bottle, although other suitable attachment means can also be employed. The light label **800** can be disposable or reusable.

[**0095**] At least a portion **816** of the lighted label **800** is light-transmissive and defines one or more indicia **820**. For example, the indicia **820** may include a person's name (e.g., "CARL'S BEER", etc.) to allow that person's drink to be readily identified, for example, from a group of other drinks on a table. The indicia **820** can also be positioned so as to accentuate certain portions of the beverage container. For example, the indicia **820** can be positioned to accentuate or draw attention to the brewery name or brand of beer on a preexisting label attached to the beer bottle **878**. In this exemplary manner, the lighted label **800** and highlighted indicia **820** can serve an advertising purpose for the brewery name or brand of beer.

[**0096**] As shown, the lighted label **800** includes two LEDs **812**, although other quantities of LEDs and/or other suitable light source types can be employed. The LEDs **812** are switchably connectable with at least one power source **840** (e.g., a watch battery, etc.) within a power source compartment **836** defined by the lighted label **800**.

[**0097**] When connected to the power source **840**, the LEDs **812** emit light **824** which highlights the indicia **820**. The indicia **820** may be formed with a sufficient thickness relative to (e.g., height or depth into, etc.) the label **800** and/or at an angle relative to a direction of travel of the light **824** so as to increase the light transmissibility or accentuation of the indicia **820** and/or to allow the indicia **820** to alter (e.g., capture, refract, disperse, diffuse, diffract, etc.) light **824**.

[**0098**] The label **800** may have means for inhibiting light from inadvertently escaping out of the label **800**. For example, the label **800** may be configured (e.g., shaped, sized, have opaque portions, formed of suitable materials, etc.) so as to at least help direct light through the label **800** and/or

towards the indicia **820**. In this exemplary manner, the amount of light available for highlighting the indicia **820** can be increased.

[0099] In some embodiments, the back portion **882** of the label **800** is transparent or translucent such that light **824** from the LEDs **812** can pass into a transparent or translucent beverage container to which the label **800** is attached. In this exemplary manner, the beverage within the beverage container can also be illuminated with light emitted by the LEDs **812**.

[0100] The lighted label **800** can also include an externally flexible surface portion, for example a flexible back portion **882**, and at least one switching device coupled to the externally flexible surface portion. Application of external pressure upon the externally flexible surface portion activates the switching device. This, in turn, electrically connects the LEDs **812** to the power source **840**. Alternatively, other switching means can also be employed for the lighted label **800**.

[0101] Optionally, one or more of the various LEDs **812** may produce light that has at least one attribute (e.g., color, intensity, blink speed, hue, saturation, brightness, etc.) different than the light produced by the other LEDs **812**. By way of example, one or more LEDs **812** may produce blue-colored light, whereas the other LEDs **812** may produce red-colored light, among other colors and color combinations. Rather than producing colored light, one or more of the LEDs **812** could produce broadband light that travels through a colored filter, which may but need not be the light-transmissive portion **816**.

[0102] In some embodiments, the label's back portion **882** (or other label portion) may include a graphic element or image (e.g., a scene, printed material, a photograph, artwork, an art print, a photographic print, etc.) which may but need not be ultraviolet-reactive (e.g., responsive to the ultraviolet A (UVA) radiation component of black light, etc.). The indicia **820** can be positioned relative to the graphic element to accentuate certain portions of the graphic element when the indicia **820** are highlighted. Further, some embodiments include indicia **820** formed with ultraviolet-reactive ink (e.g., ink responsive to the UVA component of black light, etc.) and/or an ultraviolet-reactive light-transmissive portion **816**. In which case, the light source **812** is preferably adapted to produce and direct ultraviolet light (e.g., black light which includes a UVA radiation component, etc.) at the indicia **820**, light-transmissive portion **816**, and the graphic element.

[0103] FIGS. 9 and 10 illustrate a lighted key holder **900** embodying several aspects of the invention. As shown, the lighted key holder **900** includes a housing **983** which defines an internal compartment **984** adapted to receive a back portion **985** of a key **986**. At least a portion **916** of the housing **983** is light-transmissive and defines one or more indicia **920**.

[0104] In an exemplary embodiment, the indicia **920** is etched or carved (e.g., with a cutting tool, knife, razor blade, laser, chemically etched, drilled, etc.) into the material (e.g., plastic, etc.) forming the key holder **900**. This etching can increase the light transmissibility of the etched indicia and/or allow the etched indicia to alter (e.g., capture, refract, disperse, diffuse, diffract, etc.) light **924**. The preferred angle(s) and thickness (e.g., height or depth, etc.) at which the indicia are cut or otherwise formed into the key holder material will depend on the particular application. In exemplary embodiments, the indicia can be etched into an outer and/or inner

surface of the key holder material at an angle of about ± 45 degrees relative to the direction of travel of the light **924**.

[0105] As shown, the lighted key holder **900** includes two LEDs **912**, although other quantities of LEDs and/or other suitable light source types can be employed. The LEDs **912** are switchably connectable via conductive leads **944** with at least one power source **940** (e.g., a watch battery, etc.) within a power source compartment **936** defined by the lighted key holder **900**.

[0106] When connected to the power source **940**, the LEDs **912** emit light **924** which highlights the indicia **920**. The light **924** can be guided or conducted by the housing **983** such that the light travels generally towards the indicia **920** and/or a front portion **987** of the housing **983**. In at least some embodiments, the front portion **987** is transparent (or at least translucent) such that light **924'** can pass therethrough. In this exemplary manner, a key portion **988** extending outwardly from the housing **983** (and a keyhole adjacent thereto) can be illuminated with light **924'** emitted by the LEDs **912**.

[0107] The key holder **900** may have means for inhibiting light from inadvertently escaping out of the label **800**. For example, the key holder **900** may be configured (e.g., shaped, sized, have opaque portions, formed of suitable materials, etc.) so as to at least help direct light **924** generally towards the front portion **987** and/or the indicia **920**. This, in turn, can increase the amount of available light for highlighting the indicia **920** and/or for illuminating the key portion **988**.

[0108] The housing **983** can include an externally flexible surface portion and at least one switching device (e.g., push-button switching device, etc.) coupled to the externally flexible surface portion such that application of external pressure upon the externally flexible surface portion activates the switching device. This, in turn, switchably connects the LEDs **912** to the power source **940**. Alternatively, other switching means can also be employed. For example, in another embodiment, the key holder includes electrical terminals external to the housing such that a user's hand upon grasping the key holder causes electrical contact between the terminals thus completing the circuit for power delivery to the light source from the power source.

[0109] To allow a user internal access to the key compartment **984**, for example, to remove or replace the key **986**, the key holder **900** includes an openable portion **989**, such as a lid or cap. When in the open position (FIG. 10), the portion **989** exposes the key compartment **984**. But the portion **989** closes the key compartment **984** to retain the key **986** within the housing **983** when the portion **989** is coupled to the housing **983** in a closed position (FIG. 9).

[0110] In the illustrated embodiment of FIGS. 9 and 10, the portion **989** is pivotably or hingedly coupled to the housing **983** such that the portion **989** is pivotal between an opened position (FIG. 10) and a closed position (FIG. 9). Alternatively, the portion **989** can be removably coupled to the housing **983** by using a suitable fastening system or method (e.g., a threaded connection, an interference fit, resilient ribs, among others).

[0111] The lighted key holder **900** can also include a loop **990** for attaching the lighted key holder **900** to a key ring or key chain. Alternatively, other attachment devices (e.g., magnets, clasps, hook and loop fasteners, etc.) can also be used for attaching the key holder **900** to a key ring, key chain, or a user.

[0112] FIG. 11 illustrates a lighted item **1100** embodying several aspects of the invention. The lighted item **1100** includes a base portion and a lighted removable portion,

which in the illustrated embodiment are in the form of a placemat **1191** and a lighted coaster **1192**, respectively, each having a relatively low profile. The base portion and the lighted removable portion should not be limited to the exemplary tablemat and coaster combination shown in FIG. 11 as these configurations are shown for illustrative purposes only and not for purposes of limitation.

[0113] With further reference to FIG. 11, indicia **1120** is defined along a light-transmissive sidewall portion **1116** of the coaster **1192**. The indicia **1120** can be formed (e.g., with a cutting tool, knife, razor blade, laser, chemically etched, drilled, etc.) with a sufficient thickness relative to (e.g., at a sufficient height or depth into, etc.) sidewall portion **1116** and/or at an angle relative to the direction of travel of the light **1124** so as to increase the light transmissibility and/or accentuation of the indicia **1120** by the light **1124** and/or to allow the indicia **1120** to alter (e.g., capture, refract, disperse, diffuse, diffract, etc.) light **1124**. Additionally, or alternatively, indicia can be defined in other methods (e.g., by using optical fibers, etc.) and by other portions of the coaster **1192**, such as the coaster top surface **1193**.

[0114] The coaster **1192** includes four LEDs **1112**, although other quantities of LEDs and/or other suitable light source types can be employed. Conductive leads **1144** connect the LEDs **1112** with at least one power source **1140** (e.g., a watch battery, etc.) within a power source compartment **1136** defined by the coaster **1192**.

[0115] When connected to the power source **1140**, the LEDs **1112** emit light **1124** which highlights the indicia **1120** defined along the coaster sidewall **1160** and/or elsewhere. The coaster **1192** can be configured (e.g., shaped, sized, have opaque portions, formed of suitable materials, etc.) so as to at least help direct light through the coaster **1192** and/or towards the indicia **1120**. In this exemplary manner, the amount of light available for highlighting the indicia **1120** can be increased.

[0116] The coaster **1192** is sized to be received within an opening **1194** defined by the placemat **1191**. The coaster **1192** may be engaged with the placemat **1191** using any suitable fastening system or method (e.g., a threaded connection, an interference fit, resilient ribs, among others). In one embodiment, the opening **1194** is sized to frictionally receive and form an interference fit with the coaster **1192** such that an external force must be applied to the coaster **1192** to remove the coaster **1192** from the opening **1194**. In this exemplary manner, the coaster **1192** can be retained within the opening **1194** during normal use. This also allows the coaster **1192** to be readily removed from the opening **1194**, for example, to substitute or replace the coaster **1192** or the placemat **1191**.

[0117] In some embodiments, indicia **1120'** are also defined along a light-transmissive sidewall portion **1195** of the placemat **1191**. The indicia **1120'** can be formed (e.g., etched, carved, etc.) with a sufficient thickness relative to (e.g., at a sufficient height or depth into, etc.) the sidewall portion **1195** and/or at an angle relative to the direction of travel of the light so as to increase the light transmissibility and/or accentuation of the indicia **1120'** and/or to allow the indicia **1120'** to alter (e.g., capture, refract, disperse, diffuse, diffract, etc.) light **1124**.

[0118] Additionally, or alternatively, indicia can be defined by other methods (e.g., by using optical fibers, etc.) and by other portions of the placemat **1191**, such as the placemat's top surface **1196**.

[0119] When the coaster **1192** is within the placemat opening **1194**, light **1124** from the LEDs **1112** passes through the coaster's sidewall **1160** and into the placemat **1191**. In this exemplary manner, the placemat indicia **1120'** can be illuminated with light from the LEDs **1112**. The placemat **1191** may have means for inhibiting light from inadvertently escaping out of the placemat **1191**. For example, the placemat **1191** may be configured (e.g., shaped, sized, have opaque portions, formed of suitable materials, etc.) so as to at least help direct light through the placemat **1191** and/or towards the indicia **1120'**. In this exemplary manner, the amount of light available for highlighting the indicia **1120'** can be increased.

[0120] Various embodiments can include a plurality of interchangeable placemats each defining an opening for receiving the coaster **1192**. The placemats can have a variety of sizes, configurations, shapes, decorations, and define different indicia. For example, the lighted coaster **1192** may be used in a generally rectangular placemat decorated with a Christmas motif as well in a generally oval shaped placemat decorated with a Thanksgiving motif. In various embodiments, the lighted coaster **1192** can also include a controller (e.g., an integrated circuit/printed circuit assembly and at least one switch, etc.) for controlling the operation of the light sources **1112** such that the lighted coaster **1192** produces thematic light (e.g., certain colors, etc.) consistent with the particular theme or motif associated with the placemat. For example, when the coaster **1192** is being used with a placemat decorated with a Christmas motif, a user can access the controller's switch to cause the LEDs **1112** to emit light that phases between the colors green and red.

[0121] Various embodiments can include a plurality of interchangeable coasters each sized to be received within an opening **1194** defined by the placemat **1191**. The various lighted coasters may each define different indicia and/or be decorated differently. For example, one coaster may be decorated with a Christmas motif, another can be decorated with a Thanksgiving motif, and yet another can be decorated in a Halloween motif. Accordingly, any of these coasters may be used with the placemat **1191** depending on which holiday is being celebrated. In addition, various embodiments can include coasters that produce thematic light (e.g., certain colors, etc.) consistent with the particular theme or motif. For example, a coaster decorated with a Halloween motif can include one or more LEDs that produce orange and/or black colored light.

[0122] In at least some embodiments, the coaster **1192** is integral with and fixedly attached to the placemat **1191**. Yet other embodiments include one or more lighted coasters **1192** but not a placemat or base portion **1191**. Other embodiments include at least one placemat defining a plurality of openings each sized to receive a different one of a plurality of lighted coasters.

[0123] In still further embodiments, the coaster and/or placement (e.g., lower surface, etc.) can include a graphic element or image thereon (e.g., a scene, printed material, artwork, a graphic design, a photograph, artwork, an art print, a photographic print, etc.). The indicia can be positioned relative to the image such that the indicia when highlighted accentuate certain portions of the graphic element or image. For example, the coaster and/or placement can include a menu thereon such that the light and/or highlighted indicia accentuate prices on the menu.

[0124] FIGS. 12A, 12B, and 12C respectively illustrate a lighted fork **1200A**, spoon **1200B**, and knife **1200C** embody-

ing several aspects of the invention. As shown, each lighted item **1200** includes a handle **1204** and an LED **1212** within the handle **1204**. Alternatively, other quantities of LEDs and/or other suitable light source types can be employed. The LED **1212** is switchably connectable via conductive leads **1244** with at least one power source **1240** (e.g., a watch battery, etc.) also disposed within the handle **1204**.

[0125] When connected to the power source **1240**, the LED **1212** emits light **1224** which highlights the indicia **1220**. The light **1224** can be guided or conducted by the handle **1204** such that the light travels generally towards the indicia **1220**. The indicia **1220** can be formed with a sufficient thickness relative to (e.g., at a sufficient height or depth into, etc.) the handle **1204** and/or at an angle relative to the direction of travel of the light so as to increase the light transmissibility and/or accentuation of the indicia **1220** and/or to allow indicia **1220** to alter (e.g., capture, refract, disperse, diffuse, diffract, etc.) light from the LED **1212**.

[0126] The handle **1204** may have means for inhibiting light from inadvertently escaping out of the handle **1204**. For example, the handle **1204** may be configured (e.g., shaped, sized, have opaque portions, formed of suitable materials, etc.) so as to at least help direct light **1224** generally towards the indicia **1220**. This, in turn, can increase the amount of available light for highlighting the indicia **1220** and/or for illuminating adjacent surroundings. For example, light **1224** from the LED **1212** can illuminate a food item on the tines **1297A** of the fork **1200A**, within the bowl portion **1298B** of the spoon **1200B**, or being cut by the cutting edge **1299C** of the knife **1200C**.

[0127] In FIGS. **12A** and **12C**, the lighted fork **1200A** and knife **1200C** are shown with a rotatable end cap **1248A**, **1248C**, respectively, that functions as a switching device for switchably connecting the LED **1212A**, **1212C** to the power source **1240A**, **1240C**. Rotating the end cap **1248A**, **1248C** in a first direction relative to a longitudinal axis through the handle **1204A**, **1204C** activates or turns on the LED **1212A**, **1212C**. Rotating the end cap **1248A**, **1248C** in the opposite direction deactivates or turns off the LED **1212A**, **1212C**.

[0128] As shown in FIG. **12B**, the lighted spoon **1200B** includes electrical terminals **1248B** externally located on the handle **1204B** such that a user's hand upon grasping the spoon handle **1204** causes electrical contact between the terminals **1248B**, thereby completing the circuit for power delivery to the LED **1212B** from the power source **1240B**. Alternatively, the terminals **1248B** may be located at other positions. In addition, other switching means can be employed for the lighted tableware including push-button switches, etc.

[0129] In various embodiments, the lighted item can include an ultraviolet-reactive portion, and the light source can include at least one ultraviolet light source for illuminating the ultraviolet-reactive portion with ultraviolet light. For example, the ultraviolet-reactive portion can be responsive to the ultraviolet A (UVA) radiation component of black light produced by the light source, which, in turn, produces a visually stimulating effect. Exemplary ultraviolet-reactive materials include plastic or vinyl materials containing phosphor (e.g., Zinc Sulfide, Strontium Aluminate, etc.) and fluorescent materials.

[0130] Further, the indicia in various embodiments can be formed with ultraviolet-reactive ink. Accordingly, the lighted item can include one or more indicia which are responsive to ultraviolet light, such as the UVA component of black light.

[0131] Indeed, some embodiments of the lighted item include an outer light-transmissive layer which can be reactive to ultraviolet light (e.g., responsive to the UVA component of black light, etc.), indicia formed with ultraviolet-reactive ink, and an inner or back layer including a graphic element or image thereon (e.g., a scene, printed material, artwork, a graphic design, a photograph, artwork, an art print, a photographic print, etc.) which can also be ultraviolet-reactive. In such embodiments, the light source can produce and direct ultraviolet light (e.g., black light with an UVA radiation component, etc.) at the indicia and the inner and outer layers to produce a visually pleasing display. The indicia can be positioned relative to the graphic element to accentuate certain portions of the graphic element when the indicia are highlighted.

[0132] Moreover, in any of the embodiments in which the lighted item includes an edible (e.g., edible portion **108** of the frozen confection **100**, candy **208**, etc.), the edible (or a portion thereof) may itself be UV-reactive or responsive to black light. For example, various embodiments include an edible including a UV-reactive food additive.

[0133] In various embodiments of the invention, a wide range of materials can be used for the lighted item. The indicia can be integrally formed into the material by using a cutting tool, knife, razor blade, laser, chemically etched, drilled, etc. Exemplary materials include transparent materials, translucent materials, other light-altering materials (e.g., materials that alter light by refraction, diffraction, diffusion, and/or dispersion, etc.), flexible materials, plastic materials, vinyl materials, polystyrene, polyvinylchloride (PVC) (e.g., environmentally PVC, medical grade PVC, etc.) and materials capable of being mass produced with relatively low manufacturing costs, among other materials suitable for the intended purpose. The type of material used can depend at least in part on the particular type and intensity of light produced by the light source. Alternatively, or additionally, a light-transmissive portion may be defined by one or more openings or holes which are arranged to form indicia. These holes allow light from the light source to escape or pass through the holes, thus becoming visible to a user.

[0134] In various embodiments of the invention, a lighted item can include any suitable number of (i.e., one or more) and type of light source. Exemplary light sources include LEDs, incandescent, laser, fluorescent, phosphorescent, chemiluminescent, halogen, fiber optics, electroluminescent, neon light sources, black lights, a combination thereof, and the like.

[0135] In various embodiments of the invention, a lighted item can include a plurality of light sources, one or more of which may produce light having at least one attribute (e.g., color, intensity, blink speed, hue, saturation, brightness, etc.) different than light produced by another light source. Indeed, any of the various lighted items **100**, **200**, **300**, **400**, **500**, **600**, **700**, **800**, **900**, **1100**, **1200** can be configured to produce light having one or more colors depending at least in part on user preferences. User preferences may, in turn, be based on any number of factors including the event at which the lighted item is being distributed or used. For example, a lighted item which produces colored light consistent with a home team's colors can be distributed at a sporting event, such as a football game.

[0136] In various embodiments of the invention, a lighted item may include a controller for controlling operation of the light source(s) in accordance with user input to provide such

features as blinking, strobing and/or color changes. The controller can include an integrated circuit/printed circuit assembly (e.g., integrated circuits in a printed circuit assembly, etc.) and at least one switch. The switch may, for example, allow the user to select from among various display modes for the light sources, such as an off-light mode, an on-light mode, a mode in which each of the light sources simultaneously emit steady or non-flashing light, a mode in which the light sources emit light intermittently, a mode in which the various light sources illuminate or blink at different times in accordance with a predetermined sequence or order, a mode in which the light sources emit light that phases between or blends colors, a mode in which the light sources emit light randomly, a mode in which the light sources pulsate to sounds, and/or a mode combining one or more of the foregoing. Such sounds may be produced by the lighted item itself (e.g., via a speaker built-in to the lighted item, etc.) or a source external to the lighted item (e.g., ambient sounds, etc.). In some embodiments, sounds can cause synchronized pulsation of the light sources of two or more different lighted items, thus providing a pleasing light pattern or effect.

[0137] The controller can also include a plurality of switches each of which can be used to control the operation of an individual light source or group of light sources. For example, the controller may include a first switch for activating and deactivating LEDs that emit white light and a second switch for activating and deactivating the LEDs that emit blue light.

[0138] Additionally, various lighted items can include a push-button switch for switchably connecting the light sources to the power source. The switch can be positioned within the lighted item and be coupled to an externally flexible surface portion of the lighted item such that application of external pressure upon the externally flexible surface portion activates the switch, thereby causing operation of the light source. The external pressure may, for example, be applied by the user squeezing the lighted item at the externally flexible surface portion. The switch may also allow the user to cycle through various display modes or select a particular color for the light by successively squeezing the lighted item at about the externally flexible surface portion. Additionally, the switch may also allow the user to dim or brighten the intensity of the light, for example, by holding down the switch with continuously applied pressure to the lighted item at about the externally flexible surface portion.

[0139] Various lighted items can include electrical terminals for switchably connecting the light source to the power source. For example, the electrical terminals can be located such that a user's hand upon grasping the item completes the circuit for power delivery to the light source from the power source.

[0140] In another form, the present invention provides a method that generally includes providing a lighted item having at least a first light-transmissive portion defining one or more indicia, and at least one light source positioned for directing light through the first light-transmissive portion for highlighting the indicia. The method can further include activating the light source to highlight the indicia.

[0141] In another implementation, a method generally includes activating at least one light source coupled to an item to highlight one or more indicia defined by at least a first light-transmissive portion of the item.

[0142] In yet another form, the invention also provides methods of advertising. In one implementation, a method of

advertising generally includes distributing at least one item having at least a first light-transmissive portion defining an advertisement, and at least one light source positioned for directing light through the first light-transmissive portion for highlighting the advertisement. The method can further include activating the light source to highlight the advertisement. The advertising may include, e.g., indicia identifying a source (e.g., company, another party, contact information, etc.) of products or services, such as trademarks and trade names.

[0143] By highlighting the indicia in a visually stimulating and pleasing manner, various embodiments of the invention serve to reinforce or strengthen the effectiveness of the advertisement(s) being displayed by the item.

[0144] Optionally, the method may also include providing items having indicia (e.g., branded goods, etc.) for further distribution (e.g., as a promotional item, etc.) by the source or another party. In such a case, the method may also include providing the source (e.g., company, etc.) or another party with items having indicia. The source, or the another party on behalf of the source, may then further distribute the items to potential or existing customers of the products or services provided by the source.

[0145] Certain terminology is used herein for purposes of reference only, and thus is not intended to be limiting. For example, terms such as "upper", "lower", "above", and "below" refer to directions in the drawings to which reference is made. Terms such as "front", "back", "rear", "bottom" and "side", describe the orientation of portions of the component within a consistent but arbitrary frame of reference which is made clear by reference to the text and the associated drawings describing the component under discussion. Such terminology may include the words specifically mentioned above, derivatives thereof, and words of similar import. Similarly, the terms "first", "second" and other such numerical terms referring to structures do not imply a sequence or order unless clearly indicated by the context.

[0146] When introducing elements or features and the exemplary embodiments, the articles "a", "an", "the" and "said" are intended to mean that there are one or more of such elements or features. The terms "comprising", "including" and "having" are intended to be inclusive and mean that there may be additional elements or features other than those specifically noted. It is further to be understood that the method steps, processes, and operations described herein are not to be construed as necessarily requiring their performance in the particular order discussed or illustrated, unless specifically identified as an order of performance. It is also to be understood that additional or alternative steps may be employed.

[0147] The description of the invention is merely exemplary in nature and is in no way intended to limit the invention, its application, or uses. Thus, variations that do not depart from the substance of the invention are intended to be within the scope of the invention. Such variations are not to be regarded as a departure from the spirit and scope of the invention.

What is claimed:

1. A lighted item comprising a light-conducting portion including one or more indicia having at least one side edge portion, a light-transmissive portion, a consumable, and at least one light source positioned to emit light into the light-conducting portion such that the light-conducting portion conducts light emitted by the light source to the at least one side edge portion of the one or more indicia thereby high-

lighting the one or more indicia and such that the light-conducting portion conducts light emitted by the light source through the light-transmissive portion thereby highlighting said consumable, whereby light emitted by the light source is channeled within a material thickness of the light-conducting portion generally at the at least one edge portion of the one or more indicia, and the light-conducting portion having means for inhibiting light from inadvertently escaping out of the light-conducting portion thereby increasing the amount of available light that highlights the one or more indicia, wherein the one or more indicia are integrally formed with a sufficient thickness dimension relative to the light-conducting portion for altering light emitted by the light source into the light-conducting portion.

2. The lighted item of claim 1, wherein the consumable is fit for human consumption by drinking or eating.

3. The lighted item of claim 1, wherein the one or more indicia are integrally formed at a sufficient depth into the light-conducting portion for altering light emitted by the light source into the light-conducting portion.

4. The lighted item of claim 1, wherein the one or more indicia are integrally formed in the light-conducting portion at an acute angle relative to a direction at which light emitted by the light source is transmitted through the light-conducting portion.

5. The lighted item of claim 1, wherein the consumable includes one or more indicia highlighted by light emitted by the light source and passing through the light-transmissive portion into the consumable.

6. The lighted item of claim 1, wherein the lighted item includes a holding device for holding the consumable, the holding device including at least one sidewall having an inner surface and an outer surface, the at least one sidewall including the one or more indicia and the light-conducting portion, wherein the light source is disposed within the holding device to emit light into the at least one sidewall, whereby light emitted by the light source is channeled generally between the inner and outer surfaces of the at least one sidewall generally at the at least one edge portion of the one or more indicia for highlighting the one or more indicia, and wherein the holding device defines a power source receptacle configured to receive at least one power source and electrically connect the power source to the light source.

7. The lighted item of claim 1, wherein the lighted item includes at least one graphic element, and the one or more indicia are positioned to accentuate at least a portion of the graphic element when the one or more indicia are highlighted by light emitted by the light source.

8. The lighted item of claim 1, wherein the light source is disposed within the light-conducting portion, and wherein the light-conducting portion defines a power source receptacle configured to receive at least one power source and to electrically connect the power source to the light source.

9. The lighted item of claim 8, wherein the light-conducting portion includes at least one flexible portion coupled to a switching device such that movement of the flexible portion switchably connects the light source to the power source.

10. The lighted item of claim 1, further comprising electrical terminals external to the lighted item for switchably connecting the light source to a power source when a user's body electrically connects the terminals to one another.

11. The lighted item of claim 1, wherein the lighted item includes a cup defining the light-conducting portion and electrical terminals positioned within the cup for switchably con-

necting the light source to a power source when an electrically conductive consumable liquid in the cup electrically connects the terminals to one another.

12. The lighted item of claim 1, wherein said means for inhibiting light comprises at least one or more of:

- a substantially opaque portion of the light-conducting portion; or
- a reflective portion of the light-conducting portion; or
- a faceted portion of the light-conducting portion; or
- a portion of the light-conducting portion configured to conduct at least some of the light through the interior of the light-conducting portion by successive internal reflections.

13. A lighted item comprising a light-transmissive element, at least one light source positioned to emit light through the light-transmissive element, one or more indicia integrally formed in the light-transmissive element to receive light emitted by the light source via the light-transmissive element and to alter the light for highlighting the one or more indicia, the one or more indicia being integrally formed with a sufficient thickness dimension such that the light is captured by one or more edges of the one or more indicia, and a consumable positioned to receive light emitted by the light source via the light-transmissive element for highlighting the consumable, wherein the one or more indicia are integrally formed at an angle of about ninety degrees or less relative to a direction at which light emitted by the light source is being transmitted through the light-transmissive element.

14. The lighted item of claim 13, wherein the consumable is fit for human consumption by drinking or eating.

15. The lighted item of claim 13, wherein the one or more indicia are etched in the light-transmissive element at an acute angle relative to the direction of travel of the light.

16. The lighted item of claim 13, wherein the one or more indicia are etched in the light-transmissive element at an angle of about forty-five degrees relative to the direction of travel of the light.

17. The lighted item of claim 13, wherein the one or more indicia are integrally formed at a depth into the light-transmissive element.

18. A lighted tableware piece comprising a handle including a light-transmissive portion and a light-conducting portion, and at least one light source positioned to emit light into the light-conducting portion such that the light-conducting portion channels light emitted by the light source within a material thickness of the light-conducting portion to another portion of the lighted tableware piece to thereby highlight said another portion of the lighted tableware piece and such that the light-conducting portion channels light emitted by the light source through the light-transmissive portion to thereby highlight an element engaged to the lighted tableware piece.

19. A lighted item comprising at least one light source and at least one sidewall having an inner surface and an outer surface, the at least one sidewall defining an opening sized to receive a beverage container at least partially therein such that the lighted item is positionable generally around at least a portion of the beverage container, the at least one sidewall including a light-conducting portion positioned to receive light emitted by the light source such that light is channeled generally between the inner and outer surfaces of the at least one sidewall to thereby highlight another portion of the lighted item.

20. A lighted label configured to couple to a beverage container, the lighted label including inner and outer surfaces defining a light-conducting portion and at least one light

source positioned to emit light into the light-conducting portion such that light emitted by the light source is channeled generally between the inner and outer surfaces for highlighting another portion of the lighted label.

21. A lighted coaster comprising at least one sidewall having a light-conducting portion, and at least one light source positioned to emit light into the light-conducting portion such that light emitted by the light source is channeled within the lighted coaster for highlighting another portion of the lighted coaster.

22. A combination including the lighted coaster of claim **21** and a placemat defining an opening sized to receive the lighted coaster, the placemat including a light-transmissive portion, and wherein the light source is positioned within the lighted coaster to direct light through a light-transmissive portion of the lighted coaster and the light-transmissive portion of the placemat when the lighted coaster is positioned within the opening of the placemat.

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