LIGHTING SYSTEM FOR ILLUMINATING A BAG

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ABSTRACT

What is provided is a bag having one or more interior surfaces and one or more exterior surfaces; a first lighting strand affixed to an interior surface, wherein the first lighting strand is capable of providing illumination to at least one interior portion of the bag; a second lighting strand affixed to an exterior surface, wherein the second lighting strand is capable of providing illumination to at least one exterior portion of the bag; at least one battery pack electrically coupled to the first and second lighting strands capable of providing power to said first and second lighting strands to illuminate the lighting strands; and at least one switch electrically coupled to the battery pack, wherein the switch is capable of turning power from said battery pack to the lighting strips on and off.
LIGHTING SYSTEM FOR ILLUMINATING A BAG

CLAIM OF PRIORITY


FIELD

[0002] This disclosure relates to a lighting system for illuminating a bag.

BACKGROUND

[0003] Purses having internal lighting are known. Typically, a purse or handbag is made of non-rigid material. A handbag having internal lighting contains a lighting source including luminous wires or a light bulb, such as an incandescent bulb, to illuminate the interior of the purse. It is known to affix the lights to the frame of the purse such that the lights automatically turn on when the purse is opened and automatically turn off when the purse is closed. It is known to include a timing circuit to turn the interior lights on and off. U.S. Pat. Nos. 7,111,959 and 6,120,162 disclose examples of illuminated handbags.

SUMMARY

[0004] A lighting system for illuminating a bag is provided. In one or more embodiments, the lighting system may include one or more lighting strands, such as but not limited to LED strands, as a lighting source for illuminating an interior and/or exterior of the bag. The lighting strands may be electrically coupled to one or more battery packs capable of providing power to the lighting strands and one or more switches capable of turning the battery pack power on and off. In some embodiments, the bag may contain two or more lighting strands placed on different interior surfaces of the bag for illuminating the interior. In other embodiments, the bag may contain a single lighting strand which may be capable of being affixed to two or more interior surfaces of the bag. Some embodiments may include a timer or timing circuit to turn all or some of the lights on after a prescribed amount of time. Some embodiments may contain separate switches for powering exterior lighting strands and interior lighting strands. Various embodiments include but are not limited to purse designs and backpack designs.

BRIEF DESCRIPTION OF THE DRAWINGS

[0005] Subject matter is particularly pointed out and distinctly claimed in the concluding portion of the specification. Claimed subject matter, however, both as to organization and method of operation, together with objects, features, and advantages thereof, may best be understood by reference to the following detailed description read with the accompanying drawings in which:

[0006] FIG. 1 is an example of a purse embodiment;
[0007] FIG. 2 is an example of a second purse embodiment;
[0008] FIG. 3 is an example of a third purse embodiment;
[0009] FIG. 4 is an example backpack embodiment;
[0010] FIG. 5 is an example of a second backpack embodiment;
[0011] FIGS. 6 and 7 are alternate views of a third backpack embodiment.

DETAILED DESCRIPTION

[0012] In the following detailed description, numerous specific details are set forth in order to provide a thorough understanding of claimed subject matter. However, it will be understood by those skilled in the art that claimed subject matter may be practiced without these specific details. In other instances, well-known methods, procedures, and components have not been described in detail so as not to obscure claimed subject matter.

[0013] Referring to FIG. 1, a handbag or purse embodiment is shown. Purse 10 depicted is a clutch style bag, but various other styled purses are contemplated within the scope of this application. For example, shoulder bag purses, change purses and various other styled purses are contemplated herein. In some embodiments, purse 10 may be made of a non-rigid material, yet in other embodiments, purse 10 may be constructed of a rigid material.

[0014] In this embodiment, purse 10 has a lining 11. However, lining 11 is optional and other embodiments may not include lining 11. Purse 10 has one or more exterior surfaces 12 and one or more interior surfaces 13. In the embodiment depicted, purse 10 has four interior surfaces 13 on its sides; however, various other embodiments may possess other numbers of interior surfaces 13, depending upon the construction and shape of purse 10. In this embodiment, purse 10 has a bottom interior surface 14, but other embodiments may be constructed without bottom interior surface 14. In this embodiment, purse 10 also has fastener 15 that is capable of removably closing purse 10. Here, fastener 15 is a clasp. However, various other fasteners 15, including but not limited to, zippers, velcro, snaps, hinges, buttons, magnetic closures, and hooks are also contemplated within the scope of this application, and other embodiments may not include fastener 15.

[0015] Purse 10 also contains lighting strands 16 that are capable of illuminating one or more portions of the interior of purse 10. Interior illumination may be useful in viewing one or more interior portions of purse 10 and/or purse contents. Lighting strands 16 may be affixed to one or more interior surfaces 13 or bottom interior surface 14. Lighting strands 16 may be LED light strands or other types of lighting strips.

[0016] FIG. 1 depicts two LED lighting strands 16 affixed to two opposing interior surfaces 13, but other embodiments may include different numbers of lighting strands 16, which may be affixed to different interior surfaces 13 and/or bottom interior surface 14. For example, two lighting strands 16 may be affixed to two adjacent interior surfaces 13 in some embodiments. For example, a lighting strand 16 may be affixed to bottom surface 14 in some embodiments. For example, three lighting strands 16 may be employed in some embodiments, with two affixed to opposing or adjacent interior surfaces 13 and one affixed to bottom interior surface 14 in other embodiments. Other embodiments may include lighting strands 16 affixed to top interior surfaces (not shown), for some purse designs. Other examples having different numbers of lighting strands 16 configured in different places to illuminate interior portions of purse 10 are contemplated within the scope of this application.

[0017] Lighting strands 16 are shown as having a length slightly less than the length of purse 10. They are shown as being affixed within purse 10 substantially horizontally. However, lighting strands 16 may be of any length and may be affixed vertically, diagonally, or in any other manner within the interior of purse 10 in other embodiments. Claimed sub-
subject matter is not intended to be limited to the particular configuration and length of FIG. 1.

[0018] Lighting strands 16 may be affixed to interior surfaces 13 and/or bottom interior surface 14 in various manners, such as but not limited to being stitched, sewn or glued onto interior surfaces 13 and/or bottom interior surface 14. In some embodiments having an interior lining 11, the lighting strands 16 may be stitched, sewn and/or glued onto lining 11. Alternatively, lighting strands 16 may be affixed to interior surfaces 13 by being threaded through lining 11 from behind the lining 11, such as but not limited to through grommets located in lining 11. The lighting strands 16 may be affixed to lining 11 in many other ways and claimed subject matter is not intended to be limited to these two examples.

[0019] FIG. 1 shows a battery pack 17 that is electrically connected to lighting strands 16 and is capable of providing power to lighting strands 16 to illuminate them. Battery pack 17 may accommodate different types of batteries and/or different numbers of batteries in various embodiments. For example, battery pack 17 may accommodate three or four AA or AAA type batteries in some embodiments. Other embodiments may employ different numbers and/or types of batteries. The batteries may be rechargeable batteries in some embodiments. Other embodiments may use solar powered rechargeable batteries and include a solar panel on the bag for recharging the batteries. Claimed subject matter is not intended to be limited to any particular battery type, size or number. In this embodiment, battery pack 17 is substantially rectangular in shape; however battery pack 17 may be shaped differently in various embodiments and claimed subject matter is not intended to be so limited.

[0020] In this embodiment, lining 11 has a pocket 18 that is capable of accepting battery pack 17 therein. In this embodiment, pocket 18 is substantially rectangular in shape; however, various other sizes and shapes of pocket 18 are contemplated within the scope of this application. In this embodiment, pocket 18 is a fastener, which is shown as a zipper, for opening and closing pocket 18 to access and/or hide battery pack 17 from the main interior purse area. Other fasteners for closing pocket 18 may be employed in various embodiments, such as but not limited to, snaps, Velcro, buttons, magnets, clasps and other fasteners. Claimed subject matter is not intended to be limited to a particular type of fastener. Further embodiments may not include a fastener and instead have pocket 18 open. Other embodiments may not include pocket 18 at all. Still, in other embodiments, battery pack 17 and/or pocket 18 may be located in purse 10 in various different locations. Other embodiments may contain more than one battery pack 17 electrically connected to lighting strands 16.

[0021] In this embodiment, battery pack 17 has a switch 19 capable of turning power from battery pack 17 to lighting strands 16 on and off. In this embodiment, switch 19 is on battery pack 17. In other embodiments, switch 19 may be electrically connected to battery pack 17 but not located directly on battery pack 17. Further embodiments may include two switches 19, with one located on battery pack 17 and the other remotely electrically coupled to battery pack 17 and lighting strands 16. Remotely electrically coupled switch 19 may be located either on the interior or the exterior of purse 10. For embodiments having two switches 19, the switch 19 located on battery pack 17 may be used as a master switch to turn battery pack 17 on when not in use, such as when purse 10 is being stored. Claimed subject matter is not intended to be limited to a particular number of switches nor to particular switch locations.

[0022] Some embodiments may include a timer or timing circuit for turning power from battery pack 17 to some or all lighting strands 16 off after a prescribed time period, such as, for example, after twenty seconds. However, claimed subject matter is not intended to be limited to bags having a timer or timing circuit.

[0023] FIG. 2 shows a second embodiment of a purse design. Purse 20 is shown without a lining to display the electrical connections therein. Though not required, a lining may be used with this embodiment. Purse 20 has exterior surfaces (not shown) and interior surfaces 23. Purse 20 is shown with a bottom interior surface 24, though as discussed above with respect to FIG. 1, other embodiments may not have a bottom interior surface 24, depending upon the shape and construction of purse 20. Purse 20 has a clasp 25 capable of removably closing purse 20. Clasp 25 is merely one example of a fastener capable of removably closing purse 20 and other fasteners known within the art are possible within the scope of this application. Similarly, other embodiments may not include clasp 25 or any other fastener.

[0024] Purse 20 has two lighting strands 26 that are electrically connected to battery pack 27 via wires 21. Battery pack 27 is remotely electrically coupled to switch 29 via wire 22. One or more other switches 29 could be added to this embodiment, as discussed above with respect to FIG. 1, such as but not limited to, adding a switch 29 located on battery pack 27 and/or a switch 29 located on the exterior of purse 20. A lining could be added to this embodiment to hide some of all of wires 21 and 22 and/or battery pack 27; however this is not required.

[0025] FIG. 3 shows a third embodiment of a purse design without a lining. Purse 30 has exterior surfaces (not shown) and interior surfaces 33. A lining optionally may be used with purse 30. Purse 30 is shown with a bottom interior surface 34 and a clasp 35 capable of removably closing purse 30, which are both optional, as discussed above with respect to FIGS. 1 and 2. Purse 30 has a single LED lighting strand 36 that is electrically connected to battery pack 37 via wire 31. Other types of lighting strands 36 are possible within the scope of this application. Battery pack 37 is remotely electrically connected to switch 39 via wire 32; however, alternatively switch 29 could be located on battery pack 37 and/or more than one switch could be electrically connected to battery pack 37 and located on the interior and/or exterior of purse 30. In this embodiment, LED lighting strand 36 is shown to be affixed to more than one interior surface 33. Other embodiments may contain a single LED lighting strand 36 affixed to only one interior surface 33 and/or bottom interior surface 34. In this embodiment, portion 38 of lighting strand 36 is shown to be not illuminated. For embodiments having a lining, portion 38 of LED lighting strand 36 may be placed beneath the lining to give the appearance of not being illuminated. In other embodiments, portion 38 may be lit so as to give an appearance of multiple LED lighting strands 36. Other embodiments having a single LED lighting strand 36 may include lighting that extends across all interior surfaces 33 and/or across bottom exterior surface 34 and one or more interior surfaces 33.

[0026] Referring to FIG. 4, a backpack embodiment is shown. Backpack 40 has exterior surfaces 44 and interior surfaces 43. Lighting strands 46 are located on interior sur-
faces 43 of backpack 40. In this embodiment, two LED lighting strands 46 are placed on a front interior surface 43 and two LED lighting strands 46 are placed on a back interior surface 43. Other numbers and types of lighting strands 46 may be employed in various embodiments and they may be placed in different locations and/or on different interior surfaces 43 in various embodiments. Lighting strands 46 are affixed to interior surfaces 43 substantially vertically with respect to backpack 40; however lighting strands 46 may be affixed substantially horizontally, diagonally or in any other manner in different embodiments. Lighting strands 46 are shown as having a length slightly less than the length of backpack 40; however in various embodiments, they may be of different lengths.

[0027] Lighting strands 46 are electrically coupled to battery pack 47, which is capable of providing power to turn the lighting strands 46 on and off. FIG. 4 shows an interior of battery pack 47 to show an example number and configuration of batteries contained therein and is only meant to be an example of one possible battery pack design.

[0028] Battery pack 47 is remotely electrically coupled to switch 49 via wire 42 and to lighting strands 46 by wires (not shown). Wire 42 is shown as being located beneath an interior lining (indicated by dashed lines) and viewable at its connection to battery pack 47 within a pocket in back interior surface 43. Switch 49 is capable of turning battery pack 47 on and off. In some embodiments, battery pack 47 may also be electrically coupled to a switch 49 located directly on battery pack 47. In this embodiment, switch 49 is a push button switch, however many other types of switches known in the art are contemplated within the scope of this application, including but not limited to flip switches and slide switches. Switch 49 may also work with a timer or timing circuit and may be capable of automatically turning power to some or all of lighting strands 46 off after a prescribed time period. In this embodiment, battery pack 47 and switch 49 are placed on a back interior surface 43 of backpack 40; however battery pack 47 and/or switch 49 may be located in various places on backpack 40 in different embodiments and claimed subject matter is not intended to be so limited.

[0029] Battery pack 47 is shown in a pocket on interior surface 43 with a zipper closure for hiding and/or accessing battery pack 47. However, both the pocket and closure are optional. Claimed subject matter is not intended to be limited to a particular battery pack configuration, shape, size or placement. For example, other embodiments may include more than one battery pack 47. For example, battery pack 47 may be located in an exterior pocket of backpack 40, among other possible designs within the scope of this application.

[0030] Referring to FIG. 5, a specialized backpack embodiment is shown. In this embodiment, backpack 50 is a picnic style backpack containing picnic contents. Claimed subject matter is not intended to be limited to any picnic contents. Other specialized backpack embodiments may be wine style backpacks, containing compartments for wine glasses, a wine bottle, wine opener, and other items. Other specialized backpack embodiments may contain insulated compartments for carrying food items and/or ice or other cooling packs to keep food cool and/or heating packs to keep food warm. Other specialized backpack embodiments may be camping or hiking style backpacks, such as but not limited to those with waist securing straps, places for carrying a sleeping bag and/or having a metal or other rigid frame. Other specialized backpacks may be for hunting or fishing and contain compartments designed to fit hunting or fishing gear. Of course, as discussed above, non-specialized backpacks embodiment exist and claimed subject matter is not intended to be limited to special backpack embodiments nor to any particular specialized backpack contents (i.e. picnic utensils, cups, etc.) of such embodiments.

[0031] Backpack 50 has two lighting strands 56 placed on opposing side interior surfaces 53 substantially near the opening of a main backpack compartment. In this particular embodiment, the lighting strands 56 are placed to provide interior lighting to backpack 50 in front on backpack contents. Illustrating yet another possible configuration and location for lighting strands 56 within the scope of this application. However, lighting strands 56 may be placed in many other locations, including but not limited to, behind backpack contents, on adjacent side surfaces 53, or on other interior surfaces 53 in other embodiments. Lighting strands 56 may be of any length and positioned in many manners on interior surfaces 53, and claimed subject matter is not intended to be limited to this particular example shown in FIG. 5.

[0032] Lighting strands 56 are electrically coupled to battery pack 57, which is remotely electrically coupled to switch 59 via wire 58 (shown with a dashed line where placed beneath an interior lining). In this particular embodiment, battery pack 57 and switch 59 are positioned on a rear interior surface 53 and battery pack 57 is depicted within a pocket having a zippered closure on rear interior surface 53; however in other embodiments, they may be located in other positions and placements, and claimed subject matter is not intended to be so limited.

[0033] FIG. 6 shows a further backpack embodiment. Backpack 60 has one or more interior surfaces 63 and one or more exterior surfaces 65. It has interior lighting strands 64 on one or more interior surfaces 63 and it has exterior lighting strands 66 on one or more exterior surfaces 65. Exterior lighting strands 66 may provide lighting outside of backpack 60, which may illuminate one or more exterior surfaces 65 of backpack 60, may illuminate an area outside of backpack 60, and/or may be employed as a safety feature to a user of backpack 60 by making backpack 60 more visible to others, on some embodiments.

[0034] Lighting strands 64 and 66 are electrically connected to battery pack 67, which is remotely electrically connected to switch 69 via wire 68. Some embodiments may include two switches 69 for turning interior lighting strands 64 and exterior lighting strands 66 on and off separately. A switch 69 for powering exterior lighting strands 66 may be located on the exterior of backpack 60. A third switch 69 may be included with some embodiments, and may be located directly on battery pack 67 for turning power on and off to all lighting strands 64 and 66. One or more switches 69 may also operate with a timer or timing circuit to power one or more lighting strands 64 and/or 66 off after a period of time. For example, a timer may be used with an interior switch 69 to turn interior lighting strands 64 off after a prescribed time period, but exterior lighting strands 66 may operate without a timer, such that they remain on until an exterior switch 69 is turned off. This embodiment includes one battery pack 67; however other embodiments may include more than one battery pack 67. For example, some embodiments may include a first battery pack 67 to power interior lighting strands 64 and a second battery pack 67 to power exterior lighting strands 66. The particular number of lighting strands 64 and 66 and switches 69 shown and described in this embodiment and their particular placements on interior surfaces 63 and exterior surfaces 65 are merely examples of numerous possible numbers of lighting strands 64 and 66 and switches 69 and possible positions. For example, FIG. 7 shows a possible embodiment where exterior lighting strands 76 are configured in a pattern of a star. Lighting strands 64 and/or 66 may
be placed to form many possible patterns, pictures and stylized designs, within the scope of this application. Lighting strands 64 and/ or 66 may be of many different sizes and lengths within the scope of this application.

[0035] Other purse, backpack or other bag embodiments may include lighting strands to illuminate more than one interior compartment. Further embodiments may include exterior lighting strands on more than one exterior surface. Different embodiments may include blinking or otherwise non-continuously lit lighting sources, and lighting sources of one or more colors.

[0036] Further bag embodiments are contemplated within the scope of this application. For example, other embodiments may include: luggage, sports bags, bowling bags, shoe bags, tote bags, hunting bags, tackle boxes, coolers or other types of bags made of non-rigid or rigid materials.

[0037] In the preceding description, various aspects of claimed subject matter have been described. For purposes of explanation, systems and configurations were set forth to provide a thorough understanding of claimed subject matter. However, these are merely example illustrations of the above concepts wherein other illustrations may apply as well, and the scope of claimed subject matter is not limited in these respects. It should be apparent to one skilled in the art having the benefit of this disclosure that claimed subject matter may be practiced without the specific details. In other instances, well-known features were omitted and/or simplified so as not to obscure claimed subject matter. While certain features have been illustrated and/or described herein, many modifications, substitutions, changes and/or equivalents will now occur to those skilled in the art. It is, therefore, to be understood that the appended claims are intended to cover all such modifications and/or changes as fall within the true spirit of claimed subject matter.

1. An apparatus, comprising:
   a bag comprising one or more interior surfaces and one or more exterior surfaces;
   a first lighting strand affixed to at least one said interior surface, wherein said first lighting strand is capable of providing illumination to at least one interior portion of said bag;
   a second lighting strand affixed to at least one said exterior surface, wherein said second lighting strand is capable of providing illumination to at least one exterior portion of said bag;
   at least one battery pack electrically coupled to said first and second lighting strands capable of providing power to said first and second lighting strands to illuminate said lighting strands; and
   at least one switch electrically coupled to said battery pack, wherein said switch is capable of turning power from said battery pack to first and second lighting strands on and off.

2. The apparatus of claim 1, further comprising:
   a third lighting strand affixed to a second said interior surface, wherein said third lighting strand is capable of providing illumination to at least a second interior portion of said bag; wherein said battery pack is electrically coupled to said third lighting strand and is capable of providing power to said third lighting strand to illuminate said third lighting strand.

3. The apparatus of claim 2, wherein said first and third lighting strands are capable of illuminating side interior portions of said bag, and further comprising:
   a fourth lighting strand affixed to a bottom interior surface of said bag, wherein said fourth lighting strand is capable of providing illumination to at least a bottom interior portion of said bag; wherein said battery pack is electrically coupled to said fourth lighting strand and is capable of providing power to said fourth lighting strand to illuminate said fourth lighting strand.

4. The apparatus of claim 1, further comprising:
   a fifth lighting strand affixed to a second said exterior surface, wherein said fifth lighting strand is capable of providing illumination to at least a second said exterior portion of said bag; wherein said battery pack is electrically coupled to said fifth lighting strand and is capable of providing power to said fifth lighting strands to illuminate said fifth lighting strand.

5. The apparatus of claim 1, further comprising:
   a pocket located on one said interior surface of said bag, wherein said pocket is capable of accepting said battery pack therein.

6. The apparatus of claim 1, further comprising:
   a pocket located on one said exterior surface of said bag, wherein said pocket is capable of accepting said battery pack therein.

7. The apparatus of claim 1, further comprising:
   two battery packs, wherein a first said battery pack is electrically coupled to said first lighting strand and is capable of providing power to said first lighting strand to illuminate said first lighting strand, and wherein a second said battery pack is electrically coupled to said second lighting strand and is capable of providing power to said second lighting strand to illuminate said second lighting strand.

8. The apparatus of claim 1, further comprising an interior lining on said interior surfaces, wherein said first lighting strand is affixed to said interior surface by being sewn to said lining.

9. The apparatus of claim 1, wherein said first and second lighting strands are LED lighting strands.

10. A bag, comprising:
    a LED lighting strand affixed to an interior lining affixed to one or more interior surfaces of said bag, wherein said LED lighting strand is capable of providing illumination to at least one interior portion of said bag;
    at least one battery pack electrically coupled to said LED lighting strand capable of providing power to said LED lighting strand to illuminate said LED lighting strand; and
    at least one switch electrically coupled to said battery pack, wherein said switch is capable of turning power from said battery pack to said LED lighting strand on and off.

11. The bag of claim 10, further comprising a second LED lighting strand, wherein said second LED lighting strand is capable of providing illumination to one or more exterior surfaces of said bag.

12. The bag of claim 11, further comprising a second battery pack, wherein said second battery pack is electrically connected to said second LED lighting strand and is capable of providing power to said second LED lighting strand.

13. The bag of claim 10, further comprising a third LED lighting strand, wherein said third LED lighting strand is affixed to said interior lining, is electrically coupled to said battery pack and is capable of illuminating a second said interior surface of said bag when powered by said battery pack.

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