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(54) **WINDOW-MOUNTED AIR CONDITIONING UNIT COVER**

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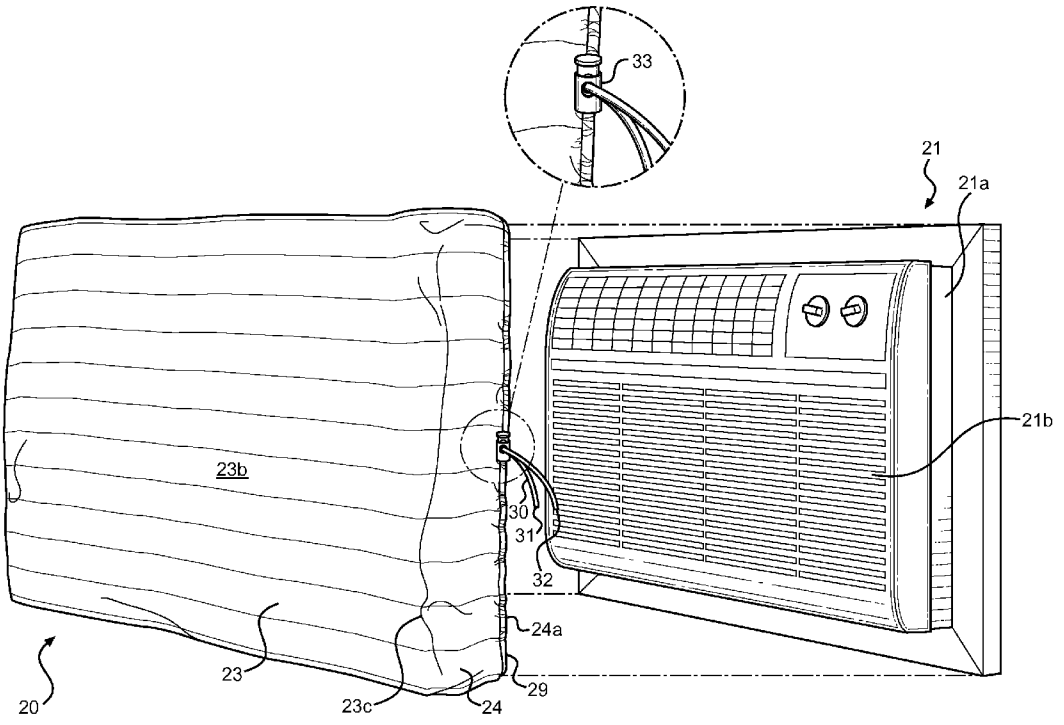
(57) **ABSTRACT**

Provided is a cover for a window-mounted air conditioning unit that is affixed to a window to prevent cold air and precipitation from entering into a home through any exposed areas within the front portion of the window-mounted air conditioning unit. The cover includes a face portion and four sidewalls with a multi-layer construction. Preferably, the layers include an interior layer for wind blocking, a middle thermal insulation layer for insulation, and an exterior layer for durability. The face portion is substantially rectangular and has an outer edge therearound, wherein the four sidewalls extend perpendicularly along the outer edge forming a pocket on the opposite side of the face portion. The pocket is configured to receive the front portion of an air conditioning unit front portion.



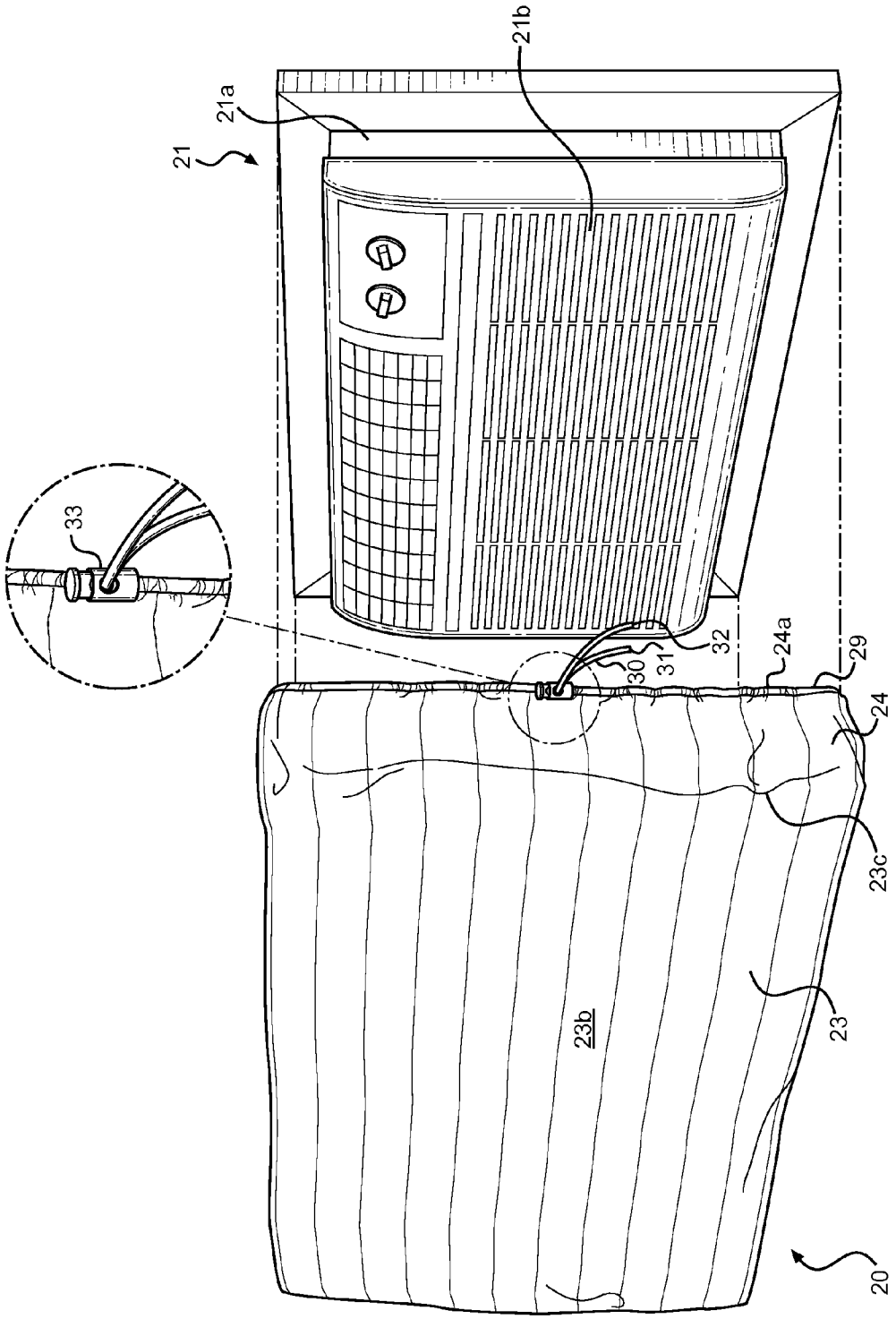


FIG. 1

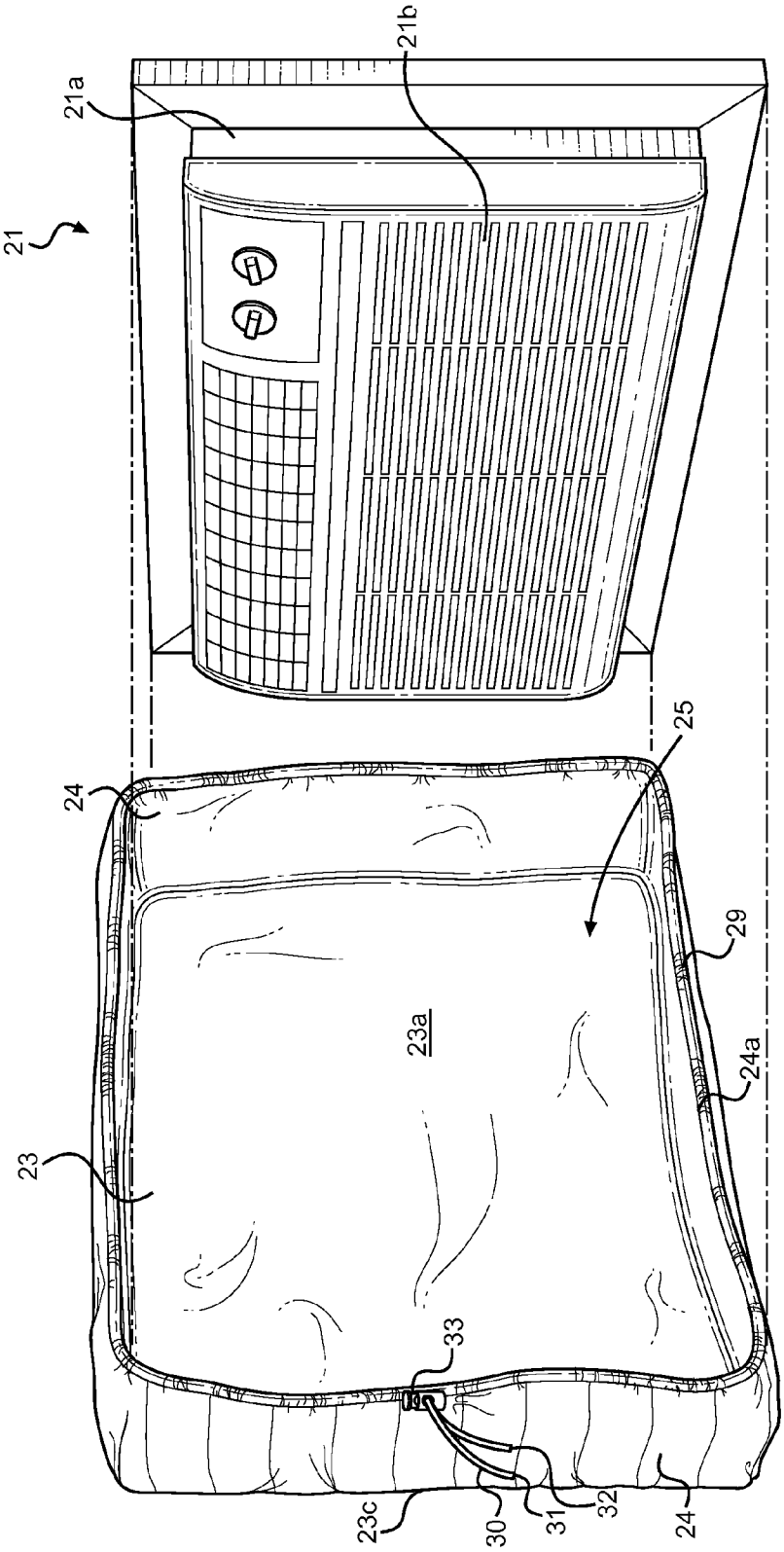
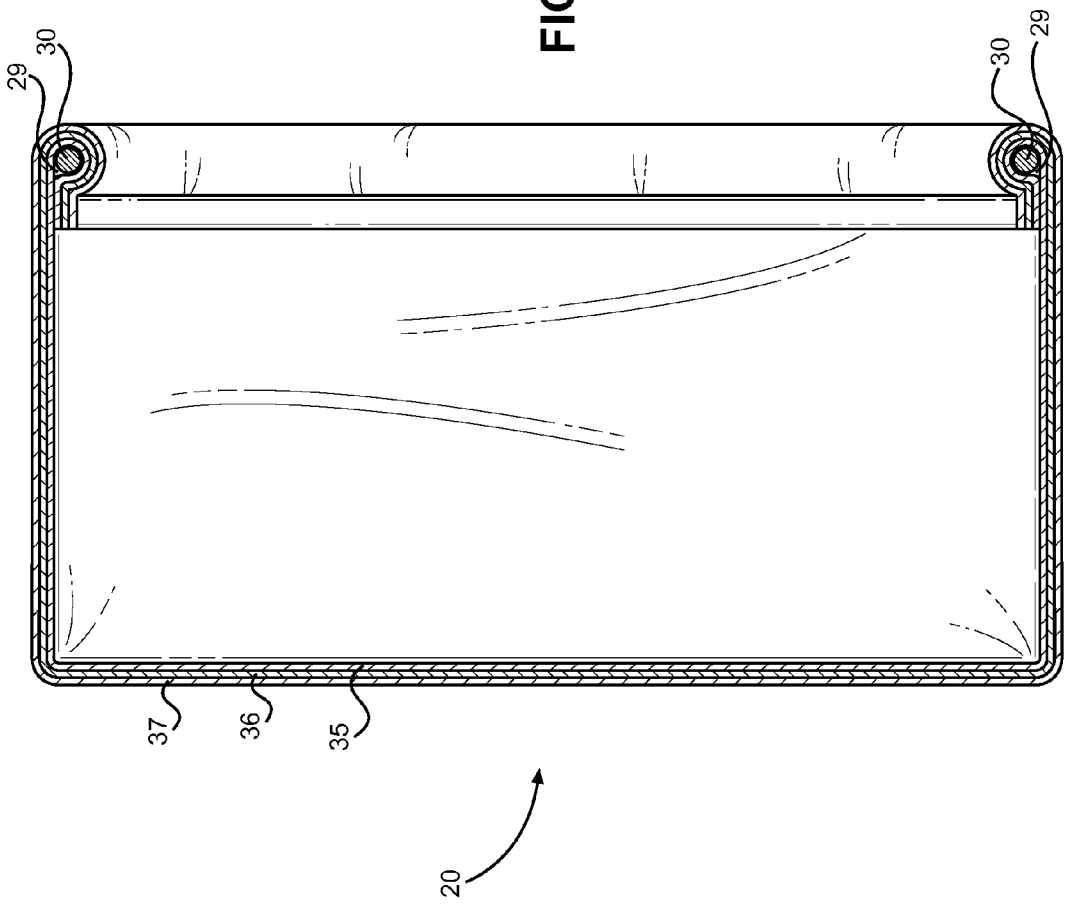


FIG. 2

FIG. 3



WINDOW-MOUNTED AIR CONDITIONING UNIT COVER

CROSS REFERENCE TO RELATED APPLICATION

[0001] This application claims the benefit of U.S. Provisional Application No. 61/915,586 filed on Dec. 13, 2013. The above identified patent application is herein incorporated by reference in its entirety to provide continuity of disclosure.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The present invention relates to window-mounted air conditioners. More specifically, the present invention pertains to an improved cover for window-mounted air conditioners. The present invention is a substantially rectangular cover having a face portion integrally attached to four sidewalls forming a pocket. The pocket is adapted to receive therein the front portion of an air conditioning unit and allows the face portion to be placed in contact with the front surface of the window-mounted air conditioning unit. The present invention is adapted to prevent cold air and precipitation from entering into a home through the vents or other exposed areas of the window-mounted air conditioning unit.

[0004] Often, many households employ the use of window-mounted air conditioners, even though they are less efficient than central air conditioners. However, one particular advantage of window-mounted air conditioning units are that they require less energy for cooling than homes with central air conditioning. Homes with a central air conditioning unit usually maintain lower temperatures in more rooms than homes with window-mounted air conditioners. In addition, since window air conditioners are often noisy, homeowners remember to turn them off when they leave a room. By contrast, some homeowners with central air conditioning often leave their air condition system on all day, even when the home is unoccupied. Therefore, window-mounted air conditioners continue to be a popular cooling solution for many home owners and apartment dwellers.

[0005] However, while window-mounted air conditioners are useful in the spring and summer seasons, the winter months bring cold temperatures, chilling winds, and precipitation. Cold air or precipitation may seep in to the house through any exposed gaps in between the window and the air conditioner. The cold air and precipitation entering through the air conditioner will cause a rise in energy costs, and may further cause discomfort. Removing the air conditioning units can be viewed as extremely inconvenient and burdensome as some of these window-mounted air conditioners are heavy and cumbersome. Often people may simply drape a cloth over the unit to keep the room relatively insulated from the cold air seeping in between exposed cracks and gaps between the air conditioning unit and the window. Therefore, there exists a need for a cover that prevents cold air or precipitation from seeping through a window mounted with an air conditioning unit.

[0006] The present invention provides a cover that is adapted to cover the front portion of a window-mounted air conditioning unit in order to prevent cold air and precipitation from entering in a house through any exposed areas within the window-mounted air conditioning unit. The cover is substantially rectangular having a face portion integrally attached to four sidewalls forming a pocket. The pocket is adapted to receive a front portion of an air conditioning unit and allow an interior surface of the face portion to be placed in contact with the outer face of the air conditioner unit. The sidewalls are folded on themselves at a peripheral edge to form a channel that receives a drawstring therethrough to removably secure the front portion therein. The cover further includes a multi-layered construction. In a preferred embodiment, the interior layer is a wind blocking layer composed of plastic, the middle thermal insulation layer is composed of foam, and the exterior durable layer is composed of a fabric.

[0007] 2. Description of the Prior Art

[0008] Devices have been disclosed in the prior art that relate to air conditioner covers. These include devices that have been patented and published in patent application publications. Some of these devices provide an interior cover for an air conditioner that is removably secured over a front grille and front portion of the cabinet of an air conditioner. Other devices provide a cover having a back panel and four side wall panels which extend from the back panel, wherein a flange extends around the periphery and is formed integrally with the side walls. These devices, however, do not disclose a cover having a wind blocking layer, a thermally insulating layer and an exterior durable layer that are coextensive with one another. The foregoing is a list of devices deemed most relevant to the present disclosure, which are herein described for the purposes of highlighting and differentiating the unique aspects of the present invention, and further highlighting the drawbacks existing in the prior art.

[0009] Specifically, U.S. Pat. No. 5,125,197 to Fuchs provides an interior cover for an air conditioner having a cabinet and a front grille, wherein the cabinet is mounted on a wall. The Fuchs device discloses an enclosure member that is sized to fit over a front grille and the front portion of the cabinet of an air conditioner. The Fuchs device further consists of a mechanism for removably securing the enclosure member thereon, and another mechanism for thermally sealing the enclosure member to the surface of the wall. However, the Fuchs device does not provide a cover having three coextensive layers secured by a drawstring.

[0010] Similarly, U.S. Pat. No. 4,788,805 to Shaw provides a cover for an air conditioner mounted on a wall. The Shaw device discloses a cover having a back panel and four side wall panels which extend from the back panel, wherein a flange extends around the periphery and is formed integrally with the side walls. A sealing strip is adhered to the inner surface of the flange to seal against the wall around the periphery of the air conditioner. The Shaw device further discloses retainers secured to the wall adjacent to the flange adapted to secure the sealing strip to the wall. However, the Shaw device does not provide a cover removably secured to a front portion of a window-mounted air conditioning unit having three coextensive layers.

[0011] U.S. Pat. No. 4,759,194 to Shapiro is an insulating cover device for wall appliances for air conditioning and fan units. The Shapiro device is a one piece section of insulating material having a side and back walls. The walls consist of a grooved or slotted design that is adapted to permit sliding over the appliances. The device is also designed to incorporate an insulating face to fit against the building wall. However, the Shapiro device does not provide a cover for a window-mounted air conditioning unit.

[0012] U.S. Pat. No. 6,061,981 to Nieves provides an air conditioner cover adapted to cover an air conditioner face. The Nieves device discloses a cover having a main housing

with a front panel, four peripheral walls, and a mouth opening opposite the front panel. A flange extends perpendicular to the peripheral walls at the mouth opening. The Nieves device further includes a seal having four angled gaskets with a triangular cross section extending from the peripheral walls around the mouth opening. The angled gaskets are adapted to secure the air conditioner face to the mouth opening. However, the Nieves device does not provide a cover having a wind blocking layer coextensive with a thermally insulating layer and an exterior durable layer.

[0013] Finally, U.S. Pat. No. 4,625,784 to Boroson discloses an indoor air conditioner cover having a fabric outer layer, an inner ply adapted for insulation, and an opening at one end adapted to fit over the indoor portion of an air conditioner. The Boroson device is further equipped with a means to reduce the opening along the periphery of the opening and grasp the periphery of the indoor portion of an air conditioner. However, the Boroson device does not provide a cover having three coextensive layers.

[0014] The devices disclosed in the prior art have several known drawbacks. Some of these devices disclose an interior cover for an air conditioner that is removably secured over a front grille and front portion of the cabinet of an air conditioner. Other devices disclose a cover having a back panel and four side wall panels which extend from the back panel, wherein a flange extends around the periphery and is formed integrally with the side walls. These devices are limited in that they do not include three coextensive layers and a drawstring to removably secure the cover to a window-mounted air conditioning unit. The present invention provides a cover having a wind blocking layer coextensive with a thermally insulating layer and an exterior durable layer. It is therefore submitted that the present invention is substantially divergent in design elements from the prior art, and consequently it is clear that there is a need in the art for an improvement to air conditioner covers. In this regard, the instant invention substantially fulfills these needs.

SUMMARY OF THE INVENTION

[0015] In view of the foregoing disadvantages inherent in the known types of air conditioning unit covers now present in the prior art, the present invention provides a new and improved window-mounted air conditioning unit cover adapted to cover a window-mounted air conditioning unit that is that prevents cold air and precipitation from entering into a home through any exposed areas within the window-mounted air conditioning unit.

[0016] It is therefore an object of the invention to provide a new and improved window-mounted air conditioning unit cover that has all of the advantages of the prior art and none of the disadvantages.

[0017] Another object of the present invention is to provide a new and improved window-mounted air conditioning unit cover that is configured to cover an air conditioning unit that is affixed to a window.

[0018] Yet another object of the present invention is to provide a new and improved window-mounted air conditioning unit cover that prevents cold air and precipitation from entering into a home through the air conditioning unit and window.

[0019] Still yet another object of the present invention is to provide a new and improved window-mounted air conditioning unit cover having a substantially rectangular cover with a face portion integrally attached to four sidewalls along an outer edge thereof forming an opening on an opposite face of the face portion.

[0020] Another object of the present invention is to provide a new and improved window-mounted air conditioning unit cover, wherein the opening is designed to receive an front portion of the window-mounted air conditioning unit therein and an interior surface of the face portion is placed in contact with an outer face of the front portion.

[0021] A further object of the present invention is to provide a new and improved window-mounted air conditioning unit cover, wherein the sidewalls further include a peripheral edge that are folded on themselves to form a channel that includes a drawstring to removably secure the cover around the front portion.

[0022] Another object of the present invention is to provide a new and improved window-mounted air conditioning unit cover having a cover with a wind blocking layer coextensive with a thermal insulating layer and an exterior layer.

[0023] Still yet another object of the present invention is to provide a new and improved window-mounted air conditioning unit cover wherein the device may be readily fabricated from materials that permit relative economy and are commensurate with durability.

[0024] Other objects, features, and advantages of the present invention will become apparent from the following detailed description taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTIONS OF THE DRAWINGS

[0025] Although the characteristic features of this invention will be particularly pointed out in the claims, the invention itself and manner in which it may be made and used may be better understood after a review of the following description, taken in connection with the accompanying drawings wherein the numeral annotations are provided throughout.

[0026] FIG. **1** shows a side perspective of the present invention.

[0027] FIG. **2** shows a reverse perspective of the present invention.

[0028] FIG. **3** shows a side cross-sectional view of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

[0029] References are made herein to the attached drawings. Like reference numerals are used throughout the drawings to depict like or similar elements of the window-mounted air conditioning unit cover. For the purposes of presenting a brief and clear description of the present invention, the preferred embodiment will be discussed as used to cover the front face of an air conditioning unit to prevent cold air or precipitation air passing therethrough. The figures are intended for representative purposes only and should not be considered to be limiting in any respect.

[0030] Referring now to FIGS. **1** and **2**, there are shown side and reverse perspective views of the window-mounted air conditioning unit cover **20**. Cover **20** is configured to removably cover a window-mounted air conditioning unit **21** that is affixed to a window and serves to prevent cold air and precipitation from entering into a home through any exposed areas between the air conditioning unit and window. The cover **20** is substantially rectangular in shape and comprises a face portion **23** integrally attached to four sidewalls **24**. The

face portion **23** comprises an interior surface **23**A, a coextensive exterior surface **23**B, and an outer edge **23**C therearound. The sidewalls **24** extend substantially perpendicularly from the face portion **23** along the outer edge **23**C thereof forming a pocket **25**. The pocket **25** is configured to receive a front portion **21**A of a window-mounted air conditioning unit **21** whereby an outer face **21**B of the front portion **21**A is placed in contact with the interior surface **23**A of the face portion **23** and the sidewalls **24** cover the sides of the front portion of the air conditioner. In this way, the portion of the air conditioner that extends into a room on the interior side of the window is completely enclosed within the cover **20**.

[0031] The sidewalls **24** further comprise peripheral edges **24**A, wherein the peripheral edges **24**A are folded onto themselves to form a channel **29** therealong. The channel **29** receives a drawstring **30** therethrough that allows the cover **20** to removably attach to the front portion **21**A of the window-mounted air conditioning unit **21**. The drawstring **30** is preferably composed of a long and narrow cord, however, without limitation other embodiments compose the drawstring **30** of other suitable materials, such as braid, leather, or other strips of fabric. The drawstring **30** is configured to tighten and draw in the channel **29** to secure the device **20** to the air conditioner **21**.

[0032] The drawstring **30** comprises a first end **31** and second end **32** that is attached to a fastener **33**, wherein both the first end **31** and the second end **32** are received therethrough fastener **33**. The fastener **33** is preferably a plastic cord toggle that is designed to removably attach to the drawstring **30** and tighten drawstring **30** around the front portion **21**A of the window-mounted air conditioning unit **21**. The fastener **33** is further designed to release and allow the cover **20** to be removed from the front portion **21**A.

[0033] The fastener **33**, preferably a plastic cord toggle as aforementioned, includes a barrel, a toggle, and a spring. These parts are squeezed together allowing the fastener **33** to freely move along the drawstring **30**. When these parts are released, the spring creates tension that removably secures the drawstring **30** in place. Without limitation, other embodiments use other suitable types of fasteners **33**.

[0034] Referring now to FIG. **3**, there is shown a side cross-sectional view of the cover **20**. The cover **20** comprises a multi-layered construction. In a preferred embodiment, the cover **20** comprises three coextensive layers secured together via any suitable fastening means such as by use of adhesives or heat sealing. The innermost layer is a wind blocking interior layer **35** preferably composed of polyester. In other embodiments the wind blocking interior layer **35** is alternately composed of nylon, a combination of polyester and nylon fibers, or other suitable plastic materials that are adapted to be wind resistant. The intermediate layer is preferably a thermal insulating layer **36** to reduce heat transfer through the cover **20**. Preferably, the insulating layer **36** is composed of foam, and more preferably is composed of polyurethane. However, without limitation other types of insulating material are used in other embodiments for the thermal insulation layer **30**B. Finally, the outermost layer is an exterior fabric layer **37** preferably composed of cotton, which is designed to be durable. In other embodiments, other appropriate durable fabrics compose of the exterior layer such as wool, silk or linen.

[0035] The wind blocking interior layer **35**, the thermal insulating layer **36**, and the exterior fabric layer **37** extend across the sidewalls to the face portion. The face portion includes an outer edge therearound, wherein the sidewalls extend substantially perpendicularly therefrom. The wind blocking interior layer **35**, the thermal insulating layer **36**, and the exterior fabric layer **37** are coextensive along the peripheral edge, wherein the coextensive layers **35**, **36**, **37** are folded onto themselves to form a channel **29** therealong. The channel **29** is designed to receive a drawstring **30** therethrough. The drawstring further comprises a fastener, wherein the drawstring **30** and fastener are designed to removably attach the cover **20** around the front portion of a window-mounted air conditioning unit, wherein the interior surface of the face portion is placed in contact with the outer face of the front portion of the window-mounted air conditioning unit. The cover **20** is particularly advantageous as it prevents any cold air and precipitation from entering into a home through any exposed areas within the front portion of the window-mounted air-conditioning unit.

[0036] It is therefore submitted that the instant invention has been shown and described in what is considered to be the most practical and preferred embodiments. It is recognized, however, that departures may be made within the scope of the invention and that obvious modifications will occur to a person skilled in the art. With respect to the above descriptions then, it is to be realized that the optimum dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form, function, and manner of operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art, and all equivalent relationships to those illustrated in the drawings and described in the specifications are intended to be encompassed by the present invention.

[0037] Therefore, the foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

I claim:

1. A window-mounted air conditioning unit cover, comprising:

a cover having a face portion and sidewalls extending therefrom, defining a pocket in which a front portion of a window-mounted air conditioning unit can be received;

wherein said cover comprises a plurality of coextensive layers;

a drawstring disposed about a peripheral edge of said sidewalls;

wherein said drawstring further comprises a fastener designed to removably secure said cover to said window-mounted air conditioning unit.

2. The window-mounted air conditioning unit cover of claim **1**, wherein said plurality of coextensive players includes a innermost layer, an intermediate layer, and an outermost third layer, wherein the innermost layer is a wind blocking interior layer, the intermediate layer is a thermal insulating layer, and the third layer is an exterior fabric layer.

3. The window-mounted air conditioning unit cover of claim **1**, wherein said sidewalls fold over themselves along said peripheral edge to form a channel therealong that receives said drawstring therethrough.

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