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**Meissner**

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(54) **BASEMENT WINDOW SHIELD WITH INTEGRATED VENT**

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(58) **Field of Search** ..... **52/107, 3, 302.1, 52/169, 169.1, 273, 287; 454/212, 358**

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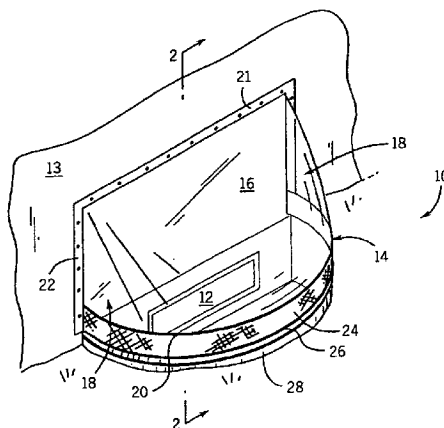
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(57) **ABSTRACT**

A window well cover for a below-grade or basement window is disclosed. A transparent upper structure or portion is designed to cover a below-grade window on an outside of a building or other structure. The upper end of the transparent upper structure extends, or is angled, downwardly from a mounting flange terminating at a lower end. Furthermore, the transparent upper structure has two curved sides, which serve to connect the side ends. Mounting flanges extend outwardly from the two side ends. The window well cover includes a vent portion integrally formed therewith of an air pervious material to allow continuous air exchange through the window well cover. The vented portion may extend the length of, or the entire lower periphery of, the transparent upper structure. The window well cover, which is free of movable parts, allows for continuous airflow through the window well cover while restricting the entry of debris and insects.

**32 Claims, 3 Drawing Sheets**



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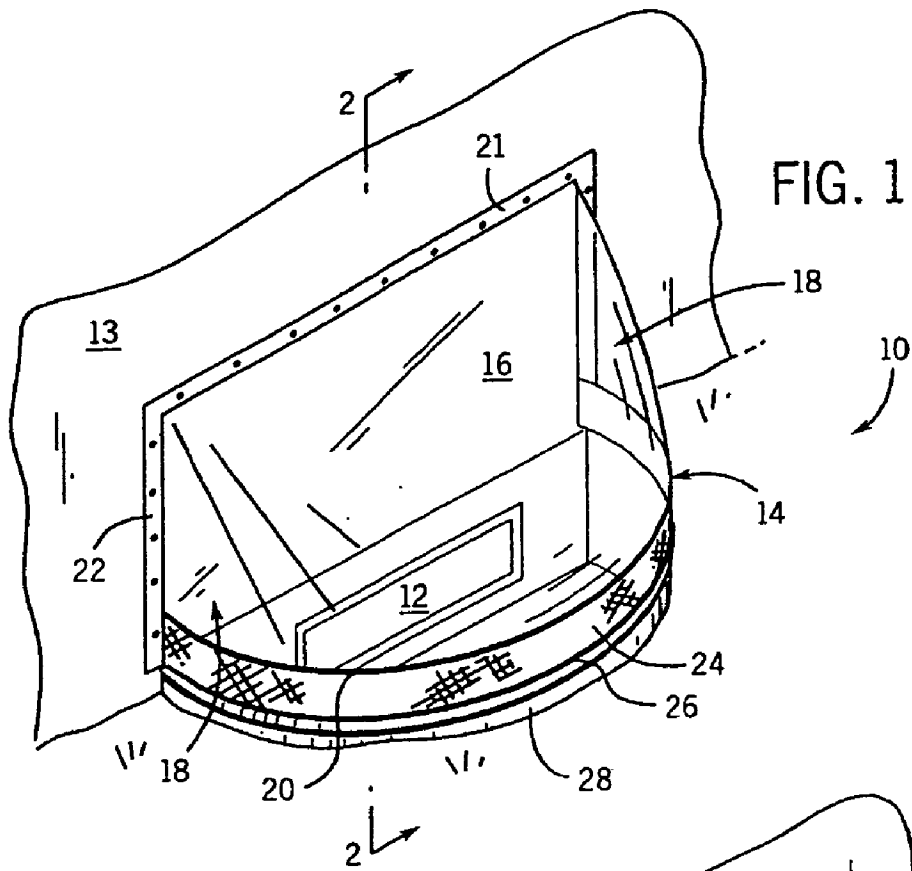


FIG. 1

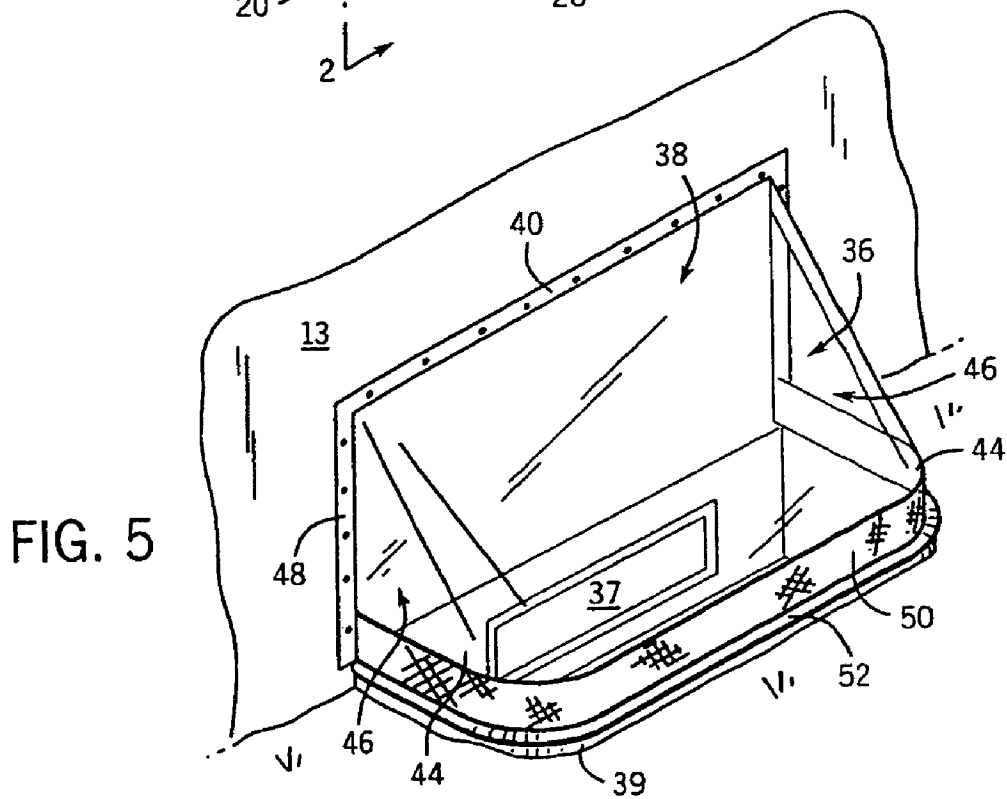


FIG. 5

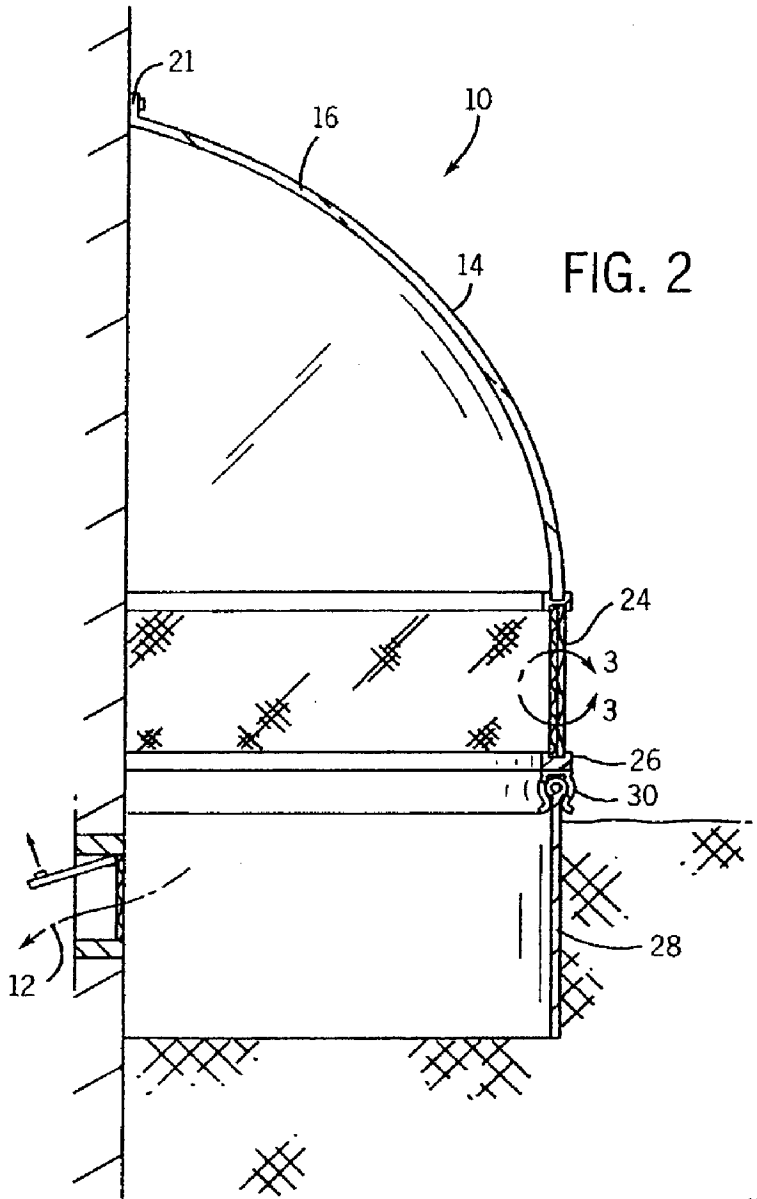


FIG. 2

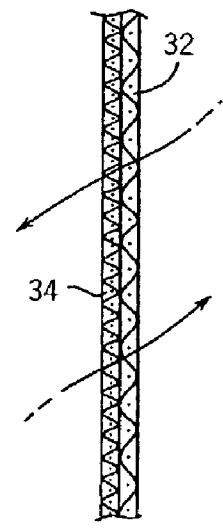


FIG. 3

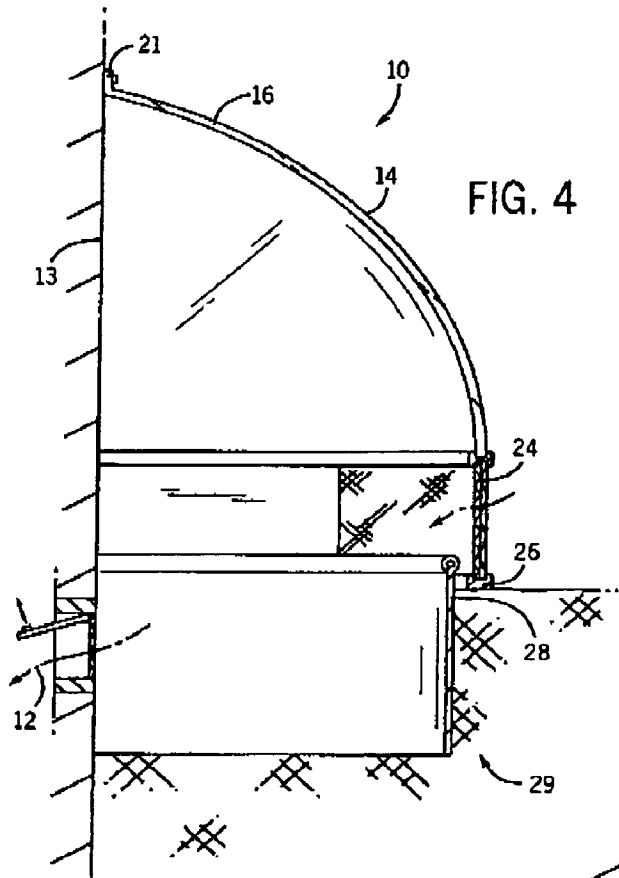


FIG. 4

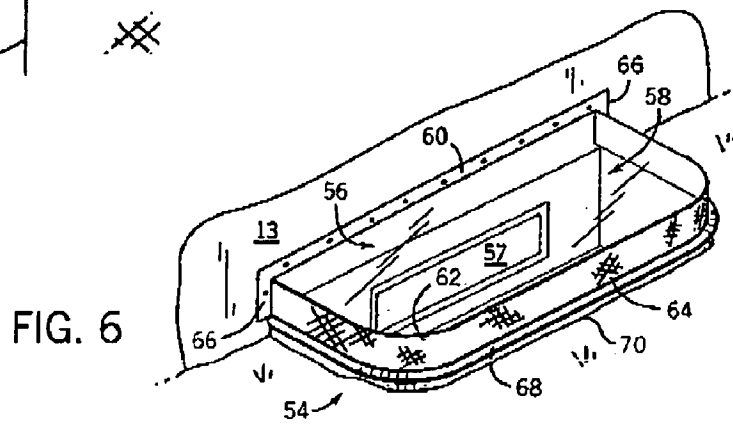


FIG. 6

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## BASEMENT WINDOW SHIELD WITH INTEGRATED VENT

### BACKGROUND OF INVENTION

The present invention relates generally to a cover for window wells, and more specifically, to a cover for window wells that is vented to allow airflow through the window cover. Further, the venting is achieved without moving parts.

Typically, window well covers have been single-piece construction for the purpose of protecting a window well and accompanying window from dirt, animals, leaves and other debris. By enclosing the window well with this single-piece cover, typically constructed of plastic, and securing the cover to the building or ground, the window well is further protected from the elements.

However, such window well covers are typically not vented and as a result, in humid climates, condensation can form inside the cover and obstruct a view out of the window. Further, a build up of condensation within the window well cover can, over time, cause damage to the accompanying building. Similarly, such window covers do not allow ventilation into the building through the covered window. Additionally, it is impractical to remove the cover to alleviate a build up of moisture within the cover or to allow airflow through the window because such window covers are permanently attached.

Attempts to solve this problem include constructing window covers having a movable vent assembly, similar to a window or door, introduced into single-piece covers thereby forming a multi-piece cover. These ventable multi-piece covers only allow for airflow through the cover when the vent is physically open.

However, such assemblies add to the complexity of the design by including multiple interconnected pieces, much like a door and hinge assembly. Furthermore, in such window covers having movable venting means, it is necessary to physically open and close the vent when desiring airflow or protection from the elements. The inclusion of multiple pieces not only adds to production costs but when exposed to the harsh conditions of the elements, these additional parts are susceptible to breakdown and often require upkeep and management to maintain consistent operation.

Therefore, it would be advantageous to design a window well cover that provides the protection and simplicity of single-piece covers but allows airflow absent the upkeep and management typically associated with covers having multiple moving parts. Furthermore, it would be advantageous to design such a window well cover that does not require physical management of the vent assembly to allow airflow.

### BRIEF DESCRIPTION OF INVENTION

The present invention discloses a window well cover that solves the aforementioned problems by providing a continuous vent without movable parts.

The invention includes a window well cover that protects window wells from collecting debris and from the elements as well as protecting people and animals from accidental entry while allowing continuous airflow. Additionally, the window well cover provides the aforementioned protection and airflow while alleviating the need for movable parts and their associated maintenance.

Therefore, in accordance with one aspect of the invention, a window well cover is disclosed that includes both a dome portion of a weather impervious material having a periphery to substantially cover a window well and a vent portion of

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an air pervious material to allow continuous air exchange through the window well cover. The vent portion is directly connected to the dome portion and extends along at least a portion of the periphery of the dome portion.

In accordance with another aspect of the invention, a window well cover that is free of movable parts is disclosed. The window well cover includes a transparent upper structure designated to substantially cover a below-grade window or an outside of a building. The window well cover further includes a vent constructed integrally within the transparent upper structure. The vent is capable of allowing air flow while restricting debris from passing therethrough.

In accordance with another aspect of the invention, a window well cover is disclosed that includes a planar top portion constructed to cover a below-grade window. The window well cover further includes a vent portion directly connected to the planar top portion and formed of an air pervious material to allow continuous air exchange through the window well cover.

Various other features, objects and advantages of the present invention will be made apparent from the following detailed description and the drawings.

### BRIEF DESCRIPTION OF DRAWINGS

The drawings illustrate multiple embodiments presently contemplated for carrying out the invention.

In the drawings:

FIG. 1 is a perspective view of a window well cover in accordance with one embodiment of the present invention attached to a structure having a below grade window.

FIG. 2 is a cross-sectional view of the window well cover and attached structure taken along line 2—2 of FIG. 1.

FIG. 3 is a cross-sectional of a venting portion of the window well cover of FIG. 1 view taken along line 3—3 of FIG. 2.

FIG. 4 is a cross-sectional view similar to FIG. 2 showing another embodiment of the present invention.

FIG. 5 is a perspective view similar to FIG. 1 showing another embodiment of the present invention.

FIG. 6 is a perspective view similar to FIG. 1 showing another embodiment of the present invention.

### DETAILED DESCRIPTION

Referring to FIG. 1, a window well cover **10** is shown in accordance with one embodiment of the present invention. The window well cover **10** is designed to cover a below-grade window **12** of a building or other structure **13**. The window well cover **10** includes a transparent upper structure **14** having a dome shape, that forms the upper end of the window well cover **10** and is comprised of a weather-impervious material. Preferably, the dome portion **14** is formed of plastic, glass or another weather-impervious material that is preferably transparent. Using a transparent material allows a line of sight as viewed from inside the covered window out beyond the window well cover **10** through the dome portion **14** and allows light entry through the dome **14**, below-grade window **12** and into the building or structure **13**. However, it is contemplated that the dome portion **14** could be constructed of an opaque material in order to restrict light entry through the window well cover **10** if desired. Additionally, dome portion **14** could be constructed of a material that allows a line of sight from inside the covered window to outside the window well cover but substantially reduce any lines of sight from outside the window well cover to inside the window well cover. Use of

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such a material would afford a certain level of privacy and seclusion, yet allow entry of light that may be desirable to some consumers.

The dome portion **14** has an upper end **16** that extends to converge with two side ends **18** to form a curved lower end **20** forming a radius between the two side ends **18**. An upper mounting flange **21** extends from the upper end **16** and similar mounting flanges **22** extend from the two side ends **18**. Mounting flanges **21**, **22**, separately or together, can be used to secure the window well cover **10** to the building **13** to enclose the below-grade window **12**. It is contemplated that nails, screws, staples or similar fastening means could be used to puncture the mounting flanges **21**, **22** and extend into the building, thus securing the window well cover **10** against the building or structure **13**. Furthermore, it is also alternatively contemplated that non-intrusive fastening means, such as caulk or other adhesives, may also be used to secure the window well cover **10** against the structure **13**. Also, it is contemplated that mounting flange **21** may be used to secure the window well cover **10** by positioning the mounting flange **21** under a building exterior, such as under one section of lap siding to secure the window well cover **10** to structure **13** in such a manner to limit movement of the cover relative to the below-grade window **12**. In this arrangement the side mounting flanges **22** could be eliminated and the lower portion of the window well cover could be fastened to the window well wall **28**.

The window well cover **10** further includes a vent portion **24** formed of an air pervious material to allow continuous air exchange through the window well cover **10**. As shown, the vent portion **24** may extend the entire length of a lower periphery of the dome portion **14**. However, it is also contemplated that the vented portion **24** may extend along only a portion of the lower periphery of the dome portion **14**. Also, extending from the vent portion **24** is a lower support **26**, which extends along the periphery of the vented portion. This lower support **26** also extends vertically from the vent portion **24** to meet window well wall **28** in order to provide support for the vent portion **24** and dome portion **14**. As such, a secure base is created to support the assembly.

Referring now to FIG. 2, a cross-sectional view of the window well cover **10** and below-grade window **12** taken along line 2—2 of FIG. 1 is shown. The lower support **26** is shown as preferably including a mounting clip **30**. The mounting clip **30** extends downwardly from the lower support **26** and engages or attaches to the window well wall **28** to secure the window well cover **10** to the window well wall **28**. It is further contemplated that the mounting clip **30** can be used in lieu of or in conjunction with the mounting flanges **21**, **22**. Additionally, it is contemplated that a plurality of support rods **31**, shown in phantom, may be included around a periphery of the dome portion **14** to provide additional support to the dome portion **14** beyond the support provided by the vent portion **24**. As indicated in FIG. 2, the vent portion **24** allows air flow not only with the window well cover **10** to prevent the accumulation of condensation, but also allows for ventilation into the building through window **12**.

Referring to FIG. 3, a cross-sectional view of the vent portion **24** taken along line 3—3 of FIG. 2 is shown. The vent portion **24** preferably includes two layers of venting material an outer layer **32** and an inner layer **34**. The outer layer **32** is more porous than the inner layer **34**. In this embodiment, the outer layer **32** is preferably formed of a rigid material to support the dome portion while allowing airflow therethrough. The inner layer **34** is constructed of a less course material to restrict the entry of insects and debris

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yet also allow airflow therethrough. It is further contemplated that the outer layer **32** and the inner layer **34** may be of different venting material. Suitable materials such as metal, plastic, porous cloth, etc. are within the wide range of material suitable for the venting material.

In an alternative embodiment, a single layer of venting material may be used. This single layer, composed of a material similar to the aforementioned inner layer, serves to restrict the entry of debris and insects into the window well cover **10** but also allows airflow. To provide support, a plurality of supports are provided along the periphery of the vent. These supports are constructed from a rigid material extend vertically down from the dome portion **14** to the lower support **26**.

Referring to FIG. 4, a cross-sectional view of the window well cover **10** and below-grade window **12** in accordance with another embodiment of the present invention is shown. As indicated, the dome portion **14** and vent portion **24** are designed such that window well cover **10** extends beyond the window well wall **28** to surround an exposed portion **35** of the window well wall that extends vertically above a ground area **29**. Lower support **26** is designed to provide support by engaging ground area **29**.

Referring to FIG. 5, a window well cover **35** in accordance with another embodiment of the present invention is illustrated. A transparent upper structure or portion **36** is designed to cover a below-grade window **37** on an outside of a building **13** or other structure. The upper end **38** of the transparent upper structure **36** extends, or is angled, downwardly from the mounting flange **40** terminating at a lower end **42**, which is substantially parallel to the mounting flange **40**. Furthermore, the transparent upper structure **36** has two curved sides **44**, which serve to connect the side ends **46**. Mounting flanges **48** extend outwardly from the two side ends **46**. Mounting flanges **40**, **48**, separately or together, can be used to secure the window well cover **35** to the building **13** or previously described to enclose the below-grade window **37**. The window well cover **35** includes a vent portion **50** formed of an air pervious material to allow continuous air exchange through the window well cover **35** while remaining free of moving parts. As shown, the vented portion **50** may extend the length of, or the lower periphery of, the transparent upper structure **38**. However, it is also contemplated that the vented portion **50** may extend only a portion of the lower periphery of the transparent upper structure **38**. Also, extending from the vent portion **50** is a lower support **52**, which extends along the periphery of the vented portion. This lower support **52** also extends vertically from the vent portion **50** to meet a window well wall **39** thereby creating a secure base to support the vented portion **50**, transparent upper structure **36** and flanges **40**, **48**.

The embodiments shown in FIGS. 1 and 5 are indicative of the various shapes of window wells and therefore, the alternative construction shapes of the covers. Other shapes are also contemplated and are well within the scope of the claims of the present invention.

Referring to FIG. 6, a perspective view of a window well cover **54** in accordance with yet another embodiment of the present invention is shown. The window cover **54** includes a planar top portion **58** that is constructed to cover a below grade window **57**. The planar top portion **58** is formed by an inner end **56** extending horizontally to meet outer end **62**. A mounting flange **60** extends upward from the inner end **56** such that the mounting flange **60** is substantially parallel to the planar top portion **58**. Further, extending from outer end **62** is a vent portion **64** integrally formed with transparent portion **58**. The vent portion **64** is formed of an air pervious

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material to allow continuous air exchange through the window well cover 54 while restricting debris. As shown, the vented portion 64 extends downwardly from the transparent portion 58 such that it is positioned substantially perpendicular to the transparent portion 58. Furthermore, the vented portion 64 may extend along the length of the transparent portion 58. Mounting flanges 66 may also extend from the vent portion 64. Also extending from the vent portion 64 is a lower support 68, which extends horizontally along at least a portion of the periphery of the vented portion 64. This lower support 68 also extends vertically from the vent portion 64 to meet a window well wall 70 and support the transparent portion 58, vented portion 64 and mounting flanges 60, 66.

Therefore, in accordance with one embodiment of the invention, a window well cover is disclosed. The includes both a dome portion of a weather impervious material having a periphery to substantially cover a window well and a vent portion of an air pervious material to allow continuous air exchange through the window well cover. The vent portion is directly connected to the dome portion and extends along at least a portion of the periphery of the dome portion.

In accordance with another embodiment of the invention, a window well cover that is free of movable parts is disclosed that includes a transparent upper structure designated to substantially cover a below-grade window or an outside of a building. The window well cover further includes a vent constructed integrally within the transparent upper structure. The vent is capable of allowing air flow while restricting debris from passing therethrough.

In accordance with another embodiment of the invention, a window well cover is disclosed that includes a planar top portion constructed to cover a below-grade window. The window well cover further includes a vent portion directly connected to the planar top portion and formed of an air pervious material to allow continuous air exchange through the window well cover.

The present invention has been described in terms of the preferred embodiment, and it is recognized that equivalents, alternatives, and modifications, aside from those expressly stated, are possible and within the scope of the appending claims.

What is claimed is:

1. A window well cover comprising:

a dome portion forming an upper end of the window well cover, the dome portion comprised of a weather impervious material and having a periphery to substantially cover a window well, wherein the dome portion has an upper end and two side ends, the upper end having a rigidly attached mounting flange extending therefrom; and

a vent portion directly connected to the dome portion and extending along at least a portion of the periphery of the dome portion and formed of an air pervious material to allow continuous air exchange through the window well cover.

2. The window well cover of claim 1 wherein the dome portion is designed to cover a below-grade window of a structure and has a mounting portion for attachment to the structure and wherein the vent portion extends an entire length of the dome.

3. The window well cover of claim 1 wherein the dome portion is angled downwardly from the mounting flange.

4. The window well cover of claim 3 wherein the upper end converges with the two side ends to form a curved lower end forming a radius between the two side ends.

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5. The window well cover of claim 4 wherein the two side ends have a mounting flange extending therefrom.

6. The window well cover of claim 3 wherein the upper end extends downwardly and terminates at a lower end of the dome portion that is substantially parallel to the mounting flange.

7. The window well cover of claim 6 wherein the substantially parallel lower end of the dome portion has two curved sides, each that connect to the side ends of the dome portion.

8. The window well cover of claim 1 wherein the vent portion extends at least a portion of a lower periphery of the dome portion.

9. The window well cover of claim 1 wherein the vent portion extends along an entire length of a lower periphery of the dome portion.

10. The window well cover of claim 1 further comprising a lower support extending about a periphery of the vent portion.

11. The window well cover of claim 10 wherein the lower support extends an entire length of a lower periphery of the window well cover.

12. The window well cover of claim 10 further comprising a mounting clip extending downwardly from the lower support attachable to a window well wall.

13. The window well cover of claim 10 wherein the lower support extends downwardly from the vent portion and overlaps a window well wall.

14. The window well cover of claim 1 wherein the window well cover is free of movable parts.

15. A window well cover with integral vent comprising: a transparent upper structure to cover a below-grade window on an outside of a building;

a vent constructed integrally within the transparent upper structure and having airflow capability while restricting entry of debris; wherein the vent is comprised of two parallel layers of venting material; wherein the window well cover is free of movable parts; and

wherein the vent is positioned at a base of the transparent upper structure.

16. The window well cover of claim 1 wherein the dome portion is at least partially opaque.

17. The window well cover of claim 1 wherein the vent is comprised of two layers of venting material.

18. The window well cover of claim 17 wherein the two layers of venting material are dissimilar.

19. The window well cover of claim 18 wherein the two layers include an outer layer of venting material that is more porous than an inner layer of venting material.

20. The window well cover of claim 17 wherein an outer layer of venting material is rigid to support the transparent upper structure and is designed to engage a lower support and to allow airflow therethrough.

21. The window well cover of claim 17 wherein an inner layer of venting material is designed to allow airflow and restrict entry of insects therethrough.

22. The window well cover of claim 15 wherein the vent includes one layer of venting material and a plurality of support rods around a periphery of the transparent upper structure.

23. A window well cover comprising; a planar top portion constructed to cover a below-grade window on an outside of a building;

a vent portion directly connected to the planar top portion and formed of an air pervious material to allow continuous air exchange through the window well cover;



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wherein a rigidly attached mounting flange, attachable to the outside of the building, extending from an inner end of the planar top portion is substantially perpendicular to the planar top portion; and

wherein the vent portion is substantially parallel to the mounting flange.

24. The window well cover of claim 23 wherein the inner end of the top portion extends horizontally and terminates at an outer end that is substantially parallel to the mounting flange.

25. The window well cover of claim 23 wherein the vent portion extends downwardly from an outer end of the planar top portion and is positioned substantially perpendicular to the planar top portion.

26. The window well cover of claim 23 wherein the vent portion has at least one mounting flange extending therefrom.

27. The window well cover of claim 23 wherein the vent portion extends about a periphery of the planar top portion.

28. The window well cover of claim 23 further comprising a lower support extending along at least a portion of a periphery of the vent portion.

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29. The window well cover of claim 23 wherein a lower support extends along an entire length of a periphery of the window well cover.

30. The window well cover of claim 28 further comprising a mounting clip extending downwardly from the lower support attachable to a window well wall.

31. The window well cover of claim 23 wherein the window well cover is free of movable parts.

32. A window well cover comprising:

a unitary planar top portion and mounting flange constructed as a one-piece unit and arranged to allow covering of a below-grade window; and

a vent portion connected to the unitary planar top portion and mounting flange, the vent portion formed of an air pervious material to allow continuous air exchange through the window well cover wherein the vent includes one layer of venting material and a plurality of support rods around a periphery of the transparent upper structure.

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