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(54) CORNER MOLDING FOR WALL COVERING ASSEMBLY

(76) Inventor: **Peter A. Hintze**, Hudson, WI (US)

Correspondence Address:
DICKE, BILLIG & CZAJA, P.L.L.C.
FIFTH STREET TOWERS
100 SOUTH FIFTH STREET, SUITE 2250
MINNEAPOLIS, MN 55402 (US)

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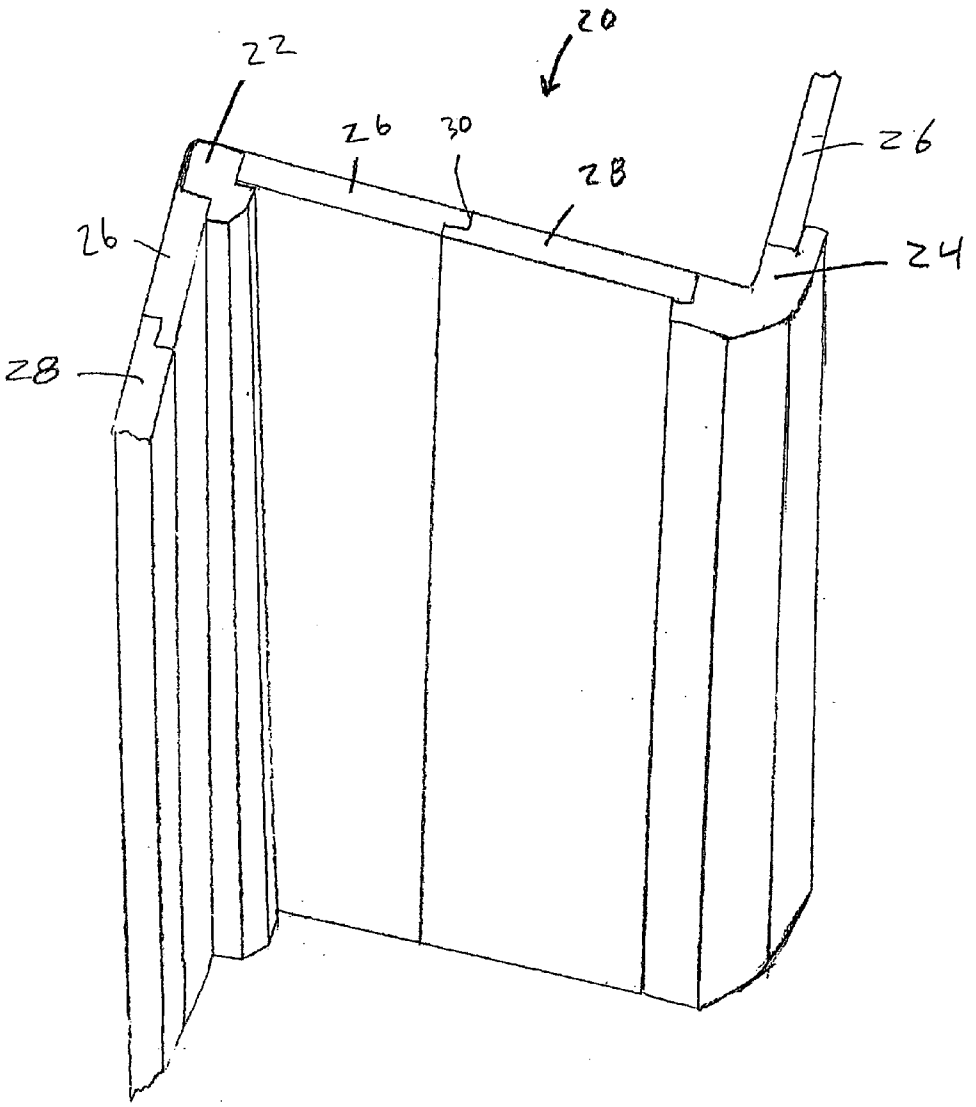
(57) **ABSTRACT**

A corner molding for a solid wall covering includes a base section and a cap section. The cap section is attached to the base section, and together with the base section, defines a first channel and a second channel, the channels configured to accept the solid wall covering. The cap section is configured to project over an edge of the solid wall covering.



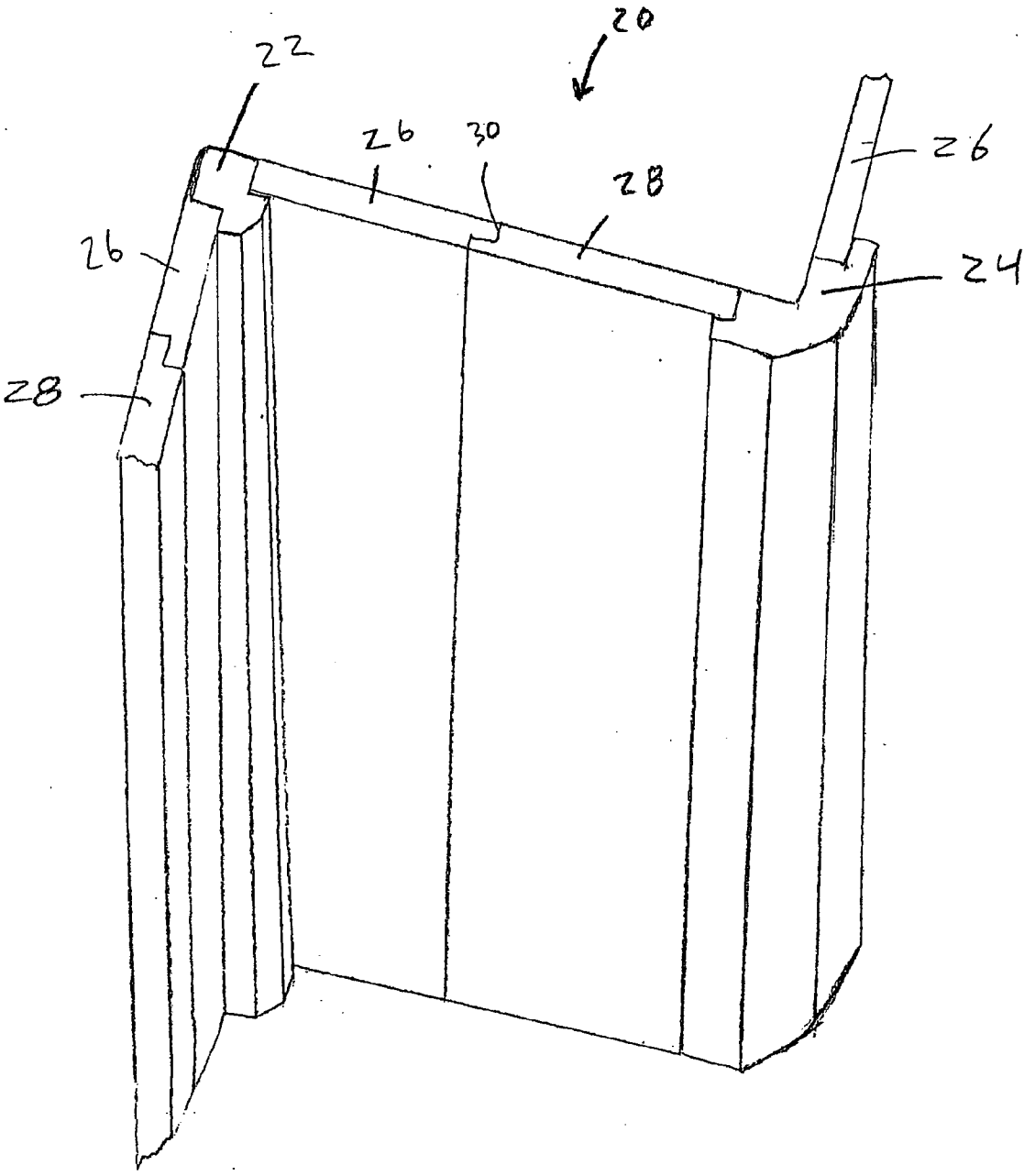


Figure 1

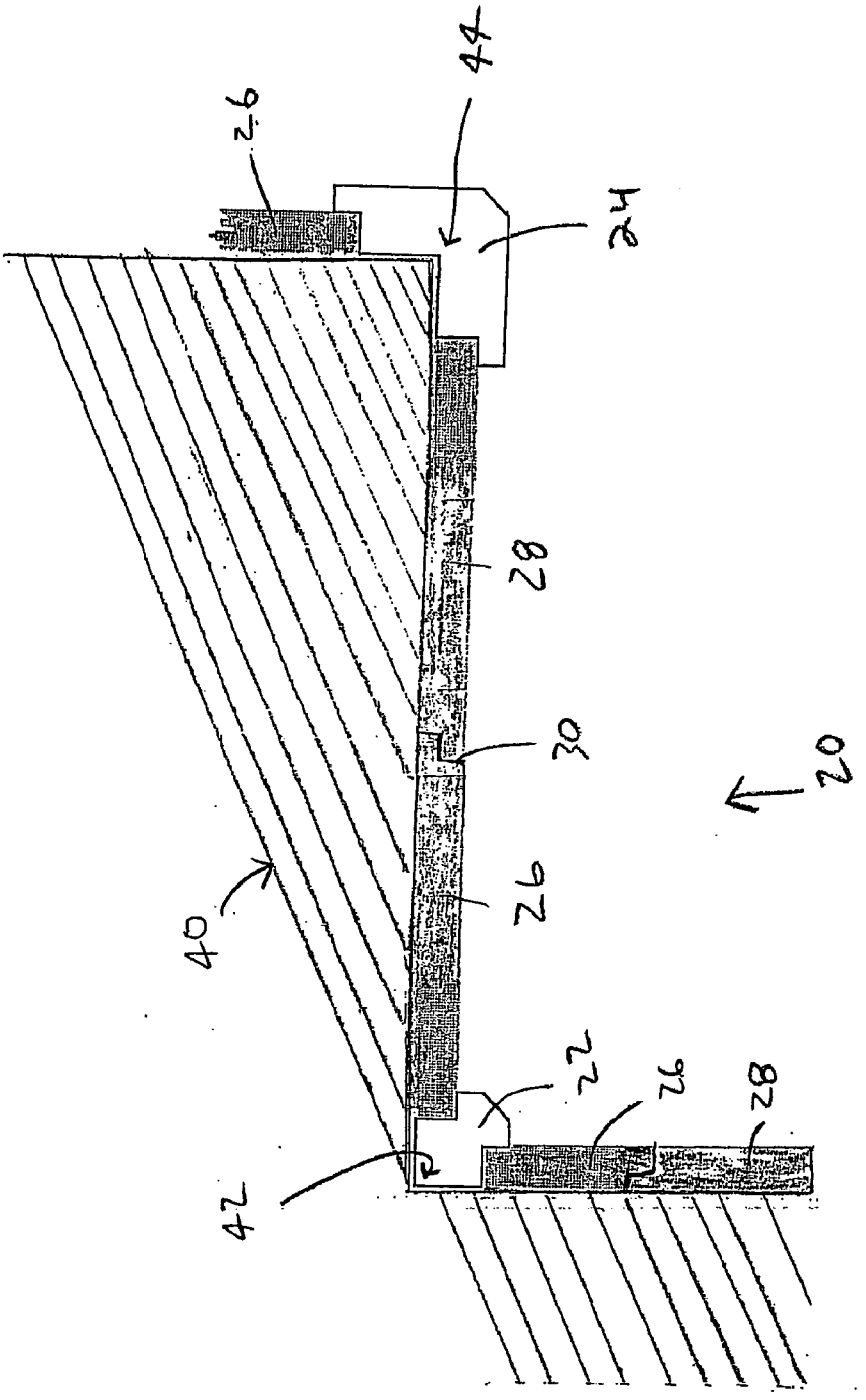


Figure 2

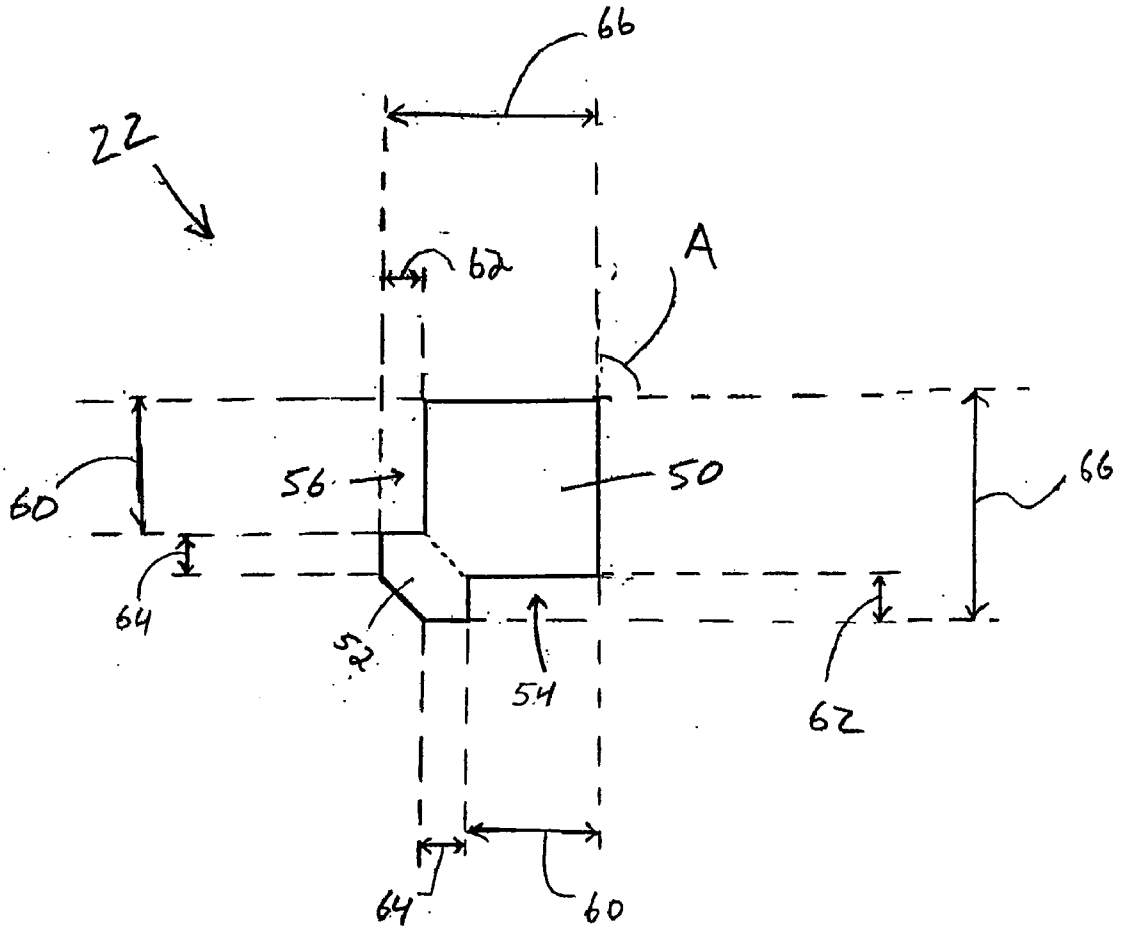


Figure 3

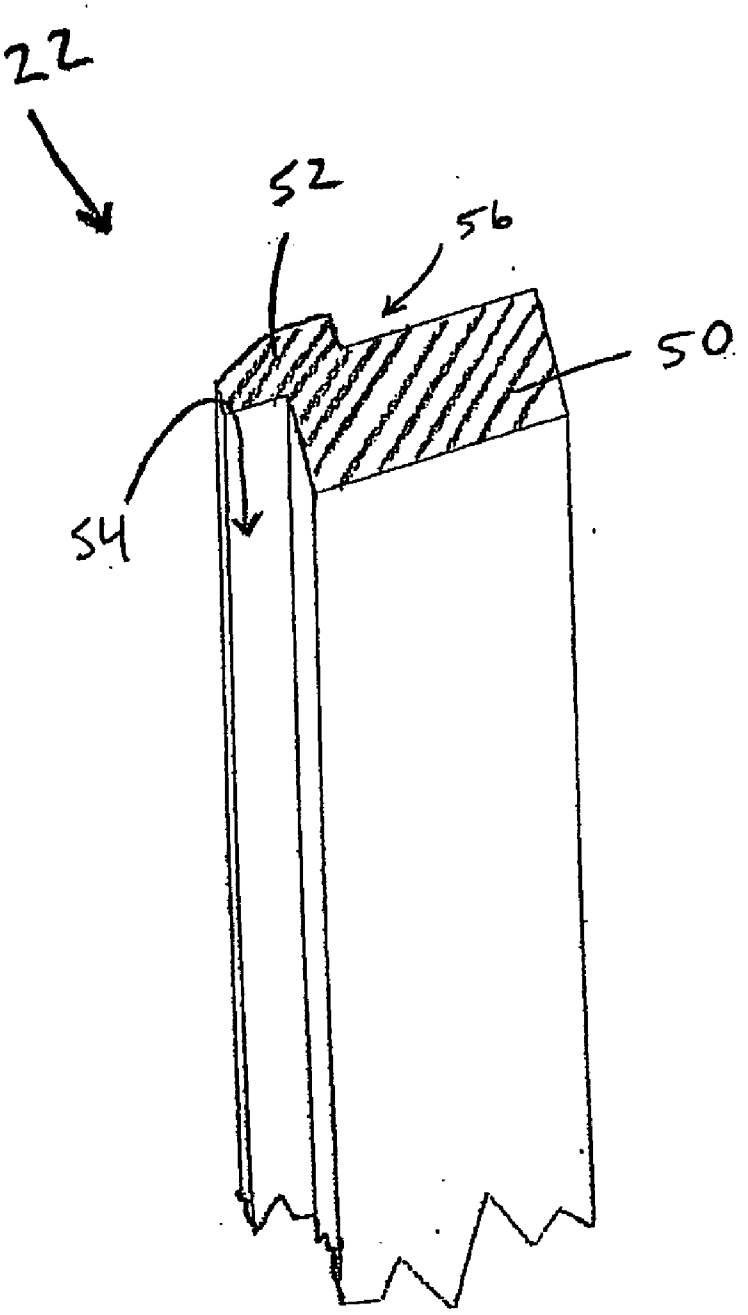


Figure 4

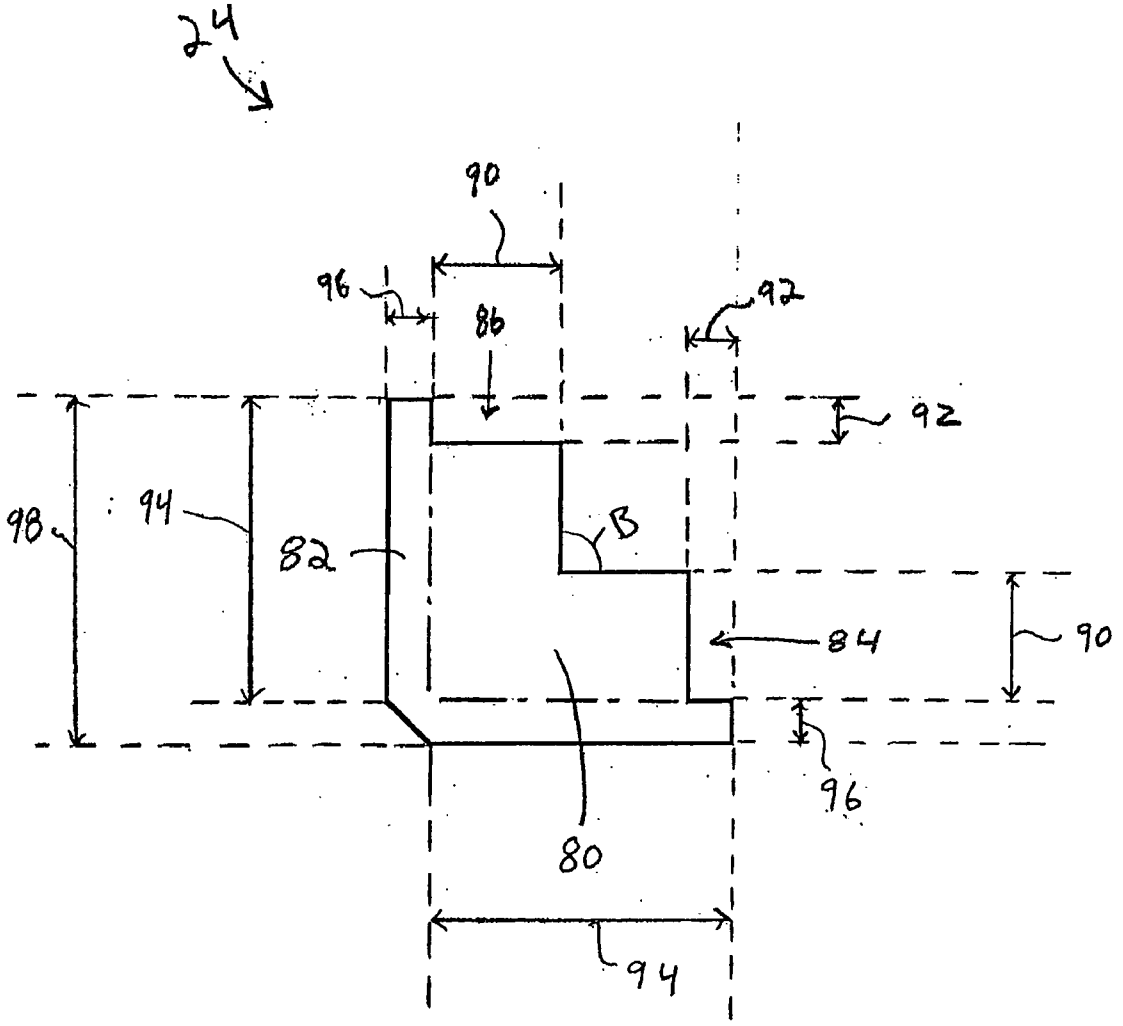


Figure 5

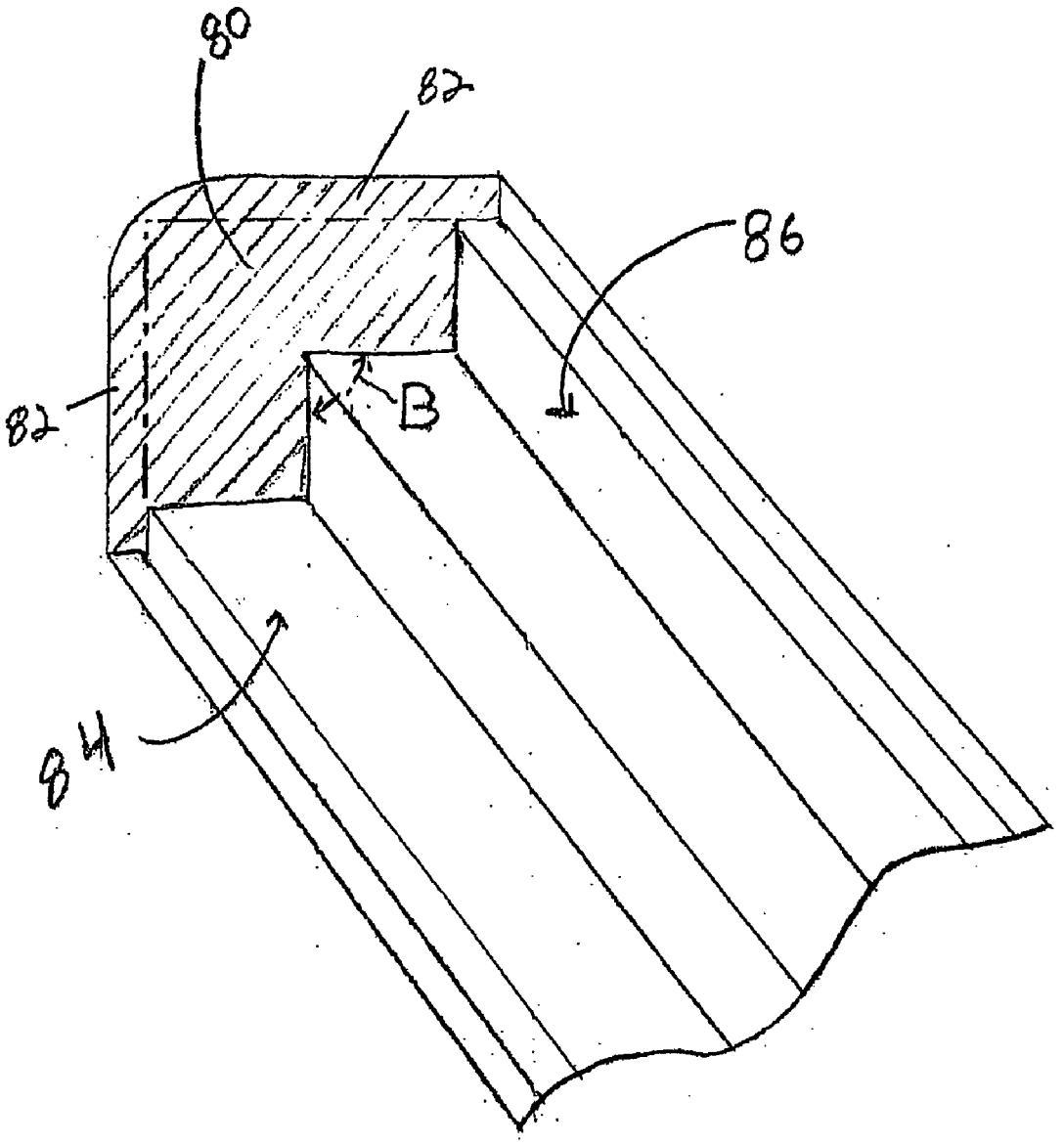


Figure 6

CORNER MOLDING FOR WALL COVERING ASSEMBLY

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This Non-Provisional Patent Application claims the benefit of the filing date of U.S. Provisional Patent Application Ser. No. 60/505,460 filed Sep. 24, 2003, entitled "CORNER MOLDING FOR WALL COVERING ASSEMBLY."

BACKGROUND OF THE INVENTION

[0002] A recent resurgence in the housing market has resulted in an increase in new home construction and the remolding of existing homes. A feature common to both new home construction and the remolding of existing homes is the attachment of wall coverings to walls.

[0003] One particularly favored wall covering includes paneling. Paneling, in general, includes composite structures and wooden structures, including, for example, solid wood structures such as knotty pine boards. The paneling can incorporate a variety of surface textures and visual features that appeal to consumers' decorating preferences.

[0004] With this background in mind, the paneling is applied to a wall area, generally spanning the width of the wall and extending from floor to ceiling. In - this tegard, not all walls are smooth and square. Consequently, any variation in the wall surface will result in a corresponding visibly noticeable variation in the wall covering, most often discernable along edges of the wall covering. Understandably, members of the building trades and consumers of home remolding products have a desire to efficiently and beautifully attach finished wall coverings that are aesthetically pleasing and simple to install. Therefore, advancements in the simple installation of aesthetically pleasing solid wall coverings are desirable.

SUMMARY OF THE INVENTION

[0005] One aspect of the present invention provides a corner molding for a solid wall covering. The corner molding includes a base section and a cap section. The cap section is attached to the base section, and together with the base section, defines a first channel and a second channel. The channels are configured to accept the solid wall covering. The cap section is configured to project over an edge of the solid wall covering.

[0006] Another aspect of the present invention provides a method of attaching a solid wall covering to a wall. The method includes affixing a first portion of the solid wall covering to the wall. The method includes affixing, to the wall, a sequence of adjacent solid wall covering portions extending from the first portion, including affixing a last portion of the solid wall covering to the wall, the last portion completing the sequence of adjacent solid wall covering portions extending from the first portion. The method includes affixing a corner molding over an edge of the last portion of the solid wall covering. The corner molding includes a cap section attached to a base section and defines at least one channel configured to accept the solid wall covering. The cap section is configured to project over the edge of the last portion of the solid wall covering.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] **FIG. 1** is a perspective view of a wall covering assembly according to one embodiment of the present invention.

[0008] **FIG. 2** is a cross-sectional view of the wall covering assembly of **FIG. 1**.

[0009] **FIG. 3** is a cross-sectional view of an interior corner molding according to one embodiment of the present invention.

[0010] **FIG. 4** is a perspective view of the interior corner molding of **FIG. 3**.

[0011] **FIG. 5** is a cross-sectional view of an exterior corner molding according to one embodiment of the present invention.

[0012] **FIG. 6** is a perspective view of the exterior corner molding of **FIG. 5**.

DETAILED DESCRIPTION

[0013] In the following Detailed Description, reference is made to the accompanying drawings, which form a part hereof, and in which is shown by way of illustration specific embodiments in which the invention may be practiced. In this regard, directional terminology, such as "top,""bottom, ""front,""back,""leading,""trailing," etc., is used with reference to the orientation of the Figure(s) being described. Because components of embodiments of the present invention can be positioned in a number of different orientations, the directional terminology is used for purposes of illustration and is in no way limiting. It is to be understood that other embodiments may be utilized and structural or logical changes may be made without departing from the scope of the present invention. The following detailed description, therefore, is not to be taken in a limiting sense.

[0014] One embodiment of a wall covering assembly **20** is generally illustrated in **FIG. 1** and **FIG. 2**. **FIG. 1** is a perspective view of the wall covering assembly **20** and **FIG. 2** is a cross-sectional view of the wall covering assembly **20**. With reference to **FIG. 1**, the exemplary wall covering assembly **20** includes an interior corner molding **22**, an exterior corner molding **24**, a first wall covering section **26**, and a second wall covering section **28**. In one configuration, wall covering sections **26** and **28** are solid and couple together at a joint **30**. In one embodiment, joint **30** is a tongue and groove joint. Joint **30** ca take various forms. For example, joint **30** can be a mitered joint, a lap joint, a butt joint, or any other suitable joint that couples first wall covering section **26** with second wall covering section **28**. Additionally, wall covering sections **26** and **28** are illustrated as being distinct from one another. However, in other embodiments, the first and second wall covering sections **26** and **28** are substantially identical in conformation, such that first wall covering section **26** is substantially a replicate of second wall covering section **28**.

[0015] Referring to **FIG. 2**, a wall **40** has an interior corner **42** and an exterior corner **44**. In accordance with one embodiment of the present invention, first and second wall covering sections **26** and **28** extend between interior corner molding **22** and exterior corner molding **24**. Wall covering section **26** includes edges **46** and **47**, and wall covering section **28** includes edges **48** and **49**. Generally, edges **46**,

47, 48, and 49 of wall covering sections 26 and 28 are formed individually. Accordingly, accurate and exact edges 46, 47, 48, and 49 are labor intensive to craft. Alternately, edges 46, 47, 48, and 49 can be quickly formed, often resulting in gaps and inaccurate joints 30, which affect both the appearance and the alignment of wall covering sections 26 and 28 and joint 30. As illustrated in FIG. 2, interior corner molding 22 and exterior corner molding 24 are configured to project over edges 46, 47, 48, and 49 of respective wall covering sections 26 and 28 to create an aligned and an aesthetically pleasing finished wall covering assembly 20 on wall 40.

[0016] A cross-sectional view of interior corner molding 22 according to one embodiment of the present invention is generally illustrated in FIG. 3. Interior corner molding 22 includes a base section 50 and a cap section 52. Cap section 52 is attached to base section 50, and together they define a first channel 54 and a second channel 56. First and second channels 54 and 56 are configured to accept a wall covering, such as wall covering sections 26 and 28 (shown in FIGS. 1 and 2). In one embodiment, base section 50 defines an angle A that is configured to occupy the space between adjacent walls. In one embodiment, angle A is approximately 90 degrees such that base section 50 occupies the space between orthogonal walls (shown in FIG. 2). When interior corner molding 22 is employed as a portion of wall covering assembly 20, cap section 52 is configured to project over edges 46 and 47 (shown in FIG. 2) of wall covering sections 26 and 28. In one embodiment, the edges 46 and 47 are uneven (i.e., edges 46 and 47 have variations that impair alignment with other portions of wall coverings) and the cap section 52 is configured to project over, and visually hide, edges 46 and 47.

[0017] Interior corner molding 22 is configured to cooperate with exterior corner molding 24 (shown FIGS. 1 and 2) and first and second wall covering sections 26 and 28 (shown in FIGS. 1 and 2) in forming a visually pleasing finished solid wall covering assembly 20 on walls 40. With reference to FIG. 3, interior corner molding 22 has a specific geometry. For example, interior corner molding 22 defines channels 54 and 56 that have a channel width indicated by arrows 60 selected to accommodate a width of wall covering sections 26 and 28. Channels 54 and 56 of interior corner molding 22 also each have a channel depth indicated by arrows 62, which corresponds to the amount of overhang, or the amount that cap section 52 projects over edges 46 and 47. Further, for aesthetic and functional reasons, cap section 52 has a fascia width indicated by arrows 64. Interior corner molding 22 has a molding width indicated by arrows 66, that corresponds to the planform size employed to fabricate interior corner molding 22. In one embodiment, interior corner molding 22 is fabricated in a one-pass cutting operation to simultaneously form channel width 60, channel depth 62, and fascia width 64.

[0018] In one example embodiment, interior corner molding 22 is sized to accommodate approximately ⅜ inch tongue and groove #2 knotty pine wall covering sections 26 and 28. In this example embodiment of interior corner molding 22, channel width 60 is selected to be approximately ⅜ of an inch, channel depth 62 is selected to be approximately ¼ inch, and fascia width 64 is selected to be approximately ¼ inch. In this example embodiment, molding width 66 is selected to be approximately ⅞ inch such that the planform of interior corner molding 22 can be fabricated by a cutting machine in one pass.

[0019] In another example embodiment, interior corner molding 22 is configured to accommodate approximately ¾ inch tongue and groove #2 knotty pine wall sections 26 and 28. In this example embodiment, channel width 60 is selected to be approximately ¾ inch, channel depth 62 is selected to be approximately ¼ inch, and fascia width 64 is selected to be approximately ¼ inch. In this example embodiment, molding width 66 is selected to be approximately ⅛ inch such that the planform of interior corner molding 22 can be fabricated in a one pass cutting operation.

[0020] FIG. 4 is a perspective view of one embodiment of interior corner molding 22 which is formed of solid material. In particular, base section 50 and cap section 52 are solid. Together, base section 50 and cap section 52 define first channel 54 and second channel 56, channels 54 and 56 being configured to accept wall covering sections 26 and 28. In one embodiment, channels 54 and 56 are rigidly supported by base section 50 and cap section 52, such that channels 54 and 56 resist collapse and deflection. Additionally, solid base section 50 and solid cap section 52 permit molding 22 to be fastened with mechanical or chemical fasteners. For example, fasteners such as glues, epoxies, and nails and/or screws, can be employed in attaching molding 22 to wall 40 (shown in FIG. 2) without deformation, warping, or denting of molding 22. In one embodiment, interior corner molding 22 is fabricated from a synthetic material, such as plastic. Alternately, interior corner molding 22 can be fabricated from a composition of material including a blend of natural wood and synthetic materials.

[0021] A cross-sectional view of exterior corner molding 24 according to one embodiment of the present invention is generally illustrated in FIG. 5. Exterior corner molding 24 includes a base section 80 and a cap section 82. Cap section 82 is attached to base section 80, and together they define a first exterior corner channel 84 and a second exterior corner channel 86. First and second exterior corner channels 84 and 86 are configured to accept wall covering sections 26 and 28 (shown in FIGS. 1 and 2). In one embodiment, base section 80 defines an angle B that is configured to occupy the space between adjacent walls (e.g., exterior corner 44 shown in FIG. 2). In one embodiment, angle B is approximately 90 degrees such that base section 80 occupies the space between orthogonal walls. As illustrated in FIG. 2, base section 80 occupies an exterior corner 44 between two adjacent walls such that cap section 82 is configured to extend beyond base section 80 and project over edges 48 and 49.

[0022] In one embodiment of the present invention, exterior corner molding 24 defines a primary channel width 90 sized to accommodate a width of wall covering sections 26 and 28. Exterior corner molding 24 defines a primary channel depth indicated by arrows 92, a primary fascia width indicated by arrows 94, and a fascia depth indicated by arrows 96. As illustrated in FIG. 5, cap section 82 includes primary fascia width 94 comprising primary channel depth 92 and fascia depth 96, and as such, cap section 82 is configured to project over edges (for example edges that are imprecisely formed) 48 and 49 of wall covering section 28. Exterior corner molding 24 has an exterior molding width indicated by arrows 98 that characterizes the dimension of

raw material from which exterior corner molding **24** is formed. In one embodiment, exterior corner molding **24** is fabricated in a one-pass cutting operation such that primary channel width **90**, primary channel depth **92**, primary fascia width **94**, and fascia depth **96** are formed simultaneously.

[**0023**] Exterior corner molding **24** is configured to accept wall covering sections **26** and **28** of varying sizes. In one example embodiment, exterior corner molding **24** is sized to accommodate approximately ⅜ inch tongue and groove #2 knotty pine wall covering sections **26** and **28**. In this example embodiment, primary channel width **90** is selected to be approximately ⅜ inch, primary channel depth **92** is selected to be approximately ¼ inch, primary fascia width **94** is selected to be approximately 1⅜ inch, fascia depth **96** is selected to be approximately ¼ inch, and exterior mold width **98** is selected to be approximately 1⅝ inch.

[**0024**] In another example embodiment, exterior corner molding **24** is sized to accommodate approximately ¾ inch tongue and groove #2 knotty pine wall covering sections **26** and **28**. In this example embodiment, primary channel width **90** is selected to be approximately ¾ inch, primary channel depth **92** is selected to be approximately ¼ inch, primary fascia width **94** is selected to be approximately 1¾ inch, fascia depth **96** is selected to be approximately ¼ inch, and exterior molding width **98** is selected to be approximately 2 inch.

[**0025**] In one embodiment, exterior corner molding **24** is fabricated from natural wood. In an alternate embodiment, exterior corner molding **24** is fabricated from a synthetic material, for example, plastic. In yet another embodiment, exterior corner molding **24** is fabricated from a combination of natural and synthetic materials.

[**0026**] **FIG. 6** is a perspective view of one embodiment of exterior corner molding **24** formed of solid material. In particular, base section **80** and cap section **82** are solid. Together, base section **80** and cap section **82** define first exterior corner channel **84** and second exterior corner channel **86**, exterior corner channels **84** and **86** being configured to accept wall covering sections **26** and **28**. In this embodiment, exterior corner channels **84** and **86** are rigidly supported by base section **80** and cap section **82**, such that exterior corner channels **84** and **86** resist collapse and deflection. Additionally, solid base section **80** and solid cap section **82** permit molding **24** to accept a variety of chemical and mechanical fasteners. For example, molding **24** can be attached to wall **40** (shown in **FIG. 2**) with glues, epoxies, and/or nails and/or screws, without deformation or denting. In one embodiment, exterior corner molding **24** is fabricated from a synthetic material, such as plastic. Alternately, exterior corner molding **24** can be fabricated from a composition of material including a blend of natural wood and synthetic materials.

[**0027**] With reference to **FIG. 2**, wall **40** can be non-uniform (i.e., wavy), which is especially the case for older walls **40** in need of a wall covering. An expert, such as a carpenter, can craft wall covering sections having joints that precisely meet at interior coiner **42** and exterior corner **44**. However, precise joints between adjoining wall covering sections crafted by a non-expert require great effort and time, and still often result in a less than pleasing finished wall covering.

[**0028**] With reference to **FIG. 2**, wall **40** includes a solid wall covering assembly **20** having no visible imperfections that can be quickly assembled by any do-it-yourself person. It is desired that wall covering sections **26** and **28** be positioned on wall **40** in a level and plumb manner. Specifically, it is desired that joint **30** is substantially vertical and wall covering sections **26** and **28** are pleasingly aligned. Additionally, wall covering sections **26** and **28** should terminate precisely at corners **42** and **44**. However, because wall **40** is non-uniform, achieving the desired joint **30** and mating sections **26** and **28** at corners **42** and **44** can be difficult, if not impossible, for many do-it-yourself persons. This problem is solved by one embodiment of the present invention where interior corner molding **22** and exterior corner molding **24** are configured to accept wall covering sections **26** and **28** such that cap sections **52** and **82** project over edges **46**, **47**, **48**, and **49**. Consequently, edges **46**, **47**, **48**, and **49** can be formed quickly and without exacting precision because cap sections **52** and **82** cover the imperfections. The resulting solid wall covering assembly **20** is uniform in appearance, and corners **42** and **44** are capped by the uniform and pleasing cap sections **52** and **82**.

[**0029**] With reference to **FIG. 2**, in an example embodiment, interior corner molding **22** is fastened into interior corner **42**. Wall covering section **26** is selected and an edge **47** is coupled to channel **54** (shown in **FIG. 3**). A second wall covering section **28** is positioned adjacent to wall covering section **26** such that joint **30** is vertical and precise. In configuring joint **30** to be vertical and precise, edge **47** can vary from a vertical orientation. However, this variation is visually obviated by cap section **52** (shown in **FIG. 3**).

[**0030**] In one wall covering process, wall covering section **26** is fixed in place. Second wall covering section **28** is then cut to a desired size, which forms edge **48**. Wall covering section **28** is then positioned and fixed in place. Vertical joint **30** is established, but edge **48** can be non-vertical (i.e., wavy, or not uniform). Exterior corner molding **24** is positioned and attached to wall **40** such that edge **48** is engaged by channel **86** (shown in **FIG. 5**). Edge **48** is covered by cap **82** (shown in **FIG. 5**). In this example embodiment, joint **30** is vertical and precise, and cap sections **52** and **82** project over edges **47** and **48**, respectively, to create a visually pleasing finished wall covering assembly **20** on wall **40**. In one embodiment, edges **47** and **48** can vary by as much as approximately ⅜ inches from plumb (or from a linear line) and still be covered by cap sections **52** and **82**. Other dimensions are possible for moldings **22** and **24** that will permit even larger variations in edges **47** and **48**.

[**0031**] Although specific embodiments have been illustrated and described herein, it will be appreciated by those of ordinary skill in the art that a variety of alternate and/or equivalent implementations may be substituted for the specific corner moldings shown and described without departing from the scope of the present invention. This application is intended to cover any adaptations or variations of the corner moldings discussed herein. Therefore, it is intended that this invention be limited only by the claims and the equivalents thereof.

What is claimed is:

1. A corner molding for a solid wall covering comprising:

a base section; and

a cap section attached to the base section and together with the base section defining a first channel and a

second channel, the channels configured to accept the solid wall covering, wherein the cap section is configured to project over an edge of the solid wall covering.

2. The corner molding for a wall covering of claim 1, wherein the base section and the cap section are wood.

3. The corner molding for a wall covering of claim 2, wherein the base section and the cap section are solid.

4. The corner molding of claim 1, wherein the base section is configured to be positioned at an interior junction of two intersecting walls.

5. The corner molding of claim 1, wherein the base section is configured to be positioned at an exterior junction of two intersecting walls.

6. The corner molding of claim 1, wherein the cap section is configured to project over an uneven edge of the solid wall covering.

7. The corner molding of claim 1, wherein the solid wall covering is a tongue and groove wall covering.

8. A wall covering assembly comprising:

at least one interior corner molding having an interior cap section and defining at least one interior corner channel;

at least one exterior corner molding having an exterior cap section and defining at least one exterior corner channel;

at least one section of a solid wall covering configured to extend between the at least one interior corner channel and the at least one exterior corner channel;

wherein the interior and exterior corner channels are configured to accept the solid wall covering; and

wherein the interior cap section and the exterior cap section are configured to project over respective edges of the solid wall covering.

9. The wall covering assembly of claim 8, wherein the solid wall covering is selected from the group consisting of knotty pine board, hardwood board, particle board, laminated board, and composite board.

10. A method of attaching a solid wall covering to a wall comprising:

affixing a first portion of the solid wall covering to the wall;

affixing, to the wall, a sequence of adjacent solid wall covering portions extending from the first portion including:

affixing a last portion of the solid wall covering to the wall, the last portion completing the sequence of adjacent solid wall covering portions extending from the first portion; and

affixing a corner molding over an edge of the last portion of the solid wall covering, wherein the corner molding includes a cap section attached to a base section and defines at least one channel configured to accept the solid wall covering, the cap section configured to project over the edge of the last portion of the solid wall covering.

11. The method of claim 10, further comprising:

affixing an interior corner molding having an interior cap section and defining at least one interior corner channel to an interior corner of the wall.

12. The method of claim 11, wherein affixing a first portion of the solid wall covering to the wall includes coupling a first edge of the solid wall covering to the interior corner channel.

13. The method of claim 10, wherein affixing a corner molding includes affixing an exterior corner molding over an edge of the last portion of the solid wall covering.

14. The method of claim 10, wherein affixing a corner molding includes affixing a solid wood corner molding.

15. The method of claim 10, wherein affixing a corner molding includes affixing a corner molding over an uneven edge of the last portion of the solid wall covering.

16. The method of claim 10, wherein affixing a corner molding includes gluing a base section of the corner molding to the wall.

17. The method of claim 10, wherein affixing a corner molding includes nailing a cap section of the corner molding to the solid wall covering and to the wall.

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