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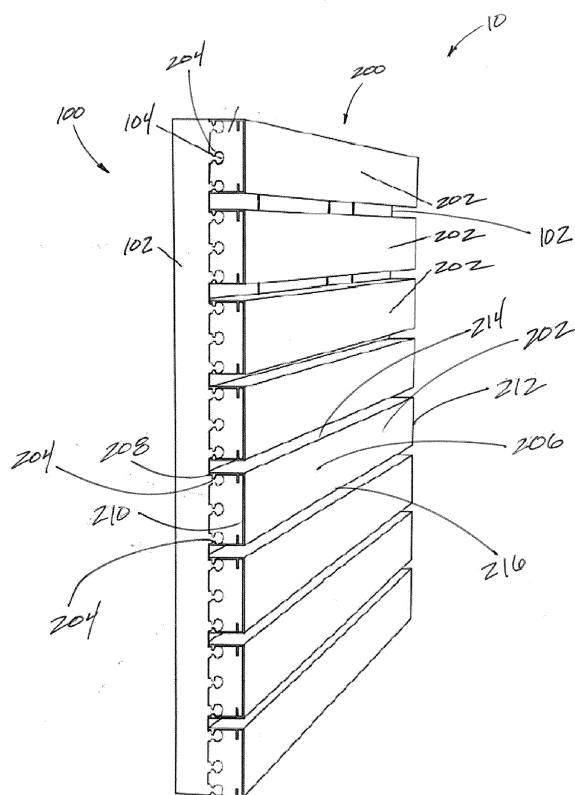
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(54) CUSTOMIZABLE CLADDING SYSTEM

(57) A customizable cladding system is provided. The customizable cladding system includes one or more base plates designed to be attached to a support structure (e.g., a fence post, wall, etc.). The base plates include attachment mechanisms extending outward from their front surfaces. Cladding plates, including corresponding attachment mechanisms on their back sides, are then removable coupled to the base plates to form a customizable cladding. The structure of the customizable cladding may be modified at any time by removing the cladding plates and reconfiguring them with the base plates as desired.

FIG. 1



Description**FIELD OF THE INVENTION**

[0001] This invention relates to cladding, including a customizable cladding system.

BACKGROUND

[0002] Wall cladding is used throughout the world on all types of buildings to provide thermal insulation and weather resistance, to improve the aesthetic appearance of the building, to define zones and structural elements, and for other purposes. Typically, the cladding is permanent in nature, and once installed, remain in place and with the same form and shape until the cladding is completely replaced. Replacement of such cladding structures is oftentimes costly and labor intensive.

[0003] Accordingly, there is a need for a customizable cladding system.

BRIEF DESCRIPTION OF THE DRAWINGS

[0004] Various other objects, features and attendant advantages of the present invention will become fully appreciated as the same becomes better understood when considered in conjunction with the accompanying drawings, in which like reference characters designate the same or similar parts throughout the several views, and wherein:

FIG. 1 shows a schematic of a customizable cladding system according to exemplary embodiments hereof;

FIG. 2 shows a schematic of a support assembly according to exemplary embodiments hereof;

FIG. 3 shows a side view of a customizable cladding system according to exemplary embodiments hereof;

FIGS. 4-8 show schematic views of customizable cladding systems according to exemplary embodiments hereof;

FIG. 9 shows a schematic view of a customizable cladding system including an overall cladding member according to exemplary embodiments hereof; and

FIG. 10 shows two cladding members and a connecting plate according to exemplary embodiments hereof.

DETAILED DESCRIPTION OF EXEMPLARY EMBODIMENTS

[0005] In general, the system according to exemplary embodiments hereof includes a customizable cladding system. The cladding system generally includes one or more base plate assemblies that may be attached to desires support structures (e.g., a wall), and one or more cladding assemblies that may be attached to the base plates at various locations depending on the desired outcome. In this way, the system is customizable.

[0006] In one exemplary embodiment hereof, as shown in **FIGS. 1 and 2**, the customizable cladding system **10** (also referred to as simply the system **10**) includes a support assembly **100** and a cladding assembly **200**. In general, the support assembly **100** includes one or more base structures **102** that may be configured with one or more external support structures (e.g., walls, columns, etc.), and the cladding assembly **200** includes one or more cladding members **202** (e.g., panels, slats, etc.) that may be attached to, and extend between, the base structures **102**. The base structures **102** each include first attachment mechanisms **104** and the cladding members **202** each include second attachment mechanisms **204**, and the first and second attachment mechanisms **104, 204** facilitate the attachment of the cladding members **202** to the base structures **102**. The system **10** also may include other elements as necessary to fulfill its functionalities.

[0007] It also is contemplated that the customizable cladding system **10** may be used as a barrier system, with the support assembly **100** configured with posts (e.g., fence posts), and the cladding assembly **200** extending between the posts. Accordingly, while this specification will describe the system **10** primarily in respect to its use as a cladding system, it is understood that the system **10** also may be used as a barrier system, and that its ultimate use does not limit the scope of the system **10** in any way.

[0008] Further details of the customizable cladding system **10**, the support assembly **100**, and a cladding assembly **200** will be described below in relation to **FIGS. 1-7**.

45 Support Plate Assembly 100

[0009] In some embodiments, as shown in **FIG. 2**, the support assembly **100** includes one or more base structures **102** each including a base plate **106** and first attachment mechanisms **104**.

[0010] In some embodiments, the base plate **106** is generally elongate and includes a front surface **108**, a rear surface **110**, a left side **112**, and a right side **114**. The rear surface **110** is designed to be attached to a surface of an external support structure such as a wall. In this arrangement, the front surface **108** faces outward from the external support structure and includes the one or more first attachment mechanisms **104** for the attach-

ment of the cladding assembly 200.

[0011] In some embodiments, the rear surface 110 includes one or more support ribs 116 extending orthogonally outward from the rear surface 110. It is preferable that the one or more support ribs 116 each extend the same distance from the rear surface 110 so that the distal ends of the ribs 116 are aligned along the same plane. In this way, the distal ends of the support ribs 116 may be placed against a surface of an external support structure and the base structure may be attached thereto. Once attached, the support ribs 116 may provide support to the base plate 106 across the width and length of the plate 106.

[0012] In some embodiments, the base plate 106 includes an elongate secondary U-shaped channel member that may facilitate the attachment of the plate 106 to the supporting structure. In this case, the U-shaped channel member may be secured vertically to the side of the support structure with the channel facing outwards, and the support ribs 116 may be received into the channel and secured therein. In another embodiment of this type, the far left and right support ribs 116 may extend adjacent the left and right walls of the U-shaped channel (either outside the channel walls or inside the channel walls) and be secured thereto. In this way, the base plate 106 may be secured to the support structure.

[0013] In some embodiments, the base plate 106 includes one or more through-hole(s) 118 through which a screw, bolt, nail, or other type of securing mechanism may pass to secure the plate 106 to the external support structure. However, it is understood that the base plate 106 may be attached to an external support structure using other types of attachment techniques (e.g., adhesive, welding, etc.) and that the scope of the system 10 is not limited in any way by the way in which the base plate 106 is secured to the external support structure.

[0014] In some embodiments, the base plate 106 includes one or more first attachment mechanisms 104 coupled to its front surface 108 and extending outward therefrom.

[0015] As will be described herein, the first attachment mechanisms 104 are designed to releasably attach to the second attachment mechanisms 204 (of the cladding assembly 200) in order to releasably secure the cladding members 202 to the base structures 102. For example, in some embodiments, the first attachment mechanisms 104 may include a generally male interlocking profile and the second attachment mechanisms 204 may include a generally female interlocking profile so that the male and female interlocking profiles may mate and attach to one another. It also is contemplated that these profiles may be reversed and that the first attachment mechanisms 104 may include female interlocking profiles and the second attachment mechanisms 204 may include male interlocking profiles, and/or any combinations thereof.

[0016] Expanding on this concept, in some embodiments, as shown in FIGS. 2 and 3, the first attachment mechanisms 104 each may include an attachment mech-

anism body 120 with a proximal end attached to the front surface 108 of the base plate 106 and a distal end extending outward therefrom. The distal end may include a head 124 with a neck 122 positioned between the head 124 and the plate 106.

[0017] In some embodiments, the head 124 includes an outward convex curvature as shown in FIGS. 2 and 3. However, it also is contemplated that the outer curvature of the head 124 include an arrow, a point, a square with rounded corners, a trapezoid, other suitable shapes and/or forms, and any combinations thereof. As will be described in other sections, the head 124 is shaped to enable the second attachment mechanism 204 to slide past the head 124 and to subsequently engage with the neck 122.

[0018] In some embodiments, the neck 122 includes an inward concave curvature as shown in FIGS. 2 and 3. However, it also is contemplated that inward curvature of the neck 122 include a notch (e.g., a V-, U-, or arc-shaped notch), a square with rounded corners, a trapezoid, ledge (e.g., right angled or slanted), other suitable shapes and/or forms, and any combinations thereof. As will be described in other sections, the neck 122 is shaped to receive a corresponding element on the second attachment mechanism 204 in order to mate and connect the first and second attachment mechanisms 104, 204 together.

[0019] In some embodiments, the cross-sectional shape of the first attachment mechanism's body 120 is square or rectangular shaped. In this case, the neck's inward curvature may extend around the entire cross-sectional perimeter of the mechanism's body 120 or may be placed at desired areas on the body's cross-sectional perimeter, e.g., on the top and bottom sides of the body 120 as shown in FIG. 2. In other embodiments, the cross-sectional shape of the first attachment mechanism's body 120 is circular or oval shaped, and the neck's inward curvature may extend around the entire cross-sectional circumference of the mechanism's body 120 or may be placed at desired areas on the body's cross-sectional circumference, e.g., on the top and bottom sides of the body 120. It also is contemplated that the mechanism's body 120 include other cross-sectional shapes and that the neck's inward curvature may be placed at any desired locations as required.

[0020] In some embodiments, as shown in FIG. 2, the first attachment mechanisms 104 are arranged on the plate's front surface 108 as a matrix of rows and columns. For example, as shown in FIG. 2, the matrix may include two side-by-side columns of first attachment mechanisms 104 separated by a predetermined distance (e.g., 6"-12"). Each row also may be separated by a predefined distance (e.g., 2") and the number of rows may depend on the height of the base plate 106. In some embodiments, the vertical spacings between the rows of mechanisms 104 are constant while in other embodiments the spacings may differ from one pair of rows to the next. The side-by-side columns preferably match and are

aligned vertically so that the rows are generally horizontal. In this way, as will be described in other sections, the corresponding second attachment mechanisms 204 may be correspondingly aligned to facilitate the easy alignment, placement, and engagement of the first and second attachment mechanisms 104, 204 together.

[0021] While FIG. 2 shows two side-by-side columns of first attachment mechanisms 104, it is understood that a base plate 106 may include any number of columns of first attachment mechanisms 104 (with each column including any number of first attachment mechanisms 104 depending on the height of the base plate 106) and that scope of the system 10 is not limited in any way by the number(s) of columns of first attachment mechanisms 104 on any particular base plate 106.

[0022] In some embodiments, as shown in FIG. 2, a first column of first attachment mechanisms 104 may be positioned on or towards the left side 112 of a base plate 106 and a second column of first attachment mechanisms 104 may be positioned on or towards the right side 114 of the base plate 106. However, it is understood that the columns of first attachment mechanisms 104 may be positioned anywhere on a base plate 106 as required.

Cladding Assembly 200

[0023] In some embodiments, as shown in FIGS. 1 and 3, the cladding assembly 200 includes one or more cladding members 202 (e.g., panels, plates, slats, etc.) configured to attached to, and extend between, the base structures 102. Each cladding member 202 includes a front side 206, a back side 208, a left side 210, a right side 212, a top side 214, and a bottom side 216. While the cladding members 202 in FIG. 1 are shown as generally rectangular cuboids, it is understood that the cladding members 202 may be formed as any suitable shapes.

[0024] FIG. 3 shows a side view of the system 10 looking directly into the left side of the system 10 of FIG. 1. In some embodiments, as shown in FIG. 3, each cladding member 202 is designed to mate with a corresponding base structure 102.

[0025] In some embodiments, as shown in FIG. 3, the cladding member's top side 214 and bottom side 216 include sidewalls 217, 219, respectively, that extend backwards from the member's back side 208. In this way, the member's top side sidewalls 217, back side 208, and bottom side sidewalls 219 define an inner cavity 218 about the member's back side 208.

[0026] In some embodiments, the top side sidewalls 217 and/or the bottom side sidewalls 219 form second attachment mechanisms 204 by including tabs 220 on their inner surfaces facing into the inner cavity 218. In some embodiments, the tabs 220 generally correspond in shape to the inward curvatures on the first attachment mechanism's neck 122. In this way, the tabs 120 may be received into the first attachment mechanism's neck 122 and be releasably held therein. In some embodiments,

the tabs 120 may be elongate and may extend from the cladding member's left side 210 to its right side 212 and/or any portion thereof, and preferably at locations that correspond to the placement of the first attachment mechanisms 104 when the system 10 is fully erected.

[0027] For further clarification, FIG. 3 shows an upper cladding member 202 slightly dislodged from the corresponding base member 102, and a lower cladding member 202 releasably interlocked with the corresponding base member 102. When interlocked, it may be preferable that the distal end of the top side sidewalls 217 and the distal end of the bottom side sidewall 219 generally abut or otherwise engage the front surface 108 of the base member 102. In this arrangement, the first and second attachment mechanisms 104, 204 are interlocked, and the first attachment mechanisms' bodies 120 are received into the cladding member's inner cavity 218.

[0028] To secure the upper cladding member 202 to the base member 102, the upper cladding member 202 is aligned with the corresponding first attachment mechanisms 104 and moved in the direction of the arrow A. As the cladding member 202 is moved in this direction, the tabs 204 (upper and lower) may engage the head 124 of the corresponding first attachment member 104.

[0029] To remove the cladding member 202 from the base structure 102, the cladding member 202 may be moved in a direction generally opposite the direction of the arrow A such that the cladding member's upper side 214 and lower side 216 flex slightly outward thereby allowing the tabs 120 to dislodge from the necks 122.

[0030] In some embodiments, the distance between the cladding member's top side 214 and bottom side 216 is chosen to generally correspond to the distance between two rows of first attachment mechanisms 204. As shown in FIG. 3, the distance between the cladding member's top and bottom sides 214, 216 is chosen to generally correspond to the distance between a first row of first attachment mechanisms 104 and a third row of first attachment mechanisms 104 thereby skipping the second row of first attachment mechanisms 104. Notably, the second row of attachment mechanisms 104 may not be utilized in this arrangement and may simply be received into the cladding member's backside cavity 218.

[0031] It can be seen that the height of each cladding member 202, and therefore the distance between the member's top and bottom sides 214, 216, may preferably be chosen to correspond to the distance between any two rows of first attachment mechanisms 104. In this way, an upper row of first attachment mechanisms 104 may

be engaged with a second attachment mechanism 204 configured with the cladding member's top side 214, a lower row of first attachment mechanisms 104 may be engaged with a second attachment mechanism 204 configured with the cladding member's bottom side 216, and the intermediary rows (if existing) may be received into the cladding member's backside cavity 218. For example, **FIG. 4** shows a cladding members 202 configured with adjacent rows of first attachment mechanisms 104, **FIG. 5** shows cladding members 202 configured with first and third rows of first attachment mechanisms 104 (with one intermediary row of first attachment mechanisms 104 therebetween, generally un-utilized, and received into the cladding member's backside cavity 218), **FIG. 6** shows cladding members 202 configured with first and sixth rows of first attachment mechanisms 104 (with four intermediary rows of first attachment mechanisms 104 therebetween, generally un-utilized, and received into the cladding member's backside cavity 218), and **FIG. 7** shows a first cladding member 202 configured with first and eighth rows of first attachment mechanisms 104 (with six intermediary rows of first attachment mechanisms therebetween, generally un-utilized, and received into the cladding member's backside cavity 218) and a second cladding member 202 configured with first and second rows of first attachment mechanisms 104.

[0032] In some embodiments, as shown in **FIG. 3**, cladding member's top side 214 and/or bottom side 216 may extend generally linearly from the member's front side 206 to its back side 208. However, in other embodiments, as shown in **FIG. 8**, the top and/or bottom sides 214, 216 may include non-linear elements. For example, in some embodiments, the top and/or bottom sides 214, 216 may include curvatures, right angles, etc. For example, the lower cladding member 202 shown in **FIG. 8** includes a lower elongate cavity formed by its bottom side 216 that extends from its left side 210 to its right side 212. This channel may be configured to receive lighting elements (e.g., a string of lights that extends the length of the cladding member 202), electrical lines, other types of elements, and/or any combinations thereof.

[0033] In some embodiments, as shown in **FIG. 9**, a first cladding member's bottom side sidewall 219 may be joined with a second cladding member's top side sidewall 217 to form an overall cladding member 202-O. For example, as shown in **FIG. 9**, the distal end of the first member's bottom side sidewall 219 may be joined to the distal end of the second member's top side sidewall 217 by a section of cladding member material. Notably, because the sidewalls 219, 217 are joined, one or both of the sidewalls 219, 217 may include a tab 220 that interlocks with a corresponding neck 122. For example, **FIG. 9** shows the first member's bottom side sidewall 219 as including a tab 220 and the second member's top side sidewall 217 as not including a tab 220. It is understood that any number of cladding members 202 may be combined in this manner to form overall cladding members 202-O with any number of combined bottom side sidewalls 219 and

top side sidewalls 217.

[0034] It is understood that cladding members 202 of different sizes may be configured together on common base structures 102 in any combinations as desired.

5 **[0035]** In some embodiments, as shown in **FIG. 10**, the system 10 includes one or more connecting plates 224 designed to connect two cladding members 202 end-to-end. In some embodiments, the connecting plates 224 are used to connect two cladding members 202 end-to-end at an angle as shown in **FIG. 10**, while in other embodiments, the connecting plates 224 may be used to connect two cladding members 202 end-to-end in a generally straight configuration.

10 **[0036]** In some embodiments, as shown in **FIG. 10**, each connecting plate 224 includes a first end 226 and a second end 228 that may (or may not) be offset by an angle. In some embodiments, the cladding members 202 include inner channels 222 designed to receive an end 226, 228 of a connecting plate 224. For example, a first 15 cladding member 202 may receive a first end 226 of a connecting plate 224, and a second cladding member 202 may receive a second end 228 of the connecting plate 224. In this way, the connecting plate 224 extends from within the first cladding member 202 to within the 20 second cladding member 202 thereby connecting the ends of the cladding members 202 together.

25 **[0037]** In some embodiments, as shown in **FIG. 10**, each cladding member 202 includes an internal channel 230 formed between the back side 208 of the cladding member 202 and an internal rib 222 extending inward from the cladding member's top side sidewall 217 and/or from the cladding member's bottom side sidewall 219. In some embodiments, the internal rib 222 is orthogonal to the sidewall 217, 219 from which it extends, and extends 30 from the left side 210 to the right side 212 of a cladding member 202, or any portions thereof.

35 **[0038]** In some embodiments, each internal channel 230 is designed to receive an end 226, 228 of a connecting plate. For example, as shown in **FIG. 10**, a first cladding member (e.g., the upper member 202 in **FIG. 10**), includes an upper internal channel 230 formed between the upper rib 222 and the back side 208 of the cladding member 202, and a lower internal channel 230 formed 40 between the lower rib 222 and the back side 208 of the cladding member 202. As shown, the upper internal channel 230 and the lower internal channel 230 are opposing and designed to together receive a first end 226 of the connecting plate 224. In some embodiments, the upper internal channel 230 receives an upper edge of the plate's first end 226 and the lower internal channel 230 receives a lower edge of the plate's first end 226. It 45 may be preferable that the width of each internal channel 230 generally match the width of the connecting plate 224 so that the connecting plate 224 fits within the channels 230 snug.

50 **[0039]** In some embodiments, the ribs 222 extend inward from each respective inner surface of the top side sidewall 217 and/or the bottom side sidewall 219 a dis-

tance adequate to hold each side **226**, **228** of the connecting plate **224** secure. For example, in some embodiments, the ribs **222** may extend inward about 1/8" to about 1" and preferably about 1/2".

[0040] It is understood that the second cladding member **202** (e.g., the lower member **202** in FIG. 10) includes a similar arrangement of upper and lower ribs **222** forming corresponding upper and lower internal channels **230**, and that the upper and lower channels **230** are opposing and designed to together receive the second end **228** of the connecting plate **224**. Once the connecting plate **224** is received into the ends of the first and second cladding members **202**, the cladding members **202** may be pushed together to abut end-to-end while being held in place by the connecting plate **224** configured therein.

[0041] It may be preferable that the respective ends of the cladding members **202** that are abutted in this arrangement include miter cuts as necessary that generally correspond to the angle between the connecting plate's first and second ends **226**, **228** so that the ends of the cladding members **202** may abut without gaps or disconnects.

[0042] In some embodiments, the connecting plate's first and second ends **226**, **228** are offset from one another by an angle of 90° thereby enabling the cladding system **10** to be configured with a corner of a support structure (e.g., an outer corner of a wall). In this example, a first base structure **102** may be configured with the wall to one side of the outward corner, and a second base structure **102** may be configured with the wall to the other side of the outward corner. A first cladding member **202** may be configured with first base structure **102** and a second cladding member **202** may be configured with the second base structure, and the first and second cladding members **202** may be connected to one another using a connecting plate **224** (e.g., as shown in FIG. 10).

[0043] In some embodiments, the base structures **102** and/or the cladding members **202** comprise metal (e.g., aluminum, steel, etc.), plastic, wood, composite materials, other suitable materials, and any combinations thereof.

[0044] While FIG. 1 shows cladding members **202** configured between two side-by-side vertical base structures **102**, it is understood that the cladding members **202** may be configured between any number of base structures **102**.

[0045] While the system **10** has been described as oriented generally vertically, it also is understood that the system **10** may be oriented sideways, diagonally, and/or in any other desired orientation(s).

[0046] It is understood that any aspect and/or element of any embodiment of the system **10** described herein or otherwise may be combined with any other aspect and/or element of any other embodiment described herein or otherwise in any way to form additional embodiments of the system **10** all of which are within the scope of the system **10**.

[0047] Where a process is described herein, those of

ordinary skill in the art will appreciate that the process may operate without any user intervention. In another embodiment, the process includes some human intervention (e.g., a step is performed by or with the assistance of a human).

[0048] As used herein, including in the claims, the phrase "at least some" means "one or more," and includes the case of only one. Thus, e.g., the phrase "at least some ABCs" means "one or more ABCs" and includes the case of only one ABC.

[0049] As used herein, including in the claims, term "at least one" should be understood as meaning "one or more", and therefore includes both embodiments that include one or multiple components. Furthermore, dependent claims that refer to independent claims that describe features with "at least one" have the same meaning, both when the feature is referred to as "the" and "the at least one".

[0050] As used in this description, the term "portion" means some or all. So, for example, "A portion of X" may include some of "X" or all of "X". In the context of a conversation, the term "portion" means some or all of the conversation.

[0051] As used herein, including in the claims, the phrase "using" means "using at least," and is not exclusive. Thus, e.g., the phrase "using X" means "using at least X." Unless specifically stated by use of the word "only", the phrase "using X" does not mean "using only X."

[0052] As used herein, including in the claims, the phrase "based on" means "based in part on" or "based, at least in part, on," and is not exclusive. Thus, e.g., the phrase "based on factor X" means "based in part on factor X" or "based, at least in part, on factor X." Unless specifically stated by use of the word "only", the phrase "based on X" does not mean "based only on X."

[0053] In general, as used herein, including in the claims, unless the word "only" is specifically used in a phrase, it should not be read into that phrase.

[0054] As used herein, including in the claims, the phrase "distinct" means "at least partially distinct." Unless specifically stated, distinct does not mean fully distinct. Thus, e.g., the phrase, "X is distinct from Y" means that "X is at least partially distinct from Y," and does not mean that "X is fully distinct from Y." Thus, as used herein, including in the claims, the phrase "X is distinct from Y" means that X differs from Y in at least some way.

[0055] It should be appreciated that the words "first," "second," and so on, in the description and claims, are used to distinguish or identify, and not to show a serial or numerical limitation. Similarly, letter labels (e.g., "(A)", "(B)", "(C)", and so on, or "(a)", "(b)", and so on) and/or numbers (e.g., "(i)", "(ii)", and so on) are used to assist in readability and to help distinguish and / or identify and are not intended to be otherwise limiting or to impose or imply any serial or numerical limitations or orderings. Similarly, words such as "particular," "specific," "certain," and "given," in the description and claims, if used, are to distinguish or identify, and are not intended to be other-

wise limiting.

[0056] As used herein, including in the claims, the terms "multiple" and "plurality" mean "two or more," and include the case of "two." Thus, e.g., the phrase "multiple ABCs," means "two or more ABCs," and includes "two ABCs." Similarly, e.g., the phrase "multiple PQRs," means "two or more PQRs," and includes "two PQRs."

[0057] The present invention also covers the exact terms, features, values and ranges, etc. in case these terms, features, values and ranges etc. are used in conjunction with terms such as about, around, generally, substantially, essentially, at least etc. (i.e., "about 3" or "approximately 3" shall also cover exactly 3 or "substantially constant" shall also cover exactly constant).

[0058] As used herein, including in the claims, singular forms of terms are to be construed as also including the plural form and vice versa, unless the context indicates otherwise. Thus, it should be noted that as used herein, the singular forms "a," "an," and "the" include plural references unless the context clearly dictates otherwise.

[0059] Throughout the description and claims, the terms "comprise", "including", "having", and "contain" and their variations should be understood as meaning "including but not limited to" and are not intended to exclude other components unless specifically so stated.

[0060] It will be appreciated that variations to the embodiments of the invention can be made while still falling within the scope of the invention. Alternative features serving the same, equivalent, or similar purpose can replace features disclosed in the specification, unless stated otherwise. Thus, unless stated otherwise, each feature disclosed represents one example of a generic series of equivalent or similar features.

[0061] The present invention also covers the exact terms, features, values, and ranges, etc. in case these terms, features, values, and ranges etc. are used in conjunction with terms such as about, around, generally, substantially, essentially, at least etc. (i.e., "about 3" shall also cover exactly 3 or "substantially constant" shall also cover exactly constant).

[0062] Use of exemplary language, such as "for instance", "such as", "for example" ("e.g.,") and the like, is merely intended to better illustrate the invention and does not indicate a limitation on the scope of the invention unless specifically so claimed.

[0063] While the invention has been described in connection with what is presently considered to be the most practical and preferred embodiments, it is to be understood that the invention is not to be limited to the disclosed embodiment, but on the contrary, is intended to cover various modifications and equivalent arrangements included within the spirit and scope of the appended claims.

Claims

1. A customizable cladding system comprising:

a first elongate plate including a first end and a second end defining a first longitudinal axis, the first elongate plate including a first front side and a first back side; at least one first attachment mechanism coupled to and extending from the first front side and including an inward curvature; a second elongate plate including a third end and a fourth end defining a second longitudinal axis, the second elongate plate including a second front side and a second back side; and at least one second attachment mechanism coupled to and extending from the second back side and including an outward extending tab; wherein the inward curvature is adapted to receive the outward extending tab thereby releasably attaching the second back side of the second elongate plate to the first front side of the first elongate plate; wherein the second longitudinal axis is orthogonal to the first longitudinal axis.

2. The system of claim 1 wherein the at least one first attachment mechanism includes a plurality of first attachment mechanisms arranged in rows and columns coupled to the first front side.
3. The system of claim 2 wherein a first elongate plate includes a first left side and a first right side, the first left side and first right side each extending from the first end to the second end, and wherein a first column of first attachment mechanisms is coupled to the first front side towards the first left side and a second column of first attachment mechanisms is coupled to the first front side towards the first right side.
4. The system of claim 1 wherein a first of the at least one second attachment mechanism includes a first upper sidewall and a second of the at least one second attachment mechanism includes a first lower sidewall, the first upper sidewall and the first lower sidewall each extending outward from the second back side and from the third end to the fourth end.
5. The system of claim 4 wherein the first upper sidewall includes a first outward extending tab, and the first lower sidewall includes a second outward extending tab, the first and second outward extending tabs extending from the third end to the fourth end.
6. The system of claim 1 wherein the at least one first attachment mechanism includes a head distal to the inward curvature, the head including a distal convex curvature.
7. The system of claim 6 wherein the at least one second attachment mechanism is adapted to deflect

over the head to be received into the inward curvature.

8. The system of claim 4 further comprising a rib coupled to and extending outward from an inner surface in the first upper sidewall and/or from an inner surface of the first lower sidewall, the rib forming a first channel between the rib and the second back side of the second elongate plate. 5
9. The system of claim 8 further comprising a connecting plate including a first edge adapted to be received into the first channel. 10

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FIG. 1

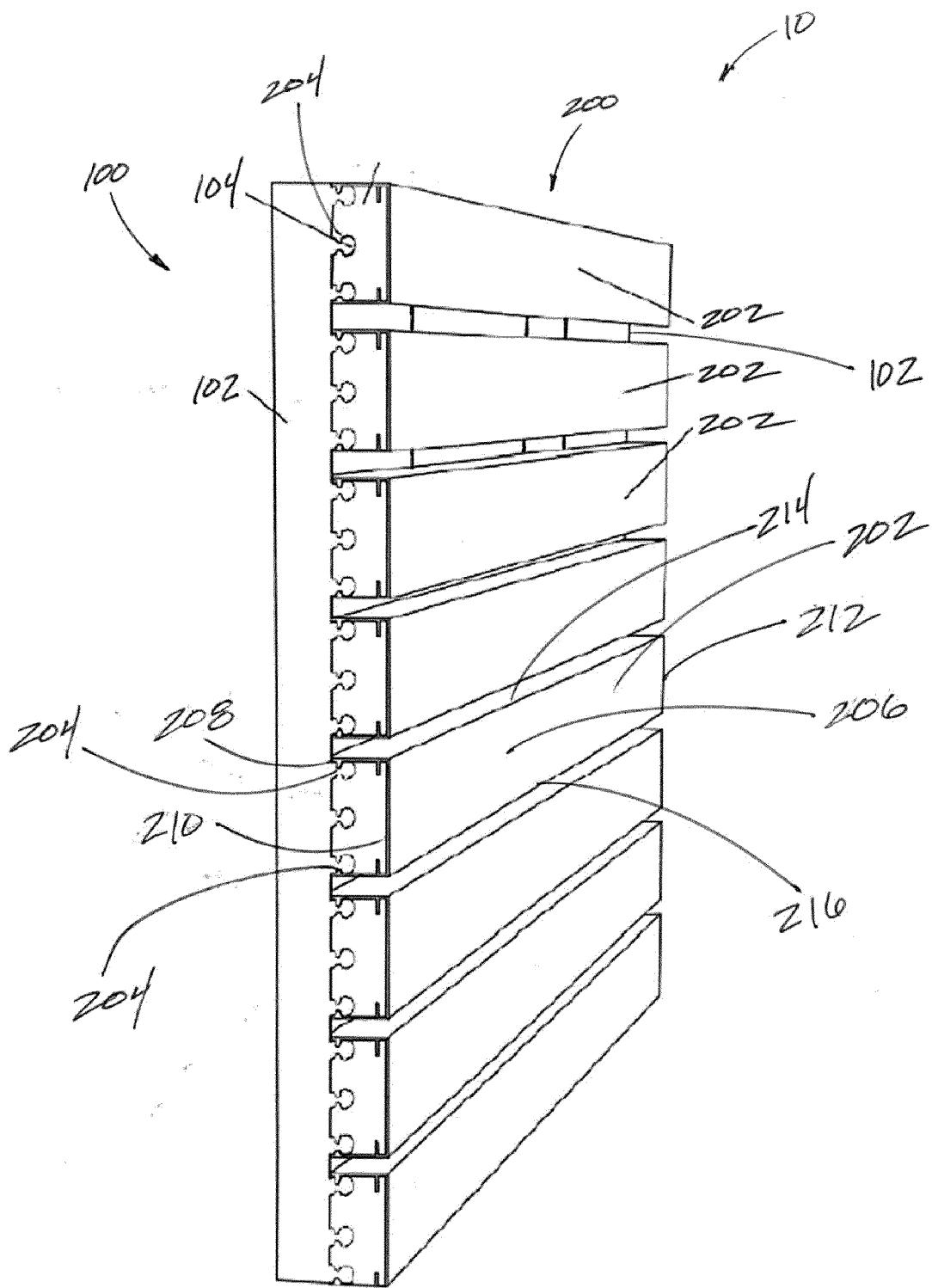


FIG. 2

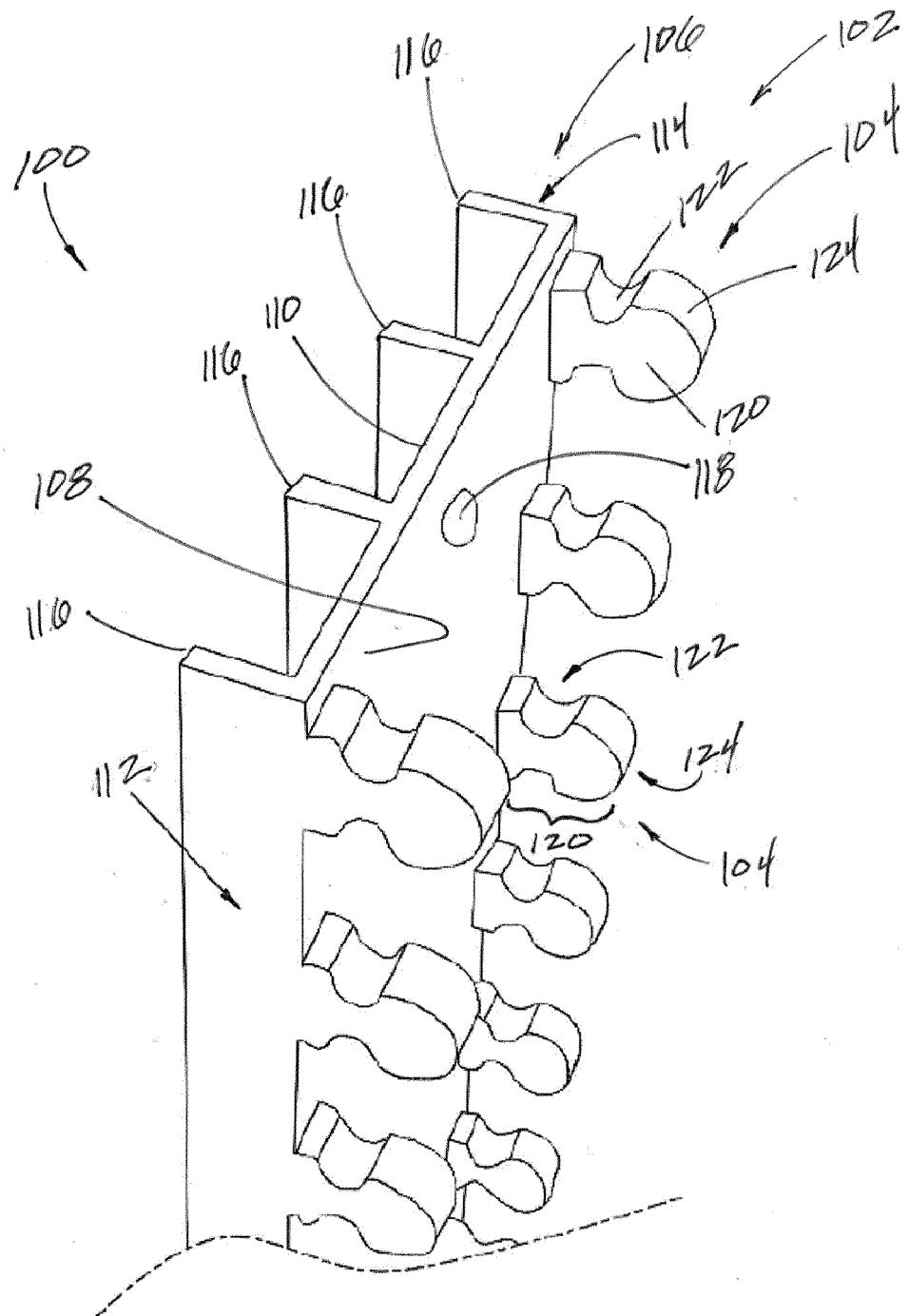


Fig. 3

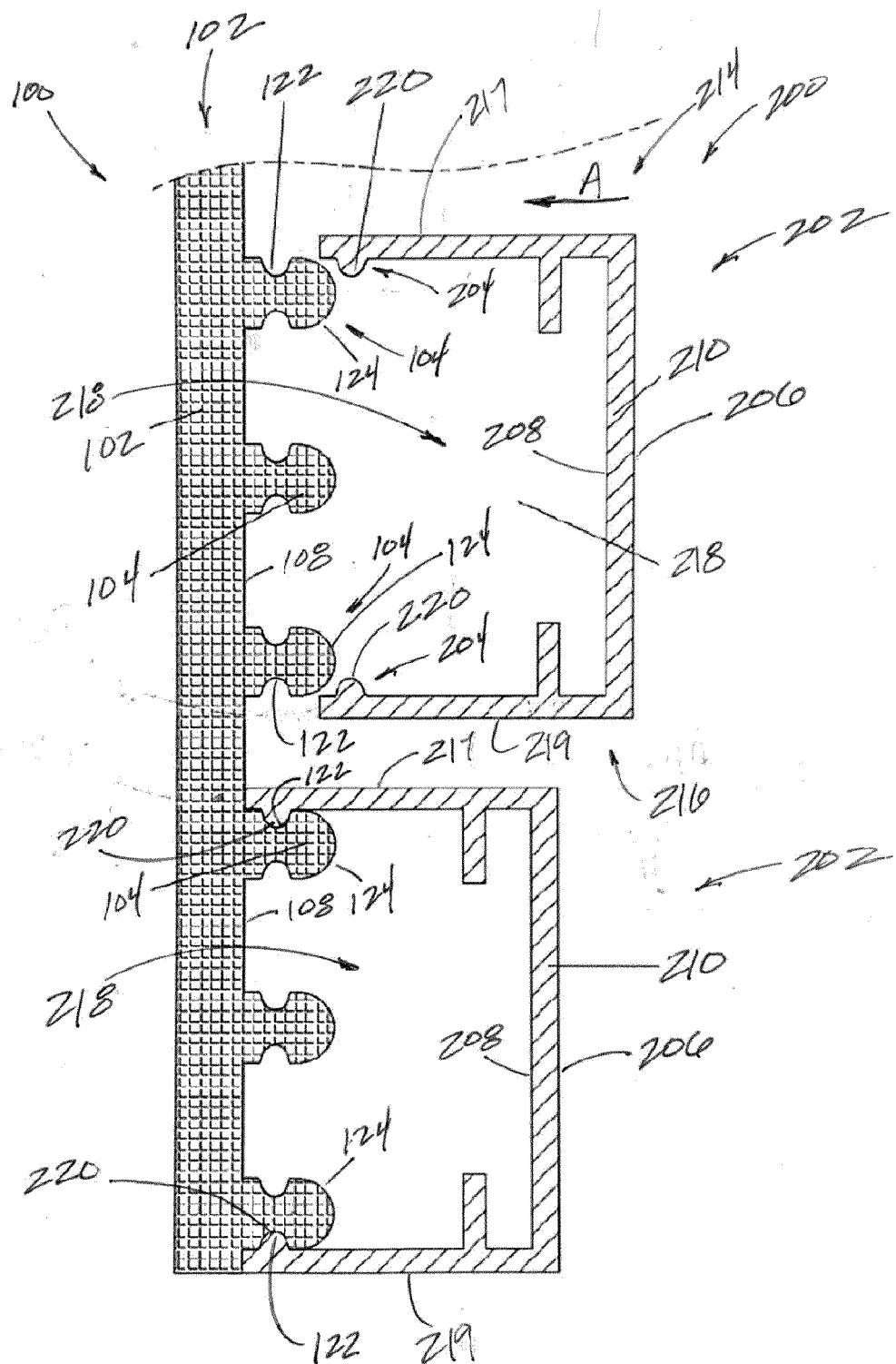


FIG. 4

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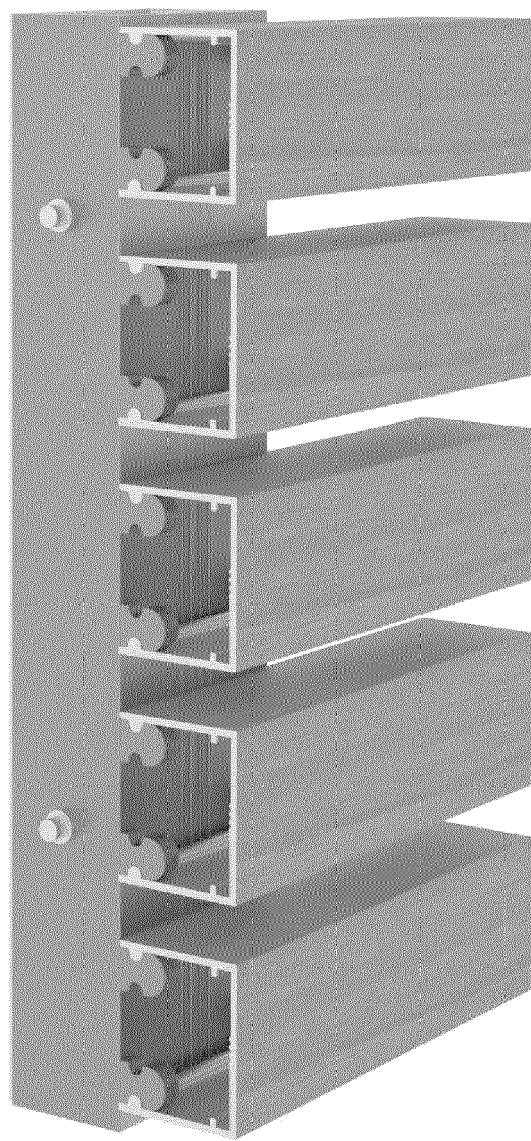


FIG. 5

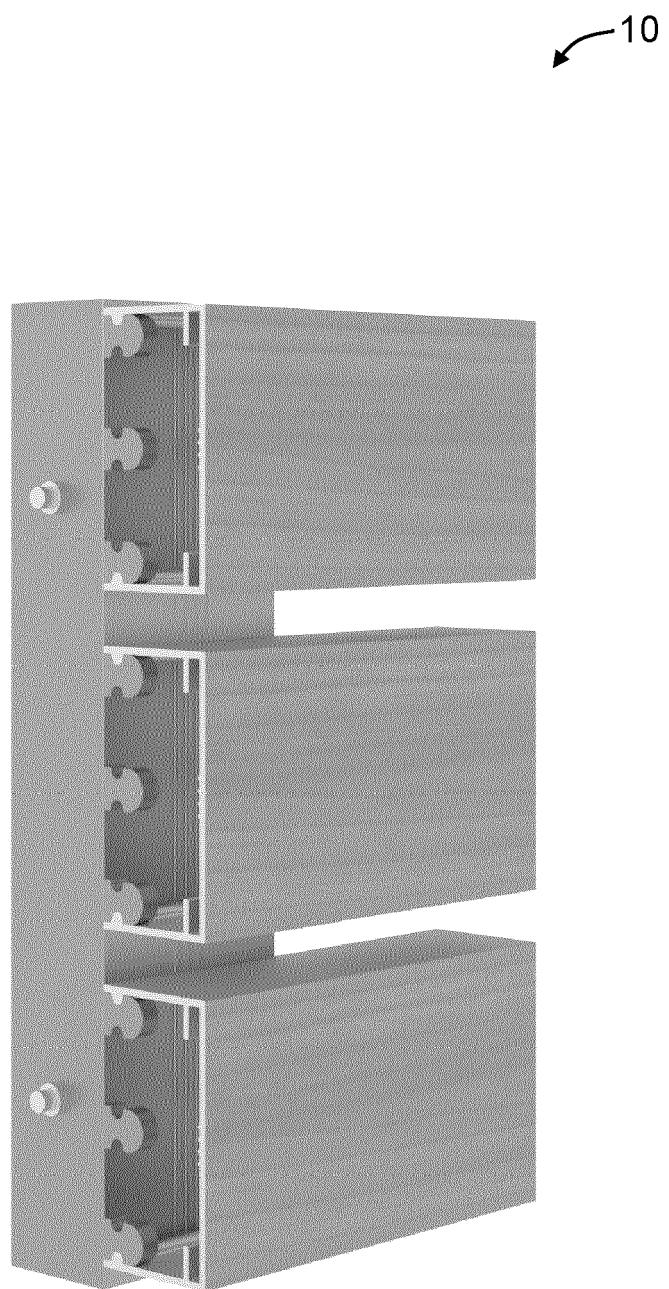


FIG. 6

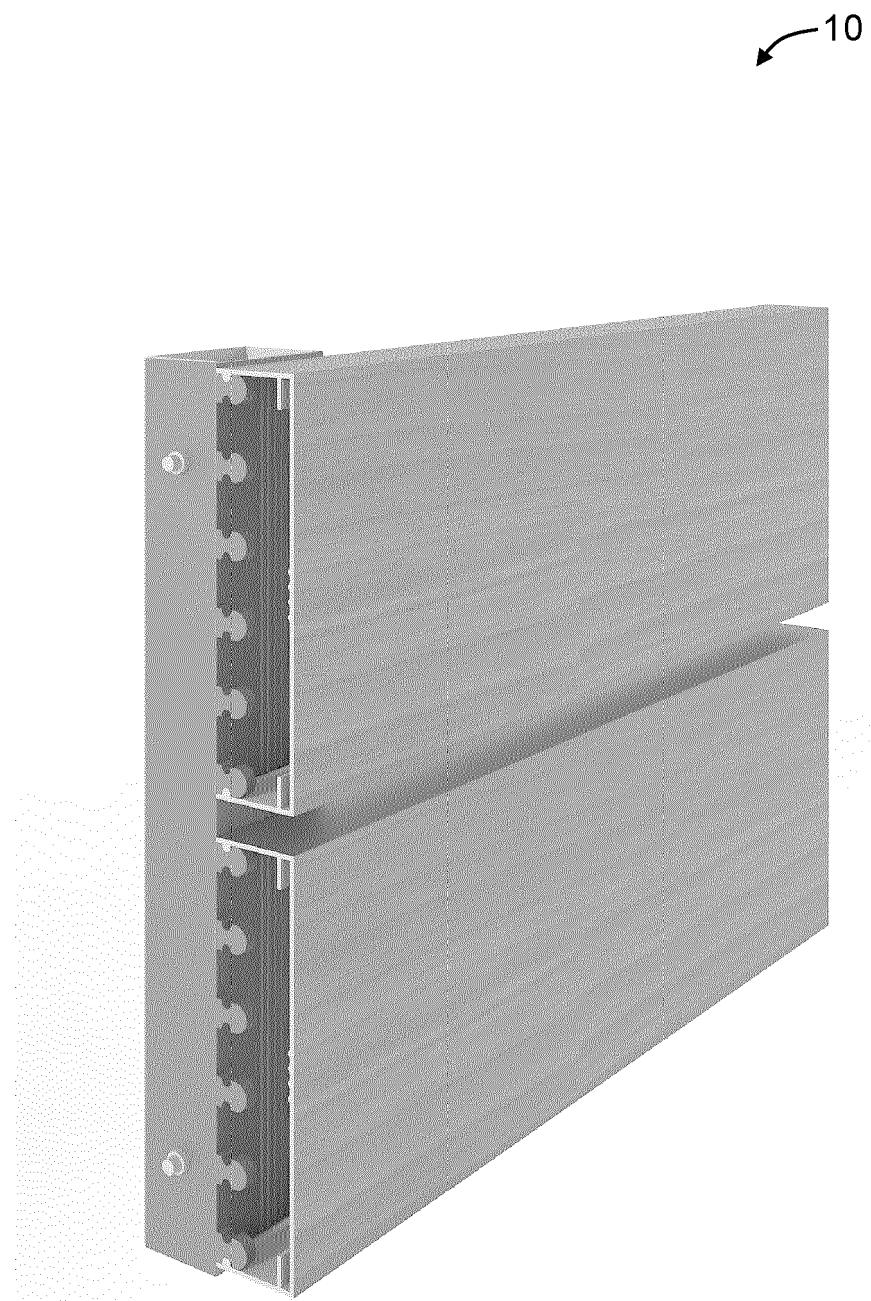


FIG. 7

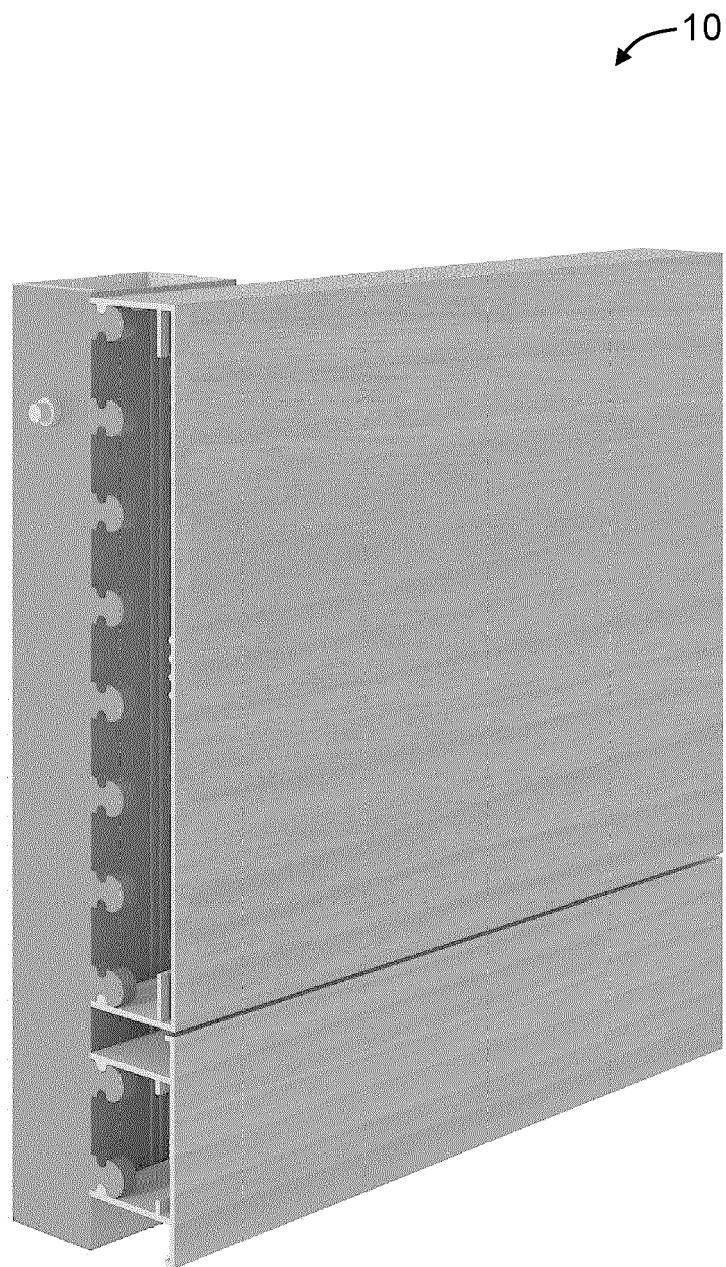


FIG. 8

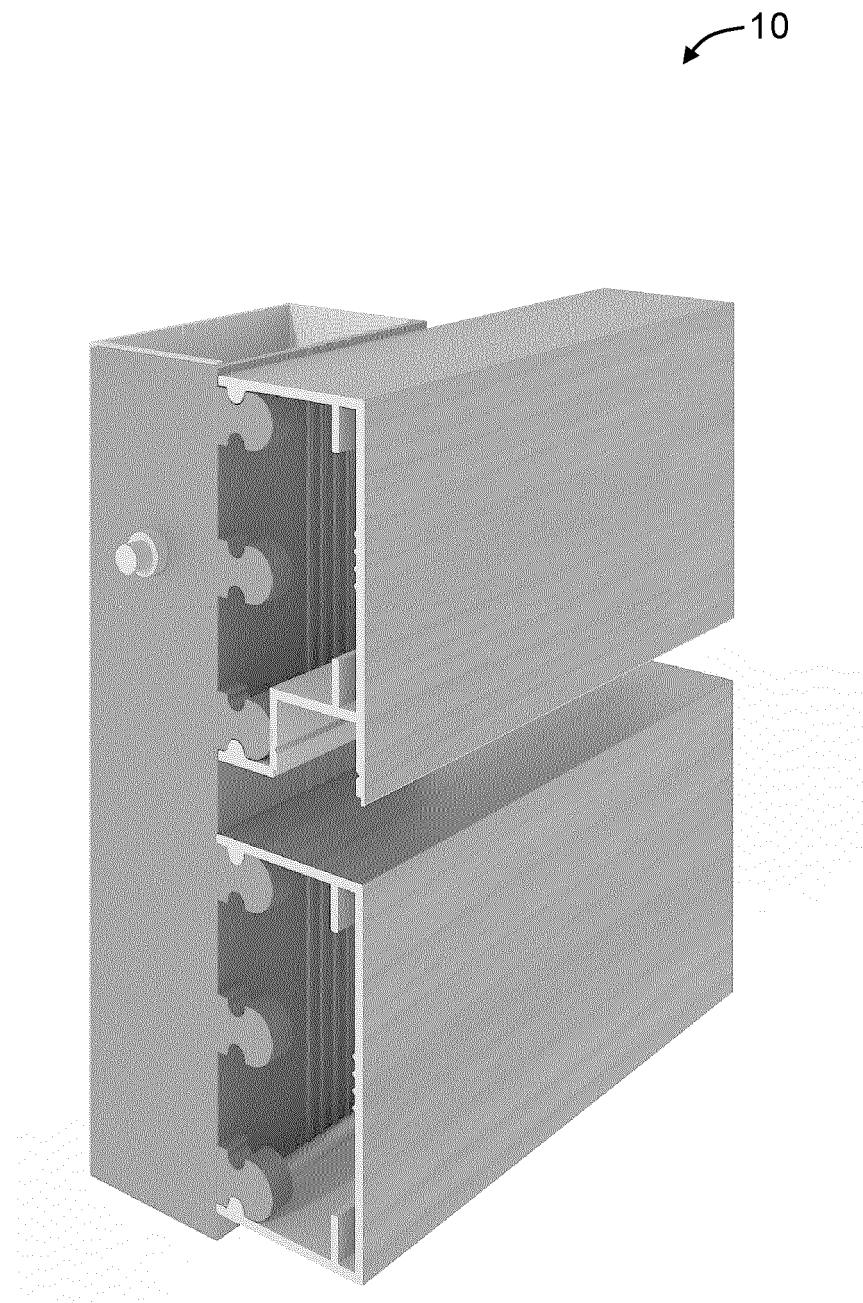


FIG. 9

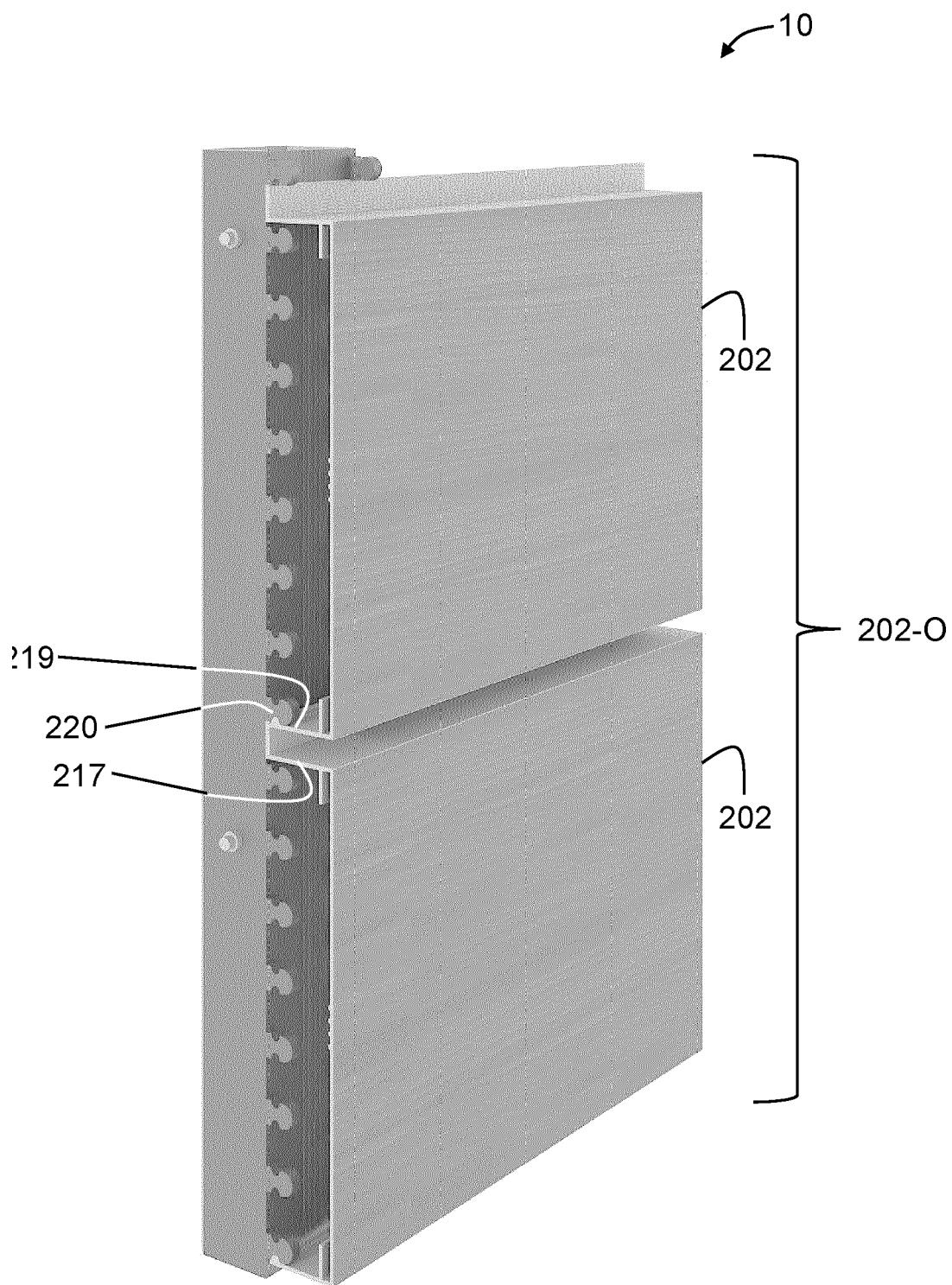
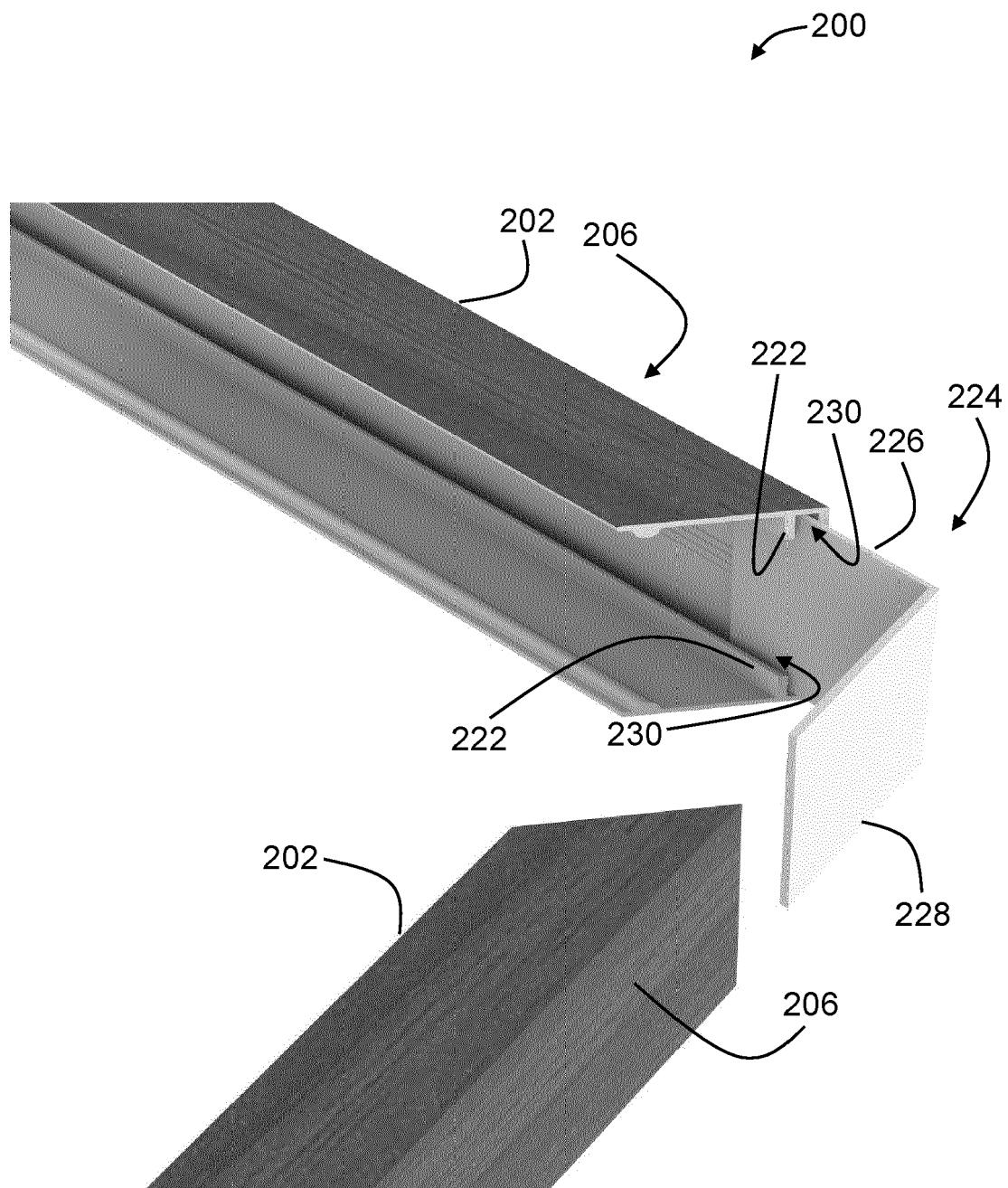


FIG. 10





EUROPEAN SEARCH REPORT

Application Number

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