



(22) **Date de dépôt/Filing Date:** 2008/06/06

(41) **Mise à la disp. pub./Open to Public Insp.:** 2008/12/08

(45) **Date de délivrance/Issue Date:** 2016/02/16

(30) **Priorité/Priority:** 2007/06/08 (US60/942,932)

(51) **Cl.Int./Int.Cl.** *E04B 2/74* (2006.01),
E04B 2/82 (2006.01)

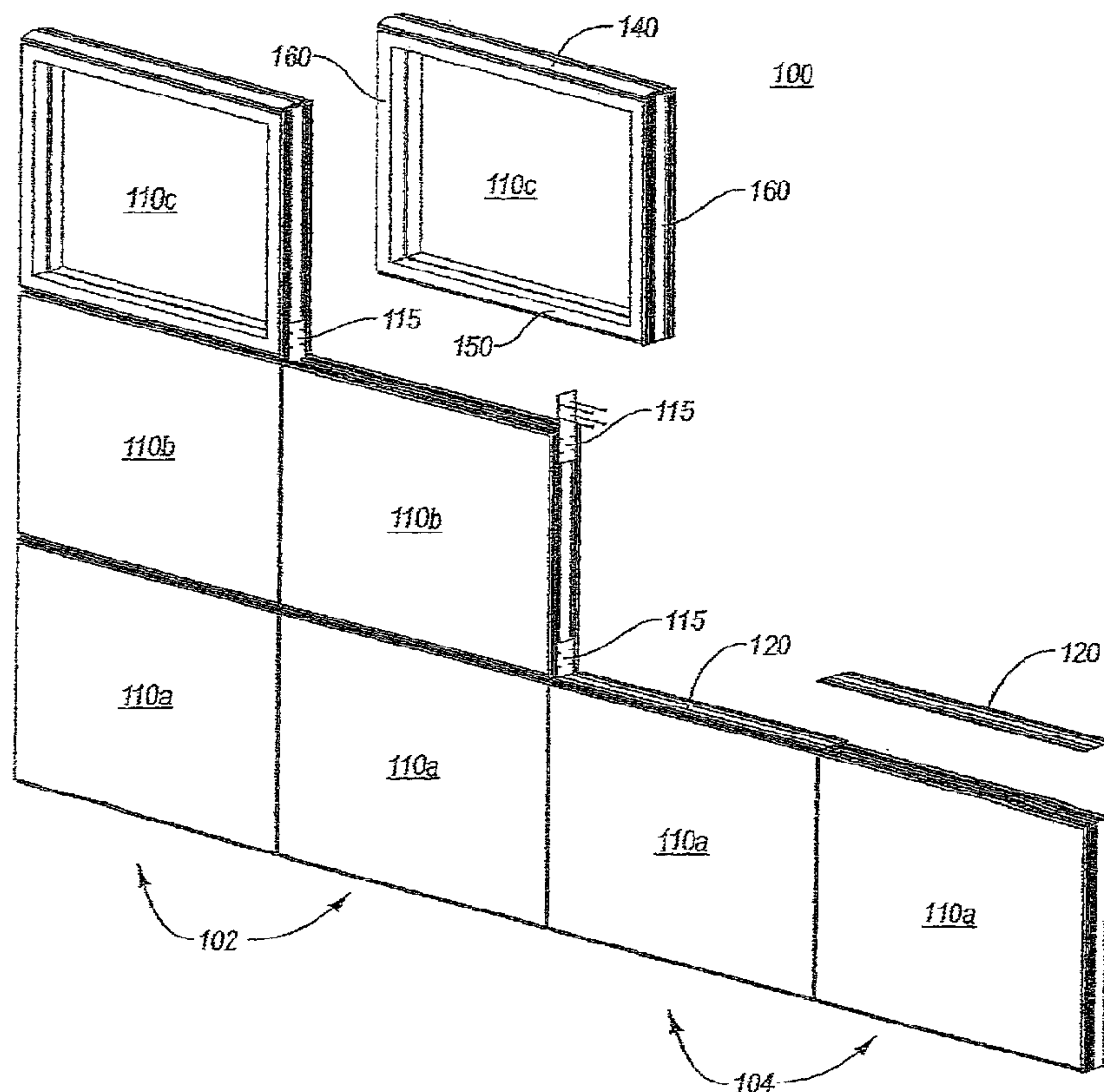
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(54) **Titre : SYSTEME PERMETTANT D'OBTENIR DES MODULES A HAUTEUR PARTIELLE AINSI QUE DES MODULES A PLEINE HAUTEUR**

(54) **Title: A SYSTEM FOR PROVIDING BOTH PARTIAL HEIGHT AND FULL HEIGHT WALL MODULES**



(57) **Abrégé/Abstract:**

A system for providing both partial-height and full-height wall modules can include a plurality of wall module portions. The plurality of wall module portions can include lower wall module portions and upper wall module portions. A lower wall portion can be configured with a top bracket upon which a trim cap can be placed to form a partial-height wall module. One or more upper wall module portions can also be stacked on the lower wall module portion to form a full-height wall module.

ABSTRACT OF THE DISCLOSURE

A system for providing both partial-height and full-height wall modules can include a plurality of wall module portions. The plurality of wall module portions can include lower wall module portions and upper wall module portions. A lower wall portion can be configured with a top bracket upon which a trim cap can be placed to form a partial-height wall module. One or more upper wall module portions can also be stacked on the lower wall module portion to form a full-height wall module.

**A SYSTEM FOR PROVIDING BOTH PARTIAL HEIGHT AND FULL HEIGHT
WALL MODULES**

BACKGROUND OF THE INVENTION

1. Technical Field

[0001] The present disclosure relates generally to wall modules and reconfigurable combinations of walls.

2. Background and Relevant Art

[0002] Office space can be relatively expensive, not only due to the basic costs of the location and size of the office space, but also due to any construction needed to configure the office space in a particular way. For example, an organization might purchase or rent a large open space in an office complex, and then subdivide or partition the open space into various offices, conference rooms, or cubicles, depending on the organization's needs and size constraints. Rather than having to find new office space and move as an organization's needs change, it is often necessary to have a convenient and efficient means to reconfigure the existing office space. Many organizations address their configuration and reconfiguration issues by dividing large, open office spaces into individual work areas using modular walls and partitions.

[0003] In particular, at least one advantage of modular systems is that they are relatively easy to configure. In addition, another advantage is that modular systems can be less expensive to set up, and can be reconfigured more easily than more permanently constructed office dividers. For example, a set of offices and a conference area can be

carved out of a larger space in a relatively short period of time with the use of modular systems. If needs change, the organization can readily reconfigure the space.

[0004] Manufacturers or assemblers of modular spaces generally assemble a plurality of wall modules together to create partitions, rooms, or the like in a space (e.g., a large room with sub-dividable space). The manufacturer will assemble the partitions or rooms by connecting two or more wall modules together about one or more connectors, such as one or more connector posts. The created partitions may then be used as offices, booths, or any number of purposes, and can be rearranged into any number of different designs with some ease.

[0005] At times, it may be desirable to provide walls of differing heights as part of a modular wall system. In some applications, a full-height wall may be desirable. For example, when creating a modular space where it is desirable to limit the exposure of the modular space to outside sources of sound and/or light, such as in a conference room where private meetings may be held, full-height walls are typically desirable. In other applications, a partial-height wall may be desirable, which may make use of a partial-height or short wall module. For example, when creating multiple modular spaces wherein each modular space does not have its own individual light source, such as a window or overhead light, it may be desirable to construct the modular spaces using partial-height wall modules so that multiple modular spaces benefit from the limited light sources available. One such example of partial-height modular spaces may include conventional cubicle arrangements.

[0006] Conventionally, separate modular wall systems are used for providing full-height wall modules and partial-height wall modules. Each modular wall system typically requires a number of unique adapters. In order to couple the separate modular

wall systems together, additional adapters may also be required. As a result, the use of separate wall systems for partial and full-height wall modules, each with its own unique adapters, may increase the number of components a manufacturer produces, thus requiring that the manufacturer have separate manufacturing tools and processes for the separate wall systems. Similarly, using separate wall systems for partial and full-height wall modules increases the number of components an assembler is forced to stock in order to meet full-height and partial-height wall applications. Accordingly, manufacturing and assembling a combination of partial and full-height wall modules can be inefficient and costly.

[0007] In addition to the disadvantages already mentioned, the differences between partial and full-height wall systems may affect the aesthetics of a modular space in undesirable ways. Because the separate systems operate independent of one another, they may not be designed to connect to each other in a seamless and aesthetically pleasing fashion. Connection of partial-height systems to full-height systems may create unattractive joints between the systems. As a result, in modular spaces where both full-height and partial-height modular walls are desired, the use of separate wall systems may result in an unsightly finished product.

[0008] Accordingly, these are a number of difficulties in providing modular walls/partitions, particularly where height designs and constraints may need to change.

BRIEF SUMMARY OF THE INVENTION

[0009] Implementations of the present invention overcome one or more problems in the art with systems, methods, and apparatus configured to provide flexibility in the design and installation of wall module systems. In particular, implementations of the present invention extend to a wall module system that can be configured for providing full-height wall modules and partial-height wall modules.

[0010] For example, implementations of the present invention include a system, in which wall module portions are combined in various configurations so as to provide both partial and full-height wall modules, thereby avoiding the need for multiple systems. In one implementation, the system has a plurality of wall module portions, including at least one lower wall module portion and at least one upper wall module portion. The lower wall module portion can include a top bracket configured to interface with an upper wall module portion, such that an upper wall module portion can be stacked on a lower wall module portion to form a full-height wall module. In one implementation, an upper wall module portion may include a bottom bracket that is configured to interface with the top bracket of a lower wall module portion. In a further implementation, the system can include a trim cap configured to interface with the top bracket of a lower wall module portion to form a partial-height wall module.

[0011] In addition, implementations of the present invention can also include a stackable wall module portion. In one implementation, the stackable wall module portion can include a panel with a top edge and a bottom edge. A top bracket can be coupled to the top edge of the panel, and a bottom bracket can be coupled to the bottom edge of the panel. The bottom bracket is configured to interface with the top bracket,

such that two or more stackable wall module portions may be stacked together to form a full-height wall module.

[0012] In addition, implementations of the present invention can also include a method for creating partial or full-height wall modules. In one implementation, such a method includes placing a first wall module portion in a location where a partial or full-height wall module is desired. The first wall module portion can include a top bracket configured to interface with a trim cap to form a partial-height wall module or with the bottom surface of an additional wall module portion to form a full-height wall module. In addition, the method includes at least one of stacking a second wall module portion on top of the first wall module portion to create a full-height wall module, or coupling a trim cap with the top bracket of the first wall module portion to create a partial-height wall module.

[0013] Additional features and advantages of exemplary implementations of the invention will be set forth in the description which follows, and in part will be obvious from the description, or may be learned by the practice of such exemplary implementations. The features and advantages of such implementations may be realized and obtained by means of the instruments and combinations particularly pointed out in the appended claims. These and other features will become more fully apparent from the following description and appended claims, or may be learned by the practice of such exemplary implementations as set forth hereinafter.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] In order to describe the manner in which the above-recited and other advantages and features of the invention can be obtained, a more particular description of the invention briefly described above will be rendered by reference to specific embodiments thereof which are illustrated in the appended drawings. Understanding that these drawings depict only typical embodiments of the invention and are not therefore to be considered to be limiting of its scope, the invention will be described and explained with additional specificity and detail through the use of the accompanying drawings in which:

[0015] Figure 1 illustrates a partially exploded view of a module wall system for providing both full-height wall modules and partial-height wall modules in accordance with an implementation of the present invention;

[0016] Figure 2 illustrates a partial cross-sectional view of a full-height wall module with glass wall portions in accordance with an implementation of the present invention;

[0017] Figure 3 illustrates a partial cross-sectional view of a full-height wall module with solid wall portions in accordance with an implementation of the present invention;

[0018] Figure 4 illustrates a partial cross-sectional view of a full-height wall module with a solid wall portion stacked over a glass wall portion in accordance with an implementation of the present invention;

[0019] Figure 5 illustrates a partial cross-sectional view of a full-height wall module with a glass wall portion stacked over a solid wall portion in accordance with an implementation of the present invention;

[0020] Figure 6 illustrates a partial cross-sectional view of a solid partial-height wall module in accordance with an implementation of the present invention; and

[0021] Figure 7 illustrates a partial cross-sectional view of a glass partial-height wall module in accordance with an implementation of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0022] Implementations of the present invention overcome one or more problems in the art with systems, methods, and apparatus configured to provide flexibility in the design and installation of wall module systems. In particular, the present invention extends to a wall module system for providing full-height wall modules and partial-height wall modules. For example, a single system is provided, in which wall module portions are combined in various configurations so as to provide both partial and full-height wall modules, thereby avoiding the need for multiple systems.

[0023] Accordingly, a manufacturer need not produce multiple systems, each with its own unique adapters and connectors, for providing both partial-height and full-height wall modules. As a result, a manufacturer can reduce the number of components the manufacturer produces, thereby avoiding the need for separate manufacturing tools and processes for the separate wall systems. As an additional result, an assembler can reduce the number of components the assembler stocks in order to provide full-height and partial-height wall modules.

[0024] In addition, the system, according to at least one implementation, can be configured to connect partial and full-height wall modules in a seamless and aesthetically pleasing fashion. In particular, the system can minimize or prevent unattractive joints commonly associated with the connection of partial-height systems to full-height systems, thereby resulting in a more attractive finished product.

[0025] Referring now to the Figures, Figure 1 illustrates a partially exploded view of one implementation of the wall module system 100 of the present invention. As shown, the wall module system 100 can include a plurality of wall module portions 110

(110a-110c), which an assembler can combine to form full-height wall modules 102 and partial-height wall modules 104.

[0026] In at least one implementation of the present disclosure, an assembler can construct a full-height wall module 102 using a lower wall module portion 110a and one or more upper wall module portions 110b, 110c. The full-height wall module 102 can be freestanding, or can alternatively be fixed in place by coupling the lower wall module portion 110a to a support surface structure, such as a floor or adjacent wall. Similarly, one of the upper wall module portions 110b, 110c can be coupled to an upper support surface structure, such as a ceiling. While Figure 1 illustrates the use of multiple upper wall module portions 110b, 110c stacked upon a lower wall module portion 110a to form a full-height wall module 102, one will appreciate that a single upper wall module portion 110b or 110c can be stacked upon a lower wall module portion 110a to form the full-height wall module 102.

[0027] In order to facilitate the stacking of multiple wall module portions 110, the wall module portions 110 can comprise brackets (e.g., 140, 150, 160) (or “extrusions”), located along the horizontal and/or vertical edges of the wall module portions 110. In particular, the brackets (e.g., 140, 150, 160) can be elongated and extend along the full length and/or height of the wall module portion 110. In at least one implementation, a manufacturer can form the brackets (e.g., 140, 150, 160) using an extrusion process, in which a metallic material, such as aluminum, is extruded into the desired shape for the bracket. The manufacturer can further configure the brackets (e.g., 140, 150, 160) to interface with additional wall module portions 110 for creating full-height wall modules 102, or with trim caps 120 for creating partial-height wall modules 104.

[0028] For example, a lower wall module portion 110a can include a top bracket (e.g., 140) along the top surface of the lower wall module portion 110a. A manufacturer can configure the top bracket (e.g., 140) to interface with the bottom surface of an upper wall module portion 110b, 110c, such that an upper wall module portion 110b, 110c can be stacked on the lower wall module portion 110a to form a full-height wall module 102. Similarly, in at least one implementation, an upper wall module portion 110b, 110c can further comprise a bottom bracket (e.g., 150). In at least one implementation, a manufacturer can configure the bottom bracket (e.g., 150) to interface with the top bracket (e.g., 140) of a lower wall module portion 110a. In any event, an assembler can stack an upper wall module portion 110b, 110c upon a lower wall module portion 110a to form a full-height wall module 102.

[0029] Of course, one will appreciate that, in at least one implementation of the present invention, an upper wall module portion 110b, 110c can comprise both a bottom bracket (e.g., 150) and a top bracket (e.g., 140). In addition, a manufacturer can configure the multiple upper wall module portions 110b, 110c to be stacked together on top of a lower wall module portion 110a to form a full height wall module 102, as illustrated in Figure 1. Similarly, in a further implementation of the present invention, a manufacturer can configure the multiple wall module portions 110 to be universally used as lower wall module portions 110a or as upper wall module portions 110b, 110c. For example, in at least one implementation, a manufacturer can configure the top and bottom surfaces of the multiple wall module portions 110 to interface together for stacking, such that any wall module portion 110 can be used as either a lower wall module portion 110a or as an upper wall module portion 110b, 110c. As a result, a manufacturer can improve the interchangeability of the multiple wall module portions

110 of the wall module system 100, and also minimize the number of different types of wall module portions 110 necessary for the wall module system 100.

[0030] As Figure 1 further illustrates, the wall module portions 110 can include vertical brackets (e.g., 160) (or “vertical extrusions”) along the vertical edges of the wall module portions 110. In one implementation, a manufacturer can configure the vertical brackets 160 to include features for interfacing with additional components for securing wall module portions 110 together. For example, Figure 1 illustrates the use of splice plates 115 to secure wall module portions 110 together in a stacked manner. In particular, the vertical brackets 160 can include a channel or surface configured for receiving the splice plates 115 and to which an assembler can fasten the splice plates 115 using any number of fastening mechanisms, such as screws, clips, glue, and the like. These, in turn, allow the manufacturer/assembler to bridge the gap between two stacked wall module portions 110, and to secure the two wall module portions 110 together in a stacked manner to form a full-height wall module 102. One will appreciate that a manufacturer can form the splice plates 115 using any number of rigid materials. In at least one implementation, the splice plate 115 includes sheet metal, though substantially rigid plastics and other materials can also be used.

[0031] As further illustrated by Figure 1, an assembler can form a partial-height wall module 104 using a lower wall module portion 110a and a trim cap 120. In at least one implementation, a manufacturer can configure the trim cap 120 to interface with the top surface of the lower wall module portion 110a in order to provide an aesthetically pleasing finish along the top surface of the partial-height wall module 104. For example, the manufacturer can configure the trim cap 120 to couple with the top bracket (e.g., 140) of the lower wall module portion 110a. One will appreciate that a

manufacturer can form the trim cap 120 using any type of materials, such as plastic, wood, or metallic materials. In at least one implementation, the trim cap 120 can comprise extruded aluminum.

[0032] As Figure 1 illustrates, an assembler can install a partial-height wall module 104 adjacent to a full-height wall module 102. As shown, a manufacturer can facilitate coupling a partial-height wall module 104 to a full-height wall module 102 by configuring the lower wall module portions 110a to be coupled together. For example, in at least one implementation, a manufacturer can configure the vertical brackets (e.g., 160) of the lower wall module portions 110a of the system 100 to be coupled together regardless of the type of wall module in which the lower wall module portions 110a are used, whether it be in a full-height wall module 102 or a partial-height wall module 104.

[0033] As a result, an assembler can couple a full-height wall module 102 to a partial-height wall module 104 by coupling their respective lower wall module portions 110a together. In at least one implementation, a manufacturer can further the capability of coupling multiple wall module portions 110 together by configuring the multiple wall module portions 110 to have the same width and same height. In a further implementation, and to improve the aesthetics of the transition between the different height wall modules, an assembler can install vertical trim (not shown) along the exposed vertical edge of an upper wall module portions 110b, 110c where a full-height wall module 102 transitions to a partial-height wall module 104.

[0034] In general, the wall module portions 110 can further comprise panels (e.g., 230 and 330, Figures 2 and 3). The panels (e.g., 230 and 330, Figures 2 and 3) can be coupled panels (e.g., 330, Figure 3) or unitary panels (e.g., 230, Figure 2). In addition, the panels can be formed of solid materials (e.g., 330, Figure 3), which are

generally opaque, or can be formed of glass materials (e.g., 230, Figure 2), which can be transparent or otherwise. For ease of reference, wall module portions 110 including solid panels may be referred to herein as solid wall module portions (e.g., 110a, 110b), while wall module portions 110 including glass panels may be referred to herein as glass wall module portions (e.g., 110c).

[0035] Figure 2 illustrates a further embodiment of a full-height wall module 202. As a preliminary matter and by way of explanation, the elements of the full-height wall module 202 shown in Figure 2 may be functionally similar to the elements of the full-height wall module 102 previously described above and shown in Figure 1 in most respects. Nevertheless, certain features will not be described in relation to this embodiment for purposes of convenience, even though such components may function in the manner as described above and are hereby incorporated into this alternative embodiment described below. In general, like structures and/or components are given like reference numerals.

[0036] In any event, Figure 2 illustrates a partial cross-sectional view of a full-height wall module 202 using glass wall module portions 210 according to at least one implementation of the present invention. The illustrated full-height wall module 102 includes a lower wall module portion 210a on which is stacked an upper wall module portion 210b. The lower wall module portion 210a illustrated in Figure 2 includes a unitary glass panel 230a, a top bracket 240, and one or more vertical brackets 260a. As shown, the top bracket 240 is coupled to the top of the glass panel 230a. As further illustrated in Figure 2, a manufacturer can configure the top bracket 240 to include various features which secure the top bracket 240 to the panel 230a. For example, a manufacturer can secure the top bracket 240 to the glass panel 230a using clips,

fasteners, glues and the like. As is further shown, the top bracket 240 can include interfacing features 245 along its upper surface to interface with corresponding interfacing features 255 of the upper wall module portion 210b.

[0037] The upper wall module portion 210b, as illustrated in Figure 2, includes a unitary glass panel 230b, a bottom bracket 250, and one or more vertical brackets 260b. In particular, the bottom bracket 250 couples to the bottom of the glass panel 230b. Similar to the illustrated top bracket 240, the bottom bracket 250 can include various features which secure the bottom bracket 250 to the glass panel 230b. As is further illustrated, the bottom bracket 250 of the upper wall module portion 210b can include interfacing features 255 to interface with corresponding interfacing features 245 of the top bracket 240 of the lower wall module portion 210a, such that an assembler can securely stack the upper wall module portion 210b upon the lower wall module portion 210.

[0038] Figure 2 further illustrates the use of a splice plate 215 to bridge the gap between the stacked wall module portions 210a, 210b and to secure the wall module portions 210a, 210b in a stacked manner. In at least one implementation, an assembler fastens the splice plate to the vertical brackets 260a, 260b of the wall module portions 210a, 210b to secure the wall module portions 210a, 210b together as is further shown in Figure 1. Any number of fastening mechanisms can be used, including the use of screws, nails, clips, glues, and the like, to fasten the splice plate 215 to the wall module portions 210a, 210b. In a further implementation, and to improve the aesthetics of the full-height wall module 202, a manufacturer can configure the wall module portions 210a, 210b to seamlessly stack together so as to reduce or eliminate the break at the

seam between the lower wall module portion 210a and the upper wall module portion 210b.

[0039] Similar to that shown in the preceding Figures, Figure 3 illustrates a yet further embodiment of a full-height wall module 302. Specifically, Figure 3 illustrates a partial cross-sectional view of a full-height wall module 302, albeit using solid wall module portions 310 rather than glass wall module portions (e.g., 210, Figure 2). As shown, the full-height wall module 302 includes an upper wall module portion 310b stacked upon a lower wall module portion 310a. In particular, the lower wall module portion 310a includes multiple opposing top brackets 340, multiple coupled solid panels 330a, and one or more vertical brackets 360a. As is further illustrated, the upper wall module portion 310b includes multiple bottom brackets 350, multiple coupled solid panels 330b, and one or more vertical brackets 360b. As shown, the top and bottom brackets 340, 350 can include connecting features to secure the top and bottom brackets 340, 350 to the solid panels 330.

[0040] Although Figure 3 illustrates the use of multiple solid panels 330 and multiple brackets 340, 350 for each solid wall module portion 310, one will appreciate that a manufacturer, in at least one implementation of the present invention, can configure the solid wall module portions 310 to only include a unitary solid panel 330 and/or a single top bracket 340 or bottom bracket 350.

[0041] As shown, the panels 330b of the upper wall module portion 310b can be configured in size and shape to abut the extending interfacing features 345 of the top bracket 340 of the lower wall module portion 310a. Figure 3 shows that the interfacing features 345 of the top bracket 340 can securely hold the upper wall module portion 310b by interfacing with and supporting the bottom edges of the panels 330b. As

Figure 3 illustrates, the interfacing features 345 can include an angular surfaces to interface with and support the corresponding angular surfaces of the panels 330b to hold the upper wall module portion 310b in place on top of the lower wall module portion 310a. This relatively secure positioning allows the manufacturer/assembler to further secure the two wall module portions 310a, 310b together using one or more splice plates 315. In at least one implementation, an assembler stacks the wall module portions 110a, 110b together and then fastens the splice plate 315 to the vertical brackets 360a, 360b of the wall module portions 310a, 310b to secure the wall module portions 310a, 310b in a stacked position.

[0042] In a further embodiment, the bottom brackets 350 of the upper wall module portion 310b can include interfacing features similar to those of the bottom bracket shown in Figure 2 (e.g., 255) to interface with the interfacing features 345 of the top bracket 340 of the lower wall module portion 310a, such that an assembler can stack the upper wall module portion 310b upon the lower wall module portion 310a to form the full-height wall module 302. Similarly, in a yet further implementation of the present invention, a manufacturer can configure the solid wall module portions 310a, 310b to be similar to glass wall module portions (e.g., 210, Figure 2). Accordingly, and regardless of the type, whether glass or solid, a manufacturer can configure lower wall module portions (e.g., 110a, Figure 1) and upper wall module portions (e.g., 110b, 110c, Figure 1) to universally and interchangeably stack together to form full-height wall modules (e.g., 102, Figure 1).

[0043] Figure 4 illustrates a still further embodiment of a full-height wall module 402. As with Figures 2 and 3, Figure 4 illustrates a partial cross-sectional view of a full-height wall module 402. In particular, Figure 4 includes a solid wall module

portion 410b stacked over a glass wall module portion 410a in accordance with an implementation of the present invention. The solid wall module portion 410b includes multiple bottom brackets 450, multiple coupled solid panels 430b, and one or more vertical brackets 460b. The glass wall module portion includes a top bracket 440, a unitary glass panel 430a, and one or more vertical brackets 460a.

[0044] As previously introduced, the interfacing features 445 of the top bracket 440 of the glass wall module portion 410a can be similar to the interfacing features (e.g., 345, Figure 3) of a solid wall module portion (e.g., 310a, Figure 3). As a result, the solid wall module portion 410b can interface with and be stacked upon the glass wall module portion 410a. In particular, the interfacing features 445 of the top bracket 440 can include angular surfaces to interface with and support the corresponding angular surfaces of the solid panels 430b to hold the solid wall module portion 410b in place on top of the glass wall module portion 410a. As a result, an assembler can stabilize the solid wall module portion 410b on top of the glass wall module portion 410a and then fasten the wall module portions 410a, 410b together using one or more splice plates 415.

[0045] Figure 5 illustrates a yet further embodiment of a full-height wall module 502. Similar to Figures 2-4, Figure 5 illustrates a partial cross-sectional view of a wall module, specifically a full-height wall module 502. In this case, Figure 5 illustrates a glass wall module portion 510b that is stacked over a solid wall module portion 510a in accordance with an implementation of the present invention. As illustrated in Figure 5, the top brackets 540 of the solid wall module portion 510a can include interfacing features 545 to interface with the corresponding interfacing features 555 of the bottom bracket 550 of the glass wall module portion 510b. Accordingly, an assembler can

stabilize the glass wall module portion 510b on top of the solid wall module portion 510a by positioning the interfacing features 545, 555 together to form the full-height wall module 502. Thereafter, the assembler can fasten the wall module portions 510 together using one or more splice plates 515.

[0046] Figure 6 illustrates an embodiment of a partial-height wall module 604 in accordance with at least one implementation of the present invention. Specifically, Figure 6 illustrates a partial cross-sectional view of glass partial-height wall module 604 using a glass wall module portion 610a and a trim cap 620. As illustrated, the glass wall module portion 610a includes a unitary glass panel 630, a top bracket 640 coupled to the top of the glass panel 630, and one or more vertical brackets 660a. As further illustrated in Figure 6, the trim cap 620, such as an aluminum top cap, is provided which includes interfacing features 625 on the bottom thereon that interface with the corresponding interfacing features 645 of the top bracket 640. In a further implementation of the present invention, a manufacturer can configure the trim cap 620 such that the interfacing features 625 of the trim cap 620 can clip into the corresponding interfacing features 645 of the top bracket 640 to secure the trim cap 620 in place. In any event, an assembler is able to couple the trim cap 620 to the top bracket 640 of the glass wall module portion 610a to form the partial-height wall module 604.

[0047] Similarly, Figure 7 illustrates a further embodiment of a partial-height wall module 704. As in the preceding Figures, Figure 7 illustrates a partial cross-sectional view of a wall module, in this case a partial-height wall module 704. In particular, Figure 7 illustrates a partial-height wall module 704 using a solid wall module portion 710a and a trim cap 720 in accordance with an implementation of the present invention. As shown, the lower wall module portion 710a includes coupled

solid panels 730, top brackets 740 coupled to the tops of the solid panels 730, and a vertical bracket 760a. As further illustrated in Figure 7, the trim cap 720 includes interfacing features 725 on the bottom thereon that interface with corresponding interfacing features 745 on the top of the top brackets 740. As a result, and similar to Figure 6, an assembler can position the trim cap 720 on the top brackets 740 of the solid wall module portion 710a to form the partial-height wall module 704.

[0048] In accordance with the above disclosure and the elements illustrated in the Figures, and referring again to Figure 1, a manufacturer/assembler can perform a method of creating partial 104 or full-height 102 wall modules. In particular, a manufacturer/assembler can perform a step of placing a first wall module portion 110a in a location where a partial 104 or full-height wall module 102 is desired. As discussed in more detail above, the first wall module portion 110a can include a top bracket 140 configured to interface with a trim cap 120 to form a partial-height wall module 104 or with the bottom surface of an additional wall module portion 110b, 110c to form a full-height wall module 102. Thereafter, the manufacturer/assembler can perform at least one of stacking a second wall module portion 110b, 110c on top of the first wall module portion 110a to create a full-height wall module 102 or coupling a trim cap 120 to the top surface of the first wall module portion 110a to create a partial-height wall module 104.

WHAT IS CLAIMED IS:

1. A stackable modular wall system for dividing open spaces into smaller individual spaces and work areas at least in part defined by one or more full-height or partial-height wall modules, the system comprising:

a plurality of wall module portions stacked one on top of another, thereby forming a full-height wall module or a partial-height wall module, wherein:

the plurality of wall module portions comprise one or more of solid wall module portions and a glass wall module portion, each of the solid wall module portions having a plurality of solid portion brackets securing a front solid panel and a back solid panel at opposing sides thereof, and each of the glass wall module portions having a glass panel secured at opposing ends thereof within a plurality of glass portion brackets,

the solid portion brackets comprise two or more of solid portion non-interfacing brackets, solid portion panel-interfacing brackets, and solid portion bracket-interfacing brackets, and the glass portion brackets comprise two or more of glass portion top bracket-interfacing brackets, glass portion bottom bracket-interfacing brackets, and glass portion panel-interfacing brackets,

the solid portion panel-interfacing brackets and the glass portion panel-interfacing brackets have a plurality of interfacing features being configured to interface with and support bottom edges of the front and back solid panels, and all of the solid wall module portions having solid portion non-interfacing brackets on a bottom thereof are configured to be stacked on top of any of the solid wall module portions having solid portion panel-interfacing brackets at a top thereof and on top of any of the glass wall module portions having glass portion panel-interfacing brackets at a top thereof, and

the solid portion bracket-interfacing brackets and glass portion top bracket-interfacing brackets have a plurality of interfacing features being configured to interface with corresponding interfacing features of the glass portion bottom bracket-interfacing brackets, and all of the glass wall module portions having glass portion bottom bracket-interfacing brackets are configured to be stacked on top of any of the solid wall module portions having the solid portion bracket-interfacing brackets at the top thereof and on

top of any of the glass wall module portions having glass portion top bracket-interfacing brackets at the top thereof.

2. The system as recited in claim 1, wherein the solid portion brackets and the glass portion brackets are substantially horizontal.

3. The system as recited in claim 2, wherein wall module portions comprise vertical brackets.

4. The system as recited in claim 2, wherein:
the vertical brackets of the solid wall module portions are solid portion vertical brackets;
the vertical brackets of the glass wall module portions are glass portion vertical brackets;
and
the solid portion vertical brackets are different from the glass portion vertical brackets.

5. The system as recited in claim 4, wherein:
the solid portion vertical brackets are different from the solid portion brackets that are substantially horizontal; and
the glass portion vertical brackets are different from the glass portion brackets that are substantially horizontal.

6. The system as recited in claim 4, wherein:
lengths of the solid portion brackets that are substantially horizontal define a width of the solid wall module portions;
lengths of the solid portion vertical brackets define a height of the solid wall module portions;
lengths of the glass portion brackets that are substantially horizontal define a width of the glass wall module portions; and
lengths of the glass portion vertical brackets define a height of the glass wall module portions.

7. The system as recited in claim 6, wherein the widths of all of the solid wall module portions are the same as the widths of all of the glass wall module portions.
8. The system as recited in claim 6, wherein the heights of all of the solid wall module portions are the same as the heights of all of the glass wall module portions.
9. The system as recited in claim 4, wherein:
 - a depth of the solid wall module portion is defined by a distance between a front of the front solid panel and a back of the back solid panel;
 - the glass portion brackets that are substantially horizontal have a depths that is substantially that same as a depth of the glass portion vertical brackets; and
 - a depth of the glass wall module portion is defined by a width of the depth of the glass portion brackets that are substantially horizontal and glass portion vertical brackets.
10. The system as recited in claim 9, wherein the depth of the solid wall module portion is substantially the same as the depth of the glass wall module portion.
11. The system as recited in claim 4, further comprising a plurality of splice plates, each splice plate securing two or more of the solid wall module portions and glass wall module portions.
12. The system as recited in claim 1, wherein:
 - the bottom edges of the front and back solid panels have an inward facing angle; and
 - the interfacing features of the solid portion panel-interfacing brackets interface with the inward facing angle.
13. The system as recited in claim 1, further comprising a trim cap secured to a top of one or more wall module portions.

14. The system as recited in claim 13, wherein the trim cap comprises a plurality of interfacing features that clip into corresponding interfacing features of the one or more of the solid portion bracket-interfacing brackets and the glass portion bottom bracket-interfacing brackets.

15. A stackable modular wall system comprising:

a plurality of wall module portions, each wall module portion being configured to interface with another wall module portion;

at least one of the wall module portions having a first interfacing feature, the at least one wall module being configured to couple to and support a unitary panel in the center of the wall module portion; and

at least another of the wall module portions having a second interfacing feature, the at least another wall module being configured to couple to and support one or more coupled panels at an exterior face of the wall module portion,

wherein the first interfacing feature and second interfacing feature are different from one another and are configured to contact each other so as to facilitate stacking of the plurality of wall module portions relative to one another.

16. The system as recited in claim 15, the unitary panel being coupled to the wall module portion configured to support a unitary panel.

17. The system as recited in claim 16, wherein the unitary panel is opaque.

18. The system as recited in claim 16, wherein the unitary panel is at least partially transparent.

19. The system as recited in claim 15, the coupled panel being coupled to the wall module portion configured to support one or more of the coupled panels.

20. The system as recited in claim 19, wherein the coupled panel is opaque.

21. The system as recited in claim 19, wherein the coupled panel is at least partially transparent.
22. The system as recited in claim 15, wherein a height or width of each of the plurality of wall module portions is equal.
23. The system as recited in claim 15, wherein at least one of the first and second interfacing features is configured to receive at least a portion of the other of the first and second interfacing features at least partially therein.
24. The system as recited in claim 15, wherein at least one of the first and second interfacing features is configured to be inserted at least partially within at least a portion of the other of the first and second interfacing features.
25. The system as recited in claim 15, wherein the first and second interfacing features comprise corresponding catch features that secure the first and second interfacing features together.
26. A stackable modular wall system comprising:
- a first wall module portion including a center-mounted panel coupled to one or more first vertical brackets and at least one of i) a top bracket including a first interfacing feature, or ii) a bottom bracket including the first interfacing feature, the center-mounted panel being coupled to the center of the first wall module portion; and
 - a second wall module portion including one or more face-mounted panels coupled to one or more second vertical brackets and at least one of a first horizontal bracket or a second horizontal bracket, the second wall module portion including a second interfacing feature adjacent a top edge or a bottom edge thereof, the one or more face-mounted panels being coupled to one or more exterior faces of the second wall module;
- wherein the first interfacing feature is configured to interface with the second interfacing feature; and
- wherein each of the wall module portions has an equal width or height.

27. The system as recited in claim 26, wherein the first interfacing feature directly engages the second interfacing feature.
28. The system as recited in claim 26, wherein the first interfacing feature and second interfacing feature are different from one another and are configured to facilitate stacking of the first wall module portion and the second wall module portion relative to one another.
29. The system as recited in claim 26, wherein the center-mounted panel is opaque.
30. The system as recited in claim 26, wherein at least one of the one or more face-mounted panels is opaque.
31. The system as recited in claim 26, further comprising one or more splice plates to connect the one or more first vertical brackets to the one or more second vertical brackets.
32. The system as recited in claim 26, wherein the first interfacing feature comprises one or more angular surfaces and the second interfacing feature comprises one or more corresponding angular surfaces, the one or more angular surface and the one or more corresponding angular surfaces being configured to engage one another to facilitate stacking of the first wall module portion and the second wall module portion relative to one another.
33. The system as recited in claim 32, wherein the one or more corresponding angular surfaces are formed on the one or more face-mounted panels.
34. The system as recited in claim 26, wherein at least one of the first and second interfacing features is configured to receive at least a portion of the other of the first and second interfacing features at least partially therein, and the other of the first and second interfacing features is configured to be inserted at least partially within the at least one of the first and second interfacing features.

35. A stackable modular wall system comprising:

a first wall module portion including a center-mounted panel coupled to one or more first vertical brackets and at least one of i) a top bracket including a first interfacing feature, or ii) a bottom bracket including a second interfacing feature, the center-mounted panel being coupled to the center of the first wall module portion; and

a second wall module portion including one or more face-mounted panels coupled to one or more second vertical brackets and at least one of a first horizontal bracket and a second horizontal bracket, the second wall module portion including a second interfacing feature adjacent a top edge or a bottom edge thereof, the one or more face-mounted panels being coupled to an exterior face of the second wall module;

wherein the first interfacing feature is configured to interface with the second interfacing feature;

wherein each of the wall module portions has an equal width or height; and

wherein the first interfacing feature is different from the second interfacing feature.

36. The system as recited in claim 35, wherein the center-mounted panel is opaque.

37. The system as recited in claim 35, wherein at least one of the one or more face-mounted panels is opaque.

38. The system as recited in claim 35, wherein each of the wall module portions is configured to be used as a lower wall module portion or an upper wall module portion.

39. The system as recited in claim 35, wherein the first interfacing feature and second interfacing feature are configured to facilitate stacking of the first wall module portion and the second wall module portion relative to one another.

40. The system as recited in claim 39, wherein the first interfacing feature and second interfacing feature directly engage one another.

41. The system as recited in claim 35, wherein the first wall module portion comprises a first top bracket having a top panel connection and a first bottom bracket having a bottom panel connection, wherein the top panel connection is different from the bottom panel connection.

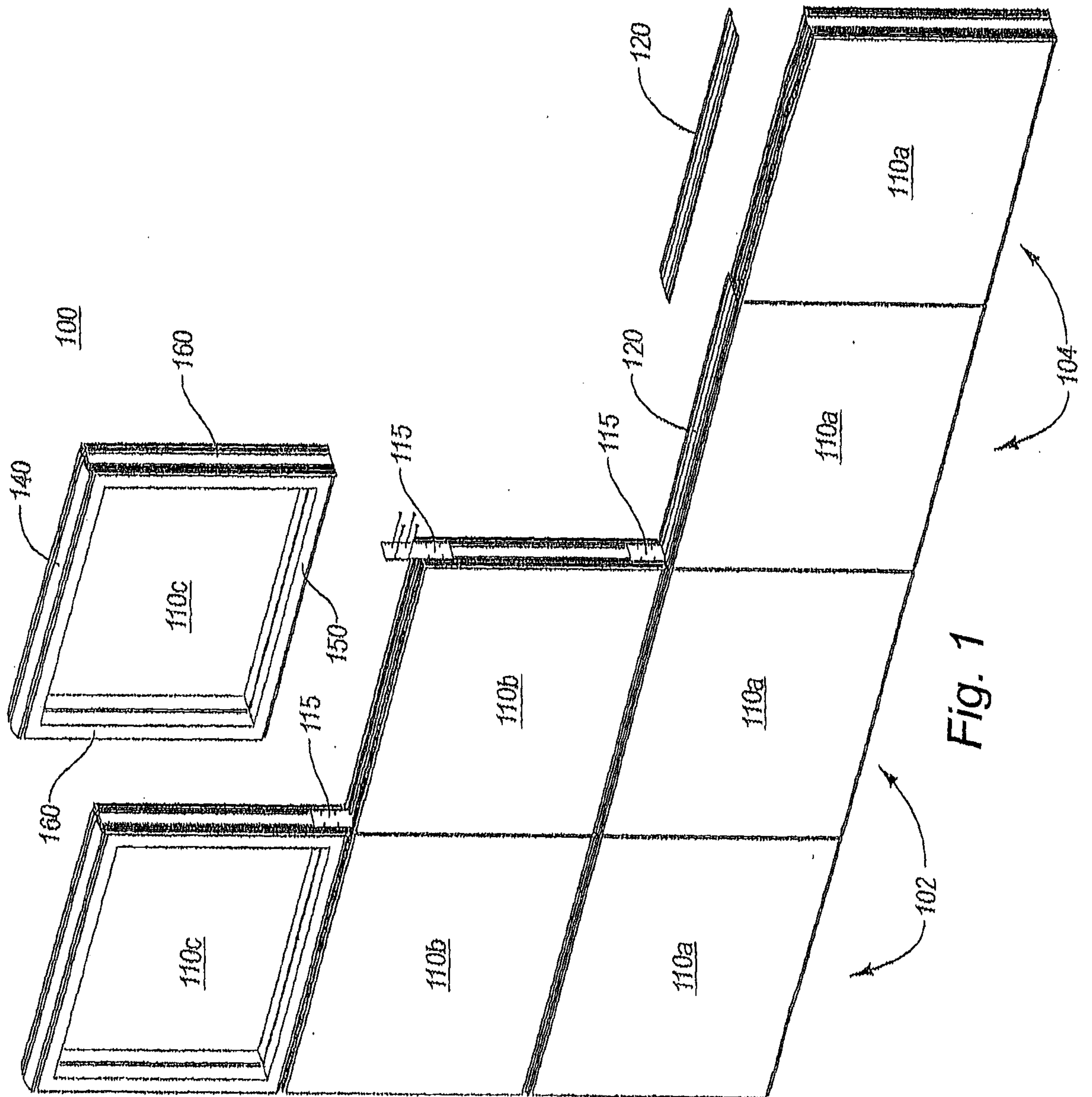
42. The system as recited in claim 35, wherein the second wall module portion comprises a second top bracket having a top panel connection and a second bottom bracket having a bottom panel connection, wherein the top panel connection is different from the bottom panel connection.

43. The system as recited in claim 35, wherein the second interfacing feature comprises one or more angular surfaces formed on the one or more face-mounted panels.

44. The system as recited in claim 43, wherein the first interfacing feature comprises one or more angular surfaces, the one or more angular surfaces of the first and second interfacing features being configured to engage one another to facilitate stacking of the first wall module portion and the second wall module portion relative to one another.

45. The system as recited in claim 35, wherein the first and second interfacing features are configured to engage one another in a mating relationship to facilitate stacking of the first wall module portion and the second wall module portion relative to one another.

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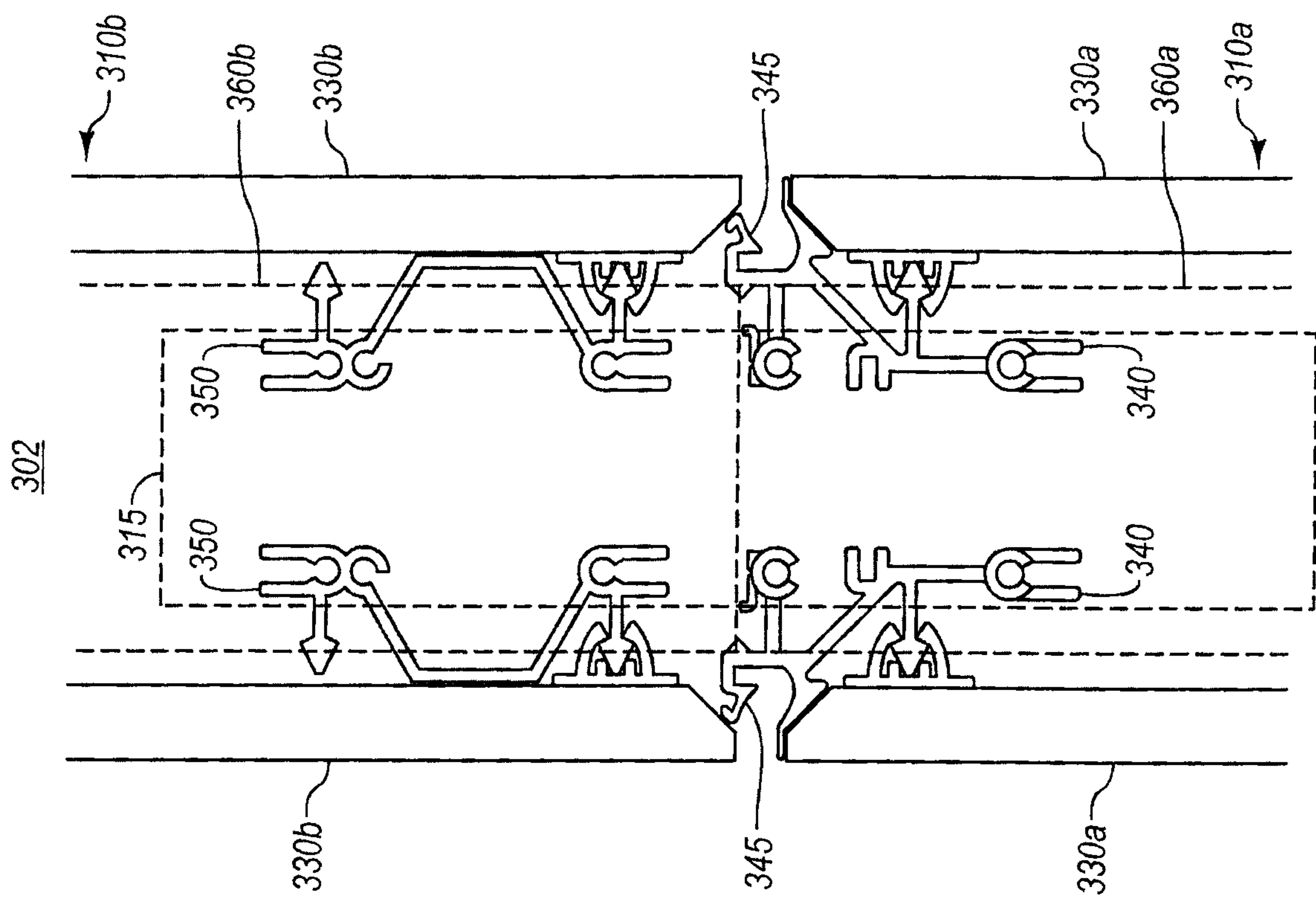


Fig. 3

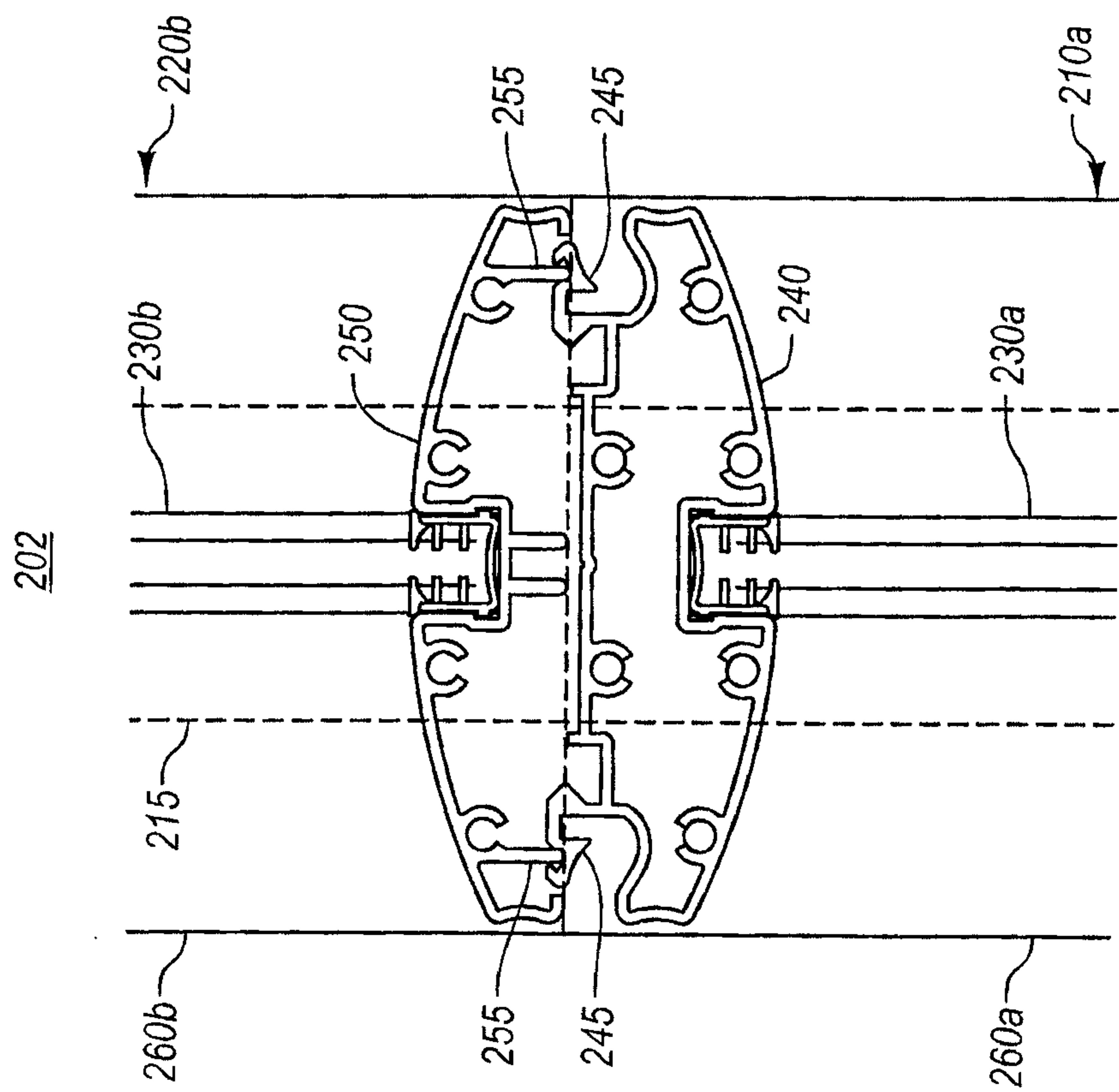


Fig. 2

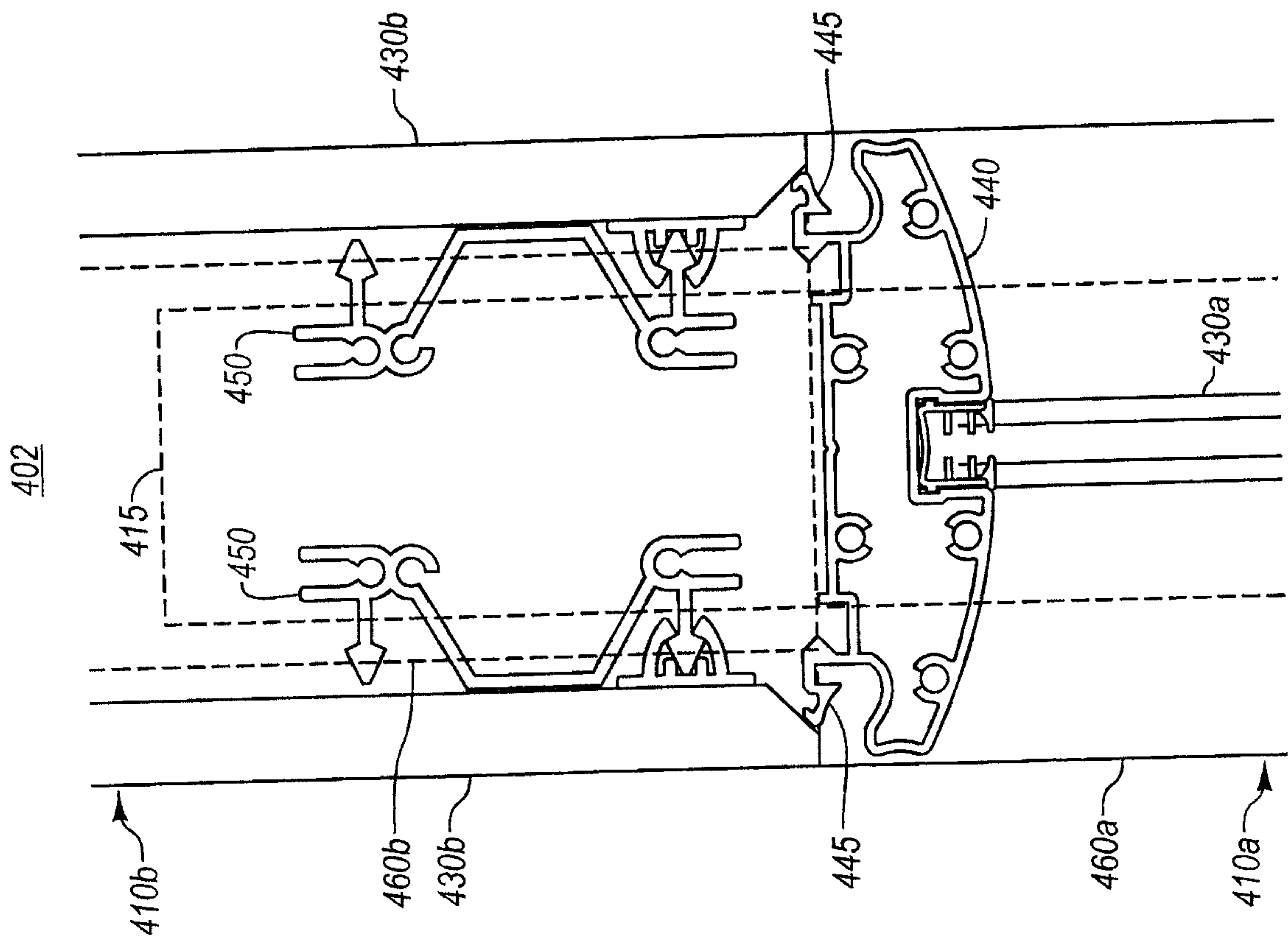


Fig. 4

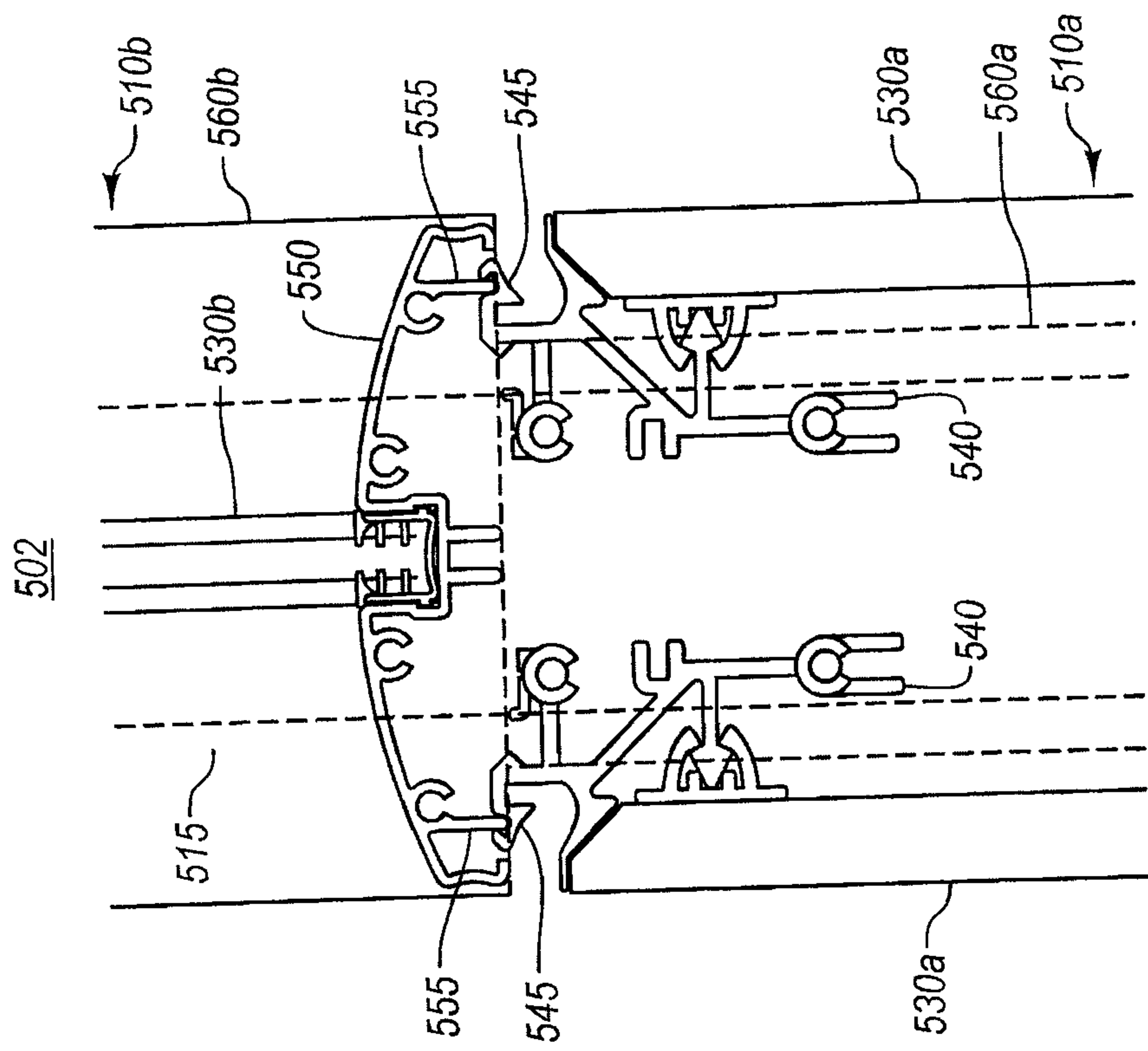


Fig. 5

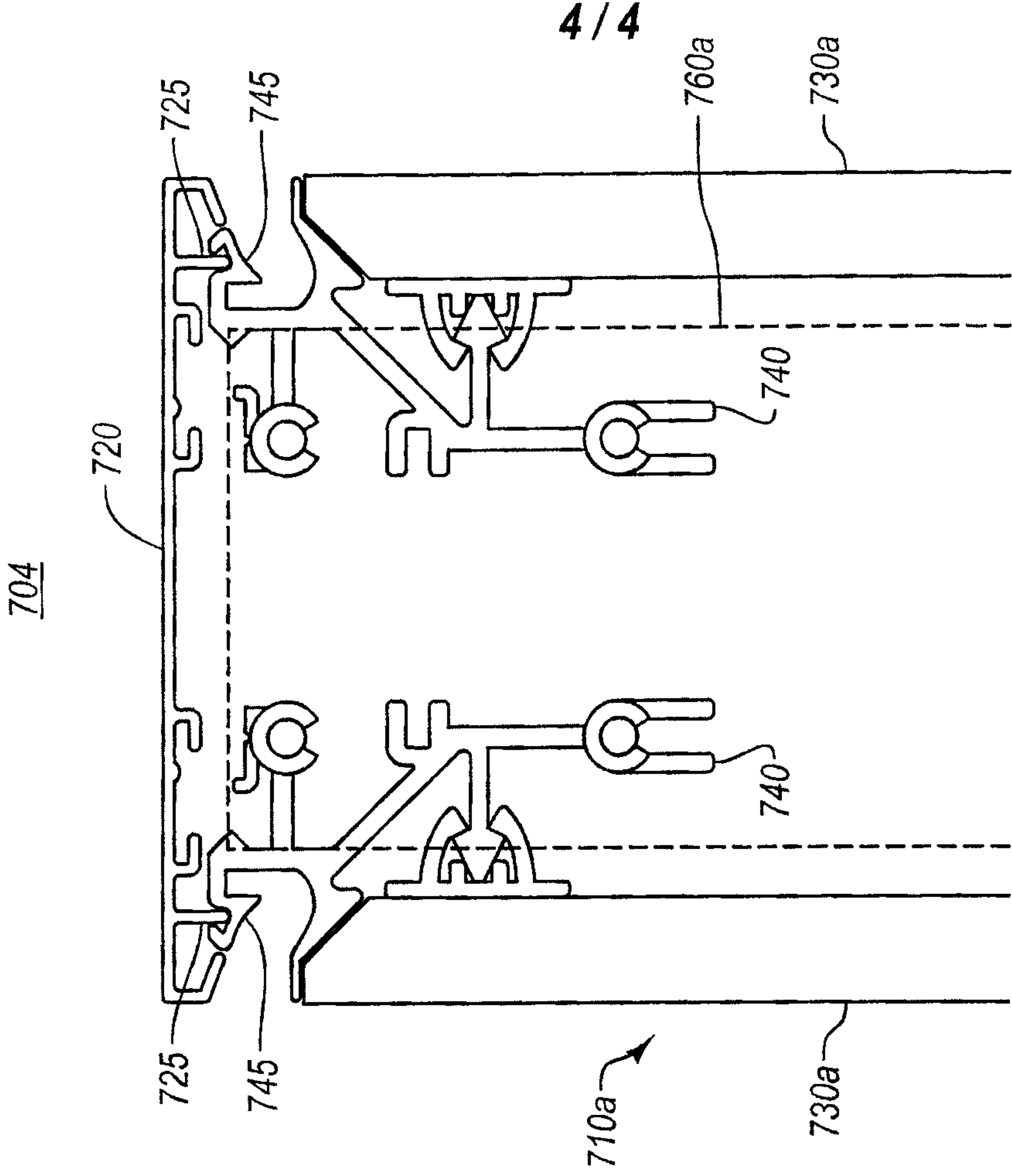


Fig. 7

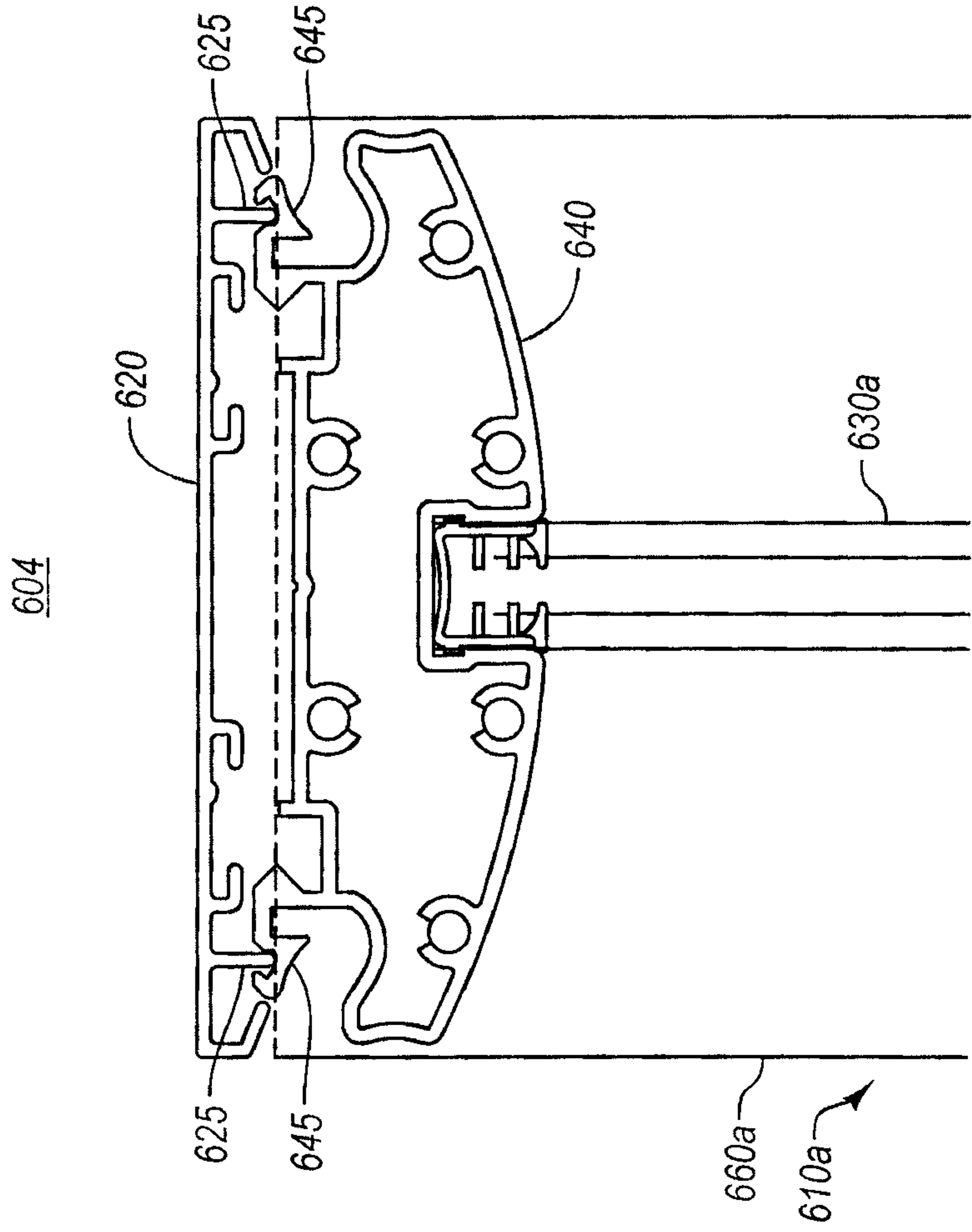


Fig. 6

