(11) EP 2 213 829 A2

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication: **04.08.2010 Bulletin 2010/31**

(51) Int Cl.: **E06B** 9/42 (2006.01)

E06B 9/58 (2006.01)

(21) Application number: 10152178.9

(22) Date of filing: 29.01.2010

(84) Designated Contracting States:

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated Extension States:

AL BA RS

(30) Priority: 30.01.2009 GB 0901533

(71) Applicant: Turnils (UK) Limited Renfrew PA4 9RE (GB)

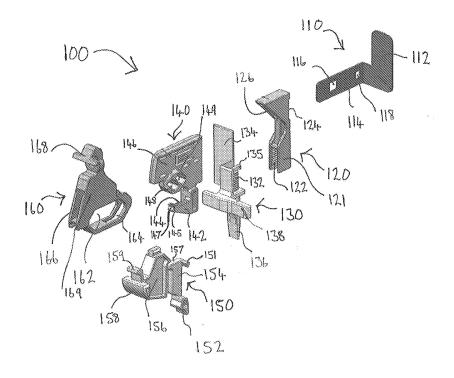
(72) Inventor: Wilson, Neil Renfrew PA4 9RE (GB)

(74) Representative: Harrison Goddard Foote 106 Hope Street Glasgow G2 6PH (GB)

(54) Adjustable fascia for blinds

(57) There is herein described a bracket for attaching a blind to a window frame, said bracket comprising: attachment means for attaching a blind to a window frame; means capable of adjusting the position of the bracket

with respect to the window frame; wherein the means capable of adjusting the position of the bracket eliminates or substantially eliminates any gaps between a front fascia attached to the blind and a window frame.



35

40

50

FIELD OF THE INVENTION

[0001] The present invention relates to blinds (or shades) such as Venetian, pleated and, in particular roller blinds for use primarily at glazed windows. The invention also relates to components used in the manufacture of such blinds or apparatus. The blinds and apparatus of the invention are applicable primarily to apertures glazed with a transparent, translucent, coloured or colourless glass pane or panel, but may also be used with other suitable glazing materials such as transparent, translucent, coloured or colourless plastic sheets.

1

BACKGROUND OF THE INVENTION

[0002] Most blinds comprise a panel or a group of panels of shading material, the configuration of which can be changed by a user to shade or expose a window. Thus, a roller blind comprises a web of fabric which in the shading configuration lies approximately parallel to the window and in the exposing condition is wound around a rigid roller or the like conventionally arranged near the top of the window.

[0003] Venetian blinds, which are also known as slatted blinds, are also well known and conventionally comprise an upper supporting structure in the form of a head rail from which depend two or more spaced apart ladders. The ladders comprise a pair of longitudinal cords or threads aligned in use substantially parallel to the window with a plurality of lateral threads inter-connecting the longitudinal cords at regular intervals. The lateral threads support respective laths or slats which form the shading part of the blind. The slats may rest on the lateral threads without any attachment, or some or all of the slats may be directly connected to respective lateral threads.

[0004] Mechanisms are conventionally provided by which the blind can be raised and lowered so that it can adopt configurations in which the window is wholly shaded, partially shaded or unshaded. Such mechanisms will normally include at least one lift cord which may pass through holes defined in the slats of the blind or may, for example, run behind the slats. Also, mechanisms are provided by which the slats can be tilted or inclined out of a nominally horizontal alignment into alignments tending towards the vertical, thereby to vary the degree of shading provided by the blind. Tilting is conventionally effected by adjusting the configurations of the longitudinal cords of the ladders.

[0005] A problem with existing standard blinds is that there is a space between a front fascia of a blind and a window frame. This reduces the degree of privacy and/or shading provided by the blind.

[0006] A further problem with existing blinds is that when fitting blind systems there has to be accurate measurement and cutting of vertical elements which form part the blind system. If the vertical elements are cut inaccu-

rately then gaps may be formed which leads to badly fitting blinds. A badly fitting blind also leads to the blind rattling and having an unstable base. This is because a blind fitter has to cut side bars to a very high degree of accuracy such as within a tolerance of 1mm otherwise there is a gap formed by the fitment of the side bars. This causes rattling and forms an unstable base for the blind. The present invention provides a higher degree of tolerance for a blind fitter which allows a side bar to be cut with a greater degree of tolerance such as about 10 mm. The fitment of the side bar can then be adjusted using the bracket of the present invention to provide a snug fit with no gap or substantially no gap. This prevents rattling and forms a secure base for the blind. The present invention therefore facilitates the cutting of side bars which makes the blind much easier to fit and also greatly eliminates any wastage caused by incorrectly cut side bars. [0007] It is an object of at least one aspect of the present invention to obviate or mitigate at least one or more of the aforementioned problems.

[0008] It is a further object of at least one aspect of the present invention to provide a blind which improves the location and/or fitting of a front fascia of a blind onto a window frame.

[0009] It is a further object of at least one aspect of the present invention to provide a blind which reduces or eliminates rattling.

SUMMARY OF THE INVENTION

[0010] According to a first aspect of the present invention there is provided a bracket for attaching a blind to a window frame, said bracket comprising:

attachment means for attaching a blind to a window frame:

means capable of adjusting the position of the bracket with respect to the window frame;

wherein the means capable of adjusting the position of the bracket eliminates or substantially eliminates any gaps between a front fascia attached to the blind and a window frame.

[0011] The present invention therefore relates to a system for a blind which allows for adjustability of a blind system against a window frame to eliminate or substantially eliminate gaps between a fascia and a window frame. The present invention also prevents or eliminates rattles by providing for a good fit for the blind system. This is because a blind fitter has to cut side bars to a very high degree of accuracy such as within a tolerance of, for example, about 1mm otherwise there is a gap formed by the fitment of the side bars. This causes rattling and forms an unstable base for the blind. The present invention provides a higher degree of tolerance for a blind fitter which allows a side bar to be cut with a greater degree of tolerance such as, for example, about 20 mm, about 10 mm or about 5mm. The fitment of the side bar can

30

35

40

45

50

then be adjusted using the bracket of the present invention to provide a snug fit with no gap or substantially no gap. This prevents rattling and forms a secure base for the blind. The present invention therefore facilitates the cutting of side bars which makes the blind much easier to fit and also greatly eliminates any wastage caused by incorrectly cut side bars.

[0012] The present invention may therefore allow for adjustability of a blind system in the vertical/substantially vertical and/or horizontal/substantially horizontal direction (with respect to the window frame).

[0013] The present invention therefore provides a bracket (e.g. a fixing bracket) which may be capable of mechanically attaching itself to a window frame using, for example, a surrounding bead on the window frame. The fixing bracket may be a top corner fixing bracket. Typically, any suitable type of mechanical means may be used for attaching the fixing bracket to a window frame. The fixing bracket may be attached to a fascia of a blind system using any suitable means (e.g. any type of mechanical means). Conveniently, the fixing bracket may attach itself to an inner member of the fascia without any screws. The fixing bracket may allow for substantially horizontal and/or substantially vertical movement of an attached blind.

[0014] In particular embodiments, the bracket may allow and provide for substantially translational movement (e.g. substantially horizontal) movement of an attached fascia. This may allow a fascia to be moved into close proximity and/or abut against the window frame. Any suitable type of mechanical means may be used to allow and provide for the substantially translational movement. The substantially translational movement may, for example, allow from about 1 - 20 mm of adjustment to occur. An attached fascia may therefore be moved substantially horizontally.

[0015] The bracket may comprise a corner bracket which may comprise a first portion and a second portion which may be substantially orthogonal to one another. The second portion may comprise two apertures which may be used to connect the corner metal bracket to other parts of the top corner fixing bracket. The first and second portions may be substantially planar members which together may form the bracket. The first portion may be substantially L-shaped and the second portion may be substantially flat and elongate in shape. The second portion may be adapted to fit under a bead in a window frame which may then be used to attach a blind system to a window. The corner bracket may be made from a suitable metal, alloy and/or plastics material.

[0016] Typically, the bracket may also comprise a holding bracket which may have a series of engaging edges (e.g. teeth) along at least one or both inner sides of the holding bracket. The engaging edges may be vertical or substantially vertical. The series of engaging edges may be towards the lower end of the holding bracket and may be used to provide vertical/substantially vertical adjustment. The second portion of the corner bracket may be

intended and adapted to fit through an opening in the upper end of the holding bracket. The upper end of the holding bracket may comprise a substantially triangular shaped housing which may be used to attach the holding bracket to other parts of the fixing bracket. The holding bracket may be made from a suitable metal, alloy and/or plastics material.

[0017] The bracket may also comprise a side extrusion top locking bracket which may also have a series of engaging edges (e.g. teeth) which may be capable of engaging with the series of engaging edges (e.g. teeth) in the holding bracket. The engaging edges may be vertical or substantially vertical. In combination with the series of engaging edges on the holding bracket, the holding bracket and the side extrusion top locking bracket may be used to provide vertical or substantially vertical adjustment of the blind system. The engaging edges (e.g. teeth) in the holding bracket and the side extrusion top locking bracket may be close together and may engage and/or interact with one another. The interacting engaging teeth may allow small adjustments to be made of about 1 mm. This may help to eliminate or substantially eliminate gaps between a fascia and a window frame and may also prevent or eliminate rattles by providing for a good fit for the blind system. The side extrusion top locking bracket may comprise a flat planar section, a lower protruding member and a central substantially horizontal member. The side extrusion top locking bracket may be made from a suitable metal, alloy and/or plastics material. **[0018]** The bracket may additionally comprise a main bracket member which may have an extended lower section which may have a series of engaging edges (e.g. teeth) and an upper section which may have two apertures which may be used for holding pins for holding the roller blind. The engaging edges may be horizontal or substantially horizontal. The main bracket member may also comprise a stop member at the end the series of engaging edges. The main bracket member may be made from a suitable metal, alloy and/or plastics material. [0019] The bracket may also comprise a fascia extension bracket which may comprise a button which may be used to install or remove the top corner fixing bracket by pushing the top corner fixing bracket into or away from a window frame. The fascia extension bracket may comprise a flange and a protruding arm which may be capable of engaging and interacting with the series of engaging edges in the main bracket member. By pressing against or pulling on the button of the fascia extension bracket the protruding arm may be moved along the engaging edges (e.g. teeth) thereby allowing the horizontal location of the fascia extension bracket to be changed. This provides the advantageous feature that when a fascia of a window blind is attached to the fixing bracket then the displacement (i.e. distance) between the fascia and the window frame can be adjusted and changed, thereby eliminating or substantially eliminating gaps between the fascia and the window frame. The protruding arm of the fascia extension bracket in combination with the engag-

25

40

50

ing edges (e.g. teeth) of the main bracket member thereby provide a means for precisely mounting a fascia against a window frame. The fascia extension bracket may also comprise a stabiliser which helps to hold the fascia in place. In particular embodiments, the fascia extension bracket may comprise a central member, a stabiliser and an arm which may help to hold a fascia in place. The fascia extension bracket may be made from a suitable metal, alloy and/or plastics material.

5

[0020] The bracket may also comprise a fascia bracket. The fascia bracket may comprise a central horizontal opening and a further opening which may be used for connecting to the main bracket member. The fascia bracket may also comprise a further opening which may allow the upper section of the main bracket member to extend therethrough. On the top of the fascia bracket there may be a substantially U-shaped member which may be used as a clip to attach itself to a fascia. The fascia bracket may also comprise a central section. The fascia bracket may be made from a suitable metal, alloy and/or plastics material.

[0021] Typically, the corner bracket, the holding bracket, the side extrusion top locking bracket, the main bracket member, the fascia extension bracket and the fascia bracket may be attached to one another to form the fixing bracket (e.g. top corner fixing bracket) of the present invention.

[0022] In particular embodiments, the bracket may be attached to a front fascia of a blind. The blind may be attached to a window frame and/or a pane of glass.

[0023] By pressing on the button on the fascia extension bracket may therefore allow the bracket of the present invention to be horizontally or substantially horizontally moved and thereby snugly press a fascia against a window frame by moving the protruding arm of the fascia extension bracket along the engaging edges (e.g. teeth) of the main bracket member thereby allowing the horizontal location of the fascia extension bracket to be changed. The series of engaging edges on the extended lower section may lock the fascia extension bracket in place once the top corner fixing bracket with attached fascia have been snugly pressed against the window frame. By pressing the bracket against the window frame eliminates or substantially eliminates any gaps between the window frame and a blind which may be attached to the top bracket. The system therefore allows for adjustability of a blind system against a window frame to eliminate or substantially eliminate gaps between the fascia and the window frame.

[0024] The bracket of the present invention may therefore be attached to a front fascia a blind. The bracket formed may be assembled into a single unitary piece. The bracket may be attached to a pane of glass using, for example, the first portion of the corner bracket to fit underneath a bead on a window frame.

[0025] The fascia extension bracket may comprise a button which may be used to activate, install and/or remove a blind attached to the fascia by pushing the bracket

of the present invention into or away from a window frame. There may also be a stabiliser and an arm at a lower part of the fascia which may help to hold the fascia in place. By pressing on the button allows the fixing bracket of the present invention and an attached fascia to be snugly pressed against a window frame by, for example moving an arm along the extended lower section of the main bracket member. The series of engaging edges (e.g. teeth) on the extended lower section may lock the fascia extension bracket in place once the fixing bracket and fascia have been snugly pressed against the window frame.

[0026] In use, the corner metal bracket, the holding bracket, the side extrusion top locking bracket and the main bracket member may remain substantially stationary as the fascia extension bracket and the fascia bracket may be moved towards or away from the window frame. The fascia extension bracket and the fascia bracket may therefore be coupled to the corner metal bracket, the holding bracket, the side extrusion top locking bracket and the main bracket member in any suitable manner that allows a controlled substantially translational and/or horizontal movement to occur such as sliding the different members against one another. By pressing on the button of the fascia extension bracket allows this movement to occur by engaging and disengaging with the engaging edges (e.g. teeth) of the main bracket member. The engaging edges (e.g. teeth) of the main bracket member may therefore mechanically lock the different parts of the fixing bracket of the present invention in place when the fascia is abutting against a window frame.

[0027] The present invention may therefore provide a fixing bracket (e.g. a top corner fixing bracket) which may be capable of mechanically attaching itself to a window frame using, for example, a surrounding bead on the window frame. However, any other suitable type of mechanical means may be used for attaching the top corner fixing bracket to a window frame. The fixing bracket may be attached to a fascia of a blind system using any suitable means (e.g. any type of mechanical means). Usually, the fixing bracket may attach itself to an inner member of the fascia. Using any suitable form of mechanical means, the fixing bracket may therefore allow translational movement of the attached fascia which allows the fascia to be in close proximity and/or abut against the window frame. [0028] By pressing the bracket of the present invention and an attached fascia against a window frame eliminates or substantially eliminates any gaps between the window frame and the fascia. The system may therefore allow for adjustability of a blind system against a window frame to eliminate or substantially eliminate gaps between the fascia and the window frame. This improves the privacy and/or shading provided by the blind and also provides a much more aesthetically appealing blind sys-

[0029] The blind system for attaching a blind to a window frame according to the present invention may comprise additional components such as any one or combi-

nation of the following: a fascia end cap; a roller fabric; a side extrusion (e.g. a substantially vertical fitting member); a bottom bar end cap; a bottom bar; and a side extrusion bottom locking bracket.

[0030] The side extrusion bottom locking bracket may assist in the vertical location of the blind system.

[0031] Once the side extrusion bottom locking bracket is fixed in place vertical/substantially vertical adjustment may then take place using the series of engaging edges (e.g. teeth) on the side extrusion top locking bracket in combination with the series of engaging edges on the holding bracket. The holding bracket and the side extrusion bottom locking bracket may therefore be used to provide vertical/substantially vertical adjustment of the blind system. The engaging edges (e.g. teeth) may be close together and may allow small adjustments to be made of, for example, about 1 mm. This may help to eliminate or substantially eliminate gaps between a fascia and a window frame and may also prevent or eliminate rattles by providing for a good fit for the blind system.

[0032] This means that the side extrusion can be cut with a higher degree of tolerance than would otherwise be allowed. Any slack and/or 'play' therefore left in the fitted side extrusion may therefore be overcome. This means that not only does the blind as described in the present invention allow horizontal/substantially horizontal adjustment but also vertical/substantially vertical adjustment.

[0033] The blind system of the present invention may therefore allow for both substantially horizontal and substantially vertical movement to occur when fitted to, for example, a window frame. The substantially vertical and substantially horizontal movement may occur independently of one another. An attached fascia may therefore be moved both substantially horizontally and/or substantially vertically. This allows the blind system of the present invention to be used for different sized and shaped windows. The bracket may also be used for different types, shapes and sizes of fascias. The bracket of the present invention may therefore be adaptable allowing a range of movements to occur. This allows and provides for the best fit of the blind and fascia to a window frame allowing the fascia to be in close proximity and/or abut against the window frame. This improves the privacy and/or shading provided by the blind and also provides a much more aesthetically appealing blind system with substantially no gaps between the fascia and the window frame.

[0034] The present invention also provides for removable sections which allow for differently sized windows to be used with the present invention.

[0035] According to a second aspect of the present invention there is provided a system for attaching a blind to a window frame, said system comprising:

(a) a bracket comprising:

attachment means for attaching a blind to a window frame; and

means capable of adjusting the position of the bracket with respect to the window frame; and

(b) a fascia of a blind attached to the bracket;

wherein the means capable of adjusting the position of the bracket eliminates or substantially eliminates any gaps between a front fascia attached to the blind and a window frame.

[0036] The present invention may therefore allow for adjustability of a blind system in the vertical and/or horizontal direction (with respect to the window frame).

[0037] Typically, there may be two brackets, one for each of the top corners of the window frame.

[0038] The blind may also comprise: a fascia end cap; a roller fabric; a side extrusion; a bottom bar end cap; a bottom bar; and/or a side extrusion bottom locking bracket.

[0039] The bracket may allow the attached fascia to be moved both substantially horizontally and substantially vertically against the window frame. This allows for a tight and/or snug fit of the fascia and the window frame. The system therefore may allow for adjustability of a blind system against the window frame to eliminate or substantially eliminate gaps between the fascia and the window frame. This improves the privacy and/or shading provided by the blind.

[0040] The blind system for attaching a blind to a window frame according to the present invention may comprise additional components such as any one or combination of the following: a fascia end cap; a roller fabric; a side extrusion (e.g. a substantially vertical fitting member); a bottom bar end cap; a bottom bar; and a side extrusion bottom locking bracket.

[0041] Once the bracket is fixed in place vertical/substantially vertical adjustment may then take place using the series of engaging edges (e.g. teeth) on the side extrusion top locking bracket in combination with the series of engaging edges on the holding bracket. The holding bracket and the side extrusion top locking bracket may therefore be used to provide vertical/substantially vertical adjustment of the blind system. The engaging edges (e.g. teeth) may be close together and may allow small adjustments to be made of, for example, about 1 mm. This may help to eliminate or substantially eliminate gaps between a fascia and a window frame and may also prevent or eliminate rattles by providing for a good fit for the blind system.

[0042] A blind fitter has to cut side bars to a very high degree of accuracy such as within a tolerance of 1 mm otherwise there is a gap formed by the fitment of the side bars. This causes rattling and forms an unstable base for the blind. The present invention provides a higher degree of tolerance for a blind fitter which allows a side bar to be cut with a greater degree of tolerance such as about 10 mm. The fitment of the side bar can then be adjusted using the bracket of the present invention to provide a snug fit with no gap or substantially no gap.

35

40

This prevents rattling and forms a secure base for the blind. The present invention therefore facilitates the cutting of side bars which makes the blind much easier to fit and also greatly eliminates any wastage caused by incorrectly cut side bars.

[0043] Any slack and/or 'play' therefore left in the fitted side extrusion may therefore be overcome by using the holding bracket and the side extrusion top locking bracket. This means that not only does the blind as described in the present invention allow horizontal adjustment but also vertical adjustment, independent of one another.

BRIEF DESCRIPTION OF THE DRAWINGS

[0044] Embodiments of the present invention will now be described, by way of example only, with reference to the accompanying drawings in which:

Figure 1 is an exploded view of various component parts of a top corner fixing bracket according to an embodiment of the present invention;

Figure 2 is a perspective view of an assembled top corner fixing bracket using the various component parts shown in Figure 1;

Figure 3a is a representation of the top corner fixing bracket shown in Figures 1 and 2 attached to a fascia of a blind system and being installed or removed from a window frame;

Figure 3b is a representation of the top corner fixing bracket shown in Figures 1 and 2 attached to a fascia of a blind system and in an operational position attached to a window frame;

Figure 4 is an expanded sectional side view of the top corner fixing bracket shown in Figures 1 to 3b attached to a fascia of a blind system and in an operational position attached to a window frame;

Figure 5 is a sectional rear view of part of the top corner fixing bracket shown in Figures 1 to 4;

Figure 6 is a view of a removable section from a top corner fixing bracket for different sized windows according to a further embodiment of the present invention:

Figure 7 is a view of a removable section from a bottom corner fixing bracket for different sized windows according to a further embodiment of the present invention;

Figure 8 is a view of a side extrusion bottom locking bracket according to a further embodiment of the present invention;

Figure 9 is a view showing the side extrusion bottom locking bracket shown in Figure 8 securely locked in place to a window frame;

Figure 10 is a view of the side extrusion bottom locking bracket shown in Figures 8 and 9 and a bottom bar end; and

Figure 11 is a view of the top corner fixing bracket shown in Figures 1 to 5 and other components of a blind system according to a further embodiment of the present invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0045] The present invention relates to a system for a blind which allows for adjustability of a blind system against a window frame to eliminate or substantially eliminate gaps between a fascia and a window frame.

10

[0046] Figure 1 is an exploded view of various component parts of a top corner fixing bracket according to the present invention, generally designated 100. In Figure 2, the top corner fixing bracket 100 is shown in an assembled configuration.

[0047] The top corner fixing bracket 100 comprises a corner metal bracket 110. The corner metal bracket 110 comprises a first portion 112 and a second portion 114 which are substantially orthogonal to one another. The second portion 114 comprises two apertures 116,118 which are used to connect the corner metal bracket 110 to other parts of the top corner fixing bracket 100. The first and second portions 112, 114 are substantially planar members which together form the corner metal bracket 110 in a unitary form. The first portion 112 is substantially L-shaped and the second portion 114 is substantially flat and elongate in shape. The second portion 114 is intended to fit under a bead in a window frame which may then be used to attach a blind system to a window. The corner metal bracket 110 is made from a suitable metal, alloy and/or plastics material.

[0048] The top corner fixing bracket 100 also comprises a holding bracket 120 which has a series of engaging edges 122 (e.g. teeth) along at least one or preferably both the inner sides of a housing 121 in the holding bracket 120. The series of engaging edges 122 are towards the lower end of the holding bracket 120. The second portion 114 of the corner metal bracket 110 is intended to fit through an opening 124 in the upper end of the holding bracket 120. The upper end of the holding bracket 120 has a substantially triangular shaped housing 126 which is used to attach the holding bracket 120 to other parts of the top corner fixing bracket 100. The holding bracket 120 is made from a suitable metal, alloy and/or plastics material.

[0049] The top corner fixing bracket 100 further comprises a side extrusion top locking bracket 130 which also has a series of engaging edges 132 which are capable of engaging with the series of engaging edges 122 in the holding bracket 120. The side extrusion top locking bracket 130 also has a flat planar section 134 located in the upper region of the locking bracket 130. There is also a lower protruding member 136. There is also a central substantially horizontal member 138 which engages against other parts of the fixing bracket 100. The side extrusion top locking bracket 130 also comprises a catch member 135 which may be used to engage with the holding bracket 120. The side extrusion top locking bracket 130 is made from a suitable metal, alloy and/or plastics material.

50

20

30

40

45

[0050] There is also a main bracket member 140 which has an extended lower section 142 which has a series of engaging edges 144 (e.g. teeth) and an upper section 146 which has two apertures 148,149. There is also a protruding stop member 145 at the end of the lower section 142 comprising the engaging edges 144. The main bracket member 140 also comprises an indented area 147 located below the stop member 145. The main bracket member 140 is made from a suitable metal, alloy and/or plastics material.

[0051] The top corner fixing bracket 100 also comprises a fascia extension bracket 150. The fascia extension bracket 150 has a button 152 which can be used to install or remove the top corner fixing bracket 100. The button 152 is connected via an arm 154. The fascia extension bracket 150 also comprises a central member 156, a stabiliser 158 and an arm 159 which may help to hold a fascia in place. The fascia extension bracket 150 also comprises a flange 157 onto which is located a protruding arm 151 which is capable of engaging with the teeth 144 on the main bracket member 140. The protruding arm 151 is substantially orthogonal to the longitudinal axis of the flange 157 forming an L-shaped member. The fascia extension bracket 150 is made from a suitable metal, alloy and/or plastics material.

[0052] The top corner fixing bracket 100 also comprises a fascia bracket 160. The fascia bracket 160 comprises a central horizontal opening 162 and a further opening 164 which is used for connecting to the main bracket member 140. There is a further opening 166 which allows the upper section 146 of the main bracket member 140 to extend therethrough. On the top of the fascia bracket 160 there is a substantially U-shaped member 168 which may be used as a clip to attach itself to a fascia. The fascia bracket 160 has a central section 169 which is capable of functioning as a housing for the upper section 146 of the main bracket member 140. The fascia bracket 160 is made from a suitable metal, alloy and/or plastics material.

[0053] Figure 2 is a representation of the corner metal bracket 110, the holding bracket 120, the side extrusion top locking bracket 130, the main bracket member 140, the fascia extension bracket 150 and the fascia bracket 160 attached to one another to form the top corner fixing bracket 100 and in an assembled arrangement ready to be used. The first portion 112 of the corner metal bracket 110 is shown to extend from the top corner fixing bracket 100 and ready to be attached underneath a bead on a window frame. This allows the first portion 112 of the corner metal bracket 110 to attach the fixing bracket 100 to a window frame without any screws or any other attachment means.

[0054] Figure 2 also shows the interaction between the main bracket member 140 and the fascia extension bracket 150. As shown in Figure 2, the flange 157 of the fascia extension bracket 150 extends along the lower section 142 comprising the engaging edges 144 (e.g. teeth). The protruding arm 151 then extends across and

engages with the engaging edges 144 (e.g. teeth) of the main bracket member 140. By pressing against or pulling on the button 152 of the fascia extension bracket 150 the protruding arm 151 can be moved along the engaging edges 144 (e.g. teeth) thereby allowing the location of the fascia extension bracket 150 to be moved. This provides the advantageous feature that when a fascia of a window blind is attached to the fixing bracket 100 then the displacement (i.e. distance) between the fascia and the window frame can be adjusted and changed, thereby eliminating or substantially eliminating gaps between the fascia and the window frame. The protruding arm 151 of the fascia extension bracket 150 in combination with the engaging edges 144 (e.g. teeth) of the main bracket member 140 thereby provide a means for precisely mounting a fascia against a window frame. The protruding stop member 145 on the main bracket member 140 will also prevent the protruding arm 151 from disengaging with the engaging edges 144 (e.g. teeth) by preventing the fascia extension bracket 150 from being pulled too far away from the main bracket member 140.

[0055] Figure 3a is representation of the top corner fixing bracket 100 attached to a front fascia 200 of a blind. The top corner fixing bracket 100 is formed into one single piece and in Figure 3a is shown in the position of being installed or removed. The protruding arm 151 of the fascia extension bracket 150 is also shown resting in the indented area 147 (i.e. in a neutral position) of the main bracket member 140 and is therefore ready to adjust the distance between the fascia 200 and a pane of glass 300. The top corner fixing bracket 100 is attached to the pane of glass 300 using the first portion 112 of corner metal bracket 110 to fit underneath a bead on a window frame. As shown in Figure 3a, the U-shaped clip member 168 attaches itself to an inner protruding part 210 of the fascia 200. The U-shaped clip member 168 may operate via a snap-fit mechanism. The button 152 on the fascia extension bracket 150 is also shown to extend from the fascia 200 allowing the top corner fixing bracket 100 to be activated and be installed or removed by pushing or pulling the top corner fixing bracket 100 into or away from a window frame. The amount of horizontal and/or translational movement allowed may, for example, be from about 1-40 mm or from about 1 - 20 mm. There is also shown the stabiliser 158 and the arm 159 of the fascia extension bracket 150. The stabilizer 158 engages with a lower part 212 of the fascia 200 which helps to hold and/or lock the fascia 200 in place.

[0056] As shown in Figure 3b the top corner fixing bracket 100 is in the operational position. The initial sequence of operation initially requires the protruding arm 151 to be disengaged from the indented area 147 of the main bracket member 140. This requires the fascia extension bracket 150 to be initially pulled away from the main bracket member 140 (and the pane of glass 300). The protruding arm 151 can then be lifted and positioned onto the engaging edges 144 (e.g. teeth) of the main bracket member 140. By pressing on button 152 (i.e. ap-

40

plying force 'F' as shown in Figure 3b) then allows the top corner fixing bracket 100 and fascia 200 to be snugly pressed against a window frame by moving arm 154 along the extended lower section 142 of the main bracket member 140. During this movement the protruding arm 151 is moved along the engaging edges 144 (e.g. teeth) of the main bracket member 140. The series of engaging edges 144 (e.g. teeth) on the extended lower section 142 may also lock the fascia extension bracket 150 in place once the top corner fixing bracket 100 and fascia 200 has been snugly pressed against the window frame.

[0057] As shown in Figures 3a and 3b, the corner metal bracket 110, the holding bracket 120, the side extrusion top locking bracket 130 and the main bracket member 140 remain substantially stationary as the fascia extension bracket 150 and the fascia bracket 160 are moved towards or away from the window frame and the pane of glass 300. The fascia extension bracket 150 and the fascia bracket 160 may therefore be coupled to the corner metal bracket 110, the holding bracket 120, the side extrusion top locking bracket 130 and the main bracket member 140 in any suitable manner that allows a controlled substantially translational and/or horizontal movement to occur such as sliding the different members against one another. By pressing on the button 152 of the fascia extension bracket 150 allows this movement to occur by engaging and disengaging with the engaging edges 144 (e.g. teeth) of the main bracket member 140 with the protruding member 151 of the fascia extension bracket 150. The application of force 'F' to the button 152 is shown in Figure 3b. The engaging edges 144 (e.g. teeth) of the main bracket member 140 may therefore mechanically lock the different parts of the top corner fixing bracket 100 in place when the fascia 200 is abutting against a window frame and a pane of glass 300.

[0058] The present invention therefore provides a top corner fixing bracket 100 which is capable of mechanically attaching itself to a window frame using, for example, a surrounding bead on the window frame. However, any other suitable type of mechanical means may be used for attaching the top corner fixing bracket 100 to a window frame. The top corner fixing bracket 100 may be attached to a fascia of a blind system using any suitable means (e.g. any type of mechanical means). Usually, the top corner fixing bracket 100 attaches itself to an inner member of the fascia. Using any suitable form of mechanical means, the top corner fixing bracket 100 therefore allows translational movement of the attached fascia which allows the fascia to be in close proximity and/or abut against the window frame thereby eliminating or substantially eliminating gaps between a fascia and a window frame.

[0059] By pressing the top corner fixing bracket 100 and the fascia 200 against the window frame and the pane of glass 300 therefore eliminates or substantially eliminates any gaps between the window frame 300 and the fascia 200 which may be attached to the top corner fixing bracket 100. The system therefore allows for ad-

justability of a blind system against a window frame and/or a pane of glass to eliminate or substantially eliminate gaps between the fascia 200 and the window frame and the pane of glass 300. This improves the privacy and/or shading provided by the blind and also provides a much more aesthetically appealing blind system.

[0060] Figure 4 is a sectional side view of the top corner fixing bracket 100 attached to the fascia 200. Figure 4 clearly shows the spring arm 159 engaging against the fascia 200. There is also shown a back pad 170 which directs forces towards the top corner fixing bracket 100. There is also shown holes 148,149 which allow the amount by which the blind protrudes to be minimised and allows for adjustment of a roller blind to maximum effect as either of the holes 148,149 may be used for holding pins for holding the roller blind depending on which provides the best fitting. Figure 4 also shows the U-shaped clip member 168 attaching itself to the inner protruding part 210 of the fascia 200. Figure 4 also clearly shows the protruding arm 151 of the fascia extension bracket and the engaging edges 144 (e.g. teeth) of the main bracket member 140 which allows for the distance between the fascia 200 and the pane of glass 300 to be changed and varied in a substantially horizontal and/or substantially translational movement.

[0061] Figure 5 is a sectional rear view of part of the top corner fixing bracket 100. As shown in Figure 5, the holding bracket 120 comprises a series of vertical or substantially vertical engaging edges 122 (e.g. teeth) in a housing 121 extending along the inner sides of the holding bracket 120. The series of engaging edges 122 are capable of engaging with the series of vertical or substantially vertical engaging edges 132 of side extrusion top locking bracket 130. This allows the height of a blind system to be adjusted (i.e. vertical or substantially vertical adjustment). The top corner fixing bracket 100 therefore provides any form of suitable mechanical means allowing vertical or substantially vertical movement which may, for example, be from about 1 - 40 mm or about 1 - 20 mm. The relative vertical position of the holding bracket 120 and the side extrusion top locking bracket 130 is therefore capable of being adjusted using the engaging edges 122 and the engaging edges 132. This allows the vertical position of an attached fascia to be adjusted and varied once fitted to obtain the best fit.

[0062] The top corner fixing bracket 100 therefore allows both substantially horizontal and substantially vertical movement to occur when fitted to, for example, a window frame. The substantially vertical and substantially horizontal movement may occur independently of one another. An attached fascia may therefore be moved both substantially horizontally and/or substantially vertically. This allows the top corner fixing bracket 100 to be used for different sized and shaped windows. The top corner fixing bracket 100 may also be used for different types, shapes and sizes of fascias. The top corner fixing bracket 100 of the present invention is therefore adaptable allowing a range of movements to occur. This allows and pro-

40

50

55

vides for the best fit of the blind and fascia to a window frame allowing the fascia to be in close proximity and/or abut against the window frame. This improves the privacy and/or shading provided by the blind and also provides a much more aesthetically appealing blind system with substantially no gaps between the fascia and the window frame.

[0063] Figure 6 shows a removable section 400 for different sized windows. This therefore allows the window fixing bracket 100 of the present invention to be used in a variety of different sized window frames. Figure 6 shows the side extrusion top locking bracket 130 and the series of vertical engaging edges 132 and the central substantially horizontal member 138. (There is a series of vertical engaging edges 132 on the other side but these are not shown in Figure 6). There is also shown the catch member 135 which is used for attaching the side extrusion top locking bracket 130 to the holding bracket 120. The removable section 400 may therefore be fitted to an end part of the substantially horizontal member 138 allowing the top corner fixing bracket 100 of the present invention to be adapted for any size (e.g. width) of window frame. [0064] Figure 7 shows a removable section 500 from a bottom corner fixing bracket 510 which again is used for different sized windows.

[0065] Figure 8 is a side extrusion bottom locking bracket 600 which has protruding member 610 which may be used to engage with a blind system.

[0066] Figure 9 is a further view of the side extrusion bottom locking bracket 600 attached to a window frame 700.

[0067] Figure 10 represents a view of the side extrusion bottom locking bracket 600 being held in place by a bottom bar end cap 612. The bottom bar end cap 612 is prevented from moving due to an applied tension force. [0068] Figure 11 is a view of the top corner fixing bracket 100 used in a blind system according to the present invention. As shown in Figure 11 there are two the top corner fixing brackets 100, one in the top right hand corner and another in the top left hand corner of a window frame 950. Figure 11 shows that the system comprises: a window frame 950; fascia end caps 952; a roller fabric 954; a side extrusion 956; bottom bar end caps 958; a bottom bar 960; and side extrusion bottom locking brackets 962. The top corner fixing brackets 100 allow the attached fascia 200 to be moved both substantially horizontally and substantially vertically against the window frame 950 (as previously described). This allows for a tight and/or snug fit of the fascia 200 and the window frame 950. The system therefore allows for adjustability of a blind system against the window frame 950 to eliminate or substantially eliminate gaps between the fascia 200 and the window frame 950. This improves the privacy and/or shading provided by the blind. The side extrusion bottom locking brackets 962 assist in the vertical location of the blind system. The side extrusion 956 can be cut with a higher degree of tolerance than would otherwise be allowed. This is because a blind fitter with prior art

devices has to cut side bars to a very high degree of accuracy such as within a tolerance of 1mm otherwise there is a gap formed by the fitment of the side bars. This causes rattling and forms an unstable base for the blind. The present invention provides a higher degree of tolerance for a blind fitter which allows the side extrusion 956 to be cut with a greater degree of tolerance such as about 10 mm or even 20 mm. The fitment of the side extrusion 956 can then be adjusted using the brackets 100 of the present invention to provide a snug fit with no gap or substantially no gap. This prevents rattling and forms a secure base for the blind. The present invention therefore facilitates the cutting of the side extrusion 956 which makes the blind much easier to fit and also greatly eliminates any wastage caused by incorrectly cut side extrusion bars.

[0069] Any slack and/or 'play' therefore left in the fitted side extrusion 956 may therefore be overcome by, for example, rotating the side extrusion bottom locking bracket 962 slightly. This means that not only does the blind system as described in the present invention allow horizontal adjustment but also vertical adjustment.

[0070] Once the brackets 100 are fixed in place, vertical or substantially vertical adjustment may take place using the series of engaging edges 132 on the side extrusion top locking bracket 130 in combination with the series of engaging edges 122 on the holding bracket 120. The holding bracket 120 and the side extrusion top locking bracket 130 may therefore be used to provide vertical/ substantially vertical adjustment of the blind system. The engaging edges 122,132 may be close together and may allow small adjustments to be made of, for example, about 1 mm. Horizontal or substantially horizontal movement of the fascia 200 may be obtained as previously described using the protruding arm 151 of the fascia extension bracket and the engaging edges 144 (e.g. teeth) of the main bracket member 140. This may help to eliminate or substantially eliminate gaps between a fascia and a window frame and may also prevent or eliminate rattles by providing for a good fit for the blind system.

[0071] Whilst specific embodiments of the present invention have been described above, it will be appreciated that departures from the described embodiments may still fall within the scope of the present invention. For example, any suitable type mechanism may be used to adjust the position of the fascia on a blind system. A bracket may be used to provide a plurality of movements such as substantially horizontal and/or substantially vertical for the blind which is attached to the fascia.

Claims

1. A bracket for attaching a blind to a window frame, said bracket comprising:

attachment means for attaching a blind to a window frame;

20

30

40

45

50

55

means capable of adjusting the position of the bracket with respect to the window frame;

wherein the means capable of adjusting the position of the bracket eliminates or substantially eliminates any gaps between a front fascia attached to the blind and a window frame.

- 2. A bracket for attaching a blind to a window frame according to claim 1, wherein the bracket is capable of providing translational (e.g. substantially horizontal) movement and/or substantially vertical movement of an attached fascia.
- 3. A bracket for attaching a blind to a window frame according to any of claims 1 or 2, wherein the bracket comprises a corner bracket which comprises a first portion and a second portion which are substantially orthogonal to one another and wherein the corner bracket is capable of mechanically attaching itself to a window frame using a surrounding bead on the window frame.
- 4. A bracket for attaching a blind to a window frame according to any preceding claim, wherein the bracket comprises a holding bracket which has a series of vertical or substantially vertical engaging edges (e.g. teeth) along at least one or both inner sides of the holding bracket.
- 5. A bracket for attaching a blind to a window frame according to any preceding claim, wherein the bracket also comprises a side extrusion top locking bracket which has a series of vertical or substantially vertical engaging edges (e.g. teeth) which are capable of engaging with the series of vertical or substantially vertical engaging edges (e.g. teeth) in the holding bracket.
- 6. A bracket for attaching a blind to a window frame according to any of claims 4 and 5, wherein the series of vertical or substantially vertical engaging edges (e.g. teeth) along at least one or both inner sides of the holding bracket and the series of vertical or substantially vertical engaging edges (e.g. teeth) on the side extrusion top locking bracket are capable of providing vertical/substantially vertical movement which facilitates the cutting of side extrusions when fitting a blind by providing a high degree of tolerance for a blind fitter.
- 7. A bracket for attaching a blind to a window frame according to any preceding claim, wherein the bracket also comprises a main bracket member which has an extended lower section and a series of horizontal or substantially horizontal engaging edges (e.g. teeth).

- 8. A bracket for attaching a blind to a window frame according to any preceding claim, wherein the bracket also comprises a fascia extension bracket which comprises a button which is used to install or remove the bracket by pushing the top corner fixing bracket into or away from a window frame, and a protruding arm which is capable of engaging with the series of horizontal or substantially horizontal engaging edges on the main bracket member.
- 9. A bracket for attaching a blind to a window frame according to any of claims 7 and 8, wherein the series of horizontal or substantially horizontal engaging edges on the main bracket member and the protruding arm on the fascia extension bracket are capable of providing horizontal or substantially horizontal movement of an attached fascia.
- 10. A bracket for attaching a blind to a window frame according to any preceding claim, wherein the bracket is capable of providing about 1 20 mm of translational (e.g. substantially horizontal) movement and/or about 1 20 mm substantially vertical movement of an attached fascia.
- 11. A bracket for attaching a blind to a window frame according to any preceding claim, wherein the bracket also comprises a fascia bracket which is capable of clipping onto a fascia.
- **12.** A system for attaching a blind to a window frame, said system comprising:
 - (a) a bracket comprising:

attachment means for attaching a blind to a window frame; and means capable of adjusting the position of the bracket with respect to the window frame; and

(b) a fascia of a blind attached to the bracket;

wherein the means capable of adjusting the position of the bracket eliminates or substantially eliminates any gaps between a front fascia attached to the blind and a window frame.

- 13. A system for attaching a blind to a window frame according to claim 13, wherein there are two brackets, one for each of the top corners of the window frame.
- 14. A system for attaching a blind to a window frame according to any of claims 11 and 12, wherein the bracket is capable of providing about 1 - 20 mm of translational (e.g. substantially horizontal) movement and/or about 1 - 20 mm substantially vertical

movement of an attached fascia.

15. A system for attaching a blind to a window frame according to any of claims 12 to 14, wherein the bracket is as defined in claims 1 to 11.

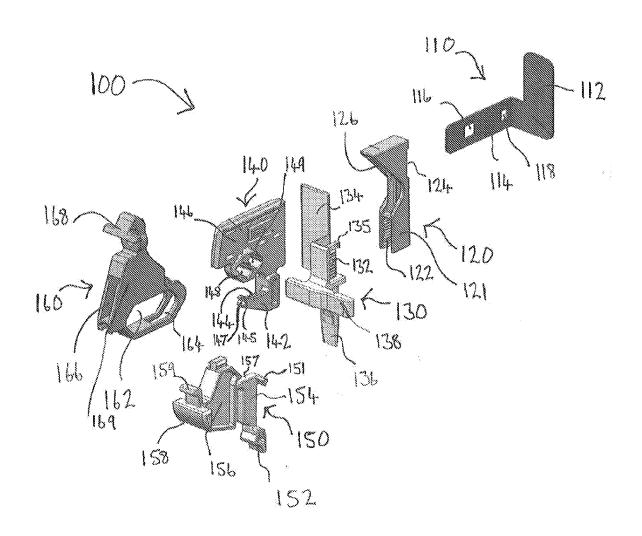
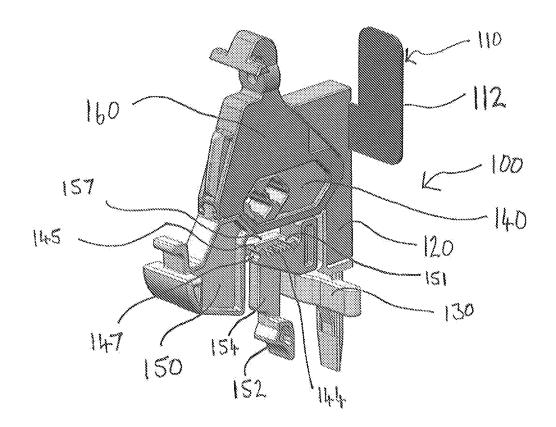
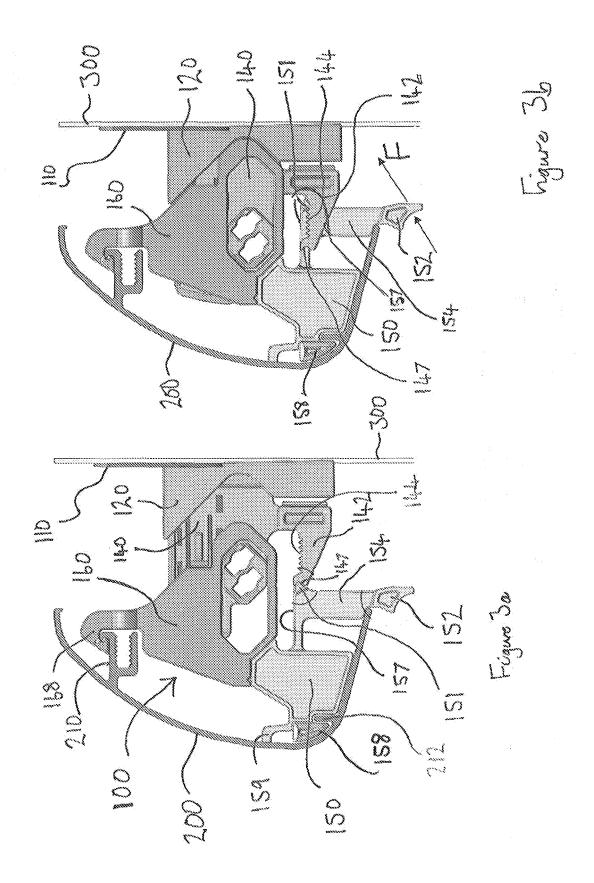
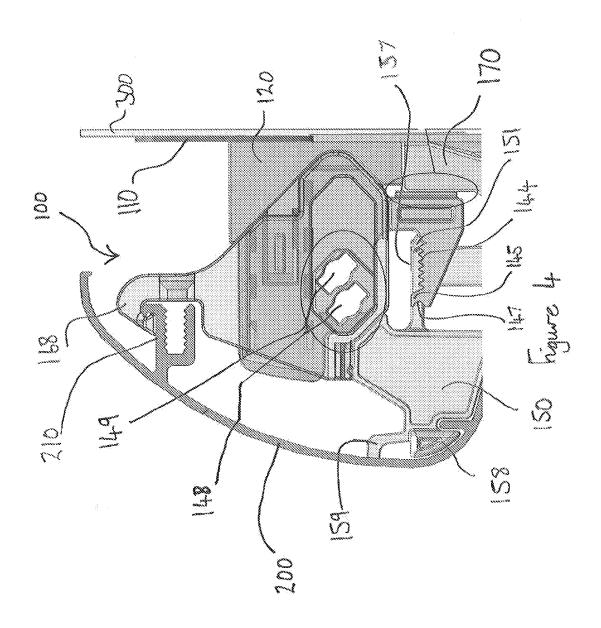


Figure 1







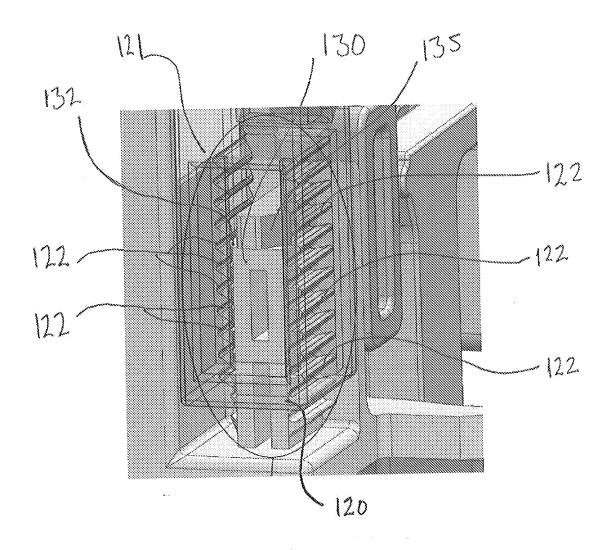
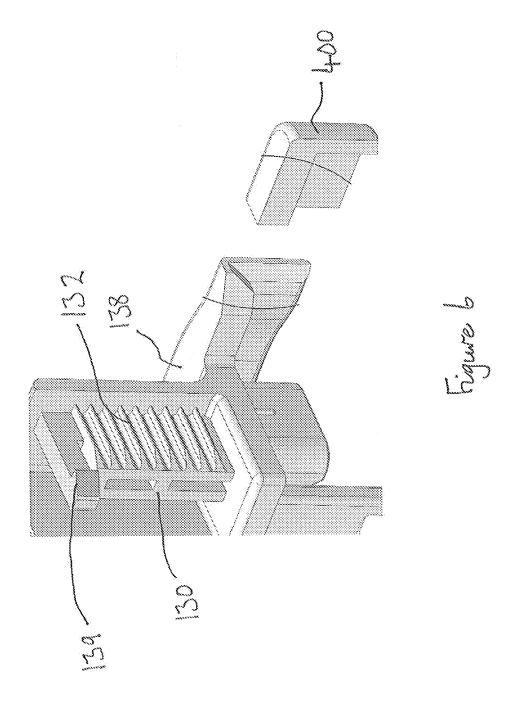
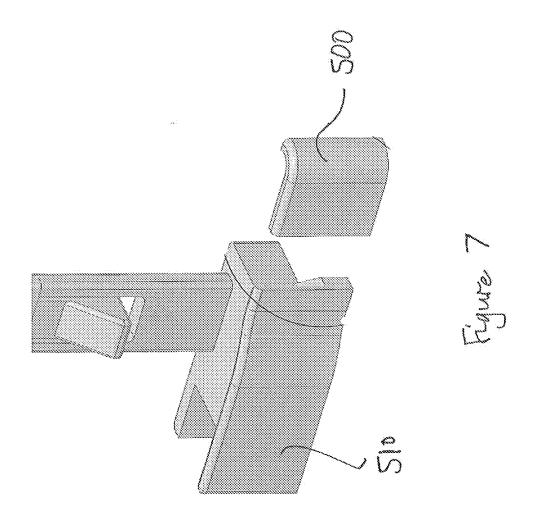
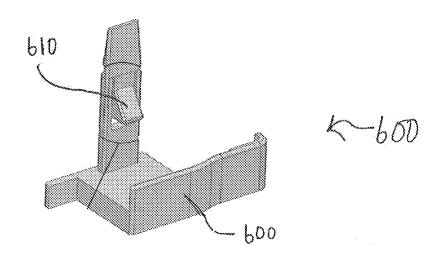


Figure 5







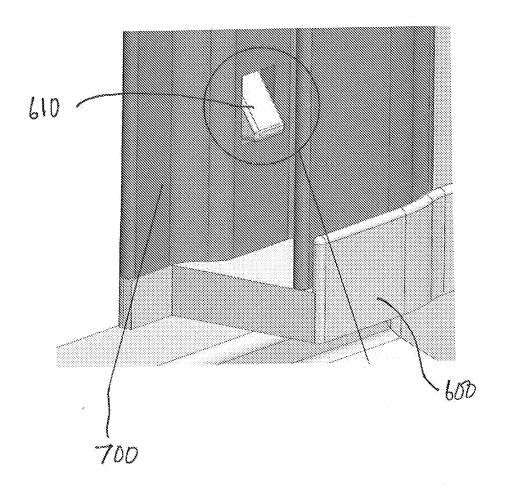


Figure 9

