

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
13.06.2018 Bulletin 2018/24

(51) Int Cl.:
E04D 13/035 (2006.01)

(21) Application number: **17206051.9**

(22) Date of filing: 07.12.2017

(84) Designated Contracting States:
**AL 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 RS SE SI SK SM TR**
 Designated Extension States:
BA ME
 Designated Validation States:
MA MD TN

(30) Priority: 07.12.2016 GB 201620817

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(54) **A ROOF WINDOW COMPRISING A COVER MEMBER**

(57) A roof window comprising a frame and a sash, the roof window further comprising an elongate sash cover member having two longitudinal edge portions and two lateral edge portions, the elongate sash cover member being adaptable to cover at least part of the exterior surface of a side member of the sash and/or frame, the sash comprising a cover member retaining means having

means for releasably locating and retaining at least part of one lateral edge portion of the elongate sash cover member, the cover member retaining means being disposed proximal the sash at a location where an upper lateral edge portion of the elongate sash cover member is located in a mounted position.

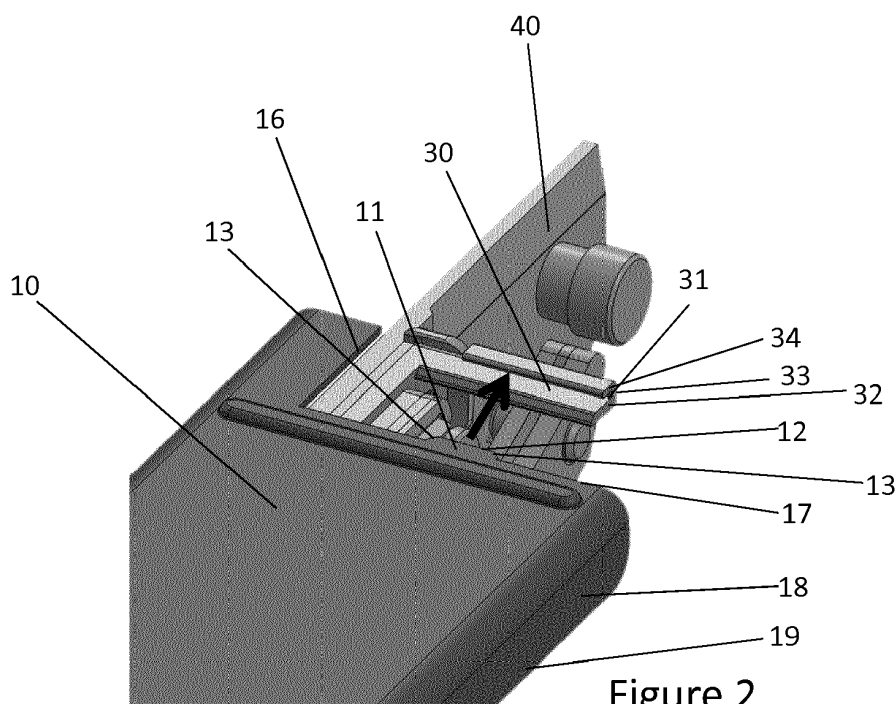


Figure 2

Description

[0001] The present invention relates to roof windows, and in particular to roof windows comprising a cover member for covering at least part of the exterior facing surface of the main roof window structure.

[0002] In known windows, and in particular roof windows comprising a frame and a sash mounted within the frame, cover members are often screwed onto the exterior facing surfaces of the window, e.g. the exterior faces of the frame and sash, so as to protect the underlying window structure from exposure to the elements, and to prevent/reduce the ingress of water into the building via the roof window structure. While generally effective as a method of fastening, the use of screw fasteners to attach the cover member to the roof window has been found to be generally undesirable due to the screws which remain visible on the outside surface of the covering members. Furthermore, deformation occurs on the covering members as a result of creating apertures in the covering members for receiving screws. There is also the issue of time taken to attach the cover member to the window structure and remove it for maintenance. In addition, the use of screw fasteners requires that an aperture is formed in the cover member for receiving the screw fasteners, and that the screw fasteners penetrate into the window structure. This provides a route for water ingress through the aperture in the cover member and into the window structure, which can lead to the deterioration of the window structure, particularly if the frame and sash are constructed from wood based materials. Furthermore, the screw fasteners can act as a thermal bridge between the window structure and the cover members, thereby negatively affecting the thermally insulative properties of the window.

[0003] There have been attempts to reduce the use of penetrating screw fasteners. In particular, one known arrangement described in European Patent No. 1 355 016 B1 in the name of Roto Frank AG provides a cover member which is attached to a sash frame using an under-grip connection member. The under-grip connection member comprises an engaging element riveted to the cover plate and extending downwardly therefrom and a counter engagement element attached to the window sash. The engaging element has an enlarged head portion and a constricted centre portion. The counter engagement element includes a C-rail with end sections designed to receive and engage the centre constricted portion. The under-grip connection member acts to grip the cover plate from below and prevent it from being lifted off from the window casement, but still allows for the longitudinal movement of the cover member such that the engaging element can be slid into and out of engagement with the counter engagement element. Another known arrangement described in European Patent No. 2 748 388 B1 in the name of VKR Holding A/S provides a male part in the form of two downwardly depending barbed prongs attached to the cover member. The male part is

adapted to form a snap-lock engagement with a corresponding female part attached to the window structure.

[0004] While the above existing devices have achieved some success in reducing the requirement of penetrating screw fasteners to connect the cover member to the window structure, they require the provision of additional components to be attached to both the window structure and the cover member. These additional components require additional manufacturing steps and increase the total cost for the window. Furthermore, the prior devices require the precise alignment of engagement elements which are obscured from the view of the window installer by the presence of the cover member. The window installer has to attempt to align the engagement components effectively blindly, which complicates the installation process and increases the installation time.

[0005] It is an object of the present invention to obviate and/or mitigate the problems of penetrating screw fasteners used for attaching cover members to roof window structures.

[0006] It is a further object of the present invention to obviate and/or mitigate the problems of complicated/expensive manufacture in existing cover member attachment systems for roof windows.

[0007] It is yet a further object of the present invention to obviate and/or mitigate the problems of complicated/time consuming installation of existing cover member attachment systems for roof windows.

[0008] Accordingly, the present invention provides a roof window comprising a frame and a sash, the frame having a top member, a bottom member and two side members extending between the top and bottom member defining a quadrangular frame having an opening for receiving the sash, the sash having a top member, a bottom member and two side members extending between the top and bottom member defining a quadrangular sash frame having an opening for receiving a pane of glass, the roof window further comprising an elongate sash cover member having two longitudinal edge portions and two lateral edge portions, the elongate sash cover member being adaptable to cover at least part of the exterior surface of a side member of the sash and/or frame, the sash comprising a cover member retaining means having means for releasably locating and retaining at least part of one lateral edge portion of the elongate sash cover member, the cover member retaining means being disposed proximal the sash at a location where an upper lateral edge portion of the elongate sash cover member is located in a mounted position, at least part of the other end of the elongate sash cover member being releasably fixed relative to the sash at the other end thereof so that the elongate sash cover member has at least part of the upper lateral edge portion slidably inserted into the means for releasably locating and retaining that part of the upper lateral edge portion.

[0009] Although the term elongate sash cover member is used it will of course be appreciated that this elongate sash cover member will also cover a part of the frame

coextensive with the part of the sash that this elongate sash cover member covers.

[0010] Ideally, the means for releasably locating and retaining at least part of the upper lateral edge portion of the elongate sash cover member is located proximal to the hinge.

[0011] Preferably, the means for releasably locating and retaining at least part of the upper lateral edge portion of the elongate sash cover member comprises a first stop means extending in a direction out of the main plane of the exterior top surface of the sash side member.

[0012] Ideally, the means for releasably locating and retaining at least part of the upper lateral edge portion of the elongate sash cover member comprises the first stop means extending in a direction upwardly from the main plane of the exterior top surface of the sash side member and most preferably perpendicular from this main plane.

[0013] Ideally, the first stop means acts as a physical stop preventing at least part of the upper lateral edge portion of the elongate sash cover member and therefore the elongate sash cover member from moving any further in a direction longitudinally along, and most preferably towards the top of the sash when the upper lateral edge of the elongate sash cover member abuts the first stop means.

[0014] Preferably, the first stop means acts as a physical stop preventing at least part of the upper lateral edge portion of the elongate sash cover member and therefore the elongate sash cover member from moving any further in a direction longitudinally along and most preferably towards the top of the sash in a plane parallel to the main plane of the exterior top surface of the sash side member when the upper lateral edge of the elongate sash cover member abuts the first stop means.

[0015] Preferably, the first stop means locates the longitudinal position of the elongate sash cover member relative to the sash side member by providing a physical stop for at least part of the upper lateral edge of the elongate sash cover member.

[0016] Ideally, the means for releasably locating and retaining at least part of the upper lateral edge portion of the elongate sash cover member comprises a second stop means extending in a direction capable of abutting the exterior top surface of the upper lateral edge portion of the elongate sash cover member.

[0017] Preferably, the means for releasably locating and retaining at least part of the upper lateral edge portion of the elongate sash cover member comprises the second stop means extending parallel to the main plane of the exterior top surface of the sash side member.

[0018] Preferably, the second stop means determines the distance the upper lateral edge portion of the elongate sash cover member can move away from the main plane of the exterior top surface of the sash side member by providing a physical stop acting against the exterior top surface of the upper lateral edge portion of the elongate sash cover member. Advantageously, this prevents wind lifting or twisting the upper lateral edge portion of the

elongate sash cover member away from the sash under windy conditions.

[0019] Ideally, the means for releasably locating and retaining at least part of the upper lateral edge portion of the elongate sash cover member comprises a third stop means extending in a direction capable of abutting the interior underside surface of the upper lateral edge portion of the elongate sash cover member.

[0020] Preferably, the means for releasably locating and retaining at least part of the upper lateral edge portion of the elongate sash cover member comprises the third stop means extending parallel to the main plane of the interior underside surface of the elongate sash cover member in the mounted position.

[0021] Preferably, the third stop means provides a bed for the interior underside surface of the upper lateral edge portion of the elongate sash cover member by providing a physical stop acting against the interior underside surface of the upper lateral edge portion of the elongate sash cover member. Advantageously, this third stop provides support for the underside surface of the upper lateral edge portion of the elongate sash cover member in its mounted position.

[0022] Ideally, the means for releasably locating and retaining at least part of the upper lateral edge portion of the elongate sash cover member defines a female locating and retaining means formed for slidably receiving at least part of the upper lateral edge portion of the elongate sash cover member.

[0023] Ideally, the stop means defines a female locating and retaining means formed for slidably receiving at least part of the upper lateral edge portion of the elongate sash cover member.

[0024] Preferably, the first, second and third stop means defines a female locating and retaining means formed for slidably receiving at least part of the upper lateral edge portion of the elongate sash cover member.

[0025] Ideally, the female locating and retaining means formed for slidably receiving at least part of the upper lateral edge portion of the elongate sash cover member comprises an elongate channel opening towards the top or bottom member, most preferably the bottom member of the sash.

[0026] Preferably, the elongate channel is in alignment with the upper lateral edge portion of the elongate sash cover member when the elongate sash cover member is mounted on the sash side member.

[0027] Ideally, the frame side members also have elongate frame cover members which extend along a part of the frame members not covered by the elongate sash cover members. Again, although the term elongate frame cover member is used it will of course be appreciated that this elongate frame cover member will also cover a part of the sash coextensive with the part of the frame that this elongate frame cover member covers.

[0028] Ideally, a part of one end portion of the elongate frame cover member overlaps the lateral edge portion of the elongate sash cover member and the means for re-

leasably locating and retaining at least part of the upper lateral edge portion of the elongate sash cover member, the overlap being a sufficient distance so as to hide the releasable locating and retaining means when the sash is in a closed position.

[0029] Preferably, a part of the lower end portion of the elongate frame cover member overlaps the lateral edge portion of the elongate sash cover member and the means for releasably locating and retaining at least part of the upper lateral edge portion of the elongate sash cover member by a distance in the range of 5 mm to 15 mm and most preferably in the range of 9 mm to 12 mm when the sash is in a closed position.

[0030] Advantageously, this means that the elongate sash cover member has no visible mechanical coupling means for coupling it to the sash when the sash is in a closed position. This dramatically improves the aesthetic appearance of the roof window in the closed position as a person's eye is normally drawn to these discrepancies as a result of the light reflecting from them in a non-uniform way.

[0031] Ideally, the releasable locating and retaining means is cast from a metal or metal alloy material, most preferably steel. Advantageously, this allows the material to be formed and also allows the tight dimensional tolerances available to work with in this area of the roof window to be achieved.

[0032] Ideally, the releasable locating and retaining means is formed from material having a thickness in the range of 1 mm to 2 mm, most preferably 1.5 mm.

[0033] Advantageously, the present invention provides an elongate sash cover member with an upper lateral edge portion that is slidably inserted into a means for releasably locating and retaining at least part of the upper lateral edge portion of the elongate sash cover member on the sash. This slidable engagement holds the elongate sash cover member in engagement with the sash, thereby preventing the elongate sash cover member from being lifted upwards and away from the sash via wind for example. The sliding engagement further allows slidable movement of the elongate sash cover member in one direction such that it can be removed for maintenance i.e., backwards in the direction opposite to which the elongate sash cover member was slid into engagement with the releasable locating and retaining means. The releasable locating and retaining means retains the elongate sash cover member in position on the sash without requiring screw fasteners to penetrate into the window structure providing a non-visible connection between the sash and the elongate sash cover member at the upper end and along the length of the elongate sash cover member.

[0034] In addition, the upper lateral edge portion of the elongate sash cover member and the releasable locating and retaining means is visible to the window installer during installation. In use, the window installer can simply align the upper lateral edge portion of the elongate sash cover member with the elongate channel of the releasa-

ble locating and retaining means and slide the upper lateral edge of the elongate sash cover member into the elongate channel to secure the cover in place.

[0035] Preferably, the sliding engagement between the elongate sash cover member and the elongate channel is a non-clip and/or non-snap-lock and/or non-biased engagement. Advantageously, the elongate sash cover member can simply be slid into sliding engagement with the elongate channel, and does not require a complicated fastening arrangement.

[0036] Ideally, the upper lateral edge portion of the elongate sash cover member and the releasable locating and retaining means has a means for preventing lateral movement of the upper lateral edge portion of the elongate sash cover member.

[0037] Preferably, the upper lateral edge portion of the elongate sash cover member has a projecting tab for preventing lateral movement of the upper lateral edge portion of the elongate sash cover member relative to the releasable locating and retaining means.

[0038] Ideally, the releasable locating and retaining means has a recess or aperture for receiving the projecting tab for preventing lateral movement of the upper lateral edge portion of the elongate sash cover member relative to the releasable locating and retaining means.

[0039] Preferably, the first stop means defines the recess or aperture for receiving the projecting tab for preventing lateral movement of the upper lateral edge portion of the elongate sash cover member.

[0040] Advantageously, this lateral movement preventing means ensures that the elongate sash cover member has its movement completely restricted under windy weather conditions when it is located in place in the releasable locating and retaining means.

[0041] Ideally, the elongate sash cover member comprises a top sheet member having an exterior and interior facing surface, the projecting tab being parallel to the main plane of the top sheet member.

[0042] Preferably, the elongate cover member has a material thickness in the range of 0.7 mm to 1.3 mm, and is most preferably 1 mm.

[0043] Ideally, the elongate cover member is manufactured from aluminium or zinc or copper or a composite material.

[0044] Preferably, the projecting tab is substantially planar.

[0045] Ideally, the projecting tab and the top sheet member being co-planar. Advantageously, the projecting tab is not downwardly or upwardly off-set from the top sheet of the elongate sash cover member, but instead extends from the cover member in the same plane as the top sheet member.

[0046] Preferably, the elongate sash cover member further comprises side sheet members connected to or integrally formed with the top sheet members. By "integrally formed" as referred to above and in the forgoing, we mean that the object is designed as an integral component of the object to which it is attached/part of. In this

case, we mean that the side sheet members are designed as an integral component with the top sheet member. Advantageously, having the side sheet members of the elongate sash cover member integrally formed with the top sheet member means that the elongate sash cover member can be manufactured as a single integral structure.

[0047] Ideally, the side sheet members and top sheet member of the elongate sash cover member form a single, unitary, structure. In other words, the side sheet members and top sheet members of the elongate sash cover member are homogenous, and can be formed from a single piece of material such as metal.

[0048] Preferably, the side sheet members are downwardly directed flanges.

[0049] Ideally, the elongate sash and/or frame cover member has a generally C-shaped cross-section.

[0050] Preferably, the side sheet members and top sheet members of the elongate sash cover member are substantially planar surfaces.

[0051] Preferably, the upper lateral edge portion is an L-shaped upper lateral edge portion, the projecting tab extending from the base of the L-shape. Advantageously, the L-shaped upper edge lateral portion of the elongate sash cover member provides for more effective draining of precipitation away from the sash structure. It also provides for a greater overlap between the sash cover member and the frame cover member.

[0052] Preferably, the projecting tab comprises a leading edge portion.

[0053] Ideally, the projecting tab comprising tapered side edges, the side edges tapering to the leading edge portion. Advantageously, the leading edge portion enables the projecting tab to be inserted into the recess or aperture with relative ease.

[0054] Preferably, the cover member retaining means being locatable on the sash at a position which enables the elongate sash cover member to sit in its final position when slid into the cover member retaining means.

[0055] Preferably, the releasable locating and retaining means comprises an elongate slot formed by a channel section sized to receive at least part of the lateral edge of the elongate sash cover member.

[0056] Ideally, at least part of the lateral edge of the elongate sash cover member is adapted for sliding engagement with elongate slot of the channel section.

[0057] Preferably, the channel section and elongate slot extends laterally for a length which corresponds to a substantial part of the width of the lateral edge of the elongate sash cover member. Advantageously, this means that the likelihood of the upper edge of the elongate sash cover member twisting in windy conditions is reduced.

[0058] Ideally, the channel section and elongate slot extends laterally for a length which corresponds in a range of 20% to 80% of the width of the lateral edge of the elongate sash cover member, and most preferably in the range of 25% to 40%.

[0059] Preferably, the channel section and elongate slot extends laterally for a length in a range of 10 mm to 25 mm.

5 **[0060]** Ideally, the length of the lateral edge is in a range of 30 mm to 60 mm, most preferably 40 mm to 50 mm.

[0061] Preferably, the third stop means provides the bottom channel member of the elongate channel of the releasable locating and retaining means.

10 **[0062]** Ideally, the exterior top surface of the sash members defines a sash plane and the third stop means extends away from the side sash member in a plane parallel to and optionally most preferably in alignment with the main sash plane.

15 **[0063]** Preferably, the bottom channel member of the elongate channel extends away from the side sash member in a plane parallel to and optionally most preferably in alignment with the main sash plane.

[0064] Preferably, the first stop means provides the upstanding channel member of the elongate channel of the releasable locating and retaining means.

20 **[0065]** Ideally, the first stop means extends out of the main plane of the bottom channel member away from the third stop means in an upward direction and optionally most preferably perpendicular to the main sash plane.

25 **[0066]** Preferably, the upstanding channel member extends out of the main plane of the bottom channel member in an upward direction and optionally most preferably perpendicular to the main sash plane.

30 **[0067]** Ideally, the first stop means/upstanding channel member extends a distance just slightly greater than the thickness of the material of the elongate sash cover member.

35 **[0068]** Ideally, the first stop means/upstanding channel member extends a distance in a range of 0.8 mm to 1.4 mm.

[0069] Preferably, the second stop means provides the top channel member of the elongate channel of the releasable locating and retaining means.

40 **[0070]** Ideally, the second stop means extends in a plane parallel to the third stop means and/or the main sash plane.

[0071] Preferably, the top channel member of the elongate channel extends in a plane parallel to the third stop means and/or the main sash plane.

45 **[0072]** Preferably, the top channel member/second stop means extends a distance less than the distance between the lateral edge portion the elongate sash cover member and a rain barrier on the elongate sash cover member when the elongate sash cover member is located in a final position.

[0073] Ideally, at least part of the lateral edge portion of the elongate sash cover member is sandwiched between the second stop means/top channel member and the third stop means bottom channel member. Advantageously, this limits the rotational movement of the elongate sash cover member, thereby making it harder for the elongate sash cover member to be accidentally dis-

lodged from the releasable locating and retaining means under windy condition or when it is accidentally or otherwise knocked or engaged during use or maintenance.

[0074] Preferably, the sash is pivotally engaged with the frame.

[0075] In one arrangement, the sash is pivotally engaged with the frame at an engagement point in a top portion of the frame. In this arrangement, the window is a top-hung window. In another arrangement, the sash is pivotally engaged with the frame at an engagement point in a centre portion of the frame. In this arrangement, the window is a centre-hung window.

[0076] Ideally, the sash is pivotally engaged with the frame by a pivot hinge.

[0077] Preferably, the pivot hinge comprising a sash hinge component attachable to the sash, and a frame hinge component attachable to the frame, the sash hinge component being adaptable to hingedly engage with the frame hinge component.

[0078] Ideally, the elongate sash cover member retaining means is mounted on the sash hinge component.

[0079] Preferably, the releasable locating and retaining means is mounted on the sash hinge component.

[0080] Ideally, the elongate sash cover member retaining means/releasable locating and retaining means is integrally formed with the sash hinge component. Advantageously, the elongate sash cover member retaining means/releasable locating and retaining means and the sash hinge component can be manufactured as a single, integral structure. This simple design facilitates manufacture of the sash hinge component as an integral component, and does not require the assembly or fabrication of component parts. The elongate sash cover member retaining means/releasable locating and retaining means does not need to be riveted or otherwise separately connected or attached to the sash hinge component during the manufacturing process or during window installation.

[0081] Ideally, the roof window further comprising an elongate sash cover member end cap adaptable to cover at least an end portion of the elongate sash cover member, and a sash frame end cap adaptable to cover at least a corresponding portion of the sash, the elongate sash cover member end cap being adaptable to attach to the sash end cap.

[0082] Preferably, the elongate sash cover member end cap and the cover member retaining means/releasable locating and retaining means are disposed on opposed end portions of the elongate sash cover member when the elongate sash cover member is mounted on the roof window.

[0083] Ideally, the projecting tab extends from the upper lateral edge portion of the elongate sash cover member, the other edge portion being covered by the elongate sash cover member end cap, the elongate sash cover member being adaptable to attach to a sash end cap positioned on the sash. Advantageously, the elongate sash cover member end cap enables the free end of the elongate sash cover member to be attached to the sash

to hold the elongate sash cover member securely in place.

[0084] Ideally, the elongate sash cover member end cap being adaptable to be releasably attached to the sash end cap positioned on the window structure. Advantageously, the elongate sash cover member end cap can be held in releasable attachment with the sash. During use, the elongate sash cover member end cap helps to securely hold the elongate sash cover member in place, but can be removed to enable maintenance on the elongate sash cover member/sash.

[0085] Preferably, the elongate sash cover member end cap being adaptable to be releasably attached to the sash end cap using fastening means.

[0086] More ideally, the fastening means being a threaded screw fastener. Advantageously, the elongate sash cover member end cap can be attached to the sash end cap using a simple threaded screw fastener. As the sash is provided with a sash end cap, the threaded screw fastener does not have to penetrate through the window structure itself, and thus maintains the integrity of the window structure.

[0087] Ideally, the elongate sash cover member end cap and the sash end cap defining recesses sized to receive the fastening means, the elongate sash cover member being adapted to be fastened to the sash end cap by the fastening means extending between the recess in the elongate sash cover member end cap and the recess in the sash end cap. Advantageously, the elongate sash cover member end cap and the sash end cap can be manufactured with recesses to receive the fastening means. A window installer does not have to force the fastening means through the material of the end caps or use a tool, such as a drill, to form appropriate through-apertures.

[0088] Ideally, the recesses to receive a fastening means comprise a through bore on the elongate sash cover member end cap and a channel for receiving a fastening means on the sash end cap such that a fastening means can be inserted through the through bore of the elongate sash cover member end cap and into the channel of the sash end cap for fastening the elongate sash cover member end cap and sash end cap together.

[0089] Preferably, the fastening means extends in the longitudinal direction of the elongate sash cover member and is spaced below the surface of the elongate sash cover member.

[0090] In another embodiment, the recesses to receive a fastening means comprise a through bore on the sash end cap and a channel for receiving a fastening means on the elongate sash cover member end cap such that a fastening means can be inserted through the through bore of the sash end cap and into the channel of the elongate sash cover member end cap for fastening the sash end cap and the elongate sash cover member end cap together.

[0091] Preferably, the fastening means extends in a direction perpendicular to the longitudinal direction of the

elongate sash cover member and is spaced below the surface of the elongate sash cover member.

[0092] Advantageously, the fastening means inserted in this way are not visible when the sash is in the closed position further improving the aesthetic appearance of the elongate sash cover members.

[0093] Ideally, the sash comprising a top member, bottom member, and side members, the sash end cap being positioned over an end portion of one or both of the side members of the sash.

[0094] Ideally, the elongate sash cover member is connected to the sash such that the elongate sash cover member moves with the sash as the sash pivots relative to the frame between closed and open positions.

[0095] Ideally, the elongate sash cover member is partially received under the elongate frame cover member when the window is in the closed position. Advantageously, when the window is closed, the elongate frame cover member and elongate sash cover member form a water resistant barrier.

[0096] Accordingly, the present invention provides a hinge for a roof window, the hinge comprising an elongate sash cover member retaining means having means for releasably locating and retaining at least part of one lateral edge portion of an elongate sash cover member, the elongate sash cover member retaining means being disposed on the hinge at a location where an upper lateral edge portion of the elongate sash cover member is located in a mounted position.

[0097] Ideally, the means for releasably locating and retaining a part of the upper lateral edge portion of the elongate sash cover member has a means for slidably receiving at least part of the upper lateral edge portion of the elongate sash cover member.

[0098] Preferably, at least part of the other end of the elongate sash cover member being releasably fixed relative to a sash at the other end thereof so that the elongate sash cover member has at least part of the upper lateral edge portion slidably inserted into the means for releasably locating and retaining that part of the upper lateral edge portion.

[0099] Ideally, the hinge comprises a frame mounted component and a sash mounted component, wherein the elongate sash cover member retaining means is provided on the sash mounted component.

[0100] Preferably, the frame mounted component and the sash mounted component are pivotally coupled to allow the sash to pivot relative to the frame between closed and open positions.

[0101] Preferably, the means for releasably locating and retaining at least part of the upper lateral edge portion of the elongate sash cover member comprises a first stop means extending in a direction out of the main plane of the exterior top surface of the sash side member.

[0102] Ideally, the means for releasably locating and retaining at least part of the upper lateral edge portion of the elongate sash cover member comprises the first stop means extending in a direction upwardly from the main

plane of the exterior top surface of the sash side member and most preferably perpendicular from this main plane.

[0103] Ideally, the first stop means acts as a physical stop preventing at least part of the upper lateral edge portion of the elongate sash cover member and therefore the elongate sash cover member from moving any further in a direction longitudinally along, and most preferably towards the top of the sash when the upper lateral edge of the elongate sash cover member abuts the first stop means.

[0104] Preferably, the first stop means acts as a physical stop preventing at least part of the upper lateral edge portion of the elongate sash cover member and therefore the elongate sash cover member from moving any further in a direction longitudinally along and most preferably towards the top of the sash in a plane parallel to the main plane of the exterior top surface of the sash side member when the upper lateral edge of the elongate sash cover member abuts the first stop means.

[0105] Preferably, the first stop means locates the longitudinal position of the elongate sash cover member relative to the sash side member by providing a physical stop for at least part of the upper lateral edge of the elongate sash cover member.

[0106] Ideally, the means for releasably locating and retaining at least part of the upper lateral edge portion of the elongate sash cover member comprises a second stop means extending in a direction capable of abutting the exterior top surface of the upper lateral edge portion of the elongate sash cover member.

[0107] Preferably, the means for releasably locating and retaining at least part of the upper lateral edge portion of the elongate sash cover member comprises the second stop means extending parallel to the main plane of the exterior top surface of the sash side member.

[0108] Preferably, the second stop means determines the distance the upper lateral edge portion of the elongate sash cover member can move away from the main plane of the exterior top surface of the sash side member by providing a physical stop acting against the exterior top surface of the upper lateral edge portion of the elongate sash cover member. Advantageously, this prevents wind lifting or twisting the upper lateral edge portion of the elongate sash cover member away from the sash under windy conditions.

[0109] Ideally, the means for releasably locating and retaining at least part of the upper lateral edge portion of the elongate sash cover member comprises a third stop means extending in a direction capable of abutting the interior underside surface of the upper lateral edge portion of the elongate sash cover member.

[0110] Preferably, the means for releasably locating and retaining at least part of the upper lateral edge portion of the elongate sash cover member comprises the third stop means extending parallel to the main plane of the interior underside surface of the elongate sash cover member in the mounted position.

[0111] Preferably, the third stop means provides a bed

for the interior underside surface of the upper lateral edge portion of the elongate sash cover member by providing a physical stop acting against the interior underside surface of the upper lateral edge portion of the elongate sash cover member. Advantageously, this third stop provides support for the underside surface of the upper lateral edge portion of the elongate sash cover member in its mounted position.

[0112] Ideally, the means for releasably locating and retaining at least part of the upper lateral edge portion of the elongate sash cover member defines a female locating and retaining means formed for slidably receiving at least part of the upper lateral edge portion of the elongate sash cover member.

[0113] Ideally, the stop means defines a female locating and retaining means formed for slidably receiving at least part of the upper lateral edge portion of the elongate sash cover member.

[0114] Preferably, the first, second and third stop means defines a female locating and retaining means formed for slidably receiving at least part of the upper lateral edge portion of the elongate sash cover member.

[0115] Ideally, the female locating and retaining means formed for slidably receiving at least part of the upper lateral edge portion of the elongate sash cover member comprises an elongate channel opening towards the top or bottom member, most preferably the bottom member of the sash.

[0116] Preferably, the elongate channel is in alignment with the upper lateral edge portion of the elongate sash cover member when the elongate sash cover member is mounted on the sash side member.

[0117] Accordingly, the present invention provides a method for assembling a roof window, the method comprising:

providing a frame and a sash, the frame having a top member, a bottom member and two side members extending between the top and bottom member defining a quadrangular frame having an opening for receiving the sash, the sash having a top member, a bottom member and two side members extending between the top and bottom member defining a quadrangular sash frame having an opening for receiving a pane of glass;

providing an elongate sash cover member having two longitudinal edge portions and two lateral edge portions, the elongate sash cover member being adaptable to cover at least part of the exterior surface of a side member of the sash and/or frame, the sash comprising a cover member retaining means having means for releasably locating and retaining at least part of the lateral edge portion of the elongate sash cover member, the cover member retaining means being disposed proximal the sash at a location where an upper lateral edge portion of an elongate sash cover member is located in a mounted position; and releasably fixing at least part of the other end of the

elongate sash cover member to the sash at the other end thereof so that the elongate sash cover member has at least part of an upper lateral edge portion slidably inserted into the means for releasably locating and retaining that part of the upper lateral edge portion.

Ideally, the method further comprising: providing an elongate sash cover member end cap adaptable to cover at least an end portion of the elongate sash cover member, and a sash frame end cap adaptable to cover at least a corresponding portion of the sash; and attaching the elongate sash cover member end cap to the sash frame end cap.

[0118] Preferably, connecting the elongate sash cover member end cap to the sash frame end cap comprises inserting a fastening means through the elongate sash cover member end cap and into the sash frame end cap. Alternatively, connecting the elongate sash cover member end cap to the sash frame end cap comprises inserting a fastening means through the sash frame end cap and into the elongate sash cover member end cap.

[0119] The skilled man will appreciate that the roof window referred to in the above method(s) can include can include any or all of the features of the windows discussed previously.

[0120] The skilled man will also appreciate that all preferred or optional features of the invention described with reference to only some aspects or embodiments of the invention may be applied to all aspects of the invention.

[0121] It will be appreciated that optional features applicable to one aspect of the invention can be used in any combination, and in any number. Moreover, they can also be used with any of the other aspects of the invention in any combination and in any number. This includes, but is not limited to, the dependent claims from any claim being used as dependent claims for any other claim in the claims of this application.

[0122] The invention will now be described with reference to the accompanying drawings which shows by way of example only one embodiment of an apparatus in accordance with the invention.

[0123] In the drawings:

Figure 1 is a perspective view of a roof window comprising a sash, frame and cover members;

Figure 2 is a partial perspective view of an elongate sash cover member according to illustrated arrangements of the present invention;

Figure 3 is a partial top view of an elongate sash cover member according to illustrated arrangements of the present invention;

Figure 4 is a perspective view of a cover member retaining means extending outwardly from a sash hinge component according to illustrated arrangements of the present invention;

Figure 5 is a front elevation view of the cover member retaining means in Figure 4;

Figure 6 is a top view of the cover member retaining means in Figure 4;

Figure 7 is side elevation view of the cover member retaining means in Figure 4;

Figure 8 is a partial perspective view of an elongate sash cover member end cap connected to a sash frame end cap according to illustrated arrangements of the present invention;

Figure 9 is a partial exploded view of an elongate cover member end cap and a sash frame end cap according to illustrated arrangements of the present invention;

Figure 10 is a perspective view of a sash frame end cap according to illustrated arrangements of the present invention;

Figure 11 is a partial exploded view of a roof window with a sash frame cover member, an elongate cover member end cap and a sash frame end cap according to illustrated arrangements of the present invention;

Figure 12 is a partial underside perspective view of a sash frame with a cover member, an elongate cover member end cap and a sash frame end cap according to illustrated arrangements of the present invention;

Figure 13 is a partial exploded view of the underside of an elongate cover member with an elongate cover member end cap according to illustrated arrangements of the present invention; and,

Figure 14 is a partial perspective view of a sash frame end cap according to illustrated arrangements of the present invention.

[0124] In Figure 1, there is shown a roof window indicated generally by the reference numeral 1 comprising a frame 2 and a sash 3 received in the frame 2. The frame 2 comprises a top member 2a, bottom member 2b, and two side members 2c, 2d extending between the top member 2a and the bottom member 2b defining a quadrangular frame 2. The quadrangular frame 2 has an opening 2f sized to receive the sash 3. The sash 3 comprises a top member 3a, bottom member 3b and side members 3c, 3d extending between the top member 3a and bottom member 3b and defines a quadrangular sash 3. The quadrangular sash 3 has an opening 3f sized to receive a pane of glass. The roof window 1 is a centre-hung roof window 1 where the sash 3 is pivotally received in the frame 2 by two hinge components (not shown in Figure 1) positioned at or about the centre of the window 1. The sash 3 is shown in an open position where a ventilation passage is provided through the roof window 1 and into the building structure via the quadrangular opening 2f in the frame 2. The sash 3 is moveable between this and, optionally, other open positions to a closed position where the ventilation passage is sealed. Other arrangements such as where the roof window 1 is a top-hung roof window 1 with the sash 3 pivotally hinged to the frame 2 at or about the top of the roof window 1 are within

the scope of the present invention. Other roof window structures not expressly discussed above are also included within the scope of the present invention. Although the present invention is particularly suited to roof windows, other arrangements and locations of windows are also included within the scope of the present invention.

[0125] At least part of the exterior surface of the frame 2 and/or sash 3 of the roof window 1 is covered with cover members 4, 5a, 5b, 6, 10a and 10b. As will be understood, "exterior surface" refers to the exterior faces of the frame 2 and/or sash 3 which face the outside, rather than the interior surface which refers to the interior faces of the frame 2 and/or sash 3 which face inside the building to which the roof window 1 is attached. The cover members 4, 5a, 5b, 6, 10a and 10b protect the frame 2 and/or sash 3 from exposure to the elements, and prevent/reduce the ingress of water into the building via the frame 2 and/or sash 3. The particular arrangement in Figure 1 includes a hood 4 to cover the top member 2a of the frame 2 and also the top member 3a of the sash 3 when the sash 3 is in the closed position. In addition, upper cover members 5a, 5b are provided to cover the upper region (i.e. the region above the hinge component) of the side members 2c, 2d of the frame 2, and also the upper region of the side members 3c, 3d of the sash 3 when the sash 3 is in the closed position. The upper cover members 5a, 5b are also known as frame striking bead coverings 5a, 5b. Further, elongate sash cover members 10a, 10b are provided to cover the lower region of the side members 3c, 3b of the sash 3, and also the lower region of the side members 2c, 2d of the frame 2 when the sash 3 is in the closed position. The elongate sash cover members 10a, 10b are also known as sash striking bead coverings. In further addition, bottom cover member 3b is provided to cover the bottom member 3b of the sash 3, and also the bottom member 2b of the frame 2 when the sash 3 is in the closed position. Other arrangements of cover members, such as including some of the cover members referred to above or extra cover members not expressly mentioned above are also included within the scope of the present invention.

[0126] Referring to Figure 2 and 3 there is shown an elongate sash cover member 10 in accordance with the present invention. Although the term elongate sash cover member is used, it will of course be appreciated that this elongate sash cover member 10 will also cover a part of the frame 2 coextensive with the part of the sash 2 that this elongate sash cover member 10 covers. The elongate sash cover member 10 has two longitudinal edge portions 19 and two lateral edge portions 17. Figure 2 further shows the sash 3 comprising a cover member retaining arrangement 30 having an arrangement 31, 32, 33, 34, 35 for releasably locating and retaining at least part of the lateral edge portion 17 of the elongate sash cover member 10. The cover member retaining arrangement 30 is disposed proximal the sash 3 at a location where an upper lateral edge portion 17 of the elongate sash cover member 10 is located in a mounted position.

At least part of the other end of the elongate sash cover member 10 is releasably fixed relative to the sash 3 at the other end thereof, described in greater detail below, so that the elongate sash cover member 10 has at least the upper lateral edge portion 17 slidably inserted into the arrangement 31, 32, 33, 34, 35 for releasably locating and retaining that part of the upper lateral edge portion 17 of the elongate sash cover member 10.

[0127] The frame side members 2c, 2d also have elongate frame cover members 5a, 5b which extend along a part of the frame members 2c, 2d not covered by the elongate sash cover members 10a, 10b. Again, although the term elongate frame cover member 5a, 5b is used it will of course be appreciated that the elongate frame cover member 5a, 5b will also cover a part of the sash 3 coextensive with the part of the frame 2 that these elongate frame cover member 5a, 5b cover. The elongate sash cover member 10 is connected to the sash 3 such that the elongate sash cover member 10 moves with the sash 3 as the sash 3 pivots relative to the frame 2 between closed and open positions. The elongate sash cover member 10a, 10b is partially received under the elongate frame cover member 5a, 5b when the roof window 1 is in the closed position. This means that when the roof window 1 is closed, the upper cover member 5a, 5b and lower cover member 10 form a water resistant barrier. A part of the lower end portion of the elongate frame cover member 5a, 5b overlaps the lateral edge portion 17 of the elongate sash cover member 10 and the arrangement 31, 32, 33, 34, 35 for releasably locating and retaining at least part of the upper lateral edge portion 17 of the elongate sash cover member 10 when the sash is in a closed position. The overlap is a sufficient distance so as to hide the releasable locating and retaining arrangement 31, 32, 33, 34, 35 when the sash 3 is in a closed position. This means that the elongate sash covering member 10 has no visible mechanical coupling arrangement for coupling it to the sash 3 when the sash 3 is in a closed position. This dramatically improves the aesthetic appearance of the roof window 1 in the closed position as a person's eye is normally drawn to these discrepancies as a result of the light reflecting from them in a non-uniform way.

[0128] Referring to Figure 4, the cover member retaining arrangement 30 for releasably locating and retaining at least part of the upper lateral edge portion 17 of the elongate sash cover member 10 is located proximal to the hinge 40. The cover member retaining arrangement is locatable on the sash 3 at a position which enables the elongate cover member 10 to sit in its final position when slid into the cover member retaining portion.

[0129] In the particular example shown in Figure 4, the cover member retaining arrangement 30 is connected to or part of a sash hinge component which is adapted to hingedly engage with a frame hinge component (not shown) provided on the frame 2. The cover member retaining arrangement 30 is, in some arrangements, integrally formed with the sash hinge component. This

means that the cover member retaining arrangement 30 and the sash hinge component 40 can be manufactured as a single, integral structure. This simple design facilitates manufacture of the sash hinge component 40 as an integral component, and does not require the assembly or fabrication of component parts. The cover member retaining arrangement 30 does not need to be riveted or otherwise separately connected or attached to the sash hinge component 40 during the manufacturing process or during window installation. In some further arrangements, the cover member retaining arrangement 30 and the sash hinge component 40 form a single, unitary, structure. In other words, the cover member retaining arrangement 30 and the sash hinge component 40 are homogenous and can be formed from a single piece of metal. Of course other arrangements where the cover member retaining arrangement 30 is a separate component connected to the sash hinge component 40 are within the scope of the present invention. In the embodiment shown in the drawings, the cover member retaining arrangement 30 is a cast component separately attachable to the sash hinge component 40. It is manufactured from steel.

[0130] Referring to Figures 4, 5 and 7, the arrangement 31, 32, 33, 34, 35 for releasably locating and retaining at least part of the upper lateral edge portion 17 of the elongate sash cover member 10 comprises a first stop arrangement 33 extending out of the main plane of the exterior top surface of the sash side member 3c, 3d. The first stop arrangement 33 extends in a direction upwardly from the main plane of the exterior top surface of the sash side member 3c, 3d and most preferably perpendicular from this main plane. The first stop arrangement 33 acts as a physical stop preventing at least part of the upper lateral edge portion 17 of the elongate sash cover member 10 and therefore the elongate sash cover member 10 from moving any further in a direction longitudinally along, and most preferably towards the top of the sash 3 when the upper lateral edge 17 of the elongate sash cover member 10 abuts the first stop arrangement 33. The first stop arrangement 33 acts as a physical stop preventing at least part of the upper lateral edge portion 17 of the elongate sash cover member 10 and therefore the elongate sash cover member 10 from moving any further in a direction longitudinally along and most preferably towards the top of the sash 3 in a plane parallel to the main plane of the exterior top surface of the sash side member 3c, 3d when the upper lateral edge 17 of the elongate sash cover member 10 abuts the first stop arrangement 33. The first stop arrangement 33 locates the longitudinal position of the elongate sash cover member 10 relative to the sash side member 3c, 3d by providing a physical stop for at least part of the upper lateral edge 17 of the elongate sash cover member 10.

[0131] Referring to Figures 4 to 7, the arrangement 31, 32, 33, 34, 35 for releasably locating and retaining at least part of the upper lateral edge portion 17 of the elongate sash cover member 10 comprises a second stop

arrangement 34 extending in a direction capable of abutting the exterior top surface of the upper lateral edge portion 17 of the elongate sash cover member 10. The second stop arrangement 34 extends parallel to the main plane of the exterior top surface of the sash side member 3c, 3d. The second stop arrangement 34 determines the distance the upper lateral edge portion 17 of the elongate sash cover member 10 can move away from the main plane of the exterior top surface of the sash side member 3c, 3d by providing a physical stop acting against the exterior top surface of the upper lateral edge portion 17 of the elongate sash cover member 10. Advantageously, this prevents wind lifting or twisting the upper lateral edge portion 17 of the elongate sash cover member 10 away from the sash 3 under windy conditions.

[0132] Referring to Figures 4 to 7, the arrangement 31, 32, 33, 34, 35 for releasably locating and retaining at least part of the upper lateral edge portion 17 of the elongate sash cover member comprises a third stop arrangement 32 extending in a direction capable of abutting the interior underside surface of the upper lateral edge portion 17 of the elongate sash cover member 10. The third stop arrangement 32 extends parallel to the main plane of the interior underside surface of the elongate sash cover member in the mounted position. The third stop arrangement 32 provides a bed for the interior underside surface of the upper lateral edge portion 17 of the elongate sash cover member 10 by providing a physical stop acting against the interior underside surface of the upper lateral edge portion 17 of the elongate cover member 10. The third stop arrangement 32 provides support for the underside surface of the upper lateral edge portion 17 of the elongate sash cover member 10 in its mounted position.

[0133] Referring to Figures 4 and 5, the arrangement 31, 32, 33, 34, 35 for releasably locating and retaining at least part of the upper lateral edge portion 17 of the elongate sash cover member 10 defines a female locating and retaining arrangement 31 formed for slidably receiving at least part of the upper lateral edge portion 17 of the elongate sash cover member 10. The first, second and third stop arrangements 32, 33, 34 define the female locating and retaining arrangement 31 formed for slidably receiving at least part of the upper lateral edge portion 17 of the elongate sash cover member 10. The female locating and retaining arrangement 31 comprises an elongate channel 31 opening towards the bottom member of the sash 3. The elongate channel 31 is in alignment with the upper lateral edge portion 17 of the elongate sash cover member 10 when the elongate sash cover member 10 is mounted on the sash side member 3c, 3d. The releasable locating and retaining arrangement 31, 32, 33, 34, 35 is at least partly produced from a metal or metal alloy material, most preferably steel. This allows the arrangement to be formed and also allows the tight dimensional tolerances available to work with in this area of the roof window 1 to be achieved.

[0134] The elongate sash cover member 10 with an

upper lateral edge portion 17 that is slidably inserted into an arrangement 31, 32, 33, 34, 35 for releasably locating and retaining at least part of the upper lateral edge portion 17 of the elongate sash cover member 10 on the sash 3. This slidable engagement holds the elongate sash cover member 10 in engagement with the sash 3, thereby preventing the elongate sash cover member 10 from being lifted upwards and away from the sash 3 via wind for example. The sliding engagement further allows slidable movement of the elongate sash cover member 10 in one direction such that it can be removed for maintenance i.e., backwards in the direction opposite to which the elongate sash cover member 10 was slid into engagement with the releasable locating and retaining arrangement 31, 32, 33, 34, 35. The releasable locating and retaining arrangement 31, 32, 33, 34, 35 retains the elongate sash cover member 10 in position on the sash without requiring screw fasteners to penetrate into the sash 3 and/or frame 2 providing a non-visible connection between the sash 3 and the elongate sash cover member 10 at the upper end and along the length of the elongate sash cover member 10. In addition, the upper lateral edge portion 17 of the elongate sash cover member 10 and the releasable locating and retaining arrangement 31, 32, 33, 34, 35 is visible to the window installer during installation. In use, the window installer can simply align the upper lateral edge portion 17 of the elongate sash cover member 10 with the elongate channel 31 of the releasable locating and retaining means and slide the upper lateral edge of the elongate sash cover member 10 into the elongate channel 31 to secure the cover in place.

[0135] Referring to Figures 2 and 4, the upper lateral edge portion 17 of the elongate sash cover member 10 and the releasable locating and retaining arrangement 31, 32, 33, 34, 35 has an arrangement 11, 35 for preventing lateral movement of the upper lateral edge portion 17 of the elongate sash cover member 10. The arrangement 11, 35 includes a projecting tab 11 on the upper lateral edge portion 17 of the elongate sash cover member 10 for preventing lateral movement of the upper lateral edge portion 17 of the elongate sash cover member relative to the releasable locating and retaining arrangement 31, 32, 33, 34. The arrangement 11, 35 further includes a recess or aperture 35 for receiving the projecting tab 11 of the upper lateral edge 17 of the elongate sash cover member 10. The recess or aperture 35 is defined by the first stop arrangement 33. This lateral movement preventing arrangement 11, 35 ensures that the elongate sash cover member 10 has its movement completely restricted under windy weather conditions when it is located in place in the releasable locating and retaining arrangement 31, 32, 33, 34.

[0136] Referring to Figure 2, the female locating and retaining arrangement 31/channel section 31 is an elongate slot sized to receive at least part of the lateral edge 17 of the elongate sash cover member 10. At least part of the lateral edge 17 of the elongate sash cover member 10 is adapted for sliding engagement with the elongate

slot of the female locating and retaining arrangement 31/channel section 31. The at least part of the lateral edge 17 of the elongate sash cover member 10 is adapted for sliding engagement with the elongate slot of the female locating and retaining arrangement 31/channel section 31. The channel section 31 and elongate slot extends laterally for a length which corresponds to a substantial part of the width of the lateral edge 17 of the elongate sash cover member 10. This means that the likelihood of the upper edge 17 of the elongate sash cover member 10 twisting in windy conditions is reduced. In some arrangements, the channel section 31 and elongate slot extend laterally for a length which corresponds in a range of 10 to 90% of the width of the lateral edge 17 of the elongate sash cover member 10.

[0137] Referring again to Figure 2, the third stop arrangement 32 provides the bottom channel member 32 of the elongate channel 31 of the releasable locating and retaining arrangement 30. The exterior top surface of the side sash members 3c, 3d define a sash plane and the third stop arrangement 32/bottom channel member 32 of the elongate channel 31 extends away from the side sash members 3c, 3d in a plane parallel to and optionally most preferably in alignment with the main sash plane.

[0138] The first stop arrangement 33 provides the upstanding channel member 33 of the elongate channel 31 of the releasable locating and retaining arrangement 30. The first stop arrangement 33 extends out of the main plane of the bottom channel member 32 away from the third stop arrangement 32 in an upward direction and in most arrangements perpendicular to the third stop arrangement 32 and the main sash plane. The upstanding channel member 33 extends out of the main plane of the bottom channel member 32 in an upward direction and in most arrangements perpendicular to the main sash plane. The first stop arrangement 33/upstanding channel member 33 extends a distance greater than the thickness of the sheet of the elongate sash cover member 10.

[0139] The second stop arrangement 34 provides the top channel member 34 of the elongate channel 31 of the releasable locating and retaining arrangement 30. The second stop arrangement 34/top channel member 34 extends in a plane parallel to the third stop arrangement 32 and/or the main sash plane. The top channel member 34/second stop arrangement 32 extends a distance less than the distance between the lateral edge portion 17 of the elongate sash cover member 10 and a rain barrier 71 on the elongate sash cover member 10. Rain barrier 71 engages with the underside surface of the elongate frame cover members 5a, 5b to prevent wind driven rain passing up between the overlapping portions of the cover members 5a, 5b and 10. At least part of the lateral edge portion 17 of the elongate sash cover member 10 is sandwiched between the second stop arrangement 34/top channel member 34 and the third stop arrangement 32/bottom channel member 32. This limits the rotational movement of the elongate sash cover member 10, thereby making it harder for the elongate

sash cover member 10 to be accidentally dislodged from the releasable locating and retaining arrangement 30 under windy conditions or when it is accidentally or otherwise knocked or engaged during installation, use or maintenance. In most arrangements, the sliding engagement between the elongate sash cover member 10 and the elongate channel 31 is a non-clip and/or non-snap-lock and/or non-biased engagement. The elongate sash cover member 10 can simply be slid into sliding engagement with the elongate channel 31, and does not require a complicated fastening arrangement.

[0140] Referring to Figures 2 and 3, the elongate sash cover member 10 comprises a top sheet member having an exterior and interior facing surface, the projecting tab 11 being parallel to the main plane of the top sheet member. The projecting tab 11 is substantially planar, and is co-planar with the top sheet member. This means that the projecting tab 11 is not downwardly or upwardly offset from the top sheet of the elongate sash cover member, but instead extends from the elongate sash cover member 10 in the same plane as the top sheet member. The elongate sash cover member 10 further comprises side sheet members 18 connected to or integrally formed with the top sheet members. By "integrally formed", we mean that the object is designed as an integral component of the object to which it is attached/part of. In this case, we mean that the side sheet members 18 are designed as an integral component with the top sheet member. Advantageously, having the side sheet members 18 of the elongate sash cover member 10 integrally formed with the top sheet member means that the elongate sash cover member 10 can be manufactured as a single integral structure. The side sheet members 18 and top sheet member of the elongate sash cover member 10 form a single, unitary, structure. In other words, the side sheet members 18 and top sheet members of the elongate sash cover member 10 are homogenous, and can be formed from a single piece of material such as metal.

[0141] As shown in Figure 2, the side sheet members 18 are downwardly directed flanges 18 such that the elongate sash cover member 10 has a generally C-shaped cross-section. In other words, the elongate sash cover member 10 is a C-channel. The top sheet member and/or the side sheet members 18 of the elongate sash cover member 10 are substantially planar surfaces.

[0142] In one particular arrangement as shown in Figures 2 and 3, the upper lateral edge portion 16, 17 is an L-shaped upper edge portion 16, 17 where the projecting tab 11 extends from the base 17 of the L-shape. The L-shaped upper edge portion 16, 17 provides for more effective draining of precipitation away from the structure of the sash 3 and a greater overlap of the cover members 5a, 5b, 10a, 10b. Referring to Figure 3 in particular, the projecting tab 11 comprises a leading edge portion 12. Tapered side edges 13 taper to the leading edge portion 12. The leading edge portion 12 enables the projecting tab 11 to be inserted into the recess or aperture 35 with relative ease.

[0143] As shown in Figure 8, the roof window 1 further comprises an elongate sash cover member end cap 50 adaptable to cover at least an edge portion of the elongate sash cover member 10, and a sash frame end cap 60 adaptable to cover at least a portion of the sash 3. The elongate sash cover member end cap 50 is adaptable to attach to the sash frame end cap 60. The elongate sash cover member end cap 50 and the releasable locating and retaining arrangement 31, 32, 33, 34 are disposed on opposed end portions of the elongate sash cover member 10 when mounted on the roof window 1. The projecting tab 11 extends from the upper lateral edge portion 16 of the elongate sash cover member 10, the elongate sash cover member end cap 50 is adaptable to attach to the sash frame end cap 60 positioned on the sash. Of course other arrangements of the projecting tab 11 and the elongate sash cover member end cap 50 are within the scope of the present invention.

[0144] The elongate sash cover member end cap 50 enables the free end (i.e. the end without the projecting tab 11) of the elongate sash cover member 10 to be attached to the sash 3 to hold the cover member 10 securely in place. In arrangements of the present invention, the elongate sash cover member end cap 50 is releasably attached to the sash frame end cap 60 positioned on the sash 3. The elongate sash cover member end cap 50 can therefore be held in releasable attachment with the sash 3. During use, the elongate sash cover member end cap 50 helps to securely hold the cover member 10 in place, but can be removed to enable maintenance on the elongate cover member 10/sash 3. The releasable attachment comprises using a fastening arrangement to attach the elongate sash cover member end cap 50 to the sash frame end cap 60. One particular fastening arrangement is a threaded screw fastener, but other known fastening arrangements are within the scope of the present invention. The releasable attachment means that the elongate sash cover member end cap 50 can be attached to the sash frame end cap 60 using a simple threaded screw fastener. As the sash 3 is provided with a sash frame end cap 60, the threaded screw fastener does not have to penetrate through the sash 3 and/or frame 2 itself, and thus maintains the integrity of the sash 3 and/or frame 2. The elongate sash cover member end cap 50 and the sash frame end cap 60 define recesses sized to receive the fastening arrangement such that the elongate sash cover member 10 is fastened to sash frame end cap 60 by the fastening arrangement extending between the recess 55, 155 in the elongate sash cover member end cap 50 and the recess 65, 165 in the sash frame end cap 60. The elongate sash cover member end cap 50 and the sash frame end cap 60 can be manufactured with recesses to receive the fastening arrangement thereby increasing the accuracy of the install. A window installer does not have to force the fastening arrangement through the material of the end caps 50, 60 or use a tool, such as a drill, to form appropriate through-apertures. The recesses to receive the fastening arrangement

are a through bore 55 on the elongate sash cover member end cap 50 and a channel 65 for receiving the fastening arrangement on the sash end cap 60 such that the fastening arrangement can be inserted through the through bore 55 of the elongate sash cover member end cap 50 and into the channel 65 of the sash end cap 60 for fastening the elongate sash cover member end cap 50 and sash end cap 60 together. The fastening arrangement extends in the longitudinal direction of the elongate sash cover member 10 and is spaced below the surface of the elongate sash cover member 10. Alternatively, the recesses to receive the fastening arrangement consist of a through bore 165 on the sash end cap 60 and a channel 155 for receiving the fastening arrangement on the elongate sash cover member end cap 50 such that the fastening arrangement can be inserted through the through bore 165 of the sash end cap 60 and into the channel 155 of the elongate sash cover member end cap 50 for fastening the sash end cap 60 and the elongate sash cover member end cap 50 together. The fastening arrangement extends in a direction perpendicular to the longitudinal direction of the elongate sash cover member 10 and is spaced below the surface of the elongate sash cover member 10. The fastening inserted in this way are not visible when the sash 3 is in the closed position further improving the aesthetic appearance of the elongate sash cover members 10. The sash end cap 60 is positioned over an end portion of one or both of the side members 3c, 3d of the sash 3.

[0145] A hinge 40 according to specific embodiments of the present invention will now be discussed. Referring to Figures 4 to 7, the hinge 40 has a cover member retaining arrangement 30, 31, 32, 33, 34, 35 for releasably locating and retaining at least part of one lateral edge portion 17 of the elongate sash cover member 10. The cover member retaining arrangement 30 is disposed on the hinge 40 at a location where an upper lateral edge portion 17 of the elongate sash cover member 10 is located in a mounted position. At least part of the other end of the elongate sash cover member 10 is releasably fixed relative to the sash at the other end thereof so that the elongate sash cover member 10 has at least part of the upper lateral edge portion 17 slidably inserted into the arrangement 30, 31, 32, 33, 34, 35 for releasably locating and retaining that part of the upper lateral edge portion 17. The hinge 40 comprises a frame mounted component and a sash mounted component, wherein the elongate sash cover member retaining arrangement 30, 31, 32, 33, 34, 35 is provided on the sash mounted component. The frame mounted component and the sash mounted component are pivotally coupled to allow the sash 3 to pivot relative to the frame 2 between closed and open positions.

[0146] A method for assembling roof windows 1 according to specific embodiments of the present invention will now be discussed. The method comprises providing a frame 2 and a sash 3, the frame 2 having a top member 2a, a bottom member 2b and two side members 2c, 2d

extending between the top member 2a and bottom member 2d defining a quadrangular frame 2 having an opening 2f for receiving the sash 3, the sash 3 having a top member 3a, a bottom member 3b and two side members 3c, 3d extending between the top member 3a and bottom member 3b defining a quadrangular sash frame 3 having an opening 3f for receiving a pane of glass. The method further comprises providing an elongate sash cover member 10 having two longitudinal edge portions 19 and two lateral edge portions 17, the elongate sash cover member 10 being adaptable to cover at least part of the exterior surface of a side member of the sash 3 and/or frame 2, the sash 3 comprising a cover member retaining arrangement 30 having an arrangement 31, 32, 33, 34, 35 for releasably locating and retaining at least part of the lateral edge portion 17 of the elongate sash cover member 10, the cover member retaining arrangement 30 being disposed proximal the sash 3 at a location where an upper lateral edge portion 17 of an elongate sash cover member 10 is located in a mounted position. The method further comprises releasably fixing at least part of the other end of the elongate sash cover member 10 to the sash 3 at the other end thereof so that the elongate sash cover member 10 has at least part of an upper lateral edge portion 17 slidably inserted into the arrangement for releasably locating and retaining that part of the upper lateral edge portion 17. In some arrangements, the method further comprises providing an elongate sash cover member end cap 50 adapted to cover at least an end portion of the elongate sash cover member 10, and a sash frame end cap 60 adapted to cover at least a corresponding portion of the sash 3. The method further comprises attaching the elongate sash cover member end cap 50 to the sash frame end cap 60. In some arrangements, connecting the elongate sash cover member end cap 50 to the sash frame end cap 60 comprises inserting a fastening arrangement through the elongate sash cover member end cap 50 and into the sash frame end cap 60 in a direction parallel to the longitudinal axis of the cover members and frame and sash side members.

[0147] In the preceding discussion of the invention, unless stated to the contrary, the disclosure of alternative values for the upper or lower limit of the permitted range of a parameter, coupled with an indication that one of the said values is more highly preferred than the other, is to be construed as an implied statement that each intermediate value of said parameter, lying between the more preferred and the less preferred of said alternatives, is itself preferred to said less preferred value and also to each value lying between said less preferred value and said intermediate value.

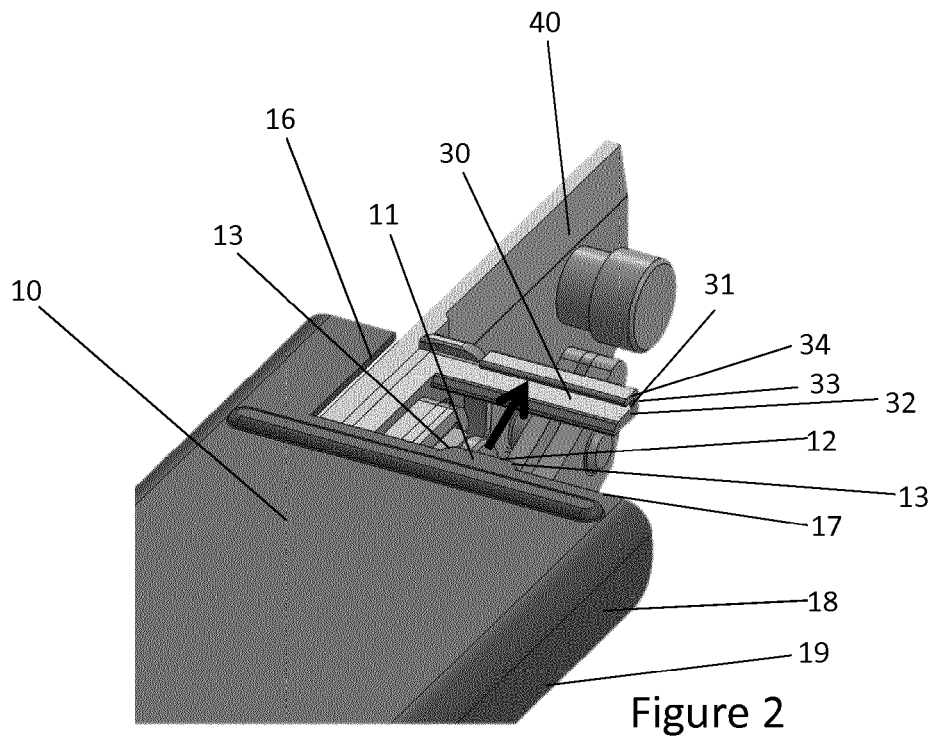
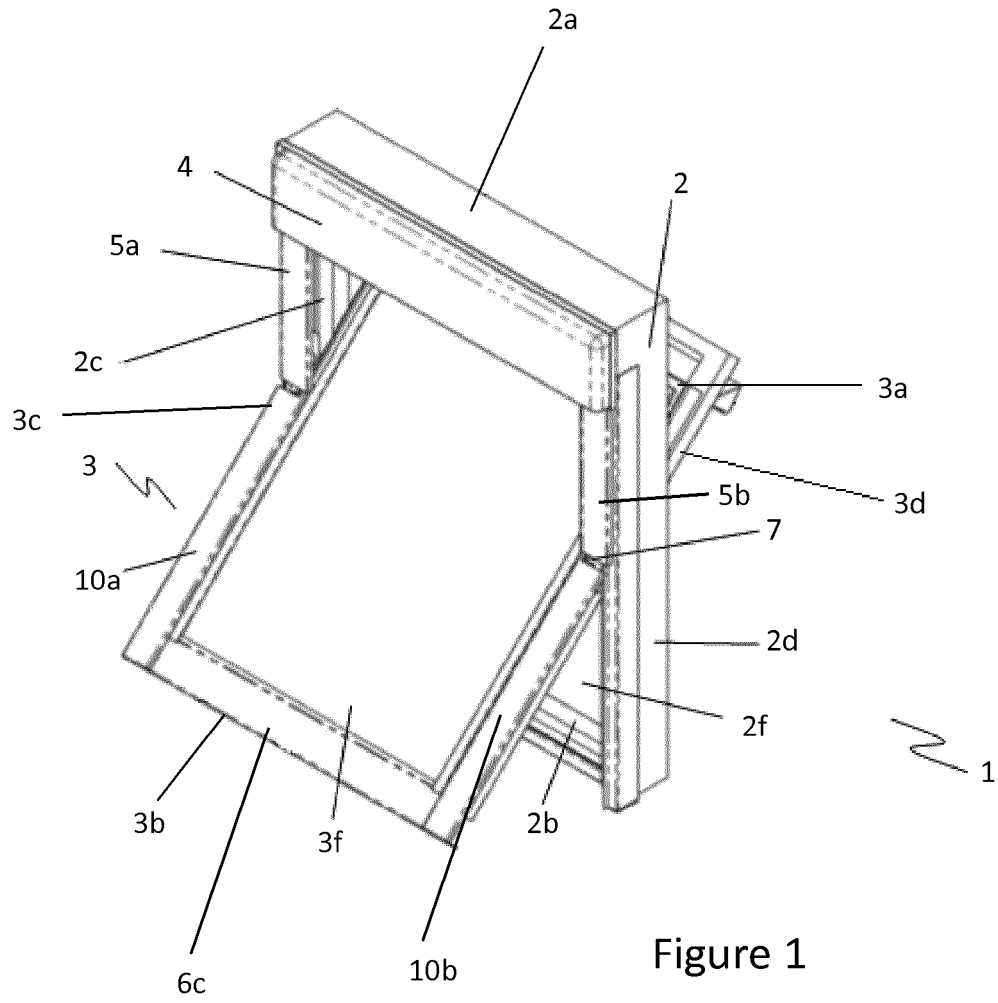
[0148] The features disclosed in the foregoing description or the following drawings, expressed in their specific forms or in terms of a means for performing a disclosed function, or a method or a process of attaining the disclosed result, as appropriate, may separately, or in any combination of such features be utilised for realising the invention in diverse forms thereof as defined in the ap-

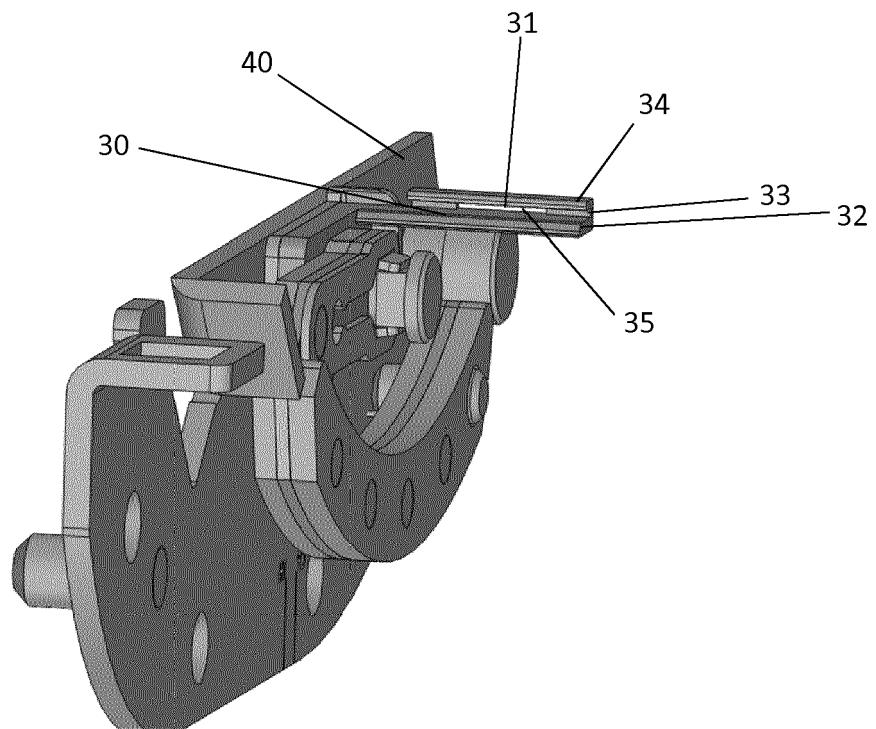
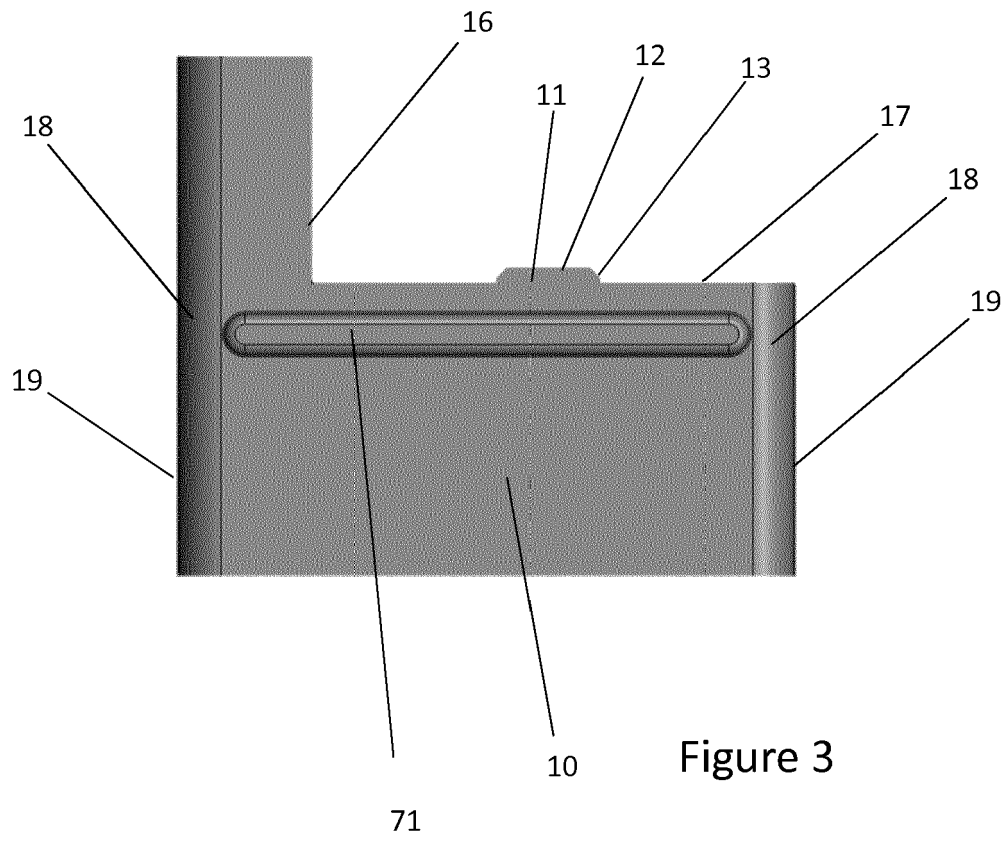
pended claims.

Claims

1. A roof window comprising a frame and a sash, the frame having a top member, a bottom member and two side members extending between the top and bottom member defining a quadrangular frame having an opening for receiving the sash, the sash having a top member, a bottom member and two side members extending between the top and bottom member defining a quadrangular sash frame having an opening for receiving a pane of glass, the roof window further comprising an elongate sash cover member having two longitudinal edge portions and two lateral edge portions, the elongate sash cover member being adaptable to cover at least part of the exterior surface of a side member of the sash and/or frame, the sash comprising a cover member retaining means having means for releasably locating and retaining at least part of one lateral edge portion of the elongate sash cover member, the cover member retaining means being disposed proximal the sash at a location where an upper lateral edge portion of the elongate sash cover member is located in a mounted position, at least part of the other end of the elongate sash cover member being releasably fixed relative to the sash at the other end thereof so that the elongate sash cover member has at least part of the upper lateral edge portion slidably inserted into the means for releasably locating and retaining that part of the upper lateral edge portion.
2. A roof window as claimed in claim 1, wherein the means for releasably locating and retaining at least part of the upper lateral edge portion of the elongate sash cover member comprises a first stop means extending in a direction out of the main plane of the exterior top surface of the sash side member.
3. A roof window as claimed in claim 1 or claim 2, wherein the means for releasably locating and retaining at least part of the upper lateral edge portion of the elongate sash cover member comprises a second stop means extending in a direction capable of abutting an exterior top surface of the upper lateral edge portion of the elongate sash cover member.
4. A roof window as claimed in any one of the preceding claims, wherein the means for releasably locating and retaining at least part of the upper lateral edge portion of the elongate sash cover member comprises a third stop means extending in a direction capable of abutting an interior underside surface of the upper lateral edge portion of the elongate sash cover member.

5. A roof window as claimed in any one of the preceding claims, wherein the means for releasably locating and retaining at least part of the upper lateral edge portion of the elongate sash cover member defines a female locating and retaining means formed for slidably receiving at least part of the upper lateral edge portion of the elongate sash cover member.
6. A roof window as claimed in claim 5, wherein the female locating and retaining means formed for slidably receiving at least part of the upper lateral edge portion of the elongate sash cover member comprises an elongate channel opening towards the top or bottom member, most preferably the bottom member of the sash, the elongate channel being in alignment with the upper lateral edge portion of the elongate sash cover member when the elongate sash cover member is mounted on the sash side member.
7. A roof window as claimed in any one of the preceding claims, wherein the frame side members also have elongate frame cover members which extend along a part of the frame members not covered by the elongate sash cover members and a part of one end portion of the elongate frame cover member overlaps the lateral edge portion of the elongate sash cover member and the means for releasably locating and retaining at least part of the upper lateral edge portion of the elongate sash cover member, the overlap being a sufficient distance so as to hide the releasable locating and retaining means when the sash is in a closed position.
8. A roof window as claimed in any one of the preceding claims, wherein the upper lateral edge portion of the elongate sash cover member and the releasable locating and retaining means has a means for preventing lateral movement of the upper lateral edge portion of the elongate sash cover member.
9. A roof window as claimed in any one of the preceding claims, wherein the releasable locating and retaining means comprises an elongate slot formed by a channel section sized to receive at least part of the lateral edge of the elongate sash cover member, at least part of the lateral edge of the elongate sash cover member is adapted for sliding engagement with elongate slot of the channel section, the channel section and elongate slot extends laterally for a length which corresponds to a substantial part of the width of the lateral edge of the elongate sash cover member.
10. A roof window as claimed in any one of the preceding claims, wherein the sash is pivotally engaged with the frame by a pivot hinge, the pivot hinge comprising a sash hinge component attachable to the sash, and a frame hinge component attachable to the frame, the sash hinge component being adaptable to hingedly engage with the frame hinge component, the elongate sash cover member retaining means being provided on the sash hinge component.
11. A roof window as claimed in claim 10, wherein the elongate sash cover member retaining means/releasable locating and retaining means is integrally formed with the sash hinge component.
12. A roof window as claimed in any one of the preceding claims, wherein the roof window further comprising an elongate sash cover member end cap adaptable to cover at least an end portion of the elongate sash cover member, and a sash frame end cap adaptable to cover at least a portion of the sash, the elongate sash cover member end cap being adaptable to attach to the sash end cap, the elongate sash cover member end cap and the cover member retaining means/releasable locating and retaining means are disposed on opposed end portions of the elongate sash cover member when the elongate sash cover member is mounted on the roof window.
13. A roof window as claimed in claim 12, wherein the elongate sash cover member end cap being adaptable to be releasably attached to the sash end cap using fastening means, the elongate sash cover member end cap and the sash end cap defining recesses sized to receive the fastening means, the elongate sash cover member being adapted to be fastened to the sash end cap by the fastening means extending between the recess in the elongate sash cover member end cap and the recess in the sash end cap, the fastening means extends in the longitudinal direction of the elongate sash cover member and is spaced below the surface of the elongate sash cover member or the fastening means extends in a direction perpendicular to the longitudinal direction of the elongate sash cover member and is spaced below the surface of the elongate sash cover member.
14. A hinge for a roof window, the hinge comprising an elongate sash cover member retaining means having means for releasably locating and retaining at least part of one lateral edge portion of an elongate sash cover member, the elongate sash cover member retaining means being disposed on the hinge at a location where an upper lateral edge portion of the elongate sash cover member is located in a mounted position.
15. A hinge for a roof window as claimed in claim 14, wherein the hinge comprises a frame mounted component and a sash mounted component, wherein the elongate sash cover member retaining means is provided on the sash mounted component.





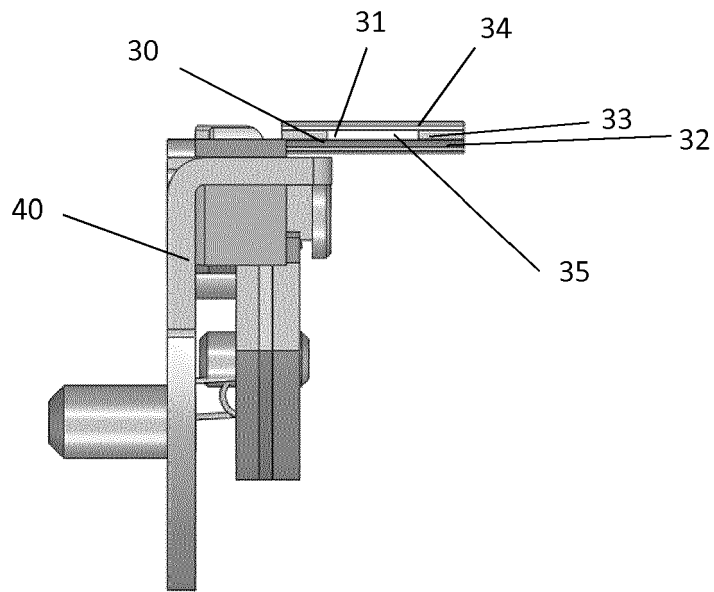


Figure 5

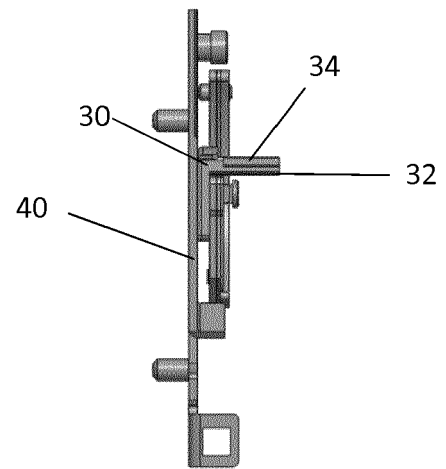


Figure 6

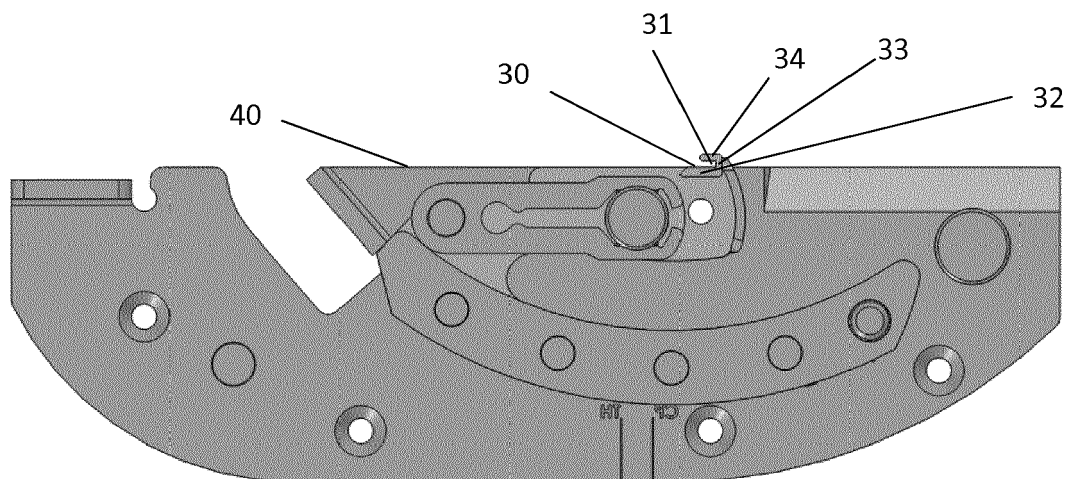


Figure 7

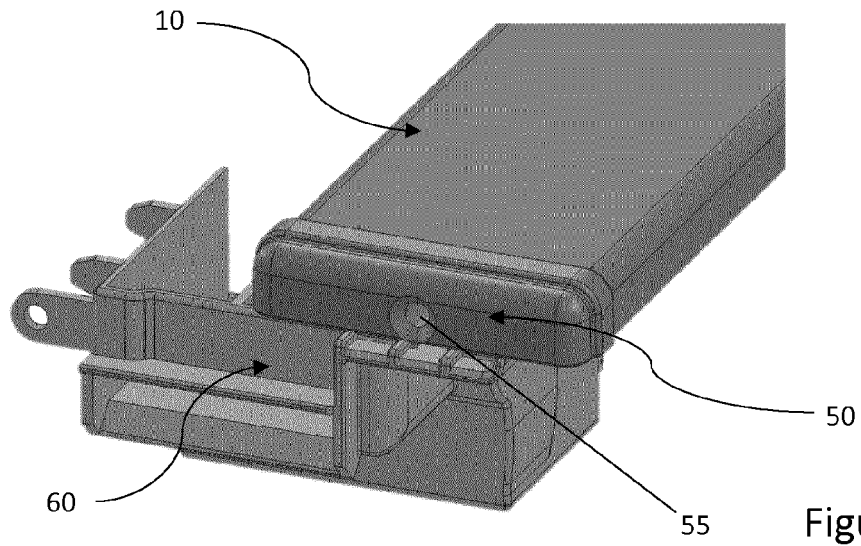


Figure 8

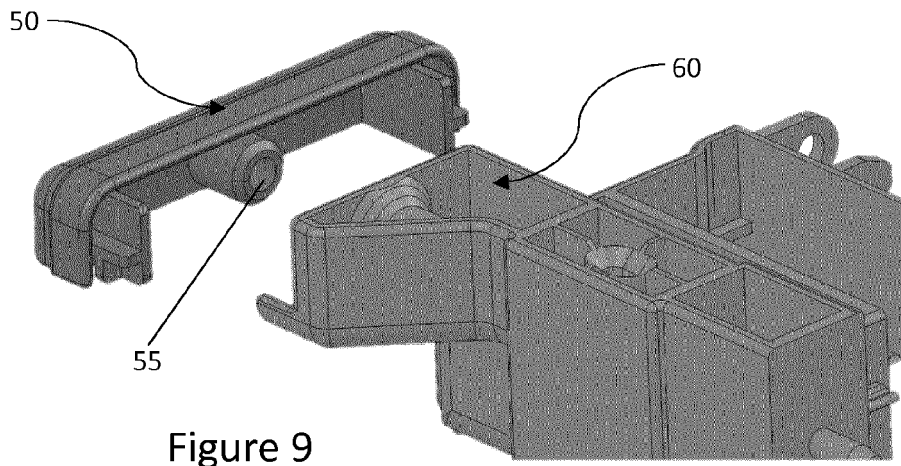


Figure 9

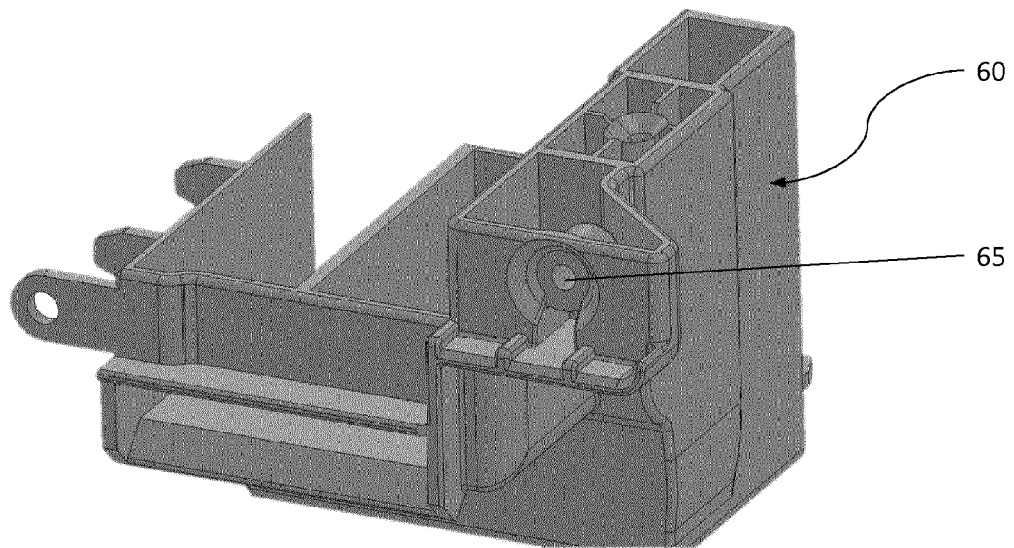


Figure 10

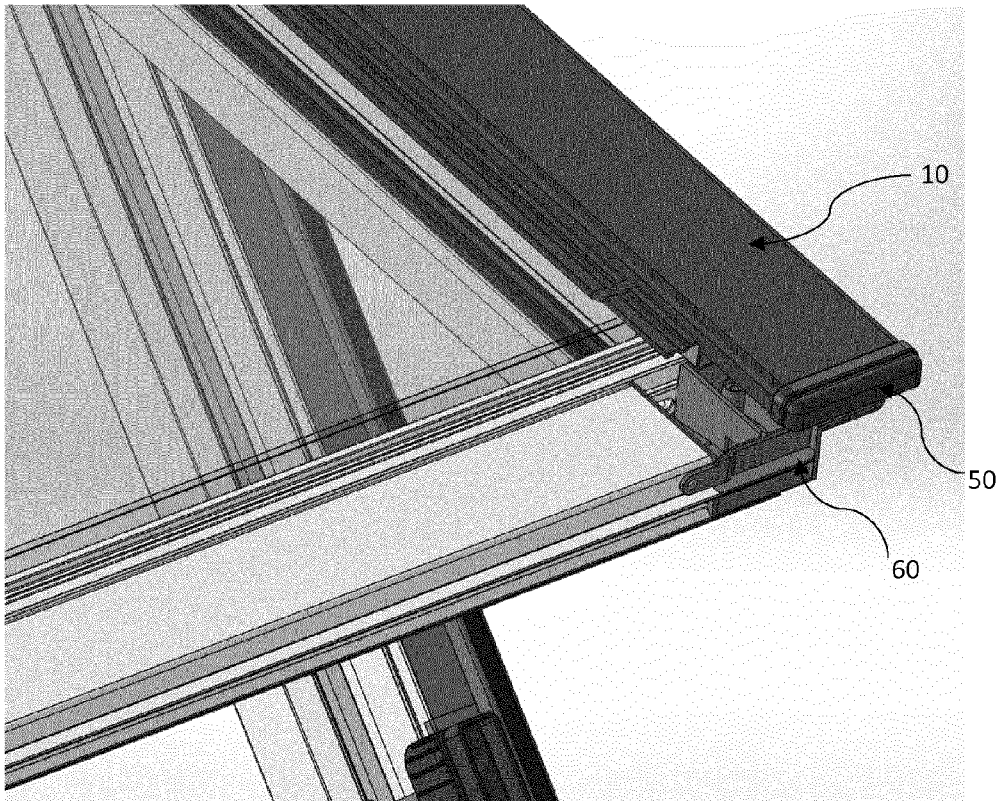


Figure 11

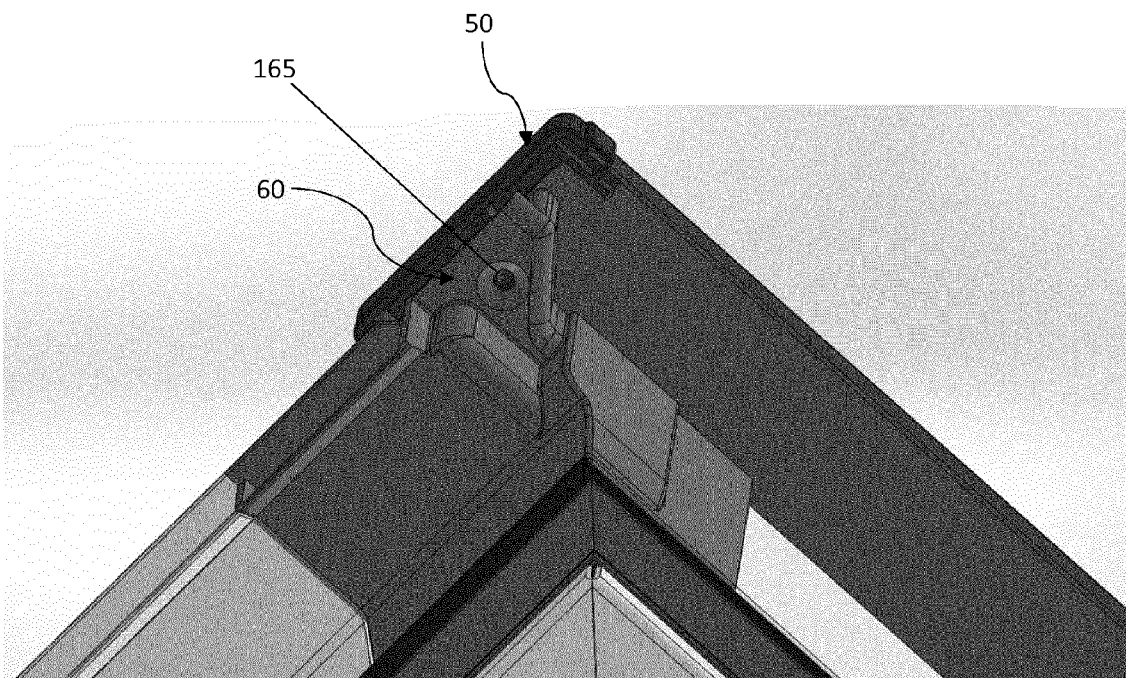


Figure 12

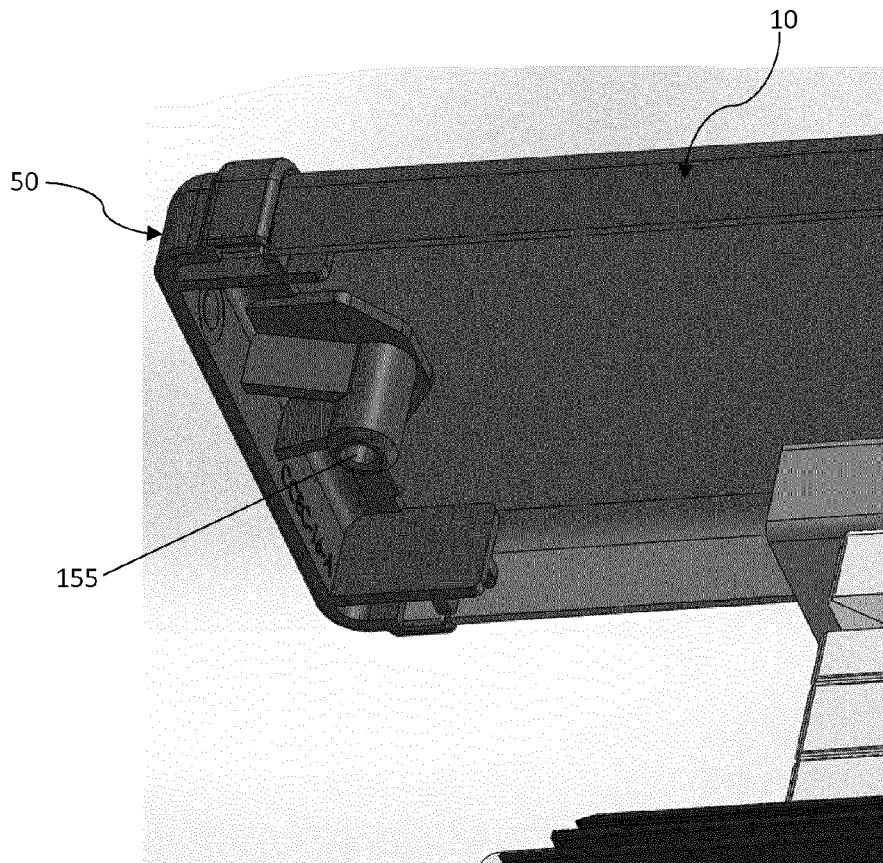


Figure 13

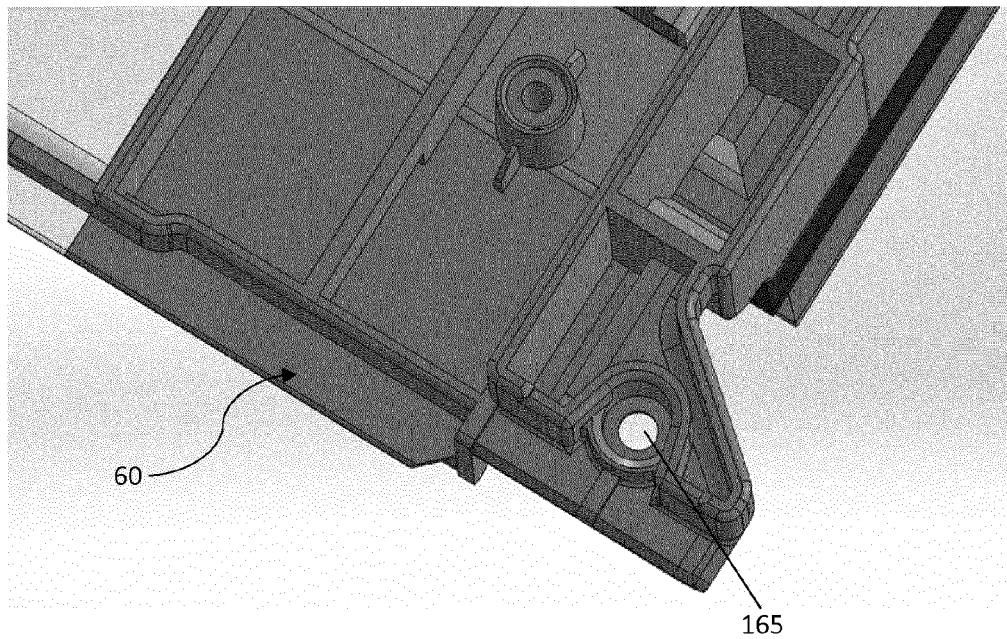


Figure 14



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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 26 March 2018	Examiner Demeester, Jan
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