

(19)



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) Publication number:

0 324 820 B1

(12)

EUROPEAN PATENT SPECIFICATION

(45) Date of publication of patent specification: **19.04.95** (51) Int. Cl.⁶: **E06B 7/10**

(21) Application number: **88905944.0**

(22) Date of filing: **04.07.88**

(86) International application number:
PCT/GB88/00524

(87) International publication number:
WO 89/00233 (12.01.89 89/02)

(54) **IMPROVED VENT FOR WINDOWS AND LIKE APERTURES.**

(30) Priority: **02.07.87 GB 8715570**
16.12.87 GB 8729328

(43) Date of publication of application:
26.07.89 Bulletin 89/30

(45) Publication of the grant of the patent:
19.04.95 Bulletin 95/16

(84) Designated Contracting States:
AT BE CH DE FR GB IT LI LU NL SE

(56) References cited:
EP-A- 0 164 755 DE-A- 2 360 002
DE-A- 2 918 409 DE-A- 2 919 682
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Description

The present invention relates to a vent for a window and also to a window assembly including the vent.

More particularly the present invention relates to a vent of the type which is fittable as a separate independent unit along an edge of a window frame and which comprises an elongate duct member provided with an air inlet at one elongate side and an air outlet at the other side, securing means being provided for securing the duct member to the edge of the window frame. Such a vent is described and claimed in the present applicants UK Patent Application No 8712477 (Published No 2194638A).

A ventilator for use in a window assembly is shown in GB-A-2116694 and comprises a front weather strip having the top and bottom longitudinal edges in the form of flange-like bearing webs which carry sealing elements for sealing abutment with co-operating surfaces, specifically wall, frame or glass surfaces. However the ventilator is intended essentially for positioning between the window sash and the windows glazing unit in an opening in the unit, and the ventilator comprises a duct body suitably dimensioned for location in this opening. The ventilator is secured to the window assembly by means of a clamping element engaging a side surface of the glazing unit. A further disadvantage of this ventilator is that when the ventilator is installed the weather strip is fully exposed as the two sealing elements have to engage their respective abutting surfaces, and this can adversely affect the aesthetic quality of a building which utilises this ventilator.

It is an object of the present invention to provide a vent operation, economic to manufacture, and relatively unobtrusive when installed.

According to the present invention there is provided a vent assembly as set out in the appended claim 1.

Thus in the present invention the vent is fitted to the window frame at an outer edge of the frame by means of securing means securing via said outer edge, and there is neither need to cut an opening in the window frame nor provide an opening in the glazing unit. Different widths of window can be catered for conveniently by cutting the vent duct member to the desired length and fitting standard end caps. Also efficient sealing is achieved by the single seal engaging the front face of the window frame which contrasts with GB-A-2116694 which demands that both of the two sealing elements are in proper sealing engagement with the window assembly and this enables the vent of the present invention to be installed more compactly.

Embodiments of the present invention will now be described by way of example with reference to the accompanying drawings wherein:

Fig 1 shows a cross-sectional end view of a vent in accordance with one embodiment of the present invention, mounted on the head of a window frame;

Fig 2 shows a cross sectional end view of a window or other aperture, such as for example a doorway, comprises a vent assembly including a main duct body, and nose and outlet portions on either side of said main duct body, at least one of said nose and outlet portions being in the form of a separate interchangeable unit, and joining means for the connection of said one portion to the main duct body.

Preferably the joining means comprises a slotted male-female interconnection. Said male-female interconnection preferably includes a clip-on facility.

Preferably the outlet portion includes an air flow control device including apertured plate means so as to provide for example a hit and miss type control. Fittable end covers can be provided to close the ends of the vent assembly and each end cover preferably includes a lateral surface servicing to overlap said apertured plate means.

Preferably control elements extend laterally from the apertured plate means to facilitate operating movements of the apertured plate means for airflow regulation by the control device. An optional cord control can be fitted to said control elements and preferably the end cover includes guide means for said cord control.

Preferably a sound insulating baffle member is housed in said duct (or vent assembly) and can comprise a ribbed base with a top plate mounted on said ribbed base.

Embodiments of the present invention will now be described by way of example with reference to the accompanying drawings wherein:-

Fig. 1 shows a cross-sectional end view of a vent in accordance with one embodiment of the present invention, mounted on the head of a window frame;

Fig. 2 shows a cross-sectional end view of a different embodiment;

Fig. 3 shows an exploded isometric view of parts of the vent of Fig. 1;

Fig. 4 shows an end view of a closure end cap for the vent of Fig. 1;

Fig. 5 shows an isometric view of the end cap of Fig. 4;

Fig. 6 shows in cross-sectional side view a sound insulating baffle member for the vent;

Fig. 7 shows a plan view of part of the base portion of the baffle of Fig. 6;

Fig. 8 shows an isometric view of parts of the baffle of Fig. 6;

Fig. 9 shows a further isometric view of the vent of Fig. 1 particularly indicating the fitting of an end cap and the baffle;

Fig. 10 shows a plan view of an alternative baffle arrangement;

Fig. 11 is an elevation of the top part of a window with the vent of Fig. 1 installed; and

Fig. 12 shows a cross sectional end view of a vent for a window, in accordance with another embodiment of the present invention.

Referring to Figs. 1 to 11, a top vent 9 is provided for a window 1 (see Fig. 11) which in the conventional way comprises a wooden outer frame 2 supporting the sash 3, the window 1 being set into a wall structure between side walls, head lintels and bottom sill. The vent 9 constitutes a separate independent unit which is secured to the head 10 of the window, especially after completion of the window but before the window is offered up to the wall aperture and comprises three parts, namely a main conduit part 11A and a nose 11B and an outlet (or control) part 11C on respective sides of the main conduit part 11A. The main conduit 11A comprises a general box form construction with open ends and a plain interior, the sides 24A, 22A of the conduit 11A defining an air inlet and an air outlet respectively carrying a series of apertures 50A, 50B for lateral airflow through the conduit 11A. The nose 11B and the control sections 11C are joined to the main conduit 11A, by male-female interconnections 51 52, 53, 54 and these interconnections are adapted for snap-fitting. The nose 11B comprises a downwardly angled canopy portion 17 and a downwardly directed flange or nose/drip 18 joined to the portion 17 by a horizontal apertured wall 56, the flange 18 including an inwardly turned lip 18A. An elongate sealing strip 14 of rectangular cross-section or other shapes is supported by the flange 18; and the strip 14 can be of suitable synthetic resinous material such as neoprene. The control section 11C shown in Fig. 1 is of channel form and has an apertured bottom wall 22 with opposed groove 57A, 57B adjacent the wall 22 wherein an apertured control plate 21 is slidable. The wall 22 and plate 21 define control means for airflow through the vent 9 operating on a hit-or-miss basis depending on whether or not the apertures of the wall 22 and the plate 21 are in alignment. Movement of the plate 21 is facilitated by gripper elements 23 which have a base 23A generally complementary to an aperture of the plate 21 so that the element 23 can be press fitted into the plate 21. Like the conduit 11A both the nose 11B and the control section 11C are open ended.

The interconnection 51 comprises a tongue 51A and slot 51B joint whereas the other three interconnections 52-54 are of the bead 58 in groove 59 type.

The conduit 11A, nose 11B and section 11C defining a unit are made from suitable metal or plastics material and can be cut in suitable lengths from a continuous length mouldings or extrusions, this latter feature considerably facilitating the use of the vent 9 in a wide variety of different sized windows. Longitudinal grooves in the nose 11A serve to receive a gauze (fly) screen 24.

The open ends of the combined unit 11A-11C are closed by left and right handed end closure caps 15 the right hand one of which is shown in Figs. 4 and 5. Thus the cap 15 comprises a recessed base part 60 carrying a set of lugs or tongues 61 engaging with the interior corners of the main conduit 11A, a tongue 62 to locate the canopy portion 17 of nose 11A and a channel form lug 63 locating the control section 11C. Further the base part 60 presents a laterally directed tab plate 64 on which an end of the air control plate 21 is slidable, the tab plate 64 serving to close off a respective end portion of the air flow control 21/22 so that effective air flow control is always possible from zero to maximum rates irrespective of the cut length of the unit 11A-11C. A stopper block 65 is housed in the base 60 of one side end cap only to set the movement of the control plate 21. Conveniently a downstand bracket 66 is carried by the plate 64, a hole 67 being present in the bracket 66 for the through-passage of a supplementary control cord 68 fitted to a respective element 23 as shown in Fig. 11; as will be appreciated the control cord 68 will considerably facilitate the operation of the air control 21/22 from a lower level.

A removable sound insulating baffle unit or cartridge 69 (Figs. 6 to 8) is housed in the main conduit 11A and comprises a base part 70 having thereon upstanding chevron form walls 71, and a top block 72 mounted on the walls 71 whereby enclosed undulating air passages 73 are present in the unit 69, the wall 71 causing deflection of sound waves in a plane parallel to the base part 70 as shown by the arrows in Fig. 7. Air can pass from the apertures 50 through the air passages 73 to the apertures 51. As can be seen in Fig. 7 the horizontal deflection arrangement enables a substantial deflection of the sound waves, the greater the degree of deflection the greater the attenuation of sound, so that the vent 9 can have relatively small depth: the same sound attenuation via vertical sound wave deflection would necessitate a much deeper vent 9 and this would lead to a less aesthetically satisfying vent structure and a vent structure which would be more difficult to install. The unit 69 will contribute to the strength and rigidity of

the main conduit 11A and will be made from suitable lightweight insulating material. The base 70 and top block 72 can be formed by cutting suitable sized portions from continuous lengths of shaped materials. The walls 71 could of course take a different shape: thus Fig. 10 shows walls 71 of different planar profile (in Fig. 10 the thin line arrows indicate the air flow path while the wider arrows show sound wave deflection). Further, an additional sound insulating unit 69A could be located in the control section 11C.

In the Fig. 1 embodiment the air flow control 22/23 is arranged horizontally, while in the modified vent of Fig. 2 the control 22/23 is arranged vertically: it will be noted however that the horizontal control 22/23 of Fig. 1 provides a maximum discharge area which is greater than that of the vertical control of Fig. 2. It is of course possible for the control 22/23 to have some other shape than that shown, for example, quarter round, and the control could discharge the ventilating air in some further alternative direction.

Prior to fitting on the window frame 1, the vent 9 is fully assembled, complete with end caps 15 and the sound insulating cartridge unit or units, if required, the nose 11B having been fitted to conduit 11A by firstly placing the tongue 51A in the slot 51B then snapping the bead 58 into the groove 59 control section 11C is fitted by a straight snap fit of the interconnections 53, 54. The vent 1 is then placed on the window head 10 and pushed inwards (ie rightwards in Fig 1) to compress the seal 14 against the outer wall 10A of the head 10 and inward movement is arrested by the lip 18A engaging the wall 10A - the outer edge of the lip 18A is set back from the free surface of the seal 14 (see Fig 2) by a predetermined amount to control the achievable compression on seal 14 and also to prevent capillarity attraction of moisture - and in this compressed position the vent 9 is secured to the head 10 by means of screws 16 (Fig 9) passing through screwholes 16A in the conduit 11A. The window 1 with vent 9 in place is now offered up to the window aperture in the building wall and the window surround construction completed so that the vent 9 is located between the building head lintel and the window frame head 10. The above vent 9 of the present invention has the following advantages:-

- 1) The vent in the standard form shown in Fig 1 or Fig 2) will be capable of universal application to all or virtually all forms of window frame without the need to alter or modify the window frame or glass and without the need for modifications to the vent, in particular the need for replacement or adjustment of the seal 14. This results from the fact that the seal 14 is arranged to engage the front wall 10A of the head 10

rather than the head top surface 10B. The front wall 10A is virtually always of a substantially flat form so that an effective seating surface is present for the seal 14. The profile of the top surface 10B on the other hand can vary quite substantially from frame to frame due to the different grooving etc. applied to this wall 10B. This latter fact makes it difficult for the one seal form to provide effective sealing on the top surface for all window frames. As can be seen the frame 2 of Fig. 1 is bevelled at the top corners (ie. between walls 10A/10B) but nevertheless the depth of the seal 14 accommodates this bevel so that sealing effectiveness is maintained. The flat form of the bottom wall 13 of the conduit 11A ensures that the conduit 11A can sit stably on the head 10 for most profiles of surface 10B. The inwardly turned lip 18A will increase the effectiveness of the front seal 14 and avoid capillarity attraction of moisture between the window frame and vent.

2. Different forms of noses 11B and control sections 11C of different form and colour can be readily fitted to the main conduit 11a. Thus the nose 11B could be for example of aluminium to match a particular window system or colour, the main conduit 11A of plastics material eg. PVC to avoid cold bridging while the control section 11C could be in another material and/or colour if desired to suit interior decor. The overall width (front to back) of the vent 9 could be readily changed by the provision of a wider section 11C so that the vent 9 will be readily adaptable for use with windows having a deeper frame: in this case the control 22/23 would occupy only a portion of the section bottom in comparison with Fig. 1. It is preferred that there is an overhang to accommodate an interior bead 28.

3. The nose 11B can be fairly readily removed even when the window with vent is installed, simply by releasing the interconnections 51, 52. This permits access to clean the fly (or insect) screen 24 or to interchange the nose 11B if a different shape or colour is required after a period of use. The seal 14 could also be readily replaced. Similarly the control section 11C could also be changed for example to match a new interior decor.

The window vent of Fig. 12 is closely similar to the vent of Fig. 1 and like parts carry like reference numerals. However, in this case the main conduit 11A is made initially in open form (eg by extrusion ie as an open channel base 13A) and is closed, when the parts 11A, 11B, 11C of the vent are assembled, by virtue of a top wall 33 of the tail section 11C extending over the open channel base, the wall 33 including an additional bead 53A for snap fitting in male/female fashion at the front end

of conduit 11A. Therefore the bulk of the parts of vent 9 can be of open channel form and none need be of closed-box form: this considerably conveniences the manufacture of the parts especially where an extrusion process is involved.

Also a sealing strip 34 of hollow cylindrical section is used (the non compressed strip state is shown dashed) differing from the previous strip section, and the strip 34 has a T-head received in a complementary slot in the flange 18.

Claims

1. A vent for fitting to a window to form a vented window assembly (1) for installation in a window aperture in a wall formation, said vent (9) comprising a shallow duct member (11A-11C) which is fitted as a separate and independent unit at an outer edge (10B) of a window frame (10) whereby when the window assembly (11) with the vent (9) is located in a window aperture the vent (9) is located between the frame member (10) and the wall formation defining the window aperture, said duct member (11A-11C) including a main duct body (11A) for location over said outer edge (10B) of the window frame (10); and lateral flange means (18) at an outer end of the said main duct body (11A) including seal means (14) for engagement with a vertical side surface (10A) and an air-flow control (22A) comprising a first aperture plate (21) movable relative to a second stationary aperture plate (22) so that the control defines a hit-and miss control, characterised in that to enable the vented window assembly to be positioned with respect to the wall formation, said flange means (18) at the outer end of the duct body projects solely inwardly so as to seal solely with a side surface (10A) of the window frame (10) via said seal means (14), in that said air-flow control (22A) is included in the outer portion (11C) of the duct-member (11A - 11C), and in that fittable end covers (15) are provided to close the ends of the duct member (11A - 11C), and include projecting elements (61, 62, 63) which are received in sockets in the duct member (11A - 11C), one of said end covers (15) including a stop (65) against which a first end of the first plate (21) of the air-flow control (22A) abuts when first ends of the control plates (21, 22) are aligned in one-end position of the control (22A) while the other end cover (15) defines a housing to receive the second end of said first plate (21) for movement of the first plate (21) to the other end position of the control.
2. A vent as claimed in claim 1 characterised in that said end covers (15) additionally include a member providing a lateral surface (64) serving to overlap said apertured plates (22, 24) whereby the air flow control (22A) can be completely closed irrespective of the selected length of the duct member (11A-C).
3. A vent as claimed in claim 2, characterised in that a remote control mechanism in the form of a cord control (68), is provided for the air flow control (22A) and includes control elements (23) for the movement of the aperture plate (21) of the control, cords (68) being attached to said elements (23), and guide means (66) on the end covers (15) for guiding said cords (68).
4. A vent as claimed in claim 3, characterised in that the guide means (66) are located on said lateral surfaces (64) of the end covers (15).
5. A vent as claimed in any one of the preceding claims comprising a vent assembly including a nose (11B) and outlet portions (11C) on either side of said main duct body (11A), at least one of said nose and outlet portions (11B, 11C) being in the form of a separate interchangeable unit, joining means (51-54) being provided for the connection of said interchangeable unit to the main duct body (11A) characterised in that a step is formed between an upper portion of the nose portion (11B) and the outer end of the main duct body (11A) said step being located below the upper surface of the main duct body (11A).
6. A vent as claimed in any one of the preceding claims characterised in that an outlet portion (11C) of the duct member is adapted to overhang the supporting frame member (10A) and a downwardly directed air discharge (22A) is provided in said outlet portion (11C).
7. A vent as claimed in any one of the preceding claims, characterised in that the vent is made of parts (13A, 17, 33, Fig. 12) which are of an open channel form but which fit together to form a hollow duct member (11A, 11B, 11C).
8. A vent as claimed in claim 5, characterised in that the parts or portions of the duct members (11A - 11C) are joined together by joining means comprising slotted male-female interconnections (51 - 54).
9. A vent as claimed in claim 5 or 6, characterised in that the flange means (18) is carried by the nose portion (11B) and takes the form

of a downstand nose or drip.

10. A vent as claimed in any one of the preceding claims, characterised in that the duct member (11A) has a substantially planar bottom surface (13) for location over a top surface (10B) of a frame member (10). 5
11. A vent as claimed in claim 1, characterised in that the flange means (18) includes an inwardly turned lip (18A). 10
12. A vent as claimed in any one of the preceding claims, characterised in that the seal means (14) is of rectangular cross-section, and made for example of a suitable synthetic resinous plastics material such as neoprene bonded to the flange means (18). 15
13. A vent as claimed in any one of the preceding claims, characterised in that the seal means (34 Fig. 12) includes a profiled base part located in a complementary shaped housing on the flange means (18). 20
14. A vent as claimed in claim 13, characterised in that the seal means (34) has a resilient head part of circular cross-sectional profile for sealing engagement with the vertical side surface (10A) of a frame member. 25
15. A vent as claimed in any one of the preceding claims, characterised in that an insulating sound baffle member (69) is housed in the main duct body (11A). 30

Patentansprüche

1. Lüftungseinrichtung zum Anfügen an ein Fenster, um damit eine belüftete Fensterbaugruppe (1) zum Einbau in eine Fensteröffnung in einer Wand zu bilden, wobei die Lüftungseinrichtung (9) ein flaches Leitungsbauteil (11A bis 11C) umfaßt, welches als gesonderte und eigenständige Einheit an einen äußeren Rand (10B) eines Fensterrahmens (10) angefügt ist, wodurch die Lüftungseinrichtung (9), nachdem die Fensterbaugruppe (1) mit der Lüftungseinrichtung (9) in eine Fensteröffnung eingesetzt ist, zwischen dem Fensterrahmen (10) und der die Fensteröffnung begrenzenden Wand liegt, und wobei das Leitungsbauteil (11A bis 11C) einen Hauptleitungskörper (11A), welcher über dem äußeren Rand (10B) des Fensterrahmens (10) angeordnet wird, und auf einer Seite an einem äußeren Ende des Hauptleitungskörpers (11A) einen abgewinkelt vorspringenden Rand (18) mit Dichtmitteln (14) zur Anlage an einer 40

Oberfläche (10A) auf einer senkrechten Seite sowie eine Steuereinrichtung (22A) für den Luftstrom hat, welche eine erste Lochplatte (21) enthält, welche relativ zu einer zweiten, feststehenden Lochplatte (22) beweglich ist, so dass die Steuerung dadurch erfolgt, dass die Löcher sich gegenseitig überlappen oder auch nicht,

dadurch gekennzeichnet, dass, um die belüftete Fensterbaugruppe in Bezug auf die Wand positionieren zu können, der abgewinkelt vorspringende Rand (18) am äußeren Ende des Leitungskörpers nur einwärts vorspringt, so dass er über die Dichtmittel (14) nur mit einer Oberfläche (10A) auf einer Seite des Fensterrahmens (10) abdichtet, dass die Steuereinrichtung (22A) für den Luftstrom im äußeren Teil (11C) des Leitungsbauteils (11A bis 11C) vorgesehen ist, und dass einfügbare Endabdeckungen (15) vorgesehen sind, um die Enden des Leitungsbauteils (11A bis 11C) zu verschließen, und vorspringende Teile (61, 62, 63) haben, welche von Fassungen im Leitungsbauteil (11A bis 11C) aufgenommen werden, wobei eine der Endabdeckungen (15) einen Anschlag (65) hat, gegen welchen ein erstes Ende einer ersten Lochplatte (21) der Steuereinrichtung (22A) für den Luftstrom anschlägt, wenn erste Enden der Steuerplatten (21, 22) in der einen Endstellung der Steuereinrichtung (22A) fluchten, während die andere Endabdeckung (15) ein Gehäuse umgrenzt, welches das zweite Ende der ersten Platte (21) aufnimmt, wenn die erste Platte (21) sich in die andere Endstellung der Steuereinrichtung bewegt. 25

2. Lüftungseinrichtung nach Anspruch 1, **dadurch gekennzeichnet**, dass die Endabdeckungen (15) ausserdem ein Teil mit einer seitlichen Oberfläche (64) haben, welche dazu dient, die Lochplatten (22, 24) zu überlappen, wodurch die Steuereinrichtung (22A) für den Luftstrom vollständig geschlossen werden kann, unabhängig davon, wie die Länge des Leitungsbauteils (11A bis 11C) gewählt ist. 40
3. Lüftungseinrichtung nach Anspruch 2, **dadurch gekennzeichnet**, dass für die Steuerung (22A) des Luftstroms ein Fernbedienungsmechanismus mit Schnur (68) vorgesehen ist und Bedienelemente (23), an welchen Schnüre (68) angebracht sind, zum Bewegen der Lochplatte (21) der Steuereinrichtung sowie Führungsmittel (66) auf den Endabdeckungen (15) hat, um die Schnüre (68) zu führen. 45

4. Lüftungseinrichtung nach Anspruch 3, **dadurch gekennzeichnet**, dass die Führungsmittel (66) auf den seitlichen Oberflächen (64) der Endabdeckungen (15) angeordnet sind. 5
5. Lüftungseinrichtung nach einem der vorstehenden Ansprüche, mit einer Lüftungsbaugruppe mit einem Nasenteil (11B) auf der einen Seite und einem Auslaßteil (11C) auf der anderen Seite des Hauptleitungskörpers (11A), wobei vom Nasenteil und Auslaßteil (11B, 11C) wenigstens eines eine gesondert austauschbare Einheit darstellt und Verbindungsmittel (51 bis 54) zur Verbindung der austauschbaren Einheit mit dem Hauptleitungskörper (11A) vorgesehen sind, 10
dadurch gekennzeichnet, dass zwischen einem oberen Abschnitt des Nasenteils (11B) und dem äußeren Ende des Hauptleitungskörpers (11A) eine Stufe gebildet ist, welche unterhalb der Oberseite des Hauptleitungskörpers (11A) liegt. 15
20
6. Lüftungseinrichtung nach einem der vorstehenden Ansprüche, **dadurch gekennzeichnet**, dass ein Auslaßteil (11C) des Leitungsbauteils so ausgebildet ist, dass er über den es unterstützenden Teil des Fensterrahmens (10A) hervorsteht, und dass in dem Auslaßteil (11C) eine nach unten gerichtete Luftaustrittsöffnung (22A) vorgesehen ist. 25
30
7. Lüftungseinrichtung nach einem der vorstehenden Ansprüche, **dadurch gekennzeichnet**, dass sie aus Teilen (13A, 17, 33, Figur 12) gemacht ist, welche die Gestalt eines offenen Kanals haben, aber so zusammenpassen, dass sie ein hohles Leitungshauteil (11A, 11B, 11C) bilden. 35
40
8. Lüftungseinrichtung nach Anspruch 5, **dadurch gekennzeichnet**, dass die Teile oder Abschnitte des Leitungsbauteils (11A bis 11C) durch Nut- und Feder-Verbindungen (51 bis 54) miteinander verbunden sind. 45
9. Lüftungseinrichtung nach Anspruch 5 oder 6, **dadurch gekennzeichnet**, dass der abgewinkelt vorspringende Rand (18) vom Nasenteil (11B) getragen wird und die Gestalt einer nach unten vorstehenden Nase oder Tropfleiste hat. 50
10. Lüftungseinrichtung nach einem der vorstehenden Ansprüche, **dadurch gekennzeichnet**, dass der Leitungskörper (11A) eine im wesentlichen ebene Unterseite (13) hat, mit der er auf der Oberseite (10B) eines Fensterrahmens (10) 55

sie überdeckend plaziert wird.

11. Lüftungseinrichtung nach Anspruch 1, **dadurch gekennzeichnet**, dass der abgewinkelt vorspringende Rand (18) eine einwärts gerichtete Lippe (18A) aufweist.
12. Lüftungseinrichtung nach einem der vorstehenden Ansprüche, **dadurch gekennzeichnet**, dass als Dichtmittel (14) eine Dichtung (14) mit rechteckigem Querschnitt vorgesehen ist, die z.B. aus einem geeigneten plastischen Kunstharz wie Neopren besteht und an dem Rand (18) haftet.
13. Lüftungseinrichtung nach einem der vorstehenden Ansprüche, **dadurch gekennzeichnet**, dass die Dichtung (34, Figur 12) einen profilierten Basisteil hat, der sich in einem komplementär dazu geformten Gehäuse auf dem Rand (18) befindet.
14. Lüftungseinrichtung nach Anspruch 13, **dadurch gekennzeichnet**, dass die Dichtung (34) einen nachgiebigen Kopfteil hat, dessen Profil im Querschnitt kreisförmig ist und dazu bestimmt ist, dicht an der Oberfläche (10A) auf der senkrechten Seite eines Fensterrahmens anzuliegen.
15. Lüftungseinrichtung nach einem der vorstehenden Ansprüche, **dadurch gekennzeichnet**, dass im Hauptleitungskörper (11A) ein isolierendes Schallschluckteil (69) untergebracht ist.

Revendications

1. Structure de ventilation destinée à être adaptée à une fenêtre pour former un ensemble de fenêtre ventilé (1) destiné à être installé dans l'emplacement d'une fenêtre dans un mur, ce volume de ventilation (9) comprenant un conduit aplati (11A-11C) adapté sous forme d'une unité séparée et indépendante à un rebord extérieur (10B) d'un châssis de fenêtre (10) de manière telle que quand l'ensemble de fenêtre (1) comportant la volume de ventilation (9) est logé dans l'ouverture d'une fenêtre, le volume de ventilation (9) est situé entre le châssis (10) et le mur comportant l'ouverture pour une fenêtre, ledit conduit (11A-11C) se composant d'un corps de conduit principal (11A) destiné à être placé par dessus ledit rebord extérieur (10B) du châssis (10) et d'ailes latérales (18) à une extrémité extérieure dudit corps de conduit principal (11A) comportant des moyens d'isolation (14) destinés à rencontrer une surface latérale verticale (10A)

et des moyens de contrôle d'écoulement de l'air (22A) comprenant une première plaque d'ouverture (21) mobile par rapport à une seconde plaque d'ouverture fixe (22), de manière telle que ces moyens de contrôle constituent une commande empirique,

caractérisée en ce que, dans le but de permettre à l'ensemble de fenêtre ventilée d'être mis en position par rapport au mur, lesdites ailes (18) à l'extrémité extérieure du corps de conduit ne dépassent que vers l'intérieur, de manière à n'assurer l'isolation qu'avec une surface latérale (10A) du châssis (10) par l'intermédiaire des moyens d'isolation (14), en ce que lesdits moyens de contrôle d'écoulement d'air (22A) sont inclus dans la portion extérieure (11C) du conduit (11A-11C), et en ce que des chapeaux terminaux adaptables (15) sont prévus pour obturer les extrémités du conduit (11A-11C) et se composent de prolongements (61, 62, 63) qui sont reçus dans des douilles prévues dans le conduit (11A-11C), l'un de ces chapeaux (15) comportant une butée (65) contre laquelle bute une première extrémité de la première plaque (21) des moyens de contrôle (22A) quand les premières extrémités des plaques de contrôle (21, 22) sont alignées dans une position terminale des moyens de contrôle (22A) tandis que l'autre chapeau (15) constitue un logement destiné à recevoir la seconde extrémité de ladite première plaque (21) pour le déplacement de la première plaque (21) vers l'autre position terminale des moyens de contrôle.

2. Structure de ventilation selon la revendication 1, caractérisée en ce que lesdits chapeaux terminaux (15) comportant au surplus un élément créant une surface latérale (64) servant à chevaucher lesdites plaques ajourées (22, 24) de manière à ce que le contrôle d'écoulement d'air (22A) puisse être complètement fermé quelle que soit la longueur choisie pour le conduit (11A-C).

3. Structure de ventilation selon la revendication 2, caractérisée en ce qu'on prévoit un mécanisme de contrôle à distance sous forme d'un cordon de contrôle (68) pour le contrôle d'écoulement d'air (22A), ce mécanisme comprenant des moyens de contrôle (23) du déplacement de la plaque d'ouverture (21), des cordons (68) étant fixés à ces moyens (23), et des moyens de guidage (66) sur les chapeaux terminaux (15) pour guider ces cordons (68).

4. Structure de ventilation selon la revendication 3, caractérisée en ce que les moyens de gui-

dage (66) sont situés sur les surfaces latérales (64) des chapeaux terminaux (15).

5. Structure de ventilation selon l'une quelconque des revendications précédentes, comprenant un ensemble de ventilations se composant d'un nez (11B) et de portions de sorties (11C) sur chaque côté du corps de conduit principal (11A), au moins l'un d'entre eux étant sous forme d'une unité interchangeable séparée, des moyens de jonction (51-54) étant prévus pour réunir cette unité interchangeable au corps du conduit principal (11A), caractérisée en ce qu'un décrochement est prévu entre une portion supérieure du nez (11B) et l'extrémité extérieure du corps de conduit principal (11A), ce décrochement étant situé au-dessous de la surface supérieure du corps de conduit principal (11A).

6. Structure de ventilation selon l'une quelconque des revendications précédentes, caractérisée en ce qu'une portion de sortie (11C) du conduit est agencée de manière à surplomber l'élément de châssis supporté (10A), et une évacuation d'air dirigée vers le bas (22A) est prévue dans cette portion de sortie (11C).

7. Structure de ventilation selon l'une quelconque des revendications précédentes, caractérisée en ce qu'elle est formée d'éléments (13A, 17, 33, figure 12) en forme de canal ouvert mais qui s'adaptent les uns aux autres pour former un élément de conduit creux (11A, 11B, 11C).

8. Structure de ventilation selon la revendication 5, caractérisée en ce que les éléments ou portions des conduits (11A-11C) sont réunis ensemble par des moyens de jonction comprenant des accouplements mâle-femelle à fente (51-54).

9. Structure de ventilation selon les revendications 5 ou 6, caractérisée en ce que les ailes (18) sont portées par le nez (11B) et ont la forme d'un nez dirigé vers le bas ou d'un égouttoir.

10. Structure de ventilation selon l'une quelconque des revendications précédentes caractérisée en ce que le conduit (11A) a une surface inférieure (13) pratiquement plane de manière à pouvoir être placée sur une surface supérieure (10B) d'un élément de châssis (10).

11. Structure de ventilation selon la revendication 1, caractérisée en ce que l'aile (18) comporte une lèvre (18A) tournée vers l'intérieur.

- 12.** Structure de ventilation selon l'une quelconque des revendications précédentes, caractérisée en ce que le moyen d'isolation (14) est à section rectangulaire et est réalisé par exemple en une matière plastique synthétique telle que le Néoprène fixée à l'aile (18). 5
- 13.** Structure de ventilation selon l'une quelconque des revendications précédentes, caractérisée en ce que le moyen d'isolation (34, figure 12) comporte une base profilée insérée dans un logement de forme complémentaire de l'aile (18). 10
- 14.** Structure de ventilation selon la revendication 13, caractérisée en ce que le moyen d'isolation (34) présente une tête élastique en forme de profilé à section circulaire rencontrant de façon étanche la surface latérale verticale (10A) de l'élément de châssis. 15 20
- 15.** Structure de ventilation selon l'une quelconque des revendications précédentes, caractérisée en ce qu'un élément formant chicane isolante phonique (69) est logée dans le corps de conduit principal (11A). 25

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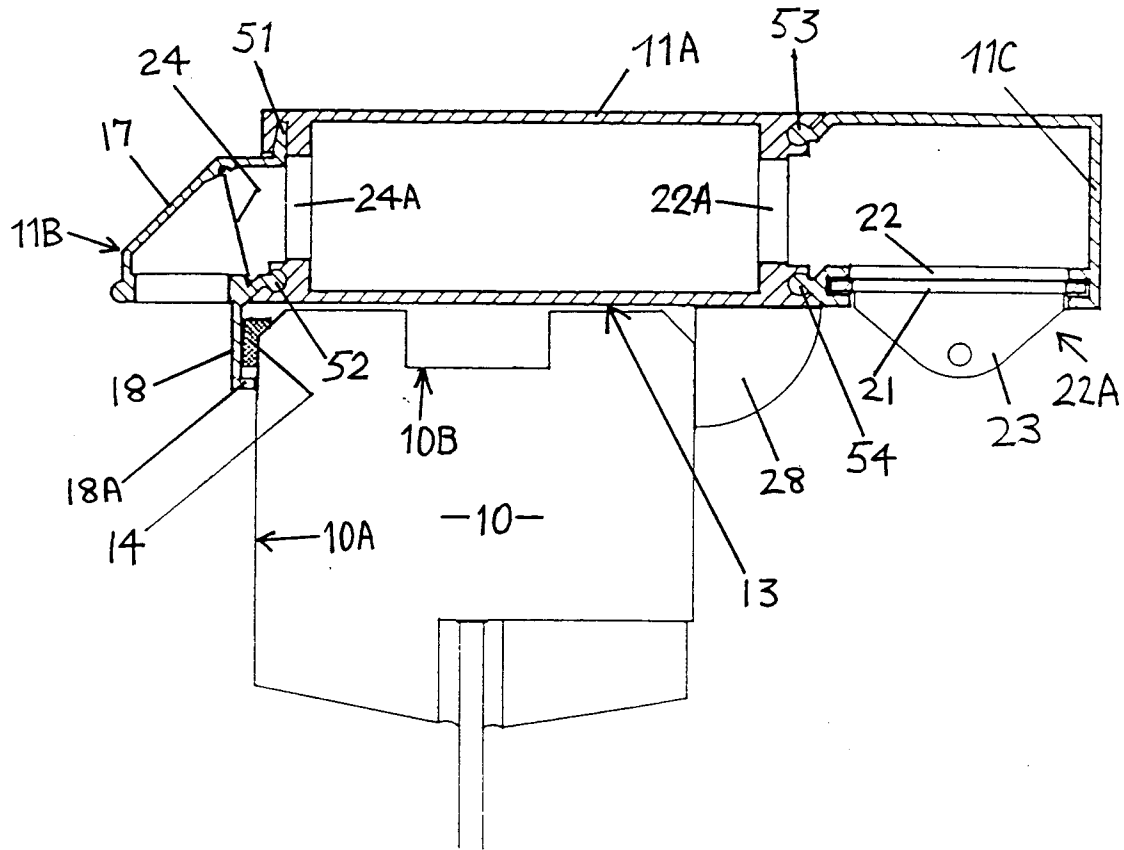


Fig. 1

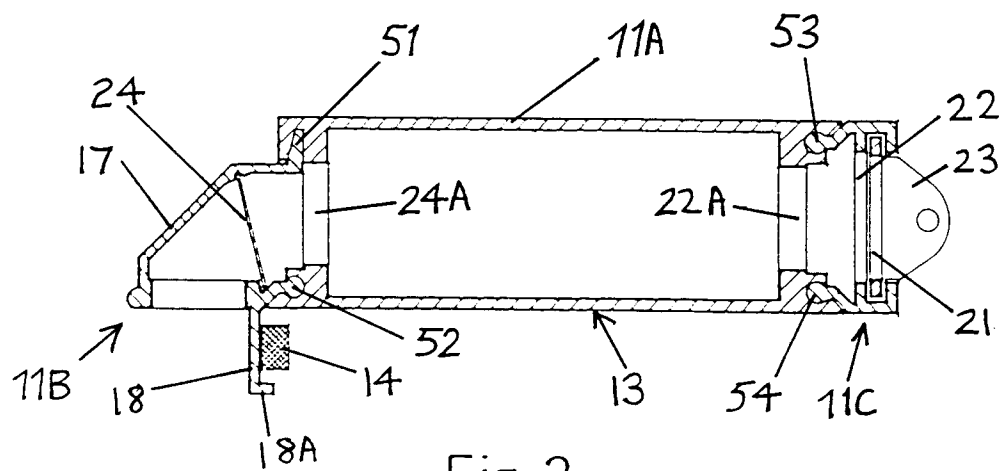


Fig. 2

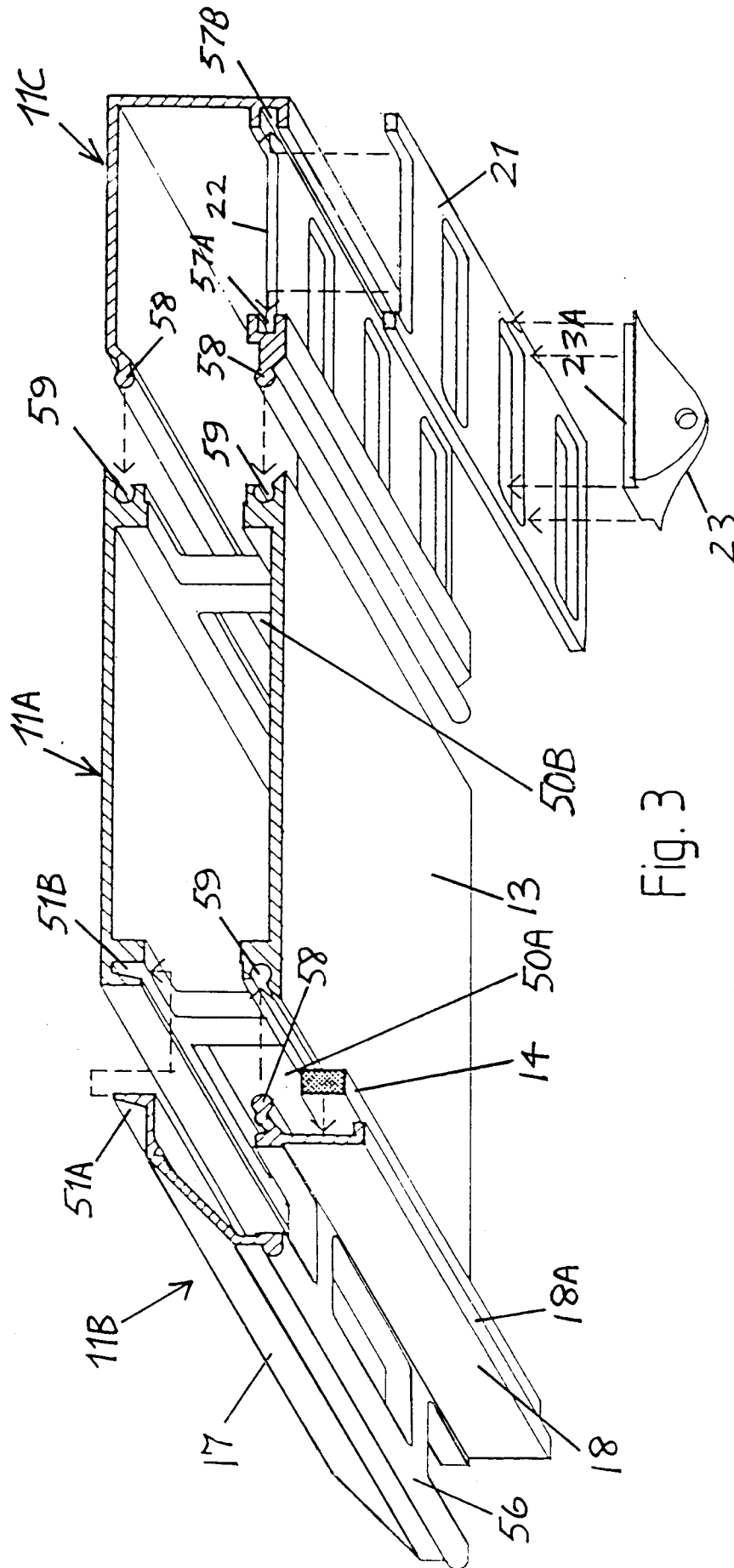
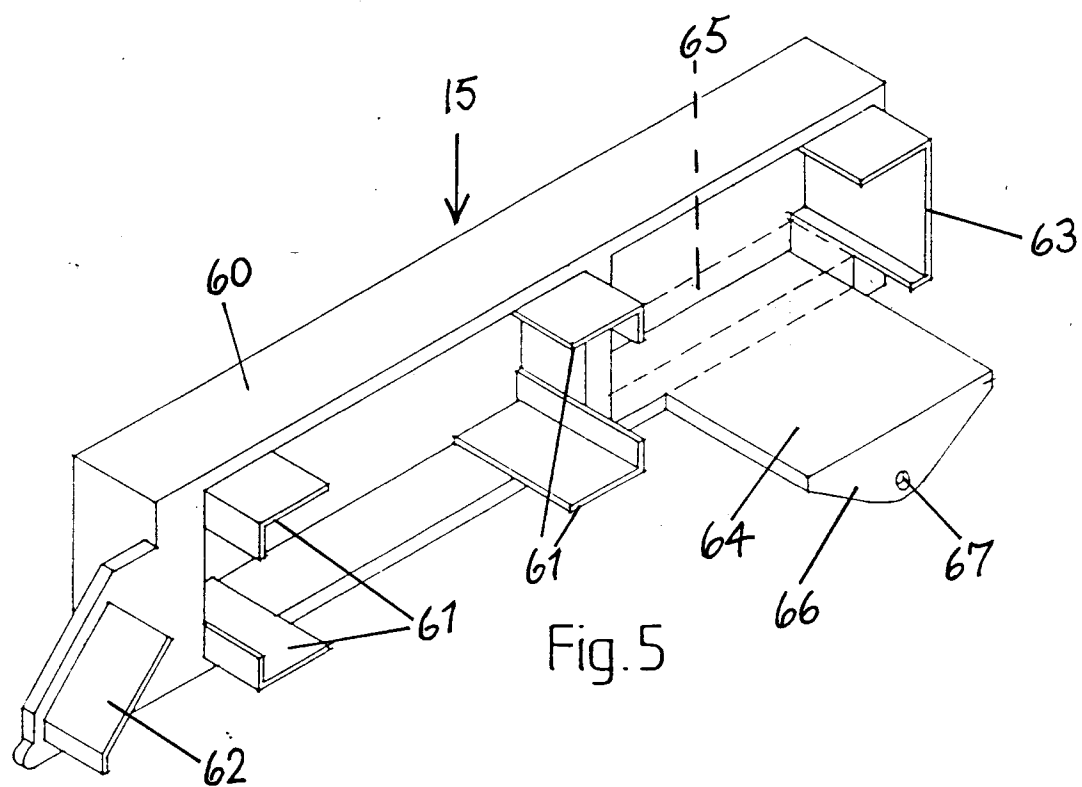
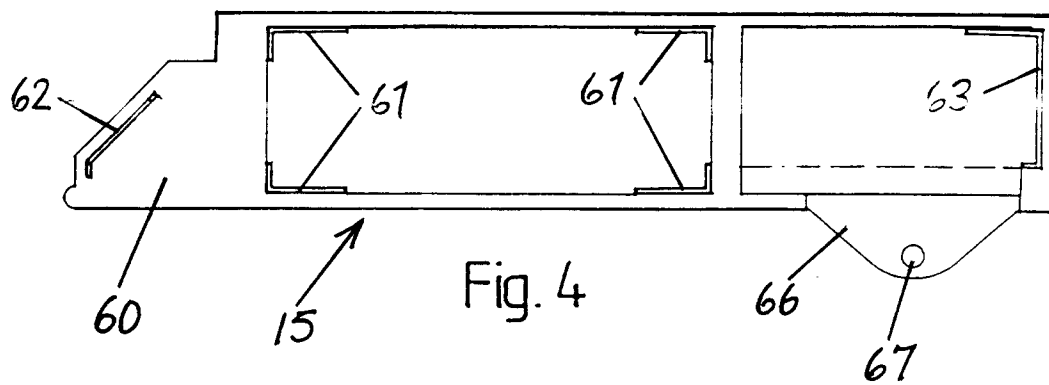
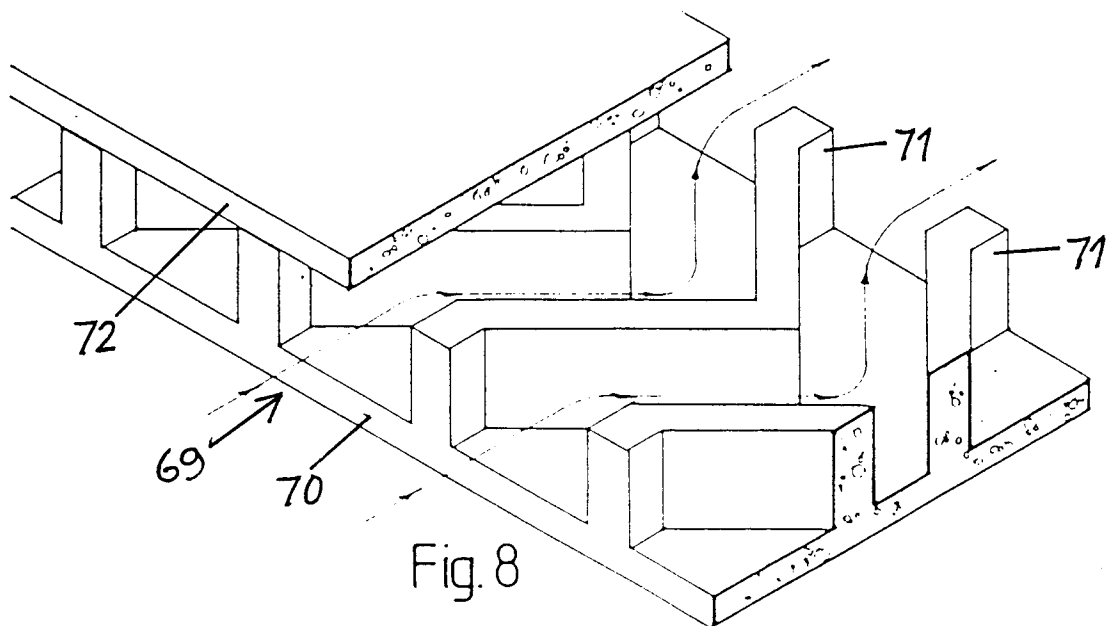
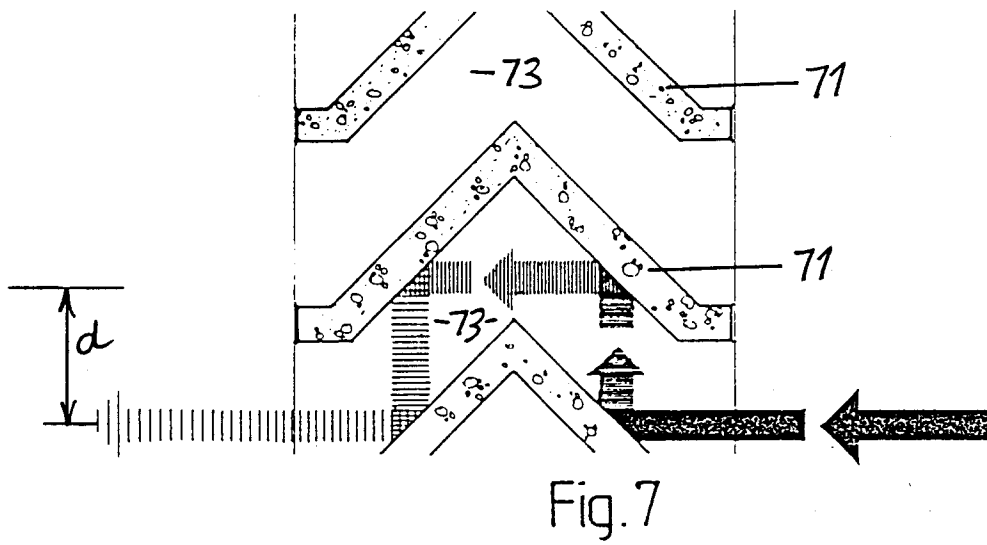
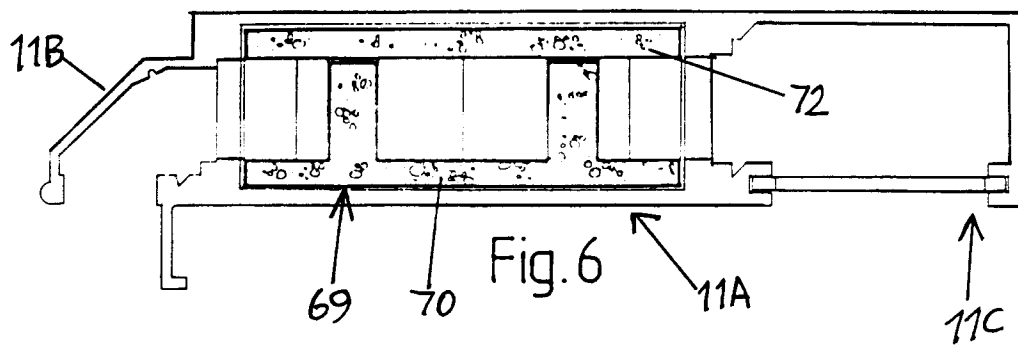


Fig. 3





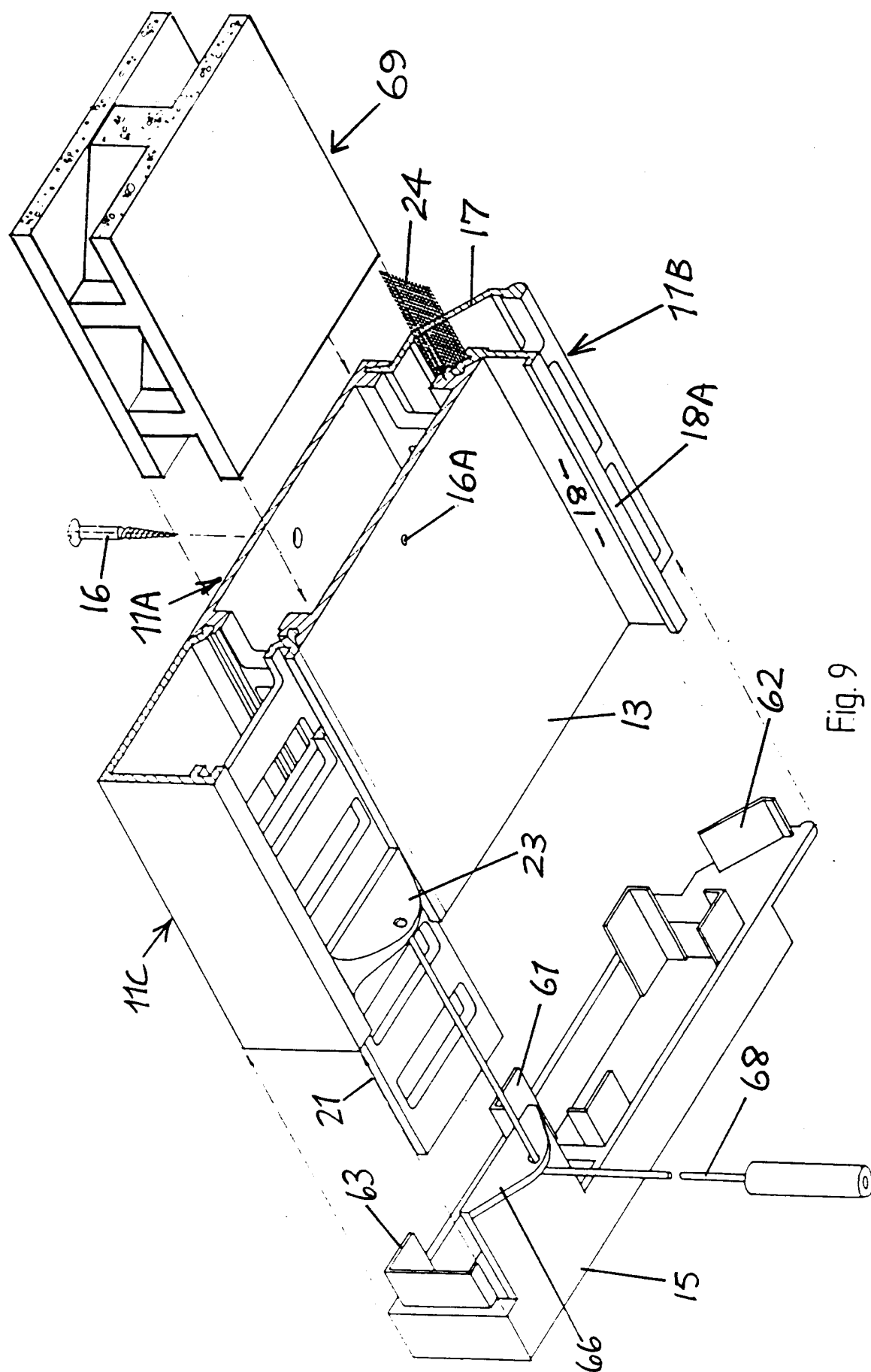


Fig. 9

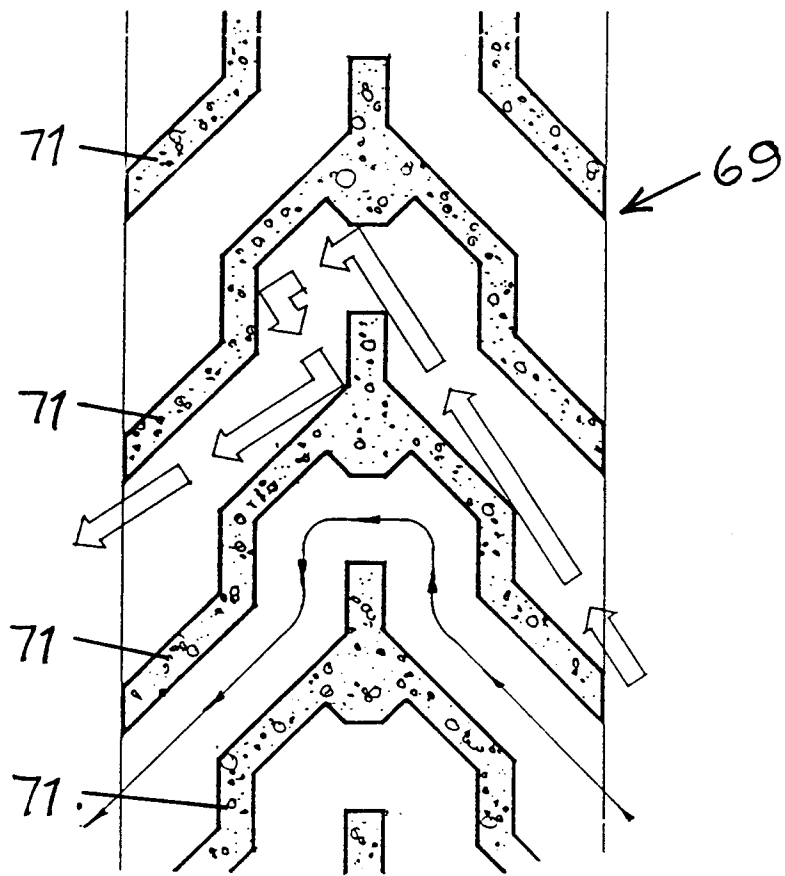


Fig. 10

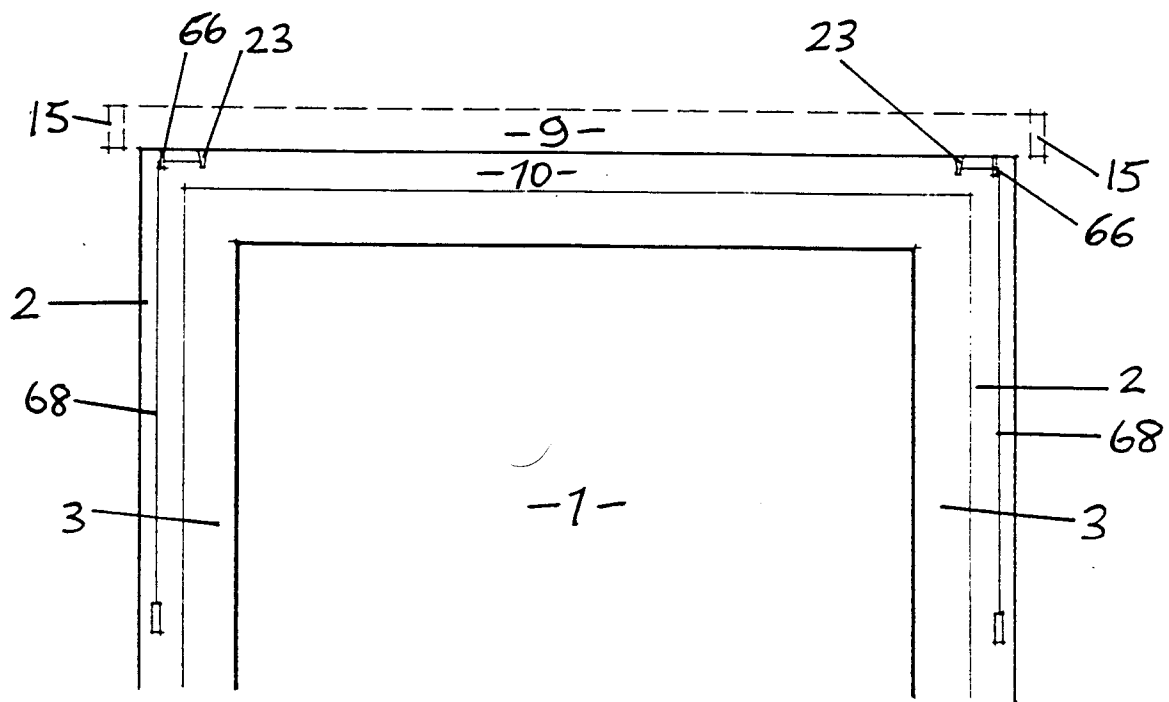


Fig. 11

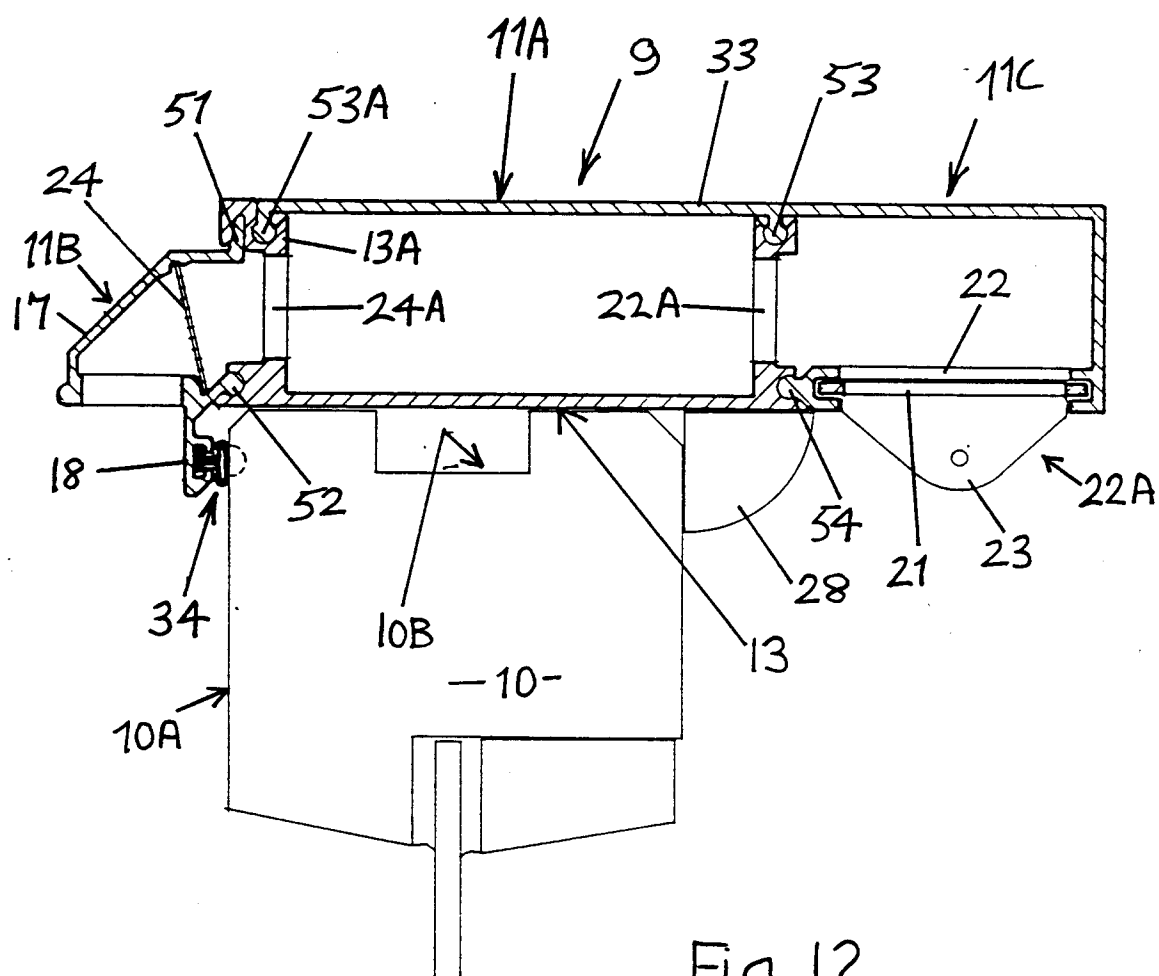


Fig. 12