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(54) **Roller screen**

(57) With a roller screen which is intended for being mounted on the frame of a window opening and which comprises a housing for a roll-up mechanism for a gauze screen and guides for said gauze screen, angle

sections are present between the housing and/or the guides and the frame. Furthermore a flexible sealing member extending in the longitudinal direction of the frame is fitted on the side of the housing and/or the guides that faces towards the frame.

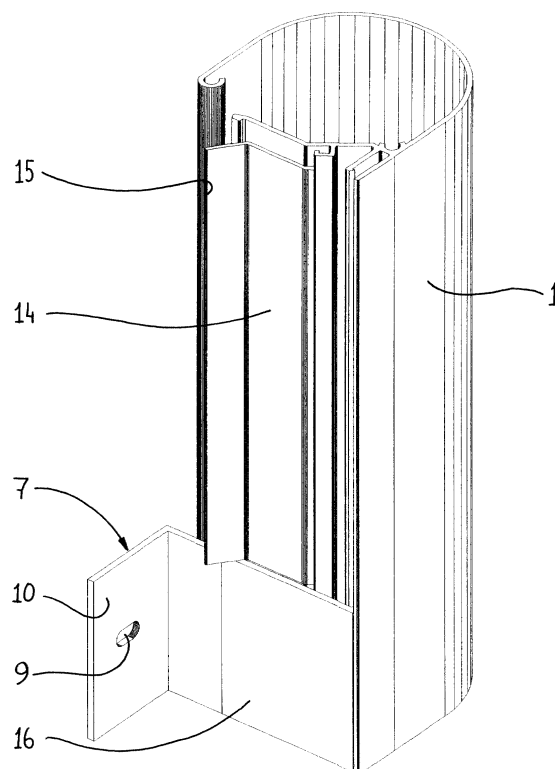


FIG. 1

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Description

[0001] The invention relates to a roller screen which is intended for being mounted on the frame of a window opening, door opening or the like and which includes a gauze screen, a roll-up mechanism for the gauze screen, which is accommodated in a housing, a pull beam connected to the free end of said gauze screen, and guides for guiding said pull beam and the side edges of said gauze screen.

[0002] With a prior art roller screen of the present type the housing and the guides are generally mounted on frontal sides of the frame in question. For the operation of the roller screen it is essential, of course, that no gaps through which insects can pass are present between the frame and the respective parts of the roller screen. With conventional frames having flat frontal sides, the housing and the guides will generally abut properly against the frame along their length, so that the desired sealing action is ensured. Problems arise, however, when the aforesaid frontal sides of the frames are not flat. This may for example be the case when the frames in question are profiled or when they are damaged. In such a case it is on the one hand impossible to ensure the required sealing action, whilst on the other hand problems may arise when mounting the roller screen parts in question on the frame.

[0003] The object of the invention is to provide a roller screen wherein the aforesaid drawbacks are eliminated in a simple yet effective manner.

[0004] In order to accomplish that objective, the roller screen according to the invention is characterized in that angle sections are present between the housing and/or the guides on the one hand and the frame on the other hand, which sections can be fixed to the frame by means of simple fixing devices and which possess connecting members on their side facing towards the housing and/or the guides, which connecting members cooperate with said housing and/or said guides, wherein a flexible sealing member extending in the longitudinal direction of the frame is fitted on the side of the housing and/or the guides that faces towards the frame, which sealing member functions to engage the frame.

[0005] The angle sections are fixed with one leg to the sides of the frame that face towards the door opening, window opening or the like in question. The other leg locally covers the frontal side of the frame and forms a suitable point of attachment for the roller screen part in question (the housing and/or the guide). Extending between successive angle sections is the flexible sealing member, which abuts against the respective frontal side of the frame with its end, thus forming an effective seal against intruding insects.

[0006] As a result of the use of angle sections, the nature of the frame hardly plays a role when mounting the roller screen. Furthermore the flexible sealing member makes it possible to obtain a proper seal irrespective of the surface condition of the frame side in question.

[0007] In a preferred embodiment of the roller screen according to the invention the flexible sealing member is interrupted at the location of the angle sections. Consequently, the flexible sealing member of this embodiment consists of a number of separate sealing members, as it were, each of which is disposed between two successive angle sections. According to another possibility, however, the sealing member is continuous indeed, but it comprises cut-away portions at the location of the angle sections. Anyway, the sealing member provides an adequate seal in combination with the angle sections, so that no insects can pass between the roller screen parts in question and the frame.

[0008] In order to enable easy mounting of the roller screen on the frame, it is furthermore preferable that the connecting members consist of snap members and/or hook members. Such members may be of a conventional type.

[0009] According to one variant of the roller screen according to the invention the legs of the angle sections are at right angles to each other. In this way the legs supporting the connecting members of all angle sections lie in the same plane, so that the roller screen is very easy to mount.

[0010] Finally, screws, nails or the like may be used as the fixing devices. The angle sections can be fixed quickly but nevertheless accurately to the frame with such conventional fixing devices.

[0011] The invention will now be explained in more detail with reference to the drawings, which shows an embodiment of the roller screen according to the invention.

[0012] In the drawing:

Fig. 1 is a perspective view of a part of an embodiment of the roller screen according to the invention; Fig. 2 is an end view of the part of the roller screen according to the invention that is shown in Fig. 1, which part is mounted on a first frame member; and Fig. 3 is an end view of the part of the roller screen according to the invention that is shown in Fig. 1, which part is mounted on a second frame member.

[0013] A roller screen to which the present invention relates is intended for being mounted on the frame of a door opening, a window opening or the like. Such a roller screen conventionally includes a gauze screen (not shown), a roll-up mechanism (not shown either) for the gauze screen, which is accommodated in a housing 1, and a pull beam (not shown) connected to the free end of the gauze screen. Guides (not shown either) are used for guiding the pull beam and the side edges of the gauze screen. In one possible embodiment the housing 1 for the roll-up mechanism is mounted on the frontal side of a vertical frame member of a window opening. Guides will be fixed to the frontal sides of the two horizontal frame members in that case.

[0014] The invention will now be explained by describ-

ing the mounting of the aforesaid housing on a respective frame member. To this end reference can also be made to Figs. 2 and 3. The only difference between Figs. 2 and 3 is the fact that in Fig. 2 a frame member 2 having a slightly inclined frontal side 3 is used, whilst Fig. 3 shows a frame member 4 having a strongly inclined frontal side 5 and possibly a contour 6.

[0015] Present between housing 1 and the respective frame member 2 or 4 are spaced-apart angle sections 7. Although only one angle section 7 is shown in Fig. 1, it must be realised that a number of angle sections 7 are arranged in spaced-apart relationship in the longitudinal direction of the housing 1.

[0016] Each angle section 7 is fixed to the respective frame member 2 or 4 by means of a suitable fixing device 8 extending through an eye 9. To this end the respective leg 10 of angle section 7 abuts flat against the respective side of frame member 2 or 4 (this side faces towards the window opening).

[0017] Housing 1 is fixed to angle section 7 by means of hook members 11 and snap members 12.

[0018] A flexible sealing member 14 is fitted in a hook 13 of housing 1. Said flexible sealing member abuts with its free end 15 against the frontal side 3 or 5 of the respective frame member 2 or 4.

[0019] As is apparent from Fig. 1, the sealing member 14 joins the side edge of an angle section 7. On the one hand a separate sealing member 14 may be present between respectively two successive angle sections 7, but it is also conceivable that the sealing member 14 continues along the length of the housing 1 and only comprises cut-away portions so as to make room for the respective leg 16 of angle section 7.

[0020] In the embodiment that is shown in Figs. 2 and 3 the legs 10 and 16 of angle sections 7 are at right angles to each other. Other angles are also conceivable, however.

[0021] A comparison between Figs. 2 and 3 immediately shows that the flexible sealing member 14 makes it possible to effect an adequate seal between the roller screen part in question and the frame in spite of the fact that the frontal side of the frame is irregularly shaped or profiled.

[0022] In the foregoing the invention has been explained on the basis of housing 1, in which the roll-up mechanism for the gauze screen is accommodated. The respective angle sections 7 and the sealing member 14 can also be used in a comparable manner at the location of the guides, however, which are mounted in the place of housing 1 in that case. This does not affect the inventive concept.

[0023] The invention is not limited to the embodiments as described above, which can be varied in several ways without departing from the scope of the invention as defined in the claims.

Claims

1. A roller screen which is intended for being mounted on the frame of a window opening, door opening or the like and which includes a gauze screen, a roll-up mechanism for the gauze screen, which is accommodated in a housing, a pull beam connected to the free end of said gauze screen, and guides for guiding said pull beam and the side edges of said gauze screen, **characterized in that** angle sections are present between the housing and/or the guides on the one hand and the frame on the other hand, which sections can be fixed to the frame by means of simple fixing devices and which possess connecting members on their side facing towards the housing and/or the guides, which connecting members cooperate with said housing and/or said guides, wherein a flexible sealing member extending in the longitudinal direction of the frame is fitted on the side of the housing and/or the guides that faces towards the frame, which sealing member functions to engage the frame.
2. A roller screen according to claim 1, **characterized in that** said flexible sealing member is interrupted at the location of said angle sections.
3. A roller screen according to claim 1 or 2, **characterized in that** said connecting members consist of snap members and/or hook members.
4. A roller screen according to any one of the preceding claims, **characterized in that** the legs of said angle sections are at right angles to each other.
5. A roller screen according to any one of the preceding claims, **characterized in that** said fixing devices are screws, nails or the like.

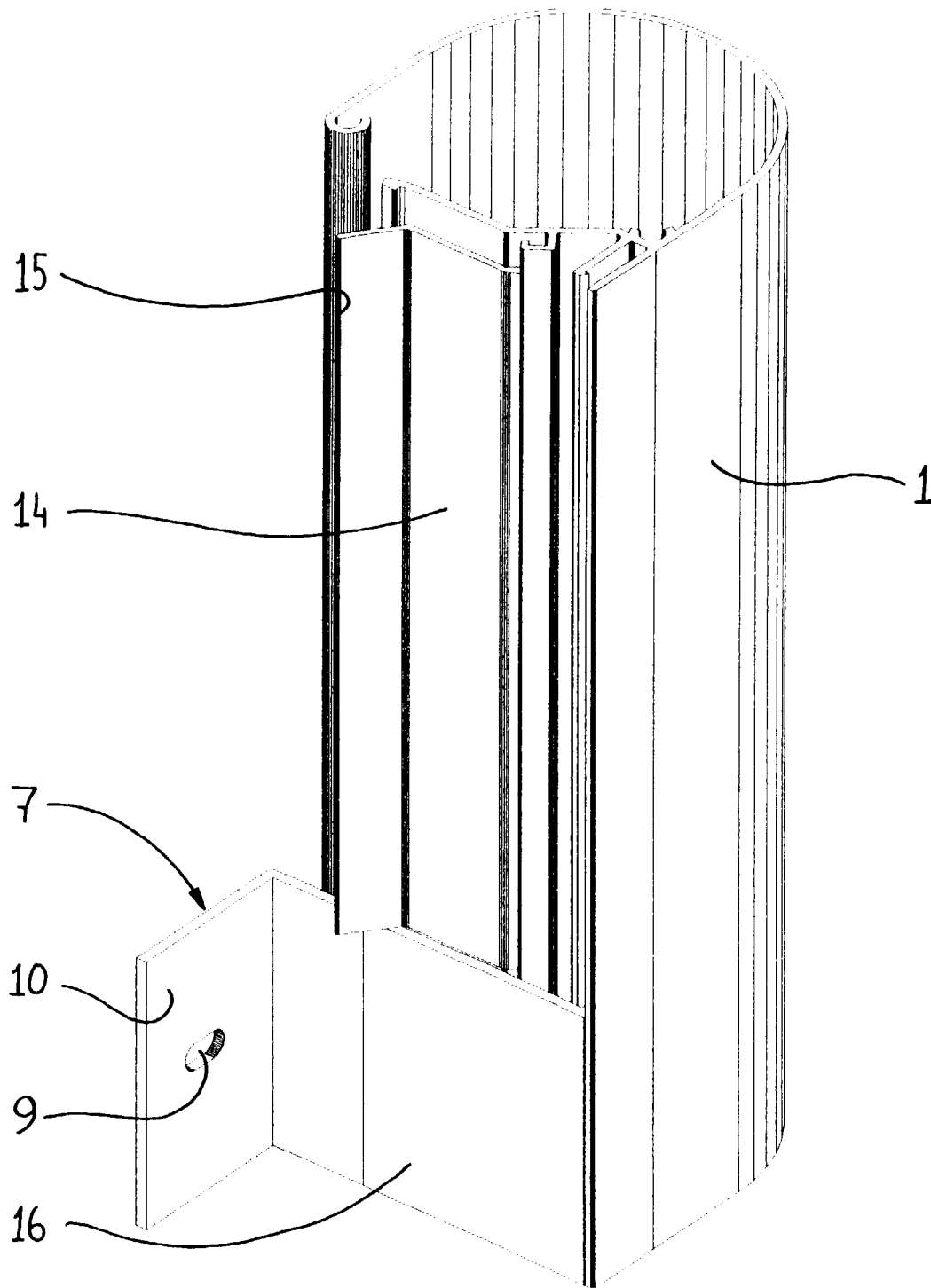


FIG. 1

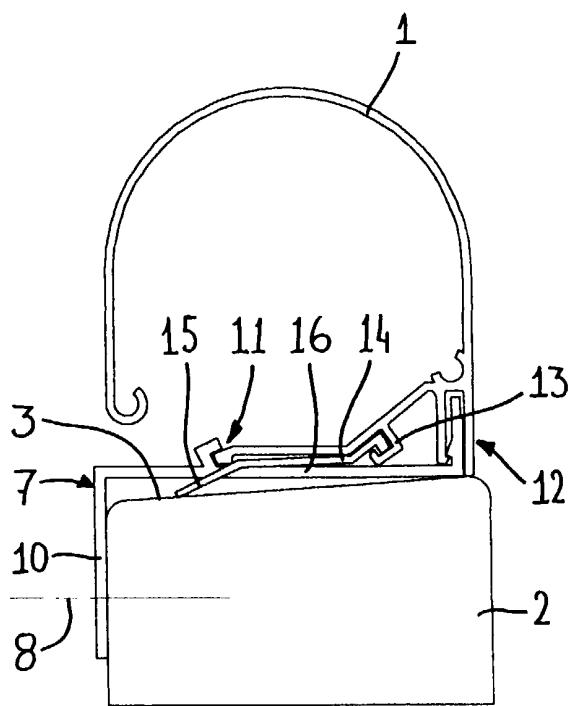


FIG. 2

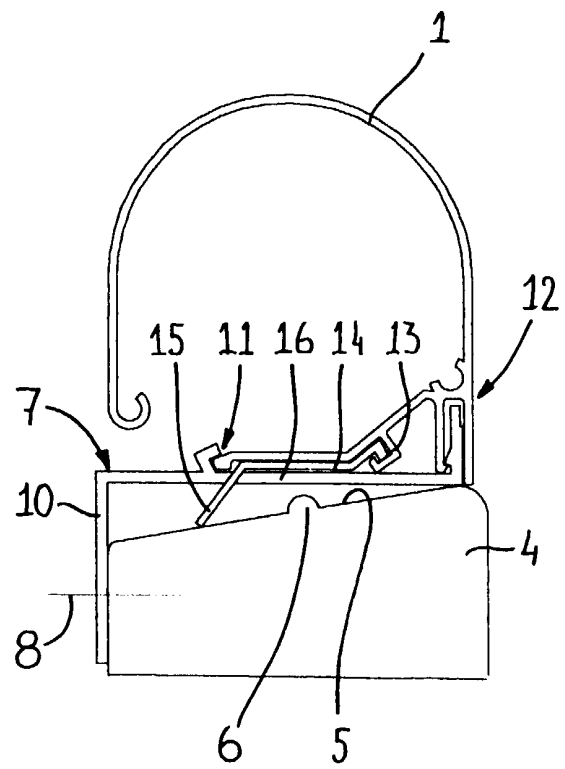


FIG. 3



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EUROPEAN SEARCH REPORT

Application Number
EP 00 20 4254

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	FR 2 437 542 A (MOLLARD PIERRE) 25 April 1980 (1980-04-25) * page 2, line 23 - line 30 * * figure 2 *	1	E06B9/54
A	DE 34 05 799 A (JOHANNES KARL HEINZ) 22 August 1985 (1985-08-22) * abstract * * page 15, line 24 - page 17, line 1 * * figures *	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			E06B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 9 February 2001	Examiner Verdonck, B
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 20 4254

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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09-02-2001

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