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### **EUROPEAN PATENT APPLICATION**

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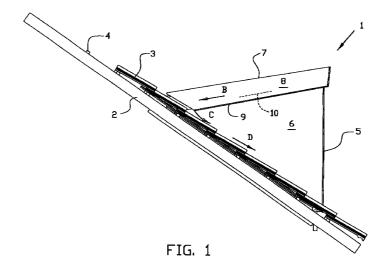
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#### (54) **Dormer window**

(57) Dormer window (1) having an upper wall (7), a front wall (5) and two side walls (6), the side walls (6) and possibly the front wall (5) as well being provided with gutters (10) at their upper edge area, which gutters extend alongside of it from the front to the rear and to

the side, respectively, which in relation to the upper surface of the upper wall (7) have a lowered gutter bottom (9), the upper surface (7) being at fall to the gutter (10).



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#### **Description**

[0001] The invention relates to a dormer window.

**[0002]** Dormer windows can already be placed on the sloping (pointed) roof of a house when it is being newly built. Often, however the need for a dormer window arises later on, in which case a hole has to made in the roof and the dormer window is built up locally or a prefab dormer window is placed over the hole on the roof.

**[0003]** The upper side of the dormer window is then provided with a waterproof covering, such as a layer of bitumen, a layer of gravel or zinc possibly placed on top of it. At one side of the dormer window a precipitation discharge pipe is arranged, with which precipitation fallen -directly or by flowing down from parts of the roof situated higher- on the upper side of the dormer window is discharged to parts of the roof situated lower. To that end an outlet is provided near the upper edge of the dormer window, which outlet has its entrance at the edge of the upper side of the dormer window and changes into the precipitation discharge.

**[0004]** The outlet/precipitation discharge may after some time start to leak at the location of the connections. The outlet can also get clogged up for instance by leaves. Furthermore it occurs only too quickly that water remains on the upper side of the dormer window, because not the entire upper side is at fall to the outlet as a result of wrong aligning of the upper side or of later deformation. In the long run this could also lead to leakages.

[0005] The invention has the object to improve on at least some of these points, and to that end provides a dormer window having an upper wall and a number of lateral walls, including a front wall and two opposite side walls, at least one lateral wall at its upper edge area being provided with a gutter extending alongside of it, which in relation to the upper surface of the upper wall has a lowered gutter bottom, the upper surface being at fall to the gutter.

**[0006]** The water on the upper wall of the dormer window now has a considerable length at its disposal over which it can flow away from the upper surface. As a result clogging up and standing water will hardly occur anymore.

**[0007]** Preferably both side walls are provided with such a gutter at their upper edge areas, which gutter extends alongside of them from the front to the rear. The water on the upper wall can then be discharged along two sides, as a result of which the dimensioning of the discharge can be kept smaller.

**[0008]** In a further development of the dormer window according to the invention the upper surface of the upper wall is at lateral fall to the gutters provided at the upper edge areas of the side walls, so that both gutters can discharge equally much and the water load is shared.

[0009] Preferably the front wall as well is provided

with such a gutter in its upper edge area, which gutter connects to the gutter at an adjacent side wall. In this way a quick discharge of water on the upper wall near the front edge is ensured.

**[0010]** Preferably the gutter(s) is/are situated outside of the lateral walls concerned, as a result of which the free space there is used and no special provisions need to be made in those walls. The gutters can as it were hang over those walls.

10 [0011] Preferably the gutters are shielded to the outside by a finishing ledge or fascia. In an advantageous manner the fascia can then also constitute the raised outer wall of the gutters, and thus perform a double function.

**[0012]** Preferably the gutters are formed as one unity with the upper wall, as a result of which placing is simple and sealing is ensured.

[0013] Another objection of the known dormer windows is that the precipitation discharge is in full view and could be regarded as an aesthetically disturbing element. Moreover the precipitation discharge can be an element which limits the freedom of design in the dormer window. The dormer window with gutters according to the invention makes it possible to entirely abandon a precipitation discharge. To that end in a further development of the dormer window according to the invention, it is provided that at the gutter provided at the upper edge area of a side wall debouches freely at its rear end. The gutter concerned thus directly drains on the roof.

**[0014]** The invention will now be elucidated on the basis of an exemplary embodiment shown in the attached drawings, in which:

Figure 1 shows a side view of the dormer window according to the invention;

Figure 2 shows a top view of the dormer window of figure 1;

Figure 3 shows a front view of the dormer window of figures 1 and 2;

Figure 4 shows a detail of the upper side wall of the dormer window of the figures 1-3.

**[0015]** The dormer window 1 is arranged on a sloping roof 2, which is provided with tiles 3 which are supported on each other and on battens 4.

[0016] Dormer window 1 comprises a front wall 5, having a window 11, two side walls 6 and an upper wall 7. All walls can be provided with insulation accommodated therein, possibly integrally formed therein. At the edges of the upper wall 7 a finishing ledge or fascia 8 is arranged, which limits the upper wall to the sides and to the front.

[0017] As can be seen in figure 2 and in figure 4 the upper wall 7 changes into a strip 12a,b,c depending

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sideward and to the fore, subsequently into a more horizontal strip 9a,b,c and finally into a raised strip 8a,b,c which also serves as fascia. Thus gutters 10a,b,c are formed at the side edges and the front edge of the upper wall 7, of which gutters the bottom 9a,b,c is lower than 5 the upper surface of the upper wall 7.

[0018] As can be seen in figure 2 the upper surface of the upper wall 7 is provided with a fall to the side edges, in the directions A and to the fore, in direction E. The water fallen on the upper wall 7 will flow down in those directions to the gutters 10a,b,c and in there flow in the direction B, F and B respectively, to the rear. Special now is that as can be seen in figure 1, the bottom 9a,b of the gutters 10a,b ends at some distance from the tiles 3 there. As a result the water from the gutters 10a,b can freely debouch in the direction C and further flow down over the tiles 3 in the direction D. An outlet can be abandoned here.

**[0019]** The gutter 10c at the front edge is especially useful when the surface of the upper wall 7 would incline a little to the fore, so that standing water at the front edge is prevented.

**[0020]** The location of the gutters at the side of the actual upper wall makes the moulding of the upper wall simple. Upper wall and gutters, including fascia, can be formed as one unity from a synthetic material. The upper wall formed thus can simply be connected to the side walls and the front wall. The dormer window as a unity 1 can then be placed on the roof 2 in the known manner.

**[0021]** As can be seen in figure 1 the gutters 10 are situated somewhat at a fall, from the front to the rear, to speed up and guarantee drainage. In this way also a striking oblique line is introduced, as a result of which it is unnecessary to make adjustments to render the fascia horizontal when the roof inclination is a bit different. The upper edge of the finishing ledges 8a,b can moreover have a course which is different from the one of the gutter bottom 10a,b.

Claims

- 1. Dormer window having an upper wall and a number of lateral walls, including a front wall and two opposite side walls, at least one lateral wall at its upper edge area being provided with a gutter extending alongside of it, which in relation to the upper surface of the upper wall has a lowered gutter bottom, the upper surface being at fall to the gutter.
- 2. Dormer window according to claim 1, both side walls at their upper edge areas being provided with such a gutter, which extends alongside of them from the front to the rear.
- 3. Dormer window according to claim 2, the upper surface of the upper wall being at lateral fall to the gutters provided to the upper edge areas of the side

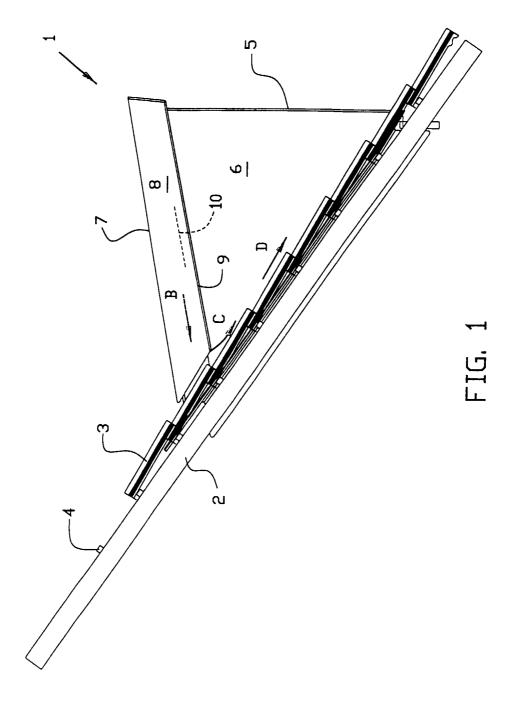
walls.

- 4. Dormer window according to claim 1, 2 or 3, the front wall as well being provided with such a gutter in its upper edge area, which gutter connects to the gutter at an adjacent side wall.
- Dormer window according to any one of the preceding claims, the gutter(s) being situated outside of the lateral walls concerned.
- Dormer window according to any one of the preceding claims, the gutters being shielded to the outside by a fascia.
- **7.** Dormer window according to claim 6, the fascia also constituting the raised outer wall of the gutters.
- **8.** Dormer window according to any one of the preceding claims, the gutters being formed as one unity with the upper wall.
- Dormer window according to any one of the preceding claims, the gutter provided at the upper edge area of a side wall debouching freely at its rear end.
- **10.** Dormer window comprising one or more of the characterizing measures described in the description and/or shown in the drawings.

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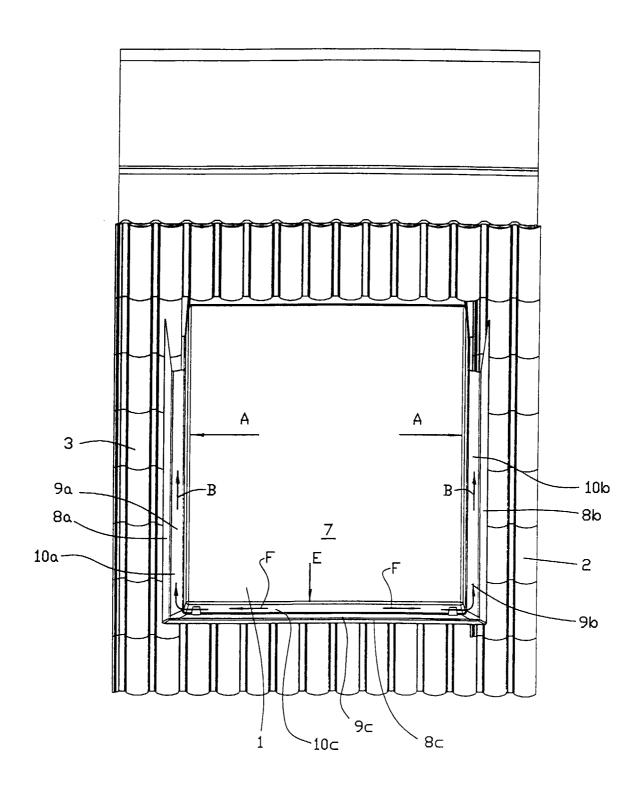
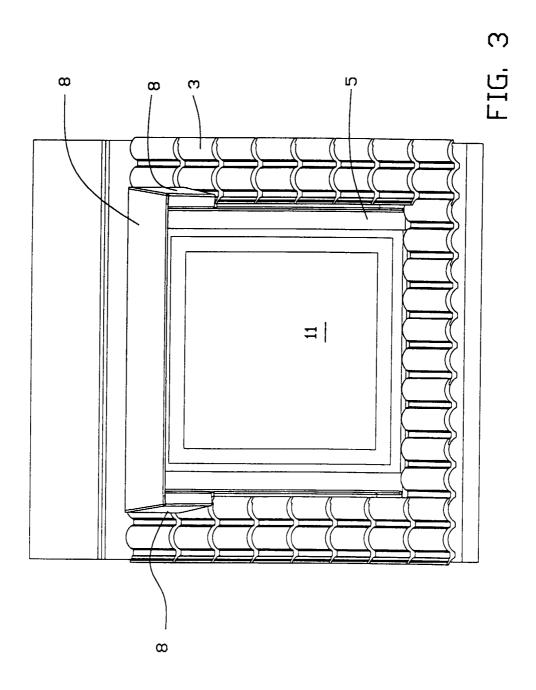
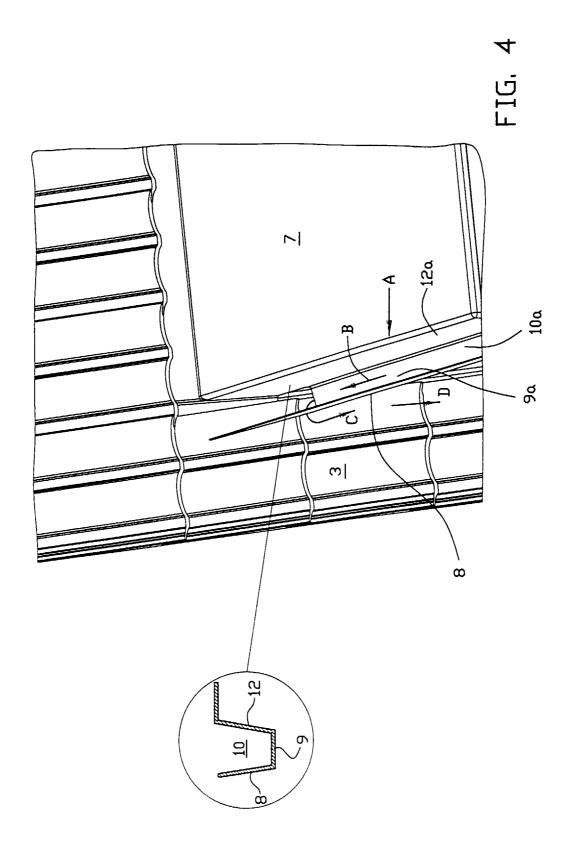


FIG. 2







# **EUROPEAN SEARCH REPORT**

Application Number EP 99 20 4360

ategory	Citation of document with indicat of relevant passages	on, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
	DE 87 15 911 U (ETERNI 21 January 1988 (1988- * page 1, line 33 - pag * page 3, line 8 - page * page 3, line 35 - pag * figure 3 *	01-21) ge 2, line 16 * e 3, line 27 *	-4,6-9	E04B7/18
	DE 295 09 428 U (KLAUS 21 September 1995 (199! * figures 1-3 *			
				TECHNICAL FIELDS SEARCHED (Int.Cl.7)
				E04B
	The present search report has been of	<u> </u>		
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X : perti Y : perti docu	ATEGORY OF CITED DOCUMENTS  cularly relevant if taken alone  cularly relevant if combined with another ment of the same category  nological background	T: theory or principle ur E: earlier petent docum after the filing date D: document cited in th L: document cited for o	nderlying the i ent, but public e application ther reasons	rivention

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

EP 99 20 4360

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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12-04-2000

Patent do cited in sear	cument ch report	Publication date	Patent family member(s)	Publication date
DE 87159	11 U	21-01-1988	NONE	
DE 29509	428 U	21-09-1995	NONE	
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82