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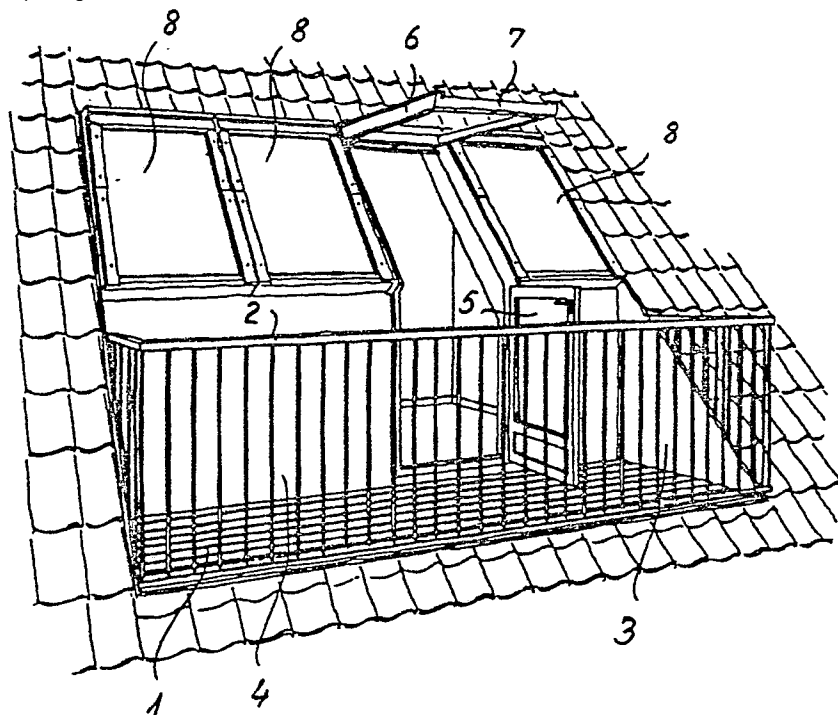
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(54) **A balcony window and door arrangement in an inclined roof.**

(57) The vertical breast wall (4) forming the rear wall of a balcony installed in an inclined roof comprises a hinged door (5) which is completed to full height by a top-hinged window (6) which in its closed position flushes with the roof surface and at its lower edge fits tightly against the top edge of the door.



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A Balcony Window and Door Arrangement in an Inclined Roof.

In buildings with inclined roof and with living rooms in the attic it has gradually become quite common to utilize the closet space under the roof, i.e. the utmost or wing section of the attic enclosure, by including said space in the area of a balcony installed in the roof. The bottom of the balcony may according to requirement extend beyond the front of the building, and the balcony may be glass covered so as to form some sort of an outdoor room in connection with the indoor living room. The balcony is delimited against said living room by a wall comprising a door and which, moreover, may entirely or substantially consist of firm or openable windows giving a good outlook and letting in a suitable quantity of daylight. Said wall should have such a position in the house that sufficient height for the balcony door, i.e. generally about 2 m or some more, is left under the inclined roof which means that the wall must be off-set somewhat inwardly from the flush of any closet wall thereby depriving the indoor living room of a corresponding floor area which instead forms part of the balcony bottom. In case of relatively large living rooms this reduced floor area may be of secondary importance but in smaller rooms it may be felt as a considerable inconvenience which is only slightly compensated for by the spaciousness on the balcony outside the wall.

Said drawback is remedied by the present invention, the object of which is to provide a special window and door arrangement for a balcony installed in an inclined roof. The characteristic feature of said arrangement is that the rear wall of the balcony consists, firstly, of a vertical breast wall having at least one door and, secondly, of a sloping roof portion including a window positioned above the door and having a lower edge which in the closing position fits tightly against the upper edge of the closed door.

Thus, the window in this arrangement corresponds in a way to the top portion of a so-called Dutch door or half door, the lower portion of which is constituted by the door in the vertical breast wall. This wall may be positioned at any rate approximately in the vertical plane of an ordinary closet wall so that the arrangement according to the invention may be established without any reduction of the floor area of the indoor living room. The fact that the bottom area of the balcony incidentally is not increased inwardly of the building is most frequently tolerated, but if this might nevertheless be considered an inconvenience, the balcony may as already stated be increased by an enlargement in the opposite direction.

When the door is closed the window may be opened and closed in an ordinary manner and, if desired, be left in a ventilation or airing position more or less open, and the living room then appears, practically spoken, like a room without a balcony. The window may be openable in a number of various known manners, e.g. by displacement in the lateral direction or in the height direction of the roof, by a combined movement of lifting and displacing, by a lifting-clear movement and subsequent pivotal movement parallel to the roof surface or by lateral hinging, but often it is most advantageous to make the window top-hinged or to choose a type of window that may be changed between pivoting about an upper axis when it is desired to have access to the balcony and a horizontal central axis with a view to opening and closing in case such access is not desired.

The door which according to desire is either outward going or inward going is freely openable after the window has been opened. The window and the door may then altogether offer a passage with quite sufficient width and height and neither the window nor the door need to cause any trouble for persons staying on the balcony.

An embodiment of the arrangement according to the invention is shown in the drawing illustrating a section of an inclined tiled roof in which a balcony is installed.

The balcony has for instance a wooden bottom 1 and an ordinary parapet 2 which in a manner not shown in detail may be secured to the roof structure. In the illustrated embodiment it is supposed that the balcony bottom corresponds to the bottom of an ordinary closet beneath the roof, but the balcony may according to desire be extended both inwardly and outwardly in relation thereto. At the ends the balcony is closed by triangular plates 3 and towards the indoor living room the balcony is defined by a vertical breast wall 4 which from the interior has the appearance of a closet wall having a door 5, illustrated to be outward going, the top edge of which is approximately in alignment with the top edge of the breast wall 4. The height of the door is then only about half the height of a normal door.

The doorway extends into the inclined roof and is provided with a window sash 6 which in this case is top hinged and is illustrated in its completely open, almost horizontal position against which the sash may be urged in an ordinary way, e.g. by gas pressurized springs or tension springs. It appears from the drawing that the door 5 and the window 6 in the open position allow for unimpeded passage between the balcony and the indoor living room.

When said passage is not needed the door 5 is closed at first, so that its top edge portion may serve as a frame member against which the lower edge member 7 of the window sash 6 may close tightly.

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In the illustrated embodiment ordinary windows 8 are installed in the roof on both sides of the particular window and door arrangement, but in dependence on circumstances the total or part of said roof portion may as well be tiled as the remainder of the roof.

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It should finally be observed that the door 5 may be two-winged and that the window 6 may have a correspondingly increased width so that the balcony to a greater extent may be utilized as an extension of the indoor living room.

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Claims

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A window and door arrangement for a balcony installed in an inclined roof, characterized in that the rear wall of the balcony consists, firstly, of a vertical breast wall (4) having at least one door (5) and, secondly, of a sloping roof portion including a window (6) positioned above the door and having a lower edge which in the closing position fits tightly against the upper edge of the closed door (5).

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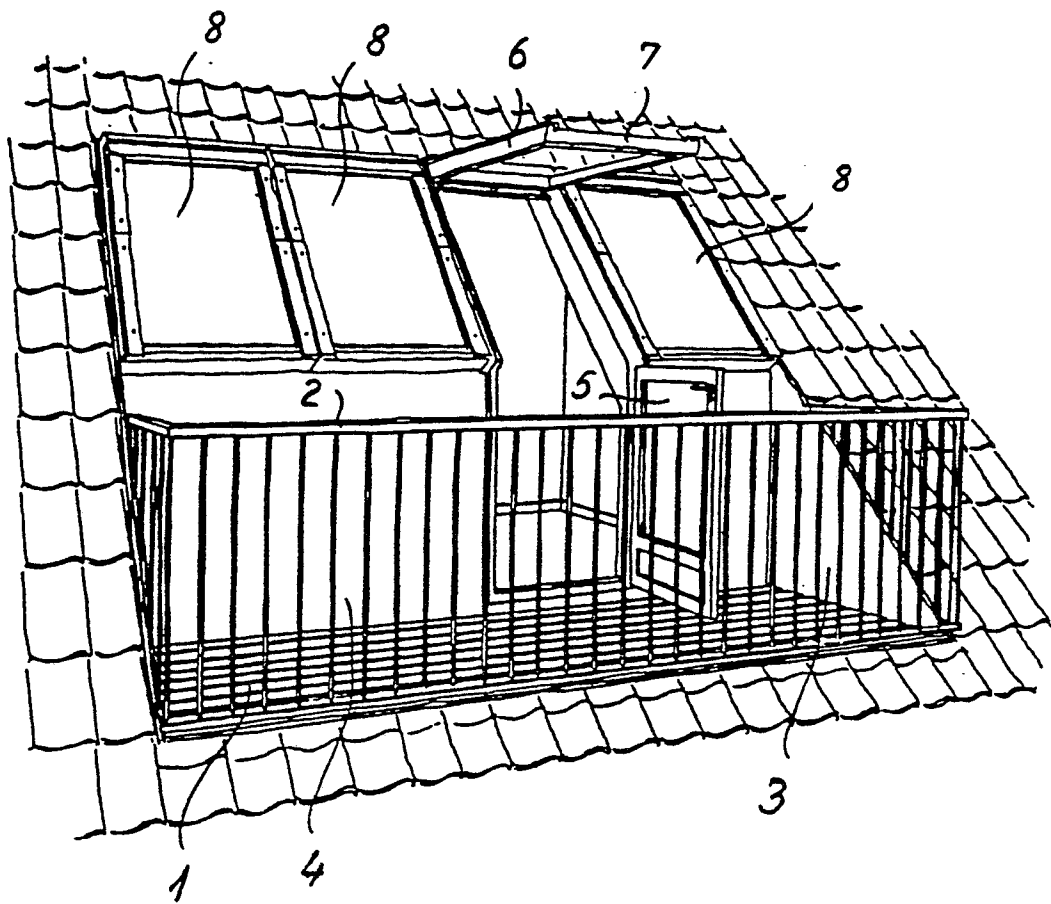
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EUROPEAN SEARCH REPORT

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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. 4)
A	US-A-3 487 483 (J.W. FREEMAN) -----		E 04 B 7/18 // E 04 B 1/00, E 04 D 13/02
			TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
			B 63 B E 04 B E 04 D E 06 B
The present search report has been drawn up for all claims			
Place of search STOCKHOLM		Date of completion of the search 30-11-1988	Examiner HEDLUND I.
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	