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(54) Window-frame

(57) A frame 1 is composed of a separate inner part 3 and a separate outer part 5. The inner part 3 is provided with two sides in view 7 and 9, which when the frame is assembled in an opening 11 in a wall 13, see figure 2, extend parallel to the inside and outside 15 and 17 of the wall. The outer part 5 is provided with a further surface in view 19, which after assembling the frame in an opening in a wall is found on the outside 17 of the wall. The outer part 5 is detachably clicked onto adapter elements 31 in the inner part 3.

The chance of damage is virtually excluded by first attaching the inner part 3 during the construction and after completion of the assembly connecting the outer part 5 with the inner part.

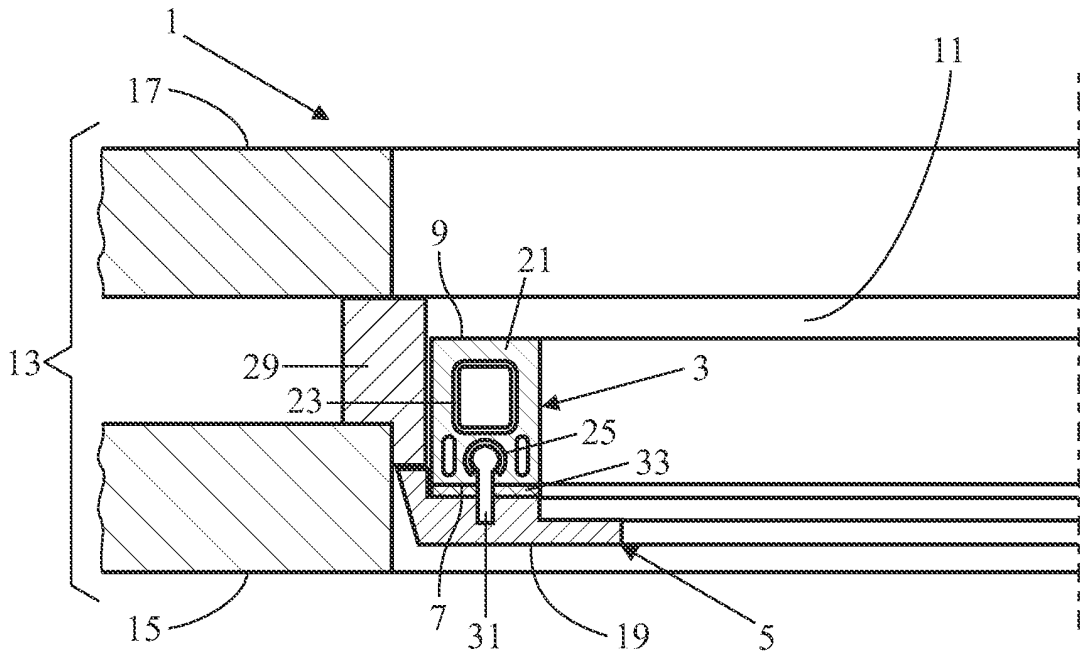

FIG. 2

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Description

BACKGROUND OF THE INVENTION:

Field of the invention

[0001] The invention relates to a frame comprising an inner part, which on assembling the frame in an opening in a wall is present mainly between the borders of the opening and which is provided with two sides in view, as well as an outer part, which can be mounted against one of the sides in view of the inner part, and thus fully or mainly covers this side in view.

Prior art

[0002] Such a frame is known from US-A-2007/0028539. In the known frame the outer part is formed by four separate click pieces, which are clicked onto the inner part. These click pieces do not contribute to the shape or insulation value of the frame. The inner part virtually fully determines the strength properties and insulation value of the frame.

Summary of the invention

[0003] An objective of the invention is to provide a frame of the type described in the preamble, which can be easily modified. For this purpose the frame according to the invention is **characterised in that** the size of the area inside the circumference of the transverse cross-section of the outer part is at least 25% of the size of the area inside the circumference of the transverse cross-section of the inner part. By dividing the frame into an inner part and an outer part, whereby the outer part determines the final shape and an appreciable part of the insulation value of the frame, the frame can be easily modified by the choice of the outer part. Moreover, by first attaching the inner part during the construction and after completion of the assembly by connecting the outer part to the inner part, the chance of damage is virtually excluded.

[0004] Preferably the size of the area inside the circumference of the transverse cross-section of the outer part is at least 50% of the size of the area inside the circumference of the transverse cross-section of the inner part. In this way the properties of the frame are determined to a still greater extent by the outer part, so that the frame can be modified even further by the choice of the outer part.

[0005] In order to provide a good insulation value the outer part is preferably massive or formed by a piece that is filled with insulation material.

[0006] The outer part can be built of four separate parts. However, in order to improve the insulation value an embodiment of the frame according to the invention is **characterised in that** the outer part is rectangular in shape and forms one whole. With four separate parts there are always gaps between these parts, which detrimentally influence the insulation value. By making the outer part from one whole the insulation value increases appreciably due to the absence of these gaps.

[0007] A further embodiment of the frame according to the invention is **characterised in that** there is a heat insulator between the inner part and the outer part. The heat insulator can for example be assembled against the inner part in the form of an insulation strip. In this way, by a correct choice of the heat insulator, the desired heat resistance can be simply achieved for every application of the frame.

Brief description of the drawings

[0008] The invention will be elucidated more fully below on the basis of drawings in which embodiments of the frame according to the invention are shown. In these drawings:

Figure 1 shows a drawing of a separate inner part and a separate outer part of a first embodiment of the frame according to the invention;
Figure 2 shows the frame shown in figure 1 assembled in an opening in a wall;
Figure 3 shows a separate inner part and a separate outer part of a second embodiment of the frame according to the invention; and
Figure 4 shows the frame shown in figure 3 assembled in an opening in a wall.

Detailed description of the drawings

[0009] Figure 1 shows a drawing of a separate inner part 3 and a separate outer part 5 of a first embodiment of the frame 1 according to the invention in horizontal cross-section. The inner part 3 is provided with two sides in view 7 and 9, which when the frame is assembled in an opening 11 in a wall 13, see figure 2, extend parallel to the inside and outside 15 and 17 of the wall. The outer part 5 is provided with a further surface in view 19, which is found on the outside 17 of the wall after assembling the frame in an opening in a wall.

[0010] The inner part 3, see figure 1, is formed by a plastic piece 21, inside of which there is a steel reinforcement frame 23. There are also steel clamping pieces 25 inside the piece 21, which are provided with attaching lugs 27. These attaching lugs 27 have been temporarily attached for transport of the inner part 3 and assembly of the inner part 3 in an opening in a wall.

[0011] After assembling the inner part 3 in the opening 11 in the wall 13, in which the inner part is fastened against an adjustment frame 29, the attaching lugs are removed and adapter elements 31 inserted into the clamping pieces 25, see figure 2. Before the outer part 5 is clicked onto the adapter elements 31, a springy strip 33 with a high insulation value is inserted between the inner part 3 and the outer part 5. The outer part 5 is also

fully inside the borders 15 of the opening 11 after assembly.

[0012] The chance of damage is virtually excluded by first assembling the inner part 3 during the construction and connecting the outer part 5 with the inner part after completion of the assembly. Moreover, the assembly of the frame is labour friendlier as now only the inner part has to be put in place and therefore less weight has to be manipulated.

[0013] By making the connection between the inner part and the outer part detachable, the appearance of the frame, if desired, can later be easily changed by the replacing the outer part by another outer part. The outer part can be of any desired material, e.g. plastic, wood or metal.

[0014] Figure 3 shows a separate inner part 3 and a separate outer part 5 of a second embodiment of the frame 35 according to the invention in horizontal cross-section. All parts of this frame 35 which are equal to or have the same function as that of the first embodiment are shown with the same reference numbers. In this frame, the inner part 3 is made of two frameworks instead of one, in which the further framework 35B is pivoted to the framework to be fastened to the wall 35A. A cover 37 has also been fitted on the outer part 5. This cover 37 can be made as a click piece.

[0015] Figure 4 shows the frame 35 assembled in an opening 11 in a wall 13. Again there is also an insulation layer 39 between the inner part 3 and the outer part 5.

[0016] Although in the above the invention is explained on the basis of the drawings, it should be noted that the invention is in no way limited to the embodiments shown in the drawings. The invention also extends to all embodiments deviating from the embodiment shown in the drawings within the context defined by the claims. For example, the outer piece can also be assembled on the other side in view of the inner part or against both sides in view.

Claims

1. Frame comprising an inner part, which on assembly of the frame is present in an opening in a wall mainly between the borders of the opening and is provided with two sides in view, as well as an outer part, which can be assembled against one of the sides in view of the inner part and thus fully or mainly covers this side in view, **characterised in that** the size of the area inside the circumference of the transverse cross-section of the outer part is at least 25% of the size of the area inside the circumference of the transverse cross-section of the inner part.

2. Frame according to claim 1, **characterised in that** the size of the area inside the circumference of the transverse cross-section of the outer part is at least 50% of the size of the area inside the circumference of the transverse cross-section of the inner part.

3. Frame according to claim 1 or 2, **characterised in that** the outer part is massive.

4. Frame according to claim 1 or 2, **characterised in that** the outer part is formed by a piece that is filled with insulation material.

5. Frame according to one of the preceding claims, **characterised in that** the outer part is rectangular in shape and forms one whole.

6. Frame according to one of the preceding claims, **characterised in that** there is a heat insulator between the inner part and the outer part.

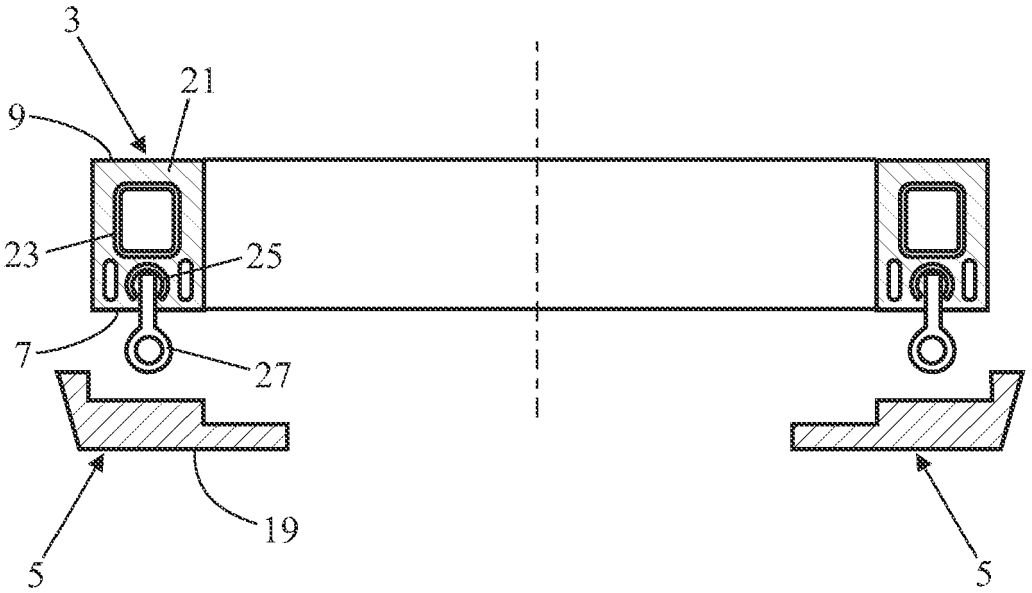


FIG. 1

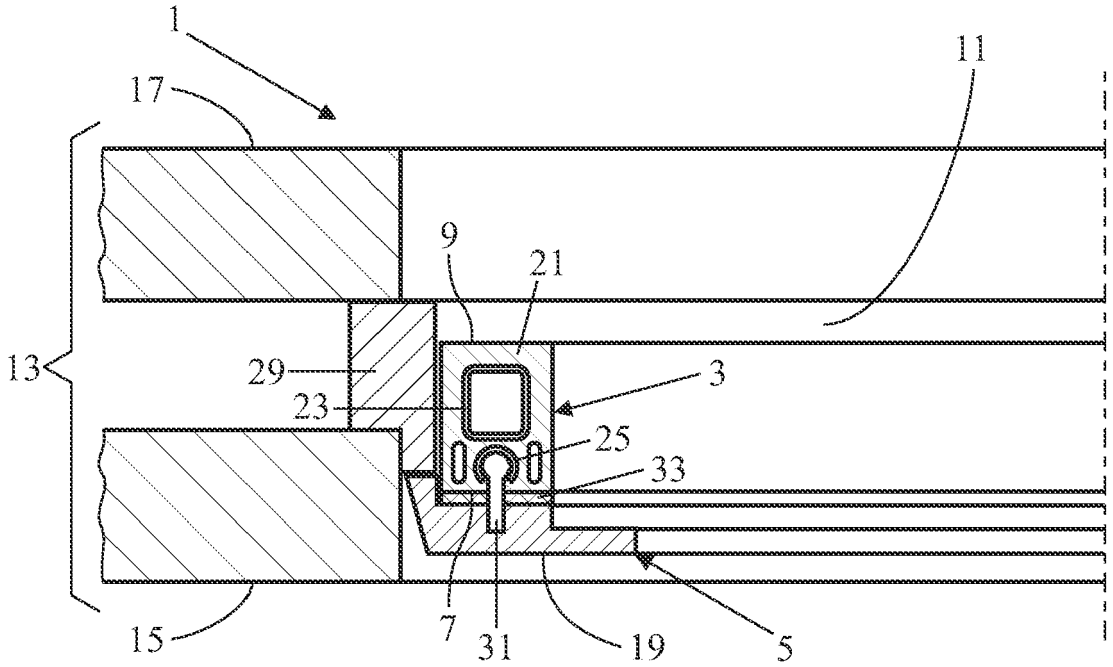
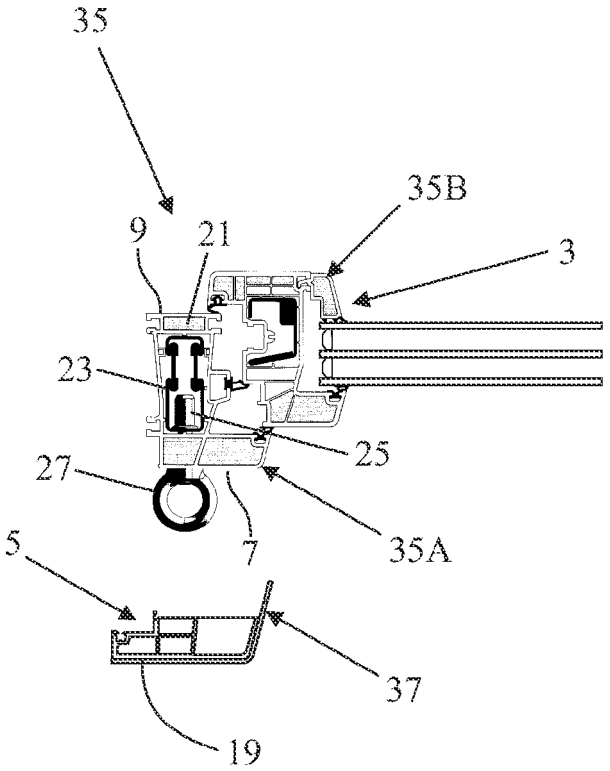


FIG. 2


35
35B
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23
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35A
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FIG. 3

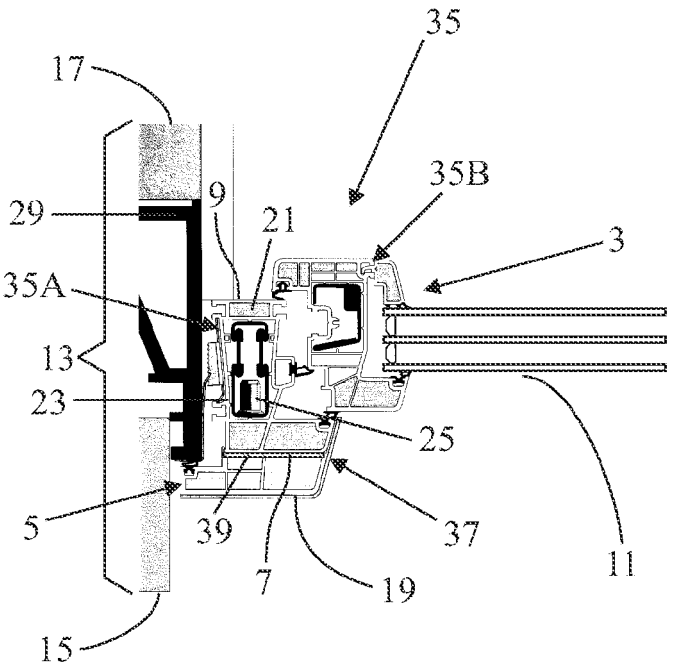
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FIG. 4

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- US 20070028539 A **[0002]**