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(54)

SIDE PANEL FOR FACADE BLIND BOX

- (57) A side panel of a facade blind box in a form of a plate comprising at the internal box side a plurality of protruding over the plate and permanently connected therewith mounting, setting and guiding elements in a form of guides creating a slot tapering in the upper zone. The mounting elements in a form of pins with openings
- and the setting elements are grouped in subsequent and interconnected modules (1, 1', 1'', 1'''), and between particular modules is made a recess. In the lower section the side panel comprises two bolts (3) deployed beyond the side panel plate and located at the left and right side of the panel.

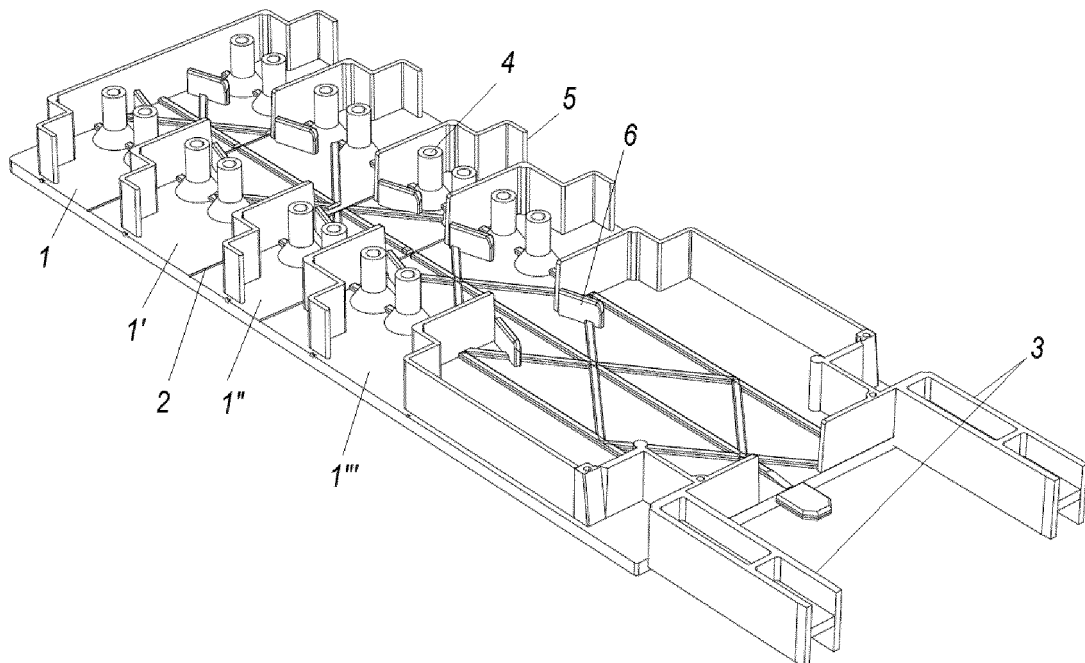


Fig. 2

Description

[0001] The present invention provides a side panel used as a structural element of a facade blind box.

[0002] A facade blind box is produced in a form of a C-shaped profile of the length corresponding to the width of the window or door opening. At the ends of the box, at both sides side panels are mounted. The panels close the facade box at both sides.

[0003] It is known from the utility model DE202017000324 and DE202017000323 a side panel for an inbox of a curtain, in particular a window curtain such as a Roman blind or the like, with the interior thereof facing the inbox and the edges thereof placed at the internal side towards the base plate. At the internal side in the side panel are arranged the supporting elements of the blind characterized in that the distance between the cap edge and the edge of the external base plate in the thickness dimension of the cover plates provides that the cover plates form long sides of the inbox and that the cap edge is discontinued with recesses. The side panels are designed to be suitable for various inboxes and various shutter installation conditions. A set of a plurality of various side panels allows to prepare various sets thereof and to store in a warehouse in different versions for easy use in the future.

[0004] Problematic in prior art solutions is very limited versatility of the employed side panels which are commonly made from cast metal and cannot be adjusted and used for different heights of facade boxes. There is no option that one element of the side panel be used for both left and right side of the facade box.

[0005] Another inconvenience in the prior art solutions is the need in many cases to mount the box to the adjacent masonry elements in the installation place. Said systems do not always provide self-supporting when the guides can overtake the function to attach the box. The guides are properly and on the entire length attached to the wall, or window or door frame, and due to that to use the guides to mount the blind box is deliberate.

[0006] The subject of the present invention is a side panel for a facade blind box in a form of a plate comprising at the internal box side a plurality of protruding over the plate and permanently connected therewith mounting, setting and guiding elements in a form of guides creating a slot tapering in the upper zone. The mounting elements in a form of pins with openings and the setting elements are grouped in subsequent and interconnected modules. Between particular modules is made a recess for easy separation of unnecessary modules. In the lower section the side panel comprises two bolts deployed beyond the side panel plate and located at the left and right side of the panel. One of the bolts, similarly to the unnecessary modules, can be removed during box installation.

[0007] Such designed side panel, when appropriate sheets are used making up the box and with an appropriate guide, makes the whole structure a self-supporting system. It is not necessary to additionally attach the fa-

cade blind box to the facade or lintel. The side panel shifts the weight of the facade blind attached thereto onto the guides inserted in the mounting bolt.

[0008] The subject of the present invention is presented in the drawing where Fig. 1 shows an axonometric view from the bottom of the facade blind box with the side panel and guides mounted in the construction opening, Fig. 2 shows an axonometric view of the side panel, Fig. 3 a frontal view from the side of the box hollow, and Fig. 4 and Fig. 5 shows a view of the panel from the sides.

[0009] The side panel is produced in a form of a plate comprising at the internal box side a plurality of protruding over the plate and permanently connected therewith mounting, setting and guiding elements in a form of guides creating a slot tapering in the upper zone. The mounting elements in a form of pins with openings and the setting elements are grouped in subsequent and interconnected modules (1, 1', 1'', 1'''). Between particular modules is made a recess 2. The recess provides easy separation of a module or a group of modules unnecessary for the selected height of the box. The panel may be adjusted to the boxes of four heights (200, 240, 300 i 350 mm). In all the cases, the depth of the boxes is 140 mm which provides correct use of the shutters of the most commonly used lamella profiles C-80 and Z-90 of the lamella width 80 mm and 90 mm respectively. In the lower section the panel comprises two bolts 3 deployed beyond the rectangle of the plate and located at the left and right side of the panel. Depending on the role the side panel plays, located at the right or left side of the facade blind box, one of the bolts 3 is removed as it is unnecessary. Not removed bolts 3 of both side panels are from the top inserted into, respectively, right and left guide maintaining the facade box in the given working position. The guides are the sections mounted to the construction opening, and the internal shape thereof corresponds to the shape of the bolt 3, for sliding the box from the top and in order to hold the box.

[0010] On the surface of the plate from the side of the box each module comprises symmetrical pins 4 with openings in the number preferably four pieces for screws mounting the box sub-elements. The screws used for mounting are self-drilling screws $\varnothing$ 5 mm.

[0011] The pins at the plate are widened to improve mechanical resistance of the pin and panel plate connection. Moreover, over the pins in each module are located profile setting elements 5 in a shape of repeatedly and alternately bent at a right angle flatbar, which are used to position and support the box elements. In the central section of the modules, between the pairs of pins and setting elements are made the guiding elements in a form of two guides 6 creating a tapering in the upper zone slot. The role thereof is positioning the shutter curtain and even guiding thereof. Moreover, near the surface of the side panel plate are formed a plurality of intersecting reinforcing ribs. The role of said ribs is to stiffen the panel plate preferably produced by plastic injection.

Claims

1. side panel of a facade blind box in a form of a plate comprising at the internal box side a plurality of protruding over the plate and permanently connected therewith mounting, setting and guiding elements in a form of guides creating a slot tapering in the upper zone **characterized in that** the mounting elements in a form of pins (4) with openings and setting elements (5) are grouped in subsequent and interconnected modules (1, 1', 1", 1'''), and between particular modules is made a recess (2), and in the lower section the side panel comprising two bolts (3) deployed beyond the lateral panel plate and located at the left and right side of the panel.

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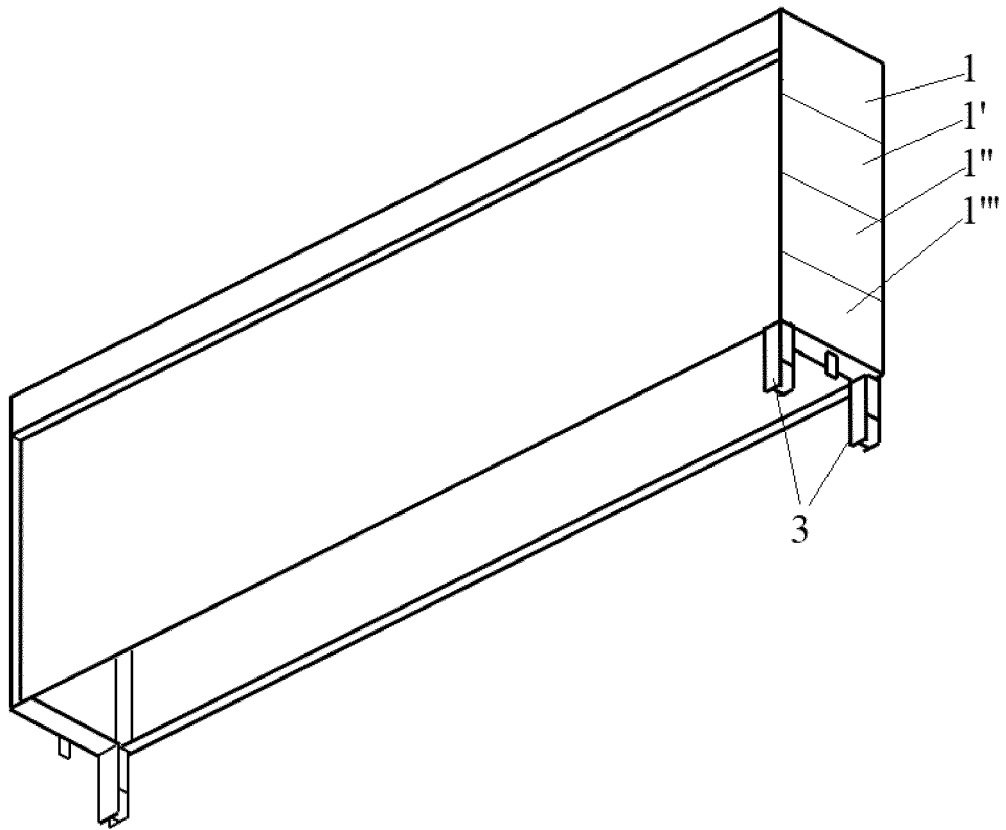


Fig. 1

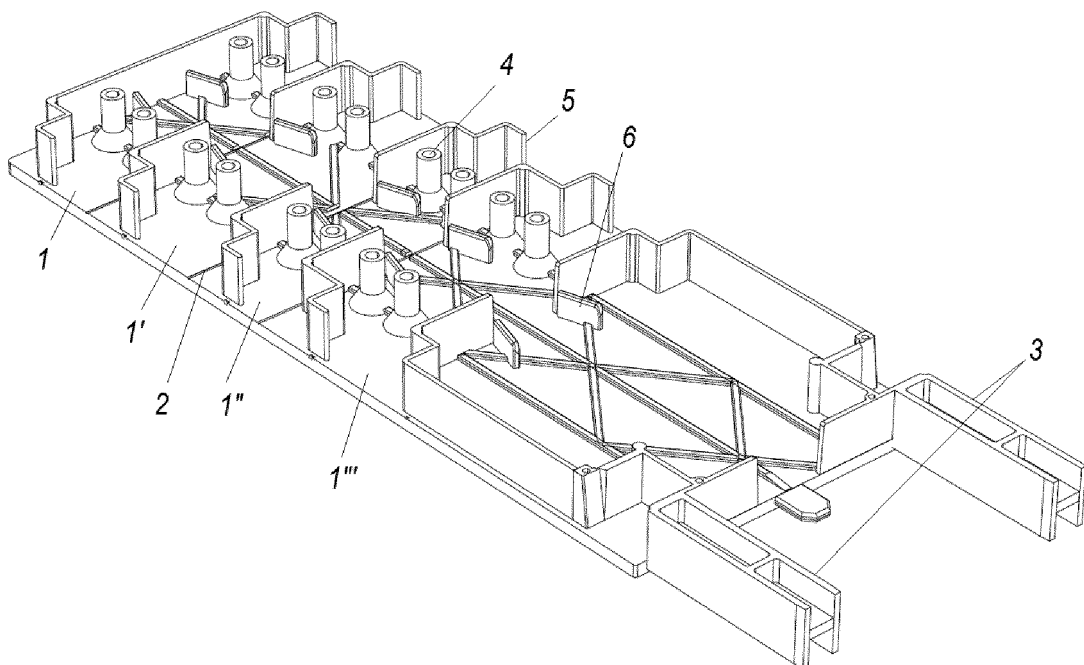


Fig. 2

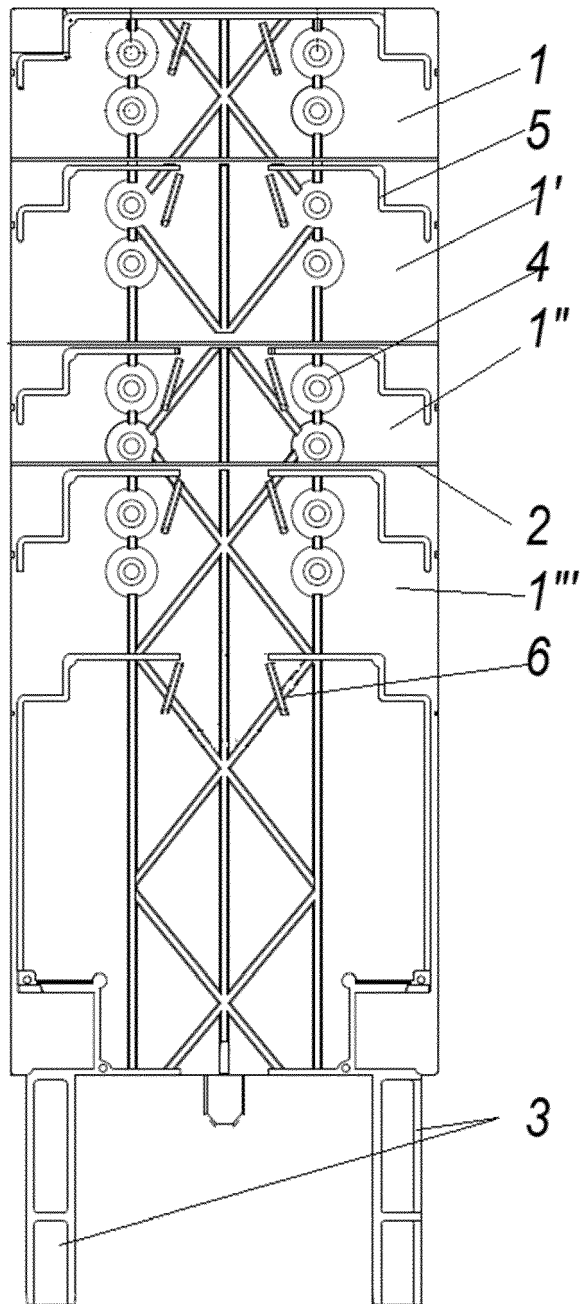


Fig. 3

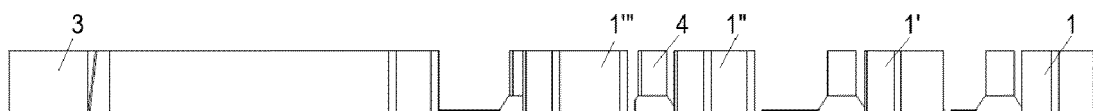


Fig. 4

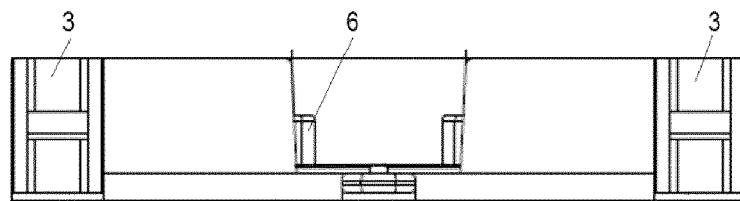


Fig. 5



EUROPEAN SEARCH REPORT

Application Number

EP 22 18 4347

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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 (IPC)
A,D	DE 20 2017 000324 U1 (ALUKON KG) 6 March 2017 (2017-03-06) * abstract * * figures 1-5 * * paragraphs [0007] - [0009] * -----	1	INV. E06B9/323 E06B9/42
A,D	DE 20 2017 000323 U1 (ALUKON KG) 6 March 2017 (2017-03-06) * abstract * * figures 1-5 * -----	1	
			TECHNICAL FIELDS SEARCHED (IPC)
			E06B
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 20 December 2022	Examiner Wehland, Florian
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	

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

EP 22 18 4347

5 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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20-12-2022

10	Patent document cited in search report	Publication date	Patent family member(s)	Publication date
	DE 202017000324 U1	06-03-2017	NONE	

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

REFERENCES CITED IN THE DESCRIPTION

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- DE 202017000324 [0003]
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