

(19)



(11)

EP 4 306 765 B1

(12)

EUROPEAN PATENT SPECIFICATION

(45) Date of publication and mention of the grant of the patent:
26.02.2025 Bulletin 2025/09

(51) International Patent Classification (IPC):
E06B 9/323^(2006.01) E06B 9/42^(2006.01)

(21) Application number: **22184347.7**

(52) Cooperative Patent Classification (CPC):
E06B 9/323; E06B 9/42

(22) Date of filing: **12.07.2022**

(54) **SIDE PANEL FOR FACADE BLIND BOX**

SEITENWAND FÜR FASSADENJALOUSIEKASTEN

PANNEAU LATÉRAL POUR CAISSON DE STORE DE FAÇADE

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

(72) Inventor: **Twardowski, Andrzej**
32-300 Olkusz (PL)

(43) Date of publication of application:
17.01.2024 Bulletin 2024/03

(74) Representative: **Lampart, Jerzy**
Kancelaria Patentowa
Ul. Wyzwolenia 1b
42-624 Ossy (PL)

(73) Proprietor: **P.P.H.U. RAILING Andrzej Twardowski**
32-300 Olkusz (PL)

(56) References cited:
DE-U1- 202017 000 323 DE-U1- 202017 000 324

EP 4 306 765 B1

Note: Within nine months of the publication of the mention of the grant of the European patent in the European Patent Bulletin, any person may give notice to the European Patent Office of opposition to that patent, in accordance with the Implementing Regulations. Notice of opposition shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

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

facade 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.

5

10

15

Patentansprüche

1. Seitenwand eines Fassadenrollladenkastens in Form einer Platte, umfassend an der inneren Kastenseite eine Vielzahl von über die Platte vorstehenden und damit fest verbundenen Befestigungs-, Einstell- und Führungselementen in Form von Führungen, die einen sich im oberen Bereich verjüngenden Schlitz bilden, **dadurch gekennzeichnet, dass** die Befestigungselemente in Form von Stiften (4) mit Öffnungen und Einstellelementen (5) in aufeinander folgenden und miteinander verbundenen Modulen (1, 1', 1", 1''') gruppiert sind und zwischen bestimmten Modulen eine Aussparung (2) ausgebildet ist, und im unteren Bereich die Seitenwand zwei Bolzen (3) umfasst, die über die seitliche Wandplatte hinaus eingesetzt sind und sich auf der linken und rechten Seite der Wand befinden.

20

25

30

35

Revendications

1. Un panneau latéral d'un caisson de façade aveugle sous forme de plaque comprenant, du côté intérieur du caisson, une pluralité d'éléments de montage, de réglage et de guidage en saillie sur la plaque et reliés en permanence à celle-ci sous forme de guides créant une fente se rétrécissant dans la zone supérieure, **caractérisé en ce que** les éléments de montage sous forme de goupilles (4) avec des ouvertures et des éléments de réglage (5) sont groupés en modules successifs et interconnectés (1, 1', 1", 1'''), et entre les modules particuliers est fait un évidement (2), et dans la section inférieure le panneau latéral comprenant deux boulons (3) déployés au-delà de la plaque du panneau latéral et situés sur les côtés gauche et droit du panneau.

40

45

50

55

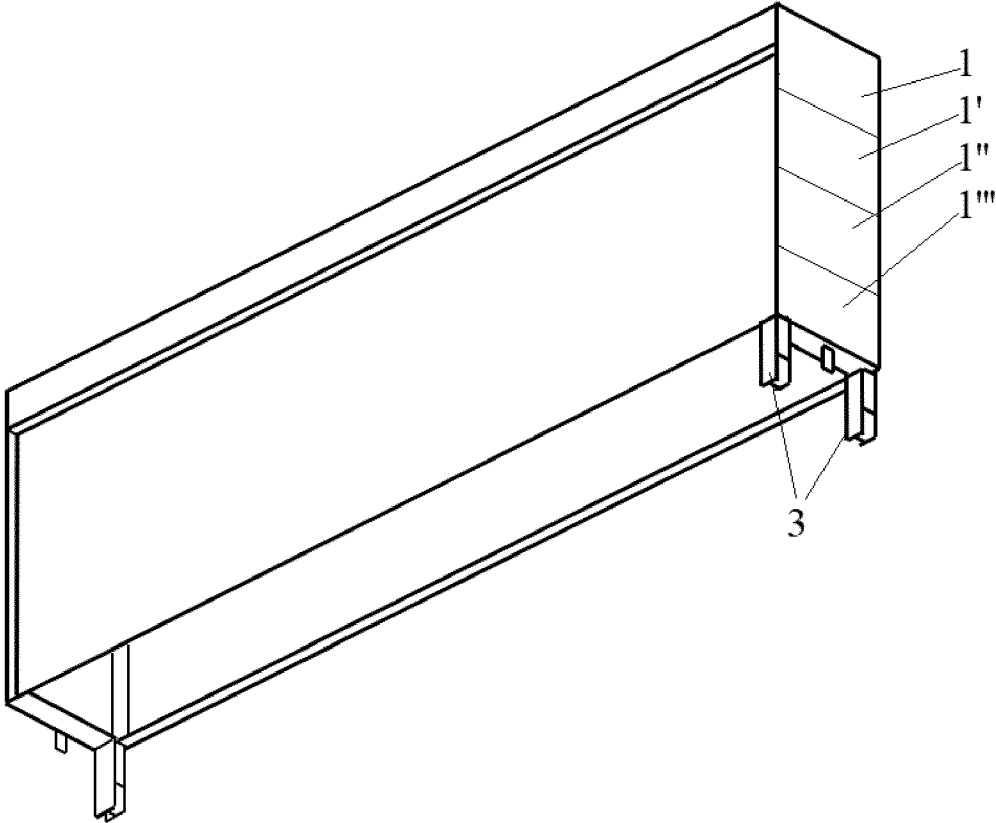


Fig. 1

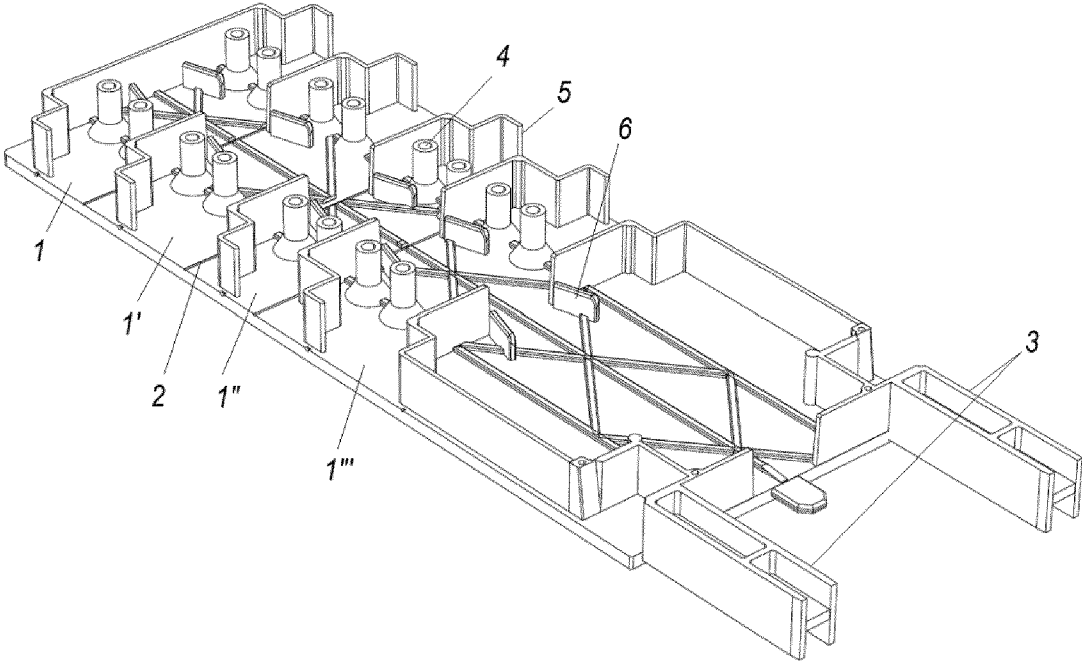


Fig. 2

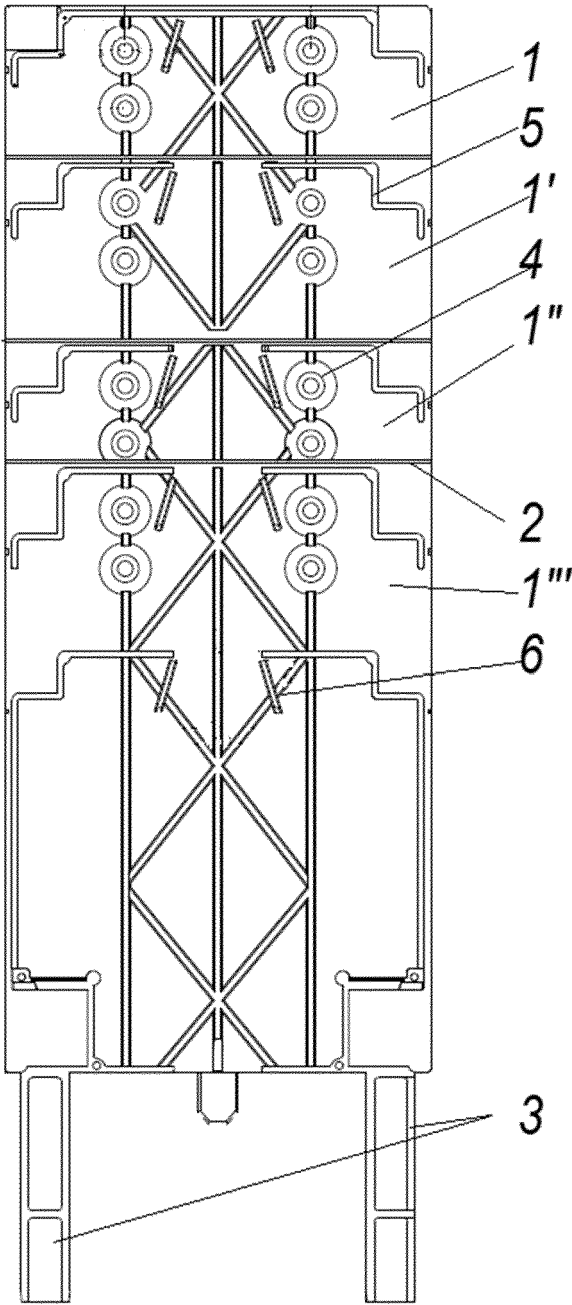


Fig. 3

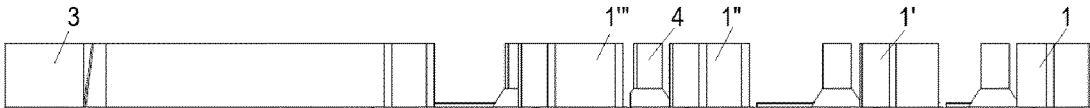


Fig. 4

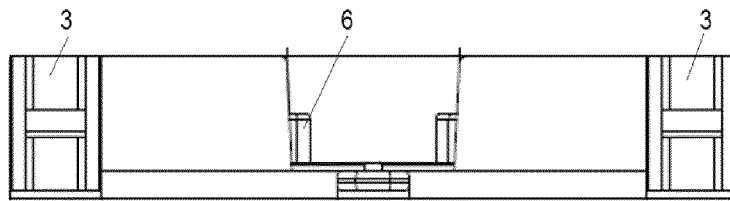


Fig. 5

REFERENCES CITED IN THE DESCRIPTION

This list of references cited by the applicant is for the reader's convenience only. It does not form part of the European patent document. Even though great care has been taken in compiling the references, errors or omissions cannot be excluded and the EPO disclaims all liability in this regard.

Patent documents cited in the description

- DE 202017000324 [0003]
- DE 202017000323 [0003]