



(12) **EUROPEAN PATENT APPLICATION**

(21) Application number : **93500049.7**

(51) Int. Cl.⁵ : **E06B 9/58**

(22) Date of filing : **23.04.93**

(30) Priority : **24.04.92 ES 9201324**

(43) Date of publication of application :
26.01.94 Bulletin 94/04

(84) Designated Contracting States :
DE FR IT PT

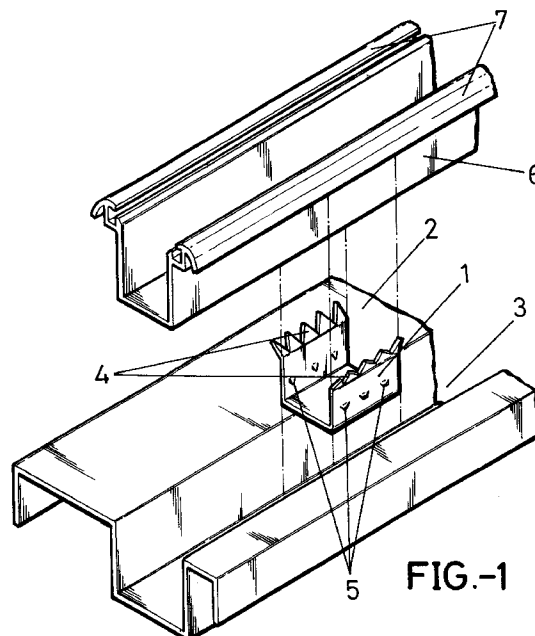
(71) Applicant : **Valle Vicente, Anselmo**
El Cid, 1
E-37007 Salamanca (ES)

(72) Inventor : **Valle Vicente, Anselmo**
El Cid, 1
E-37007 Salamanca (ES)

(74) Representative : **Suarez Diaz, Jesus**
Calle Cardenal Siliceo, 20
E-28002 Madrid (ES)

(54) **Fastening clamp for shutter rails.**

(57) Fixing clamp of blind reducing rails consisting of a clamp adopting a "U" shape, which has on the upper part two shoulders emerging side-way and configuring saw teeth, having on the lower middle zone wings which are pressure adaptable.



BACKGROUND OF THE INVENTION

This specification refers to a Model of Utility referring to a fastening clamp for shutter reducing rails, the evident object of which is to constitute a fastening or fixing unit of the reducing rail designed to incorporate an aluminium or PVC shutter in the guide existing in the metallic carpentry profile used in a general way for configuring the shutting, avoiding, as a result of it, the imperative need for using, until now, silicone, glue, rivets, screws, and so on.

FIELD OF THE INVENTION

This invention will find application within the industry engaged in the manufacture of metallic carpentry.

SUMMARY OF THE INVENTION

The fastening clamp for shutter reducing rails, which is the object of the present invention, constitutes, per se, an evident solution to the current problem on this matter, since, owing to its special configuration, it attains to fasten a reducing rail for aluminium or PVC shutters to the already existing guide on the metallic carpentries, avoiding, as a result of this application, to use silicone, glue, rivets, screws, and so on.

In a more definite way, the fastening clamp for shutter reducing rails is constituted starting from a part having an "U" general configuration, the emerging ends of which are laterally deformed, specially inward, adopting a saw bow shape at its upper end, and disposing, at its central middle part, of slight protuberances arising from a cutting metallic, deformation.

This part is introduced into the profile, exactly in the appropriate channel intended for locating the reducing rail, and next the incorporation of the rail itself is made, and due to its special deformation, the rail is exposed, at its lower side, to the deformations existing at the inner part of the clamp, while, at the upper side, the clamp fits perfectly in the lateral faces of the channel existing in the profil.

Of course, the rail has the necessary elements, located at its entrances, for airtighting the assembly.

In this way, the system saves a substantial amount of time and obviates the fact that the rail can be moved owing to temperature changes, that, no doubt and as it has been found, the time elapsing affects both glues and silicones.

Likewise, the clamp which is the object of the present invention facilitates to change the position of the elements subject to wear on the reducing rail, such as plush and antiwear rubbers.

Since the clamp is made of an elastic and stainless material and has a flexible configuration, it retains its features determining an indefinite subtleness

upon the most adverse conditions.

BRIEF DESCRIPTION OF THE DRAWINGS

In order to complement the present description and to aid to a better understanding of the features of the invention, the accompanying drawings, which are a part of this specification, show in an illustrative but non limitative way, the following:

Fig. 1 shows a perspective view of a metallic carpentry profile, as well as of a rail, the fastening clamp of said shutter reducing rail, which is the object of this invention, being shown at its middle portion.

Fig. 2 shows a front elevational sectional view of the object illustrated in Fig. 1.

PREFERRED DESCRIPTION OF THE INVENTION

From these Figures, it can be seen how the shutter reducing rail fastening clamp 1 configures starting from a part having an "U" front elevational configuration, having at its upper side a laterally emerging serrated deformation 4 adopting a saw tooth configuration at its longitudinal line.

At the lower middle portion, the side walls of said part 1 are suitable deformed by means of a mechanical operation, so obtaining flexible protuberances 5 which allow to be located on the outer side walls of a shutter guide 6 that, when introduced into the channel 3 provided in a metallic profile 2 which configures the metallic carpentry per se, obviate on a side by means of the protuberances 5 to concretely join the guide with the clamp, while the deformations 4 existing at the upper side lock up the clamp with the body of the metallic carpentry, exactly with the side walls of the channel 3.

At its upper side, the guide or reducing rail has corresponding parts or accessories 7 intended for locking up the assembly, against plush and antiwear rubbers.

It is not considered necessary to extend more this description for an expert in the art to understand the scope of the invention and the advantages derived from it.

The materials, shape, size and arrangement of its components are open to variation, provided that it does not imply any alteration to the essence of the invention.

The terms under which this specification has been described should be taken in an ample and non illative sense.

Claims

1. A fastening clamp for shutter reducing rails, of the type used for carrying out the fastening of a reducing rail (6) having a metallic carpentry profile

(2), fitted with a fitting-in groove (3), characterized in that the fastening clamp has an "U" configuration, having on the upper side laterally emerging protuberances (4) having a saw tooth shape, counting on the existence, at its lower midle part, of emerging wings (5) which are pressure deformable.

10

15

20

25

30

35

40

45

50

55

