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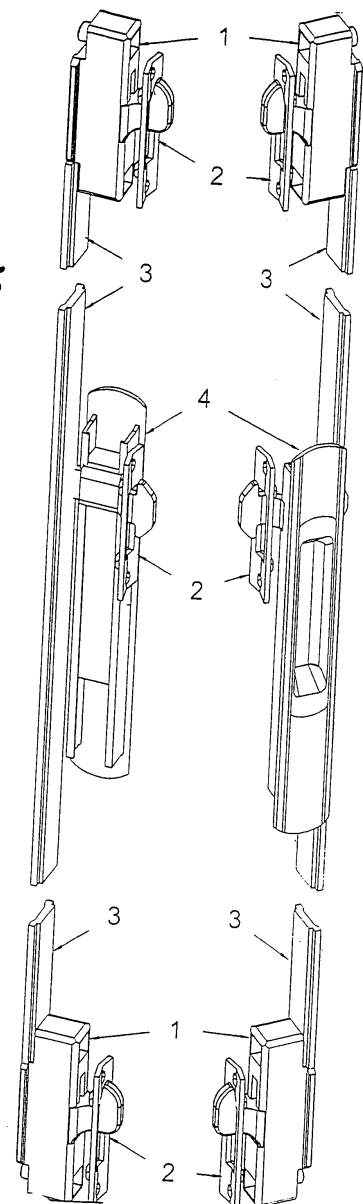
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(54) **Locking system for sliding aluminum profile constructions**

(57) Locking system for sliding doors and windows for use in aluminum profile constructions. Main characteristic is the triple locking on the middle of a door or window, on the bottom area and on the top area. The three locking parts (1,8) are controlled and locked by one simultaneous motion using a usual handle for doors and windows. The locking parts provide stable and safe locking due to their shape, due to the triple locking and due to the covering of parts by the aluminum profiles (figure 6 and figure 7). The triple locking disables the rotation of the door around the locking system (in case it was only the middle area) and the covered parts are safe by anybody that would try to destroy them. The shape of the parts helps all the other to work.

figure 5



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Description

[0001] The invention is about locking system for sliding doors and windows that is useful specially for constructions made of aluminum profiles.

[0002] Locking systems are used on any door or window. Very popular locking systems now are based on side locking (left or right side of the door or window). The method that the handle of the lock moves up and/or down a profile or bar in order to insert-touch in the floor and/or in the frame of the door is developed by this invention.

[0003] The main problem that needs solution is the secure locking that could be provided by a constructor using existing (in the market) parts in combination with parts described in this invention. The solution of the above problem is the goal of this invention.

[0004] According to the invention, there is triple locking on the side of the door or window (in the middle of side high, on the bottom area and on the top area). The three locking parts are controlled and locked by one simultaneous motion using a usual handle for doors and windows. All the parts are covered by the aluminum profiles (figure 7) so is not possible for anybody to damage them and in addition with the triple locking we have the maximum stability and safe.

[0005] Advantage of the triple locking is the stability because after locking is impossible to move the door or window in order to unlock.

[0006] The invention is further described as following through an example and in reference with the attached drawings.

Figure 1 shows the locking part for top-bottom area (1)

Figure 2 shows the connecting profile with locking part of top and bottom area

Figure 3 shows the connecting profile for locking parts of middle area

Figure 4 shows the locking part for middle area (1)

Figure 5 shows total assembly on a sliding door or window using one-direction handle (4) (up or down direction)

Figure 6 shows total assembly on a sliding door or window using two - directions handle (7) (up and down direction by one motion).

Figure 7 shows assembled door

[0007] The example shows the moving parts of bottom and top (1) are sliding in the profile and the moving part of the middle area (8) is connected on the handle (4 or 7). All moving parts are connected with a profile (3) with special cut and drilling. The shape of these parts is de-

signed to slide in the profile and to lock tide with the opposite stable parts (2).

[0008] The stable parts opposite the moving parts are positioned on specific high of door or window and with specific length in order to lock tide with the moving parts.

[0009] Using handle of one direction locking, the parts (1) have the same direction (figure 5). Using handle of two directions locking, the parts (1) have different directions (figure 6).

Claims

1. The idea of the total system is invention. The idea is triple locking and covered parts and special designed parts to provide it.
2. The moving part (figure 1) is invention. The shape is designed to serve the triple locking and covering by the profiles.
3. The moving part (figure 4, part 8) is invention. The shape is designed to serve the triple locking and covering by the profiles.
4. The cutting of the connecting profile (figure 2, part 3) and (figure 3, part 3) is invention.

figure 1

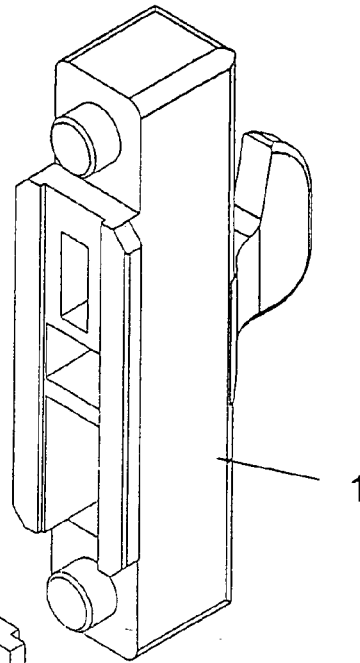


figure 2

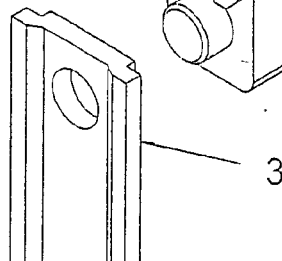


figure 3

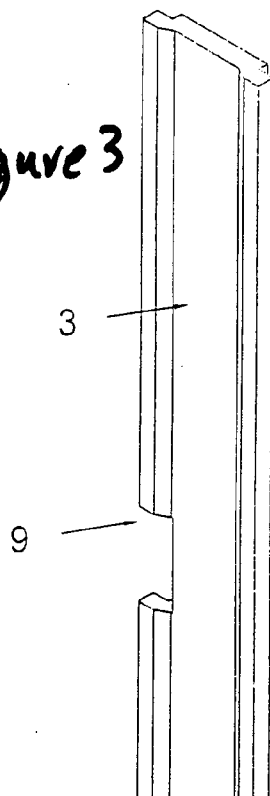


figure 4

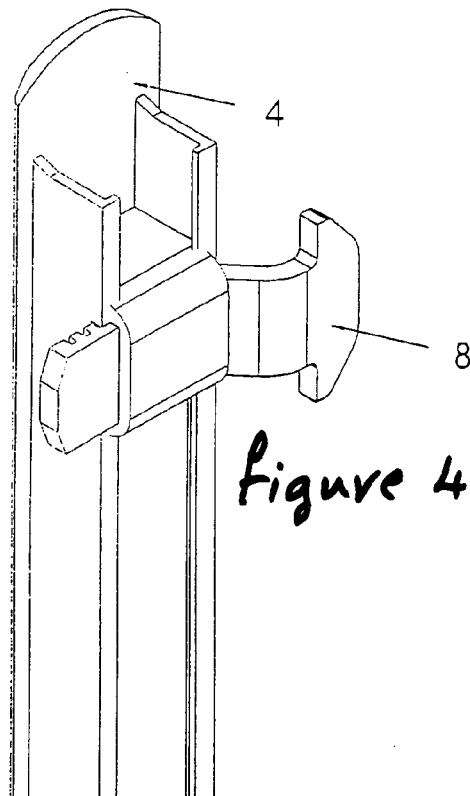


figure 5

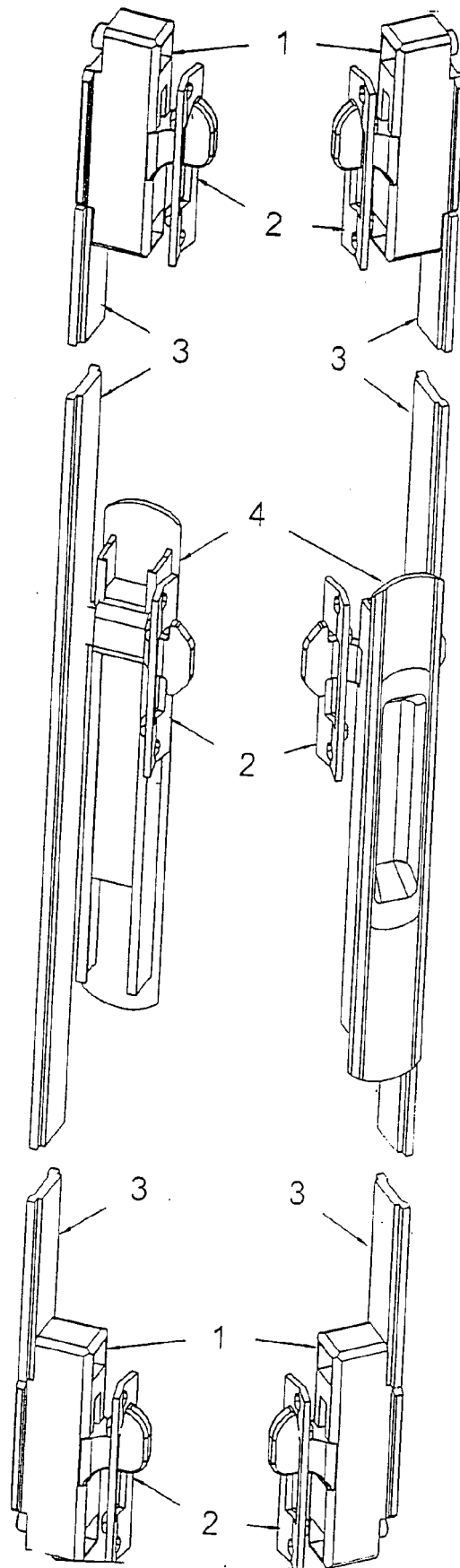


figure 6

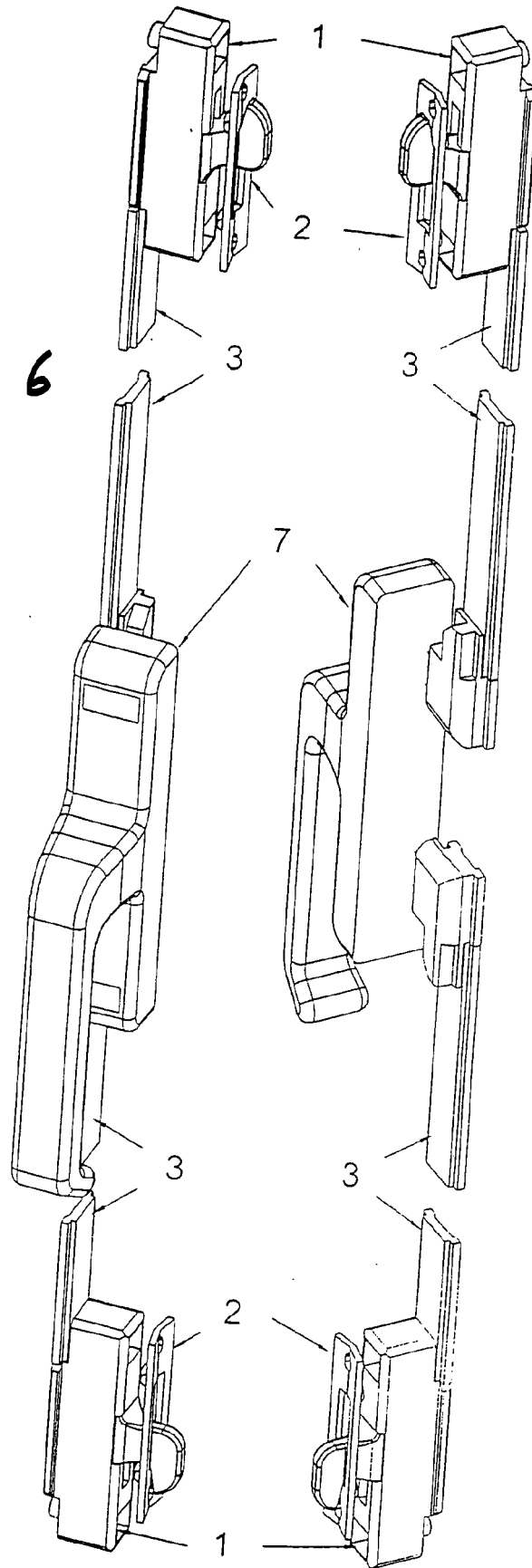
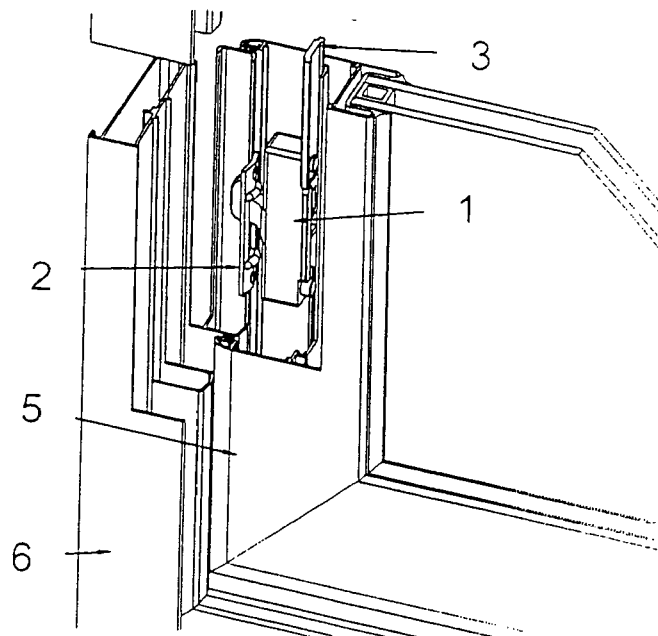


figure 7





European Patent
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EUROPEAN SEARCH REPORT

Application Number
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 12 May 2006	Examiner Westin, K
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	

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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