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(54) Title: DOOR HANDLE BLOCKING ARRANGEMENT

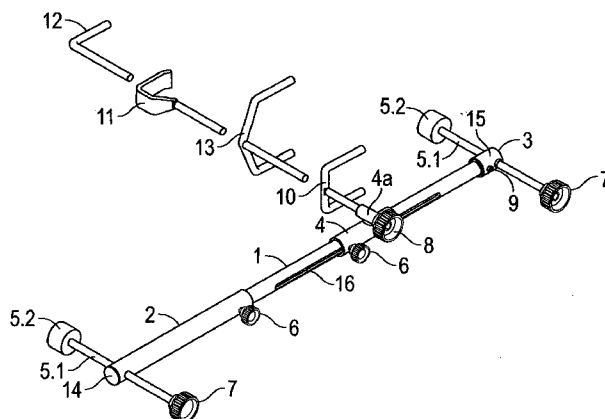


FIG. 1

(57) Abstract: A latch arrangement preventing a door handle (10,11,12,13) or the like to be opened consist of a transversal bar in form of an outer tubing (2) to which an inner tubing (1) is displaceable. The inner tubing is terminated by an end guide sleeve (15). Transverse tubings (5.1) is led through the outer tubing and the end guide. These transverse tubings are displaceable and terminated with rubber feet (5.2), abutting a doorframe or a wall surrounding the doorframe. On the inner tubing is a groove in which a displaceable sleeve (4) having a holder (4a) for fixing a handle is provided. If the width between the rubber feet (5.2) and the sleeve (4) with the holder (4a) is adjusted and is fixes to the handle grip, a universal latching arrangement is achieved that can be adapted to various door types f. ex. in camping cars, auto campers mobil homes and the like, despite the width of the doors and the type of the handle grip.



DOOR HANDLE BLOCKING ARRANGEMENT

This invention relates to a Latch arrangement preventing a door handle or the like in opening a door, said arrangement consists of a transversal bar, that can be clamped against supporting surfaces surrounding the door opening, and where on the transversal bar a latch part is provided that is adapted to hold the door handle in a locked position.

Such a latch arrangement is known from US 2009/0100884 A1.

According to this latch arrangement, the bar has cutouts adapted to engaging a doorframe. The bar is formed with a holder that is adapted to hold a handle grip in a latch position.

This known latch arrangement that is intended to lock a door from inside a room, said latch arrangement being adapted to doors having a fixed width, and with a holder, having a fixed distance in relation to the end of the bar.

It is now a purpose with the invention to provide a latch arrangement that can be adapted to various doors having different dimensions, as far as width, and the position of the door handle.

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The purpose is fulfilled by a latch arrangement of the type defined in the introductory part of claim 1, that is characterized in the transversal bar is formed as an inner tubing that in one of its ends is displaceable in an outer tubing and in that the distal end of the inner tubing is connected to an end guide and that through the outer tubing and through the end guide transversal shafts are provided.

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In this way, it is possible to adjust the latch arrangement in connection with various types of doors.

Expedient embodiments of the invention by the adjustment possibilities are as stated in claim 2, that a finger screw is provided on the outer tubing for fixing the outer tubing to the inner tubing, and as stated in claim 3, that the transversal shafts are displaceable through the outer tubing, and the end
5 guide, and further as stated in claim 4, that the transversal shafts has a thread, that corporates with a thread on the outer tubing and the inner tubing respectively.

As stated in claim 5, that the supporting surfaces is a doorframe or a surrounding wall and as stated in claim 6, that the transversal shafts are
10 terminated by rubber feet, said rubber feet are supported against the door frame or the surrounding wall that encounter the door frame a flexible and stable fixing of the latch arrangement is achieved.

In order to adapt the latch arrangement to various types of door handles
15 and the positions of the doors handle it is expedient, if ad stated in claim 7, that the latch part consists of a sleeve being displaceable provided in a groove on the inner, and is adapted to be clamped in the groove by a finger screw, and as stated in claim 8, that on the sleeve a holder is provided, said holder being welded onto the sleeve, said holder is formed with a
20 thread, that is intended to take up the handle grip.

Finally, it is advantageous, if as stated in claim 9 that that the handle grip is a double fork holder, a broad fork holder, a single fork holder or a normal handle grip having circular form, and as stated in claim 10, that the end
25 guide is fixed to the inner tubing by a spindle screw.

The invention will in the following be more fully explained in connection with the drawing on which

Fig. 1 illustrates the structure of the latch arrangement according to the invention, whereas

5 Fig. 2 illustrates the latch arrangement mounted in a door.

On the figures, 1 denotes an inner tubing having a groove 16 that is displaceable in an outer tubing 2, said tubing consists of a telescope coupling, where each tubing can be provided with a thread (not shown).

10 Near the end of the outer tubing 2, a transversal shaft 5.1 is provided, said transversal shaft on one end is terminated by a rubber foot and on its distal end is terminated by a finger screw 7. Near the end 3 of the inner tubing 2, a guide 15 is mounted, through which a transversal shaft is also mounted and also having a rubber foot 5.2 and a finger screw 7. The transversal shafts 5.1 are formed with threads (not shown) in order to be displaceable
15 transversal to the outer tubing 2 and the inner tubing 1 respectively.

In the groove 15 a displaceable sleeve 4 is provided, said sleeve has a holder 4a welded thereto, that function as a holder for fixing a door handle, here
20 shown as a double fork holder, a broad fork holder, and a single fork holder. The door handle can also be of other types, f. inst. circular, as that shown in the above mentioned US 2009/0100884 A1.

The guide is fixable to the inner tubing 1 by a spindle screw 9, whereas the sleeve can be fixed in the groove 14 by a finger screw 6.

25 By use of a finger screw 8 the handle grips can be fixed to the holder 4.

The latch arrangement according to the invention functions in the following way:

First, the width between the transversal shafts is adjusted by adjusting the inner tubings 1 position in relation to the outer tubing 2. Afterwards the transversal shafts 5.1 and the rubber feet 5.2 are adjusted so they are placed in an appropriate distance from the outer tubing 2 and the inner tubing 1.

Moreover, the holder 4 is fixed in the groove 16 and finally the holder having the finger screw 8 with fixed hand grips mounted on the holder 4A, is fixed.

Fig 2 illustrates the latch arrangement mounted in a door here shown as a fork holder 11. The door is shown in connection with a camper, an auto camper, a mobil home and the like.

The rubber feet 5.2 abuts a frame part at the left of the doorframe. Against the right side, the rubber feet 5.2 abuts against an abutting wall part.

Claims

1. Latch arrangement preventing a door handle (10,11,12,13) or the like in opening a door, said arrangement consists of a transversal bar, that can be clamped against supporting surfaces surrounding the door opening, and where on the transversal bar a latch part is provided that is adapted to hold the door handle in a locked position, **characterized in**, that the transversal bar is formed as an inner tubing (2) that in one of its end is displaceable in an outer tubing (2) and in that the distal end of the inner tubing is connected to an end guide (15) and that through the outer tubing (2) and through the end guide transversal shafts (5.1) are provided.
2. Latch arrangement according to claim 1, **characterized in**, that a finger screw (6) is provided on the outer tubing (2) for fixing the outer tubing (2) to the inner tubing (1).
3. Latch arrangement according to claim 1 - 2, **characterized in**, that the transversal shafts (5.1) are displaceable through the outer tubing (2) and the end guide (15).
4. Latch arrangement according to claim 1 - 3, **characterized in**, that the transversal shafts has a thread, that corporates with a thread on the outer tubing and the inner tubing respectively.
5. Latch arrangement according to claim 1 - 4, **characterized in**, that the supporting surfaces is a doorframe or a surrounding wall.
6. Latch arrangement according to claim 1 - 5, **characterized in**, that the transversal shafts are terminated by rubber feet (5.2) said rubber

feets are supported against the door frame or the surrounding wall that encounter the door frame.

- 5 7. Latch arrangement according to claim 1 - 6, **characterized in**, that the latch part consists of a sleeve (4) being displaceable provided in a groove (16) on the inner, and is adapted to be clamped in the groove by a finger screw (6).
- 10 8. Latch arrangement according to claim 7, **characterized in**, that on the sleeve (4) a holder (4a) is provided, said holder being welded onto the sleeve, said holder is formed with a thread, that is intended to take up the handle grip.
- 15 9. Latch arrangement according to claim 1 - 8, **characterized in**, that the handle grip is a double fork holder, a broad fork holder, a single fork holder or a normal handle grip having circular form.
- 20 10. Latch arrangement according to claim 1 - 9, **characterized in**, that the end guide (15) is fixed to the inner tubing by a spindle screw.

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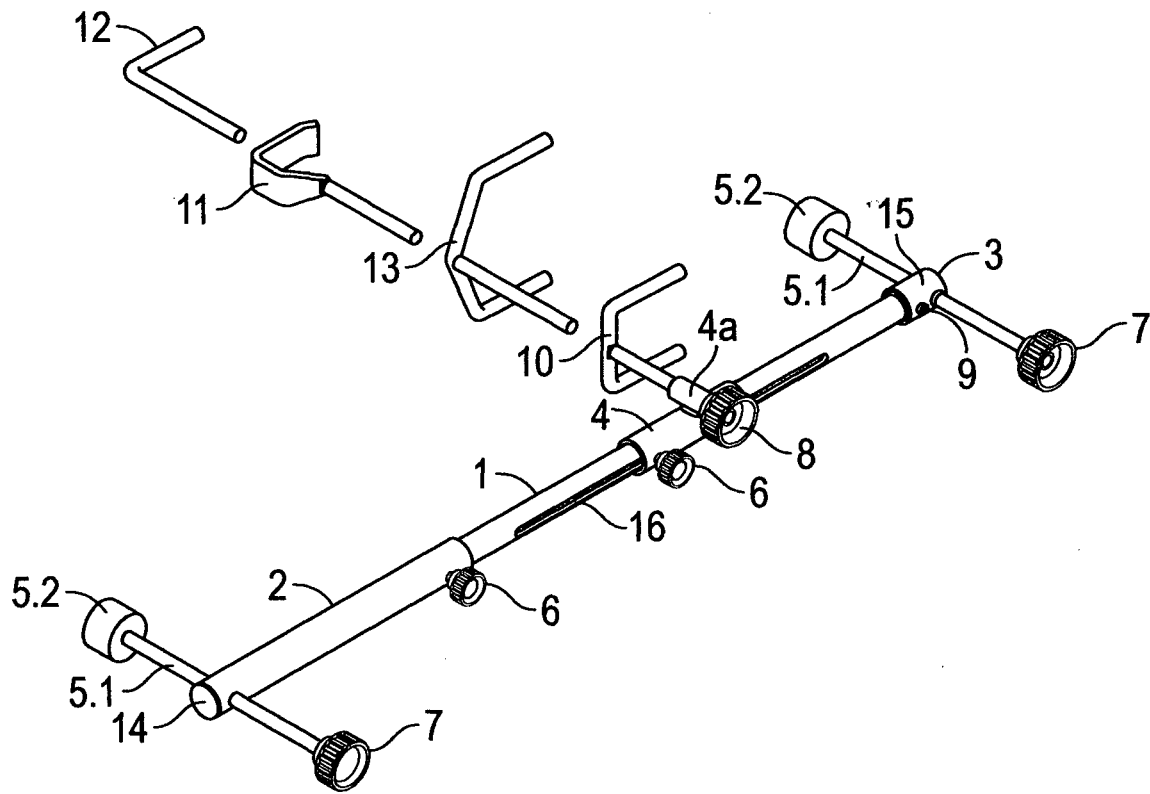


FIG. 1

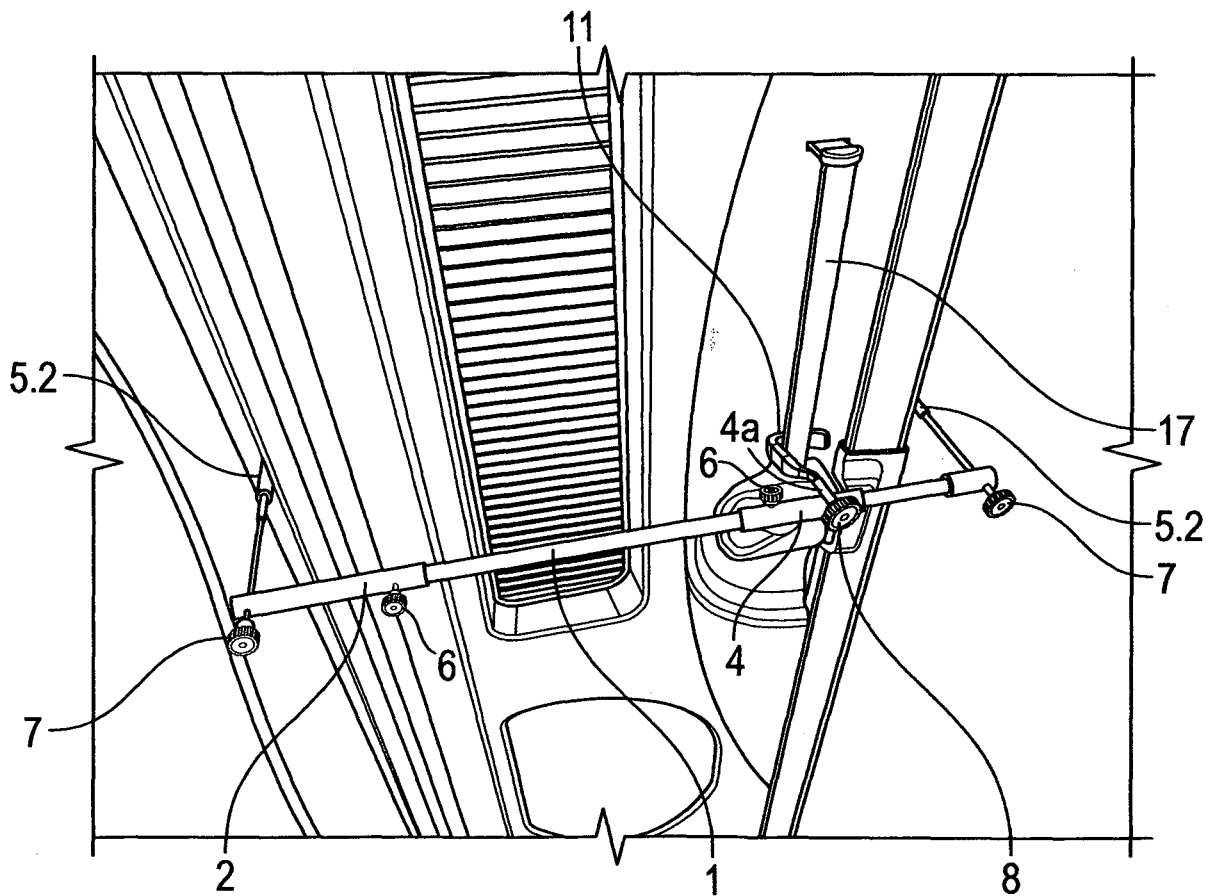


FIG. 2

INTERNATIONAL SEARCH REPORT

International application No
PCT/DK2013/000065

A. CLASSIFICATION OF SUBJECT MATTER
INV. E05B13/00 E05C17/54
ADD.
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
Minimum documentation searched (classification system followed by classification symbols)
E05B E05C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 85 14 107 U1 (HK KEUN GMBH) 14 November 1985 (1985-11-14)	1,2
Y	the whole document	3-10
Y	----- US 6 560 925 B1 (RICE) 13 May 2003 (2003-05-13) figure 2	3-10
A	----- CA 2 087 654 A1 (DENIS) 21 July 1994 (1994-07-21) figures 3,4	1-10
A	----- US 2009/100884 A1 (CARR) 23 April 2009 (2009-04-23) cited in the application paragraph [0046]; figure 7	1-10
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Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents :

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- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search 10 February 2014	Date of mailing of the international search report 17/02/2014
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Van Beurden, Jason
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INTERNATIONAL SEARCH REPORT

International application No
PCT/DK2013/000065

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2009/193858 A1 (STINSON) 6 August 2009 (2009-08-06) figures 1,3	1,2
A	----- DE 20 2006 008723 U1 (HUGL) 27 July 2006 (2006-07-27) paragraph [0024] -----	1,7,8

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/DK2013/000065

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 8514107	U1	14-11-1985	NONE
US 6560925	B1	13-05-2003	NONE
CA 2087654	A1	21-07-1994	NONE
US 2009100884	A1	23-04-2009	NONE
US 2009193858	A1	06-08-2009	NONE
DE 202006008723	U1	27-07-2006	NONE