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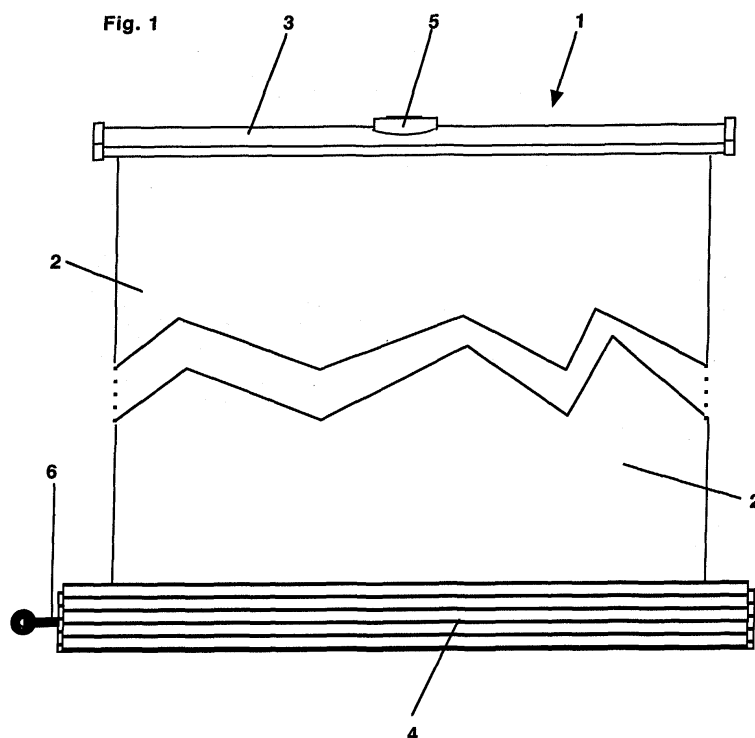
(54) Device for manoeuvring blinds

(57) A device for manoeuvring blinds, screens or advertising cloths comprises:

- a supporting rod (3) fitted with hooking members (5) for hanging the device (1) to a vertical structure;
- a rolling up roller housed in a shutter box (4);
- a screen (2) connecting the supporting rod (3) to the rolling up roller, the rolling up roller being capable of rotating in opposite directions around its own longitudinal axis for unrolling or rolling the screen (2);
- reversal elastic means are provided for rolling the

screen (2) and contrasting the unrolling of the screen (2);

- the shutter box (4) is used for operating the screen (2) by means of external forces, said forces co-operating with elastic members for rolling the screen (2) and for contrasting said elastic members for unrolling the screen (2) in order to reach a wished amplitude of exposure of the screen (2);
- at least one stopping member (6) is provided for stopping the rolling up roller when the wished amplitude of exposure of the screen (2) is reached.



Description

[0001] The present invention relates a device capable of manoeuvring, a screen or an advertising cloth. In particular, the invention concerns a device rolling and unrolling a blind for reaching a pre-established disposition in height and maintaining it in said disposition for the wished time.

[0002] The quoted devices are generally used in public rooms, as waiting-room of train stations, banks, other institutes or open spaces, for advertising goods or services of companies.

[0003] In general, these exhibiting devices consist of a base supporting a vertical holding member; the base contains at least a rolling up roller for a screen. At least a manoeuvring bar can be engaged on the holding member for the screen, which is unrolled or rolled by the roller. Advertising writings or drawings are provided on the screen.

PRIOR ART

[0004] EP-A-1422683 discloses a supporting device for advertising screens, comprising:

- a base fitted with at least one housing for at least one rolling up roller of an exhibiting screen; the roller being capable of rotating in opposite directions around its own longitudinal axis, to roll and unroll the screen;
- a vertical holding member to support at least one manoeuvring bar for the screen by means of at least one fastening bracket, one end (28) of the screen engaging the bar;
- the device further comprising:
 - at least one list integral with at least one end of the screen, the list being capable of engaging the end of the screen on the roller and/or on the manoeuvring bar.

[0005] Such an embodiment substantially presents the disadvantage of making heavier the structure supporting the screen, since the base, with the purpose to support the housing for the rolling up roller, the manoeuvring bar, the screen and the bracket, must be enough heavy to prevent the structure of being overturned.

[0006] An exhibiting device is also known using a screen connected to the rolling up roller and the manoeuvring bar by means of an edge in the screen, in order to obtain an easier substitution of the screen with respect to the traditional solutions.

AIM OF THE INVENTION

[0007] The purpose of the invention is to remove these disadvantages. The invention, as claimed, solves the problem of creating a device for manoeuvring blinds,

screens or advertising cloths. The use of the device allows to facilitate the manoeuvring of the screen, the eventual replacement does not need any particular operation.

[0008] The main advantage of the present invention consists in the fact that a wall, a panel, a table or similar vertical structures support the device. For this purpose, the device presents one or more brackets for assembling it on the vertical structure.

[0009] An other advantage of the present invention consists in the fact that its structure assures the stability of the device in said assembly conditions, in open atmospheres located near doors or windows, where wind blasts occur.

MAIN FEATURES OF THE INVENTION

[0010] The device according to the present invention includes:

- a supporting rod fitted with coupling means for hanging the device to a vertical structure;
- a rolling up roller housed in a shutter box;
- a screen connecting the supporting rod to the rolling up roller, capable of rotating in opposite directions around its own longitudinal axis to roll and unroll the screen;
- reversal elastic means are provided for rolling the screen and contrasting the unrolling of the screen;
- the shutter box is used for operating the screen by means of external forces co-operating with elastic members for rolling the screen, and contrasting said elastic members for unrolling the screen in order to reach a wished amplitude of exposure of the screen;
- at least one stopping member is provided for stopping the rolling up roller when the wished amplitude of exposure is reached.

[0011] The shutter box is heavier than the supporting rod, therefore the devices is held by hocking members not particularly sturdy, and is practical, manageable and easy transportable.

[0012] The stopping member consists of a pin stopping the rolling up roller when inserted into a suitable housing of the roller.

[0013] The stopping member consists of a screw stopping the rolling up roller when inserted into a suitable threaded hole of the roller.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] Other advantages, features and aims of the invention, may be more readily understood by referring to the accompanying drawings, which concern a preferred embodiment, in which:

- Fig. 1 is a frontal view of the device with the screen completely unrolled, in extended condition;
- Fig. 2 is a rear side view of the device with the screen

completely rolled, in closure condition;

- Fig. 3 is a side view of the device in condition of Fig. 1;
- Fig. 4 is a side view of the device in an intermediate condition;
- Fig. 5 is a side view of the device in closure condition.

DESCRIPTION OF A PREFERRED EMBODIMENT OF THE INVENTION

[0015] The figures show a device 1 for manoeuvring blinds, screen or advertising cloths, wherein a screen 2 connects a supporting rod 3 to a rolling up roller housed in a shutter box 4. The rolling up roller rotates in opposite directions around its own longitudinal axis to unroll or roll the screen 2. For this purpose, known reversal elastic means are provided (not represented) for rolling the screen 2 and contrasting the manual unrolling.

[0016] The screen 2 of Fig. 1 is completely extended and the supporting rod 3 presents a hocking member 5 for hanging the device to a vertical structure. A pin 6 stops the rolling up roller to maintain the amplitude of exposure reached by the screen as described in EP-A-1422683.

[0017] Fig. 2 represents a rear view of the device 1 with the screen 2 completely unrolled and closed within the shutter box 4.

[0018] The hocking member 5 presents a through hole 7 for hanging the device to a vertical structure. The purpose of said hocking member 5 is to facilitate the assembly of the device 1 on a vertical structure. In fact, the supporting rod 3 is lighter than the shutter box 4 and more capable of being held by hocking members not particularly sturdy, so that the device 1 is practical, manageable and easy transportable.

[0019] Fig. 3 is a side view of the device 1 in the condition of complete opening of the screen 2. When the hocking member 5 is fixed to the vertical structure, the screen 2 of the device 1 is unrolled for all its amplitude so that it shows the advertising figures represented in the screen 2.

[0020] Fig. 4 is a side view of the device 1 in the condition of partial opening of the screen 2.

[0021] Also in this case the hocking member 5 fixes the device 1 to the vertical structure, but the raising of the screen 2 is due to the rolling rotation of the rolling up roller housed in a shutter box 4. Therefore, the behaviour of the device 1 is inverse with respect to the one of the usual shutter boxes, which remain immovable and the lowering of the screen is caused by manoeuvring a suitable bar. In fact, according to the invention, the shutter box 4 works as an usual manoeuvring bar, but it maintains its feature of housing the rolling up roller.

[0022] Fig. 5 is a side view of the device 1 in the condition of complete closure of the screen 2. The hocking member 5 fixes the device to the vertical structure and this condition is held, as in all cases, by inserting the pin 6 into its housing.

Claims

1. Device for manoeuvring blinds, screens or advertising cloths comprising:

a. a supporting rod (3) fitted with hocking members (5) for hanging the device (1) to a vertical structure;

b. a rolling up roller housed in a shutter box (4);

c. a screen (2) connecting the supporting rod (3) to the rolling up roller, the rolling up roller being capable of rotating in opposite directions around its own longitudinal axis for unrolling or rolling the screen (2);

d. reversal elastic means are provided for rolling the screen (2) and contrasting the unrolling of the screen (2);

the device is **characterised by** the fact that:

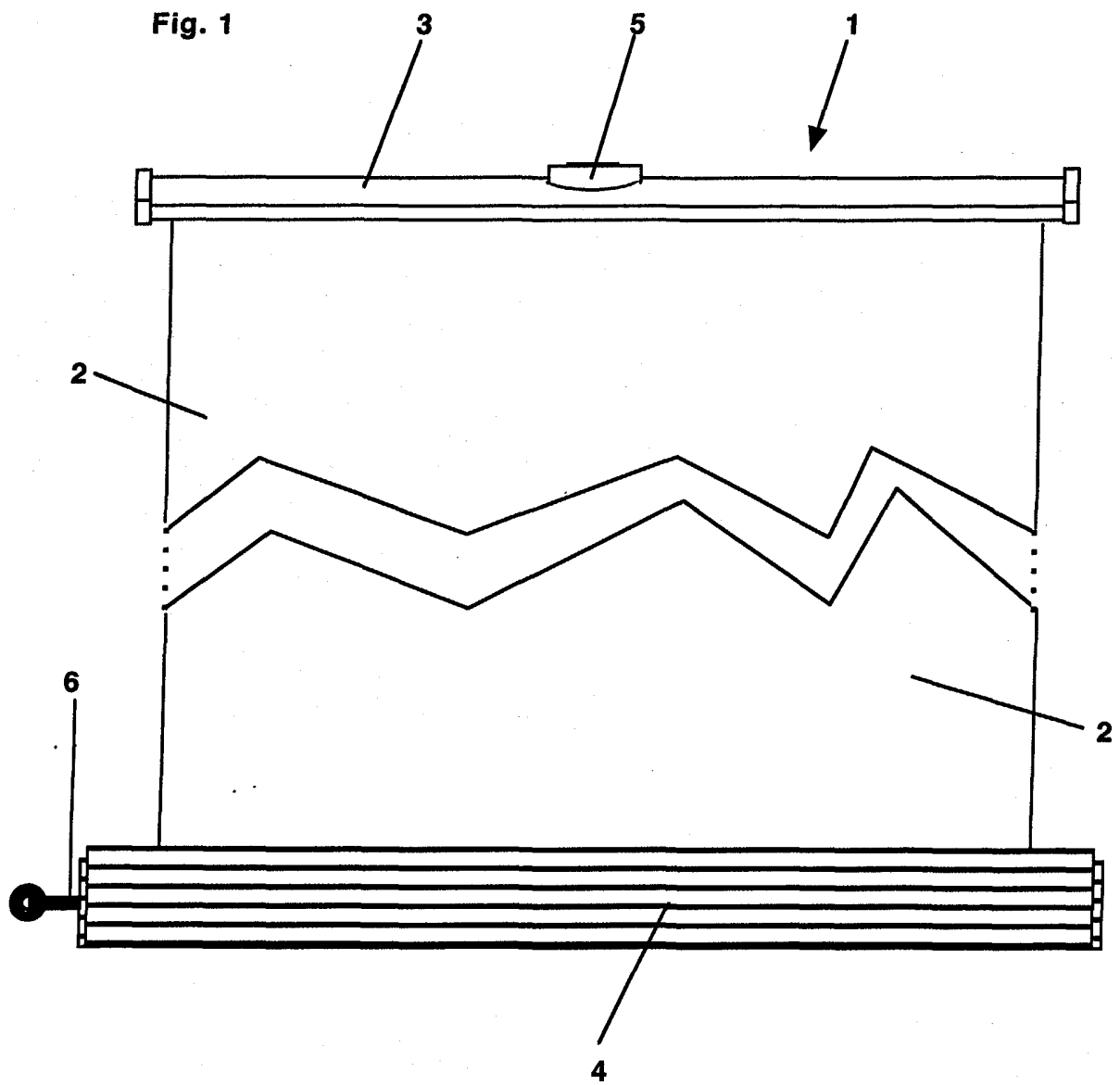
e. the shutter box (4) is used for operating the screen (2) by means of external forces, said forces co-operating with elastic members for rolling the screen (2) and for contrasting said elastic members for unrolling the screen (2) in order to reach a wished amplitude of exposure of the screen (2);

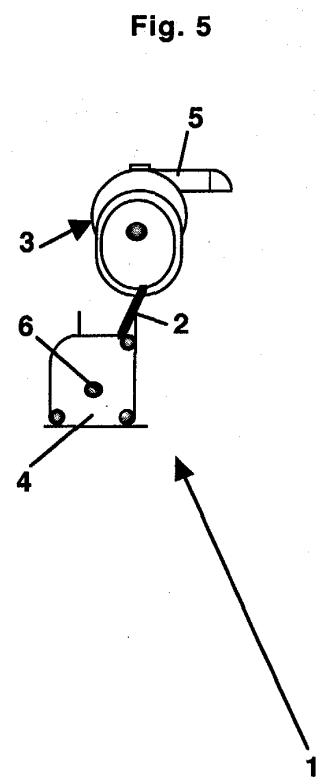
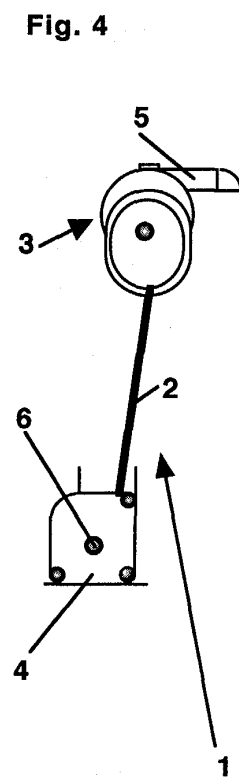
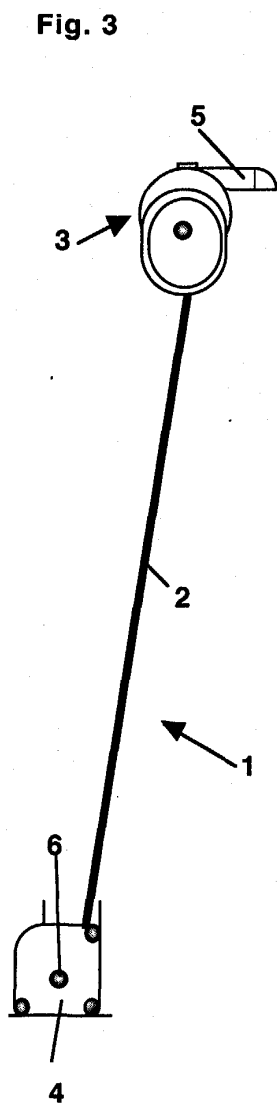
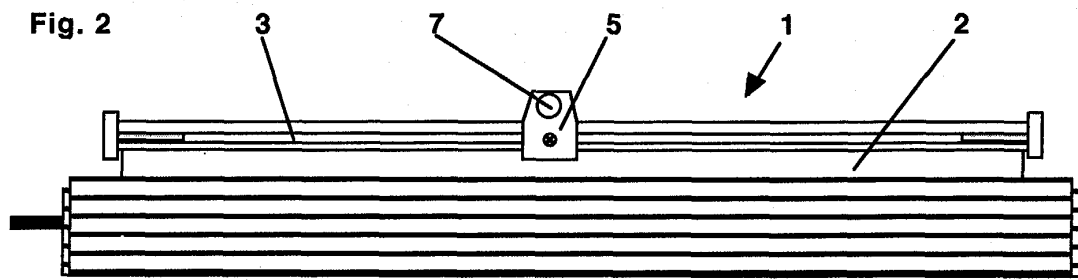
f. at least one stopping member (6) is provided for stopping the rolling up roller when the pre-established amplitude of exposure of the screen (2) is reached.

2. Device for manoeuvring blinds as in claim 1, wherein the shutter box (4) is heavier than the supporting rod (3), therefore, the devices (1) is held by hocking members (5) not particularly sturdy, and is practical, manageable and easy transportable.

3. Device for manoeuvring blinds as in claim 1, wherein the stopping member (6) consists of a pin (6) stopping the rolling up roller when inserted into a suitable housing of the roller.

4. Device for manoeuvring blinds as in claim 1, wherein the stopping member (6) consists of a screw stopping the rolling up roller when inserted into a suitable threaded hole of the roller.







European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 04 42 5517

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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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 4 April 2005	Examiner Pantoja Conde, A
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p>			

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EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 04 42 5517

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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