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## EUROPEAN PATENT APPLICATION

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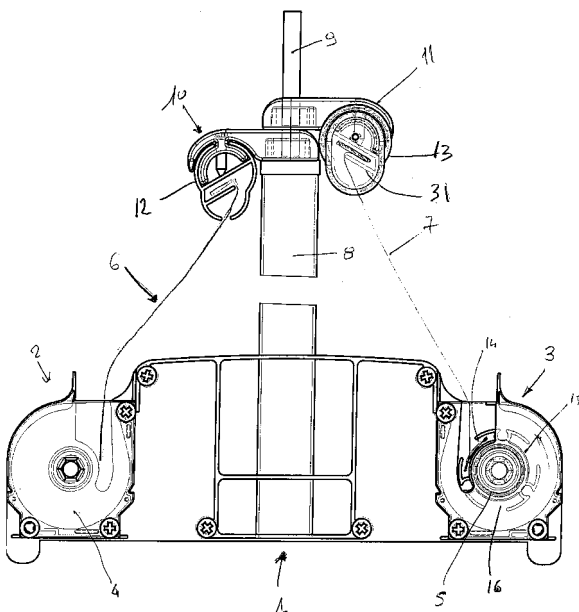
### (54) Supporting device for advertising screens or cloths

(57) A supporting device for advertising screens or cloths comprises:

a base (1) fitted with two housings (2, 3) for rolling up rollers (4, 5) of exhibiting screens (6, 7);  
the rollers (4, 5) are capable of rotating in opposite directions around their own longitudinal axis, to roll and unroll the screens (6, 7);  
a vertical holding member (8) provided at the centre of the base (1) for supporting fastening brackets

(10, 11) for manoeuvring bars (12, 13) of the screens (6, 7);  
the ends (28) of the screens (6, 7) engage the bars (12, 13);  
lists (27, 29) are fixed to the ends (17, 28) of the screens (6, 7);  
the lists (27, 29) are capable of engaging the ends (17, 28) of the screens (6, 7) on the rollers (4, 5) and the manoeuvring bars (12, 13).

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## Description

### PRESENTATION OF THE INVENTION

**[0001]** The present invention relates to a device used for supporting advertising screens or cloths. The device can be used in shops, stores or the like in order to advertise products and/or services of trade or industrial companies.

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

**[0002]** In general, these exhibiting devices consist of a base supporting a vertical holding member; this 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.

As substantial disadvantage, this kind of solution requires a laborious substitution of the screen since its opposite edges are strongly fixed to the rolling up roller and to the manoeuvring bar.

**[0003]** An exhibiting device is also known, using a screen fixed to the rolling up roller and to the manoeuvring bar by an edge of the screen so that the screen can be more easily replaced than by the previous solutions.

**[0004]** In the quoted situation, anyway, the replacement of the screen takes place only after an operation defined in a workshop by skilled workers using professional instruments.

### AIM OF THE INVENTION

**[0005]** The purpose of the invention is to remove these disadvantages. The invention, as claimed, solves the problem of creating a supporting device for advertising screens or cloths. The using of the device allows replacing the screen by operations made by unskilled persons, who have not appropriate instruments, where the device is found.

**[0006]** An advantage of the present invention consists of its base planed to increase the stability of the device in order to avoid any turnover because of the gusts of wind in open space or near doors or windows.

### MAIN FEATURES OF THE INVENTION

**[0007]** The supporting device for advertising screens or cloths comprises:

a base fitted with at least a housing for at least a rolling up roller for an exhibiting screen, the roller is capable of rotating in opposite directions around its longitudinal axis, to unroll or to roll the screen; a vertical holding member, located to the centre of the

base, to support at least a manoeuvring bar for a screen through at least a fastening bracket, the end of the screen being engaged on the bar; at least a list is integral with at least one of the ends of the screen, the list being capable of engaging the end of the screen on the roller or the manoeuvring bar.

**[0008]** The list is fixed to the end of the screen by metal stitches usually used in the offices; the metal stitches being placed by common staplers.

**[0009]** The list is bent to follow the geometry of the housing and to form fastening means with the screen, the section of the fastening means is shaped like a hook; due to this form, the list, extending for all the width of the screen and having a transversal dimension larger than the opening of the housing where the list is housed, causes the screen to remain engaged on the roller; therefore, only a movement parallel to the roller axis allows the in and out of the screen, fixed to the list, from the housing.

**[0010]** The base, moreover, presents an inner hollow capable of being filled by ballast. This feature allows lowering the centre of gravity of the device in order to avoid any turnover because of the gusts of wind in open space or near doors or windows.

### BRIEF DESCRIPTION OF THE DRAWINGS

**[0011]** 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 shows a side view of the device with the lateral cover closed;

Fig. 2 shows a side view of the device with the lateral cover open;

Fig. 3 is a frontal view of the device;

Fig. 4 is a schematic cross section of the rolling up roller of the device the screen is engaged on;

Fig. 5 is a schematic frontal view of the screen fitted with two engagement lists;

Fig. 6 is a schematic side view of the screen fitted with two engaging lists;

Fig. 7 shows a metal stitch connecting the screen to the engaging list.

### DESCRIPTION OF A PREFERRED EMBODIMENT OF THE INVENTION

**[0012]** The drawings show a supporting advertising screens or cloths, in which a base 1 shaped like a box presents a longitudinal plane of symmetry. Two housings 2, 3 for the rolling up rollers 4, 5 of the screens 6, 7 are located to the opposite sides of the plane of symmetry.

A vertical holding member 8 is provided at the centre of the base 1. The end 9 of the member 8, of shorter di-

ameter, holds two fastening brackets 10, 11 for two manoeuvring bars 12, 13 supporting the screens 6, 7.

**[0013]** Advertising writings or drawings are provided on the screen 6, 7 (here not shown).

**[0014]** The rollers 4, 5 are capable of rotating in opposite directions around their own longitudinal axis, to roll and unroll the screens 6, 7. For this purpose, known reversal elastic means (not shown) are provided for rolling up the screens 6, 7 and for bucking their unrolling by hand.

**[0015]** Three peripheral housings 14, 15, 16 extend for all the length of the roller 4 (5), to house one end 17 of the screen 6 (7) fitted with a fastening member having a section shaped like a hook. A cylindrical radiusing part (18, 19, 20), extending for all the length of the roller 4 (5), is provided in the peripheral space between two contiguous housings (14, 15, 16).

The ends of each cylindrical radiusing part 18 (19, 20) are capable of housing a pin 21 (22) (Figs 1, 3). The pins 21 (22) stop the roller 4 (5) when they are inserted in the ends of the radiusing parts (18, 19, 20).

Therefore, the impediment of the rotation of the roller 4 (5) is due to the pins 21, 22, inserted in a radiusing part (18, 19, 20), and to a limit stop for the pins 21, 22. Said limit stop consisting of a pre-established point of the perimeter of an opening 23 (24) provided in each opposite cover 25 (26) of the base 1.

In this way, therefore, it is possible to avoid the rotation of the roller 4 (5) the screen 6 (7) is rolled on.

The end 17 of the screen 6 (7) remains inserted in one of the peripheral housings 14, 15, 16 because of a fastening list 27 fixed to said end 17. The list 27 is bent to follow the geometry of the housings 14, 15, 16 and to form a fastening member with the screen 6 (7), the section of the fastening member being shaped like a hook. The list 27 extends for all the length of the end 17. The list 27 has a transversal dimension larger than the opening of the housing (14, 15, 16), where the list is found in order to allow the screen 6 (7) to remain engaged on the roller 4 (5). Therefore, only a movement parallel to the roller axis allows the in and out of the screen 6 (7), fixed to the list 27, from the housing (14, 15, 16).

**[0016]** The list 27 consists of a material assuring a good mechanical strength also with a very thin thickness. Such a material is, for example, the aluminium.

**[0017]** The peripheral housings 14, 15, 16 of each roller 4 (5) are open towards the external part of the housings 14, 15, 16. In this way the unrolled screen 6 (7) reaches, through the openings 23, 24, the manoeuvring bar 12 (13) supported by the fastening bracket 10, (11) engaged on the vertical holding member 8.

The end 28 of the screen 6 (7), opposite to the end 17, is engaged on said bar 12 (13) by means of a list 29 similar for all to the list 27 (Figs 4, 5, 6).

**[0018]** A series of metal stitches 30 is used to fix the lists 27, 29 to the relevant ends 17, 28 of the screen 6 (7), as shown in Fig. 7. The metal stitches 30 are commonly used in the offices to page up files of typewritten

papers. The metal stitches 30 are placed by common staplers sold by stationer's. To use said fixing means, it is necessary the lists 27, 29 and the screens 6, 7 are thin, strong to the mechanical stress and to the different environment conditions (for differential dilatation and the like).

**[0019]** After the lists 27, 29 have been fixed to the relevant ends 17, 28 of the screens 6, 7 by means of metal stitches 30, it is possible to introduce, with an axial movement, said ends 17, 28, respectively, into one of the peripheral housings 14, 15, 16 of the rolling up rollers 4 (5) and the manoeuvring bar 12 (13), detached from the relevant bracket 10 (11) to obtain a better freedom of montage. The introduction of the end 17 into a peripheral housing 14 (15, 16) takes place through one of the openings 23 (24) of one of the covers 25, 26 of the base 1, while the introduction of the end 28 into the manoeuvring bar 12 (13) occurs after having removed the cover 31 (32) located at the end of said manoeuvring bar 12 (13), detached from the bracket 10 (11).

**[0020]** Then, when the introduction of the ends 17, 28 has been reached, it is possible to unroll the screens 6, 7, by pulling them by hand, until the ends 28, housed in the manoeuvring bars 12, 13, reach the requested height to be supported by the vertical holding member 8 through the brackets 10, 11.

**[0021]** To replace the screen 6 (7), it is necessary to move away the cover 31 (32) of the bar 12 (13), to release the bar 12 (13) from the bracket 10 (11), to unroll the screen 6 (7) from the relevant roller 4 (5) and to insert the pins 21, 22 into one of the cylindrical radiusing parts 18, 19, 20. Then, it is necessary to rotate the roller 4 (5) until the pins 21, 22 reach their limit stop consisting of a pre-established point of the perimeter of the opening 23 (24) in order to avoid the rotation of the roller 4 (5). After having moved away the end 17 from the housing 14, (15, 16) and the end 28 from the manoeuvring bar 12 (13) with movements parallel to the axis of the roller 4 (5), the screen 6 (7) can be replaced.

**[0022]** Then, a new screen 6 (7) is made ready, by fixing the lists 27, 29 to the relevant ends 17, 28 by means of metal stitches 30. Said ends 17, 28 are inserted, respectively, into one of the peripheral housings 14 (15, 16) of rolling up roller 4 (5) and the manoeuvring bar 12 (13). Then, when the ends 17, 28 have been inserted, it is possible to unroll the screens 6, 7, until the relevant ends 17, 28, housed in manoeuvring bars 12, 13, reach, pulled by hand, the fastening brackets 10, 11 of the vertical holding member 8 to be supported by said brackets 10, 11.

**[0023]** The base 1 presents an inner hollow capable of being filled by ballast (water, heavy drugs and the like), so that the centre of gravity of the device is lowered in order to increase its stability. Said solution avoids any turnover because of the gusts of wind in open space or near doors or windows.

## Claims

1. Supporting device for advertising screens or cloths, comprising:

a base (1) fitted with at least one housing (2, 3) for at least one rolling up roller (4, 5) of an exhibiting screen (6, 7); the roller (4, 5) being capable of rotating in opposite directions around its own longitudinal axis, to roll and unroll the screen (6, 7);

a vertical holding member (8) to support at least one manoeuvring bar (12, 13) for the screen (6, 7) by means of at least one fastening bracket (10, 11), one end (28) of the screen (6, 7) engaging the bar (12, 13);

the device being **characterised by** the fact:

at least one list (27,29) is integral with at least one end (17,28) of the screen (6, 7), the list (27,29) being capable of engaging the end (17,28) of the screen (6, 7) on the roller (4, 5) and/or on the manoeuvring bar (12, 13).

2. Supporting device as in claim 1, wherein the list (27,29) is fixed to the end (17,28) of the screen (6, 7) by means of metal stitches (30) commonly used in the offices and placed by common staplers sold by stationer's.

3. Supporting device as in claim 2, wherein the list (27,29) is introduced into a peripheral housing (14, 15, 16) with an axial movement, the peripheral housing (14, 15, 16) extending for all the length of the roller (4, 5) and/or the manoeuvring bar (12, 13).

4. Supporting device as in claim 2, wherein the list (27,29) consists of a material assuring a good mechanical strength also with a very thin thickness.

5. Supporting device as in claim 4, wherein the list (27,29) consists of aluminium.

6. Supporting device as in claim 1 wherein stopping means (21, 22) are provided for preventing the rotation of the roller (4, 5) in order to allow the replacement of the screen (6, 7).

7. Supporting device as in claim 6, wherein stopping means (21, 22) consist of pins (21, 22) reaching their limit stop when they are inserted into opposite ends of a housing (14, 15, 16) of the roller (4, 5); the limit stop consisting of pre-established points of the perimeters of the openings (23, 24) provided in opposite covers (25, 26) of the base (1).

8. Supporting device as in claim 3, wherein a cylindrical

cal radiusing part (18, 19, 20) is provided in the peripheral space between two contiguous housings (14, 15, 16);

the cylindrical radiusing part (18, 19, 20), extending for all the length of the roller (4, 5), is capable of housing the pins (21, 22) preventing the rotation of the roller (4, 5) when inserted in the end of the radiusing part (18, 19, 20);

the limit stop of the pins (21, 22) consisting of pre-established points of the perimeters of the openings (23, 24).

9. Supporting device as in claim 1, wherein the list (27, 29) is bent to follow the geometry of the housings (14, 15, 16); the list (27, 29) forms a fastening member with the screen (6,7), the section of said fastening members being shaped like a hook; the list (27, 29) extending for all the length of the ends (17,28).

10. Supporting device as in claim 9, wherein the list (27, 29) has a transversal dimension larger than the opening of the housing (14, 15, 16), where the list (27, 29) is found in order to allow the screen (6, 7) to remain engaged on the roller (4, 5); therefore, only a movement parallel to the roller axis allows the in and out of the screen (6, 7), fixed to the list (27), from the housing (14, 15, 16).

Fig 1

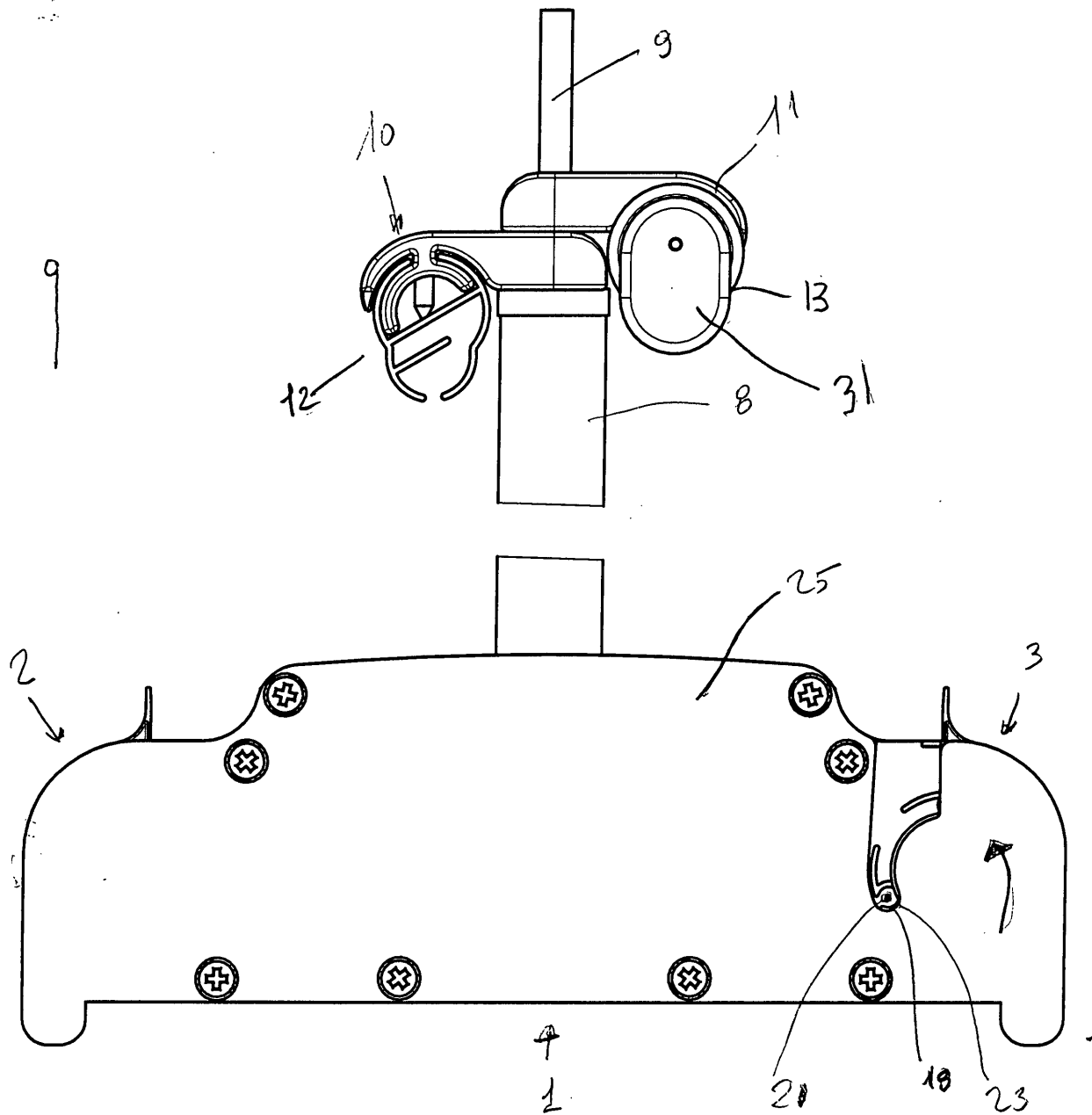
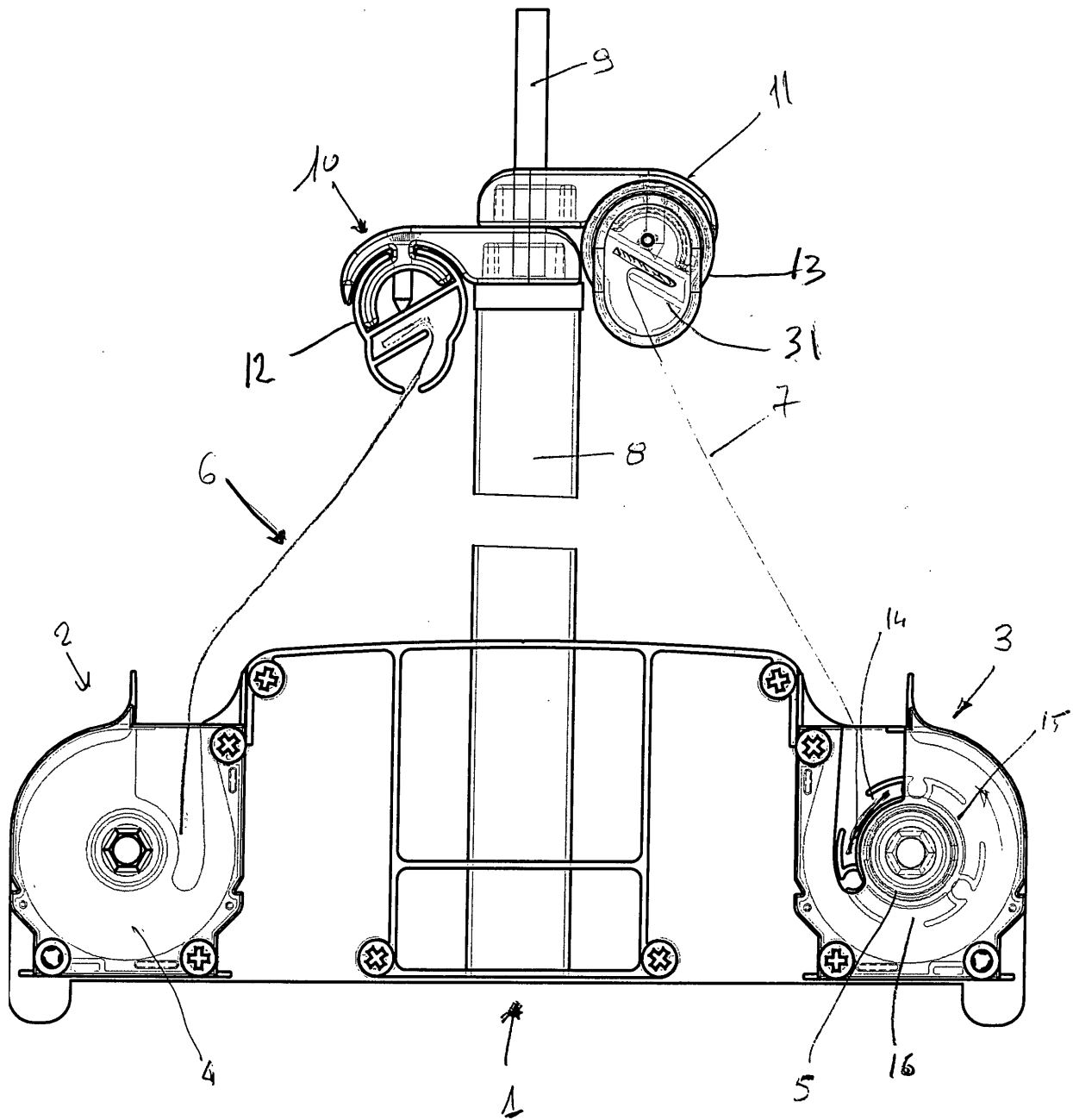


Fig. 2



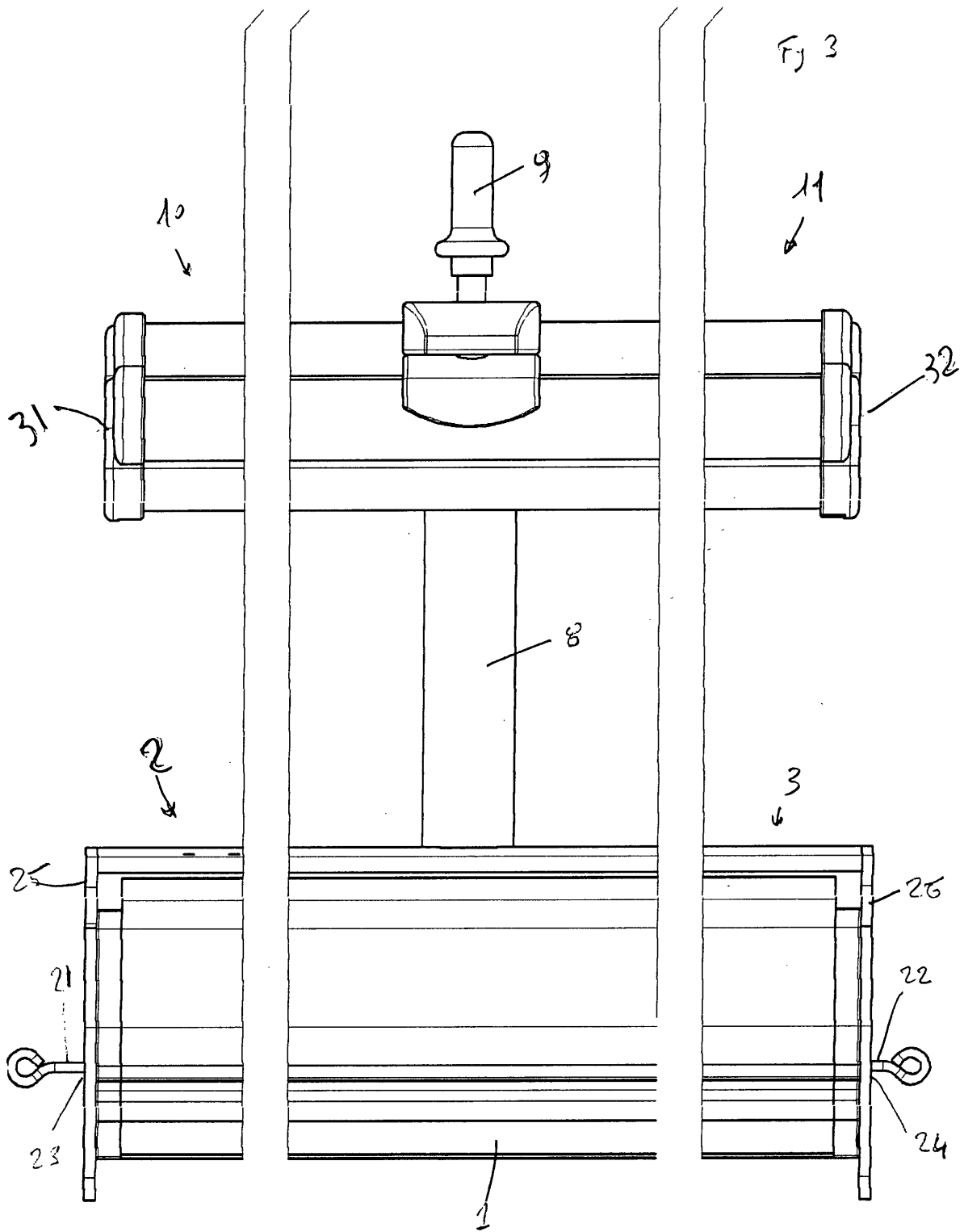


Fig 4

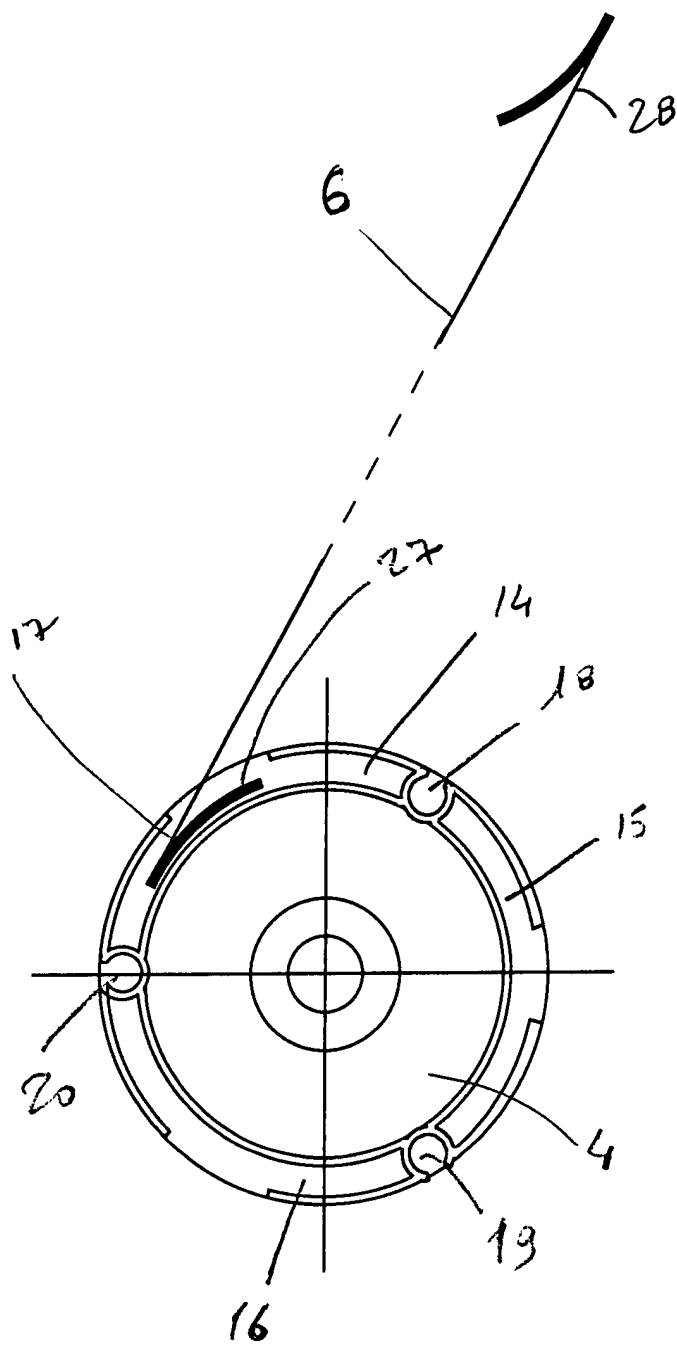


Fig. 5

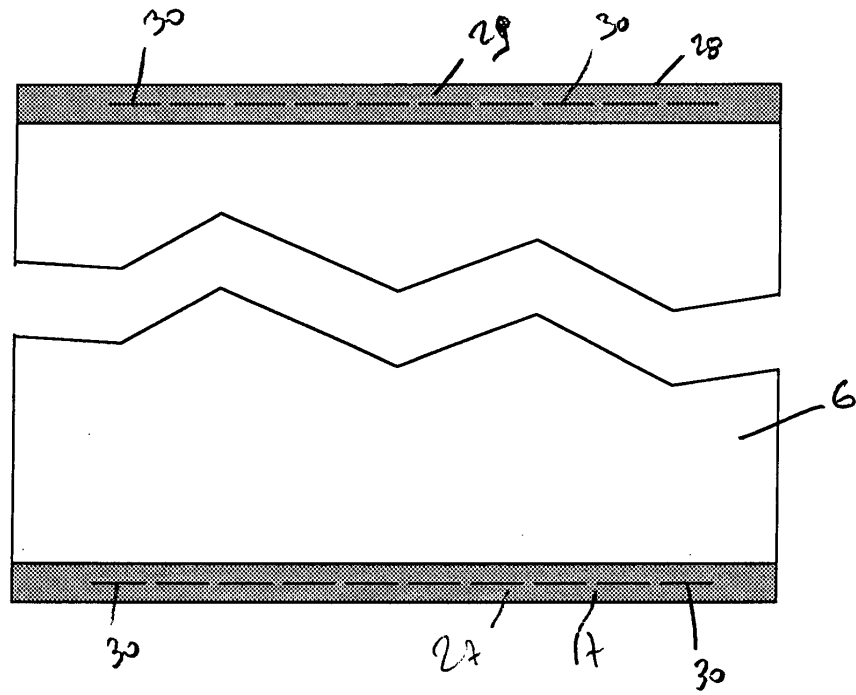


Fig. 6

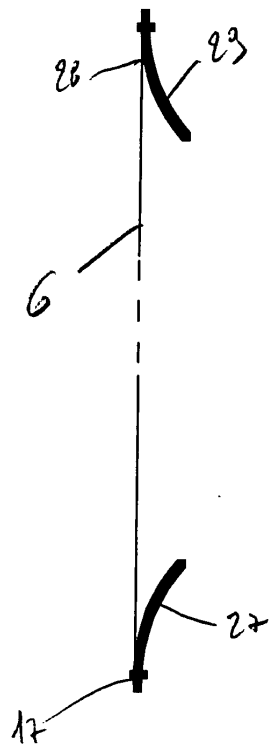
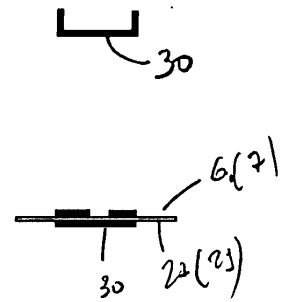


Fig. 7





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# EUROPEAN SEARCH REPORT

Application Number  
EP 02 02 6039

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	WO 02 09080 A (MARC BRIC INTRESSETER AB ;HELLSTROEM HANS (SE); JOHANSSON GERT (S) 31 January 2002 (2002-01-31) * page 1, line 30 - page 2, line 6 * * page 6, line 10 - page 7, line 21 * * page 10, line 30 - line 9 * * figures 1-6 *	1-10	G09F11/30 G09F15/00
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A	US 3 724 524 A (POTTER F) 3 April 1973 (1973-04-03) * the whole document *	1-10	
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A	GB 2 358 511 A (DIGGLE MARTIN JAMES ;DIGGLE STEVEN JOHN (GB)) 25 July 2001 (2001-07-25) * page 6, line 6 - page 7, line 27 * * figures 1-8 *	1-10	TECHNICAL FIELDS SEARCHED (Int.Cl.7) G09F G03B E06B
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Place of search THE HAGUE		Date of completion of the search 7 May 2003	Examiner Pantoja Conde, A
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	

EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
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EP 02 02 6039

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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