



(11) **EP 1 420 102 B1**

(12) **EUROPEAN PATENT SPECIFICATION**

(45) Date of publication and mention
of the grant of the patent:
14.11.2007 Bulletin 2007/46

(51) Int Cl.:
D06F 53/04 ^(2006.01)

(21) Application number: **03257228.1**

(22) Date of filing: **17.11.2003**

(54) **Retractable clothes line device**

Vorrichtung mit einziehbarer Wäscheleine

Appareil avec corde à linge rétractable

(84) Designated Contracting States:
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HU IE IT LI LU MC NL PT RO SE SI SK TR**

(30) Priority: **16.11.2002 GB 0226840**

(43) Date of publication of application:
19.05.2004 Bulletin 2004/21

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Description

[0001] This invention relates to a retractable clothes line device, and in particular but not exclusively to a retractable clothes line device having two or more lines which can be withdrawn from, or retracted back into the device independently of one another.

[0002] Retractable clothes line devices are known. An example of a known device is that as described in GB 2236302. This device comprises a housing with a support bracket so that the device can be attached to a supporting structure such as a wall. The device has a single line, which can then be withdrawn from the device and attached to a further support member creating a span of line onto which clothes may be attached for drying. After use, the line can be retracted back within the device.

[0003] Document CH 273062 discloses a retractable clothes line device with at least two rotatable members.

[0004] A problem associated with known devices is that they are not versatile in that only one span of line may be retracted from the device. Consequently, such devices only provide as much drying space as a non-retractable line, which is fastened permanently between two positions.

[0005] According to the present invention, there is provided a clothes line device comprising a casing having a support member by which the clothes line device can be attached to a supporting surface, said casing including a clothes line support comprising at least two independently rotatable members, each member supporting a respective clothes line which can be extended from the clothes line device from one or more apertures in the casing, said rotatable members being operable by a return mechanism by which the clothes lines may be caused to be retracted back into the casing when desired.

[0006] The clothes line of the present invention has the improved technical effect of providing a compact structure, which can provide a greater amount of drying space, and also the lines can be positioned in a variety of orientations so enabling improved drying.

[0007] In a preferred embodiment, the rotatable members are separated from one another by a wall within the casing. By having a wall separating the rotatable members, there is the reduced risk of tangling of the clothes lines when they are retracted back into the casing.

[0008] It is envisaged that a first end of a rotatable member is supported on an outer wall of the casing while a second end of a rotatable member is supported on a wall separating the rotatable members within the casing.

[0009] Preferably, the first and/or second ends of the rotatable members is/are supported by pivotal connectors, which enable the rotatable members to rotate around an axis. By having pivot points supporting the rotatable members, the lines may be withdrawn from the clothes line device at various angles, for example in the horizontal or the vertical direction so that an end of the line may be attached to any desired point within reach.

[0010] Preferably, the device includes a stop device

whereby when a line is extended from the casing to a certain length, the line can cooperate with said stop device to prevent further extension. The stop device may be a simple cleat around which a line is wrapped when at a required length. Alternatively, the stop device may be provided as a stop mechanism, such a ratchet that locks onto the line when extended a required distance. It is envisaged that a combination of a cleat and stop mechanism may be used.

[0011] In a preferred arrangement, the return mechanism comprises a spring that is biased to maintain the line in the retracted position. The spring can co-operate with the support for the line and provide a resistance on withdrawing the line from the casing. If a withdrawn line is released from a support, then due to the tension of the spring, the line will be retracted back into the casing. Again, a stop mechanism may be activated to lock the line when it has retracted to a certain length.

[0012] It is envisaged that the return mechanism may include a push button, where upon operation, any lock on the line or lines is released so that the line(s) may be automatically retracted back into the casing.

[0013] Preferably, the rotatable members are individual reels around which a respective clothes line is wrapped. The reels may comprise a surface around which a line is wrapped as well as a separate axle for the reel. Alternatively, the reel may be provided as a combined line support surface and axle.

[0014] The casing may be attached to the support member by fixing members which allow the support member to be folded back against a support structure.

[0015] An embodiment of the invention will now be described with reference to the accompanying figures in which:

Figure 1 shows a cross section of a retractable clothes line device of the invention in which the clothes line is retracted,

Figure 2 shows a cross section as shown in Figure 1, except that the clothes line extended from the device,

Figure 3 shows a plan view from above of a pair of reels and their position within the casing,

Figure 4 shows the reels in isolation from the casing, and

Figure 5 shows a front view of the casing and the fixing points at the end of the lines.

[0016] A cross-section of a retractable clothes line device is generally shown in Figure 1 as 1 and although two lines are held within the device, one reel is shown for ease of reference. The device comprises a casing 2 having a support 3 which can be attached to a structure, such as a wall. The support 3 comprises a bracket which, for outdoor use, is preferably a galvanised metal item which can withstand rusting. The support 3 is attached to the casing 2 by fixing members 3a which allow the support to move relative to the casing 2 (e.g. in a pivotal manner)

so that the casing may be folded back against the support structure so that the whole device becomes less obtrusive. However, it is envisaged that the whole arrangement may be fixed with no relevant movement of the support and casing. A clothes line 5 is extendable from the casing and can be wrapped around a cleat 4 at the base of the casing to hold the extended line in an extended position. The cleat also acts to support the weight of clothing on a line and preferably can take a large force, ie up to 60 Kilograms. Preferably, a cleat is provided per line although it is envisaged in some arrangements that a single cleat could be used around which multiple lines could be wrapped. In an alternative embodiment a ratchet device can be used as a stop mechanism for the line, possibly to be used in conjunction with the cleat.

[0017] A line 5 is supported on a reel 7 which, in turn, is supported by an axle 8 which co-operates with attachment points on the housing 2. The axle 8 allows the reel 7 to freely rotate and co-operates with a bias spring (not shown). The line 5 can be withdrawn from the housing 2 using a loop 10 which an individual can pull and the loop also provides a fixing member for the end of the line 5 which is extended from the housing 2. The spring can co-operate with the support 13 for the line and provide a resistance on withdrawing the line from the casing. If a withdrawn line is released from a support, then due to the tension of the spring, the line will be retracted back into the casing. A mechanism (e.g. a push button arrangement) may be configured to release a line lock mechanism so that the line can be retracted back into the casing.

[0018] Although a loop is shown which can hook around a support, the fixing member may be a hook, a clip or clasp which can be attached to a support to keep the line extended. Associated with each reel is a flange 9 which is on either end of a reel at right-angles to the axis of the reel. The flange acts as a stop to maintain the line within the confines of the axial length of the reel.

[0019] Figure 2 shows the device of Figure 1 except that the line 5 has been extended from the casing 2.

[0020] Figure 3 shows a plan view from above of the casing 2 of Figures 1 and 2. As can be seen, there are two co-axial reel arrangements 7a, 7b. Two axles 8a, 8b (associated with respective reels 7a, 7b) are attached to the casing, at their ends, at support points 11a, 11b. The supports can enable the axles to rotate around an axis. Each axle and reel arrangement may be provided as a defined unit that can be positioned within the casing midway between the end of the casing housing the support 3 and the aperture 6 within the casing. In an alternative embodiment, the reel may be provided as a combined line support surface and axle.

[0021] As shown in Figure 4, the axles 8a and 8b can be individually mounted and they can be separated by a wall 12 so that lines are kept separate from one another on the reels. The axles 8a, 8b are supported at their inner end by a mounting support 13 which forms part of the wall 12 within the casing.

[0022] Figure 5 shows a front view of the device in which the casing can be seen together with loops 10 which can be used to extend the line 5 from the casing (via the aperture 6) and which can be attached to a fixing point for holding the line in the extended position. Two cleats 4a and 4b are shown and each line can be held by a cleat dedicated to that line. The lines are extended from the casing through apertures, although it is envisaged that a single slot could form the aperture and all lines are withdrawn from that slot.

[0023] Although it is preferred that two lines are extended from the casing, it is envisaged that even more lines may be contained within the casing, each operating independently of the other and in such an arrangement a fan of lines may be extended from the device so that they can be used to support as many clothes as possible during drying.

[0024] It is to be understood that the above detailed description is an embodiment of the invention and is provided by way of example only. Various details of the invention may be modified without departing from the true spirit and scope of the invention.

Claims

1. A clothes line device comprising a casing (2) having a support member (3) by which the clothes line device can be attached to a supporting surface, said casing including a clothes line support comprising at least two independently rotatable members (7a, 8a, 7b, 8b), each said member supporting a respective clothes line (5) which can be extended from the clothes line device from one or more apertures (6) in the casing, said rotatable members being operable by a return mechanism by which the clothes lines may be caused to be retracted back into the casing when desired.
2. A clothes line device according to Claim 1, wherein the rotatable members (7a, 8a, 7b, 8b) are separated from one another by a wall (12) within the casing (2).
3. A clothes line device according to Claim 2, wherein a first end of a said rotatable member (8) is supported on an outer wall of the casing (2) and a second end of the rotatable member is supported on the wall (12) separating the rotatable members from each other within the casing.
4. A clothes line device according to Claim 3, wherein the first and/or second end of the rotatable members (8) is/are supported by pivotal connectors (11), which enable the rotatable members to rotate around an axis.
5. A clothes line device according to any one of the preceding Claims, further including a stop device (4),

whereby when a line (5) is extended from the casing (2) to a certain length, the line cooperates with the stop device to prevent further extension.

6. A clothes line device according to Claim 5, wherein the stop device comprises a simple cleat (4) around which a line (5) is wrapped when at a required length. 5
7. A clothes line device according to Claim 5 or 6, wherein the stop device is provided as a stop mechanism, such a ratchet that locks onto the line (5) when extended a required distance. 10
8. A clothes line device according to any one of the preceding Claims, wherein the return mechanism comprises a spring that is biased to maintain the line (5) in the retracted position. 15
9. A clothes line device according to Claim 8, wherein the return mechanism includes a push button, where upon operation, any lock on the line or lines is released so that the line is automatically retracted back into the casing (2). 20
10. A clothes line device according to any one of the preceding Claims, wherein the rotatable members include individual reels (7) around which a respective clothes line (5) is wrapped. 25
11. A clothes line device according to Claim 10, wherein the reels (7) comprise a surface around which a line (5) is wrapped as well as an axle for the reel. 30
12. A clothes line device according to Claim 10, wherein the reel (7) is provided as a combined line support surface and axle. 35
13. A clothes line device according to any one of the preceding Claims, wherein the casing (2) is attached to the support member (3) by fixing members (3a) which allow the support member to be folded back against a support structure. 40

Patentansprüche

1. Wäscheleinvorrichtung mit einem Gehäuse (2), das einen Tragkörper (3) aufweist, mit dem die Wäscheleinvorrichtung an einer tragenden Oberfläche anbringbar ist, wobei das Gehäuse mit einem Wäscheleinträger versehen ist, der wenigstens zwei unabhängig drehbare Körper (7a, 8a, 7b, 8b) aufweist, von denen jeder eine entsprechende Wäscheleine (5) trägt, die sich von der Wäscheleinvorrichtung aus einer oder mehreren Öffnungen (6) im Gehäuse ziehen läßt, wobei die drehbaren Körper mit Hilfe eines Rückführmechanismus betätigbar sind, durch den die Wäscheleine dazu gebracht wer-

den kann, gewünschtenfalls in das Gehäuse zurückgezogen zu werden.

2. Wäscheleinvorrichtung nach Anspruch 1, **dadurch gekennzeichnet, daß** die drehbaren Körper (7a, 8a, 7b, 8b) durch eine Wand (12) in dem Gehäuse (2) voneinander getrennt sind.
3. Wäscheleinvorrichtung nach Anspruch 2, **dadurch gekennzeichnet, daß** ein erstes Ende des drehbaren Körpers (8) auf einer Außenwand des Gehäuses (2) getragen wird und ein zweites Ende des drehbaren Körpers auf der Wand getragen wird, die die drehbaren Körper in dem Gehäuse voneinander trennt.
4. Wäscheleinvorrichtung nach Anspruch 3, **dadurch gekennzeichnet, daß** das erste und / oder zweite Ende der drehbaren Körper (8) von beweglichen Verbindern (11) getragen wird, die es den drehbaren Körpern ermöglichen, sich um eine Achse zu drehen.
5. Wäscheleinvorrichtung nach einem der vorhergehenden Ansprüche, **gekennzeichnet durch** eine Anschlagvorrichtung (4) derart, daß dann, wenn eine Leine (5) aus dem Gehäuse (2) eine bestimmte Länge abgezogen worden ist, die Leine mit der Anschlagvorrichtung zusammenwirkt, um ein weiteres Ausziehen zu verhindern.
6. Wäscheleinvorrichtung nach Anspruch 5, **dadurch gekennzeichnet, daß** die Anschlagvorrichtung eine einfache Klemmplatte (4) ist, um die die Leine (5) gewickelt wird, sobald sie eine gewünschte Länge hat.
7. Wäscheleinvorrichtung nach Anspruch 5 oder 6, **dadurch gekennzeichnet, daß** die Anschlagvorrichtung mit einem Anschlagmechanismus ausgestattet ist, beispielsweise einer Ratsche, die die Leine (5) blockiert, sobald sie um eine gewünschte Entfernung ausgezogen ist.

8. Wäscheleinvorrichtung nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, daß** der Rückführmechanismus eine Feder aufweist, die unter Spannung steht, um die Leine (5) in der zurückgezogenen Lage zu halten. 45
9. Wäscheleinvorrichtung nach Anspruch 8, **dadurch gekennzeichnet, daß** der Rückführmechanismus einen Druckknopf aufweist, durch dessen Betätigung jegliche Arretierung der Leine oder Leinen aufgehoben wird, so daß die Leine automatisch in das Gehäuse (2) zurückgezogen wird. 50
10. Wäscheleinvorrichtung nach einem der vorherge-

henden Ansprüche, **dadurch gekennzeichnet, daß** die drehbaren Körper Spulen aufweisen, um die eine entsprechende Wäscheleine (5) gewickelt ist.

11. Wäscheleinvorrichtung nach Anspruch 10, **dadurch gekennzeichnet, daß** die Spulen (7) mit einer Oberfläche versehen sind, um die herum eine Leine (5) gewickelt ist, sowie mit einer Achse für die Spule.
12. Wäscheleinvorrichtung nach Anspruch 10, **dadurch gekennzeichnet, daß** die Spule (7) aus einer Kombination von Leinentragoberfläche und Achse gebildet ist.
13. Wäscheleinvorrichtung nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, daß** das Gehäuse (2) an dem Tragkörper (3) durch Befestigungselemente (3a) angebracht ist, die es dem Tragkörper ermöglichen, gegen eine Tragkonstruktion zurückgeschwenkt zu werden.

Revendications

1. - Dispositif de corde à linge comprenant un boîtier (2) ayant un élément de support (3) au moyen duquel le dispositif de corde à linge peut être attaché à une surface de support, ledit boîtier comprenant un support de corde à linge comprenant au moins deux éléments (7a, 8a, 7b, 8b) capables de tourner de façon indépendante, chaque élément précité supportant une corde à linge respective (5) qui peut être étendue à partir du dispositif de corde à linge à partir d'une ou plusieurs ouvertures (6) dans le boîtier, lesdits éléments rotatifs étant actionnables par un mécanisme de retour au moyen duquel les cordes à linge peuvent être amenées à être à nouveau rétractées dans le boîtier quand on le souhaite.
2. - Dispositif de corde à linge selon la revendication 1, dans lequel les éléments rotatifs (7a, 8a, 7b, 8b) sont séparés les uns des autres par une paroi (12) à l'intérieur du boîtier (2).
3. - Dispositif de corde à linge selon la revendication 2, dans lequel une première extrémité d'un élément rotatif (8) précité est supportée sur une paroi externe du boîtier (2) et une seconde extrémité de l'élément rotatif est supportée sur la paroi (12) séparant les éléments rotatifs les uns des autres à l'intérieur du boîtier.
4. - Dispositif de corde à linge selon la revendication 3, dans lequel la première et/ou la seconde extrémité des éléments rotatifs (8) est/sont supportée(s) par des connecteurs pivotants (11), qui permettent aux éléments rotatifs de tourner autour d'un axe.

5. - Dispositif de corde à linge selon l'une quelconque des revendications précédentes, comprenant en outre un dispositif d'arrêt (4), ce par quoi, lorsqu'une corde (5) est étendue à partir du boîtier (2) jusqu'à une certaine longueur, la corde coopère avec le dispositif d'arrêt pour empêcher une extension supplémentaire.
6. - Dispositif de corde à linge selon la revendication 5, dans lequel le dispositif d'arrêt comprend un taquet simple (4) autour duquel une corde (5) est enroulée lorsqu'elle est à une longueur requise.
7. - Dispositif de corde à linge selon l'une des revendications 5 ou 6, dans lequel le dispositif d'arrêt est disposé en tant que mécanisme d'arrêt, tel qu'un cliquet qui se bloque sur la corde (5) lorsqu'elle est étendue sur une distance requise.
8. - Dispositif de corde à linge selon l'une quelconque des revendications précédentes, dans lequel le mécanisme de retour comprend un ressort qui est sollicité pour maintenir la corde (5) dans la position rétractée.
9. - Dispositif de corde à linge selon la revendication 8, dans lequel le mécanisme de retour comprend un bouton-poussoir, où, lors de l'actionnement, tout blocage sur la corde ou les cordes est libéré de telle sorte que la corde est automatiquement rétractée à nouveau à l'intérieur du boîtier (2).
10. - Dispositif de corde à linge selon l'une quelconque des revendications précédentes, dans lequel les éléments rotatifs comprennent des bobines individuelles (7) autour desquelles une corde à linge respective (5) est enroulée.
11. - Dispositif de corde à linge selon la revendication 10, dans lequel les bobines (7) comprennent une surface autour de laquelle une corde (5) est enroulée ainsi qu'un axe pour la bobine.
12. - Dispositif de corde à linge selon la revendication 10, dans lequel la bobine (7) est disposée en tant que surface de support de corde et axe combinés.
13. - Dispositif de corde à linge selon l'une quelconque des revendications précédentes, dans lequel le boîtier (2) est attaché à l'élément de support (3) par des éléments de fixation (3a) qui permettent à l'élément de support d'être replié contre une structure de support.

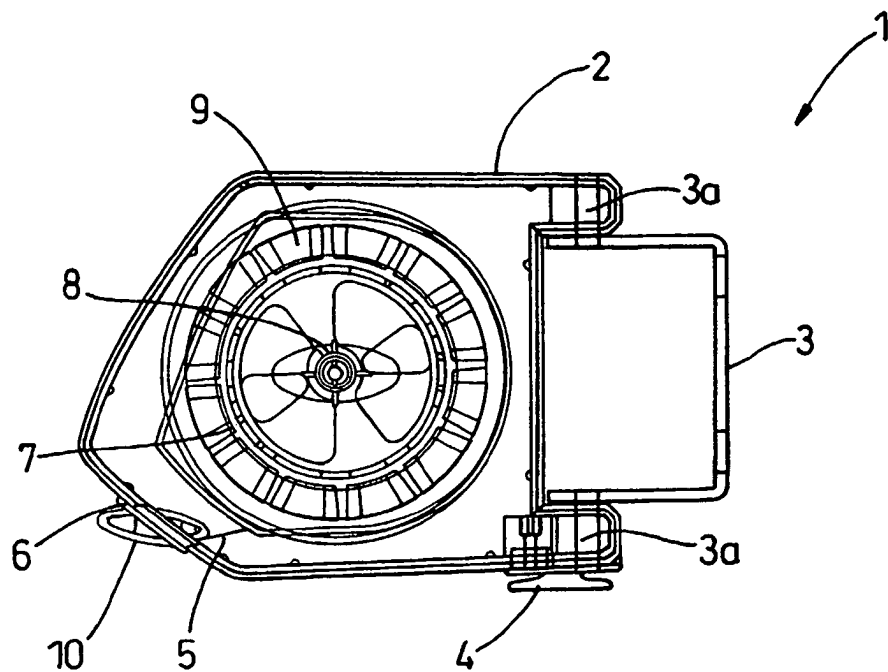


Fig. 1

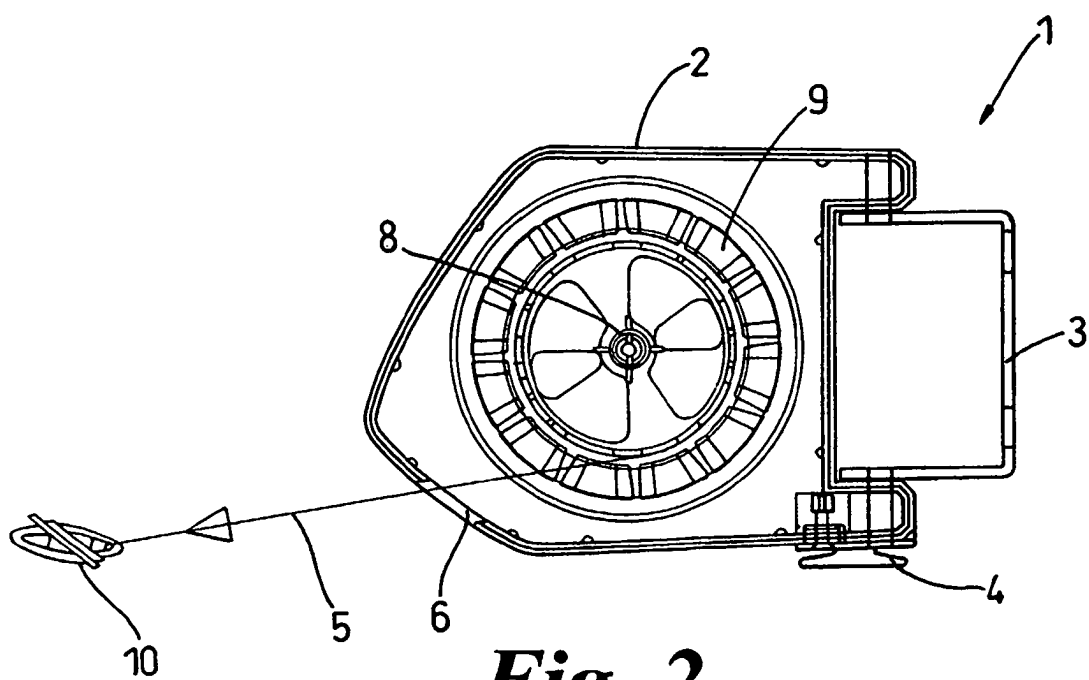
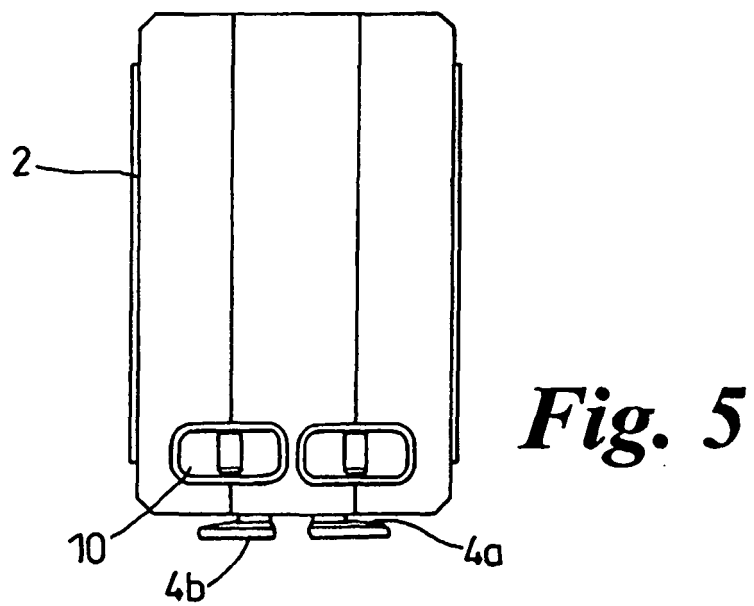
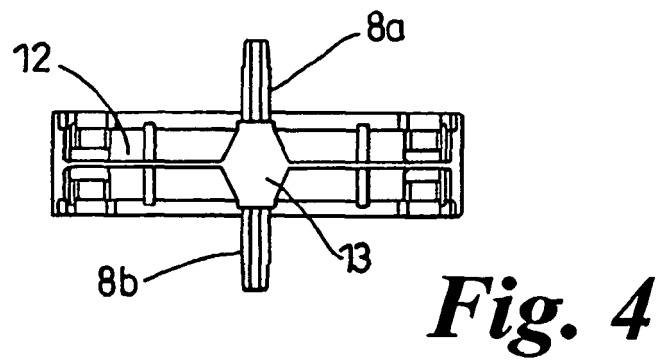
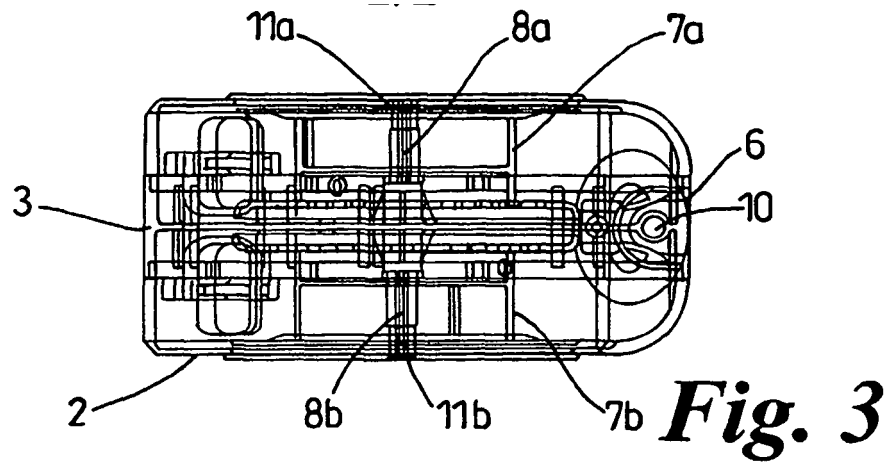


Fig. 2



REFERENCES CITED IN THE DESCRIPTION

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