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**(54) DEVICE FOR SUPPORTING REELS OF WEBS WITH SELF-ADHESIVE LABELS**

VORRICHTUNG ZUM HALTEN VON ROLLEN VON BAHNEN MIT SELBSTKLEBENDEN ETIKETTEN  
DISPOSITIF DE SUPPORT DE BOBINES DE BANDES COMPORTANT DES ÉTIQUETTES  
AUTOCOLLANTES

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## Description

**[0001]** This invention relates to a device for supporting reels of webs with self-adhesive labels, in particular intended to be used in labelling machines equipped with systems for joining the webs.

**[0002]** It is known that labelling machines (or the related labelling units) intended to apply self-adhesive labels are supplied with said labels applied one after another on suitable backing webs which are wound in reels.

**[0003]** Although there are many labels (several thousand) on each reel, the ever increasing productivity of labelling machines has increasingly highlighted the problem linked to the switch from one reel to another, since a reel can be used up within a few dozen minutes.

**[0004]** Where stopping the machine briefly to fit a new reel in the past did not cause particular problems, nowadays that would no longer be possible without drastically reducing productivity.

**[0005]** Consequently, various solutions have gradually been studied and put forward to allow joining of the end of one reel with the start of the next reel without having to stop the machine or which minimise the down time.

**[0006]** In particular, manual solutions were studied (in which joining is performed manually by the operator), as well as semi-automatic solutions and automatic solutions.

**[0007]** In all cases, the machine usually comprises two supports, one for the reel being unwound and one for the new reel, as well as systems for retaining the starting edge of the new reel which already has an adhesive element on it, in a standby position.

**[0008]** In all of the prior art solutions, when a first reel mounted on a support finishes, the starting part of the web of a second reel mounted on the other support is joined to the end part of the first web, then the first reel is substituted with a new one. Similarly, when the second reel finishes the starting part of the web of the reel used to substitute the first is joined to the end part of the second web, and so on.

**[0009]** However, the prior art solutions are all affected by the fact that the webs to be joined are asymmetrical, since the labels are applied on only one side of the web. Consequently, depending on how the two reels of the webs to be joined are positioned and how the reels are positioned, the joining operation may require various even relatively complex operations. In general, it may be the case that the new web to be joined to the web that is about to finish is positioned at the side of the latter on which the labels are located or at the opposite side on which no labels are present.

**[0010]** Consequently, in the prior art apparatuses, if joining of the web of the above-mentioned second reel to that of the first reel can be performed using some methods, joining of the web of the new reel that substituted the first, now finished one, to the web of the second reel that is about to finish must be performed using different methods.

**[0011]** DE 198 18 384 A1 discloses an appliance method for joining strips of adhesive labels. A driven feeder holds the start of the new support strip. The start of the new support strip is held in a stationary position, accelerated to the feeder speed of the old support strip and conveyed between pressure surfaces.

**[0012]** DE 100 63 000 A1 discloses a roll changing system for web-fed printing machine, comprising rotating shafts on which old and new rolls are mounted and can slide in diagonal guides which cross each other, allowing their position to be adjusted.

**[0013]** US 2,000,809 discloses a roll handling mechanism.

**[0014]** In this context, the technical purpose which forms the basis of this invention is to provide a device for supporting reels of webs with self-adhesive labels that overcomes the above-mentioned disadvantages

**[0015]** In particular, the technical purpose of this invention is to provide a device for supporting reels of webs with self-adhesive labels that allows the webs to be joined to always be made available to the labelling machine with the same mutual positioning, in such a way that the join can always be made in the same way.

**[0016]** The technical purpose specified and the aims indicated are substantially achieved by a device for supporting reels of webs with self-adhesive labels as described in the appended claims.

**[0017]** Further features and the advantages of this invention are more apparent in the detailed description, with reference to the accompanying drawings which illustrate several preferred, non-limiting embodiments of a device for supporting reels of webs with self-adhesive labels, in which:

- Figure 1 is an axonometric view of a labelling unit of a labelling machine, equipped with a supporting device in accordance with this invention;
- Figure 2 is an enlarged view of only a joining device and the supporting device of Figure 1;
- Figure 3 is an axonometric view, also showing the reels of web, of the supporting device of Figure 2;
- Figure 4 shows the device of Figure 3 without the reels and the related supports;
- Figures 5 and 6 are respectively an axonometric and a front view of a part of a positioning unit of a reel support of the supporting device of Figure 3;
- Figures 7, 9, 11, 13, 15, 17 and 19 show perpendicularly to a guide of the device, operation of the device of Figure 3 concerning the movement of a support on it;
- Figures 8, 10, 12, 14, 16, 18 and 20 are respectively enlarged views of VIII, X, XII, XIV, XVI, XVIII, XX of Figures 7, 9, 11, 13, 15, 17 and 19;
- Figures 21 to 24 are side views as in Figure 4, of the steps relating to removal of a support from the supporting device of Figure 3;
- Figure 25 shows the supporting device according to this invention with one reel unwinding and one reel

standing by;

- Figure 26 shows, with the upper reel transparent, the device of Figure 25 at the moment when the lower reel finishes and unwinding of the upper reel is about to begin; and
- Figures 27 to 29 show the method for inversion of the position of the two supports of the device of Figure 26, with the reels shown transparent.

**[0018]** With reference to the above-mentioned figures the numeral 1 denotes in its entirety a device for supporting reels of webs with self-adhesive labels, made according to this invention. Hereinafter, it will be referred to simply as the device 1.

**[0019]** It should also be noticed that, hereinafter, when reference is made to a line of extension of three-dimensional objects, it will always refer to their main line of extension, that is to say, the one parallel to which the objects have their maximum length.

**[0020]** Figure 1 shows the device 1 connected to a labelling unit 2 of a labelling machine. Obviously, this invention relates to the device 1 in itself, to a labelling unit 2 equipped with the device 1 and to the entire labelling machine equipped with the device 1. However, since the labelling unit 2 visible in the figures is in itself of the known type, it will not be described in further detail herein.

**[0021]** Figure 2 also shows a joining unit 3 associated with the labelling unit 3 which allows the join to be made between two webs arriving from the supporting device. The joining unit 3 may be made in any way. However, being a unit that is in itself known, it will not be described in detail herein.

**[0022]** According to this invention the device 1 always comprises a supporting structure 5, at least two supports 6, each for supporting a reel of web with self-adhesive labels fixed on a first side 7 of it.

**[0023]** The supports 6 are rotatably mounted or mountable on the supporting structure 5, one at a first position (the lower position in the accompanying figures) and one at a second position (the upper position in the accompanying figures).

**[0024]** At least when the device 1 is associated with the labelling unit there are first guide means 8 and second guide means 9 present.

**[0025]** The first guide means 8 define a main feed path for a first web 10 which, in use, extends from a first reel 11 mounted on the support positioned in the first position, to an outfeed section 12 of the joining unit.

**[0026]** The second guide means 9 define a secondary feed path for a second web 13 which, in use, extends from a second reel 14 mounted on the support positioned in the second position, to an operating zone identified along the main feed path in the joining unit 3. Each support 6 is equipped with two idle return rollers 63 which, depending on the position adopted by the support, may be part of the first guide means 8 or of the second guide means 9.

**[0027]** It should be noticed that in the accompanying

figures the main feed path and the secondary feed path coincide respectively with the way in which the first web 10 and the second web 13 extend.

**[0028]** Advantageously, along the respective paths, both the first web 10 and the second web 13 are positioned in such a way that their surface, although having a complex shape, is parallel to a reference axis transversal to the main feed path, which in the accompanying figures is horizontal and coincides with the axis of rotation of the reels 11, 14, and with their own sides positioned in the same way. In this way, if seen parallel to the reference axis, the main and secondary feed paths and the first web 10 and the second web 13 substantially appear to be a curved line.

**[0029]** According to the inventive aspect of this invention, on one hand the positions of the two supports 6 on the supporting structure 5 can be inverted, and, on the other hand, a support 6 positioned in the second position can be moved to the first position, allowing, during the entire movement, unwinding of the second web 13 from the second reel 14 and, in use, its free feeding from the second reel 14 towards the operating zone. In this way, when the movement is complete, it is possible to position a new reel on the other support 6 placed in the second position and so be in the starting situation. Consequently, thanks to this invention, in theory it would be possible to keep fitting new reels, joining them to the previous reels, without interruptions.

**[0030]** For that purpose, in the case of the device 1 illustrated in the accompanying figures, the supporting structure 5 comprises a guide 46, advantageously straight, on which the supports 6 are slidably mounted. Therefore, each support 6 can pass from the second position to the first position by sliding along the guide 46.

**[0031]** For the opposite passage of the other support 6, that is to say, from the first position to the second position, the guide 46 advantageously comprises two separate portions, a first portion 47 which defines the first position for the supports 6 and a second portion 48 which defines the second position for the supports 6. At least the first portion 47 is rotatable between an aligned position (Figures 4, 21 and 28) in which it is aligned with the second portion 48 and allows the passage of a support 6 from the second portion 48 to the first portion 47, and a rotated position (Figures 22 and 27) in which it is not aligned with the first portion 47 and allows the removal of a support 6 from it, preferably by simply pulling it off. Advantageously, the first portion 47 pivots at the supporting structure 5 according to an axis of rotation coinciding with that of the first reel 11 positioned on the support 6 in the first position. The second portion 48 in turn, on the opposite side to the first portion 47, is open for allowing one of the supports 6 to be coupled to it (Figure 29).

**[0032]** In the embodiment illustrated, the movement of the first portion 47 may be performed using a manually operated lever 49 connected to an air spring 50. However, in other embodiments it may be performed automatically and/or be motor-driven.

**[0033]** In the preferred embodiment, on one hand the guide 46 is constituted of a rail on which the supports 6 are slidably coupled by means of four V-shaped pulleys 51 which are positioned on both sides of the rail, and on the other hand it comprises at least one vertical component of extension (in the accompanying drawings it is in fact set at an angle of approximately 60° to the horizontal plane).

**[0034]** To facilitate the movement of the supports 6 and holding in the second position, the device 1 advantageously comprises at least one positioning unit 52, movable parallel to the guide 46 between an upper position in which it retains a support 6 positioned in the second position, a lower operating position in which it can support a support 6 positioned substantially in the first position, and a lower non-operating position in which it is positioned lower than the lower operating position and is uncoupled from the support 6 in the first position.

**[0035]** In the preferred embodiment, the positioning unit 52 comprises a body 53 (Figures 5 and 6) comprising a resting portion 54 and a following portion 55. The resting portion 54 (constituted of a cantilever-style pin in the accompanying figures) is designed to interact with a support 6 so as to sustain it.

**[0036]** In contrast, the following portion 55 is slidably associated with a cam portion 56 of the supporting structure 5. Advantageously, the following portion 55 comprises two following rollers 57 which are at a distance from one another and from an axis of rotation of the body 53.

**[0037]** In fact, the body 53 is rotatable about an axis of rotation which translates with the body 53 and which is transversal to a main line of extension of the guide 46. In particular, the body 53 is rotatable between a sustaining position in which the resting portion 54 can interact with a support 6 mounted on the guide 46 so as to sustain it (Figure 8), and a home position in which the resting portion 54 cannot engage with a support 6 associated with the guide 46 (Figure 16). There are also elastic means 58 (a torsion spring in the accompanying figures) associated with the body 53 for pushing it towards the home position. In contrast, the cam portion 56 in turn causes forced positioning of the body 53 in the sustaining position at least at the positioning unit 52 upper position, whilst it allows it to rotate towards the home position at least near to and at the lower operating position and between the lower operating position and the lower non-operating position. In fact, in this way it is possible to perform the translation of the positioning unit 52 from the non-operating home position to the sustaining position even when a support 6 is present in the respective first position.

**[0038]** In the accompanying figures the movement of the body 53 along the cam portion 56 is achieved by means of a cylinder without a rod 59, equipped with a slide 60 to which the body 53 is rotatably connected.

**[0039]** The sequence of steps for the passage of a support 6 from the second position to the first position (once the latter is free) and for preparing the device 1 to receive

another support 6 in the second position is illustrated in Figures 7 to 20.

**[0040]** Initially (Figures 7, 8), the body 53 is in the upper position and, thanks to the interaction of the cam portion 56 with the following portion 55, in the sustaining position, with the resting portion 54 interacting with a corresponding resting element 61 fixed to the support 6, sustaining it. During the entire descent of the body 53 to the lower operating position, the weight of the support 6 overcomes the resistance of the elastic means 58 and holds the body 53 rotated with the following portion 55 only partly coupled to the cam portion 56. Relative to a lower following roller 57 of the following portion 55, the resting portion 54 is in fact positioned on the other side of a vertical plane passing through the pivoting point of the body 53. When the body 53 reaches the lower operating position, the support 6 reaches the end of its stroke corresponding to the first position, and it engages in a suitable fork 62 fixed to the guide 46 (Figure 11), and advantageously fixed to the first portion 47 for rotating with it (Figure 22).

**[0041]** At that point, the further descent of the body 53 frees the resting portion 54 and the elastic means 58 can return the body 53 to the home position. At this point, the resting portion 54 is not aligned with the resting element 61 fixed to the support 6 which is in the first position (Figures 13, 14).

**[0042]** Therefore it is possible to return the positioning unit 52 towards the upper position without there being any interaction between the resting portion 54 and the resting element 61 of the support 6 in the first position (Figures 15, 16).

**[0043]** When the body 53 reaches the upper part of the cam portion 56 (Figures 17, 18) the interaction between the latter and an upper following roller 57 of the following portion 55 causes a new rotation of the body 53 towards the sustaining position, so that when the body 53 reaches the upper position it is ready to receive and support a new support 6 (Figures 19, 20).

**[0044]** Regarding overall operation of the device 1 according to this invention, that is to say, the feeding of the webs 10, 13 to the joining unit 3, the figure shows the situation running regularly, with the first web 10 being unwound, and the second web 13 ready for the join to be made in the joining unit (therefore, stationary for the time being).

**[0045]** When the first web 10 finishes (Figure 26), the joining unit is activated and makes the join between a final end of the first web 10 and a starting end of the second web 13. Then unwinding of the second web 13 begins and it is fed to the labelling machine (Figure 27).

**[0046]** At this point, it is possible to start the operations for inverting the positions of the two supports while unwinding of the second web 13 continues.

**[0047]** For that purpose, first the first portion 47 of the guide 46 is rotated into the not aligned position (Figure 22) and the empty support 6 in the first position is removed (Figures 23 and 27). When the first portion 47 has been returned to the aligned position (Figure 24) it is pos-

sible to slide the other support 6 from the second position to the first position (Figure 28).

[0048] At that point, the other support 6 previously removed, loaded with a new reel, can be fitted on the second portion 48 of the guide 46 (Figure 29) until it rests on the body 53 in the sustaining position, restoring the condition of Figure 25.

[0049] This invention brings important advantages.

[0050] In fact, thanks to the device according to this invention it has been possible to provide a device for supporting reels of webs with self-adhesive labels, that always allows two webs to be joined to each other to be made available to the labelling machine with the same mutual positioning, in such a way that the join can always be made in the same way, thereby also making the structure of the joining unit that will be used simpler.

[0051] Finally, it should be noticed that even the cost linked to implementing this invention is not very high compared with similar prior art devices.

[0052] The invention described above may be modified and adapted in several ways without thereby departing from the scope of the inventive concept.

[0053] All details of the invention may be substituted with other technically equivalent elements and the materials used, as well as the shapes and dimensions of the various components, may vary according to requirements.

## Claims

1. A device for supporting reels of webs with self-adhesive labels for labelling machines comprising:

a supporting structure (5);  
at least two supports (6) each for supporting a reel of web with self-adhesive labels fixed on one side of it, the supports (6) being rotatably mounted or mountable on the supporting structure (5), one at a first position and one at a second position;

wherein the positions of the two supports (6) can be inverted, and a support (6) positioned in the second position can be moved to the first position, allowing, during the entire movement, unwinding of a web from a reel (14) mounted on it;

### characterised in that

the supporting structure (5) also comprises a guide (46) on which the supports (6) are slidably mounted, each support (6) being able to pass from the second position to the first position by sliding along the guide (46); and said guide (46) comprises two separate portions, a first portion (47) defining the first position for the supports (6) and a second portion (48) defining the second position for the supports (6), **in that** at least the first portion (47) is rotatable between an aligned position in which it is aligned with the second

portion (48) and allows the passage of a support (6) from the second portion (48) to the first portion (47), and a rotated position in which it is not aligned with the first portion (47) and allows the removal of a support (6) from it, and **in that** the second portion (48) in turn, on the opposite side to the first portion (47), is open to allow one of the supports (6) to be coupled to it.

2. The device according to claim 1, **characterised in that** the guide (46) comprises at least one vertical component of extension and **in that** it also comprises at least one positioning unit (52), movable parallel to the guide (46) between an upper position in which it retains a support (6) positioned in the second position, a lower operating position in which it supports a support (6) positioned substantially in the first position, and a lower non-operating position in which it is positioned lower than the lower operating position and is uncoupled from the support (6) in the first position.
3. The device according to claim 2, **characterised in that** the positioning unit (52) also comprises a body (53) comprising a resting portion (54) for a support (6) and a following portion (55) slidably associated with a cam portion (56) of the supporting structure (5), said body (53) being rotatable, about an axis of rotation transversal to a main line of extension of the guide (46), between a sustaining position in which the resting portion (54) can interact with a support (6) mounted on the guide (46) so as to sustain it, and a home position in which the resting portion (54) cannot engage with a support (6) associated with the guide (46), elastic means (58) being associated with the body (53) for pushing it towards the home position; the cam portion (56) causing the positioning of the body (53) in the sustaining position at least at the upper position of the positioning unit (52), and allowing it to rotate towards the home position at least near to and at the lower operating position and between the lower operating position and the lower non-operating position, for allowing translation of the positioning unit (52) from the non-operating home position to the sustaining position even when a support (6) is present in the respective first position.
4. A labelling machine comprising a device (1) according to any one of the preceding claims.

## Patentansprüche

1. Eine Haltevorrichtung für Rollen mit Trägerband mit selbstklebenden Etiketten für Etikettiermaschinen, die Folgendes umfasst:

eine Trägerstruktur (5);

mindestens je zwei Halterungen (6), die beide zum Halten einer Rolle mit Trägerband mit selbstklebenden Etiketten, die an einer Seite eines Trägerbands angebracht sind, vorgesehen sind, dabei sind die Halterungen (6) drehbar an der Trägerstruktur (5) montiert beziehungsweise montierbar, eine in einer ersten Position und eine in einer zweiten Position;

dabei können die Positionen der zwei Halterungen (6) vertauscht werden und eine Halterung (6), die in der zweiten Position positioniert ist, kann in die erste Position bewegt werden, was während der gesamten Bewegung das Abwickeln eines Trägerbands von einer Rolle (14), die daran montiert ist, ermöglicht;

**gekennzeichnet dadurch, dass**

die Trägerstruktur (5) auch eine Führung (46) umfasst, an der die Halterungen (6) verschiebbar montiert sind, dabei kann jede Halterung (6) von der zweiten Position in die erste Position wechseln, indem sie sich auf der Führung (46) verschiebt; und besagte Führung (46) umfasst zwei getrennte Abschnitte, wobei ein erster Abschnitt (47) die erste Position für die Halterungen (6) bestimmt und ein zweiter Abschnitt (48) die zweite Position für die Halterungen (6) bestimmt, dadurch, dass zumindest der erste Abschnitt (47) zwischen einer bündigen Position, in der er mit dem zweiten Abschnitt (48) gefluchtet ist und die Verschiebung einer Halterung (6) vom zweiten Abschnitt (48) in den ersten Abschnitt (47) erlaubt, und einer gedrehten Position, in der er nicht mit dem ersten Abschnitt (47) gefluchtet ist und in der es möglich ist, eine Halterung (6) von ihm abzunehmen, gedreht werden kann, und dadurch, dass der zweite Abschnitt (48) seinerseits auf der gegenüberliegenden Seite vom ersten Abschnitt (47) offen ist, um zu erlauben, eine der Halterungen (6) damit zu verbinden.

2. Die Vorrichtung nach dem Patentanspruch 1, **gekennzeichnet dadurch, dass** die Führung (46) mindestens eine vertikale Verlängerungskomponente aufweist und dadurch, dass sie auch mindestens eine Positionierungseinheit (52) umfasst, die parallel zur Führung (46) zwischen einer oberen Position, in der sie eine Halterung (6), die sich in der zweiten Position befindet, festhält, einer niedrigeren Betriebsposition, in der sie eine Halterung (6), die sich im Wesentlichen in der ersten Position befindet, trägt, und einer niedrigeren, nicht aktiven Position, in der sie niedriger positioniert ist als in der niedrigeren Betriebsposition in der sie und nicht mit der Halterung (6) in der ersten Position verbunden ist, bewegt werden kann.
3. Die Vorrichtung nach dem Patentanspruch 2, **gekennzeichnet dadurch, dass** die Positionierungsvor-

richtung (52) außerdem einen Körper (53) aufweist, der einen Ruheabschnitt (54) für eine Halterung (6) und einen Nachlaufabschnitt (55) umfasst, der verschiebbar mit einem Nockenabschnitt (56) der Trägerstruktur (5) verbunden ist, wobei besagter Körper (53) auf einer Rotationsachse, die quer zu einer Hauptlinie der Verlängerung der Führung (46) liegt, drehbar ist, und zwar zwischen einer Trageposition, in der der Ruheabschnitt (54) mit einer Halterung (6) interagieren kann, die an der Führung (46) montiert ist, um sie zu tragen, und einer Ausgangsposition, in der der Ruheabschnitt (54) nicht mit einer Halterung (6), die mit der Führung (46) verbunden ist, interagieren kann, dabei sind elastische Mittel (58) mit dem Körper (58) verbunden, um ihn zur Ausgangsposition zu schieben; der Nockenabschnitt (56) bewirkt dabei die Positionierung des Körpers (52) in die Trageposition, zumindest in der oberen Position der Positioniereinheit (52), und ermöglicht es ihm, sich in Richtung der Ausgangsposition, zumindest in die Nähe, zu drehen, sowie in die untere Betriebsposition und zwischen der unteren Betriebsposition und der unteren nicht aktiven Position, um die Verschiebung der Positioniereinheit (52) von der nicht aktiven Ausgangsposition in die Trageposition zu erlauben, sogar, wenn sich eine Halterung (6) in der entsprechenden ersten Position befindet.

4. Eine Etikettiermaschine, die eine Vorrichtung (1) nach jedem der vorherigen Patentansprüche umfasst.

**Revendications**

1. Un dispositif pour supporter des bobines de bandes portant des étiquettes autocollantes pour étiqueteuses, comprenant :

une structure de support (5) ;  
au moins deux supports (6) pour supporter chacun une bobine de bande portant des étiquettes autocollantes fixées sur un de ses côtés, les supports (6) étant montés ou pouvant être montés de façon rotative sur la structure de support (5), l'un au niveau d'une première position et l'un au niveau d'une deuxième position ;

dans lequel les positions des deux supports (6) peuvent être inversées, et un support (6) positionné dans la deuxième position peut être déplacé dans la première position, ce qui permet, pendant tout le déplacement, le déroulement d'une bande d'une bobine (14) montée sur lui ;

**caractérisé en ce que**

la structure de support (5) comprend aussi un guide (46) sur lequel les supports (6) sont montés de façon coulissante, chaque support (6) pouvant passer de

la deuxième position à la première position en coulis-  
sant le long du guide (46) ; et ledit guide (46) com-  
prend deux portions distinctes, une première portion  
(47) définissant la première position pour les sup-  
ports (6) et une deuxième portion (48) définissant la  
deuxième position pour les supports (6), **en ce que**  
au moins la première portion (47) peut tourner entre  
une position alignée dans laquelle elle est alignée  
avec la deuxième portion (48) et permet le passage  
d'un support (6) de la deuxième portion (48) à la  
première portion (47), et une position tournée dans  
laquelle elle n'est pas alignée avec la première por-  
tion (47) et permet le retrait d'un support (6) de celle-  
ci, et **en ce que** la deuxième portion (48), à son tour,  
du côté opposé à la première portion (47), est ouver-  
te pour permettre à un des supports (6) de s'accou-  
pler avec elle.

2. Le dispositif selon la revendication 1, **caractérisé**  
**en ce que** le guide (46) comprend au moins une  
composante d'extension verticale et **en ce qu'il** com-  
prend aussi au moins une unité de positionnement  
(52), mobile parallèlement au guide (46) entre une  
position haute dans laquelle elle retient un support  
(6) positionné dans la deuxième position, une posi-  
tion basse opérationnelle dans laquelle elle supporte  
un support (6) positionné essentiellement dans la  
première position, et une position basse non opéra-  
tionnelle dans laquelle elle est positionnée plus bas  
que la position basse opérationnelle et est désac-  
couplée du support (6) dans la première position.
3. Le dispositif selon la revendication 2, **caractérisé**  
**en ce que** l'unité de positionnement (52) comprend  
aussi un corps (53) comprenant une portion d'appui  
(54) pour un support (6) et une portion de suivi (55)  
associée de façon coulissante à une portion à came  
(56) de la structure de support (5), ledit corps (53)  
pouvant tourner, autour d'un axe de rotation trans-  
versal à une ligne d'extension principale du guide  
(46), entre une position de soutien dans laquelle la  
portion d'appui (54) peut interagir avec un support  
(6) monté sur le guide (46) de manière à le soutenir,  
et une position de repos dans laquelle la portion d'ap-  
pui (54) ne peut pas être assujettie avec un support  
(6) associé au guide (46), des moyens élastiques  
(58) étant associés au corps (53) pour le pousser  
vers la position de repos ; la portion à came (56)  
déterminant le positionnement du corps (53) dans la  
position de soutien au moins au niveau de la position  
haute de l'unité de positionnement (52), et lui per-  
mettant de tourner vers la position de repos au moins  
à proximité de et au niveau de la position basse opé-  
rationnelle et entre la position basse opérationnelle  
et la position basse non opérationnelle, pour permet-  
tre la translation de l'unité de positionnement (52)  
de la position de repos non opérationnelle à la posi-  
tion de soutien même quand un support (6) est pré-

sent dans la première position respective.

4. Une étiqueteuse comprenant un dispositif (1) selon  
l'une quelconque des revendications précédentes.

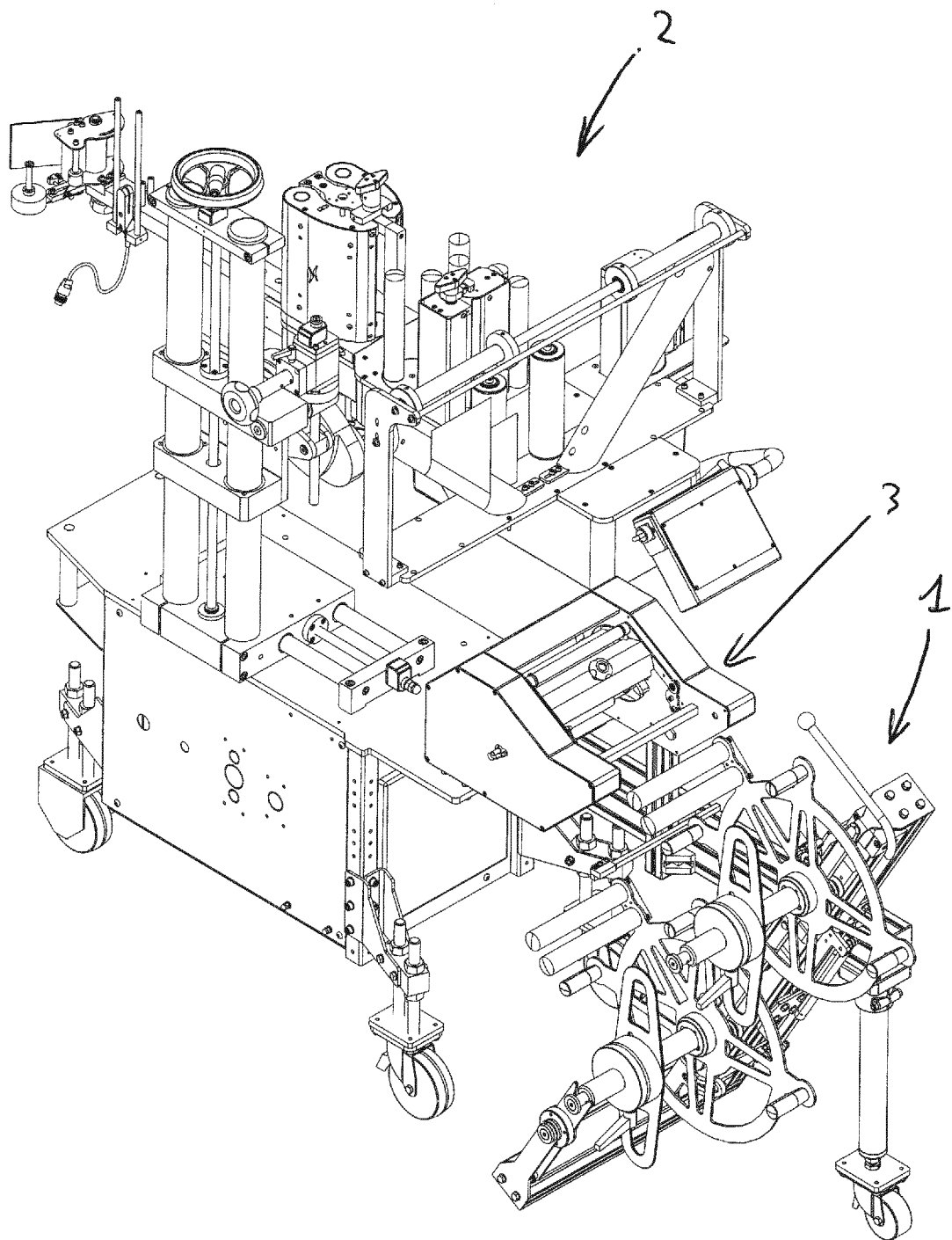


FIG. 1

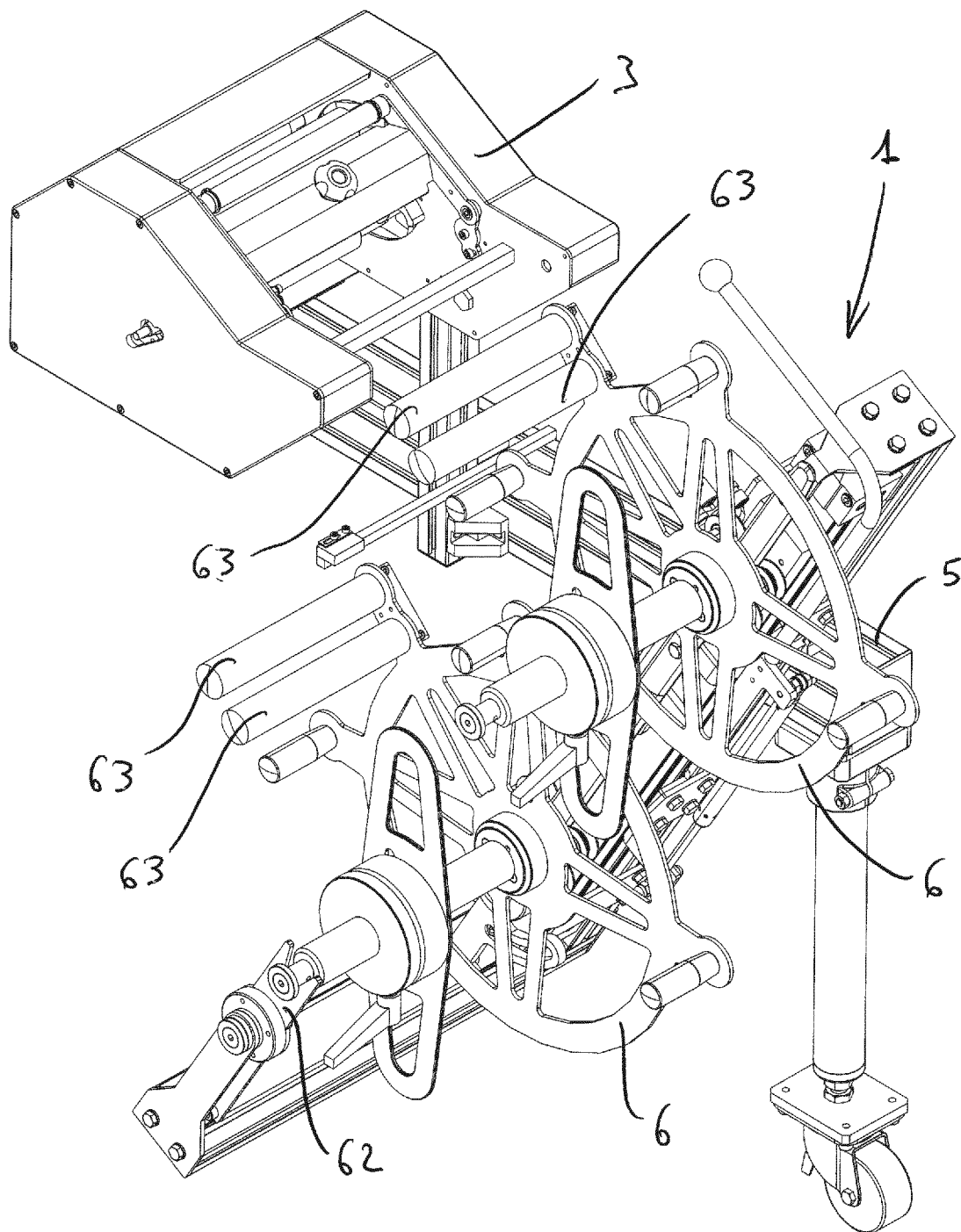


FIG. 2

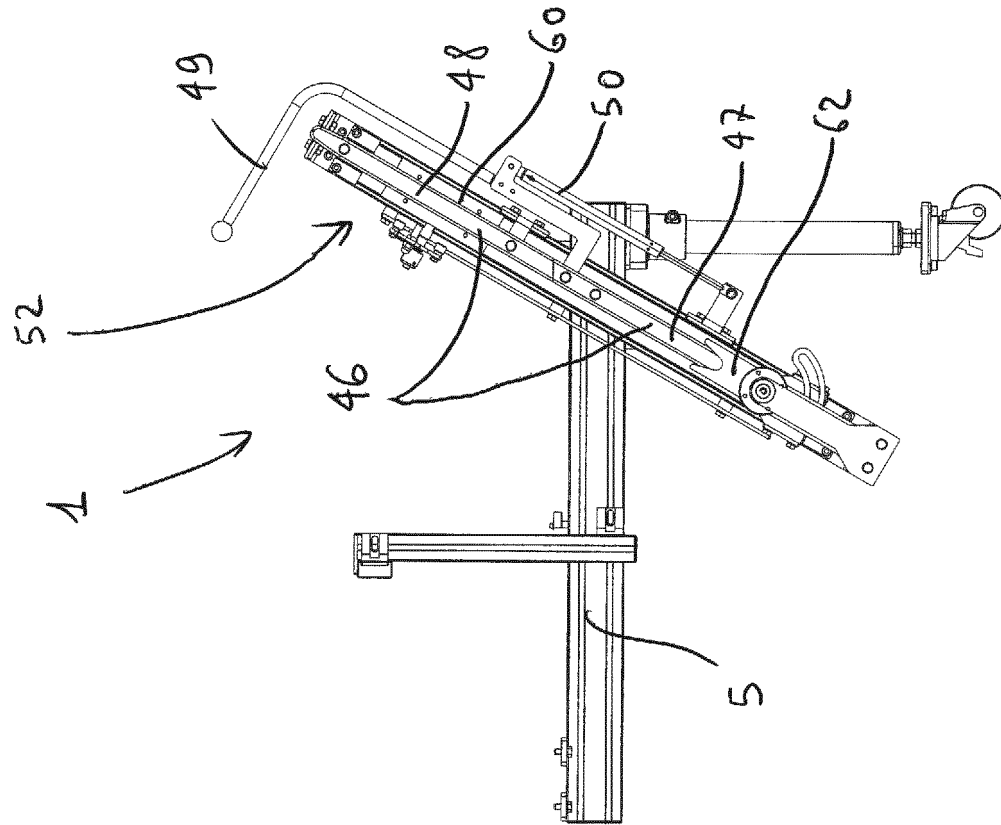


FIG. 4

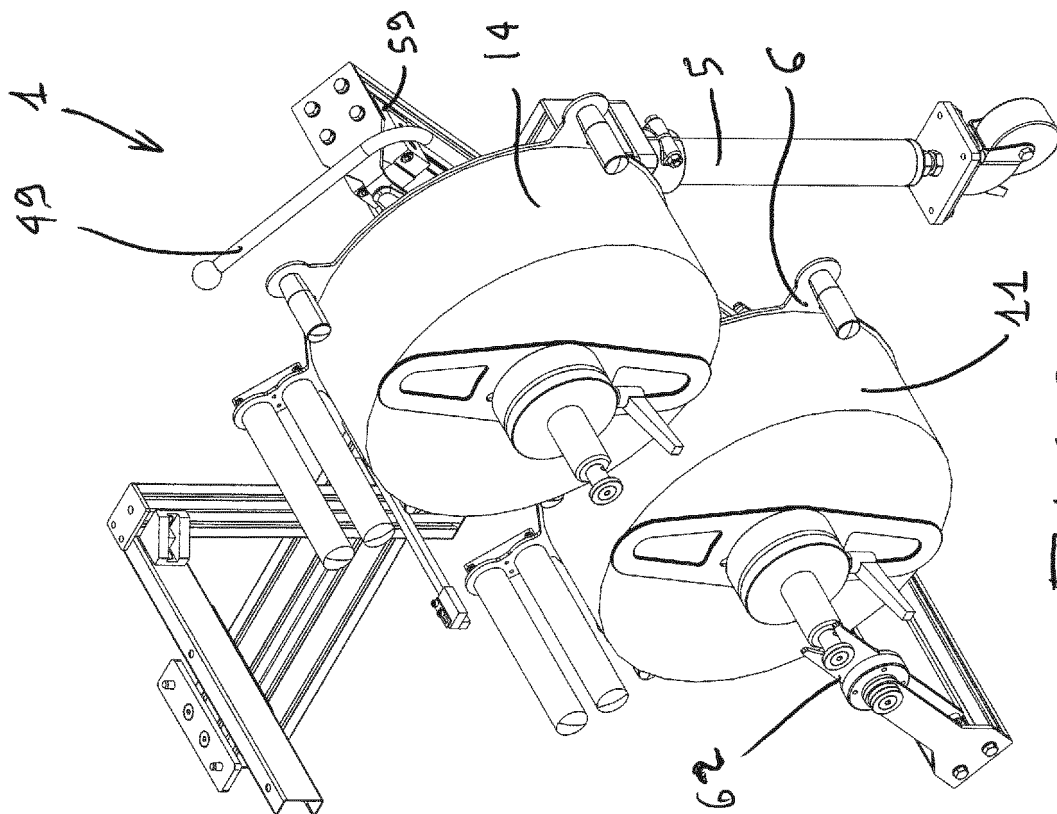
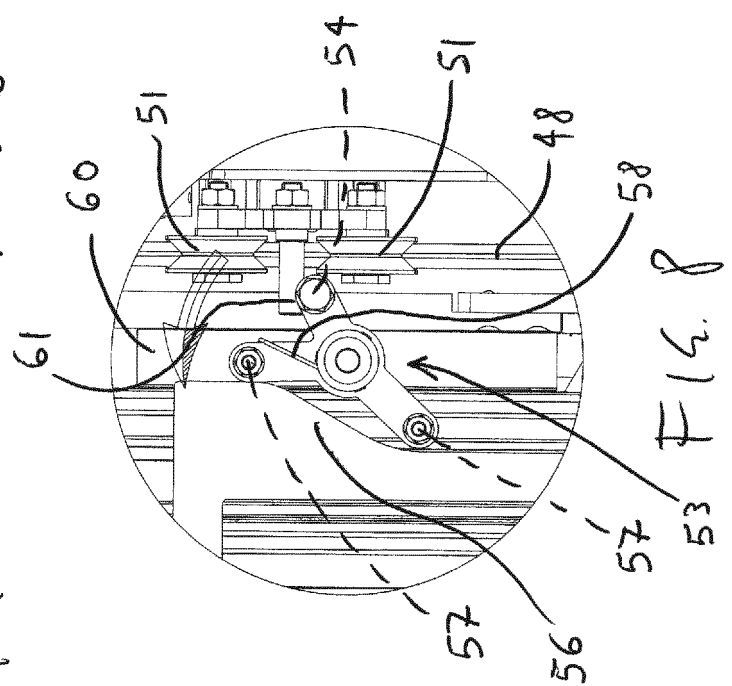
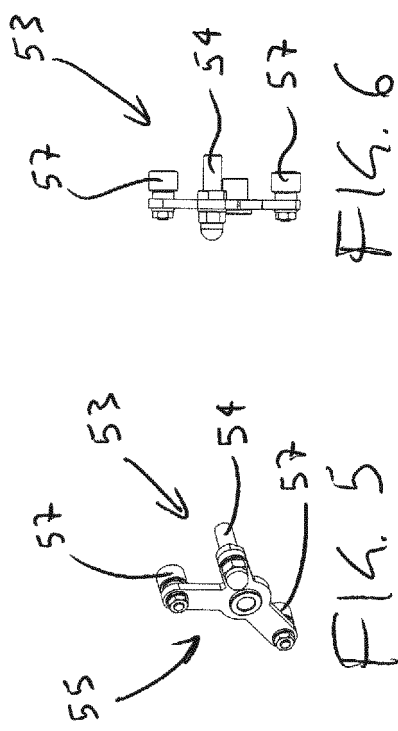
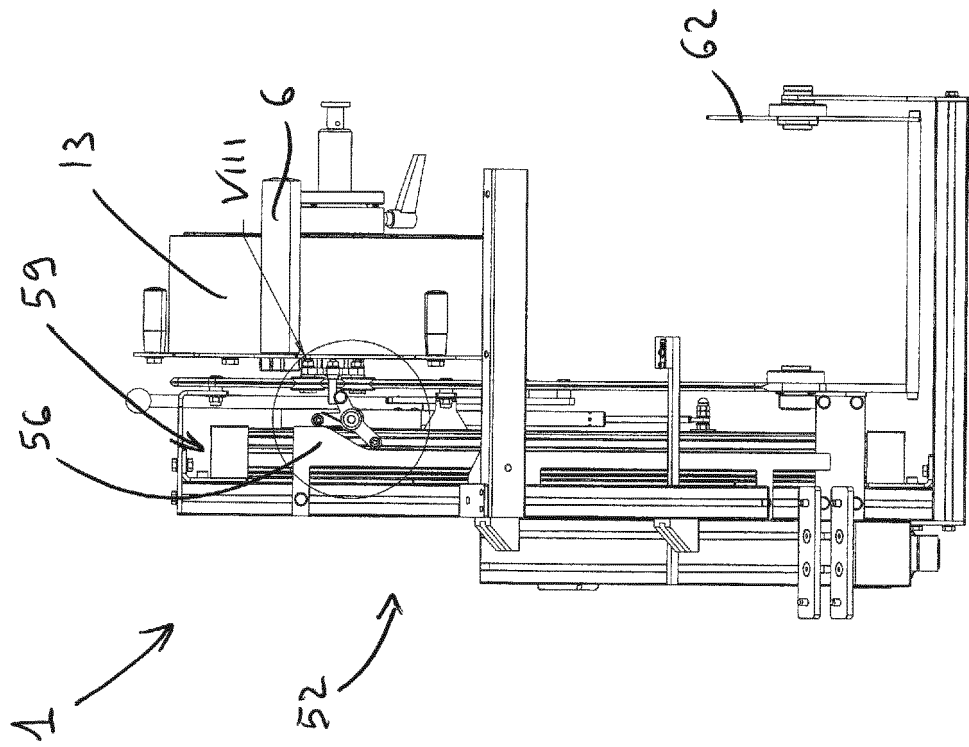


FIG. 3



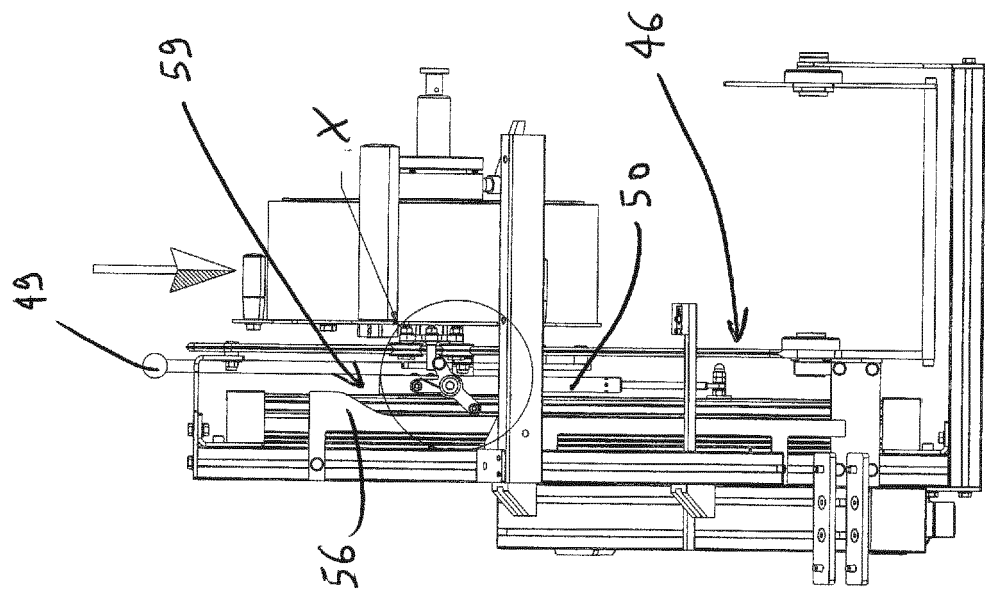


Fig. 9

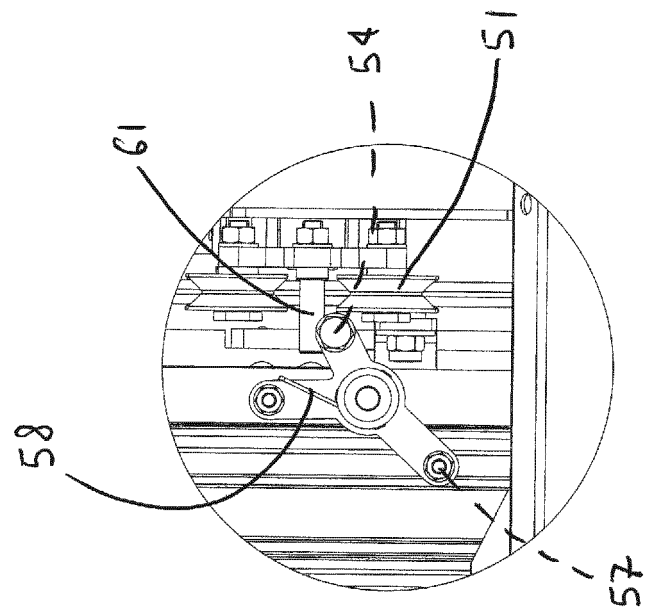


Fig. 10

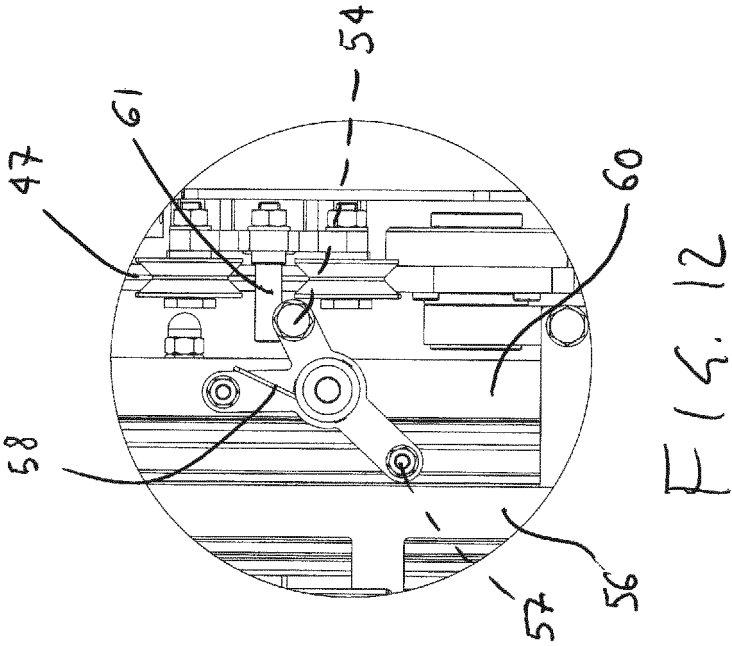
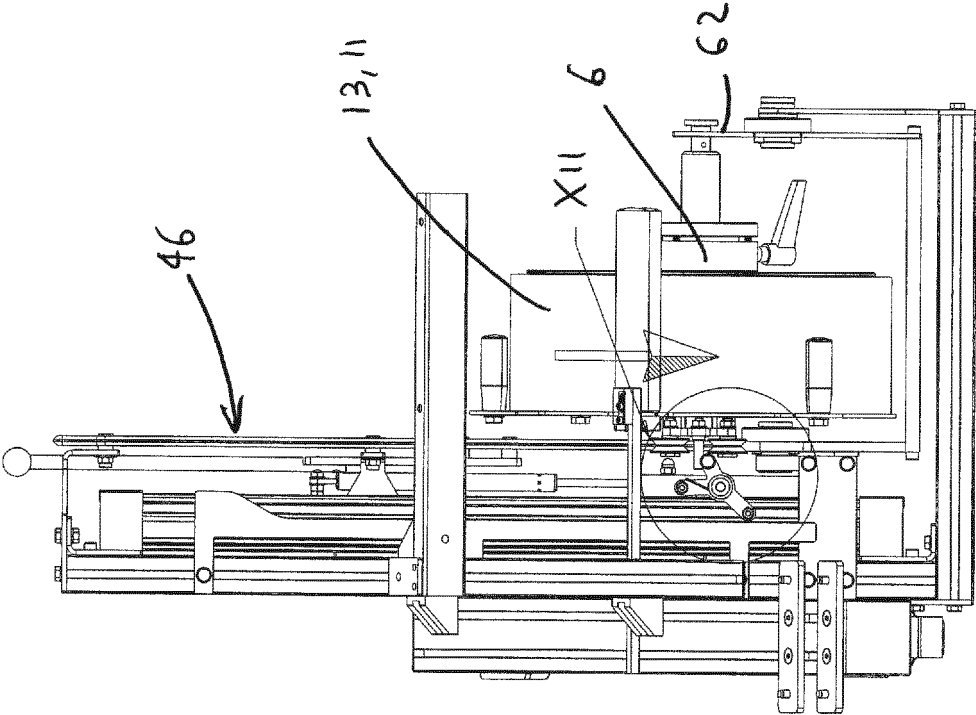


Fig. 11

Fig. 12

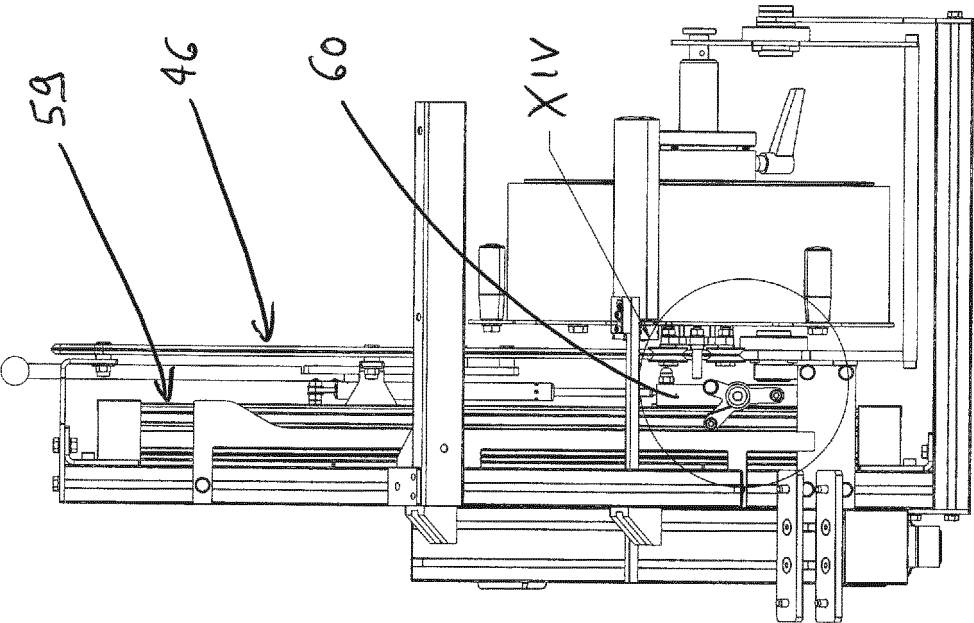


FIG. 13

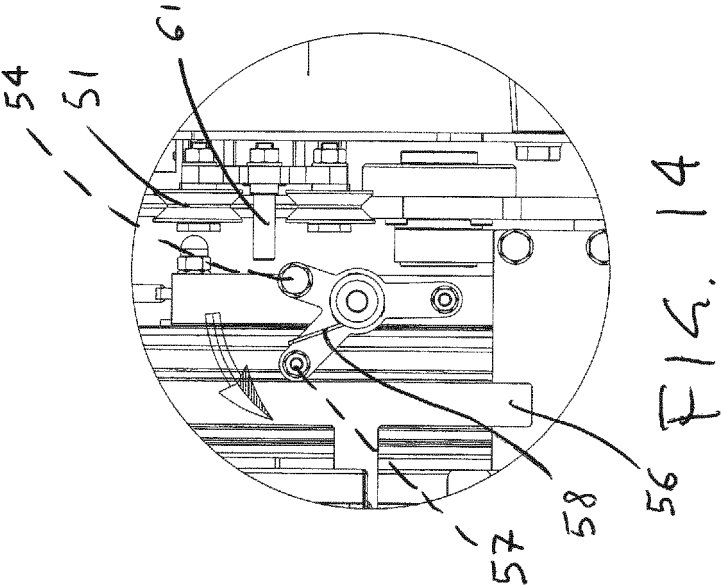


FIG. 14

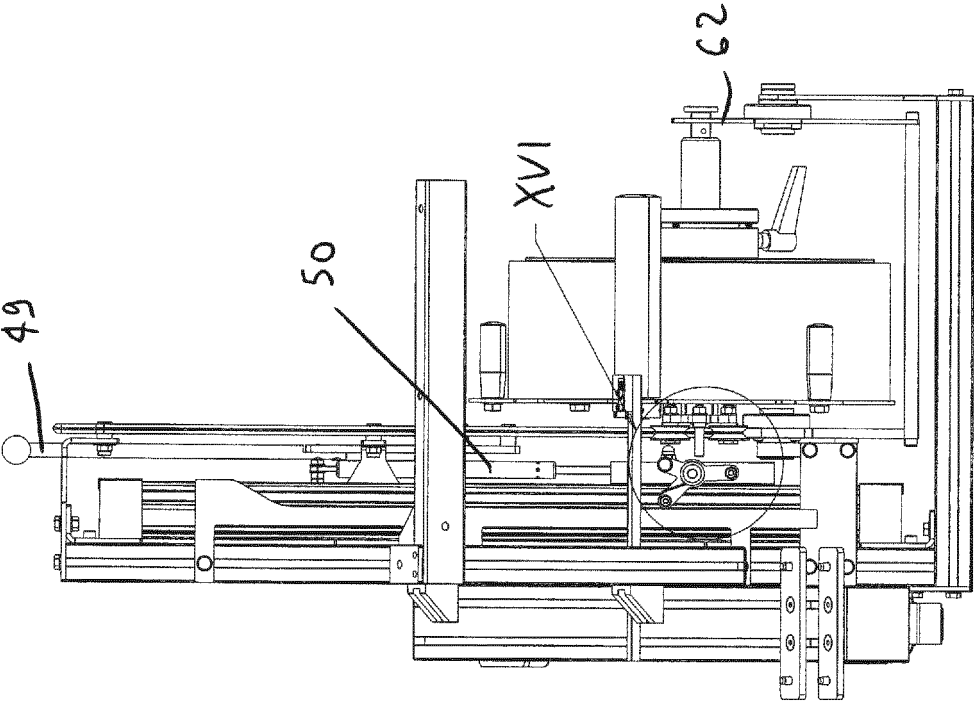


Fig. 15

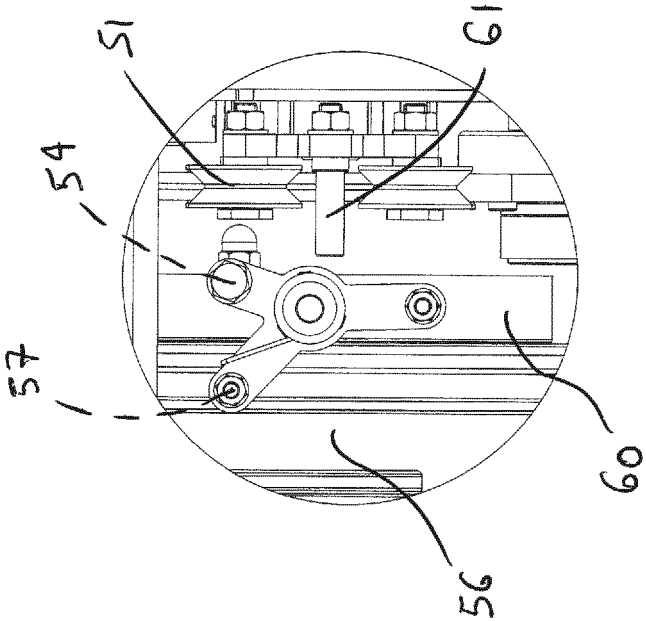


Fig. 16

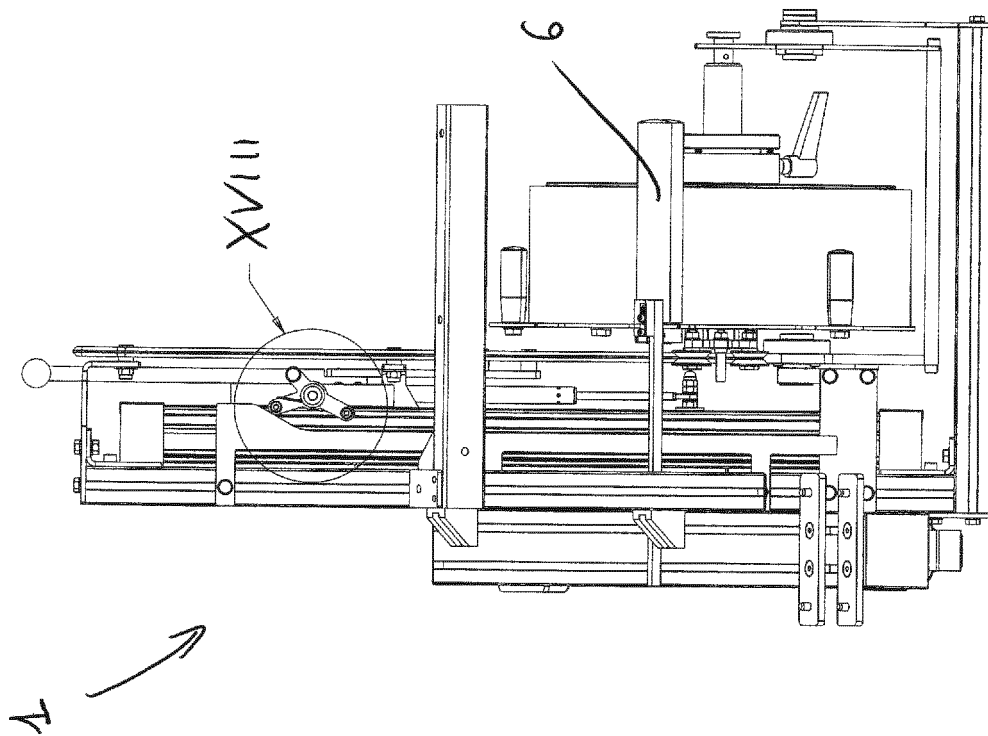


Fig. 17

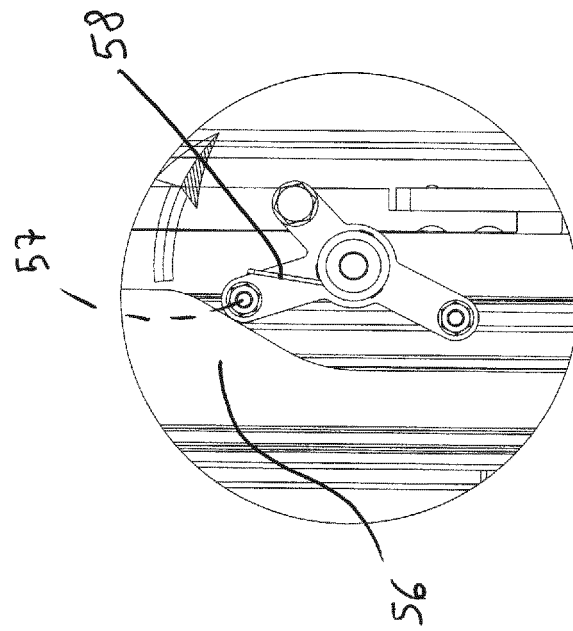


Fig. 18

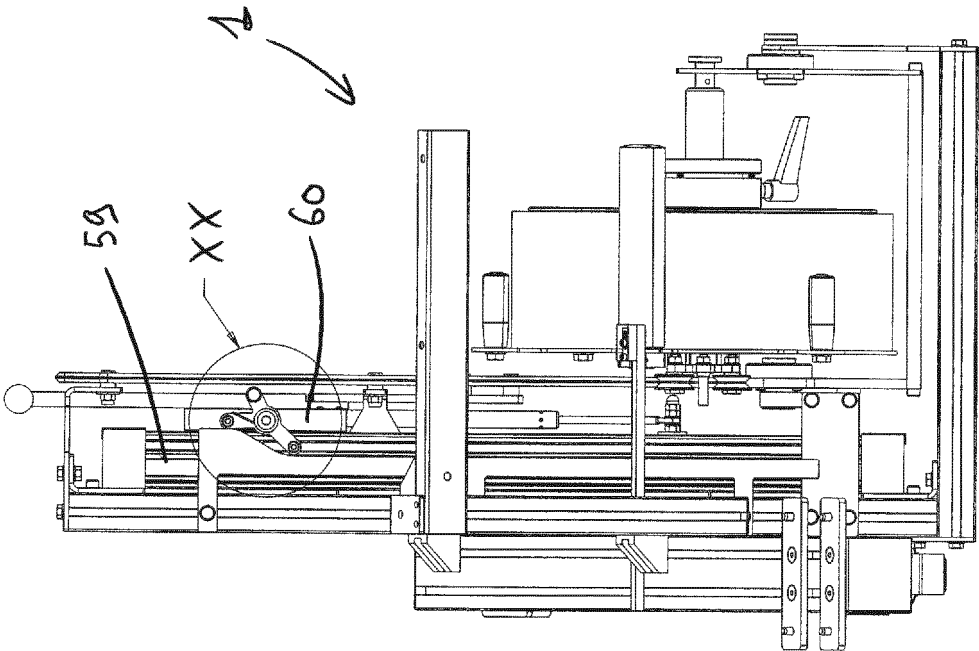


Fig. 19

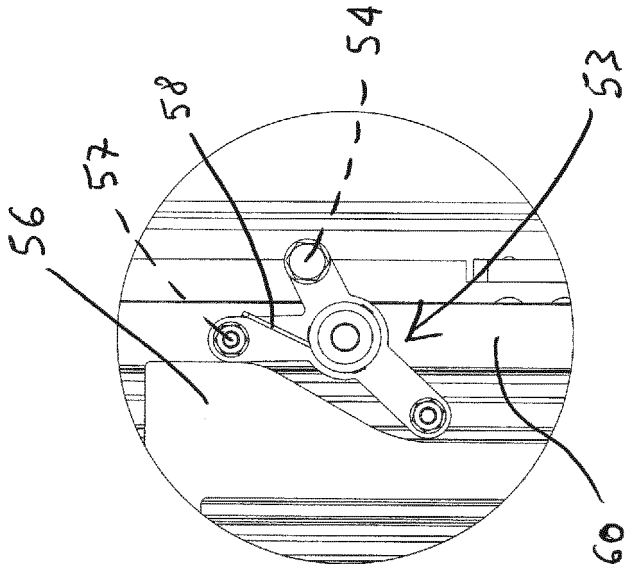


Fig. 20

1 →

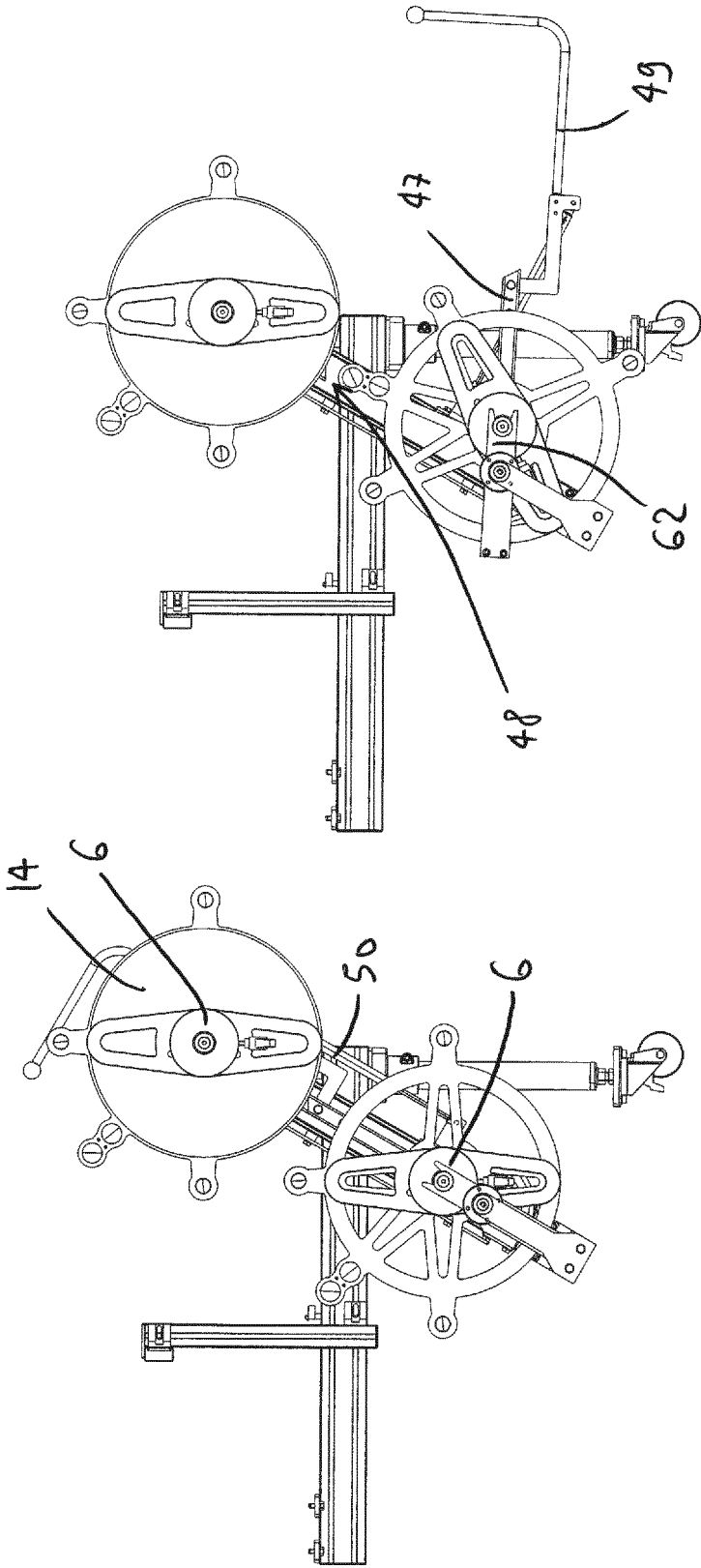


FIG. 21

FIG. 22

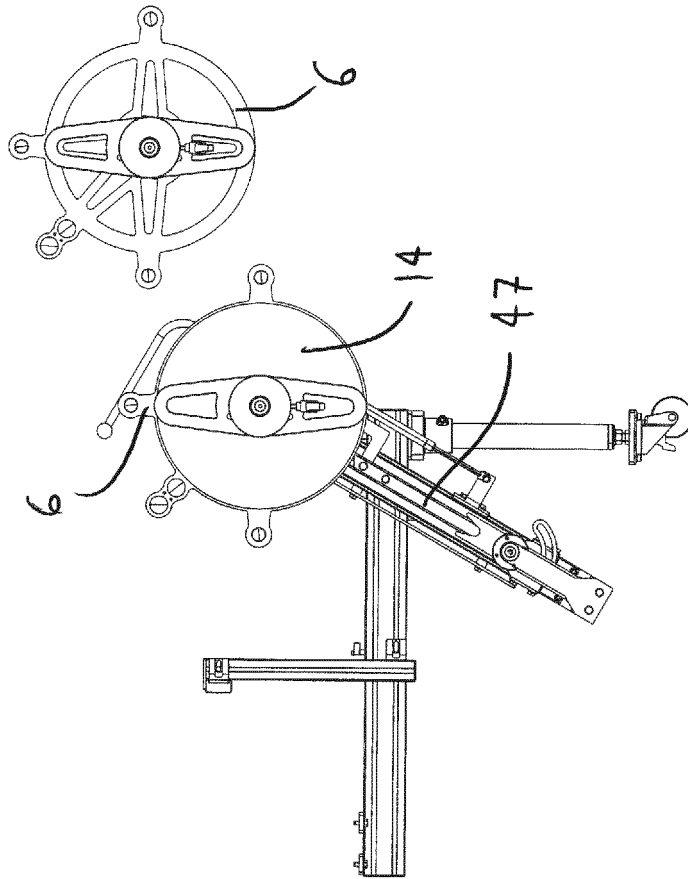


Fig. 24

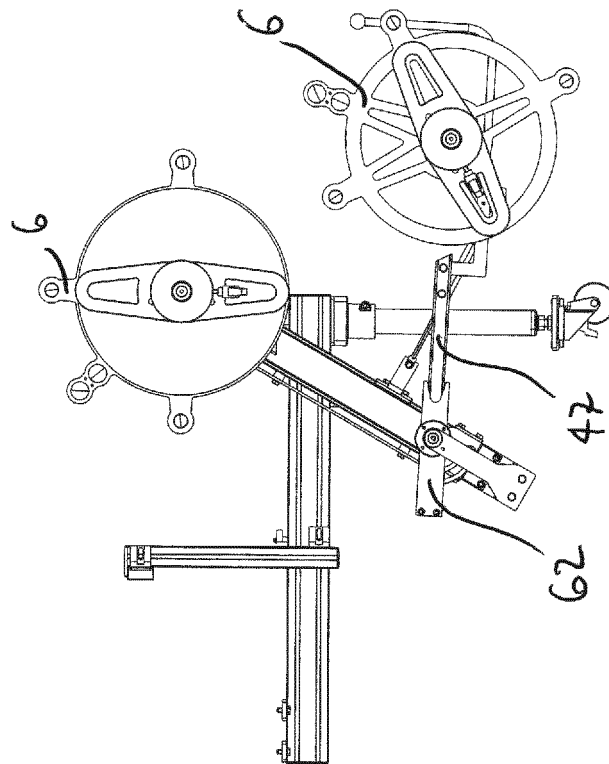


Fig. 23

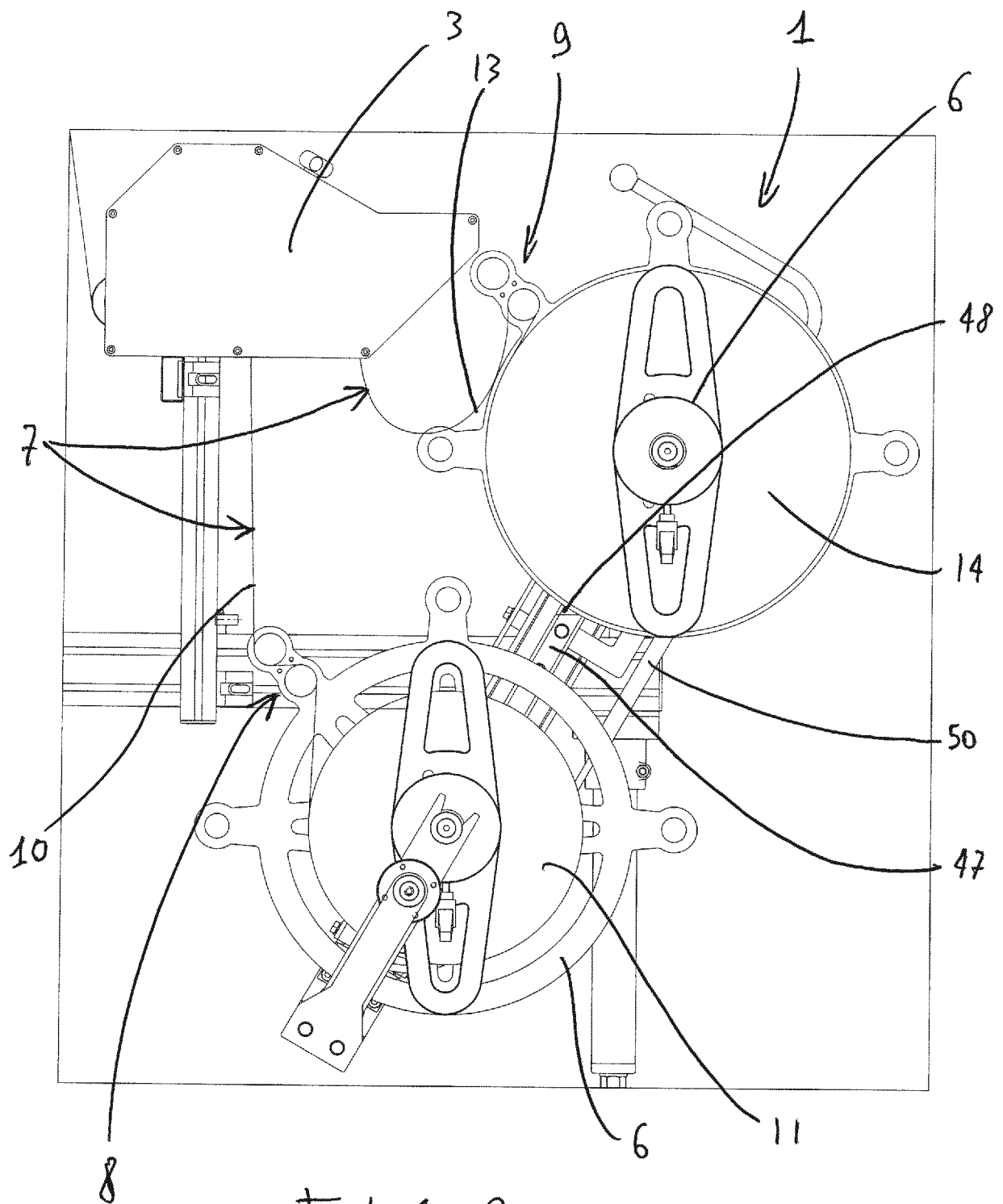
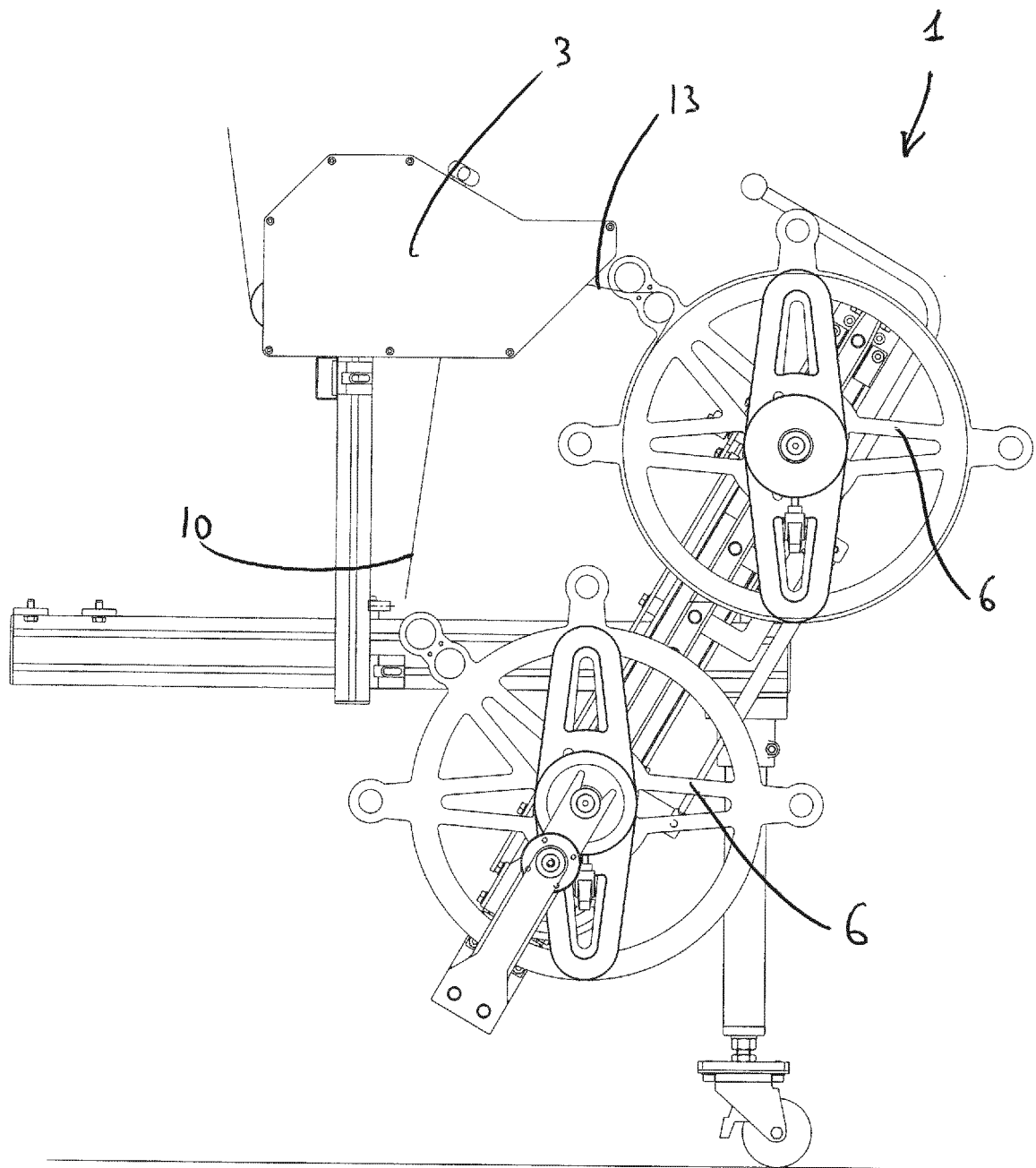


FIG. 25



F14.26

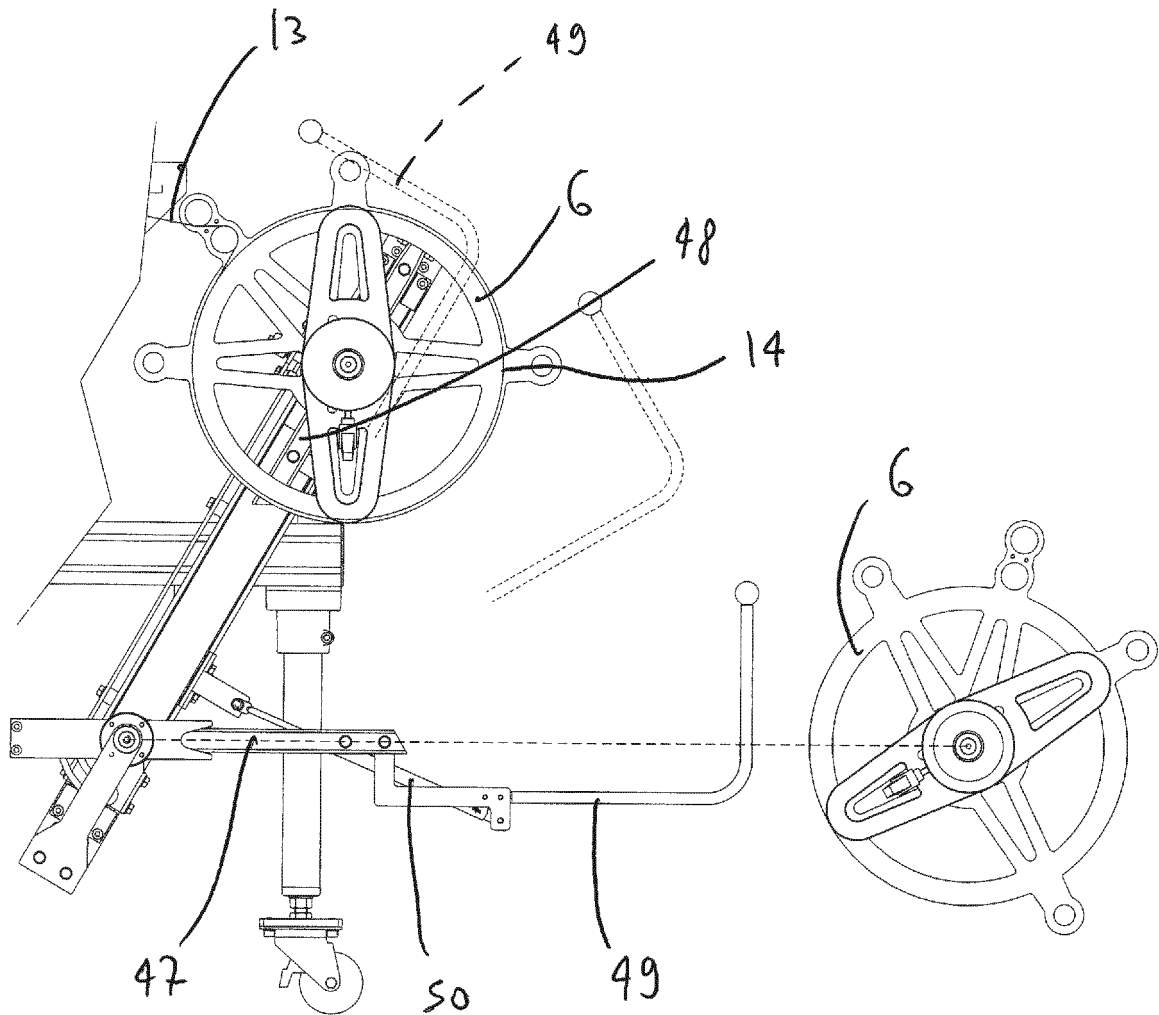
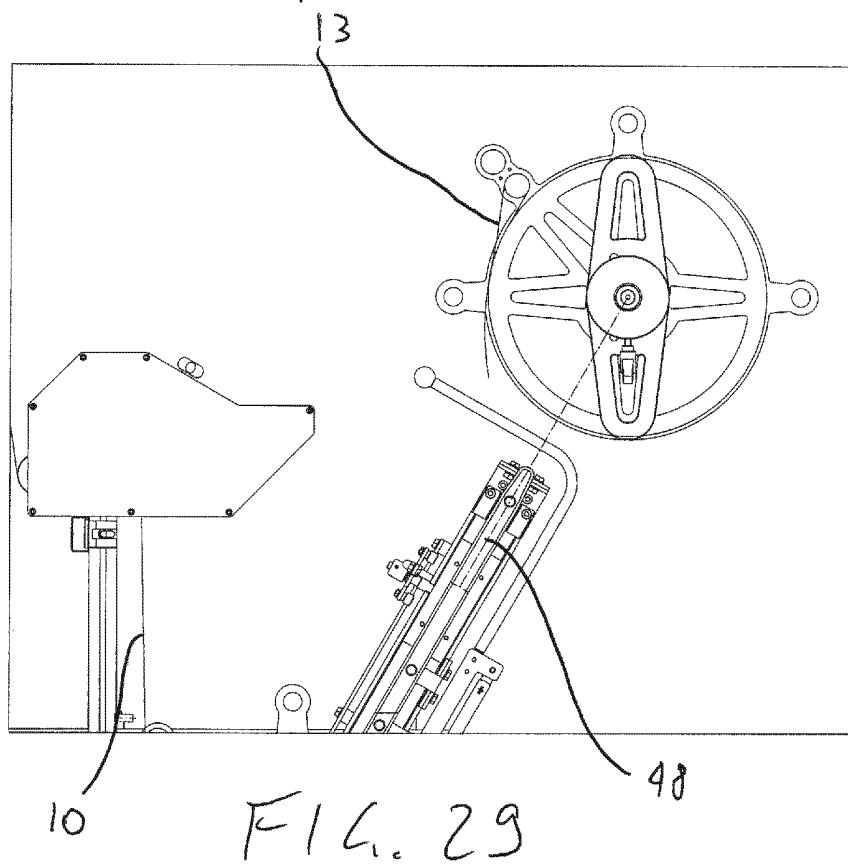
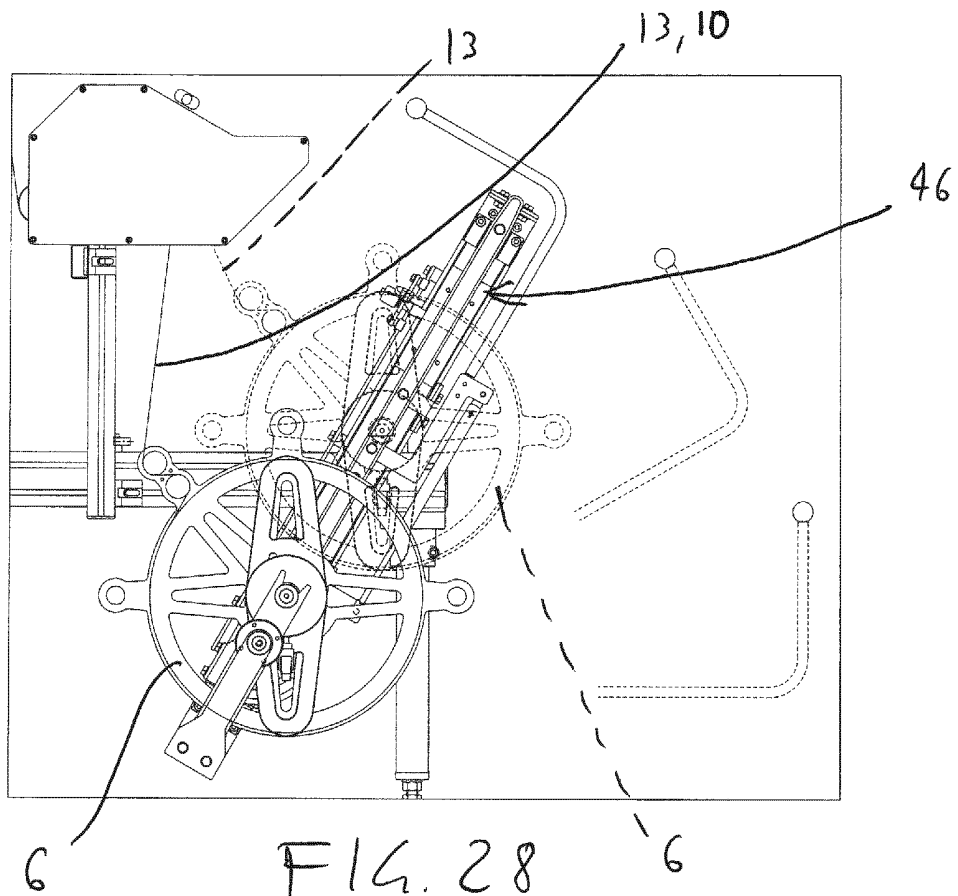


FIG. 27



**REFERENCES CITED IN THE DESCRIPTION**

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