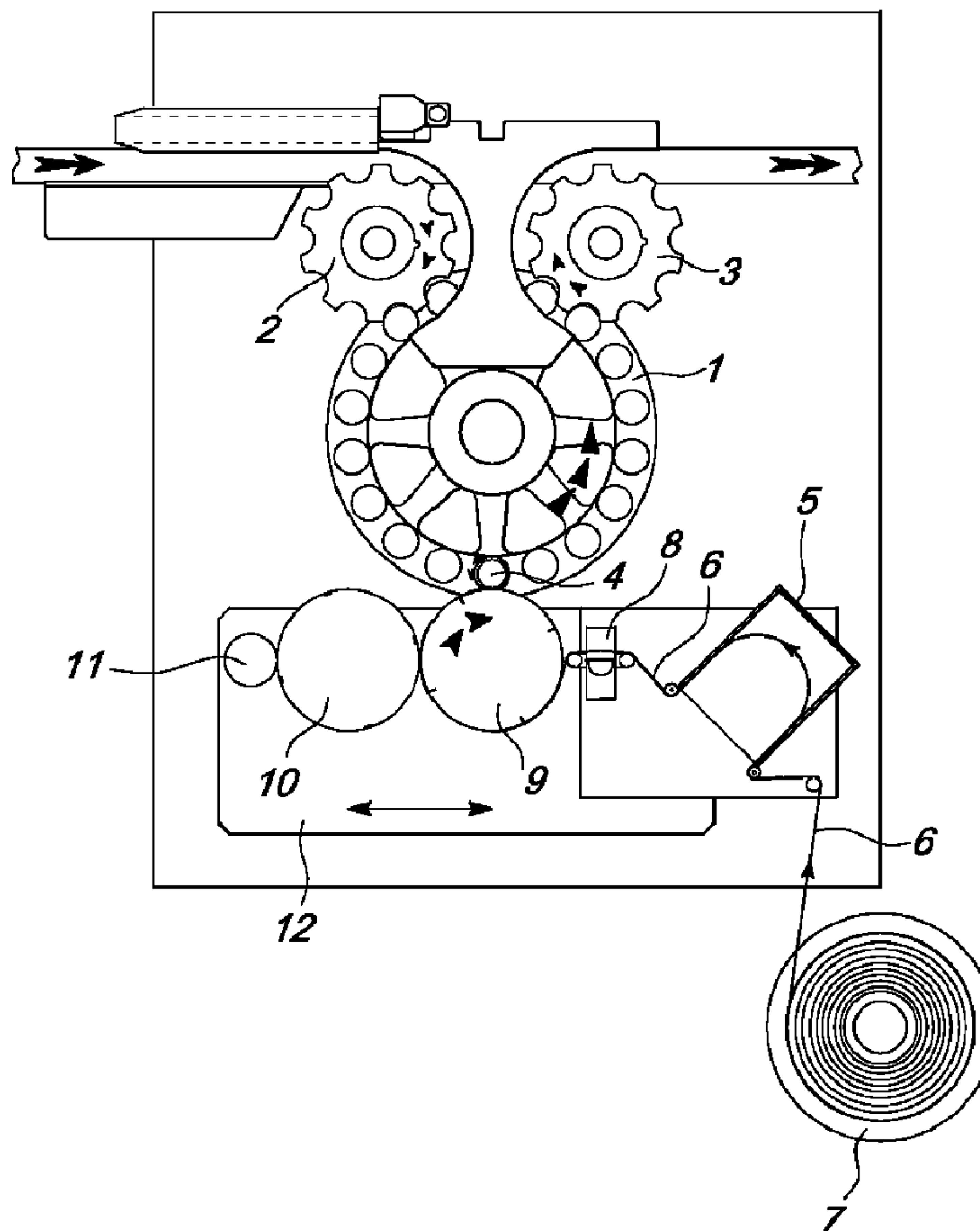




(86) **Date de dépôt PCT/PCT Filing Date:** 2009/12/17
(87) **Date publication PCT/PCT Publication Date:** 2010/07/01
(45) **Date de délivrance/Issue Date:** 2017/04/04
(85) **Entrée phase nationale/National Entry:** 2011/06/21
(86) **N° demande PCT/PCT Application No.:** EP 2009/067458
(87) **N° publication PCT/PCT Publication No.:** 2010/072653
(30) **Priorité/Priority:** 2008/12/23 (ITMN2008A000029)

(51) **Cl.Int./Int.Cl.** **B65C 9/22** (2006.01),
B65C 9/00 (2006.01), **B65C 9/18** (2006.01)
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(54) **Titre : MACHINE A ETIQUETER UTILISANT DES ETIQUETTES IMPRIMEES SUR UN RUBAN**
(54) **Title: MACHINE FOR LABELING BY MEANS OF LABELS PRINTED ON A RIBBON**



(57) **Abrégé/Abstract:**

A machine for labeling by means of labels printed on a ribbon comprising a rotating carousel (1) for supporting containers to be labeled, a device (5) for tensioning, a feeder (8), a drum (9) for cutting and a drum (10) for pasting with a corresponding roller (11)

(57) Abrégé(suite)/Abstract(continued):

for spreading adhesive, all being mounted on a movable slider (5) between a first position and a second position, the slider (5) being provided with means for movement along a guide (13) whose direction is tangent to the carousel (1) between the first and second positions.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
1 July 2010 (01.07.2010)(10) International Publication Number
WO 2010/072653 A4

(51) International Patent Classification:

B65C 9/22 (2006.01) **B65C 9/00** (2006.01)
B65C 9/18 (2006.01)

(21) International Application Number:

PCT/EP2009/067458

(22) International Filing Date:

17 December 2009 (17.12.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

MN2008A000029 23 December 2008 (23.12.2008) IT

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

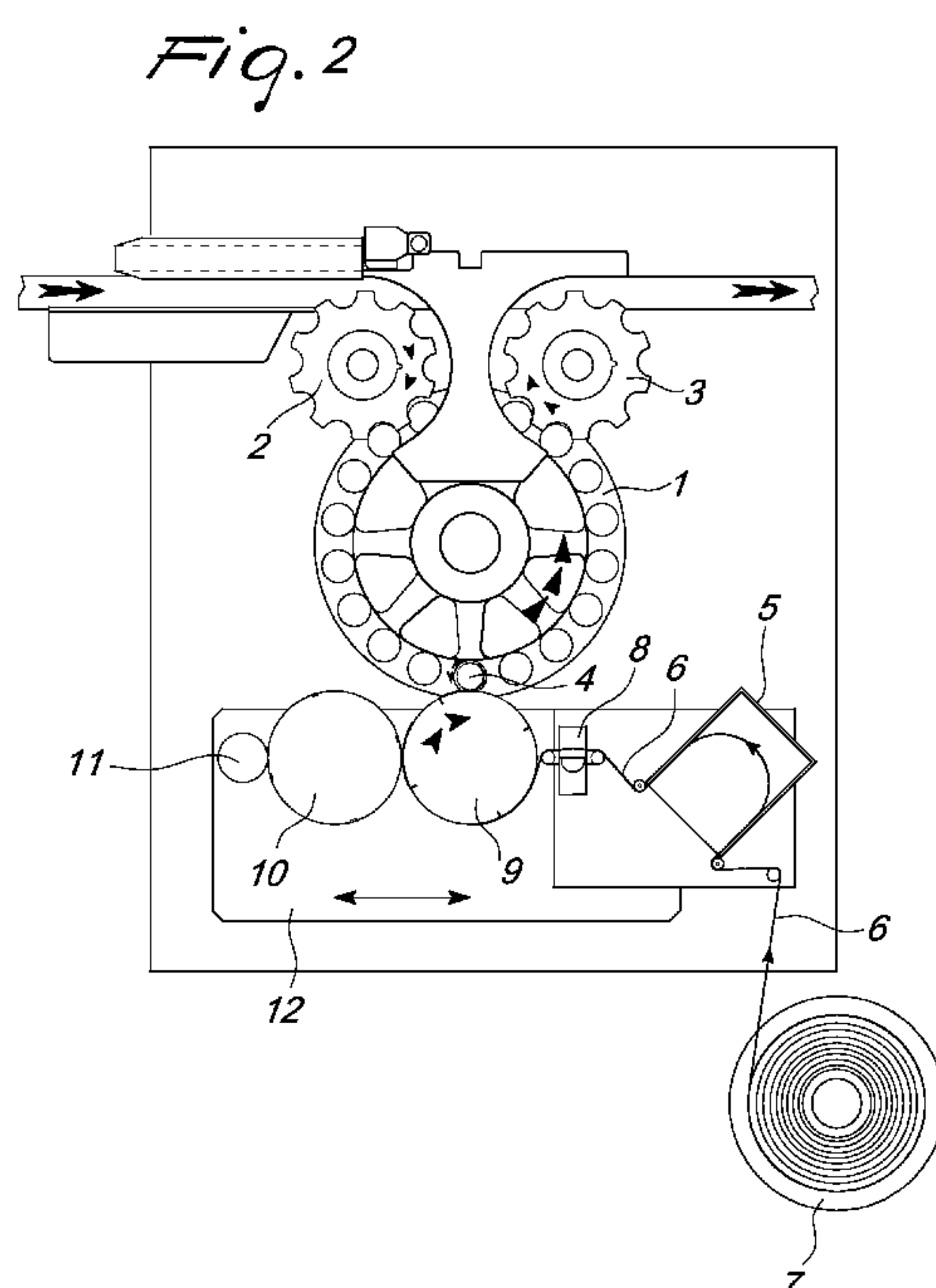
Published:

— with international search report (Art. 21(3))

— with amended claims (Art. 19(1))

Date of publication of the amended claims: 19 August 2010

(54) Title: MACHINE FOR LABELING BY MEANS OF LABELS PRINTED ON A RIBBON



(57) Abstract: A machine for labeling by means of labels printed on a ribbon comprising a rotating carousel (1) for supporting containers to be labeled, a device (5) for tensioning, a feeder (8), a drum (9) for cutting and a drum (10) for pasting with a corresponding roller (11) for spreading adhesive, all being mounted on a movable slider (5) between a first position and a second position, the slider (5) being provided with means for movement along a guide (13) whose direction is tangent to the carousel (1) between the first and second positions.

MACHINE FOR LABELING BY MEANS OF LABELS PRINTED ON A RIBBON

Technical field

The invention relates to a machine for labeling by means of labels
5 printed on a ribbon.

Background Art

It is known that the practice of printing on a ribbon labels designed to be applied to successive containers, the ribbon being wound in the form of a reel, is currently very widespread and that two types of ribbons are
10 commercially available.

A first type of ribbon is provided with a film of adhesive at the face designed to adhere to the containers to be labeled, and in this case one speaks of "pre-pasted labels"; the film of glue can be present on the entire surface of the labels or only at their edges.

15 The second type of ribbon is instead without glue, which is thus spread onto it only at the time of use.

The background art currently provides for the presence of labeling machines designed to process the first type of ribbon and of labeling machines for the second type of ribbon, with a need for considerable
20 commitment of capital for companies dedicated to packaging.

Disclosure of the invention

The aim of the present invention is to provide a labeling machine that can work with both types of ribbon.

This aim is achieved by a machine for labeling by means of labels
25 printed on a ribbon, as defined in the appended claim.

Brief description of the drawings

Further characteristics and advantages of the present invention will become better apparent from the description of a preferred but not exclusive embodiment thereof, illustrated by way of non-limiting example in the
30 accompanying drawings, wherein:

Figure 1 is a general view of the elements of the machine according to the present invention in a first operating position;

Figure 2 is a schematic plan view of the machine in the first operating position;

5 Figures 3 and 4 illustrate the machine according to the invention in a second operating position.

Ways of carrying out the Invention

With reference to the figures, the reference numeral 1 designates a carousel, which rotates counterclockwise, for supporting containers to be
10 labeled, which are fed by means of an input star conveyor 2 and evacuated by means of an output star conveyor 3. The carousel is provided with pans for supporting the individual containers, which are suitably rotated, and the reference numeral 4 designates a pan that supports the container that is ready to receive a label at the instant shown in the figures.

15 The machine further comprises a device 5 for tensioning a ribbon of labels 6 that unwinds from a roller 7, a feeder 8, which receives the ribbon in output from the tensioning device 5 in order to send it to a cutting drum 9, and finally comprises a drum 10 for pasting labels in output from the cutting drum with a corresponding roller 11 for spreading adhesive; the
20 peculiarity of the machine according to the invention consists in that said devices, all of a per se known type, are mounted on a slider 12 provided with means for movement along a guide 13 in a direction which is tangent to the carousel 1 between the two stroke limit positions shown respectively in Figures 1, 2 and 3, 4.

25 The first position, shown in Figures 1 and 2, is the one in which the cutting drum 9 faces the container ready to receive a label, which is arranged on the pan in position 4, and in this position the drum 9 is turned clockwise, in the opposite direction with respect to the direction of rotation of the carousel 1, while the pasting drum 10 and the corresponding adhesive
30 spreading roller 11 are kept stationary.

Clearly, this first position is adapted to be assumed when the machine is intended to work on a ribbon of pre-pasted labels, because in this case the drum 9 is capable of transferring directly each cut label onto the container that it faces, but the same machine can also be used when the label ribbon is
5 of the type designed to receive the adhesive at the time of use.

For this purpose it is sufficient to arrange the machine in the configuration with the slider 12 in the second position, shown in Figures 3 and 4. In this second position, the pasting drum 10 in fact faces the container on the pan in position 4, which is ready to receive a label, with a
10 clockwise rotary motion which is opposite to the motion of the carousel 1, while the cutting drum 9 rotates counterclockwise, and in this manner the labels cut by the drum 9 are spread with adhesive on the drum 10 and pass to the container ready to receive them.

Thus, the labeling machine according to the invention is capable of
15 working in the presence of labels printed on a ribbon both of the pre-pasted type and of the type designed to receive glue only at the time of use, thus offering a great possibility of saving to packaging companies.

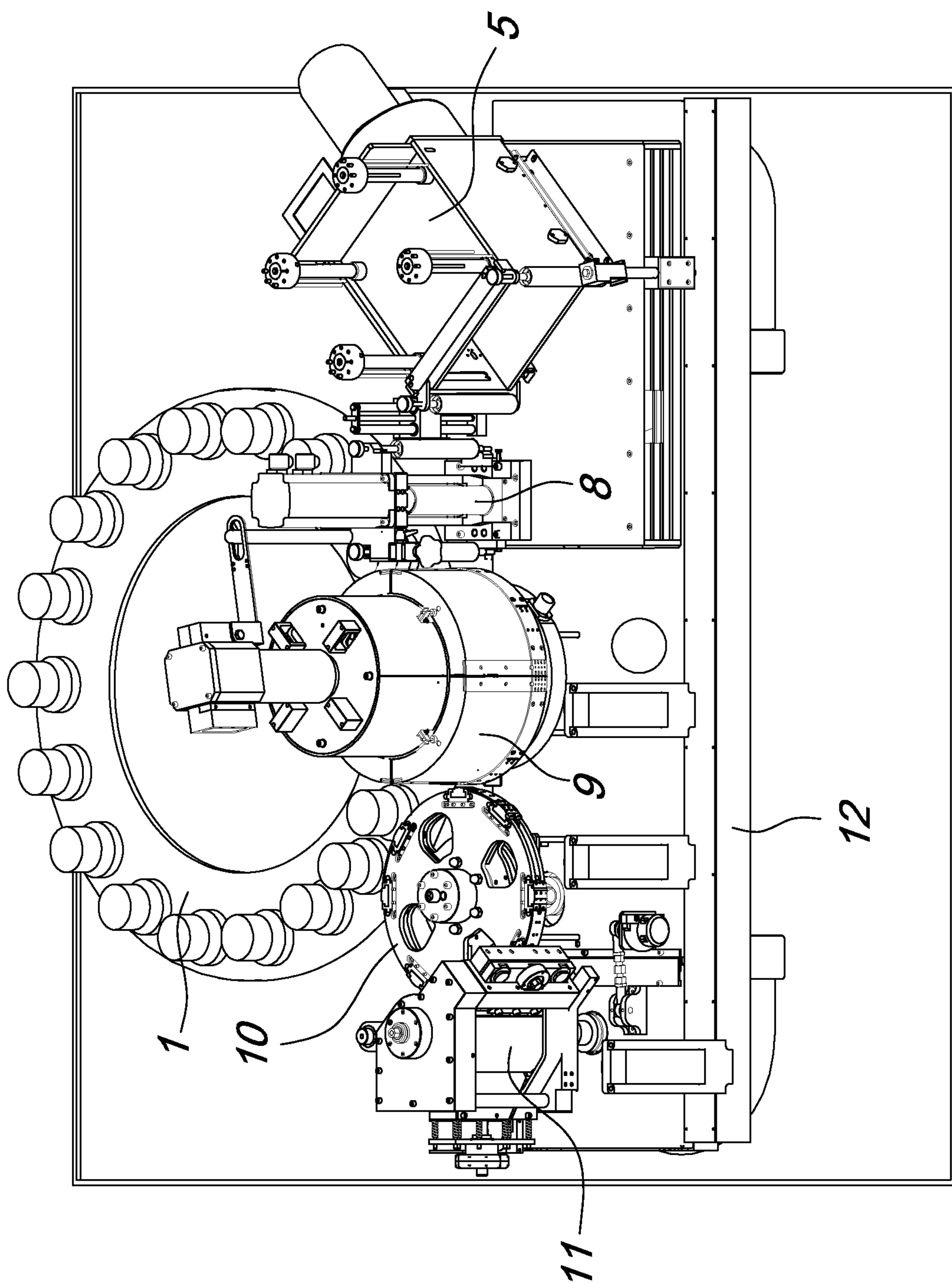
The described invention is susceptible of numerous modifications and variations, all of which are within the scope of the appended claim; all the
20 details may further be replaced with other technically equivalent elements.

Where technical features mentioned in any claim are followed by
25 reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly, such reference signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference signs.

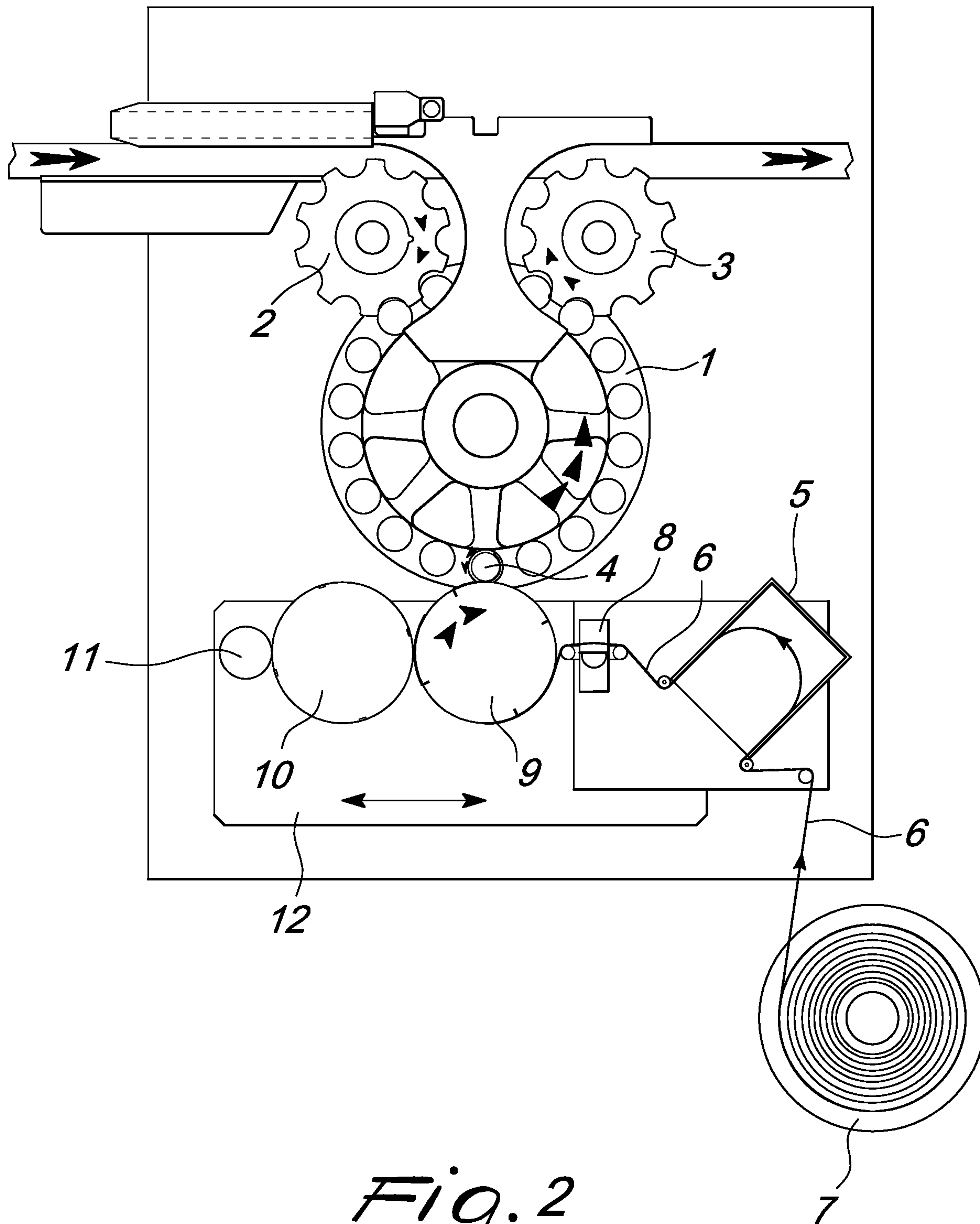
CLAIM

1. A machine for labeling by means of labels printed on a ribbon, comprising a rotating carousel (1) for supporting containers to be labeled, a device (5) for tensioning a label ribbon (6) that unwinds from a reel (7), a feeder (8) which receives the label ribbon (6) at the output of the tensioning device (5), a drum (9) for cutting the label ribbon (6) at the output of the feeder (8), a drum (10) for pasting the labels with a corresponding roller (11) for spreading adhesive on labels at the output of the cutting drum (9), characterized in that said tensioning device (5), said feeder (8), and said cutting drum (9) and said pasting drum (10) are mounted on a slider (12), said slider (12) being provided with means for movement along a guide (13) whose direction is tangent to the carousel (1) between a first position, in which the cutting drum (9) faces the container ready to receive a label, and a second position, in which the pasting drum (10) faces the container, the drums (9; 10) being mounted on the slider (5) with axes which are aligned in the direction of said guide (13), means being provided which are adapted to produce, when the slider (12) is in the first position, a rotary motion of the cutting drum (9) in the opposite direction with respect to the direction of the container supporting carousel (1), keeping stationary the pasting drum (10) with the corresponding adhesive spreading roller (11), and to produce, when the slider (12) is in the second position, a motion of the cutting drum (9) in the same direction as the carousel (1) and a motion of the pasting drum (10) in the opposite direction with respect to the direction of rotation of the carousel (1).

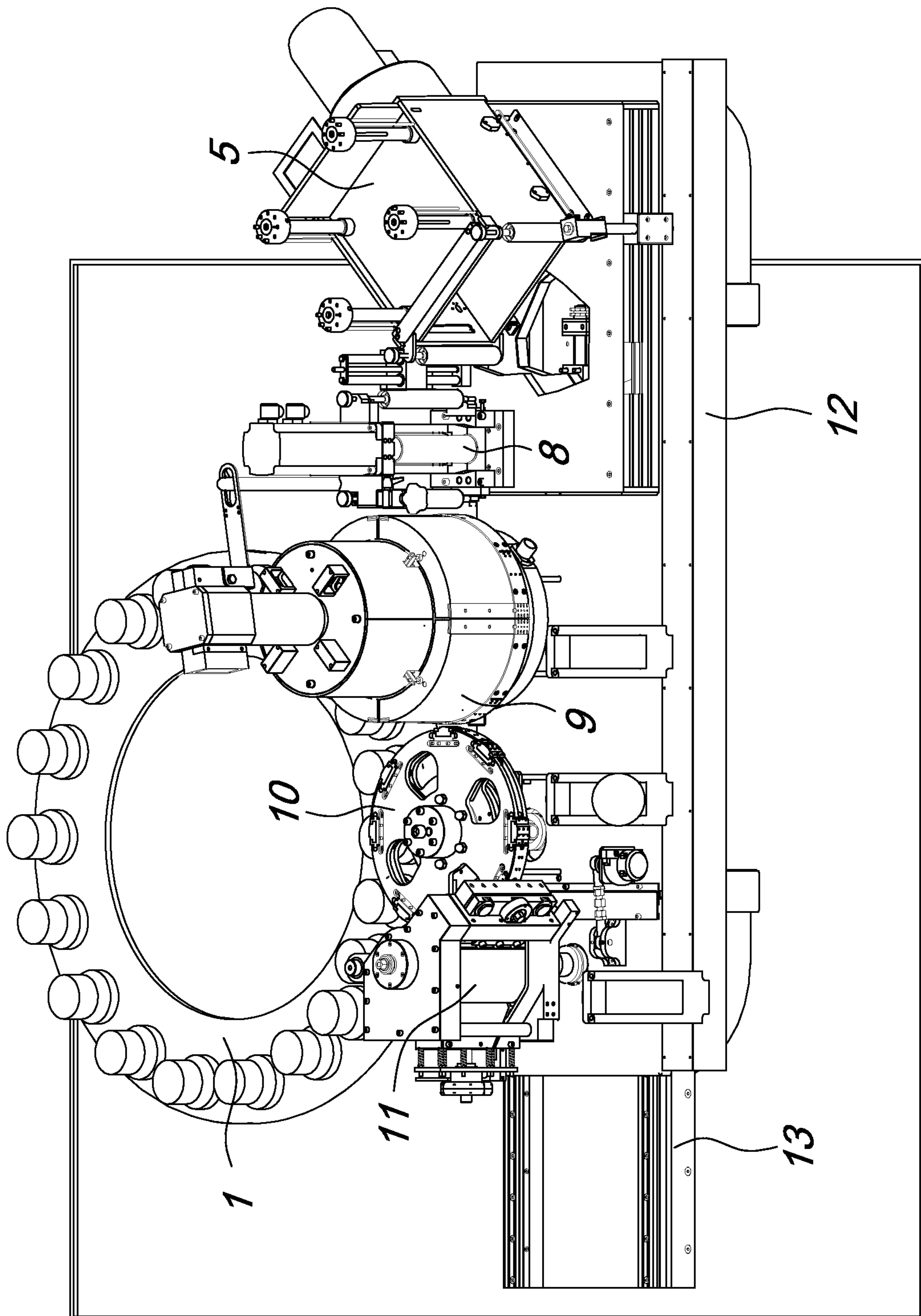
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*Fig. 1*

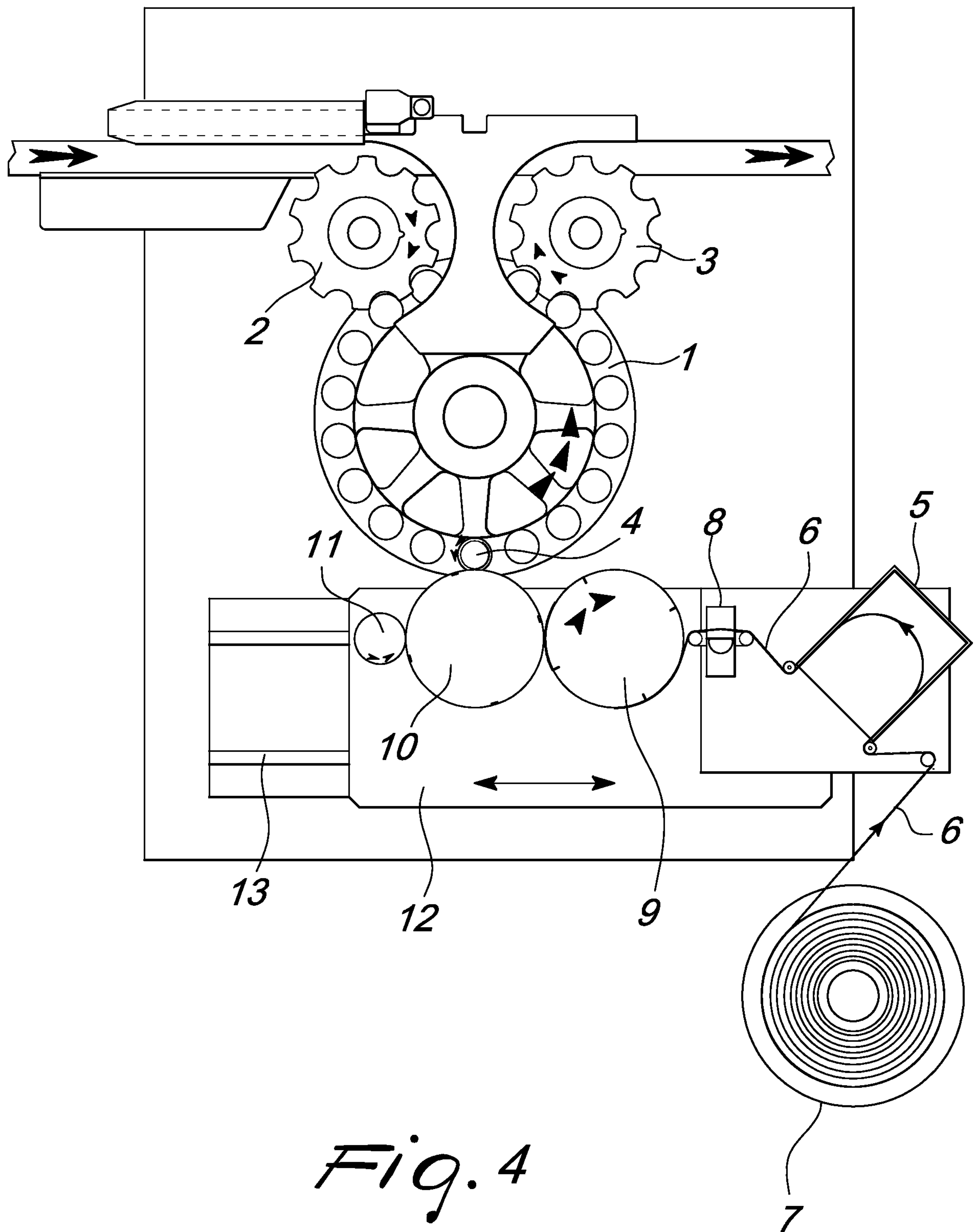
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*Fig. 2*

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*Fig. 3*

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*Fig. 4*

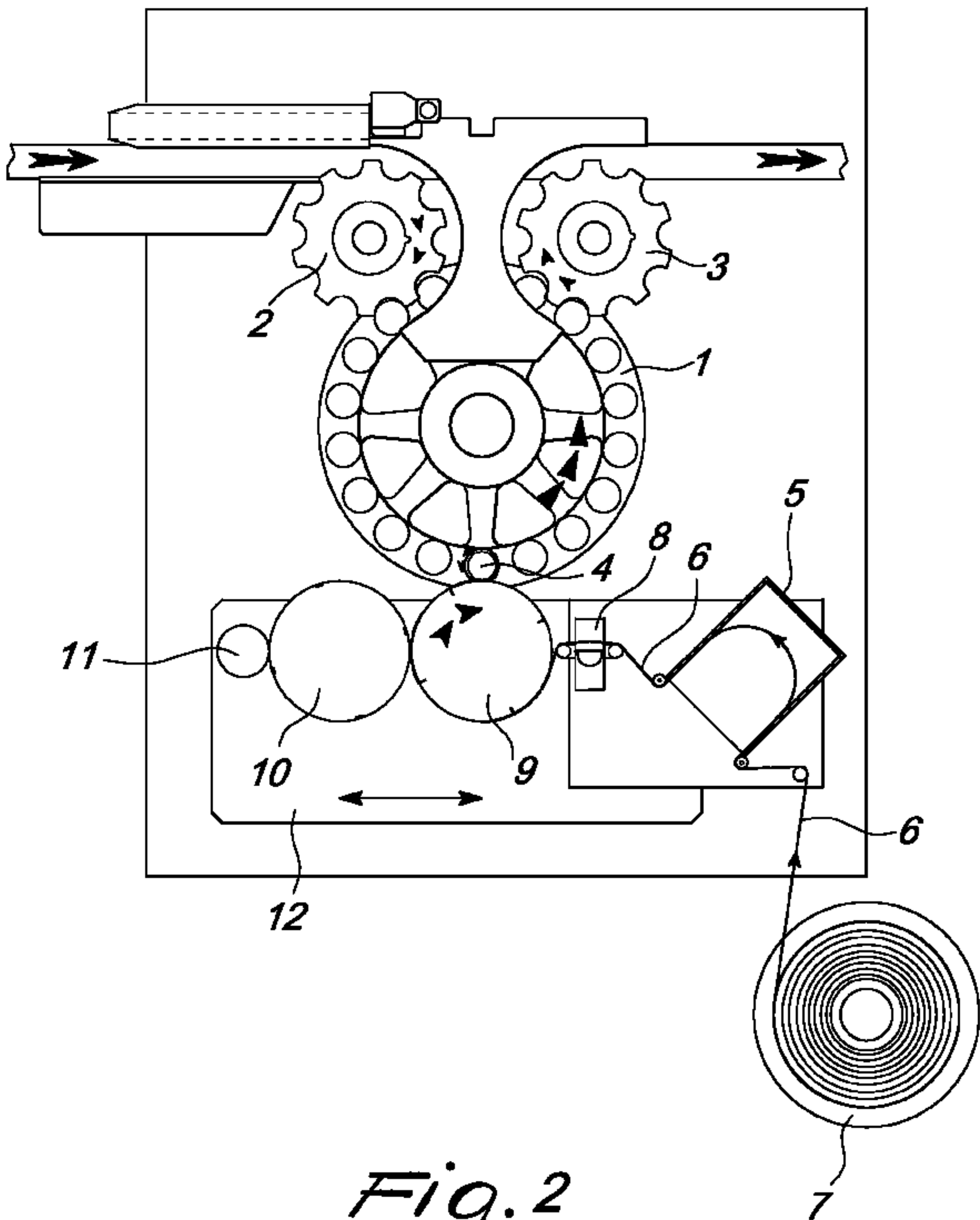


Fig. 2