



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
18.09.2024 Bulletin 2024/38

(51) International Patent Classification (IPC):
B65H 19/29 ^(2006.01)

(21) Application number: **23162420.6**

(52) Cooperative Patent Classification (CPC):
B65H 19/29; B65H 2301/414422; B65H 2301/5151;
B65H 2511/21; B65H 2701/1313; B65H 2701/1315;
B65H 2701/1944

(22) Date of filing: **16.03.2023**

(84) Designated Contracting States:
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL
NO PL PT RO RS SE SI SK SM TR**
Designated Extension States:
BA
Designated Validation States:
KH MA MD TN

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(54) **WRAPPING MATERIAL ROLL**

(57) The present invention relates to a wrapping material roll comprising an elongated wrapping material sheet wound around itself into a wound wrapping material sheet is provided. The wound wrapping material sheet comprises an inner end edge, an outer end edge, a first side edge extending between the inner end edge and the outer end edge, and a second side edge extending between the inner end edge and the outer end edge, the

second side edge being essentially parallel to the first side edge. The outer end edge of the wrapping material sheet is cut at an acute angle relative to the first side edge, and the outer end edge of the wound wrapping material sheet is secured to the wound wrapping material sheet, at, or in proximity to, an intersection between the outer end edge and the first side edge, to prevent the wound wrapping material sheet from unwinding.

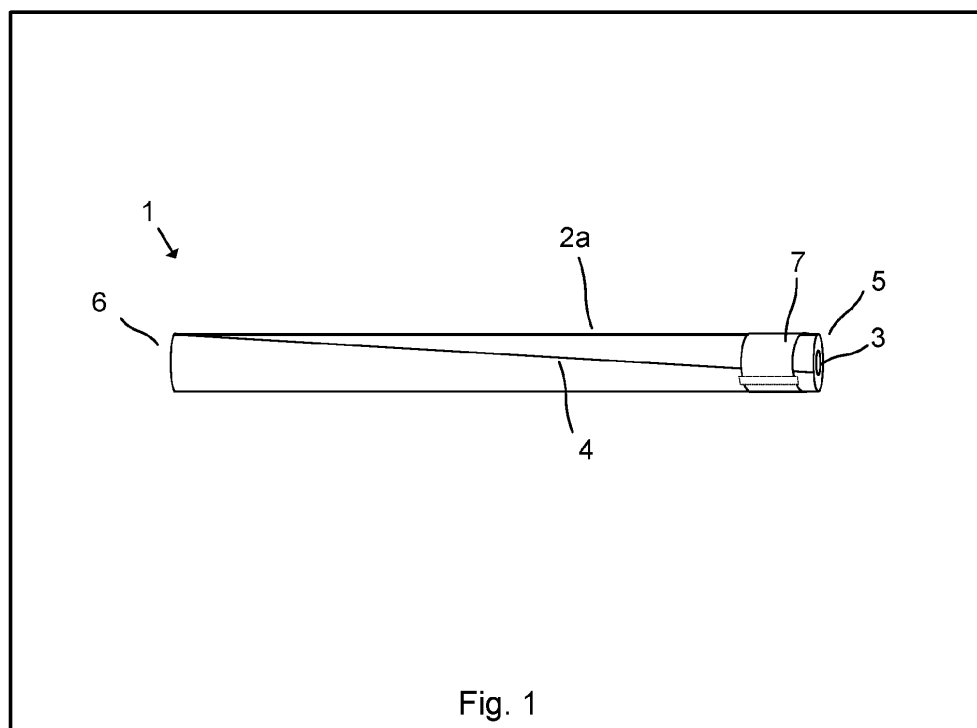


Fig. 1

Description

Field of the Invention

[0001] The present disclosure relates to wrapping material rolls, and to a method for producing a wrapping material roll.

Background of the Invention

[0002] Wrapping material, such as wrapping paper, is suitable for wrapping things such as gifts and personal items. The wrapping material is typically sold as an elongated wrapping material sheet wrapped around itself into a roll. To prevent unwinding of the outer end of the wrapping material sheet, which is something that could damage the paper and make an unpleasant impression at the retailer, the outer end of the sheet should be secured. At the same time, the color and/or pattern of the wrapping material should preferably be clearly visible to a potential user. Today, this is often solved by enclosing the wrapping material roll in a transparent plastic film. However, from an environmental perspective, the use of plastic should preferably be reduced.

[0003] Another known solution is to secure the outer end edge by applying an adhesive label at the middle of the outer end edge of the wrapping material roll. However, this solution could still lead to damage of the roll, and in particular to the non-attached corners of the outer end edge of the roll, as these possess the risk of getting stuck, crumpling or tearing during transportation and at the retailer.

[0004] WO202260519 propose a solution in which an outer end edge of a wrapping material roll is folded before being attached to the wound wrapping material. However, this solution is complicated to achieve from a production point of view.

[0005] There is thus need for an improved solution.

Summary

[0006] An object of the present invention is to overcome the above-mentioned problems and to provide a solution for securing the outer end of a wrapping material roll which allows for a pleasant appearance, while being more environmentally friendly than previous solutions.

[0007] Another object is to provide a wrapping material roll which may be efficiently produced at a comparatively low cost.

[0008] A further object is to provide such a wrapping material roll which allows for that the entire sheet may be used by the end user for wrapping.

[0009] A further object is to provide an improved method of producing such a wrapping material roll.

[0010] According to a first aspect of the present invention, a wrapping material roll comprising an elongated wrapping material sheet wound around itself into a wound wrapping material sheet is provided. The wound wrap-

ping material sheet comprises an inner end edge, an outer end edge, a first side edge extending between the inner end edge and the outer end edge, and a second side edge extending between the inner end edge and the outer end edge, the second side edge being essentially parallel to the first side edge. The outer end edge of the wrapping material sheet is cut at an acute angle relative to the first side edge, and the outer end edge of the wound wrapping material sheet is secured to the wound wrapping material sheet at, or in proximity to, an intersection between the outer end edge and the first side edge, to prevent the wound wrapping material sheet from unwinding.

[0011] By cutting the outer end edge at an acute angle, and by securing the outer end edge to the wound wrapping material roll at, or in proximity to, the corner being cut at said acute angle, it has been discovered that the risk of the roll being damaged can be significantly lowered as compared to a straight cut roll secured at the center. It has shown that an obliquely cut outer edge secured only at or in proximity to the side edge cut at an acute angle ensures that the entire outer end edge remains wrapped in close contact with the rest of the roll also at handling and storage of the roll. The present solution thus provides a wrapping material roll without any loose corners at the outer end. This does in turn also eliminate the need for any additional packaging, such as a plastic wrap, whereby a more environmentally friendly wrapping paper roll can be achieved. The elimination of an additional packaging also reduces the overall cost for producing the roll. Furthermore, the present solution provides a wrapping material roll which may be efficiently produced at a comparatively low cost, as the process of cutting the outer end edge at an angle only demands a marginal increase in time and labor as compared to conventional solutions.

[0012] The present solution also provides the user with a wrapping material roll in which all wrapping material can be utilized for wrapping. This is an improvement over solutions having a folded outer edge, since in those solutions, the folded part would probably be thrown away by the user as the permanent fold lines could give the wrapped gifts or items with an unpleasant appearance.

[0013] According to one embodiment, the outer end edge of the wound wrapping material sheet is secured to the wound wrapping material sheet, at a distance from the intersection between the outer end edge and the first side edge, the distance being within 0-5% of the total distance between the first side edge and the second side edge, as measured along the inner edge.

[0014] Hereby, the outer end edge of the wrapping material sheet can be secured close enough to the first side edge to avoid tearing of the acute angled corner.

[0015] According to one embodiment the wrapping material roll comprises an attachment member, the attachment member being arranged to secure the outer end edge of the wrapping material sheet to the wound wrapping material sheet.

[0016] In other embodiments, the outer end edge could be secured without the use of any additional attachment member. For example, the outer end edge could be glued directly to the wound wrapping material sheet.

[0017] According to one embodiment the attachment member comprises an adhesive attachment member, such as an adhesive label.

[0018] One possible advantage of the use of an adhesive label is that the attachment member could double as a label to provide information to a customer at the retailer. A further advantage connected to this is that the adhesive label of the present disclosure is placed at, or in proximity to, an end of the wrapping material roll. As wrapping material rolls are often stored vertically at a retailer, the adhesive label can thus be arranged at an upper end of the wrapping material roll where it can be more discernable to a potential buyer than would a centrally placed label.

[0019] According to one embodiment, a first part of a first portion of the attachment member is arranged to adhesively attach to an outer surface of the wound wrapping material sheet while a second portion of the attachment member is arranged to encircle the wound wrapping material sheet and adhesively attach to a second part of the first portion of the attachment member.

[0020] Hereby, the adhesive label only adheres to the wrapping material sheet at the outer end edge. Thus, a minimum amount of wrapping material is wasted, while still providing a firm securement of the outer end edge.

[0021] According to one embodiment, the angle between the outer end edge and the first side edge of the wrapping material sheet is 60-89°, preferably 70-75°.

[0022] According to an alternative embodiment, the adhesive label is a peel-off label which could adhere to the wrapping material without leaving any traces when being peeled-off.

[0023] Hereby, an angle can be provided which is narrow enough to avoiding tearing of the outer end of the wrapping material roll, while wasting as little wrapping material as possible due to the cutting of the outer end edge.

[0024] According to one embodiment, the length of the wrapping material sheet, as measured along the first side edge (6), is 1.5-200 m.

[0025] According to one embodiment the wrapping material sheet is a wrapping paper sheet.

[0026] Hereby, a wrapping material which is suitable for wrapping of a diverse range of items and which can be printed onto to create an aesthetic wrapping can be provided. However, in other embodiments, the wrapping material sheet could also include other types of wrapping materials, such as cellophane or synthetic foils.

[0027] According to one embodiment, the grammage of the wrapping paper sheet is 50-100 g/m².

[0028] According to one embodiment, the grammage of the wrapping paper sheet is 60-90 g/m².

[0029] This provides a wrapping material which is suitable for wrapping of gifts and personal items with regards

to sturdiness and flexibility.

[0030] According to one embodiment a width of the wrapping material sheet, as measured between the first and second side edges, is 38-100 cm.

[0031] Hereby, a wrapping material roll is provided which has enough width for wrapping of most gifts and personal items, while not being too bulky to handle.

[0032] According to one embodiment, the wrapping material roll further comprises a core, wherein the wrapping material sheet is wound onto the core.

[0033] Hereby, the wrapping material roll remains its stability also when most of the wrapping material sheet has been wound of. The core could in some embodiments comprise a paper tube.

According to a second aspect of the present invention, a method for producing a wrapping material roll is provided. The method comprises:

- providing an elongated wrapping material sheet, the wrapping material sheet comprising a first end edge, a second end edge, a first side edge extending between the first end edge and the second end edge, and a second side edge extending between the first end edge and the second end edge, the second side edge being essentially parallel to the first side edge,
- winding the wrapping material sheet around itself, starting from the first end edge, such that the first end edge forms an inner end edge and the second end edge forms an outer end edge of a wound wrapping material sheet,
- cutting the outer end edge of the wrapping material sheet at an acute angle relative to the first side edge, and
- securing the outer end edge of the wrapping material sheet to the wound wrapping material sheet, at, or in proximity to, an intersection between the outer end edge and the first side edge to prevent the wound wrapping material sheet from unwinding.

Effects and features of the second aspect of the invention are largely analogous to those described above in connection with the first aspect of the invention. Embodiments mentioned in relation to the first aspect of the invention are largely compatible with the second aspect of the invention, of which some are exemplified below.

[0034] By the inventive method, a wrapping material roll can be produced in a machine for producing conventional wrapping material rolls, with the addition of an angled cutting step. By cutting the outer end edge of the material, in contrast to e.g. folding the outer end edge, a highly efficient production can be achieved with a minimal addition of time and labor as compared to the production of conventional wrapping material rolls.

[0035] According to one embodiment, the method further comprises unwinding the outer end edge of the wrapping material sheet prior to cutting of the outer end edge, and a further step of rewinding the outer end edge of the wrapping material sheet after cutting of the outer end

edge.

[0036] Hereby, the wrapping material roll could first be produced in a conventional way, and then be transported to a cutting tool for providing the angled outer end edge.

[0037] In other embodiments, the outer end edge of the wrapping material sheet could be cut before winding.

[0038] According to one embodiment, the step of securing the outer end edge of the wrapping material sheet to the wound wrapping material sheet comprises:

- providing an attachment member,
- adhesively attaching a first part of a first portion of the attachment member to an outer surface of the wound wrapping material sheet,
- wrapping a second portion of the attachment member around the wound wrapping material sheet, and
- adhesively attaching the second portion of the attachment member to a second part of the first portion of the attachment member.

[0039] Further features of, and advantages with, the present invention will become apparent when studying the appended claims and the following description. The skilled person realize that different features of the present invention may be combined to create embodiments other than those described in the following, without departing from the scope of the present invention.

Brief Description of the Drawings

[0040] These and other aspects of the present inventive concept will now be described in more detail, with reference to the appended drawings showing an example embodiment of the inventive concept, wherein:

Fig. 1 is a perspective view illustrating a wrapping material roll in accordance with an embodiment of the present invention,

Fig. 2 is a perspective view illustrating a partly unwound wrapping material roll, in accordance with an embodiment of the present invention,

Fig. 3 is a perspective view showing a portion of the wrapping material roll shown in fig. 1 in enlarged scale.

Fig. 4 is a plan view illustrating an attachment member in accordance with an embodiment of the present invention, and

Fig. 5 is a schematic illustration of a method for producing a wrapping material roll in accordance with an embodiment of the present invention.

Detailed Description of Example Embodiments

[0041] Fig. 1 illustrates a wrapping material roll 1 in accordance with the present invention. The wrapping material roll 1 in Fig. 1 comprises a wound wrapping material sheet 2a. The wound wrapping material sheet 2a comprises an inner end edge 3 arranged at a center of the

wound wrapping material roll, and an outer end edge 4. The outer end edge is secured at an envelope surface of the wrapping material roll 2a. The wrapping material sheet 2 has thus been wound from the inner end edge 3 towards the outer end edge 4. The wrapping material sheet 2 further comprises a first side edge 5 and a second side edge 6 constituting the longitudinal side edges of the elongated wrapping material sheet 2. Fig. 1 further illustrates an attachment member 7 adapted to secure the outer end edge 4 to the wound wrapping material sheet 2a. The attachment member 7 is in Fig. 1 arranged closer to the first side edge 5, than to the second side edge 6. More specifically, the attachment member 7 is in Fig. 1 arranged in proximity to an intersection between the outer end edge 4, and the first side edge 5. The distance from the first side edge 5 to the attachment member 7 is dimensioned so as to avoid damage to the wrapping material sheet due to lose corners. The exact distance could be varied depending on parameters such as the angle α of the cut, and properties of the material, such as the grammage or thickness.

[0042] Fig. 2 illustrates a wrapping material roll 1 in which the outer end edge 4 has been partly unwound. In Fig. 2 the angle α of the outer cut end edge 4 can be clearly seen. The angle α could vary depending on parameters such as material properties and production parameters. For example, a more narrow angle α is expected to enhance maintaining the entire outer end edge in close contact with the remainder of the roll and thus to lower the risk of damage to the wrapping material sheet 2 but could generate a bigger amount of waste. Furthermore, a thicker wrapping material might allow for a less narrow angle without an increased risk of damage.

[0043] Fig. 3 illustrates a part of a wrapping material roll 1 in accordance with the present disclosure. In Fig. 3, the wrapping material sheet 2 is illustrated as being wound onto a core 10. The core could for example comprise a hollow paper tube, or any other structure suitable for increasing the stability of the wrapping material roll 1.

[0044] Fig. 4 illustrates an attachment member 7 in the form of an adhesive label. The adhesive layer is illustrated from an inner side, that is, the side which is adapted to face the wound wrapping material roll 2a. The attachment member 7 further comprises an outer side adapted to face away from the wound wrapping material roll 2a. The attachment member 7 comprises a first portion 8 and a second portion 9. The first portion 8 comprises a first part 8a which on its inner side is provided with an adhesive adapted to adhere to the outer edge 4 of the wound wrapping material roll 2a, and a second part 8b which is not provided with an adhesive. Furthermore, the second portion 9 is also provided with an adhesive at its inner side, so that the second portion 9 can be arranged to encircle the wound wrapping material sheet 2a and adhere to the outer side of the second part 8b the first portion 8.

[0045] The attachment member 7 in Fig. 4 is further illustrated with a tearing strip 11 between the first portion

8 and the second portion 9. The tearing strip 11 facilitates removal of the adhesive label from the wound wrapping material sheet 2a without the risk of damaging the wound wrapping material sheet 2a. However, the tearing strip 11 could also be omitted.

Fig. 5 is a method for producing a wrapping paper roll. The method comprises a step of providing 101 an elongated wrapping material sheet 2 comprising a first end edge, a second end edge, a first side edge 5 extending between the first end edge and the second end edge, and a second side edge 6 extending between the first end edge and the second end edge. The method further comprises winding 102 the wrapping material sheet 2 around itself, starting from the first end edge, such that the first end edge forms an inner end edge 3 and the second end edge forms an outer end edge 4 of a wound wrapping material sheet 2a. In a further step, the outer end edge 4 of the wrapping material sheet 2 is cut 103 at an acute angle α relative to the first side edge 5.

[0046] The cutting 103 could be performed before the winding 102 of the wrapping material. The cutting could also be performed after the winding 102 of the wrapping material, in which case part of the wrapping material sheet 2 is unwound 105 prior to the cutting 103 and re-wound 106 after the cutting 103. Lastly, the method comprises a step of securing 104 the outer end edge 4 of the wrapping material sheet 2 to the wound wrapping material sheet 2a at, or in proximity to, an intersection between the outer end edge 4 and the first side edge 5 to prevent the wound wrapping material sheet 2a from unwinding. The securing 104 could be made by an adhesive label, in which case the securing step 104 could include providing an attachment member 7, adhesively attaching a first part 8a of a first portion 8 of the attachment member 7 to an outer surface of the wound wrapping material sheet 2a, wrapping a second portion 9 of the attachment member 7 around the wound wrapping material sheet 2a, and adhesively attaching the second portion 9 of the attachment member 7 to a second part 8b of the first portion 8 of the attachment member 7.

[0047] Even though the invention has been described with reference to specific exemplifying embodiments thereof, many different alterations, modifications and the like will become apparent for those skilled in the art.

[0048] Additionally, variations to the disclosed embodiments can be understood and effected by the skilled person in practicing the claimed invention, from a study of the drawings, the disclosure, and the appended claims. In the claims, the word "comprising" does not exclude other elements or steps, and the indefinite article "a" or "an" does not exclude a plurality. The mere fact that certain measures are recited in mutually different dependent claims does not indicate that a combination of these measures cannot be used to advantage.

Claims

1. A wrapping material roll (1) comprising an elongated wrapping material sheet (2) wound around itself into a wound wrapping material sheet (2a), the wound wrapping material sheet (2a) comprising an inner end edge (3), an outer end edge (4), a first side edge (5) extending between the inner end edge (3) and the outer end edge (4), and a second side edge (6) extending between the inner end edge (3) and the outer end edge (4), the second side edge (6) being essentially parallel to the first side edge (5),

wherein the outer end edge (4) of the wrapping material sheet (2) is cut at an acute angle (α) relative to the first side edge (5), and wherein the outer end edge (4) of the wound wrapping material sheet (2a) is secured to the wound wrapping material sheet (2a) at, or in proximity to, an intersection between the outer end edge (4) and the first side edge (5), to prevent the wound wrapping material sheet (2a) from unwinding.

2. The wrapping material roll (1) according to claim 1 wherein the outer end edge (4) of the wound wrapping material sheet (2a) is secured to the wound wrapping material sheet (2a), at a distance from the intersection between the outer end edge (4) and the first side edge (5), the distance being within 0-5% of the total distance between the first side edge (5) and the second side edge (6), as measured along the inner edge (3).
3. The wrapping material roll (1) according to claim 2 further comprising an attachment member (7), the attachment member (7) being arranged to secure the outer end edge (4) of the wrapping material sheet (2) to the wound wrapping material sheet (2a).
4. The wrapping material roll (1) according to claim 3 wherein the attachment member (7) comprises an adhesive attachment member, such as an adhesive label.
5. The wrapping material roll (1) according to any one of claims 3-4 wherein a first part (8a) of a first portion (8) of the attachment member (7) is arranged to adhesively attach to an outer surface of the wound wrapping material sheet (2a) while a second portion (9) of the attachment member (7) is arranged to encircle the wound wrapping material sheet (2a) and adhesively attach to a second part (8b) the first portion (8) of the attachment member (7).
6. The wrapping material roll (1) according to any one of the preceding claims, wherein the angle (α) between the outer end edge (4) and the first side edge

(5) of the wrapping material sheet (2) is 60-89°, preferably 70-75°.

7. The wrapping material roll (1) according to any one of the preceding claims wherein the length of the wrapping material sheet (2), as measured along the first side edge (6), is 1.5-200 m. 5
8. The wrapping material roll (1) according to any one of the preceding claims wherein the wrapping material sheet (2) is a wrapping paper sheet. 10
9. The wrapping material roll (1) according to claim 8 wherein the grammage of the wrapping paper sheet is 50-100 g/m². 15
10. The wrapping material roll (1) according to claim 8 wherein the grammage of the wrapping paper sheet is 60-90 g/m². 20
11. The wrapping material roll (1) according to any one of the preceding claims wherein a width of the wrapping material sheet (2), as measured between the first (5) and second (6) side edges, is 38-100 cm. 25
12. The wrapping material roll (1) according to any one of the preceding claims further comprising a core (10), wherein the wrapping material sheet (2) is wound onto the core (10). 30
13. A method for producing a wrapping material roll (1), the method comprising:
 - providing (101) an elongated wrapping material sheet (2), the wrapping material sheet (2) comprising a first end edge, a second end edge, a first side edge (5) extending between the first end edge and the second end edge, and a second side edge (6) extending between the first end edge and the second end edge, the second side edge (6) being essentially parallel to the first side edge (5), 35
 - winding (102) the wrapping material sheet (2) around itself, starting from the first end edge, such that the first end edge forms an inner end edge (3) and the second end edge forms an outer end edge (4) of a wound wrapping material sheet (2a), 40
 - cutting (103) the outer end edge (4) of the wrapping material sheet (2) at an acute angle (α) relative to the first side edge (5), and 45
 - securing (104) the outer end edge (4) of the wrapping material sheet (2) to the wound wrapping material sheet (2a), at, or in proximity to, an intersection between the outer end edge (4) and the first side edge (5) to prevent the wound wrapping material sheet (2a) from unwinding. 50 55

14. The method according to claim 13 further comprising unwinding (105) the outer end edge (4) of the wrapping material sheet (2) prior to cutting (103) of the outer end edge (104), and a further step of rewinding (106) the outer end edge (4) of the wrapping material sheet (2) after cutting (103) of the outer end edge (4).

15. The method according to any of claims 13 or 14 wherein the step of securing (104) the outer end edge (4) of the wrapping material sheet (2) to the wound wrapping material sheet (2a) comprises:

- providing an attachment member (7),
- adhesively attaching a first part (8a) of a first portion (8) of the attachment member to an outer surface (12) of the wound wrapping material sheet (2a),
- wrapping a second portion (9) of the attachment member (7) around the wound wrapping material sheet (2a), and
- adhesively attaching the second portion (9) of the attachment member (7) to a second part (8b) of the first portion (8) of the attachment member (7).

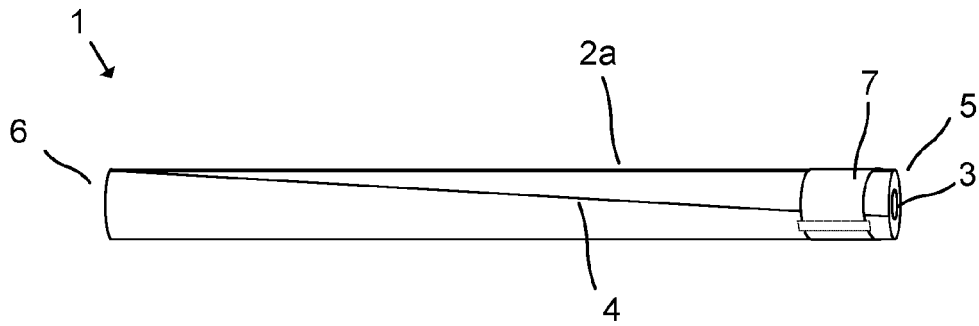


Fig. 1

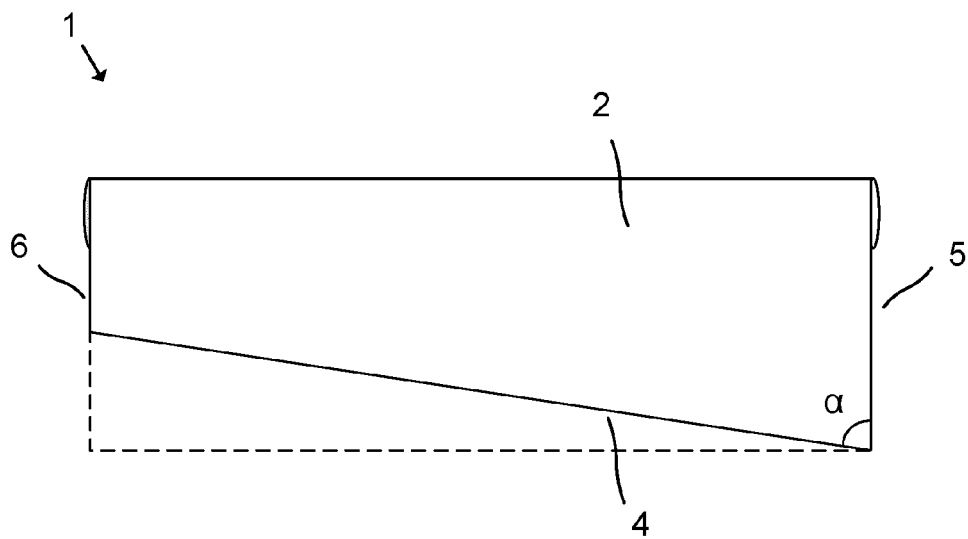


Fig. 2

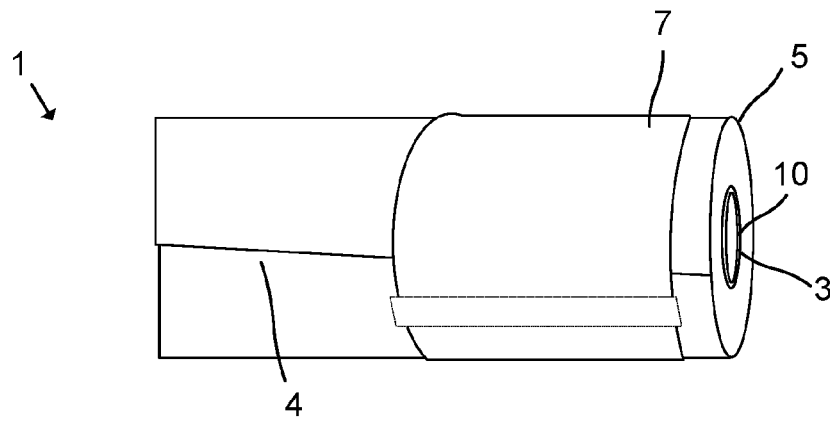


Fig. 3

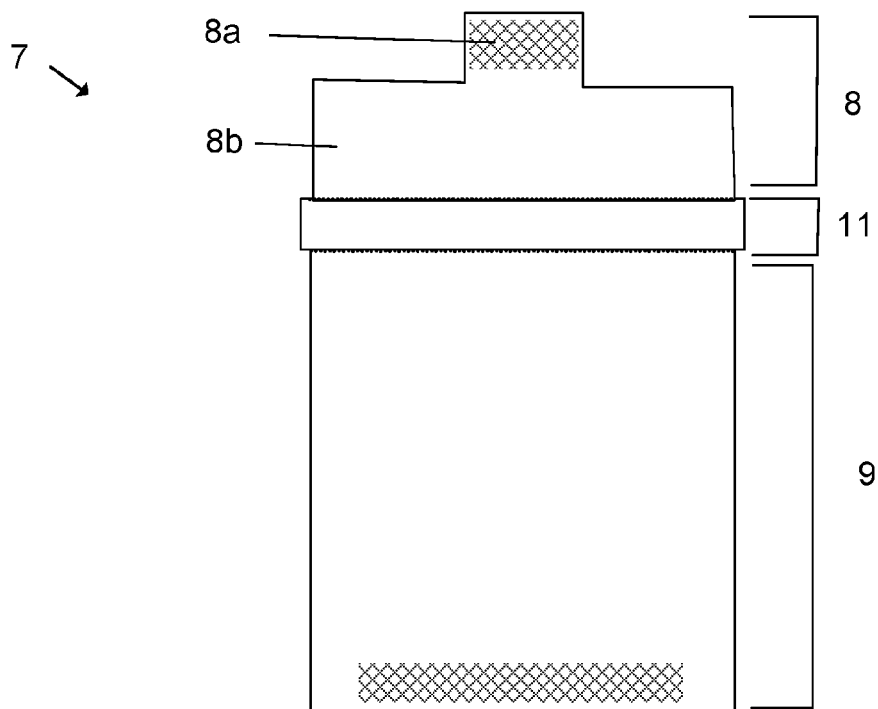


Fig. 4

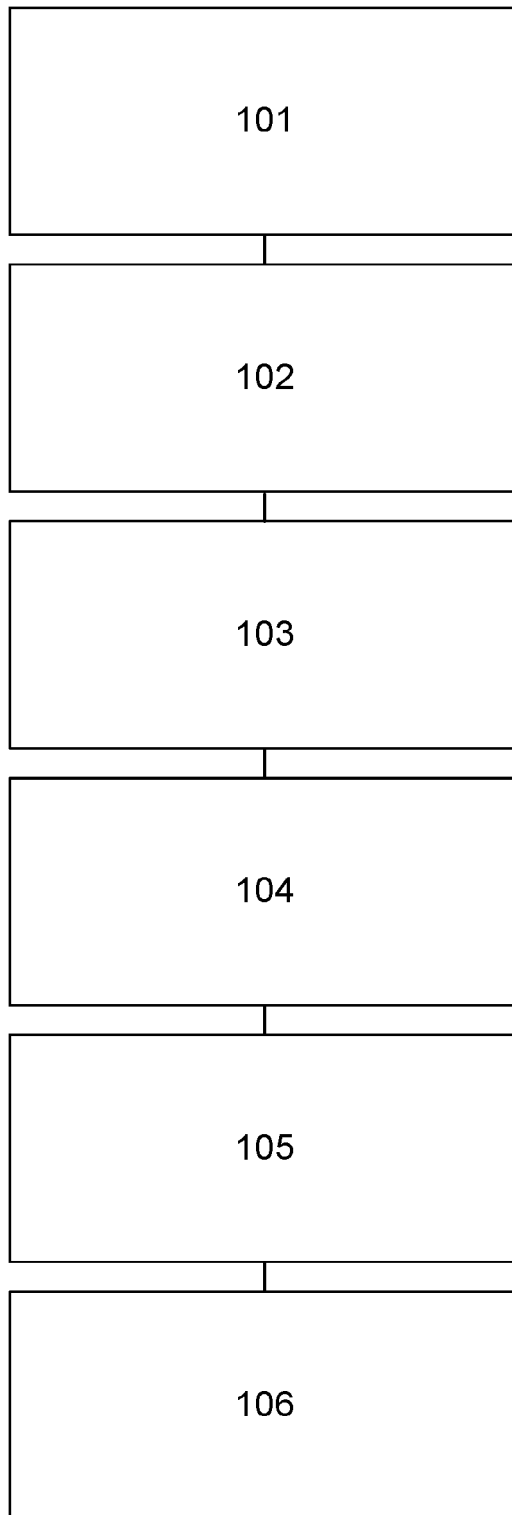


Fig. 5



EUROPEAN SEARCH REPORT

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Place of search The Hague		Date of completion of the search 7 August 2023	Examiner Cescutti, Gabriel
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