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(71) Applicant: **Tape Related Intellectual Property**

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(54) **Rolls of tape and method for forming such rolls**

(57) The invention relates to a method for forming a roll (2) of tape, wherein an amount to be wound is predetermined and is wound into a roll (2), wherein the predetermined amount is defined by square meters and to a method of distributing tape, wherein tape is wound into

rolls (2) defined by a predetermined number of square meters, such that each roll (2) comprises the same amount of tape and are sold at the same price.

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## Description

**[0001]** The invention relates to tape. The invention more specifically relates to a series of tape, wound on cores or without a core.

**[0002]** Tape is conventionally wound on a core or coreless, in multiple layers. A predetermined length of tape is wound to form a roll. The length may depend on the width of the tape. A series of rolls of tape can be provided, comprising the same length of tape but having different widths. A user can choose a roll having the right width and will get the predetermined length of tape.

**[0003]** With wider tape it may normally be desirable to get less length than when a narrower tape is used. However, in existing roll the length of tape is equal in the whole set of rolls having the same tape. Another disadvantage is that the length of tape may be difficult to check, especially when the width is not correct on the roll.

**[0004]** One aim of the present disclosure is to provide rolls of tape having tape wound based on a predetermined amount other than length.

**[0005]** Another aim of the present invention is to provide an alternative method for winding tape, especially adhesive tape.

**[0006]** In a first aspect the present invention can be defined by a method for forming a roll of tape, wherein an amount to be wound is predetermined and is wound into a roll. The predetermined amount is defined by square meters.

**[0007]** In a second aspect the present invention can be defined by a method for forming a series of rolls of tape, wherein a series of rolls is formed by winding similar or identical tape into rolls. A number of the rolls have different widths of tape and all of the rolls are wound of the same number of square meters.

**[0008]** In a third aspect the present invention can be defined by a series of rolls of tape, wherein each of the rolls comprises the same number of square meters of tape. At least two of the rolls in the series of roll can have different widths.

**[0009]** In a fourth aspect the present invention can be defined by a series of rolls of tape, wherein each of the rolls comprise a predetermined number of square meters of tape. At least two of the rolls in the series of roll can have different widths. For each roll the predetermined number of square meters can be defined by  $N$  multiplied by  $S$ , wherein  $N$  is an integer and  $S$  is chosen from 0.25, 0.33, 0.5 and 1.

**[0010]** The invention shall be further elucidated in the following description, with reference to the drawings. Therein shows:

Fig. 1 a roll of tape;

Fig. 2 an alternative roll of tape; and

Fig. 3 a series of rolls of tape.

**[0011]** In this description embodiments of the invention or parts thereof will be described, with reference to the

drawings, which embodiments are in no way to be understood as limiting the scope of protection sought. The same or similar parts in the different embodiments have the same or similar reference signs. Combinations of embodiments or parts thereof are also considered to have been disclosed herein.

**[0012]** In fig. 1 a roll 1 is shown, comprising a length  $L$  of tape 2, wound into a roll 1 without a core. The layers 2A of tape 2 are schematically indicated by the curved lines 2B. The tape 2 has a width  $W$  considerably smaller than the length  $L$ . The roll 1 has an inner diameter  $D_i$  and an outer diameter  $D_o$ . The total amount of tape 2 wound into said roll 1 is defined by  $L$  multiplied by  $W$ , resulting in a number  $N$  of square meters. In the production of the roll the number  $N$  can be a predetermined number. The tape 2 preferably is adhesive tape, such as self adhesive tape. The adhesive layer 3 of the tape 2 is preferably facing inward, that is to the centre  $C$  of the roll 1.

**[0013]** In fig. 2 a roll 1 is shown, formed of a length  $L$  of tape 2 wound into the roll 1. In this embodiment the tape 2 is wound on a core 4. The roll 1 can be made prior to winding the tape 2. In another embodiment tape can be wound on a core 4 having a width  $W_{max}$  significantly larger than the width  $W$  of the roll 1. After winding the tape 2 onto the wide core 4, the then formed wide roll 2<sub>max</sub> can be cut into rolls 2 having the width  $W$ .

**[0014]** In fig. 3 a series 5 of rolls 1 of tape 2 is shown, which rolls 1 can be made according to an embodiment of fig. 1 or 2. The rolls 1 in the series 5 or at least a number of the rolls 1 in the series 5 can have been wound from the same type of tape 2, such as the same adhesive tape. Different rolls 1 in the series 5 can have different widths  $W$ , in this example e.g.  $W_{1-5}$ . Each of the rolls 1 in the series or at least said number of rolls 1 in said series 5 can have the same number  $N$  of square meters of tape 2 wound into said rolls 1, different rolls 1 having tape 2 of different widths  $W$ . All of the rolls 1 in the series 5 can, if they have the same square metrage of the same tape 2, can be sold for the same price.

**[0015]** Rolls 1 having different widths  $W$  can be weighed in a very easy manner and be compared if they have the same metrage of tape 2, since they will weigh the same, especially if they are wound coreless. If they are wound on cores having the same weight again they can easily be weighed and compared to each other. In another aspect the winding of the tape can be performed on the bases of weight wound, because on each roll 1 the same amount of tape is wound, independent of the width of the roll 1 to be formed. Moreover width differences can be compensated by length differences, in order to ensure that the same amount of tape 2 is sold with each roll 1.

**[0016]** In an embodiment of the invention a series 5 can comprise rolls 1 having different widths or rolls comprising tape 2 having different widths  $W$ , wherein for each roll the number  $N$  of square meters to be wound into said rolls 1 is predetermined and complies with the formula  $M \cdot S$ , wherein  $M$  is an integer and  $S$  is chosen from 0.25,

0.33, 0.5 and 1. This means that either the rolls 1 have the same amount of tape 2 or a predetermined series of different number of square meters.

**[0017]** A method or series of rolls 1 of the invention can be used for selling tape at a unit price, independent of the width of the rolls 1 of tape, since all rolls 1 will comprise the same amount of tape 2. In another embodiment only a limited number of prices shall be used for rolls in the series, since they will comprise each a number of square meters of tape, chosen from a limited number of numbers, e.g. 1, 2 or 3 square meters or  $1 \times X$ ,  $2 \times X$  or  $3 \times X$  square meters, wherein X is chosen freely but identical for all rolls 1. X can for example be an integer or a fraction.

**[0018]** In fig. 3 by way of example only lengths L and widths W of the tape on the rolls 1 in the series 5 have been indicated. Each roll has a number N of square meters which is either 1 or 0.5. Some rolls 1 are combined into one set each having a number N of 0.5, resulting again in a set having one square meter of tape.

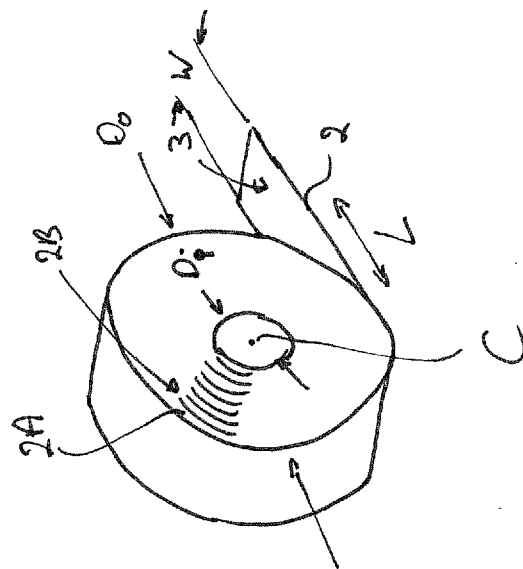
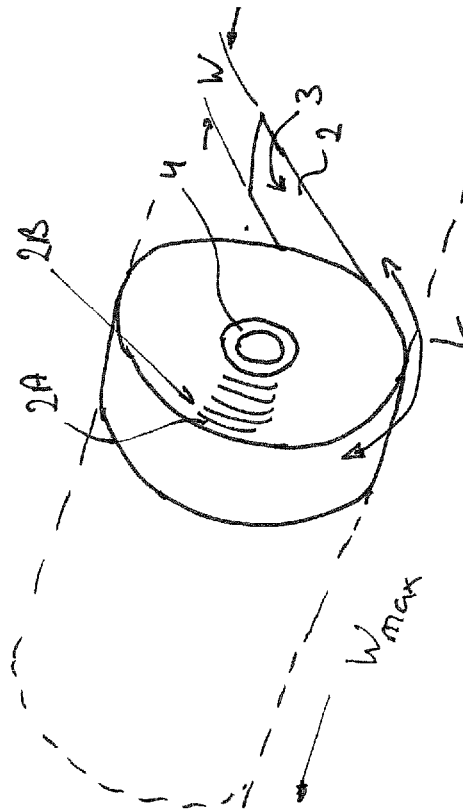
**[0019]** The present invention is by no means limited to the embodiments disclosed and described herein. Various amendments are possible within the scope of the claims, which are also considered to have been disclosed herein. Although adhesive tape has been described, other types of tape could be used in the same manner. Cores having different diameters can be used, for example providing rolls having the same outer diameter  $D_o$ , still having the same amount of tape 2.

being wound on one or more cores.

6. Series of rolls of tape, wherein each of the rolls comprise the same number of square meters of tape and wherein at least two of the rolls in the series of roll have different widths.
7. Series of rolls of tape, wherein each of the rolls comprise a predetermined number of square meters of tape and wherein at least two of the rolls in the series of roll have different widths, wherein for each roll the predetermined number of square meters is defined by M multiplied by S, wherein M is an integer and S is chosen from 0.25, 0.33, 0.5 and 1.
8. Method of distributing tape, wherein tape is wound into rolls defined by a predetermined number of square meters, such that each roll comprises the same amount of tape and are sold at the same price.

## Claims

1. Method for forming a roll of tape, wherein an amount to be wound is predetermined and is wound into a roll, wherein the predetermined amount is defined by square meters.
2. Method according to claim 1, wherein a number of square meters is predetermined and cut from a larger roll or sheet in a predetermined width and wound into a roll.
3. Method for forming a series of rolls of tape, preferably using a method according to claim 1 or 2, wherein a series of rolls is formed by winding similar or identical tape into rolls, a number of the rolls having different widths of tape and all of the rolls are wound of the same number of square meters.
4. Method for forming a series of rolls of tape according to any one of claims 1 - 3, wherein a sheet of tape having a relatively large width is wound into a roll, where after said roll is cut into a series of rolls having the same widths, smaller than the width of the relatively wider roll.
5. Method for forming a series of rolls of tape, said tape



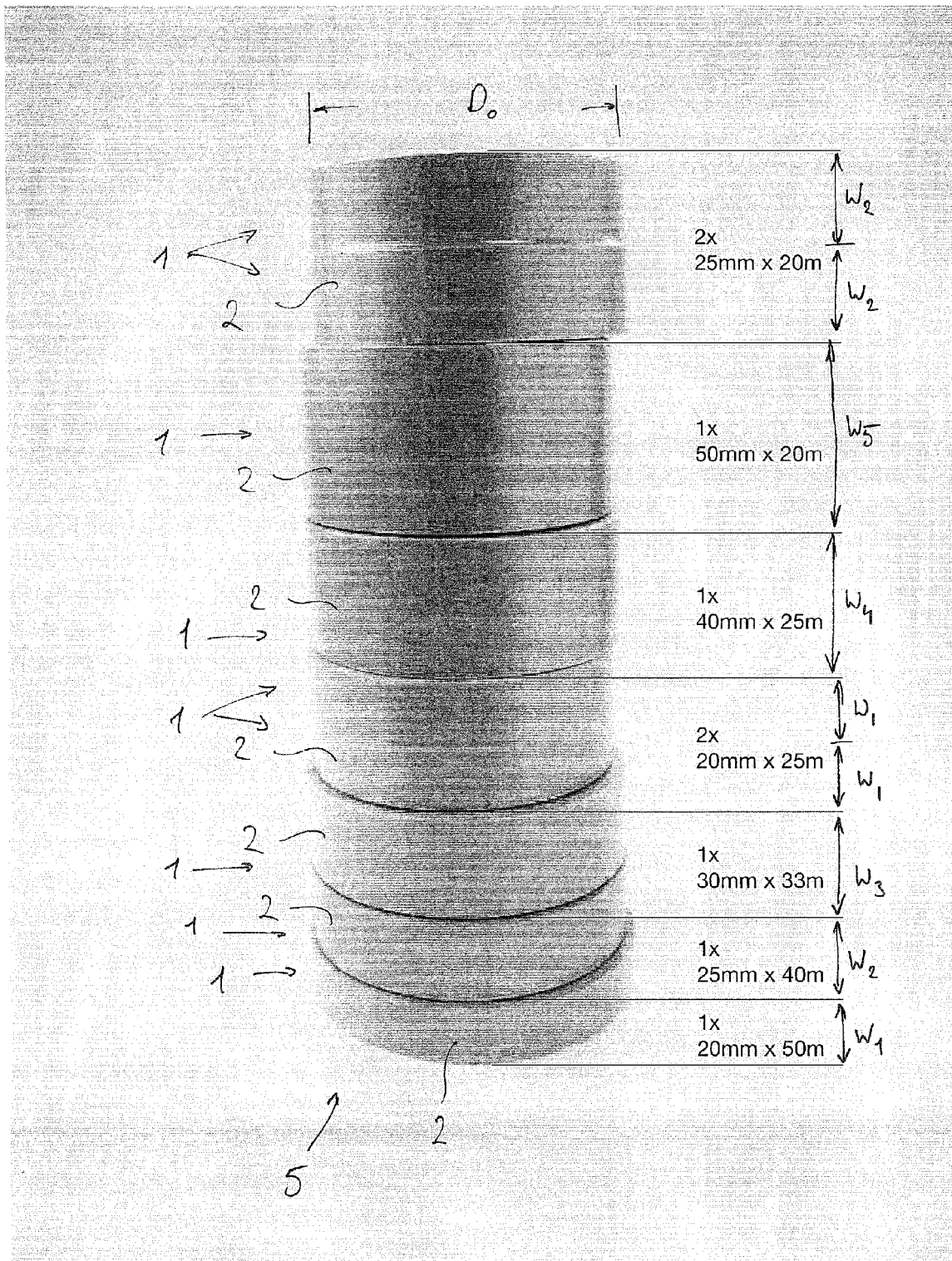


Fig 3



## EUROPEAN SEARCH REPORT

Application Number  
EP 09 15 5917

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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 19 August 2009	Examiner Haaken, Willy
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding document</p>			

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EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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