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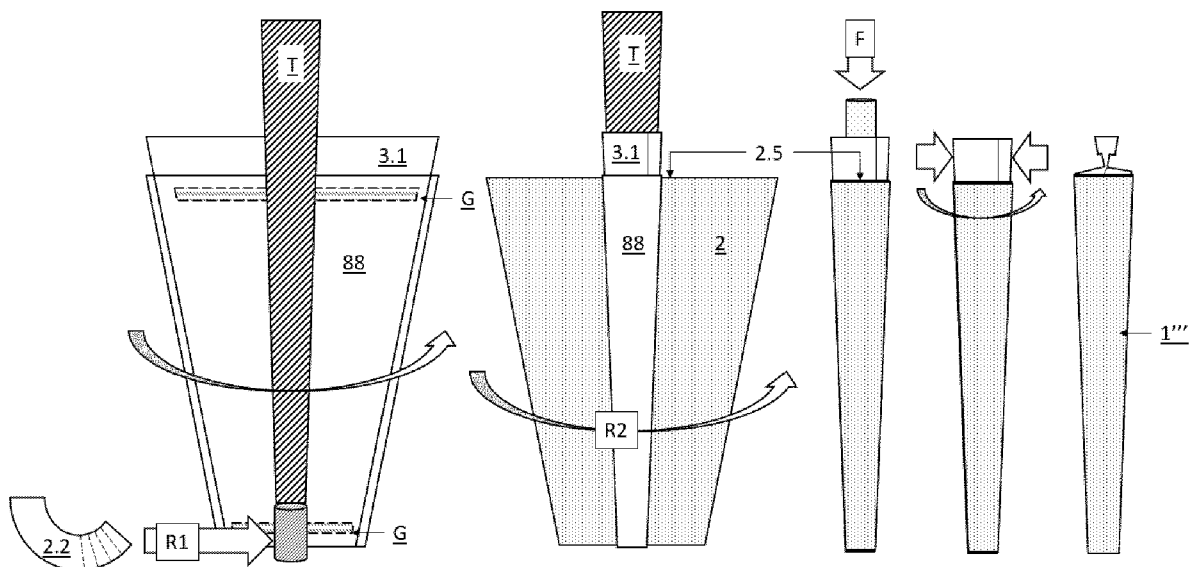
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(54) **PLUGGED CIGARETTE, CIGARETTE SHELL AND METHOD OF PRODUCING A PLUGGED CIGARETTE**

(57) A cigarette (1) including a first rolling material (2) defining a body (2.1) with an inner volume. The body (2.1) includes a support tip (2.2) arranged inside of a proximal end (2.3) of the body (2.1). A smokeable material (A) is disposed within the body (2.1). A second rolling material (3.1) is plugged at a distal end (2.5) of the body (2.1), the second rolling paper (2.5) forming a sleeve of which a first

portion (4.1) extends within the body (2.1) and of which a second portion (4.2) projects from the body (2.1) out from the distal end (2.5) in a longitudinal direction of the body (2.1). The second portion (4.2) includes a physical deformation such that the sleeve is closed thereby. Various other embodiments and methods of manufacturing the same are disclosed.

**FIG. 4**

Description

BACKGROUND OF THE INVENTION

[0001] Presently, pre-rolled cigarettes are offered in cartons wherein each cigarette has a supporting tip at a proximal while the distal end remains open. Usually tightly packed industrially produced cigarettes hardly experience any spillage. The cigarette body is usually of a rolling paper, but other materials are also known, such as dried flower petals or dried leaves. Cigarette shells or pre-rolled cigarettes are furthermore hard to manipulate due to their size. Certain papers, and most dried petals and dried leaves are brittle by nature. In many cases dried organic materials are dried as a flat sheet, rolling them into a cylinder or frustoconical shape, would see the material want to unfurl to return to the original flattened shape. Thus, when handling them not only can these materials chip, tear or break when deformed, they can also unfurl.

[0002] While filling these cigarettes with a smokeable material imparts these kinds of cigarettes with an increased stability the ends remain vulnerable. Of the two ends, the proximal end is usually provided with a supporting tip. As such, it is the distal end that remains the vulnerable.

[0003] Presently, vulnerable cigarettes are encased in a full plastic storage vessel to prevent damage, but the simple fact remains that the cigarette may still be damaged during regular transport. Additionally, this manner of storage does not prevent spillage of the smokeable material. Such spillage can occur as the cigarette shifts inside the storage vessel. Smokeable material falling out of the distal end may even be responsible for precipitating damage, because the loss of material reduces the internal structural support rendering the distal end in particular increasingly vulnerable over time. A loss of smokeable material is also a loss of product utility, as a user will not be enabled to replace the lost material, or repack it into the cigarette.

[0004] To prevent spillage, the cigarette is usually closed by deforming the paper at a distal end thereof. However, such closing methods are not possible for these particular cigarettes. And even customary cigarettes are prone to experiencing structural failure at the hands of inexperienced laborers which attempt to close the cigarettes.

[0005] A similar problem even exists in pre-rolled cigarettes with rolling paper as a first material, because such rolling materials tend to dry out in storage, which negatively impacts the flexibility of said first material. Here too then handling for closing said cigarette can cause damage, but in transport the material may also be more prone to unfurl when closed. This problem increases in severity with the thickness of the paper.

[0006] To prevent spillage and a compromised structural integrity of the cigarette during transport it has become common practice to use a silicone or plastic

end cap. These are little caps that are pulled over the distal end of a cigarette. This itself requires costly manual labor. A plug is usually stretched to fit over the distal end which process itself can also cause damage. Removing the end-cap is also not without risk, as a user may pinch and pull the end of a cigarette, in turn also causing damage.

[0007] Users experience it as particularly bothersome to have to remove said plug, and may in some cases forget to remove it, thereby torching away at silicone or plastic while failing at any proper attempt to light the cigarette.

[0008] While one might still favor silicone and plastic end-caps for their relative reliability, this solution is also exceedingly environmentally costly. After all, these caps tend to make their way into nature. More often than not the caps are removed and discarded on the spot.

[0009] Accordingly, the present invention aims to reduce this environmental impact, and provide a reliable alternative for these end-caps.

BRIEF SUMMARY OF THE INVENTION

[0010] Embodiments of the present invention are directed to a cigarette comprising a first rolling material defining a body comprises a supporting tip, such as a filter tip, arranged inside of a proximal end of the body, and wherein the body is loaded with a smokeable material. Preferably, the cigarette is plugged at a distal end of the body using a second rolling paper optionally with a lower area density compared to the first rolling material. The term "body" as used herein does not mean the body isn't filled, but rather that the body defines an inner volume which in turn is provided with the supporting tip and loaded with smokeable material.

[0011] The first rolling material can be made of rolling paper but may alternatively also be made of dried leaves or flower petals. As used herein and in the claims, the term "cigarette" shall also be interpreted to include cigars and blunts and any smoking apparatuses formed by wrapping, folding or rolling a material. According to the invention, plugging the distal end involves forming a sleeve with said second rolling material, preferably a rolling paper. A first portion of this sleeves extends within the body and a second portion projects from the body out from the distal end in a longitudinal direction of the body, which is the same longitudinal direction as that of the cigarette itself. The second portion is then deformed so as to close the sleeve. The sleeve thus acts as a plug by being so deformed that smokeable material is prevented from passing beyond the deformation.

[0012] The invention is preferably applied to cigarettes wherein the first material is a dried material and wherein the second material is more flexible than the first material.

[0013] Optionally, the first material is itself applied to an inner liner, optionally a rolling paper, which liner is more flexible than the first material, in such an example second material can be connected to said inner liner of the first

material.

[0014] Alternatively, the second material may be provided as an inner liner to the first material, but in such an alternative the second material will be a rolling paper that extend beyond the distal end of the body by at least about 1.0 to about 2.5 cm prior to deformation, and wherein the cigarette is filled with a smokeable material at least about 1 mm beyond the distal edge of the body. This allows a closing deformation to be formed in said second material at the part with which it projects from the first material without compromising the integrity of the first material. The smokeable material by grace of being present beyond said particular edge will allow the shape of the distal edge of the first material to be maintained, thus preventing any chipping, tearing or ripping.

[0015] Also, separately from the above, the second material can extend beyond the distal end of the body by at least half of the diameter of the body at said distal end, up to about 5 cm.

[0016] That is to say, prior to a deformation of the portion of the second material that extends beyond the distal end of the body as formed by the first material. This is a feature compatible with any embodiment.

[0017] To prevent the sleeve itself from sliding out, the second rolling paper can be glued, prior to rolling, to the first material. The glue can be a food grade glue such as Arabic gum, also called sugar gum. The person skilled in the art will know that there are far more glues possible, and in some cases the second paper can be heat pressed to the first material.

[0018] Beneficially the cigarette can be filled without loss of structural integrity such that the smokeable material extends from the tip to the physical deformation, which is beyond the distal end of the body formed by the first rolling material. This prevents material excess of the usually more costly first rolling material. In one example, the cigarette is filled to about 0.1 to about 0.5 mm beyond the distal end of the body with smokeable material.

[0019] When using a second rolling paper with an area density of about 9 to about 25 g/m² can be chosen. By filling the cigarette up to the distal end, or in some cases beyond the distal end of the body a very small pouch about 0.1 to about 5 mm, such as 0.2 to 1 mm, the cigarette can be lighted more easily by the user.

[0020] By filling the cigarette shell beyond the distal end of the body the deformation process, by which the cigarette is closed at its distal end, will have even less of an impact on the integrity of the first material.

[0021] To practically arrive at a suitable physical deformation that remains closed a very specific twist may be applied to the second paper. In the production process a cigarette shell may be loaded with the smokeable material and subsequently pinched at the second portion of the sleeve by two fingers. After this, the body may be rotated around the longitudinal axis so that the twisting action provides a permanent twist to the paper forms a helical twist that closes off the sleeve at the second portion.

[0022] It is also possible to arrive at a suitable physical

deformation that remains closed by pinching, folding and pressing said fold inwards. In ordinary cigarettes, such as blunts, such a technique is used. However, this technique does not translate to cigarettes with a first rolling material having a higher area density than the second rolling material, or in cigarettes with dried organic material, such as leaves or petals, as the first material, as the inward pressing, also known as tucking, can damage the first material. However, when the second material extends sufficiently beyond the distal end of the body, and when the body is at least filled to the distal end of said body, then such a technique is prevented from damaging the first material. Especially in those embodiments in which the second material is a sleeve that extends on top of a liner applied to the first material, the technique provides excellent results.

[0023] Suitable second rolling papers may have an area density of about 8 to about 40 g/m², preferably about 9 to about 25 g/m², wherein the second rolling paper is attached, such as glued, to the inner surface of the first rolling material such that the outer circumference of the sleeve and inner circumference of the body are the same.

[0024] Ideally the second rolling paper only extends between about 2 and about 0.5 cm into the body, preferably about 0.9 to about 1.1 cm. So as to prevent that it functions as a liner for the first rolling material. The use of liner along the length of the cigarette is undesirable as this can cause poor airflow and uneven burning, thus reducing the quality of the cigarette.

[0025] Preferably, the second rolling material, being a rolling paper, may extend from the proximal end of the body, as formed by the first rolling material, to beyond the distal end of said body. In this example the second rolling material is wrapped around a third rolling material, and the first rolling material is wrapped around the second rolling material. This provides a stable burn.

[0026] In another example the second rolling material is layered between a first and a third rolling material, wherein the second material extends beyond the first material at the distal end of the body formed by the first material, and wherein the third material is substantially equal in length to the first material.

[0027] In another embodiment, the third material can be a tobacco paper, wherein the second material is a rolling paper that is layered between the first and third material. The first layer can then be a tobacco leaf, for example.

[0028] In order to allow the comfortable manual creation of the twist without any material overhead the second rolling paper can be designed such that it only projects between about 1.0 and about 2.5 cm from the body. It was found that about 1.2 and about 1.8 cm works best for most hands. Between about 1.4 and 1.6 cm it was found that accidental pulling is intuitively prevented.

[0029] For marijuana-carrying cigarettes, the body can optionally be frustoconical. To prevent uneven burning, the first and second rolling papers in their unrolled form

can each shaped as an isosceles trapezoid. This allows the sleeve to also assume a frustoconical shape that extends from the body as a continuation of the divergence of the body.

[0030] Finally, it is noted that a machine is envisioned which is capable of both loading the shell of the cigarette with a smokeable material, preferably beyond the distal end of the body; and applying a physical deformation to the second portion where it projects from the body, such that the smokeable material is prevented from falling out of the shell at the distal end.

[0031] Such a machine for creating cigarettes could comprise:

- a base comprising an oscillator for shaking the machine;
- a holder, designed for being assembled with the base, comprising a plurality of channels for holding a cigarette shell in each of channel of the plurality of channels;
- a tray, with a plurality of dosing channels, designed for being assembled with the holder, and for holding a predefined amount of smokeable material in each dosing channel, wherein each dosing channel comprises a through hole for dispensing the smokeable material into a mutually different cigarette shell for forming the cigarettes,

characterized in that:

- i) the tray is provided with a crimp tool for engaging the cigarettes in each of the channels simultaneously for providing a closing deformation thereto; or
- ii) a crimp tool is designed for being assembled with the holder, so as to be assembled with the holder after filling, for engaging the cigarettes in each of the channels simultaneously for providing a closing deformation thereto.

[0032] In one example, the crimp tool could consist of two movable plates, such as metal plates, which have square through holes that are in the case of i) lined up with the through holes of the dosing channels for filling, or in the case of ii) lined up with the distal ends of the cigarettes in the holder, and wherein the plates are moveable in opposite directions such that the ends of the cigarettes are crimped in said process.

[0033] In another example, the crimp tool comprises two opposing movable surfaces which are designed to move together to pinch the distal ends of cigarettes therebetween, and wherein the at movable surfaces are designed to slide along each other once pinching the cigarettes, so as to twist the distal ends after pinching.

[0034] The person skilled in the art will understand that there are very many ways to provide the crimp tool.

[0035] The above machine would also be useful to cigarette shells only comprising a first rolling material and a tip, such as a filter tip, in which such the material

of the first rolling paper would be any customary rolling paper.

[0036] Objects, advantages and novel features, and further scope of applicability of the present invention will be set forth in part in the detailed description to follow, taken in conjunction with the accompanying drawings, and in part will become apparent to those skilled in the art upon examination of the following, or may be learned by practice of the invention. The objects and advantages of the invention may be realized and attained by means of the instrumentalities and combinations particularly pointed out in the appended claims.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

[0037] The accompanying drawings, which are incorporated into and form a part of the specification, illustrate one or more embodiments of the present invention and, together with the description, serve to explain the principles of the invention. The drawings are only for the purpose of illustrating one or more embodiments of the invention and are not to be construed as limiting the invention. In the drawings:

Fig. 1 is a series of schematic illustrations showing certain steps of a method of creating a cigarette according to an embodiment of the present invention;

Fig. 2 is a series of schematic illustrations showing a second method of creating a cigarette according to an embodiment of the present invention;

Fig. 3 is a series of schematic illustrations showing a third method of creating a cigarette according to an embodiment of the present invention; and

Fig. 4 is a series of schematic illustrations showing a fourth method of creating a cigarette.

DETAILED DESCRIPTION OF THE INVENTION

[0038] Figure 1 shows a method for creating a cigarette 1 according to an embodiment of the present invention. The progress of creation is shown from left to right.

[0039] On the left it can be seen that the cigarette 1 starts out having second rolling paper 3.1 connected to first rolling material 2, here a dried leaf. The second rolling paper is glued to the first rolling paper along its width and has an area density of 18 g/m². The glue is a food grade glue G. Supporting tip 2.2 also is part of the cigarette and is here merely exemplary folded, see arrow R1, from a piece of paper to be a cylinder or frustoconical curled supporting tip. Tip 2.2 is provided at proximal end 2.3 of what will be body 2.1, defining an inner volume, formed by the first paper after jointly rolling components 2, 2.2 and 3.1 into a cone. The distal end here is the end that is intended for being held to the lips of a user. The second paper being attached near the distal end 2.5 by glue G.

[0040] The rolling of components 2, 2.2 and 3.1 into a

cone, more specifically into a frustoconical shape, creates a shell; see arrow R2. This is an example of the shell according to an embodiment of the present invention. The act of rolling also turns the second rolling paper into a sleeve. First portion 4.1 extends 1 cm into body 2.1, and second portion 4.2 projects 1.5 cm from the body.

[0041] The body can be loaded, arrow F, with smokeable material A through said sleeve into body 2.1. Filling can occur by machine.

[0042] The smokeable material is filled up to the edge of distal end 2.5 of body 2.1. In this example body 2.1 is filled until 0.1-2 mm above the edge of distal end 2.5.

[0043] Second portion 4.2 is pinched by a worker with a first hand, and the body is cigarette is held by the worker with a second hand, whereafter the worker rotates the pinched part or the body around the longitudinal axis of the cigarette, such that helical twist closes the cigarette.

[0044] Figure 2 shows an alternative method for forming cigarette 1' to the method of Figure 1 for forming cigarette 1. While differences are discussed, same reference numbers refer to same features.

[0045] In the example of Figure 2 it is shown that first rolling material 2' can also be provided as a rectangular sheet prior to rolling, as can second rolling material 3.1'. These particularities do not disqualify the first rolling material and second rolling material for use according to the method of Figure 1.

[0046] It is also possible to just crimp second portion 4.2 that projects from body 2.1. One could even heat seal the second portion. It's also possible to create one or more folds OF by crimping the second portion. This is optional, the dotted line indicated by CF in Figure 2 represents this option.

[0047] Figure 3 shows an alternative method for forming cigarette 1'' to the method of Figure 2 for forming cigarette 1'. Same reference numbers refer to same features.

[0048] In Figure 3 it is shown that the second material can be provided as a liner for first material 2''. That is to say, the first material is supported on the second material, possibly also by glue.

[0049] Second material 3.1'' extends beyond distal end 2.5 of body 2.1 as defined by the first material. It is more pronounced in the example of Figure 3 that the body is filled to at least 0.5 mm above the distal edge of body so that applying a deformation does not affect the integrity of the first material. This distance is represented by reference number 100. While this feature is also present in Figures 1 and 2, these aren't provided with reference numeral 100 as this feature is optional for those particular examples.

[0050] Figure 4 shows yet another method for forming a cigarette 1''' according to an embodiment of the present invention. Same reference numbers refer to same features. In this example second material 3.1 is provided as an isosceles trapezoidal sheet glued G to third material 88 provided as smaller isosceles trapezoidal sheet which is roughly the same size and shape as first material 2 also

provided as a sheet. The second material is layered between the first and second material so that the second material projects from the first and second material at distal end 2.5 of the body as formed by the first material.

[0051] By having the second material layer sandwiched between these first and second material layers an additional sturdiness is obtained while also ensuring a stable burn when the cigarette is used. The manner of closing shown in Figure 4 can easily be replaced by any other method of closing.

[0052] While not shown herein, it is emphasized that the first material is also glued onto the second material along its length.

[0053] Embodiments of the present invention can include every combination of features that are disclosed herein independently from each other. Although the invention has been discussed in the foregoing with reference to an exemplary embodiment of the apparatus of the invention, the invention is not restricted to this particular embodiment which can be varied in many ways without departing from the invention. The discussed exemplary embodiment shall therefore not be used to construe the appended claims strictly in accordance therewith. On the contrary the embodiment is merely intended to explain the wording of the appended claims without intent to limit the claims to this exemplary embodiment. The scope of protection of the invention shall therefore be construed in accordance with the appended claims only, wherein a possible ambiguity in the wording of the claims shall be resolved using this exemplary embodiment. Variations and modifications of the present invention will be obvious to those skilled in the art and it is intended to cover in the appended claims all such modifications and equivalents. The entire disclosures of all references, applications, patents, and publications cited above are hereby incorporated by reference, including the priority document. Unless specifically stated as being "essential" above, none of the various components or the interrelationship thereof are essential to the operation of the invention. Rather, desirable results can be achieved by substituting various components and/or reconfiguration of their relationships with one another. The terms, "a", "an", "the", and "said" mean "one or more" unless context explicitly dictates otherwise. Note that in the specification and claims, "about" or "approximately" means within twenty percent (20%) of the numerical amount cited.

Claims

1. A cigarette comprising:

a first rolling material, such as a rolling paper, dried leaves or flower petals, defining a body with an inner volume, wherein the body comprises a support tip arranged inside of a proximal end of the body;
a smokeable material disposed within the body;

- a second rolling material plugged at a distal end of the body, the second rolling paper forming a sleeve of which a first portion extends within the body and of which a second portion projects from the body out from the distal end in a longitudinal direction of the body, and wherein the second portion comprises a physical deformation such that the sleeve is closed thereby.
2. The cigarette according to claim 1, wherein the second rolling material is more flexible than the first rolling material.
 3. The cigarette according to claim 1 or 2, wherein the smokeable material extends from the tip to the physical deformation, beyond the distal end of the body formed by the first rolling material.
 4. The cigarette according to any one of claims 1-3, wherein the physical deformation comprises a closed twist in the sleeve, wherein optionally the deformation is formed by pinching the second portion between two fingers and rotating the body with respect to the pinched portion around the longitudinal axis of the cigarette or vice versa.
 5. The cigarette according to claim 2 or any one of claims 3-4 as dependent on claim 2, wherein the second rolling material comprises an area density of about 8 to about 40 g/m², wherein the second rolling material is attached to the inner surface of the first rolling material such that the outer circumference of the sleeve and inner circumference of the body are the same.
 6. The cigarette according to any one of claims 1-5, wherein the second rolling material only extends between about 2 and about 0.5 cm into the body, such as between about 0.9 and 1.1 cm, or wherein the second rolling material extends along substantially the entire length of the body, such as at least 90% of the length of the body.
 7. The cigarette according to any one of claims 1-6, wherein the second rolling material only projects between about 2.5 and about 1.0 cm from the body, preferably between about 1.2 - 1.6 cm.
 8. The cigarette according to any one of claims 1-7, wherein the first rolling material, in its unrolled form, is shaped as an isosceles trapezoid or rectangle, and wherein the body is frustoconical.
 9. The cigarette according to claim 8, wherein the second rolling material, in its unrolled form, is shaped as an isosceles trapezoid or rectangle, and wherein preferably the shape of the second rolling material is an extension of the shape of the first rolling material.
- al.
10. The cigarette according to any one of claims 1-9, further comprising:
 - a third rolling material, wherein the second rolling material is layered between the third and first rolling material, and wherein the first and third rolling material are within about 0 to about 0.5 cm of each other's length, and wherein the length of the second rolling material preferably exceeds that of the first rolling material, and optionally also that of the third rolling material, by about 0.5 to about 2.5 cm.
 11. A cigarette shell comprising:
 - a first rolling material a body;
 - a filter tip arranged inside of a proximal end of the body;
 - a second rolling material forming a sleeve of which a first portion extends within the body and of which a second portion projects from the body out from a distal end thereof in a longitudinal direction of the body, wherein the second rolling material forms a sleeve of which a first portion extends within the body and of which a second portion projects from the body out from the distal end in a longitudinal direction of the body, and wherein the second portion projects about 1 to about 2.5 cm, from the body such that a physical deformation can be applied to the sleeve for closing it, wherein preferably the second rolling material is more flexible than the first rolling material.
 12. A method of making a cigarette comprising the steps of:
 - providing a shell according to claim 11;
 - loading the shell with a smokeable material; and
 - applying a physical deformation to the second portion where it projects from the body, such that the smokeable material is prevented from falling out of the shell at the distal end.
 13. The method according to claim 12, wherein the step of applying a physical deformation comprises pinching the second portion and rotating the pinched portion with respect to the body around the longitudinal axis of the cigarette, or vice versa, such that a closed twist is formed in the second portion;
 14. The method according to claim 12, wherein the step of applying a physical deformation to the second portion comprises crimping or folding the second portion.

15. A machine for creating cigarettes could comprise:

a base comprising an oscillator for shaking the machine;
a holder, designed for being assembled with the base, comprising a plurality of channels for holding a cigarette shell in each of channel of the plurality of channels;
a tray, with a plurality of dosing channels, designed for being assembled with the holder, and for holding a predefined amount of smokeable material in each dosing channel, wherein each dosing channel comprises a through hole for dispensing the smokeable material into a mutually different cigarette shell for forming the cigarettes, wherein:

- i) the tray is provided with a crimp tool for engaging the cigarettes in each of the channels simultaneously for providing a closing deformation thereto; or
- ii) a crimp tool is designed for being assembled with the holder, so as to be assembled with the holder after filling, for engaging the cigarettes in each of the channels simultaneously for providing a closing deformation thereto.

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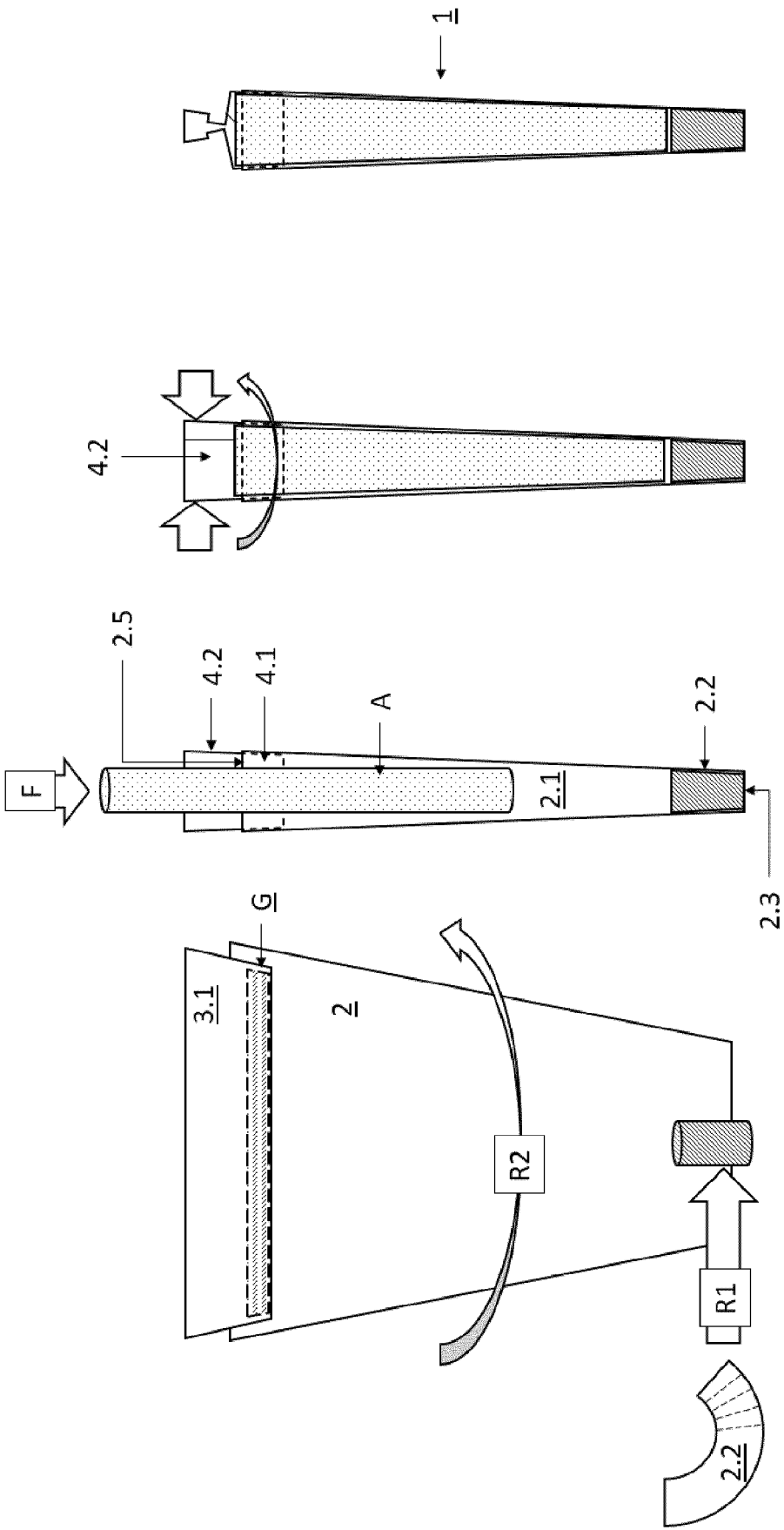


FIG. 1

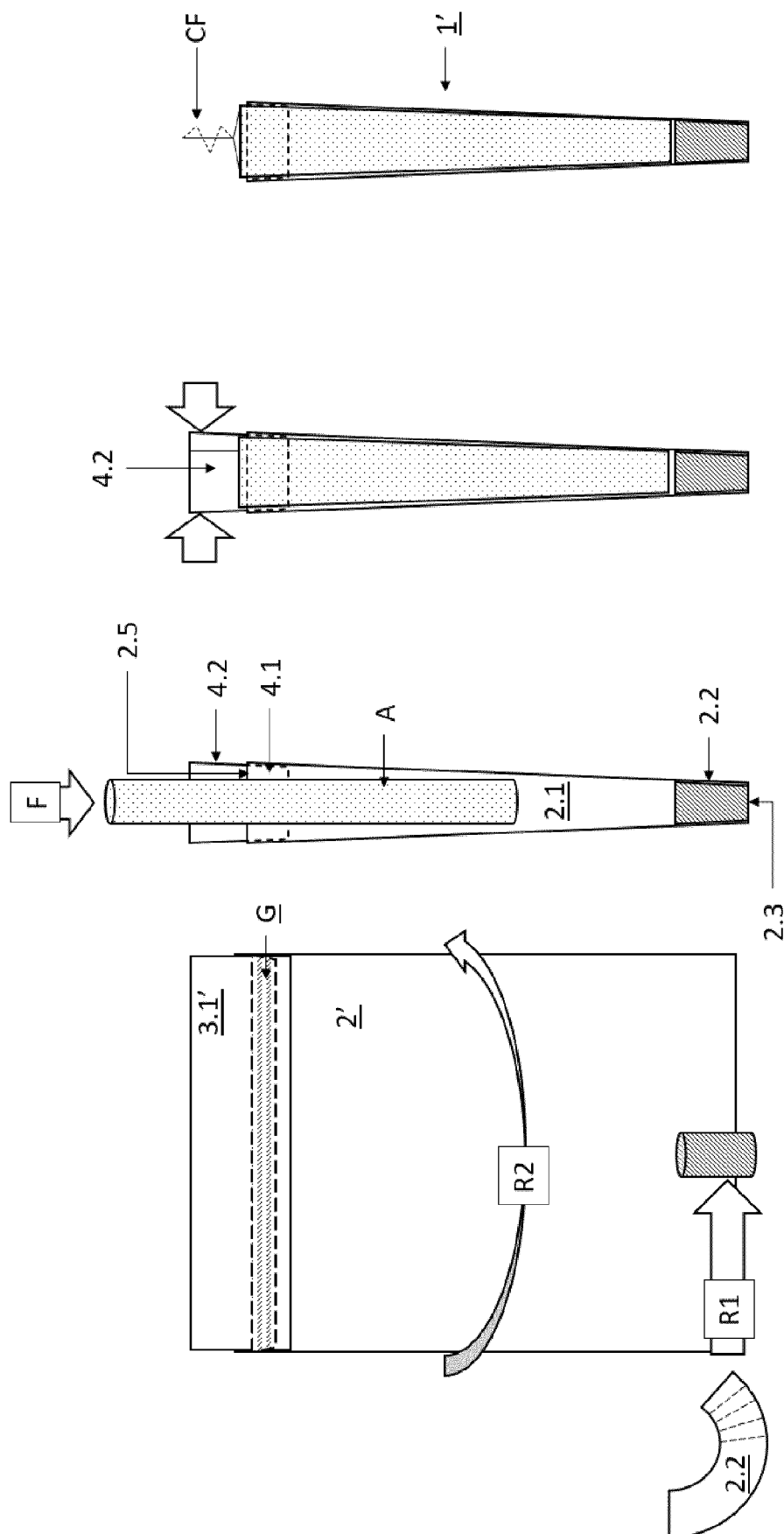


FIG. 2

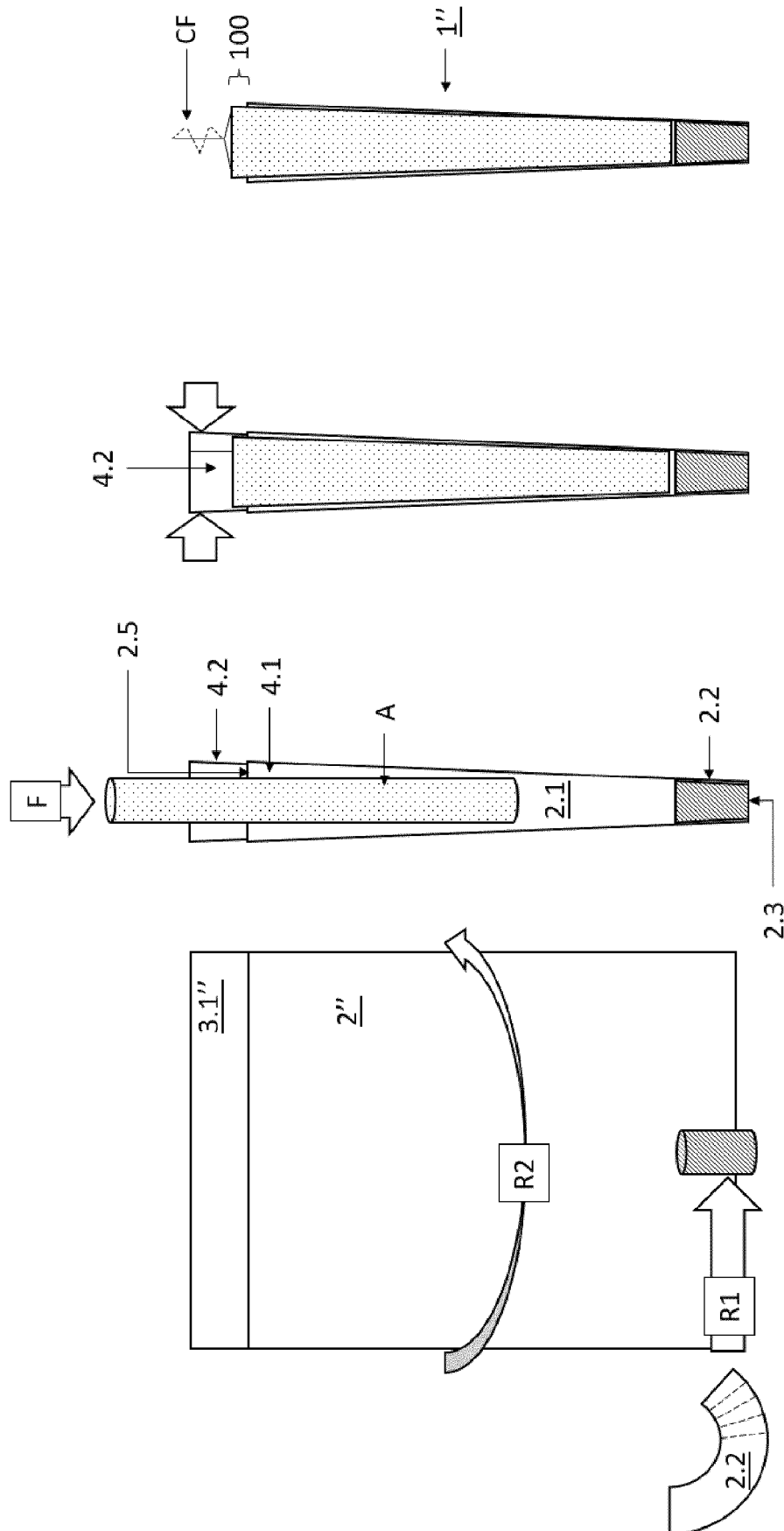


FIG. 3

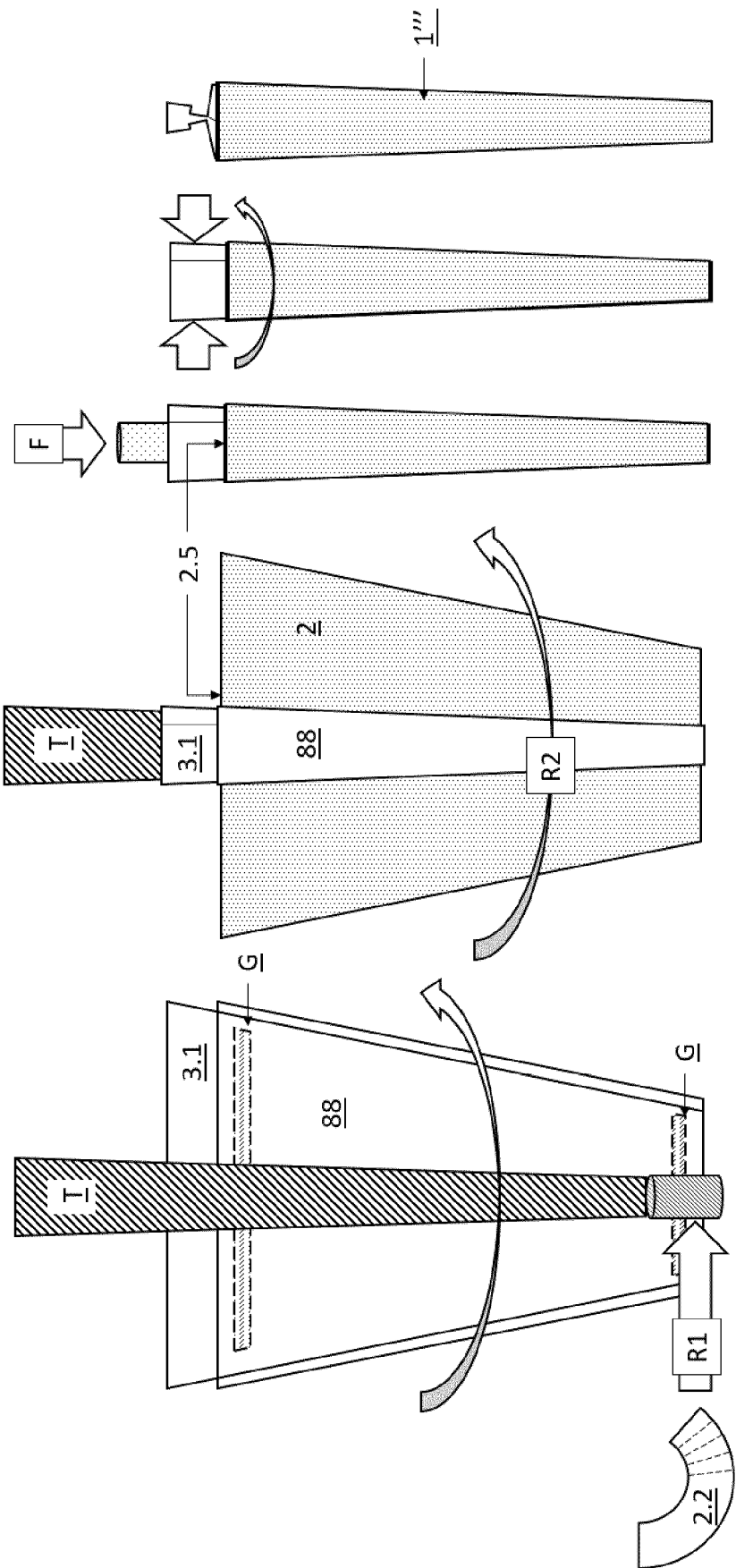


FIG. 4



EUROPEAN SEARCH REPORT

Application Number

EP 23 18 8867

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	Michelangeroll: "How to roll a Extra Long Joint - Double King Size: Intermediate Tutorial", 21 February 2016 (2016-02-21), XP93123324, Retrieved from the Internet: URL:https://www.youtube.com/watch?v=HdeRY36UepE [retrieved on 2024-01-24]	1,3,4,6,8,9	INV. A24D1/02 A24C5/46 A24C5/54 A24C5/02 ADD. A24C5/40 A24D1/04
A	* minutes: 0:50, 1:10-1:25, 3:10-3:20, 6:00, 6:30-6:40 *	10-14	
X	US 2016/088871 A1 (SINCLAIR JR DANIEL S [US] ET AL) 31 March 2016 (2016-03-31)	1,3-5,8	
A	* figures 10-12, 67-72 * * paragraphs [0130], [0136] - [0138], [0151], [0152] *	2	
X	DE 10 2014 015854 A1 (HOYER ANSELM [DE]) 28 April 2016 (2016-04-28) * figures 1, 2 * * paragraphs [0004], [0015], [0019] - [0024] *	1-4,8,9	TECHNICAL FIELDS SEARCHED (IPC) A24D A24C
X	Maryjuana: "Como apertar um cigarro com duas sedas de 1/4 (ou em "L")", 8 June 2012 (2012-06-08), XP093119740, Retrieved from the Internet: URL:https://www.youtube.com/watch?v=-diGR3ksmVg [retrieved on 2024-01-15] * minutes: 0:24-0:30, 1:13, 1:25-2, 2:30, 2:55 and 3:00. *	1,3,4,7-9,11-14	
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
Munich		27 June 2024	Schwarzer, Bernd
CATEGORY OF CITED DOCUMENTS			
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			
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 & : member of the same patent family, corresponding document			



EUROPEAN SEARCH REPORT

Application Number

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DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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A	WO 2023/022592 A1 (THE NEW WAYS B V [NL]) 23 February 2023 (2023-02-23) * figures 1, 2, 6, 7 * * page 8, line 11 - page 9, line 26 * * page 11, line 5 - line 12 * -----	1,3-5,8, 9,11-14	
			TECHNICAL FIELDS SEARCHED (IPC)
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
Munich		27 June 2024	Schwarzer, Bernd
CATEGORY OF CITED DOCUMENTS			
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			
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 & : member of the same patent family, corresponding document			

EPO FORM 1503 03.82 (P04C01)



Application Number

EP 23 18 8867

CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).

**LACK OF UNITY OF INVENTION
SHEET B**

Application Number

EP 23 18 8867

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-14

A cigarette comprising first and second rolling materials defining a cigarette shell, a support tip and smokeable material. A method of making such cigarette.

2. claim: 15

A machine for making cigarettes comprising an oscillating base, a holder for cigarette shells and a tray with dosing channels, designed for dispensing smokeable material into the cigarette shells. A crimping tool is configured to perform a closing deformation to the cigarette shells after filling.

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 23 18 8867

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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
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82