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(54) FILLING MATERIAL FOR AN ORAL POUCHED SMOKELESS PRODUCT AND ORAL POUCHED SMOKELESS PRODUCT MANUFACTURED THEREFROM

FÜLLMATERIAL FÜR EIN ORALES RAUCHFREIES PRODUKT IN BEUTELN UND DARAUS
HERGESTELLTE ORALE RAUCHFREIE PRODUKTE IN BEUTELN

MATÉRIAU DE REMPLISSAGE POUR UN PRODUIT ORAL SANS FUMÉE EN SACHET ET PRODUIT
ORAL SANS FUMÉE EN SACHET FABRIQUÉ À PARTIR DE MATÉRIAU

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Description

[0001] Consumption of smokeless tobacco-based products, like e.g. pouched smokeless tobacco products for oral consumption (e.g. snus or moist snuff), is common in societies. However, the use of tobacco material in such products limits the organoleptic properties of these products. The tobacco material commonly used in these products has a typical colour, texture, smell and taste which may not always be attractive to the consumer.

[0002] In order to address these issues, the use of bleached or whitened tobacco material has been proposed, wherein the tobacco material has been subjected to chemical treatment, heat treatment or combinations thereof to alter the colour appearance of the tobacco material towards a light-coloured appearance. However, bleaching or whitening of tobacco material is laborious and time consuming.

[0003] Consequently, there is a need for a tobacco-containing filling material for oral pouched smokeless products having a light-coloured appearance, while offering widespread opportunities to influence the organoleptic properties of the product.

[0004] US 2012/152265 A1 discloses a sugar-containing syrup derived from tobacco stalks and use thereof.

[0005] US 2013/276801 A1 discloses a tobacco product comprising two components, namely a tobacco material and a microcrystalline cellulose material, wherein the microcrystalline cellulose material is derived from a tobacco stalk material.

[0006] The present invention provides a filling material for use in an oral pouched smokeless product like e.g. snus or moist snuff, wherein the filling material comprises a total amount of tobacco material, characterized in that the total amount of tobacco material of the filling material consists of tobacco material derived from tobacco stalks, tobacco roots, tobacco flowers or combinations thereof, preferably derived from tobacco stalks, tobacco roots or combinations thereof. In other words, the filling material of the present invention lacks any tobacco material other than tobacco material derived from tobacco stalks, tobacco roots, tobacco flowers or combinations thereof. That is, the filling material of the present invention is void of any tobacco material derived from other parts of the tobacco plant like e.g. tobacco leaf or tobacco stem.

[0007] The use of tobacco material derived from tobacco stalks, tobacco roots, tobacco flowers or combinations thereof instead of tobacco material derived from parts of the tobacco plant that are usually used in manufacturing of snus or snuff, like e.g. tobacco material derived from tobacco leaf or stem, allows for the provision of light-coloured filling material without the need for additional bleaching or whitening of the tobacco material. The present invention makes use of the natural phenomenon that certain parts of the tobacco plant like stalks, roots and flower have a lighter appearance than other parts of the tobacco plant like leaf and stem, especially after curing and/or fermentation of tobacco material derived from said parts of the tobacco plant. Thus, light-coloured filling material for an oral pouched smokeless product comprising tobacco material are provided that are light-coloured while being free of any traces of bleaching or whitening agents and/or while saving efforts for additional bleaching or whitening of tobacco material or filling material.

[0008] In order to provide a filling material that has a desired nicotine content, the filling material preferably further comprises non-tobacco plant material that has been partially or fully coated with nicotine.

[0009] Thus, the present invention provides a filling material for an oral pouched smokeless product with unique organoleptic properties (like e.g. light-coloured appearance) which may differ substantially from common fillings while ensuring that the filling material encompasses nicotine in a pre-determined amount. Thereby, it is possible to provide a nicotine-containing filling material with a taste, smell, touch, sight and/or other organoleptic properties that cannot be achieved with common tobacco-based fillings. In particular, the present invention provides a filling material for an oral pouched smokeless product with a whitened or light-coloured appearance without the need to use bleached or whitened tobacco material.

[0010] The present invention provides a filling material for an oral pouched smokeless product. Oral pouched smokeless products are products for oral use which comprise a filling material which is encompassed in a pouch made of pouch material wherein the pouch material ensures that during consumption the particulate parts of the filling predominantly stay within the pouch while saliva- or water-soluble parts of the filling are at least in part allowed to pass the pouch material. Such oral pouched smokeless products are consumed by placing the pouched product into the oral cavity, most commonly between the lower gum and lip or upper gum and lip. By contact with the saliva, constituents of the filling elute from the pouch and are consumed by the consumer.

[0011] The filling material of the present invention comprises tobacco material, wherein said tobacco material is derived from tobacco stalks, tobacco roots, tobacco flowers or combinations thereof. As used herein, the term "tobacco material" denotes material derived from a part of any member of a plant of the genus *Nicotiana*. The tobacco material may be whole, shredded, threshed, cut, ground, cured, fermented, processed, pasteurized, reconstituted or otherwise treated. For the avoidance of doubt, liquid fractions or liquid extracts derived from a part of any member of a plant of the genus *Nicotiana*, and/or one or more components isolated therefrom, are not "tobacco material" for the purpose of the present invention. Preferably, the tobacco material used in the filling material of the invention is ground tobacco material. The tobacco material may also be in the form of finished products, including any smokeless tobacco compositions that are orally consumed. The tobacco material used herein encompasses tobacco material produced according to the well-

known technology e.g. used for production of tobacco material for common snus or moist snuff products.

[0012] The tobacco material used in the filling material of the invention, preferably, comprises or consists of tobacco material that has not been bleached or whitened.

[0013] Further, the tobacco material used in the filling material of the invention, optionally, comprises or consists of tobacco material that has been pasteurized. The filling material of the invention comprises tobacco material in a total amount or concentration of 0,1 to 15 weight-%, preferably in a concentration of 0,1 to 10 weight-%, more preferably in a concentration of 2 to 8 weight-%, wherein indications in weight-% are based on the dry weight of the total filling material.

[0014] For the purpose of the present invention, the term "dry weight" means the weight of the reference excluding the weight of water and also other substances that may evaporate from the reference during drying.

[0015] The filling material of the invention preferably further comprises further ingredients to form the filling material. The term "further ingredient", as used herein, refers to any substance other than tobacco material and (nicotine-coated) non-tobacco plant material. Such further ingredients preferably comprise one or more of stabilizers, humectants, plasticisers, thickeners, dyes, salts, flavours, gum base, flavour additives or any combination thereof. Exemplary embodiments of preferred further ingredients are NaCl, NH₄Cl, Na₂CO₃, propylene glycol, one or more flavours and/or combinations thereof.

[0016] The filling material of the invention preferably further comprises non-tobacco plant material. Said non-tobacco plant material is optionally present in the filling material of the invention in a concentration of 70 to 99 weight-%, preferably of 75 to 95 weight-%, more preferably of 80 to 90 weight-%, wherein indications in weight-% are based on the dry weight of the total filling material.

[0017] The optional non-tobacco plant material in the filling material according to the present invention is preferably present in the form of plant fibres, wherein the term "fibres" encompasses plant material that is in particulate form and which preferably but not necessarily has an average length that exceeds the average width of the particles of the plant material.

[0018] The non-tobacco plant material is derived from plants other than plants of the genus *Nicotiana*. The non-tobacco plant material may be derived from any part of such plants, e.g. leafs, stem, roots etc., or any combination of different parts of said plants. The non-tobacco plant material comprises or consists of plant material derived from one particular plant species or from a combination of different plant species, provided that none of these plant species represents a member of the genus *Nicotiana*.

[0019] The non-tobacco plant material preferably comprises or consists of fibres derived from natural sources. However, the fibres of non-tobacco plant material may be processed before use, such as washed, ground, cut, cured, aged, dried, fermented, chemically modified and/or otherwise.

[0020] Preferably, the non-tobacco plant material comprises or consists of wheat fibres, oat fibres, potato fibres, bamboo fibres, buckwheat fibres, barley fibres, microcrystalline cellulose and/or combinations thereof. More preferably, the non-tobacco plant material comprises or consists of wheat fibres; particularly preferably the non-tobacco plant material comprises or consists of gluten-free wheat fibres.

[0021] In a preferred embodiment, the non-tobacco plant material comprised in filling material of the invention comprises or consists of non-tobacco plant material that is, partially or fully, coated with nicotine. The nicotine content in the nicotine-coated non-tobacco plant material is preferably within the range of 0,1 to 10 weight-%, more preferably of 1 to 5 weight-%, even more preferably of 2,5 to 4,5 weight-%, particularly preferably of about 3,35 weight-%, wherein indications in weight-% are based on the dry weight of the nicotine-coated non-tobacco plant material.

[0022] The person skilled in the art is well aware of suitable means and methods to provide nicotine-coated non-tobacco plant material for use in the filling material of the present invention. Preferably, said nicotine-coated non-tobacco plant material is coated with nicotine using a liquid solution comprising nicotine. More preferably, the non-tobacco plant material is coated with nicotine using a liquid solution comprising nicotine and glycerol. More preferably, the non-tobacco plant material is coated with nicotine using a nicotine-in-glycerol solution. For the purpose of the present invention, the term "nicotine-in-glycerol solution" refers to a liquid solution wherein the combined content of nicotine and glycerol together make up at least 90 weight-% of the total weight of the nicotine-in-glycerol solution, preferably at least 95 weight-%, more preferably at least 99 weight-%. In the method described herein, the non-tobacco plant material may be coated with nicotine using a nicotine-in-glycerol solution wherein the nicotine is present in a concentration of 2 to 20 weight-%, preferably of 5 to 15 weight-%, more preferably of 10 weight-%, based on the total weight of the nicotine-in-glycerol solution.

[0023] It has surprisingly been found that coating of non-tobacco plant material with nicotine is particularly effective and/or sustained if said coating is performed using a nicotine-in-glycerol solution as defined above.

[0024] The person skilled in the art is well aware of methods suitable to coat non-tobacco plant material with nicotine using a nicotine-containing liquid solution. For example, the non-tobacco plant material can be coated with nicotine by applying the nicotine-containing liquid solution in a spray coating process or in a drum coating process.

[0025] The filling material of the present invention preferably has a water content of 25 to 55 weight-%, more preferably of 30 to 50 weight-%, even more preferably of 35 to 45 weight-%, based on the total weight of the filling material. As

used herein, the term "water content" means the total water content in the filling material of the invention as measured using a standardized method of water analysis, such as, Karl Fisher titration or gas chromatography (GC).

[0026] The filling material of the present invention can be manufactured using various methods. In an exemplary embodiment, the filling material of the present invention is manufactured using the following method comprising steps a) to c).

a) coating non-tobacco plant material with nicotine using a liquid solution comprising nicotine;

b) mixing tobacco material derived from tobacco stalks, tobacco roots, tobacco flowers or combinations thereof, the nicotine-coated non-tobacco plant material and optionally further ingredients and/or water to form the filling material; and

c) optionally mixing the product of step b) with further ingredients and/or water.

[0027] In step a) non-tobacco plant material is provided and coated with nicotine using a liquid solution comprising nicotine. The product of step a) is non-tobacco plant material coated with nicotine. Said nicotine-coated non-tobacco plant material is subjected to step b).

[0028] In step b), the nicotine-coated non-tobacco plant material is mixed with further ingredients, like e.g. salt (e.g. NaCl), and tobacco material derived from tobacco stalk, tobacco root, tobacco flower or combinations thereof and optionally uncoated non-tobacco plant material. Optionally, prior to mixing with the nicotine-coated non-tobacco plant material said tobacco material is subjected to pasteurization, i.e. to a heat treatment step well known in the art in the manufacturing of snus filling. However, such pasteurization is optional. In an embodiment, all further ingredients of the filling material may be mixed in one step and steps b) and c) may be performed simultaneously.

[0029] The filling material of the present invention preferably comprises or consists of:

- | | |
|--------------------|---|
| 0,1 to 15 weight-% | tobacco material derived from tobacco stalks, tobacco roots, tobacco flowers or combinations thereof, preferably tobacco material derived from tobacco stalks, tobacco roots or combinations thereof; |
| 70 to 99 weight-% | non-tobacco plant material, preferably nicotine-coated non-tobacco plant material; and |
| 0 to 30 weight-% | further ingredients; |

wherein above-mentioned indications in weight-% are based on dry weight of the total filling material;

wherein the optional nicotine-coated non-tobacco plant material preferably has a nicotine content within the range of 0,1 to 10 weight-% based on the dry weight of the nicotine-coated non-tobacco plant material;

and wherein the filling material has a water content of 25 to 55 weight-% based on the total weight of the filling material.

[0030] Even more preferably, the filling material of the present invention comprises or consists of:

- | | |
|---------------------|--|
| 2 to 6 weight-% | tobacco material derived from tobacco stalks, tobacco roots, tobacco flowers or combinations thereof, preferably derived from tobacco stalks, tobacco roots or combinations thereof; |
| 75 to 85 weight-% | non-tobacco plant material, preferably nicotine-coated non-tobacco plant material; |
| 3 to 9 weight-% | NaCl; |
| 4 to 10 weight-% | ammonium chloride (20%); |
| 0,3 to 1,2 weight-% | sodium carbonate; |
| 2 to 5 weight-% | propylene glycol; and |

optionally one or more flavours;

wherein above-mentioned indications in weight-% are based on dry weight of the total filling material;

wherein the optional nicotine-coated non-tobacco plant material has preferably a nicotine content within the range of 0,1 to 10 weight-% based on the dry weight of the nicotine-coated non-tobacco plant material;

and wherein the filling material has a water content of 25 to 55 weight-% based on the total weight of the filling material.

[0031] The present invention is also directed to an oral pouched smokeless product comprising a filling material of the present invention. The oral pouched smokeless product of the invention can be manufactured by dividing the filling material of the invention into individual portions (portioning) and filling of the individual portions of the filling material into separate pouches (packaging).

[0032] In the following, the present invention is illustrated by way of examples.

EXAMPLES:

Example 1: Preparation of nicotine-coated non-tobacco plant material

[0033] In this Example, the non-tobacco plant material is coated with nicotine using a liquid nicotine-in-glycerol solution, wherein the nicotine-in-glycerol solution is sprayed on the non-tobacco plant material in a fluidized bed process. Alternatively, the non-tobacco plant material can be coated with nicotine using a liquid nicotine-in-glycerol solution in a drum coating process.

a) 600g wheat fibres (WF 200 provided as VITACEL by J.Rettenmaier & Söhne GmbH & Co KG, DE) are spray coated with 350g nicotine-in-glycerol solution (10 weight-% nicotine in glycerol, provided by Siegfried Ltd, CH) in a fluidized bed process.

The desired amount of nicotine-in-glycerol solution was successfully coated onto the wheat fibres to give a product of approx. 910g of nicotine-coated wheat fibres with a nicotine content of approx. 3,8 weight-% based on the total weight of the nicotine-coated wheat fibres.

b) 600g wheat fibres (WF 200 provided as VITACEL by J.Rettenmaier & Söhne GmbH & Co KG, DE) are spray coated with 264g nicotine-in-glycerol solution (10 weight-% nicotine in glycerol, provided by Siegfried Ltd, CH) in a fluidized bed process.

The desired amount of nicotine-in-glycerol solution was successfully coated onto the wheat fibres to give a product of approx. 860g of nicotine-coated wheat fibres with a nicotine content of approx. 3,1 weight-% based on the total weight of the nicotine-coated wheat fibres.

c) 600g wheat fibres (WF 200 provided as VITACEL by J.Rettenmaier & Söhne GmbH & Co KG, DE) are spray coated with 450g nicotine-in-glycerol solution (10 weight-% nicotine in glycerol, provided by Siegfried Ltd, CH) in a fluidized bed process.

The desired amount of nicotine-in-glycerol solution was successfully coated onto the wheat fibres to give a product of approx. 1043g of nicotine-coated wheat fibres with a nicotine content of approx. 4,3 weight-% based on the total weight of the nicotine-coated wheat fibres.

Example 2: Manufacturing of a first filling material according to the invention for use in an oral pouched smokeless product

[0034] In an exemplary embodiment, a method is disclosed of manufacturing a filling material of the invention. Said method is based on mixing nicotine-coated non-tobacco plant material with further ingredients and tobacco material derived from tobacco stalk, tobacco root, tobacco flower or a combination thereof in order to form a filling material suitable for use in an oral pouched smokeless product.

[0035] An exemplary method for producing a batch of a filling material for use in an oral pouched smokeless product comprises the step of mixing the following ingredients:

135kg	nicotine-coated wheat fibres of Example 1 a), b) or c);
6,5kg	tobacco material (optionally pasteurized) derived from tobacco stalk, tobacco root, tobacco flower or a combination thereof, preferably non-bleached tobacco material;
78kg	water;
10,4kg	NaCl;
12,06kg	ammonium chloride (20%);
1,18kg	sodium carbonate;
5,6kg	propylene glycol; and

optionally flavour.

[0036] All ingredients are added in a single vessel and mixed. The resulting filling material may be partitioned and packaged into oral pouched smokeless products.

5 Example 3: Manufacturing of a second filling material according to the invention for use in an oral pouched smokeless product

[0037] In an exemplary embodiment, a method is disclosed of manufacturing a filling material of the invention. Said method is based on mixing tobacco material derived from tobacco stalk, tobacco root, tobacco flower or a combination thereof with further ingredients in order to form a tobacco filling material suitable for use in an oral pouched smokeless product.

[0038] An exemplary method for producing a batch of a filling material for use in an oral pouched smokeless product comprises the step of mixing the following ingredients:

15	135kg	tobacco material (optionally pasteurized) derived from tobacco stalk, tobacco root, tobacco flower or a combination thereof;
	118kg	water;
	13,75kg	NaCl;
20	5,98kg	ammonium chloride (20%);
	2,3kg	sodium carbonate;
	12,34kg	propylene glycol; and

optionally flavour.

25 **[0039]** All ingredients are added in a single vessel and mixed. The resulting filling material may be partitioned and packaged into oral pouched smokeless products.

Claims

- 30
1. A filling material for use in an oral pouched smokeless product, the filling material comprising tobacco material, **characterized in that** the total tobacco material content of the filling material consists of tobacco material derived from tobacco stalks, tobacco roots, tobacco flowers or combinations thereof, preferably derived from tobacco stalks, tobacco roots or combinations thereof, with the proviso that liquid fractions or liquid extracts derived from a part of any member of a plant of the genus *Nicotiana* and one or more components isolated therefrom do not represent tobacco material.
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 2. The filling material of claim 1, wherein the filling material is light-coloured.
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 3. The filling material according to anyone of the preceding claims, wherein the filling material comprises tobacco material in a concentration of 0,1 to 15 weight-%, preferably in a concentration of 0,1 to 10 weight-%, more preferably in a concentration of 2 to 8 weight-%, wherein indications in weight-% are based on the dry weight of the total filling material.
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 4. The filling material according to anyone of the preceding claims, wherein the tobacco material is non-bleached.
 5. The filling material according to anyone of the preceding claims, wherein the filling material further comprises non-tobacco plant material.
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 6. The filling material according to claim 5, wherein the filling material comprises non-tobacco plant material in a concentration of 70 to 99 weight-%, wherein the indications in weight-% are based on the dry weight of the total filling material.
 7. The filling material according to claims 5 or 6, wherein the non-tobacco plant material is coated with nicotine.
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 8. The filling material according to claim 7, wherein the nicotine-coated non-tobacco plant material has a nicotine content within the range of 0,1 to 10 weight-%, preferably of 1 to 5 weight-%, more preferably of 2,5 to 4,5 weight-%, wherein the indications in weight-% are based on the dry weight of the nicotine-coated non-tobacco plant material.

9. The filling material according to anyone of claims 5 to 8, wherein the non-tobacco plant material comprises or consists of fibres or particles from non-tobacco plants, preferably, the non-tobacco material comprises or consists of wheat fibres, oat fibres, potato fibres, bamboo fibres, buckwheat fibres, barley fibres, microcrystalline cellulose and/or combinations thereof.

10. The filling material according to anyone of the preceding claims, wherein the filling material comprises a water content of 25 to 55 weight-% based on the total weight of the filling material.

11. The filling material according to anyone of the preceding claims, the filling material containing further ingredients, wherein the further ingredients comprise stabilizers, humectants, plasticisers, thickeners, dyes, salts, flavours, gum base, flavour additives or any combination thereof, preferably comprise NaCl, NH₄Cl, Na₂CO₃, propylene glycol, optionally one or more flavours and/or combinations thereof.

12. The filling material according to anyone of the preceding claims, wherein the tobacco material is shredded, threshed, cut, ground, cured, fermented, processed, pasteurized or reconstituted.

13. The filling material according to anyone of the preceding claims, wherein the filling material comprises or consists of:

0,1 to 15 weight-%	tobacco material derived from tobacco stalks, tobacco roots, tobacco flowers or combinations thereof, preferably derived from tobacco stalks, tobacco roots or combinations thereof;
70 to 99 weight-%	non-tobacco plant material, preferably nicotine-coated non-tobacco plant material; and
0 to 30 weight-%	further ingredients;

wherein above-mentioned indications in weight-% are based on dry weight of the total filling material; and wherein the filling material has a water content of 25 to 55 weight-% based on the total weight of the filling material.

14. The filling material according to claim 13, wherein the filling material comprises or consists of:

2 to 6 weight-%	tobacco material derived from tobacco stalks, tobacco roots, tobacco flowers or combinations thereof, preferably derived from tobacco stalks, tobacco roots or combinations thereof;
75 to 85 weight-%	non-tobacco plant material, preferably nicotine-coated non-tobacco plant material;
3 to 9 weight-%	NaCl;
4 to 10 weight-%	ammonium chloride (20%);
0,3 to 1,2 weight-%	sodium carbonate;
2 to 5 weight-%	propylene glycol; and optionally one or more flavours;

wherein above-mentioned indications in weight-% are based on dry weight of the total filling material; and wherein the filling material has a water content of 25 to 55 weight-% based on the total weight of the filling material.

15. An oral pouched smokeless product comprising a filling material of one of claims 1 to 14.

Patentansprüche

1. Füllmaterial zur Verwendung in einem oralen rauchfreien Produkt in Beutelform, wobei das Füllmaterial Tabakmaterial umfasst, **dadurch gekennzeichnet, dass** der Tabakmaterialgesamtgehalt des Füllmaterials aus Tabakmaterial besteht, das von Tabakstängeln, Tabakwurzeln, Tabakblüten oder Kombinationen davon stammt, vorzugsweise von Tabakstängeln, Tabakwurzeln oder Kombinationen davon stammt, mit der Maßgabe, dass flüssige Fraktionen oder flüssige Extrakte, die von einem beliebigen Teil einer Pflanze der Gattung Nicotiana stammen, und eine oder mehrere daraus isolierte Komponenten kein Tabakmaterial darstellen.

2. Füllmaterial nach Anspruch 1, wobei das Füllmaterial eine helle Farbe aufweist.

3. Füllmaterial nach einem der vorangehenden Ansprüche, wobei das Füllmaterial Tabakmaterial in einer Konzentration

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von 0,1 bis 15 Gew.-%, vorzugsweise in einer Konzentration von 0,1 bis 10 Gew.-%, besonders vorzugsweise in einer Konzentration von 2 bis 8 Gew.-%, umfasst, wobei Angaben in Gew.-% auf das Trockengewicht des gesamten Füllmaterials bezogen sind.

- 5 **4.** Füllmaterial nach einem der vorangehenden Ansprüche, wobei das Tabakmaterial ungebleicht ist.
- 5.** Füllmaterial nach einem der vorangehenden Ansprüche, wobei das Füllmaterial ferner tabakfreies Pflanzenmaterial umfasst.
- 10 **6.** Füllmaterial nach Anspruch 5, wobei das Füllmaterial tabakfreies Pflanzenmaterial in einer Konzentration von 70 bis 99 Gew.-% umfasst, wobei die Angaben in Gew.-% auf das Trockengewicht des gesamten Füllmaterials bezogen sind.
- 7.** Füllmaterial nach Anspruch 5 oder 6, wobei das tabakfreie Pflanzenmaterial mit Nikotin beschichtet ist.
- 15 **8.** Füllmaterial nach Anspruch 7, wobei das nikotinbeschichtete tabakfreie Pflanzenmaterial einen Nikotingehalt im Bereich von 0,1 bis 10 Gew.-%, vorzugsweise von 1 bis 5 Gew.-%, besonders vorzugsweise von 2,5 bis 4,5 Gew.-%, aufweist, wobei die Angaben in Gew.-% auf das Trockengewicht des nikotinbeschichteten tabakfreien Pflanzenmaterials bezogen sind.
- 20 **9.** Füllmaterial nach einem der Ansprüche 5 bis 8, wobei das tabakfreie Pflanzenmaterial Fasern oder Partikel aus Nicht-Tabak-Pflanzen umfasst oder daraus besteht, wobei das tabakfreie Material vorzugsweise Weizenfasern, Haferfasern, Kartoffelfasern, Bambusfasern, Buchweizenfasern, Gerstenfasern, mikrokristalline Cellulose und/oder Kombinationen davon umfasst oder daraus besteht.
- 25 **10.** Füllmaterial nach einem der vorangehenden Ansprüche, wobei das Füllmaterial einen Wassergehalt von 25 bis 55 Gew.-%, bezogen auf das Gesamtgewicht des Füllmaterials, umfasst.
- 30 **11.** Füllmaterial nach einem der vorangehenden Ansprüche, wobei das Füllmaterial weitere Inhaltsstoffe enthält, wobei die weiteren Inhaltsstoffe Stabilisatoren, Feuchthaltemittel, Weichmacher, Verdickungsmittel, Farbstoffe, Salze, Aromen, Gummibasis, Geschmackszusätze oder eine Kombination davon umfassen, vorzugsweise NaCl, NH₄Cl, Na₂CO₃, Propylenglycol, gegebenenfalls ein oder mehrere Aromen und/oder Kombinationen davon umfassen.
- 35 **12.** Füllmaterial nach einem der vorangehenden Ansprüche, wobei das Tabakmaterial geschreddert, gedroschen, geschnitten, gemahlen, getrocknet, fermentiert, verarbeitet, pasteurisiert oder rekonstituiert ist.
- 13.** Füllmaterial nach einem der vorangehenden Ansprüche, wobei das Füllmaterial Folgendes umfasst oder aus Folgendem besteht:
- 40 0,1 bis 15 Gew.-% Tabakmaterial, das von Tabakstängeln, Tabakwurzeln, Tabakblüten oder Kombinationen davon stammt, vorzugsweise von Tabakstängeln, Tabakwurzeln oder Kombinationen davon stammt;
- 70 bis 99 Gew.-% tabakfreies Pflanzenmaterial, vorzugsweise nikotinbeschichtetes tabakfreies Pflanzenmaterial;
- % und
- 45 0 bis 30 Gew.-% weitere Inhaltsstoffe;
- %
- wobei die vorgenannten Angaben in Gew.-% auf das Trockengewicht des gesamten Füllmaterials bezogen sind und
- 50 wobei das Füllmaterial einen Wassergehalt von 25 bis 55 Gew.-%, bezogen auf das Gesamtgewicht des Füllmaterials, aufweist.
- 14.** Füllmaterial nach Anspruch 13, wobei das Füllmaterial Folgendes umfasst oder aus Folgendem besteht:
- 55 2 bis 6 Gew.-% Tabakmaterial, das von Tabakstängeln, Tabakwurzeln, Tabakblüten oder Kombinationen davon stammt, vorzugsweise von Tabakstängeln, Tabakwurzeln oder Kombinationen davon stammt;
- 75 bis 85 Gew.-% tabakfreies Pflanzenmaterial, vorzugsweise nikotinbeschichtetes tabakfreies Pflanzenmaterial;

(fortgesetzt)

- 3 bis 9 Gew.-% NaCl;
 4 bis 10 Gew.-% Ammoniumchlorid (20 %);
 5 %
 0,3 bis 1,2 Gew.-% Natriumcarbonat;
 2 bis 5 Gew.-% Propylenglycol und

gegebenenfalls ein oder mehrere Aromen;
 wobei die vorgenannten Angaben in Gew.-% auf das Trockengewicht des gesamten Füllmaterials bezogen sind und
 wobei das Füllmaterial einen Wassergehalt von 25 bis 55 Gew.-%, bezogen auf das Gesamtgewicht des Füllmaterials, aufweist.

15. Orales rauchfreies Produkt in Beutelform, umfassend ein Füllmaterial nach einem der Ansprüche 1 bis 14.

Revendications

1. Matériau de remplissage destiné à une utilisation dans un produit oral sans fumée en sachet, le matériau de remplissage comprenant un matériau de tabac, **caractérisé en ce que** la teneur totale en matériau de tabac du matériau de remplissage consiste en un matériau de tabac dérivé de tiges de tabac, de racines de tabac, de fleurs de tabac ou de combinaisons de celles-ci, de préférence dérivé de tiges de tabac, de racines de tabac ou de combinaisons de celles-ci, à la condition que des fractions liquides ou des extraits liquides dérivé(e)s d'une partie d'un élément quelconque d'une plante du genre Nicotiana et un ou plusieurs composants isolés de celle-ci ne représentent pas le matériau de tabac.
2. Matériau de remplissage selon la revendication 1, dans lequel le matériau de remplissage est de couleur claire.
3. Matériau de remplissage selon l'une quelconque des revendications précédentes, dans lequel le matériau de remplissage comprend le matériau de tabac dans une concentration de 0,1 à 15 % en poids, de préférence dans une concentration de 0,1 à 10 % en poids, plus préférablement dans une concentration de 2 à 8 % en poids, dans lequel les indications de % en poids sont basées sur le poids sec du du matériau de remplissage total.
4. Matériau de remplissage selon l'une quelconque des revendications précédentes, dans lequel le matériau de tabac n'est pas blanchi.
5. Matériau de remplissage selon l'une quelconque des revendications précédentes, dans lequel le matériau de remplissage comprend en outre un matériau végétal autre que le tabac.
6. Matériau de remplissage selon la revendication 5, dans lequel le matériau de remplissage comprend un matériau végétal autre que le tabac dans une concentration de 70 à 99 % en poids, dans lequel les indications de % en poids sont basées sur le poids sec du matériau de remplissage total.
7. Matériau de remplissage selon les revendications 5 ou 6, dans lequel le matériau végétal autre que le tabac est recouvert de nicotine.
8. Matériau de remplissage selon la revendication 7, dans lequel le matériau végétal autre que le tabac recouvert de nicotine a une teneur en nicotine comprise dans la plage de 0,1 à 10 % en poids, de préférence de 1 à 5 % en poids, plus préférablement de 2,5 à 4,5 % en poids, dans lequel les indications de % en poids sont basées sur le poids sec du matériau végétal autre que le tabac recouvert de nicotine.
9. Matériau de remplissage selon l'une quelconque des revendications 5 à 8, dans lequel le matériau végétal autre que le tabac comprend, ou consiste en, des fibres ou particules de plantes autres que le tabac, de préférence, le matériau autre que le tabac comprend, ou consiste en, des fibres de blé, des fibres d'avoine, des fibres de pomme de terre, des fibres de bambou, des fibres de blé noir, des fibres d'orge, de la cellulose microcristalline et/ou des

combinaisons de celles-ci.

10. Matériau de remplissage selon l'une quelconque des revendications précédentes, dans lequel le matériau de remplissage comprend une teneur en eau de 25 à 55 % en poids sur la base du poids total du matériau de remplissage.

11. Matériau de remplissage selon l'une quelconque des revendications précédentes, le matériau de remplissage contenant d'autres ingrédients, dans lequel les autres ingrédients comprennent des stabilisants, des humectants, des plastifiants, des épaississants, des colorants, des sels, des arômes, une base de gomme, des additifs aromatiques ou une combinaison quelconque de ceux-ci, de préférence comprennent du NaCl, du NH_4Cl , du Na_2CO_3 , du propylène glycol, en option un ou plusieurs arômes et/ou des combinaisons de ceux-ci.

12. Matériau de remplissage selon l'une quelconque des revendications précédentes, dans lequel le matériau de tabac est défibré, battu, haché, râpé, séché, fermenté, traité, pasteurisé ou reconstitué.

13. Matériau de remplissage selon l'une quelconque des revendications précédentes, dans lequel le matériau de remplissage comprend ou consiste en :

0,1 à 15 % en poids de matériau de tabac dérivé de tiges de tabac, de racines de tabac, de fleurs de tabac ou de combinaisons de celles-ci, de préférence dérivé de tiges de tabac, de racines de tabac ou de combinaisons de celles-ci ;

70 à 99 % en poids de matériau végétal autre que le tabac, de préférence de matériau végétal autre que le tabac recouvert de nicotine ; et

0 à 30 % en poids d'autres ingrédients ;

dans lequel les indications susmentionnées de % en poids sont basées sur le poids sec du matériau de remplissage total ;

et dans lequel le matériau de remplissage a une teneur en eau de 25 à 55 % en poids sur la base du poids total du matériau de remplissage.

14. Matériau de remplissage selon la revendication 13, dans lequel le matériau de remplissage comprend ou consiste en :

2 à 6 % en poids de matériau de tabac dérivé de tiges de tabac, de racines de tabac, de fleurs de tabac ou de combinaisons de celles-ci, de préférence dérivé de tiges de tabac, de racines de tabac ou de combinaisons de celles-ci ;

75 à 85 % en poids de matériau végétal autre que le tabac, de préférence de matériau végétal autre que le tabac recouvert de nicotine ;

3 à 9 % en poids de NaCl ;

4 à 10 % en poids de chlorure d'ammonium (20 %) ;

0,3 à 1,2 % en poids de carbonate de sodium ;

2 à 5 % en poids de propylène glycol ; et

en option d'un ou plusieurs arômes ;

dans lequel les indications susmentionnées de % en poids sont basées sur le poids sec du matériau de remplissage total ;

et dans lequel le matériau de remplissage a une teneur en eau de 25 à 55 % en poids sur la base du poids total du matériau de remplissage.

15. Produit oral sans fumée en sachet comprenant un matériau de remplissage selon l'une quelconque des revendications 1 à 4.

REFERENCES CITED IN THE DESCRIPTION

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