Patent claims

~~1. A method for shaping and sizing cellulosic plant material wherein a non-tobacco material or a material consisting to a substantial extent of a non-tobacco material, that comprises, particularly consists of small parts smaller than 1 mm, is fed to an extrusion process, wherein the extrusion process includes compressing by means of an increase in pressure and temperature to bind the small parts to larger parts of a cellulosic plant material fed to the extrusion process, and mechanically processing the material at a shearing gap outlet of an extruder (1).~~

1. A use of an extrusion process which includes compressing by means of an increase in pressure and temperature and mechanically processing the material at a shearing gap outlet of an extruder, for treating cellulosic plant material in order to shape and size the plant material, wherein the plant material comprises cut tobacco and a non-tobacco material.

2. The use ~~method~~ according to claim 1, wherein instantaneous-decompression drying is performed at the outlet of the extruder ~~(1)~~.

3. The use ~~method~~ according to claim 1 or 2, wherein additional and/or external binders are not added to the plant material in order to bind small parts of plant material to each other or to larger parts.

4. The use ~~method~~ according to any one of claims 1 to 3, wherein the extrusion process is embodied substantially in one stage.

5. The use ~~method~~ according to any one of claims 1 to 4, wherein the extrusion process is performed in the absence of oxygen.

6. The use ~~method~~ according to any one of claims 1 to 5, wherein the extrusion process is embodied to be sterilising and is in particular performed on the plant material at sterilising temperatures at at least one processing point.

7. The use ~~method~~ according to any one of claims 1 to 6, wherein the material is restructured by specialised extrusions with integrated conditioning, wherein the material is in particular set to a predetermined moisture.

~~8. The method according to any one of claims 1 to 7, wherein formulas of texturising and flavourant plant materials are processed.~~

~~9. The method according to any one of claims 1 to 8, wherein one or more of the following materials is/are processed:~~

- texturising materials such as fractions of cereals, in particular wheat, maize, oat and soya bran; wheat fibre meal, pea fibre meal; oat flakes, barley flakes and fractions of natural stimulant plants such as tea stem particles which exhibit a high fibrous content (cellulose);
- flavourant materials such as food starches or leaf fractions;
- herb and/or spice fractions such as clove waste and hops.

108. The use method according to any one of claims 1 to 97, wherein the cellulosic plant material consists of a non-tobacco material to more than 10%, specifically more than 30%, in particular more than 50%.

11. The method according to any one of claims 1 to 10, wherein the cellulosic plant material primarily comprises a coarse material which in particular exhibits a particle size of more than 2 mm.

129. The use method according to any one of claims 1 to 118, which is performed without adding structuring materials.

1310. The use method according to any one of claims 1 to 129, wherein the plant material to be processed is exposed to an increase in temperature which results from supplying external heat and/or generating mechanical pressure.

1411. The use method according to any one of claims 1 to 1310, wherein the material to be processed is a pre-conditioned material.

1512. The method according to any one of claims 1 to 1411, wherein the product which is created by processing the plant material to be processed is an irregularly shaped material, in particular a fibrous material.

16. The use of an extrusion process which includes compressing by means of an increase in pressure and temperature and mechanically processing the material at a shearing gap outlet of an extruder (1), for treating cellulosic plant material in order to shape and size the plant material, wherein a non-tobacco material or a material consisting to a substantial extent of a non-tobacco material, that comprises, particularly consists of small parts smaller than 1 mm, is fed to the extrusion process, so as to bind the small parts to larger parts of a cellulosic plant material fed to the extrusion process.

~~17. The use in accordance with claim 16, comprising the method features which are cited in claims 2 to 15.~~

13. The use according to any one of claims 1 to 12, wherein the non-tobacco material is a clove material.

~~18~~14. The use of a filling screw extruder ~~(1)~~ comprising a shearing gap outlet for treating cellulosic plant material in order to shape and size the plant material, wherein the plant material comprises cut tobacco and a non-tobacco material ~~or a material consisting to a substantial extent of a non-tobacco material, that comprises, particularly consists of small parts smaller than 1 mm, is fed to the extruder, so as to bind the small parts to larger parts of a cellulosic plant material fed to the extrusion process~~.