



(11)

EP 3 566 591 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
13.11.2019 Bulletin 2019/46

(51) Int Cl.:
A24D 3/04 (2006.01) **A24D 3/06** (2006.01)
A24F 47/00 (2006.01)

(21) Application number: **18178812.6**

(22) Date of filing: **20.06.2018**

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

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(30) Priority: **12.05.2018 CN 201820716879 U**

(54) **PRODUCT FOR BAKING AND ATOMIZING**

(57) The present invention discloses a product for baking and atomizing, characterized by comprising a baking and atomizing segment and a filter tip segment which are wrapped by common paper, wherein a hollowed segment wrapped by the common paper is disposed between the baking and atomizing segment and the filter tip segment, the baking and atomizing segment is filled with plant fiber adsorbing an atomized object, the filter tip segment is filled with PLA, and a total length of the filter tip segment and the hollowed segment is larger than 30mm. The product for baking and atomizing has the advantages of low cost and good environmental protection.

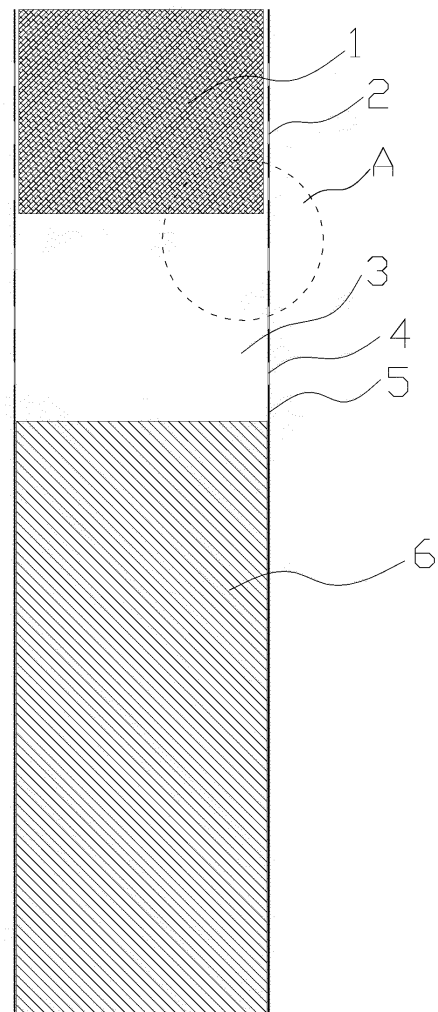


Fig. 1

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Description

Technical Field

[0001] The present invention relates to the field of electronic atomization, and in particular to a product for baking and atomizing with low cost and good environmental protection.

Related Art

[0002] With the rising of anti-smoking campaigns at home and abroad, as well as the gradually expanded scope of smoking bans in public places at home and abroad, the research and development of heat not burning (HNB) tobacco products have become one of the research hotspots of tobacco companies in many countries in the world. The so-called HNB tobacco products refer to the tobacco products "of generating smoke by heating tobacco shreds or tobacco extract", which avoids high-temperature pyrolysis of tobacco combustion, thereby greatly reducing the amount of release of harmful components in mainstream smoke. Meanwhile, because the tobacco shreds are not burned, the environmental smoke is greatly reduced. However, the tobacco shreds are used in the existing products used for baking and atomizing, and paper used for wrapping is also the paper for cigarettes, is special paper and has the requirements of good combustibility, high tensile strength, grey white color after combustion, adhesive force, and the like, as a result, the price thereof is high. Meanwhile, the material used in a filter tip is cellulose acetate. Such material can effectively reduce the sucked smoke and tar during smoking and the suspended particles generated during combustion, but it is not easy to degrade and has poor environmental protection.

SUMMARY

[0003] An objective of the present invention is to provide a product for baking and atomizing which has low cost and good environmental protection.

[0004] The present invention is implemented by the following technical measures, a product for baking and atomizing comprises a baking and atomizing segment and a filter tip segment which are wrapped by common paper, wherein a hollowed segment wrapped by the common paper is disposed between the baking and atomizing segment and the filter tip segment, the baking and atomizing segment is filled with plant fiber adsorbing an atomized object, the filter tip segment is filled with polylactic acid (PLA), and a total length of the filter tip segment and the hollowed segment is larger than 30mm.

[0005] As a preferred embodiment, the common paper of the hollowed segment is provided with a plurality of first capillary pores.

[0006] As a preferred embodiment, the common paper of the filter tip segment is provided with a plurality of sec-

ond capillary pores.

[0007] As a preferred embodiment, the first capillary pores are away from the end of the filter tip segment by 2mm-3mm, a degree of aeration of the first capillary pores is 100CU-600CU, the first capillary pores are in two rows, and a length of the hollowed segment is 5mm-35mm.

[0008] As a preferred embodiment, the baking and atomizing segment is filled with paper adsorbing the atomized object.

10 [0009] As a preferred embodiment, the plant fiber in the baking and atomizing segment is filiform, granular or flaky.

[0010] As a preferred embodiment, a length of the filter tip segment is 5mm-25mm, and a suction resistance of the filter tip segment is 2000Pa-5000Pa.

15 [0011] The present invention is a HNB product for baking, requires no use of tobacco shreds, and only requires to use harmless plant fiber as an adsorbate for atomized liquid. Therefore, the present invention has a low cost without harmful components in the tobacco shreds. Because of no need of combustion, the product for baking and atomizing only needs the common paper as a wrap-
page, and is thus low in cost. The filter tip segment of the product is filled with the PLA, which is formed by fermenting corn, cassava and other plants into lactic acid by microorganisms and then polymerizing. The PLA can be naturally degraded into water and carbon dioxide by only 6 to 12 months. The PLA is safer, lower-carbon, and environment-friendly compared with traditional cellulose acetate materials.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012]

Fig. 1 is a sectional view of an embodiment of the present invention.

Fig. 2 is an enlarged view of a part A of Fig. 1.

DETAILED DESCRIPTION

[0013] The present invention is further explained in detail in combination with the embodiments and in accordance with the accompanying drawings.

45 [0014] A product for baking and atomizing, referring to Figs. 1 and 2, comprises a baking and atomizing segment 6 and a filter tip segment 1 which are wrapped by common paper 5, wherein a hollowed segment 3 wrapped by the common paper 5 is disposed between the baking and atomizing segment 6 and the filter tip segment 1, the baking and atomizing segment 6 is filled with plant fiber adsorbing an atomized object, the filter tip segment 1 is filled with PLA, and a total length of the filter tip segment 1 and the hollowed segment 3 is larger than 30mm.

55 [0015] Since the present invention is a HNB product for baking, requires no use of tobacco shreds, and only requires the use of harmless plant fibers as an adsorbate

for atomized liquid. Therefore, the present invention has a low cost without harmful components in the tobacco shreds. Because of no need of combustion, the product for baking and atomizing only needs the common paper as a wrappage, and is thus low in cost. The filter tip segment 1 of the product is filled with the PLA, which is formed by fermenting corn, cassava and other plants into lactic acid by microorganisms and then polymerizing. The PLA can be naturally degraded into water and carbon dioxide by only 6 to 12 months. The PLA is safer, lower-carbon, and environment-friendly compared with traditional cellulose acetate materials.

[0016] According to the product for baking and atomizing of the present invention, referring to Fig. 1 to Fig. 2, based on the foregoing technical solution, specifically, the common paper 5 of the hollowed segment 3 is provided with a plurality of first capillary pores 4. Since the plurality of first capillary pores 4 is disposed in the hollowed segment 3, the cold air in the hollowed segment 3 originally is discharged from the first capillary holes 4 while the volatile substances are stored in the hollowed segment 3, so as to avoid the discomfort caused by suction of the cold air when the smoking is started. Due to the small aperture of the first capillary pores 4, it is ensured that the gas flow can be formed only under a certain pressure difference. The plurality of first capillary pores 4 is disposed in the hollowed segment 3, and during the suction, the cold air from the outside can be sucked to cool the sucked high-temperature smoke, and the high temperature smoke is prevented from burning the respiratory mucosa.

[0017] According to the product for baking and atomizing of the present invention, referring to Fig. 1 to Fig. 2, based on the foregoing technical solution, specifically, the filter tip segment 1 is provided with a plurality of second capillary pores 2. By using the second capillary pores 2 in the filter tip segment 1, the smoke is further cooled, and the comfort level of the smoke entering an oral cavity is ensured. In order to guarantee the full gas suction of the second capillary pores 2 of the filter tip segment 1, the diameter of the first capillary pores 4 is set to be smaller than or equal to the diameter of the second capillary pores 2.

[0018] According to the product for baking and atomizing of the present invention, referring to Fig. 1 to Fig. 2, based on the foregoing technical solution, specifically, the first capillary pores are away from the end of the filter tip segment by 2mm-3mm, a degree of aeration of the first capillary pores 4 is 100CU-600CU, the first capillary pores 4 are in two rows, and a length of the hollowed segment 3 is 5mm-35mm.

[0019] According to the product for baking and atomizing of the present invention, referring to Fig. 1 to Fig. 2, based on the foregoing technical solution, specifically, the baking and atomizing segment 6 is filled with paper adsorbing the atomized object. The baking and atomizing effects may be achieved by using the common paper to adsorb the atomized object. Therefore, the raw materials

are wide in source and low in cost. Of course, in other embodiments, the plant fiber harmless to a human body may also be used.

[0020] According to the product for baking and atomizing of the present invention, referring to Fig. 1 to Fig. 2, based on the foregoing technical solution, specifically, the plant fiber in the baking and atomizing segment 6 is filiform, granular or flaky.

[0021] According to the product for baking and atomizing of the present invention, referring to Fig. 1 to Fig. 2, based on the foregoing technical solution, specifically, a length of the filter tip segment 1 is 5mm-25mm, and a suction resistance of the filter tip segment is 2000Pa-5000Pa.

[0022] The foregoing elaborates the product for baking and atomizing according to the present invention and is intended to help to understand the present invention. However, the embodiments of the present invention are not limited to the above embodiments, and any changes, modifications, substitutions, combinations and simplifications made without departing from the principle of the present invention should be equivalent replacement modes and are included within a protective scope of the present invention.

Claims

1. A product for baking and atomizing, **characterized by** comprising a baking and atomizing segment and a filter tip segment which are wrapped by common paper, wherein a hollowed segment wrapped by the common paper is disposed between the baking and atomizing segment and the filter tip segment, the baking and atomizing segment is filled with plant fiber adsorbing an atomized object, the filter tip segment is filled with PLA, and a total length of the filter tip segment and the hollowed segment is larger than 30mm.
2. The product for baking and atomizing according to claim 1, **characterized in that** the common paper of the hollowed segment is provided with a plurality of first capillary pores.
3. The product for baking and atomizing according to claim 2, **characterized in that** the common paper of the filter tip segment is provided with a plurality of second capillary pores.
4. The product for baking and atomizing according to claim 2, **characterized in that** the first capillary pores are away from the end of the filter tip segment by 2mm-3mm, a degree of aeration of the first capillary pores is 100CU-600CU, the first capillary pores are in two rows, and a length of the hollowed segment is 5mm-35mm.

5. The product for baking and atomizing according to claim 1 or 2, **characterized in that** the baking and atomizing segment is filled with paper adsorbing the atomized object.

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6. The product for baking and atomizing according to claim 1 or 2, **characterized in that** the plant fiber in the baking and atomizing segment is filiform, granular or flaky.

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7. The product for baking and atomizing according to claim 1 or 2, **characterized in that** a length of the filter tip segment is 5mm-25mm, and a suction resistance of the filter tip segment is 2000Pa-5000Pa.

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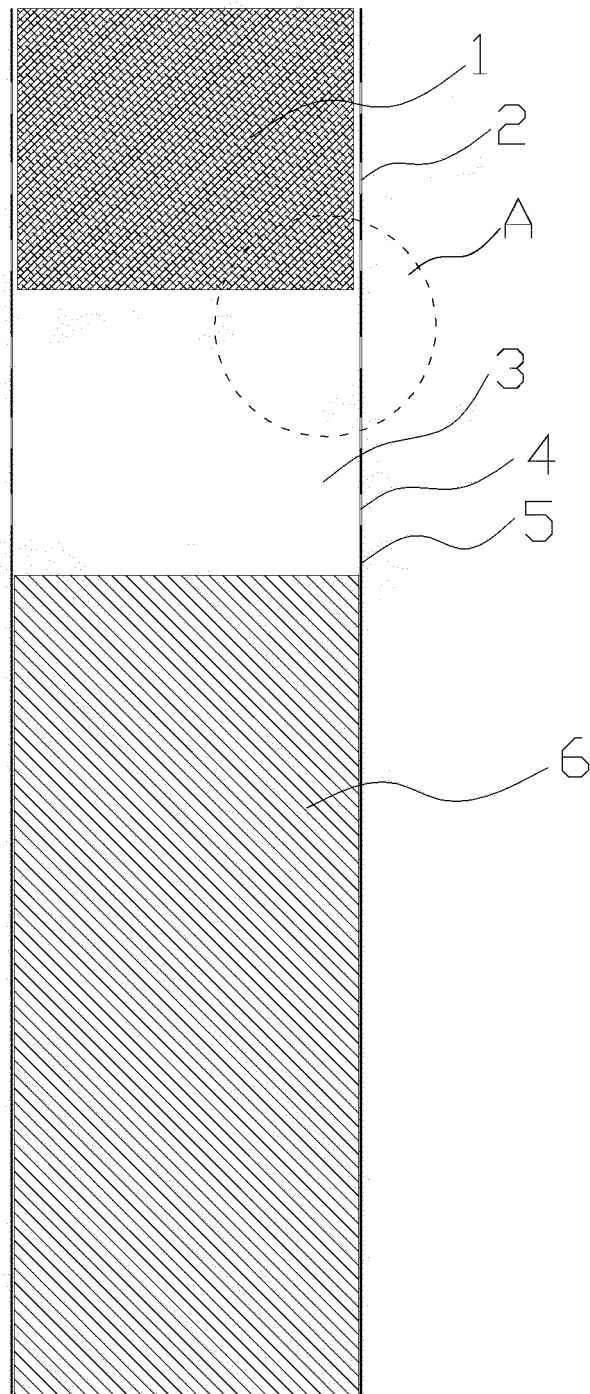


Fig. 1

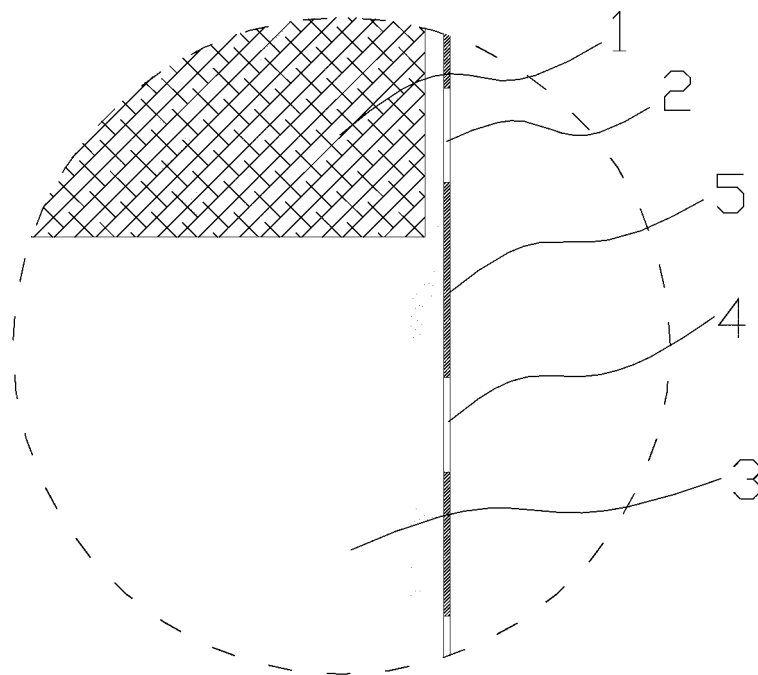


Fig. 2



EUROPEAN SEARCH REPORT

Application Number
EP 18 17 8812

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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 4 February 2019	Examiner Schwertfeger, C
CATEGORY OF CITED DOCUMENTS		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	
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**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.
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