



(11)

**EP 4 527 214 A1**

(12)

**EUROPEAN PATENT APPLICATION**  
published in accordance with Art. 153(4) EPC

(43) Date of publication:  
**26.03.2025 Bulletin 2025/13**

(51) International Patent Classification (IPC):  
**A24B 15/28** <sup>(2006.01)</sup> **A24B 15/30** <sup>(2006.01)</sup>

(21) Application number: **24748241.7**

(86) International application number:  
**PCT/KR2024/007930**

(22) Date of filing: **11.06.2024**

(87) International publication number:  
**WO 2025/033669 (13.02.2025 Gazette 2025/07)**

(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 ME MK MT NL  
NO PL PT RO RS SE SI SK SM TR**  
Designated Extension States:  
**BA**  
Designated Validation States:  
**GE KH MA MD TN**

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(30) Priority: **07.08.2023 KR 20230102769**

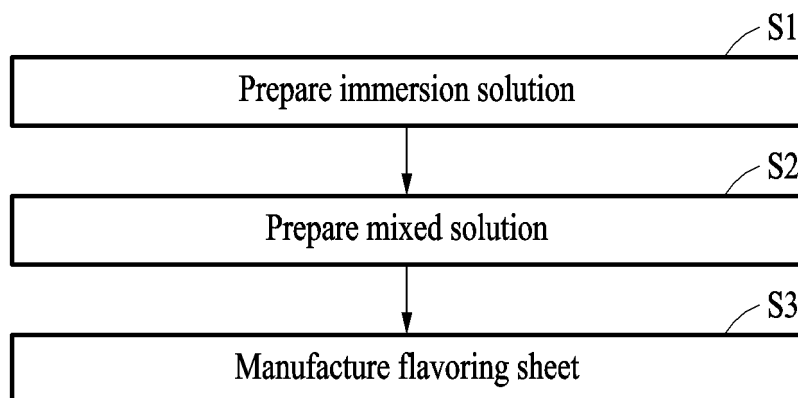
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(54) **FLAVOR SHEET FOR AEROSOL-GENERATING ARTICLE AND METHOD FOR PRODUCING SAME**

(57) The present disclosure relates to a method of manufacturing a flavoring sheet for an aerosol generating article, the method including step S1 of preparing an immersion solution by immersing a natural flavoring

raw material in a plasticizer; step S2 of preparing a mixed solution by mixing hydrocolloid with the immersion solution; and step S3 of manufacturing a sheet by casting and drying the mixed solution.



**FIG. 1**

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**Description****TECHNICAL FIELD**

5   **[0001]** The present disclosure relates to a flavoring sheet for an aerosol generating article and a method of manufacturing the same.

**BACKGROUND ART**

10   **[0002]** To meet user preferences, aerosol generating articles are flavored in various ways. A representative example of a flavoring treatment method may be adding (e.g., spraying) a flavoring liquid directly to an aerosol generating material such as cut tobacco or a filter plug (Korean Laid-open Patent Publication No. 2010-0116791).

15   **[0003]** However, a flavoring agent has volatilizing properties, and thus, there is a problem in that a taste of a cigarette continues to deteriorate as the flavoring agent is lost during the distribution and consumption period of the aerosol generating article.

20   **[0004]** Meanwhile, naturally derived flavoring agents are more natural and have better flavors than flavoring agents made from a combination of chemical flavoring substances. Accordingly, users who like flavors tend to prefer the natural flavoring agents more. The naturally derived flavoring agents are extracted from natural products through methods such as reduced pressure steam distillation, solvent extraction, and the like and then applied to aerosol generating articles. However, the applying of the naturally derived flavoring agents to the aerosol generating articles by this method is a complicated process, the extraction method includes a concentration step, etc., and therefore, the flavor may change through a separate extraction process.

**DISCLOSURE OF THE INVENTION****TECHNICAL GOALS**

25   **[0005]** In order to solve the above problems, the present disclosure provides a method of manufacturing a flavoring sheet for an aerosol generating article that is not difficult to process, is capable of produce a flavor close to a natural flavor, and may improve flavor retention and sustainability.

30   **[0006]** However, goals to be achieved are not limited to those described above, and other goals not mentioned above are clearly understood by one of ordinary skill in the art from the following description.

**TECHNICAL SOLUTIONS**

35   **[0007]** According to an embodiment of the present disclosure, there is provided a method of manufacturing a flavoring sheet for an aerosol generating article, the method including step S1 of preparing an immersion solution by immersing a natural flavoring raw material in a plasticizer; step S2 of preparing a mixed solution by mixing hydrocolloid with the immersion solution; and step S3 of manufacturing a sheet by casting and drying the mixed solution.

40   **[0008]** According to another embodiment of the present disclosure, there is provided a flavoring sheet for an aerosol generating article manufactured by the method according to an embodiment of the present disclosure, the flavoring sheet including a natural flavoring raw material, a plasticizer, and hydrocolloid, wherein the natural flavoring raw material is in a powder form.

**EFFECTS OF THE INVENTION**

45   **[0009]** When the method of manufacturing the flavoring sheet for the aerosol generating article of the present disclosure is used, the process may be simplified by directly manufacturing a sheet without a separate step for extracting a flavor, a flavoring agent may be prepared in a more economical method because expensive raw materials required for flavor extraction are not used, and a flavoring sheet may be easily manufactured with excellent ease of preparation of the mixed solution.

50   **[0010]** The flavoring sheet for the aerosol generating article manufactured by the manufacturing method of the present disclosure does not go through a process of concentrating through heating when extracting the flavor. Therefore, a flavor close to a natural flavor may be obtained and flavor retention and sustainability are excellent.

55   **[0011]** It should be understood that the effects of the present disclosure are not limited to the above-described effects, but are construed as including all effects that may be inferred from the configurations and features described in the following description or claims of the present disclosure.

## BRIEF DESCRIPTION OF DRAWING

**[0012]** FIG. 1 is a flowchart of a method of manufacturing a flavoring sheet according to an embodiment of the present disclosure.

## BEST MODE FOR CARRYING OUT THE INVENTION

**[0013]** Hereinafter, embodiments will be described in detail with reference to the accompanying drawing. However, various alterations and modifications may be made to the embodiments and thus, the scope of the disclosure is not limited or restricted to the embodiments. The equivalents should be understood to include all changes, equivalents, and replacements within the idea and the technical scope of the disclosure.

**[0014]** The terminology used herein is for the purpose of describing particular embodiments only and is not to be limiting of the embodiments. The singular forms "a," "an," and "the" are intended to include the plural forms as well, unless the context clearly indicates otherwise. It will be further understood that the terms "comprises/comprising" and/or "includes/including" when used herein, specify the presence of stated features, integers, steps, operations, elements, and/or components, but do not preclude the presence or addition of one or more other features, integers, steps, operations, elements, components and/or groups thereof.

**[0015]** Unless otherwise defined, all terms including technical and scientific terms used herein have the same meaning as commonly understood by one of ordinary skill in the art to which the embodiments belong. It will be further understood that terms, such as those defined in commonly-used dictionaries, should be interpreted as having a meaning that is consistent with their meaning in the context of the relevant art and will not be interpreted in an idealized or overly formal sense unless expressly so defined herein.

**[0016]** When describing the embodiments with reference to the accompanying drawings, like reference numerals refer to like components and a repeated description related thereto will be omitted. In the description of embodiments, detailed description of well-known related structures or functions will be omitted when it is deemed that such description will cause ambiguous interpretation of the present disclosure.

**[0017]** In addition, the terms first, second, A, B, (a), and (b) may be used to describe constituent elements of the embodiments. These terms are used only for the purpose of discriminating one component from another component, and the nature, the sequences, or the orders of the components are not limited by the terms.

**[0018]** A component, which has the same common function as a component included in any one embodiment, will be described by using the same name in other embodiments. Unless disclosed to the contrary, the description of any one embodiment may be applied to other embodiments, and the specific description of the repeated configuration will be omitted.

**[0019]** It will be understood that when a certain part "includes" a certain component, the part does not exclude another component but may further include another component.

**[0020]** Throughout the disclosure, the term "aerosol generating article" may refer to an item that may generate an aerosol. The aerosol generating article may include an aerosol generating material or an aerosol forming substrate. The aerosol generating article may further include a solid material based on tobacco raw materials such as tobacco sheets, tobacco cuts, or reconstituted tobacco, a non-tobacco material, or both. The aerosol generating material may include a volatile compound.

**[0021]** Throughout the disclosure, an "upstream" or "upstream direction" refers to a direction away from the mouth of a user who smokes the aerosol generating article and a "downstream" or "downstream direction" refers to a direction closer to the mouth of the user who smokes the aerosol generating article.

**[0022]** Throughout the disclosure, a "flavoring sheet" may refer to a flavoring agent-containing material prepared in a sheet form.

**[0023]** According to an embodiment of the present disclosure, a method of manufacturing a flavoring sheet for an aerosol generating article may be provided. The method of manufacturing a flavoring sheet for an aerosol generating article may include step S1 of preparing an immersion solution by immersing a natural flavoring raw material in a plasticizer; step S2 of preparing a mixed solution by mixing hydrocolloid with the immersion solution; and step S3 of manufacturing a sheet by casting and drying the mixed solution.

**[0024]** Hereinafter, each step will be described in detail.

**[0025]** Step S1 is a step of preparing an immersion solution, and the immersion solution may be prepared by immersing a natural flavoring raw material in a plasticizer. The immersion solution may be left at 4°C to 40°C for 12 to 50 hours, desirably, 12 hours.

**[0026]** When extraction is performed at a temperature higher than the numerical range described above, the immersion time may be shorter, and when extraction is performed at a lower temperature, the immersion time may be longer. The immersion time and temperature may be optimized depending on the type and characteristics of a natural product to be extracted.

**[0027]** The natural flavoring raw material is not limited as long as it is a natural product from which a natural flavor may be extracted.

**[0028]** The plasticizer may extract and capture the natural flavor from the natural flavoring raw material. In addition, the plasticizer may be added to manufacture in a sheet form.

**[0029]** In order to perform the above function, a content of the plasticizer added in step S1 may be 0.5 to 2 times a content of the natural flavoring raw material.

**[0030]** Step S2 is a step of preparing the mixed solution, and the mixed solution may be prepared by mixing the hydrocolloid with the previously prepared immersion solution and stirring it. Specifically, step S2 may include step a1 of preparing a hydrocolloid solution; step a2 of manufacturing the mixed solution by mixing the hydrocolloid solution and the immersion solution; and step a3 of leaving the mixed solution.

**[0031]** In step a1, the hydrocolloid may be a sheet forming agent that forms a sheet and a substance that coats and fixes a flavoring agent. The hydrocolloid may be dissolved in a solvent to be prepared in a state of the hydrocolloid solution. The hydrocolloid solution may further include a filler, and the filler may be dextrin. At this time, the solvent may include at least one or more selected from a group consisting of water and alcohol.

**[0032]** In step a2, the mixed solution may be prepared by mixing the previously prepared immersion solution and the hydrocolloid solution and stirring it sufficiently.

**[0033]** In step a3, the mixed solution may be left for 20 to 30 hours. At this time, bubbles generated during the stirring of the mixed solution may be removed.

**[0034]** The mixed solution may be not only in a liquid state but also in a mixed state of a liquid and a solid (e.g., in a slurry state).

**[0035]** At this time, a content of the immersion solution in the mixed solution may be 2 wt% to 30 wt%, desirably 10 wt% to 15 wt%. Among these, the content of the natural flavoring raw material may be 1 wt% to 15 wt%, desirably 5 wt% to 10 wt% with respect to a total weight of the mixed solution. The content of the plasticizer may be 1 wt% to 15 wt%, desirably 5 wt% to 10 wt% with respect to the total weight of the mixed solution. A weight ratio of the natural flavoring raw agent and the plasticizer may be 2:1 to 1:2.

**[0036]** Meanwhile, a content of the hydrocolloid solution in the mixed solution may be 80 wt% to 97 wt% with respect to the total weight of the mixed solution. Among these, the content of hydrocolloid may be 5 wt% to 10 wt% with respect to the total weight of the mixed solution. By adjusting the content of the immersion solution, a content of water may be adjusted to 60 wt% to 80 wt%, desirably 65 wt% to 75 wt% with respect to the total weight of the mixed solution. Water may be a component to adjust a viscosity of the mixed solution.

**[0037]** Step S3 may be a step of manufacturing a flavoring sheet. Specifically, step S3 may include step b1 of casting the mixed solution to have a predetermined thickness; and step b2 of drying the cast mixed solution at 60°C to 80°C.

**[0038]** In step b1, the mixed solution may be cast on a predetermined substrate, and the substrate may be, for example, a release film.

**[0039]** In step b2, the mixed solution may be dried at, for example, 60°C to 70°C.

**[0040]** According to another embodiment of the present disclosure, a flavoring sheet for the aerosol generating article manufactured by the manufacturing method described above may be provided. Since the method of manufacturing the flavoring sheet for the aerosol generating article according to an embodiment of the present disclosure does not include a step of concentrating by applying heat during flavor extraction, it is possible to obtain a flavor close to a natural flavor by using the flavoring sheet of the present disclosure.

**[0041]** The flavoring sheet for the aerosol generating article may include a natural flavoring raw material, a plasticizer, hydrocolloid, and moisture.

**[0042]** At this time, the natural flavoring raw material may be in a powder form. When the natural flavoring raw material is contained in a powder form, a heating process that is necessary in vacuum distillation and solvent extraction is not performed. Accordingly, a unique flavor of a unmodified natural raw material may be obtained. In addition, a finally manufactured product may be manufactured so that the flavoring raw material in a powder form is visible, thereby providing visual satisfaction to a user.

**[0043]** In the flavoring sheet for the aerosol generating article according to an embodiment of the present disclosure, the natural flavoring raw material is not limited as long as it is a natural product, and may include, for example, at least one or more selected from a group consisting of menthol, licorice, sucrose, fructose syrup, isosweetener, cocoa, lavender, cinnamon, cardamom, celery, fenugreek, cascarrilla, sandalwood, bergamot, geranium, honey essence, rose oil, vanilla, lemon oil, orange oil, mint oil, caraway, cognac, jasmine, chamomile, cinnamon, ylang ylang, sage, spearmint, ginger, coriander, and coffee.

**[0044]** In the flavoring sheet for the aerosol generating article according to an embodiment of the present disclosure, the content of the natural flavoring raw material may be 10 wt% to 40 wt%, desirably 13 wt% to 37 wt% with respect to the total weight of the flavoring sheet. When the content of natural flavoring raw material is less than the numerical range described above, the intensity of flavor expression is low, making it difficult to provide satisfaction to the user. On the other hand, when the content of natural flavoring raw material exceeds the numerical range described above, the quality of the flavoring

sheet for the aerosol generating article may be lowered as less amounts of the hydrocolloid and the plasticizer are added.

[0045] In the flavoring sheet for the aerosol generating article according to an embodiment of the present disclosure, the plasticizer may extract and capture the natural flavor from the natural flavoring raw material and may serve to form a sheet. The plasticizer may include at least one or more selected from a group consisting of medium chain triglyceride (MCTG), propylene glycol (PG), and glycerin. Desirably, the plasticizer may be MCTG.

[0046] In the flavoring sheet for the aerosol generating article according to an embodiment of the present disclosure, the content of the plasticizer may be 10 wt% to 40 wt%, desirably 13 wt% to 37 wt% with respect to the total weight of the flavoring sheet.

[0047] The content of plasticizer may be 0.5 to 2 times the content of natural flavoring raw material.

[0048] When the content of the plasticizer is less than the range described above, the flavor may not be sufficiently captured, and the intensity of flavor expression after manufacturing the flavoring sheet may be low. Accordingly, the manufacturing quality of the aerosol generating article may be lowered and the flavoring sheet may be easily damaged during the process due to reduced flexibility of the sheet. On the other hand, when the content of plasticizer exceeds the range described above, it may be difficult to manufacture the flavoring sheet in a sheet form.

[0049] In the flavoring sheet for the aerosol generating article according to an embodiment of the present disclosure, the hydrocolloid may be a material extracted from a natural substance or a natural polymer material processed from a material extracted from a natural substance. For example, the hydrocolloid may include at least one or more selected from a group consisting of carrageenan, agar, gellan gum, pectin, guar gum, xanthan gum, tamarind gum, psyllium seed gum, xanthan gum, konjac glucomannan, starch, hydroxypropyl methyl cellulose (HPMC), methyl cellulose (MC), ethyl cellulose (EC), and carboxymethyl cellulose (CMC). The starch may include various raw materials and modified starch. Desirably, the hydrocolloid may be MC.

[0050] In the flavoring sheet for the aerosol generating article according to an embodiment of the present disclosure, the content of the hydrocolloid may be 20 wt% to 55 wt% with respect to the total weight of the flavoring sheet. When the content of hydrocolloid is less than the range described above, the sheet may not be formed well. On the other hand, when the content of hydrocolloid exceeds the range described above, the intensity of the flavor expression may decrease as the contents of natural flavoring raw material and the plasticizer decrease.

[0051] Meanwhile, desirably, the content of hydrocolloid to ensure that the flavoring sheet has an appropriate tensile strength may be 25 wt% to 40 wt%.

[0052] In the flavoring sheet for the aerosol generating article according to an embodiment of the present disclosure, the flavoring sheet for the aerosol generating article may further include a filler, and the filler may be dextrin, for example.

[0053] In the flavoring sheet for the aerosol generating article according to an embodiment of the present disclosure, a content of the filler may be 5 wt% to 15 wt%, desirably 7 wt% to 10 wt% with respect to the total weight of the flavoring sheet.

[0054] In the flavoring sheet for the aerosol generating article according to an embodiment of the present disclosure, the flavoring sheet for the aerosol generating article may refer to a flavoring sheet included in at least one or more selected from a group consisting of a medium portion, a filter portion, and a wrapper. That is, an aerosol generating article may be flavored by using the flavoring sheet for the aerosol generating article according to an embodiment of the present disclosure. Meanwhile, the method of manufacturing the flavoring sheet includes the immersing of the natural flavoring raw material in the plasticizer, and thus, flavor retention and sustainability may be improved compared to the case of spraying and using a flavoring liquid.

[0055] At this time, the flavoring sheet for the aerosol generating article may be cut, folded, or coated to be applied to the aerosol generating article. For example, the flavoring sheet may be cut or folded to be applied to a medium portion and/or a filter portion of the aerosol generating article. In the case of a wrapper, the flavoring sheet may be manufactured by combining it with wrapping paper, or may be manufactured through a coating process of casting the mixed solution directly onto the wrapping paper and drying it.

[0056] Hereinafter, the present disclosure will be described in more detail with reference to examples, but the present disclosure is not limited to the following examples.

## 1. Method of manufacturing flavoring sheet

[0057] Flavoring sheets of Examples 1 to 5 were prepared in the following manner. Components and contents added during the preparation of examples and comparative examples are shown in Table 1 below. The sheets were not able to be manufactured without adding plasticizers.

(1) Step S1: Preparation of immersion solution

2 g of a coffee powder was immersed in 2g of MCTG and left at 25°C for 48 hours to prepare an immersion solution.

(2) Step S2: Preparation of mixed solution

[0058] First, 8 g of MC and 2 g of dextrin were dissolved in a solvent to prepare a hydrocolloid solution. At this time, the

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solvent was a mixture of 70 g of water and 10 g of alcohol.

**[0059]** The hydrocolloid solution and the immersion solution were mixed and stirred to prepare a mixed solution.

**[0060]** The mixed solution was left at 25°C for 24 hours to remove air bubbles.

(3) Step S3: Preparation of flavoring sheet

**[0061]** The mixed solution was casted on a release film to have a predetermined thickness and then dried at 60°C to 80°C to prepare a flavoring sheet.

### Example 2

**[0062]** A flavoring sheet was prepared in the same manner as in Example 1, except that 5 g of the coffee powder and 5 g of MCTG were added.

### Example 3

**[0063]** A flavoring sheet was prepared in the same manner as in Example 1, except that 10 g of the coffee powder, 5 g of MCTG, and 65 g of water were added.

### Example 4

**[0064]** A flavoring sheet was prepared in the same manner as in Example 1, except that 5 g of the coffee powder, 10 g of MCTG, and 65 g of water were added.

### Example 5

**[0065]** A flavoring sheet was prepared in the same manner as in Example 1, except that 10 g of the coffee powder, 10 g of MCTG, and 60 g of water were added.

[Table 1]

Classificati on	Immersion solution		Hydrocolloid solution			
	Natural flavoring raw material	Plasticizer	MC	Dextrin	Water	Alcohol
Example 1	2.0	2.0	8.0	2.0	70.0	10.0
Example 2	5.0	5.0	8.0	2.0	70.0	10.0
Example 3	5.0	10.0	8.0	2.0	65.0	10.0
Example 4	10.0	5.0	8.0	2.0	70.0	10.0
Example 5	10.0	10.0	8.0	2.0	60.0	10.0

## 2. Experimental Example 1: Composition of flavoring sheet

**[0066]** The components and contents contained in the flavoring sheets after the preparation of Examples 1 to 5 are shown in Table 2 below.

[Table 2]

Classification	Natural flavoring raw material	Plasticizer	MC	Dextrin	Water
Example 1	12.7	12.7	50.8	12.7	11.1
Example 2	23.0	23.0	36.8	9.2	8.0
Example 3	36.8	18.4	29.4	7.4	8.0
Example 4	18.4	36.8	29.4	7.4	8.0
Example 5	30.7	30.7	24.5	6.1	8.0

### 3. Experimental Example 2: Evaluation of ease of preparation and sheet quality

**[0067]** An experiment for collectively evaluating the ease of preparation of the mixed solution during the preparation of Examples 1 to 5 and the quality of the flavoring sheets was conducted based on the following three criteria, and the results thereof were shown in Table 3.

O: Excellent

Δ: Good

X: Poor

[Table 3]

Classification	Ease of preparation of mixed solution	Quality of flavoring sheet
Example 1	○	○
Example 2	○	○
Example 3	○	○
Example 4	○	○
Example 5	○	Δ

**[0068]** All of the flavoring sheets according to the examples and the comparative examples were excellent in ease of preparation of the mixed solution.

**[0069]** However, Example 5 was evaluated to have poor quality of the flavoring sheet due to a decreased tensile strength of the prepared flavoring sheet.

### 4. Experimental Example 3: Evaluation of flavor retention

**[0070]** In order to confirm the flavor retention and sustainability of Examples 1 to 5, a sensory evaluation was performed. The sensory evaluation was performed by evaluating a degree of expression of a flavor felt by users during use. At this time, the aerosol generating article was manufactured in a form of a cigarette of a non-combustible aerosol generating article by cutting the flavoring sheet into small pieces and heated with a device. The sensory evaluation was conducted on panelists with more than 5 years of smoking experience, and was conducted on 12 to 20 evaluation panel members. The evaluation was conducted based on the three criteria below, and the results thereof were shown in Table 4.

O: Excellent

Δ: Good

X: Poor

[Table 4]

Classification	Degree of flavor expression
Example 1	Δ
Example 2	○
Example 3	○
Example 4	○
Example 5	○

**[0071]** As a result of the experiment, Example 1 was found to have a low flavor intensity and poor flavor preservation and sustainability.

**[0072]** As a result of evaluating the flavor intensity of Examples 2 to 4, which were excellent in both the quality of the flavoring sheets and the flavor retention, the intensity was increased in the order of Example 4 < Example 2 < Example 3. That is, the intensity of flavor in Example 3, in which the greatest amount of coffee powder was added, was slightly higher

than those in Examples 2 and 4.

**[0073]** From the experimental example described above, by using the method of manufacturing the flavoring sheet described in the claims, the flavoring sheet may be manufactured easily in a simple and economical manner, and the flavoring sheet manufactured in this manner may also realize a flavor close to a natural flavor and have excellent flavor retention and sustainability. Therefore, it is possible to provide an aerosol generating article capable of improving satisfaction of users.

**[0074]** As described above, although the embodiments have been described with reference to the limited drawings, a person skilled in the art may apply various technical modifications and variations based thereon. For example, suitable results may be achieved if the described techniques are performed in a different order, and/or if components in a described system, architecture, device, or circuit are combined in a different manner, or replaced or supplemented by other components or their equivalents.

**[0075]** Therefore, other implementations, other embodiments, and equivalents of the claims are within the scope of the following claims.

## Claims

1. A method of manufacturing a flavoring sheet for an aerosol generating article, the method comprising:

step S1 of preparing an immersion solution by immersing a natural flavoring raw material in a plasticizer;  
step S2 of preparing a mixed solution by mixing hydrocolloid with the immersion solution; and  
step S3 of manufacturing a sheet by casting and drying the mixed solution.

2. The method of claim 1, wherein the plasticizer in step S1 extracts and captures a natural flavor from the natural flavoring raw material.

3. The method of claim 1, wherein the immersion solution in step S1 is left at 4°C to 40°C for 12 to 50 hours.

4. The method of claim 1, wherein step S2 comprises:

step a1 of preparing a hydrocolloid solution;  
step a2 of manufacturing the mixed solution by mixing the hydrocolloid solution and the immersion solution; and  
step a3 of leaving the mixed solution.

5. The method of claim 1, wherein step S3 comprises:

step b1 of casting the mixed solution to have a predetermined thickness; and  
step b2 of drying the cast mixed solution at 60°C to 80°C.

6. A flavoring sheet for an aerosol generating article manufactured by the method of claim 1, the flavoring sheet comprising:

a natural flavoring raw material;  
a plasticizer; and  
hydrocolloid,  
wherein the natural flavoring raw material is in a powder form.

7. The flavoring sheet of claim 6, wherein the natural flavoring raw material comprises at least one or more selected from a group consisting of menthol, licorice, sucrose, fructose syrup, isosweetener, cocoa, lavender, cinnamon, cardamom, celery, fenugreek, cascarilla, sandalwood, bergamot, geranium, honey essence, rose oil, vanilla, lemon oil, orange oil, mint oil, caraway, cognac, jasmine, chamomile, cinnamon, ylang ylang, sage, spearmint, ginger, coriander, and coffee.

8. The flavoring sheet of claim 6, wherein the plasticizer comprises at least one or more selected from a group consisting of medium chain triglyceride, propylene glycol, and glycerin.

9. The flavoring sheet of claim 6, wherein the hydrocolloid is a material extracted from a natural substance or a natural polymer material processed from a material extracted from a natural substance.



10. The flavoring sheet of claim 6, wherein the hydrocolloid comprises at least one or more selected from a group consisting of carrageenan, agar, gellan gum, pectin, guar gum, xanthan gum, tamarind gum, psyllium seed gum, xanthan gum, konjac glucomannan, starch, hydroxypropyl methyl cellulose, methyl cellulose, ethyl cellulose, and carboxymethyl cellulose.

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11. The flavoring sheet of claim 6, wherein a content of the natural flavoring raw material is 10 wt% to 40 wt% with respect to a total weight of the flavoring sheet.

12. The flavoring sheet of claim 6, wherein a content of the plasticizer is 10 wt% to 40 wt% with respect to a total weight of the flavoring sheet.

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13. The flavoring sheet of claim 6, wherein a content of the hydrocolloid is 20 wt% to 55 wt% with respect to a total weight of the flavoring sheet.

14. The flavoring sheet of claim 6, wherein the flavoring sheet for the aerosol generating article refers to a flavoring sheet included in at least one or more selected from a group consisting of a medium portion, a filter portion, and a wrapper.

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15. The flavoring sheet of claim 6, wherein the flavoring sheet for the aerosol generating article is cut, folded, or coated to be applied to the aerosol generating article.

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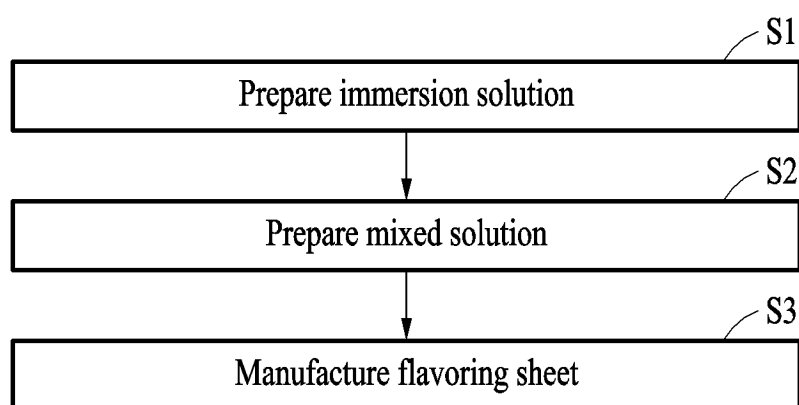
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**FIG. 1**

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR2024/007930

**A. CLASSIFICATION OF SUBJECT MATTER**

A24B 15/28(2006.01)i; A24B 15/30(2006.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

A24B 15/28(2006.01); A24B 15/14(2006.01); A24B 15/16(2006.01); A24B 15/167(2020.01); A24B 15/30(2006.01);  
A24D 1/00(2006.01); A24D 3/04(2006.01); A24D 3/06(2006.01)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models: IPC as above  
Japanese utility models and applications for utility models: IPC as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS (KIPO internal) &amp; keywords: 에어로졸 (aerosol), 시트 (sheet), 향 (fragrance), 하이드로콜로이드 (hydrocolloid)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KR 10-2023-0035974 A (KT & G CORPORATION) 14 March 2023 (2023-03-14) See claim 1; and paragraphs [0016]-[0049] and [0062]-[0101].	1-15
A	KR 10-2023-0080436 A (NICOVENTURES TRADING LIMITED) 07 June 2023 (2023-06-07) See claim 1; and paragraphs [0012]-[0013].	1-15
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A	KR 10-2019-0077434 A (JAPAN TOBACCO INC.) 03 July 2019 (2019-07-03) See claim 1; and paragraphs [0017]-[0024].	1-15
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☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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Date of the actual completion of the international search

11 September 2024

Date of mailing of the international search report

13 September 2024

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**INTERNATIONAL SEARCH REPORT**  
**Information on patent family members**

International application No.

**PCT/KR2024/007930**

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