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KAWATA et al.(10) **Pub. No.: US 2012/0085360 A1**(43) **Pub. Date: Apr. 12, 2012**(54) **ORAL TOBACCO PRODUCT**(30) **Foreign Application Priority Data**(76) Inventors: **Norio KAWATA**, Sumida-ku (JP);
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A24B 13/02 (2006.01)(52) **U.S. Cl.** 131/352(57) **ABSTRACT**(21) Appl. No.: **13/326,072**(22) Filed: **Dec. 14, 2011****Related U.S. Application Data**(63) Continuation of application No. PCT/JP2010/059668,
filed on Jun. 8, 2010.

An oral tobacco product (1) has a mixture containing, as its main constituent, tobacco particles made from a tobacco material, a pouch (2) filled with the mixture, and product information (4) relating to the mixture and provided on an outer surface of the pouch (2). The tobacco product (1) is contained in a case (14) that can be opened and closed as needed.

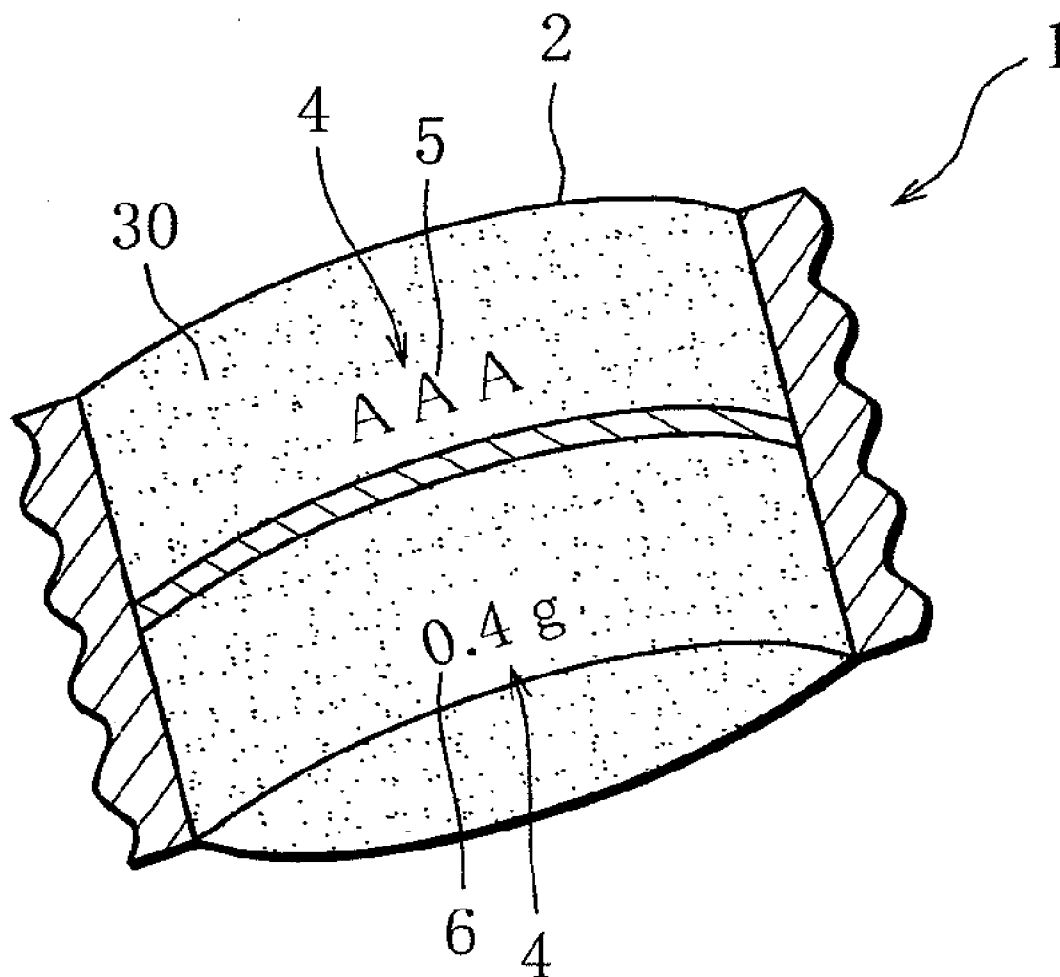


FIG. 1

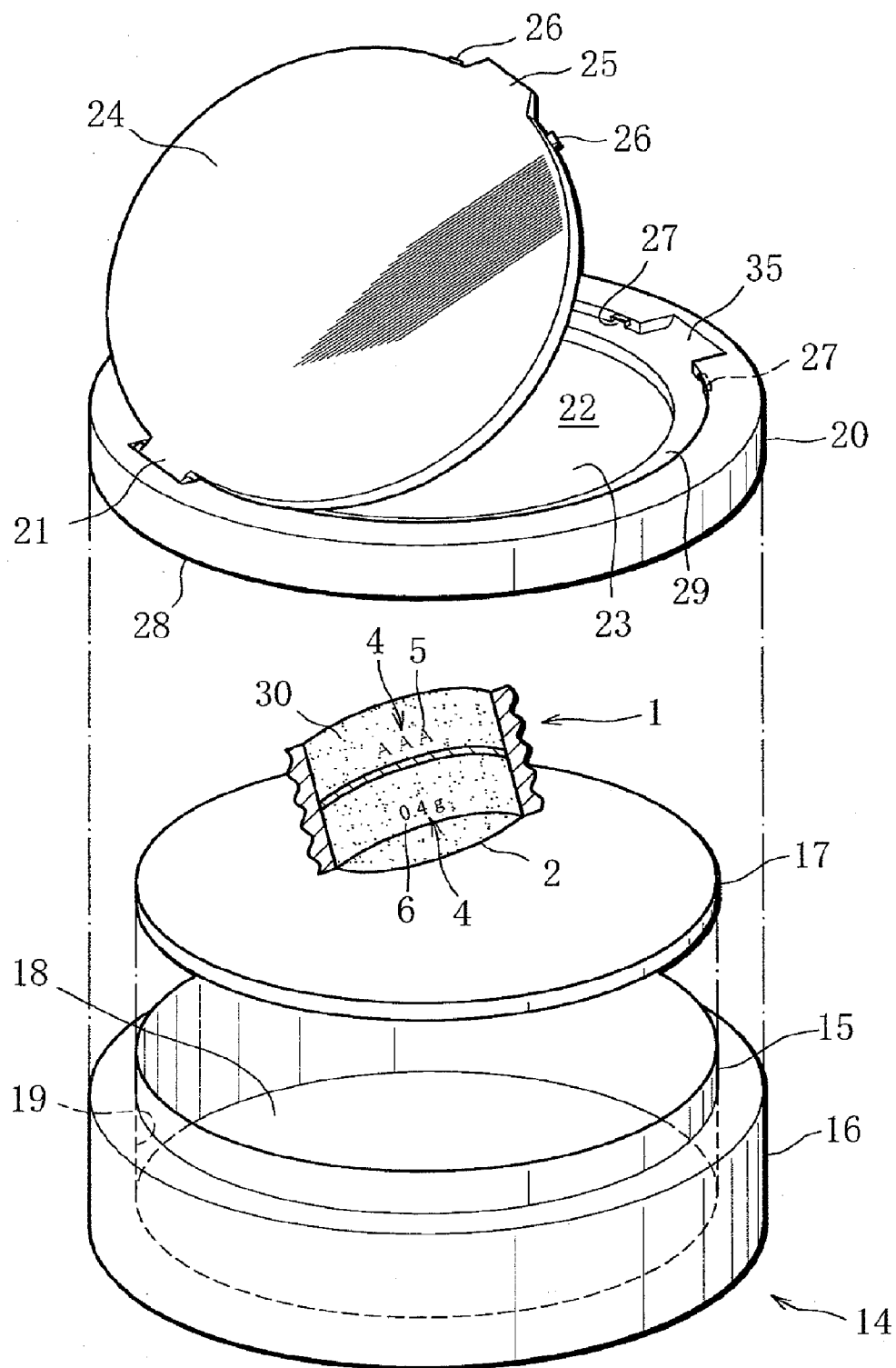


FIG. 2

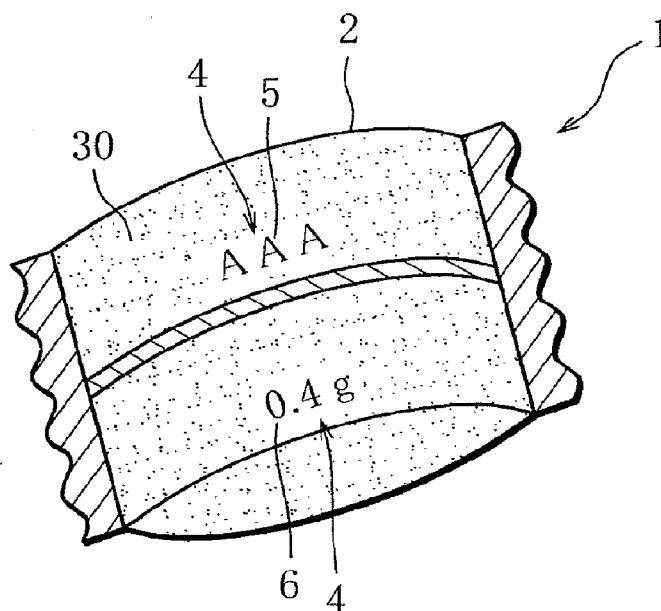


FIG. 3

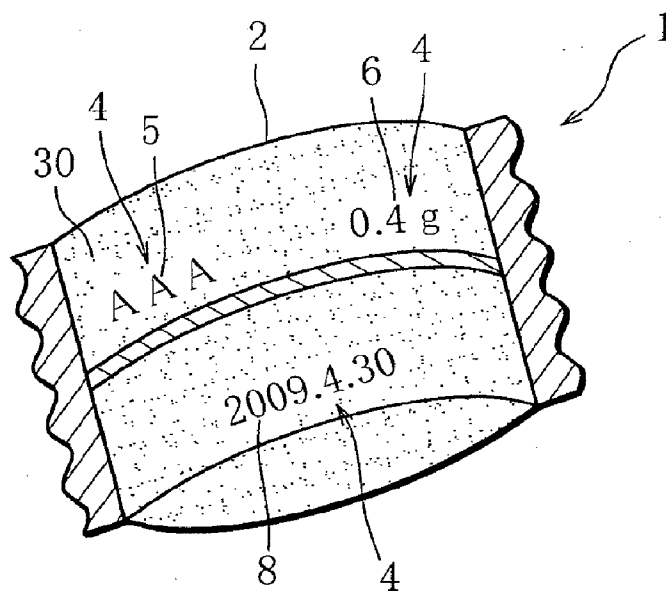


FIG. 4

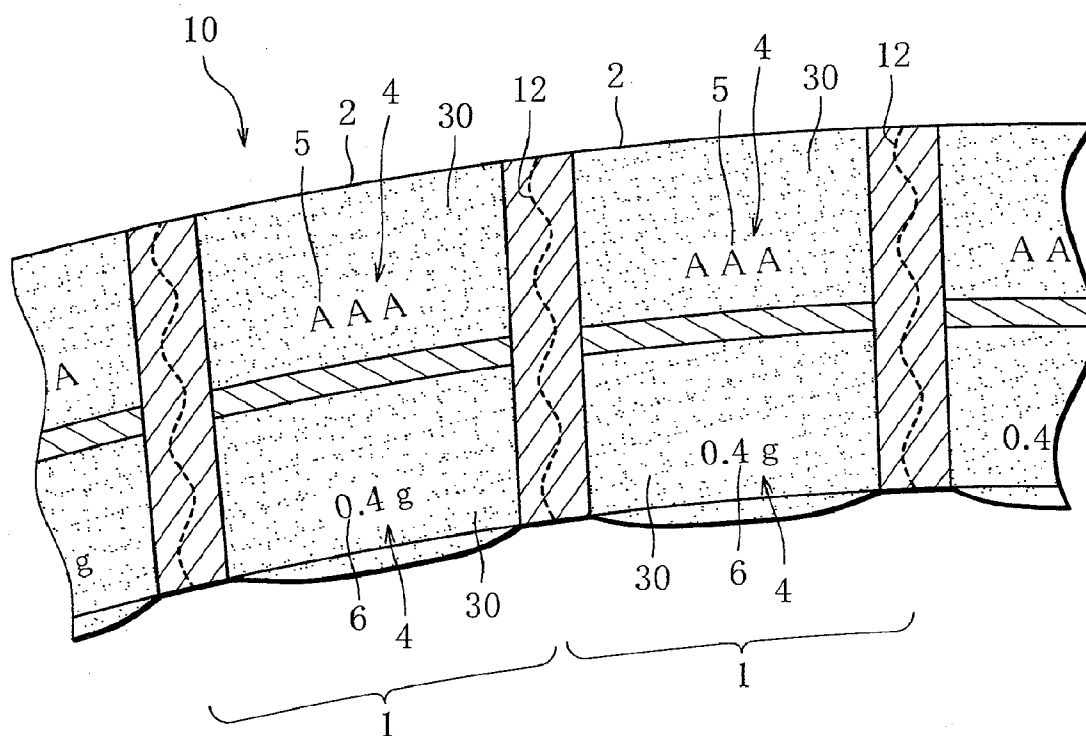


FIG. 5

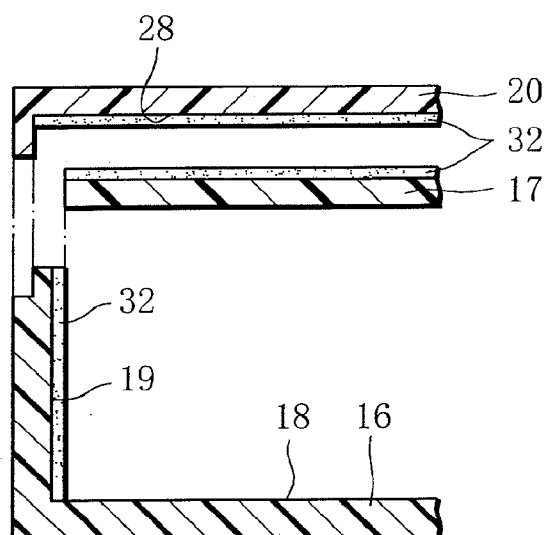
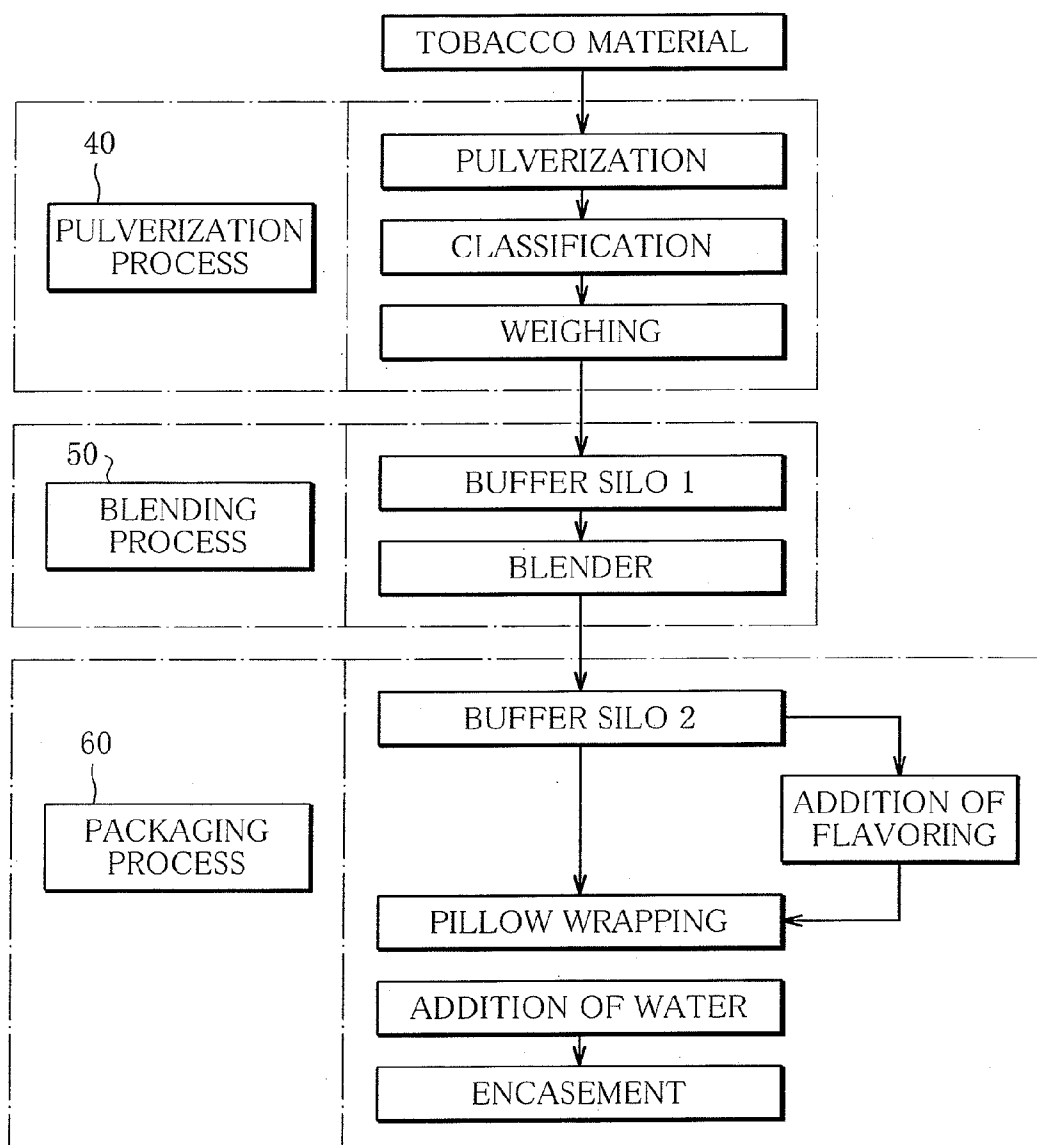


FIG. 6



ORAL TOBACCO PRODUCT

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application is a Continuation of PCT International Application No. PCT/JP2010/059668 filed on Jun. 8, 2010, which claims priority benefit of Patent Application No. 2009-143210 filed in Japan, on Jun. 16, 2009. The entire contents of all of the above applications are hereby incorporated by reference.

TECHNICAL FIELD

[0002] The present invention relates to oral tobacco products that allow users to take in tobacco components via saliva.

BACKGROUND ART

[0003] Cigarettes have so far been popular as one of articles of taste. Recently, smokeless tobacco has been attracting attention because it allows the user to take in tobacco components without the need to light the tobacco.

[0004] An oral tobacco product called snus (SNUS), which is a kind of smokeless tobacco, includes, as its main constituent, tobacco shreds obtained by finely cutting a tobacco material, and a substantial amount of water is contained in the tobacco shreds.

[0005] More specifically, snus of this kind can be classified into a loose type in which the tobacco shreds are not wrapped, and a portion type, or what is called a pouch type, in which the tobacco shreds are wrapped in a wrapper made of nonwoven fabric or the like. As the pouch-type snus, semicircular pouch type has also been known in addition to generally rectangular pouch type, which is commonly known (Patent Document 1).

[0006] In the case of the pouch-type snus, the user directly puts the snus in between the upper lip and the gum of his/her mouth, to enjoy the aroma of tobacco as well as to take into his/her body through the gum, the tobacco components leaching out from the tobacco shreds into the saliva.

PRIOR ART LITERATURE

Patent Document

[0007] Patent Document 1: International Publication No. WO 2009/010876

SUMMARY OF THE INVENTION

Problems to be Solved by the Invention

[0008] Where the pouches of snus differ from one another only in the outer shape, however, it is not possible to obtain with ease information about the tobacco shreds contained in the snus, with the result that it is difficult to distinguish snus by appearance. This type of snus is therefore lacking in the appeal to users' purchasing motivation.

[0009] An object of the present invention is to provide an oral tobacco product which is not only readily distinguishable from other oral tobacco products but also can effectively appeal to users' purchasing motivation.

Means for Solving the Problems

[0010] To achieve the above object, an oral tobacco product according to the present invention comprises a mixture containing tobacco particles made from a tobacco material, a pouch filled with the mixture, the pouch allowing a user to

take in tobacco components of the tobacco particles via saliva when put in the user's mouth, and product information relating to the mixture and provided on an outer surface of the pouch.

[0011] In this oral tobacco product, the product information about the mixture is provided on the outer surface of the pouch. Accordingly, the oral tobacco product can be visually distinguished from other similar pouch-type oral tobacco products and also can stimulate users' purchasing interest.

[0012] Specifically, the product information may include at least one of a brand name of the tobacco particles, indication of contents of the mixture, and a best-before date. The user can therefore obtain detailed information on the oral tobacco product, with the result the brand image of the oral tobacco product is enhanced.

[0013] Preferably, the product information is printed using an edible colorant. In this case, safety of the printed product information is ensured, though the oral tobacco product is directly put into the mouth.

[0014] Further, the pouch may be colored using an edible colorant such that the pouch and the product information are different in color. In this case, not only the product information can be made to stand out, but also the entire outer surface of the pouch can be used to express the brand.

[0015] Moreover, the oral tobacco product may further include a food flavoring, and the food flavoring may be contained in the edible colorant for the product information. In this case, the user can enjoy the flavor of the food flavoring before putting the oral tobacco product into his/her mouth, and can fully enjoy the aroma of the tobacco material itself in addition to the flavor of the food flavoring after the oral tobacco product is put into his/her mouth.

[0016] The edible colorant may be a natural colorant or synthetic colorant.

[0017] Preferably, the natural colorant is one selected from the group consisting of gardenia colorant, paprika colorant, and cacao colorant.

Advantageous Effects of the Invention

[0018] The oral tobacco product of the present invention has the product information printed on the outer surface of the pouch, whereby visual distinguishability of the product is enhanced. As a result, the oral tobacco product of the present invention can be differentiated from other oral tobacco products, enabling the oral tobacco product of the present invention to stimulate users' purchasing interest.

BRIEF DESCRIPTION OF THE DRAWINGS

[0019] FIG. 1 is a perspective view illustrating an oral tobacco product according to a first embodiment of the present invention, along with a case containing the oral tobacco product.

[0020] FIG. 2 is a schematic enlarged view of the oral tobacco product of the first embodiment.

[0021] FIG. 3 schematically illustrates an oral tobacco product according to a second embodiment.

[0022] FIG. 4 schematically illustrates a string of oral tobacco products according to a third embodiment.

[0023] FIG. 5 is a sectional view of part of the case illustrated in FIG. 1.

[0024] FIG. 6 is a block diagram illustrating a procedure for manufacturing the oral tobacco product.

MODE OF CARRYING OUT THE INVENTION

[0025] Referring to FIG. 1, there is illustrated an oral tobacco product 1 (hereinafter referred to as tobacco product 1) according to a first embodiment. The tobacco product 1 includes a mixture containing a predetermined amount of tobacco particles as a main constituent, and a pouch 2 wrapping the mixture therein, the pouch 2 being made from a sheet of nonwoven fabric. Specifically, the tobacco particles are obtained by finely cutting or pulverizing a tobacco material and have an average particle size of, for example, 2 mm or less.

[0026] A predetermined number of tobacco products 1 are contained in a portable case 14, for example. The user takes out the tobacco product 1 from the case 14 and puts the tobacco product 1 in his/her mouth. Specifically, the tobacco product 1 is held between the upper lip and the gum of the user so that the tobacco components leaching out from the tobacco particles into the saliva may be absorbed in the user's body through the gum.

[0027] The case 14, on the other hand, includes a case body 16, a mat 17, and a lid 20. The case body 16 is in the form of a flat cylinder with a hollow therein and has an open end 15 at the top thereof. The open end 15 protrudes upward in convex form to define a circular opening and can be opened and closed with the lid 20.

[0028] The mat 17, which is circular in shape, has an outer diameter nearly equal to the inner diameter of an inner wall 19 of the case body 16 and is placed on a bottom surface 18 of the case body 16. Thus, the tobacco product 1 lies on the mat 17 within the case 14.

[0029] The lid 20 is circular in shape and has an outer diameter equal to that of the case body 16. A generally circular stepped recess 22 is formed in the upper surface of the lid 20, and has a bottom 23 and an annular lid rest 29 surrounding the bottom 23. The lid rest 29 has such a depth as to be shallower than the bottom 23. A hinge 21 is provided in an outer peripheral portion of the lid rest 29, and a round cover 24 is attached to the hinge 21. The cover 24 has an outer diameter nearly equal to that of the lid rest 29. Accordingly, when the cover 24 is fitted in the recess 22, the recess 22 is closed with the cover 24 with the outer peripheral portion of the cover 24 disposed in close contact with the lid rest 29. As the cover 24 in the closed state is swung upward about the hinge 21, the recess 22 is exposed and thus is opened. Namely, the cover 24 is capable of opening and closing the recess 22. While the recess 22 is closed with the cover 24, the upper surface of the outer peripheral portion of the lid 20 is flush with the upper surface of the cover 24.

[0030] A knob 25 protrudes from an outer peripheral edge of the cover 24 and is located opposite to the hinge 21 in a diametrical direction of the cover 24. An indentation 35 for receiving the knob 25 is formed in the outer peripheral portion of the lid 20. The knob 25 makes it easy for the user to open the cover 24. Further, two detents 26 protrude from the outer peripheral edge of the cover 24 and are located close to and on both sides of the knob 25, respectively. Also, two engaging holes 27 associated with the respective detents 26 are formed in the outer one of the two inner peripheral surfaces of the lid 20 around the recess 22. Thus, when the cover 24 is brought to a closed position, the detents 26 fit in the respective engaging holes 27 so that the cover 24 may be kept in the closed state.

[0031] The recess 22 has a capacity large enough to accommodate several tobacco products 1 therein. The lid 20 can therefore be used as a waste container for temporarily containing used tobacco products 1. That is to say, the case 14 is capable of containing unused tobacco products 1 and used tobacco products 1 separately.

[0032] The lid 20 further has a circular recess formed in a lower surface thereof. The recess has an inner diameter slightly larger than the outer diameter of the aforementioned open end 15 and thus is capable of receiving the open end 15 therein. A ceiling surface 28 (see FIG. 5) of the recess also serves as a surface for pushing down the tobacco products 1 contained in the case body 16.

[0033] As is clear from FIGS. 1 and 2, product information 4 about the tobacco product 1 is printed on the outer surface of the pouch 2 of the tobacco product 1.

[0034] Specifically, the product information 4 may include a character string "AAA" indicating a brand 5 of the tobacco particles and printed on the upper part of the outer surface of the pouch 2. The brand 5 may not necessarily be a character string and may be a pictorial figure or character design instead. Also, the product information 4 may include, in addition to the brand 5, a content indication 6 indicating, for example, the constituents of the mixture, the amount of the mixture contained, or the like. The content indication 6 is printed on the lower part of the outer surface of the pouch 2, for example. The content indication 6 illustrated in FIGS. 1 and 2, namely, "0.4 g", indicates the amount contained.

[0035] In the oral tobacco product 1 of a second embodiment illustrated in FIG. 3, the brand 5 and the content indication 6 shown in FIG. 2 are printed on the upper part of the outer surface of the pouch 2. The brand 5 and the content indication 6 are located side by side. The product information 4 may further include a best-before date 8, which is printed on the lower part of the outer surface of the pouch 2 as illustrated. The layout of the brand 5, the content indication 6 and the best-before date 8 printed on the pouch 2 may be changed as needed.

[0036] FIG. 4 illustrates a string of oral tobacco products 10 (hereinafter referred to as tobacco product string 10) according to a third embodiment.

[0037] The tobacco product string 10 of FIG. 4 includes a plurality of tobacco products 1 whose pouches 2 are connected to one another to form a string. A perforation row 12 is formed in the sealed portion of the pouch 2 between adjacent ones of the tobacco products 1. Accordingly, the individual tobacco products 1 can be detached from the tobacco product string 10 along the perforation row 12. The tobacco product string 10 is spirally wound into a roll to be accommodated in the case 14.

[0038] The product information 4, such as the brand 5, the content indication 6 and the best-before date 8, is printed on each tobacco product 1, namely, on the outer surface of the pouch 2, of the tobacco product string 10.

[0039] Each of the tobacco products 1 is directly put into the user's mouth, and therefore, the product information 4 needs to be printed on the pouch 2 by using an edible colorant. Also, the product information 4 needs to have high distinguishability. To enhance the distinguishability, the entire surface of the pouch 2, that is, the nonwoven fabric sheet itself, is preferably colored. Specifically, the nonwoven fabric sheet is in its entirety colored in chocolate brown by using an edible colorant.

[0040] On the other hand, the brand 5 and the content indication 6 are printed on the nonwoven fabric sheet by using Food Yellow No. 4 and Food Red No. 2, respectively. In this case, natural colorants, besides synthetic colorants, may be used as the edible colorants. As such natural edible colorants, gardenia yellow colorant, paprika colorant (red), and cacao colorant (brown) are suited.

[0041] It is desirable, moreover, that the tobacco product 1 of this type stimulate not only the visual sense but the olfactory sense of the user to arouse the user's purchasing interest. To this end, the edible colorant may contain a food flavoring 30.

[0042] For example, the food flavoring 30 is added to at least one of the edible colorants used for printing the brand 5, the content indication 6 and the like.

[0043] The food flavoring 30 may also be added directly to the mixture containing tobacco particles as its main constituent. In this case, glycerin as the food flavoring is spray-coated on the mixture in an amount of 1 weight % of the mixture. The glycerin thus added also serves as a humectant. In the case of adding the food flavoring 30 to the tobacco particles, the food flavoring 30 should preferably be alkaline, not acidic, because the tobacco particles are alkaline.

[0044] The case 14, on the other hand, may also contain the food flavoring therein. As illustrated in FIG. 5, a flavoring layer 32 is formed over each of the inner wall surface 19 of the case body 16, the upper surface of the mat 17, and the ceiling surface 28 of the lid 20. The flavoring layers 32 are formed using the food flavoring. Specifically, to form the flavoring layers 32, the food flavoring is reduced in powder form or is dissolved in a solvent to obtain a liquid food flavoring. As the solvent, water, alcohol, glycerin, propylene glycol or the like may be used. In this embodiment, a liquid food flavoring of menthol is prepared by dissolving 1 weight % of menthol in alcohol, for example, and the menthol solution is spray-coated on the inner wall surface 19 of the case body, the upper surface of the mat 17 and the ceiling surface 28 of the lid, to form the flavoring layers 32.

[0045] As the food flavoring forming the flavoring layers 32, mint, vanilla, apricot, tea, cocoa, licorice, honey and the like, besides menthol, may be used singly or in combination.

[0046] Further, where a coupon is contained in the case 14, the coupon also may have a flavoring layer 32 formed thereon. In the case of using the food flavoring, a humectant is preferably arranged inside the case 14. For the humectant, glycerin or propylene glycol may be used.

[0047] A procedure for manufacturing the tobacco product 1 or the tobacco product string 10 will be now described.

[0048] As illustrated in FIG. 6, the tobacco product 1 or the tobacco product string 10 is manufactured by a pulverization process 40, a blending process 50, and a packaging process 60.

[0049] First, in the pulverization process 40, the laminas and midribs of domestic Burley tobacco are separately pulverized by respective pulverizers, to obtain tobacco particles with an average particle size of 2 mm or less. The tobacco particles are then put in respective classifiers to be classified according to size. Subsequently, the tobacco particles obtained from the laminas and those obtained from the midribs are weighed such that each accounts for 50 weight %, and are sent to the blending process 50.

[0050] In the blending process 50, the tobacco particles, which have been subjected to the weighing, are conveyed to a buffer silo 1 and kept in the buffer silo 1 for a predetermined

period of time. Then, the tobacco particles in the buffer silo 1 are subjected to thermal sterilization and cooling and are blended by a blender. While the tobacco particles are mixed by the blender, a flavoring and the like are added to the tobacco particles.

[0051] Specifically, in the blending process, water is first added to the tobacco particles so that the tobacco particles may have a water content adjusted to 15 weight %.

[0052] Subsequently, the tobacco particles are heated at 100° C. for four hours, that is, sterilization is performed. On completion of the sterilization, the tobacco particles are cooled by means of circulating cooling water, and then 10 weight % of potassium carbonate, 1 weight % of vitamin C, 5 weight % of flavoring, sodium chloride and the like are added as additives to the tobacco particles.

[0053] The additives and the tobacco particles are mixed together to obtain a mixture containing the tobacco particles as a main constituent. The mixture is then sent to the packaging process 60. The tobacco particles in the mixture preferably have a pH falling within a range of 6.5 to 9.5.

[0054] The packaging process 60 includes storage in a buffer silo 2 where the mixture obtained by the blending process 50 is stored for a predetermined period of time.

[0055] Following the storage, 0.4 g of the mixture is wrapped in a wrapper, that is, a sheet of nonwoven fabric, in the form of a pillow. The aforementioned product information 4 (brand 5, content indication 6, best-before date 8, etc.) is printed in advance on a surface of the wrapper. At this point, the tobacco product 1 illustrated in FIG. 2 or 3 is obtained. Specifically, the tobacco product 1 is in the form of a rectangle of about 12 mm×25 mm.

[0056] When the mixture is wrapped in the form of a pillow, the perforation row 12 may be formed instead of cutting off the individual tobacco products, whereupon a connected series of the tobacco products 10 illustrated in FIG. 4 is obtained. The connected series of the tobacco products is cut into individual strings 10 each including the predetermined number of the tobacco products 1.

[0057] Subsequently, water is added to each tobacco product 1 or the individual ones of the tobacco product string 10 so that the water content of the tobacco product 1 or the tobacco product string 10 may be adjusted to 25 weight %. Then, the predetermined number of the separate tobacco products 1 are contained in the case 14, or the tobacco product string 10 is contained in the case 14 after being spirally wound into a roll.

[0058] The oral tobacco product 1 or the tobacco product string 10 has the product information 4 (brand 5, content indication 6, best-before date 8, etc.) printed on the outer surface of the pouch 2. Because of the product information 4, the oral tobacco product 1 or the tobacco product string 10 can be visually distinguished with ease from other pouch-type oral tobacco products, and it is also possible to arouse the users purchasing interest. Further, the product information 4 serves to enhance the brand image of the tobacco product 1 or the tobacco product string 10.

[0059] The surface of the pouch 2 is in its entirety colored using an edible colorant, whereas the product information 4 (brand 5, content indication 6, best-before date 8, etc.) is printed using an edible colorant different in color from the pouch 2 itself. Thus, the product information 4 printed in this manner not only stands out but also is safe for users. The product information 4 may alternatively be printed on the entire outer surface of the pouch 2.

[0060] Further, where the edible colorant used for printing the product information 4 contains the food flavoring 30, the user can enjoy the flavor of the food flavoring 30 before putting the tobacco product 1 in his/her mouth, and can fully enjoy the aroma of the tobacco particles as well as the flavor of the food flavoring 30 after the tobacco product 1 is put in his/her mouth.

[0061] The case 14 has the flavoring layer 32 formed on each of the inner wall surface 19 of the case body 16, the upper surface of the mat 17 and the ceiling surface 28 of the lid 20, as stated above. Thus, even though the flavor components of the tobacco particles of the tobacco product 1 volatilize as the lid 20 of the case 14 is repeatedly opened and closed, the tobacco product 1 is added with the flavor component released from the flavoring layers 32. The user can therefore fully enjoy the flavor of the flavoring layers 32 through the medium of the tobacco product 1 even if the tobacco product 1 is kept in the case 14 for a long period of time. As a result, the tobacco product 1 can arouse the user's purchasing interest.

[0062] Even in cases where the tobacco products 1 of different kinds are contained in the same case 14, the user can distinguish the tobacco products 1 from one another on the basis of the product information 4 printed on the individual tobacco products 1 and therefore, can select with ease a desired one according to the mood of the moment, from among the different kinds of the tobacco products 1.

[0063] The present invention is not limited to the foregoing embodiments and may be modified in various ways.

[0064] For example, the product information 4 about the tobacco product 1 may be printed on both surfaces of the pouch 2, instead of a single surface only. In this case, the product information 4 printed on one surface of the pouch 2 may differ from that printed on the other surface.

[0065] Also, the product information 4 may be printed on the pouch 2 in any desired direction.

EXPLANATION OF REFERENCE SIGNS

[0066]	1 oral tobacco product
[0067]	2 pouch
[0068]	4 product information
[0069]	5 brand
[0070]	6 content indication
[0071]	8 best-before date
[0072]	10 oral tobacco product string
[0073]	12 perforation row
[0074]	14 case
[0075]	15 open end
[0076]	16 case body

[0077]	17 mat
[0078]	18 bottom
[0079]	19 inner wall surface
[0080]	20 lid
[0081]	21 hinge
[0082]	22 recess
[0083]	23 bottom
[0084]	24 cover
[0085]	25 knob
[0086]	26 detent
[0087]	27 engaging hole
[0088]	28 ceiling surface
[0089]	29 lid rest
[0090]	30 food flavoring
[0091]	32 flavoring layer
[0092]	35 indentation
[0093]	40 pulverization process
[0094]	50 blending process
[0095]	60 packaging process

1. An oral tobacco product comprising:

a mixture containing tobacco particles made from a tobacco material;
a pouch filled with said mixture, said pouch allowing a user to take in tobacco components of the tobacco particles via saliva when put in the user's mouth; and
product information relating to said mixture and provided on an outer surface of said pouch.

2. The oral tobacco product according to claim 1, wherein said product information is printed using an edible colorant.

3. The oral tobacco product according to claim 2, wherein said pouch is colored using a different edible colorant such that said pouch and said product information are different in color.

4. The oral tobacco product according to claim 1, wherein said product information includes at least one of a brand name of the tobacco particles, indication of contents of the mixture, and a best-before date.

5. The oral tobacco product according to claim 2, wherein the oral tobacco product further comprises a food flavoring.

6. The oral tobacco product according to claim 5, wherein said food flavoring is contained in the edible colorant for said product information.

7. The oral tobacco product according to claim 2, wherein said edible colorant is a natural colorant or synthetic colorant.

8. The oral tobacco product according to claim 7, wherein said natural colorant is one selected from the group consisting of gardenia colorant, paprika colorant, and cacao colorant.

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