FLAVOR ENHANCED CIGARETTES AND CIGARS

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ABSTRACT OF THE DISCLOSURE

Enhancement of the natural flavor of tobacco smoke is accomplished by the incorporation in the outer portion of the tipping sheet of a smoking article a flavor enhancing substance. Operative substances include salts of glutamic acid and nucleotides. These substances will be in direct contact with the smoker's lips and capable of transfer to the tongue to provide the enhancement or stimulation effect.

This invention relates to rod-like smoking articles such as cigarettes and cigars and, more particularly, to such smoking articles having an improved mouthpiece end which enhances the flavor of the tobacco smoke from a cigarette or cigar.

It has been proposed heretofore, as shown in U.S. Patents Nos. 1,507,926 and 1,671,182, to add a flavoring substance for tobacco smoke in the form of a coating or sheath on a cigarette mouthpiece or on the mouth end of a cigar, and it is common to add flavorants to the tobacco or a filtering element applied to the end of a cigarette or cigar.

We have now found that the natural flavor of tobacco smoke, as well as that of added flavoring substances incorporated in the tobacco or filter tip of a cigarette or cigar, can be improved by adding to a surface of the mouth end of a cigarette or cigar a flavor-enhancing substance.

The flavor enhancing substance useful in practicing this invention generally comprises a 5'-nucleotide or a salt of glutamic acid. The useful 5'-nucleotides are represented by the alkali metal salts of 5'-inosine monophosphate and of 5'-guanosine monophosphates, as well as other such nucleotides described in U.S. Patent No. 3,104,171. Representative salts of glutamic acid are the water-soluble mono- and di-salts of a metal which has a sufficient degree of water solubility to act as a flavor enhancer. Generally, the sodium and potassium salts are preferred, and particularly the laevorotatory forms of the monosodium and monopotassium glutamates.

The flavor enhancing substance can be added either directly to the tobacco at the mouth end of a cigar or to any tipping device or sheath or wrapper which forms the mouthpiece end of a cigarette or cigar. Where the flavor enhancing substance is added as a deposit on the mouthpiece, it is advantageously combined with a water-soluble carrier or binder, such as dextrin, starch or the like, and is added to the mouthpiece end of the cigarette or cigar in the form of a paste moistened with water, alcohol or other suitable vehicle. The paste can be applied by brushing or spraying, or can be applied by any conventional transfer device such as a drum, belt or wick which will leave on the mouthpiece a dot, strip or sheath of the coating mixture containing the flavor enhancing substance. When applied by spraying, the spray can be directed toward the mouthpiece ends of a group or cluster of axially aligned cigars or cigarettes. A solution of the flavor enhancing substance can also be applied to the filaments of a filler tow by spraying or wiping technique applied either to the individual filaments or to the tow. It has also been found to be practical to incorporate the flavor enhancing substance, either alone or in admixture with a diluent carrier or a flavoring substance, directly into the porous material used as the outer covering for the mouthpiece end, regardless of whether it is a separate mouthpiece component, or comprises the paper or tobacco wrapper of a cigarette or cigar which ultimately comes in contact with the smoker's lips. Thus, the flavor enhancing substance can be admixed with the solid components which are used in making a conventional tipping paper, for example, or it can be sprayed or dusted on the wet paper during its production and prior to final drying of the paper, or it can be incorporated in or applied to the surface of cigarette paper or cigar wrapper. In all of the aforementioned modifications, the flavor enhancing substance is added in such a manner that it is exposed to contact with a smoker's lips so that it can be physically transferred to the tongue to enhance or stimulate the taste of the various flavor components of the tobacco smoke.

The amount of flavor enhancing substance added to each cigarette or cigar depends upon the length of time normally required to smoke it. In general, it has been found that about 0.1 to 3.0 mg per cigarette or cigar is sufficient. For example, when an aqueous solution of monosodium glutamate is sprayed or brushed onto the mouthpiece end of a cigar or cigarette, a 0.2% by weight solution is generally satisfactory. When the filler component of a filter is impregnated with an aqueous solution of such a glutamate, on the other hand, it is advantageous to use a more concentrated solution such as one containing about 2% by weight of the glutamate.

The following specific examples are illustrative of the practice of the invention:

Example I

A cluster of axially aligned filter cigarettes were sprayed with a 2% aqueous solution of monosodium glutamate using an air sprayer. The spray was directed toward the ends of the filters of these cigarettes and the spray was held at such a distance from them that all the solution could be received by the filters and at an equal rate. Each filter received thus 0.4 milligram of monosodium glutamate. After spraying, the filters were allowed to dry. On smoking, it was found that the monosodium glutamate enhanced the flavor of the cigarette smoke.

Example II

The filter of each of a group of filter cigarettes was injected with a 20% aqueous solution of monosodium glutamate using a small syringe with a fine needle. Each filter received 3 milligrams of monosodium glutamate. The filters were allowed to dry and the cigarettes were smoked for evaluation. In each instance it was found that the monosodium glutamate enhanced the flavor of the cigarette smoke.

We claim:
1. A rod-like smoking article composed essentially of tobacco and having a mouthpiece end provided with a tipping sheet which maintains separation between the tobacco and a smoker's lips, a flavor-enhancing substance, selected from the group consisting of water soluble salts of glutamic acid and 5 nucleotides, said substance being positioned on the exterior surface of the mouthpiece tipping sheet for introducing the flavor-enhancing substance into a smoker's mouth.
3. A smoking article according to claim 1 in which the flavor-enhancing substance on the tipping sheet is present in an amount within the range of about 0.1 to 3 milligrams per article.

References Cited

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