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(54) Title: SMOKING ARTICLE AND SMOKING MATERIAL THEREFOR

(57) Abstract

The invention relates to a reconstituted smoking material which comprises a non–polyol aerosol generator, tobacco (optional), binder (optional) and inorganic filler. A further polyol aerosol generator may also be contained in the smoking material. There is also provided a smoking article containing such material in a conventional arrangement or with a core axially disposed within an annulus. A further aspect of the invention is the provision of a polyol or non–polyol aerosol generated disposed in the filter element of a smoking article, which may contain the inventive smoking material. The aerosol material on the filter is eluted into the aerosol of the smoke on burning of the smoking article.

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Smoking Article and Smoking Material therefor

The subject invention relates to smoking articles, cigarettes for example, and smoking material therefor.

The patents literature contains many proposals for smoking materials for use in place of conventional cut tobacco cigarette filler.

It is an object of the subject invention to provide new smoking materials which provide for mainstream smoke which although containing low levels of tobacco derived components, is fully acceptable to the consumer.

The subject invention provides a smoking material comprising a non-polyol aerosol generator, up to 20% by weight tobacco, binder at not more than 20% by weight and not less than 30% by weight inorganic filler.

Triethylene glycol diacetate ('TEGDA'), glycerol triacetate ('triacetin') or glycerol diacetate ('diacetin'), for example, can be used as the non-polyol aerosol generator either individually or in combination. As is well known to those skilled in smoking article science and technology, TEGDA and triacetin are substances with an established use as plasticisers (bonding agents) for cellulose acetate cigarette-filter tow. It was thus surprising to find that these substances and similar substances, when used as aerosol generating substances in smoking materials according to the subject invention, provide aerosols in mainstream smoke which smokers register as very acceptable.

Non-polyol aerosol generator is usefully present in smoking materials of the subject invention at levels in a range of about 2% to about 30% by weight. More usually the range will be about 5% to about 20% by weight, and more usually 5-15%.

Total aerosol generator can include a polyol aerosol generator, such as for example one or more of glycerol, propylene glycol and triethylene glycol.

Smoking materials according to the subject invention can, as will be readily appreciated by those skilled in the art, be fabricated by slurrying the components, in fine particulate form, with water and casting the slurry to sheet form on a band or wire sheet-forming machine or on a heated drum. An alternative is to feed a mixture of the components, together with water, to an extruder. The product of casting or extrusion is suitably cut and shredded to provide smoking material of particulate form.

If the components used to provide the smoking material do not include tobacco, then advantageously the smoking material, in particulate form, is blended with particulate tobacco. In such case, the smoking material expediently accounts for at least about 30% by weight of the blend. Suitably, the smoking material will account for the majority, by weight, of the blend, that is more than 50% by weight of the blend. The tobacco in the blend may be expanded tobacco.

A class of substance suitable for the selection therefrom of binder in smoking materials according to the subject invention is the alginates. Sodium alginate has been found to

be advantageous. Other suitable binder substances are celluloses or modified celluloses, hydroxypropyl cellulose or carboxymethyl cellulose, for example, starches or modified starches and natural gums.

Suitable substances for use as inorganic filler are calcium carbonate, perlite, vermiculite, diatomaceous earth, colloidal silica, magnesium oxide, magnesium sulphate, magnesium carbonate or other low density inorganic filler materials known to those skilled in the art.

In smoking materials according to the subject invention inorganic filler is preferably present at a level of at least about 35%, preferably at least about 40% and more preferably at least about 45% by weight.

In smoking materials according to the subject invention tobacco may be present at less than 15%, preferably less than 10% and more preferably less than 5%. The binder of smoking materials according to the invention may be present at less than 15%, and more preferably less than 10% by weight.

Smoking materials according to the subject invention may comprise one or more mechanical stabiliser or strengthening materials, examples being cocoa, sugar and fibre, paper fibre for instance. Expansion medium, such as starch, pullulan or other polysaccharides or foaming agents, for example, and high fat or high oil materials, such as cocoa butter or olive oil, corn oil, for example, may also be advantageously included.

Smoking material according to the invention may be used in a conventional smoking article, either blended with another

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