the only filter segment in the filter is the plug of filtration material. Preferably, no additional filter segments are provided either upstream or downstream of the plug of filtration material.

Alternatively, as long as the filtration material of the filter plug, extends to the mouth end of the smoking article, the filter may include one or more additional filter elements upstream of the plug of filtration material. Thus, exemplary filter structures that may be used include, but are not limited to, a mono filter, a dual filter, a triple filter, a single or multi cavity filter, and combinations thereof.

If the filter comprises a multi component filter comprising a plurality of filter segments, the one or more filter wrappers may surround one, some or all of the filter segments. Preferably, each filter segment comprises a respective filter wrapper and the whole filter is surrounded by a further filter wrapper.

If the filter comprises a multi component filter comprising a plurality of filter segments, the tipping material may surround all the filter segments plus the adjacent portion of the tobacco rod. Alternatively, the tipping material may surround only a portion of the filter, plus the adjacent portion of the tobacco rod.

The tobacco rod may comprise any suitable type or types of tobacco material or tobacco substitute, in any suitable form.

There is provided a filter for a smoking article, the filter comprising: a plug of filtration material that defines a furthest downstream end of the filter; one or more filter wrappers surrounding the plug of filtration material; wherein the one or more filter wrappers have a combined wrapper thickness (t_1) perpendicular to the longitudinal direction of the filter; wherein the filter has a diameter (D_F) perpendicular to the longitudinal direction of the filter; wherein the filter diameter (D_F) to wrapper thickness (t_1) ratio is less than about 135; wherein the filtration material extends to the furthest downstream end of the filter; and wherein the filter comprises perforations extending through the one or more filter wrappers.

By providing a filter diameter (D_F) to wrapper thickness (t_1) ratio less than about 135 and providing filtration material extending to the filter mouth end, the critical load of the smoking article filter can be increased. This reduces the chances of the filter buckling during extinguishing which, in turn, reduces the chances that the consumer's fingers come into contact with the lit end of the cigarette or old ash remaining in the ashtray. The D_F:t_1 ratio of 135 corresponds to a D_{SA}:t ratio of 100, where the diameter of the filter (D_{SA}) = 7.84 mm and the tipping material thickness (t_2) = 40 µm.

As discussed in relation to the first aspect of the invention, the one or more filter wrappers may comprise any suitable material or combination of materials.

CLAIMS

1. A smoking article comprising:

a tobacco rod;

a filter comprising a plug of filtration material that defines a furthest downstream end of the smoking article, the plug being surrounded by one or more filter wrappers; and

tipping material attaching the tobacco rod and the filter, the tipping material including a ventilation zone;

wherein the tipping material and the filter wrapper or wrappers have a combined thickness (t) perpendicular to the longitudinal direction of the smoking article;

wherein the smoking article, at a location about the plug of filtration material, has a diameter (D_{SA}) perpendicular to the longitudinal direction of the smoking article;

wherein the diameter (D_{SA}) to thickness (t) ratio is less than about 80;

wherein the filtration material extends to the furthest downstream end of the smoking article;

wherein the ventilation zone comprises perforations through the tipping material; and

wherein the perforations extend through the one or more filter wrappers.

2. A smoking article according to claim 1, wherein the ventilation zone provides between about 10% and about 80% ventilation of the mainstream smoke.

3. A smoking article according to claim 1 or claim 2, wherein the one or more filter wrappers have a porosity of less than about 1000 Coresta units.

4. A smoking article according to any preceding claim, wherein the one or more filter wrappers have a basis weight between about 50 grams per square metre and about 100 grams per square metre.

5. A smoking article according to any preceding claim, wherein the diameter (D_{SA}) to thickness (t) ratio is greater than about 50.

6. A smoking article according to any preceding claim, wherein the filter wrapper or wrappers have a thickness (t_1) substantially perpendicular to the longitudinal direction of the smoking article, wherein t_1/t is greater than about 0.65.

7. A smoking article according to any preceding claim, wherein the tipping material and the one or more filter wrappers have a combined thickness (t) of between about 100 µm and about 160 µm.

8. A smoking article according to any preceding claim, wherein the one or more filter wrappers have a combined thickness (t_1) of between about 90 µm and about 120 µm.

9. A smoking article according to any preceding claim, wherein the smoking article has a filter section having a critical load of at least about 30 Newtons when subjected to Test A.