According to a first aspect of the invention, there is provided a smoking article comprising: a wrapped rod of smokable material; a filter comprising one or more filter segments, wherein the filter is in axial alignment with the wrapped rod of smokable material and abuts the wrapped rod of smokable material at an interface; a tipping wrapper circumscribing at least a portion of the filter and attaching the filter to the wrapped rod of smokable material; an over-tipping band circumscribing the filter and overlying the tipping wrapper at the upstream end of the filter such that the over-tipping band overlies the interface between the wrapped rod of smokable material and the filter, wherein the over-tipping band is formed of a substantially air impermeable sheet of cellophane.

There is provided a smoking article comprising a wrapped rod of smokable material and a filter comprising one or more filter segments, wherein the filter is in axial alignment with the wrapped rod of smokable material and abuts the wrapped rod of smokable material at an interface. The smoking article further comprises a tipping wrapper circumscribing at least a portion of the filter and attaching the filter to the wrapped rod of smokable material. A substantially transparent over-tipping band circumscribes the filter and overlies the tipping wrapper at the upstream end of the filter such that the over-tipping band overlies the interface between the wrapped rod of smokable material and the filter. The over-tipping band is formed of an air impermeable sheet of a non-paper cellulosic material obtained by processing cellulose to form regenerated cellulose fibres.

According to a second aspect of the invention, there is provided a method for manufacturing a smoking article, comprising: providing a rod of smokable material having a wrapper; attaching a filter to the rod of smokable material by a tipping wrapper, wherein the filter abuts the rod of smokable material at an interface; and providing an over-tipping band around the filter and overlying the tipping wrapper at the upstream end of the filter such that the over-tipping band overlies the interface between the wrapped rod of smokable material and the filter, wherein the over-tipping band is formed of cellophane.

There is provided a method for manufacturing a smoking article. The method comprises providing a rod of smokable material having a wrapper; attaching a filter to the rod of smokable material by a tipping wrapper, wherein the filter abuts the rod of smokable material at an interface; and providing an over-tipping band around the filter and overlying the tipping wrapper at the upstream end of the filter such that the over-tipping band overlies the interface between the wrapped rod of smokable material and the filter. The over-tipping band is formed of an air impermeable cellulosic sheet of a non-paper cellulosic material obtained by processing cellulose to form regenerated cellulose fibres.

It shall be appreciated that any features described with reference to one aspect of the present invention are equally applicable to any other aspect of the invention.

As used herein, the terms “upstream” and “downstream” are used to describe the relative positions of elements, or portions of elements, of the smoking article in relation to the direction in which a consumer draws on the smoking article during use thereof. Smoking articles as described herein comprise a downstream end and an opposed upstream end. In use, a consumer draws on the downstream end of the smoking article. The downstream end, which is also described as the mouth end, is downstream of the upstream end, which may also be described as the distal end.

As used in the present specification, the term “cellulosic” is not used to describe a sheet material where naturally occurring cellulose fibres from pulp (e.g. spruce pulp, pinewood pulp, beech pulp, birch pulp and other wood pulp) are compressed, such as paper, paperboard, kraft paper, kraft liner board, cardboard and carton board. By contrast, the term “cellulosic” is used to describe a non-paper material obtained by processing cellulose to form so-called “regenerated cellulose fibres”, such as cellophane and rayon, as well as other cellulose derivatives like cellulose acetate and cellulose triacetate, which can also be formed into films.

Throughout this specification, the term “self-extinguishment” is used to refer to the smouldering characteristics of a smoking article under free burn conditions. To evaluate self

The term “coloured” is used throughout this specification to describe a sheet material which has a colour or colours, especially as opposed to being white or neutral. A substantially transparent sheet material may also be coloured, if it absorbs or reflects incident light of various wavelengths differentially such that it appears tinted with a colour determined by the nature of that absorption (or that reflectance). In smoking articles according to the invention a filter and a rod of smokable material abut at an interface. The filter is circumscribed by a tipping wrapper. A band of an air impermeable cellulosic material is provided, around the filter at the position of the interface between the filter and the rod, overlying the tipping wrapper. The over-tipping band is formed from a cellulosic sheet material that is substantially impermeable to air.

Because the over-tipping band is formed from a substantially air-impermeable cellulosic sheet material, the self-extinguishment time of the smoking article is significantly reduced. Thus, a smoking article, such as a cigarette, left under free burn conditions in an ashtray quickly self-extinguishes. Further, the consumer does not need to act mechanically on the remainder of the smoking article to extinguish combustion. At the same time, the use of a cellulosic sheet material, such as, for example, cellophane has been shown to advantageously reduce the visible staining of the filter due to heat generated by combustion as the cone approaches the filter.

The use of an over-tipping band in accordance with the present invention can be conveniently incorporated into any existing filter arrangement and does not need to affect the existing arrangement of the tipping wrapper or wrappers. Further, an over-tipping band in accordance with the present invention can be easily incorporated into the standard tipping wrapper, so that standard manufacturing equipment and techniques can be used for putting the over-tipping band in place.

Preferably, the over-tipping band is formed of a substantially air impermeable cellulosic sheet material. As mentioned in the first aspect of the invention, the over-tipping band is formed of cellophane. This is particularly advantageous because cellophane may be provided as a substantially transparent material and so the visual impact of the over-tipping band is minimised. Other suitable materials include films capable of blocking ambient oxygen from permeating into the filter.

Preferably, over-tipping the band has a width of at least about 3 millimetres. More preferably, the over-tipping band has a width of at least about 4 millimetres. In addition, or as an alternative, the over-tipping band has preferably a width of no more than 10 millimetres. More preferably, the over-tipping band has a width of no more than about 8 millimetres. In some preferred embodiments, the over-tipping band has a width of about 5 millimetres. As a further alternative, the over-tipping band may have a width such as to substantially circumscribe the filter over the whole of its length. This also minimises the visual impact of the over-tipping band, since the over-tipping band shall have substantially the same length and shall be in substantial alignment with the underlying tipping wrapper.

CLAIMS

1. A smoking article comprising:

a wrapped rod of smokable material;

a filter comprising one or more filter segments, wherein the filter is in axial alignment with the wrapped rod of smokable material and abuts the wrapped rod of smokable material at an interface;

a tipping wrapper circumscribing at least a portion of the filter and attaching the filter to the wrapped rod of smokable material;

an over-tipping band circumscribing the filter and overlying the tipping wrapper at the upstream end of the filter such that the over-tipping band overlies the interface between the wrapped rod of smokable material and the filter, wherein the over-tipping band is formed of a substantially air impermeable sheet of cellophane.

2. A smoking article according to claim 1, wherein the over-tipping band is substantially transparent.

3. A smoking article according to claim 1 or 2, wherein the tipping wrapper is substantially transparent.

4. A smoking article according to any preceding claim, wherein the over-tipping band extends at least 3mm in a longitudinal direction along the smoking article.

5. A smoking article according to any preceding claim, wherein the over-tipping band extends in a longitudinal direction along the smoking article by less than about a longitudinal width of the tipping wrapper.

6. A smoking article according to any preceding claim, wherein the downstream end of the over-tipping band is at least 15 millimetres from the downstream end of the filter.

7. A smoking article according to any preceding claim, wherein the upstream end of the over-tipping band is no more than 5 millimetres from the interface between the filter and the wrapped rod of smokable material.

8. A smoking article according to any preceding claim, wherein the over-tipping band is formed of a tinted sheet material.

9. A smoking article according to any preceding claim, wherein the over-tipping band is affixed to the tipping wrapper.

10. A smoking article according to any preceding claim, wherein the tipping wrapper is a paper wrapper.

11. A smoking article according to claim 9 wherein the over-tipping band is provided as a laminated layer on the paper wrapper.

12. A smoking article according to any preceding claim, wherein the self-extinguishment time of the smoking article is at least 15 percent lower than the self-extinguishment time of a corresponding smoking article with the over-tipping band removed.

13. A method for manufacturing a smoking article, comprising:

providing a rod of smokable material having a wrapper;

attaching a filter to the rod of smokable material by a tipping wrapper, wherein the filter abuts the rod of smokable material at an interface; and

providing an over-tipping band around the filter and overlying the tipping wrapper at the upstream end of the filter such that the over-tipping band overlies the interface between the wrapped rod of smokable material and the filter, wherein the over-tipping band is formed of cellophane.

14. A method according to claim 13, wherein the over-tipping band is provided on the tipping wrapper prior to the step of attaching the filter to the rod of smokable material by the tipping wrapper.