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APPLICATION No. 22648/61.....
DATED 30 <sup>th</sup> June, 1961.....

PATENTS AND DESIGNS ACT 1949

PROVISIONAL SPECIFICATION

Improvements in Cigarettes.

We, The Imperial Tobacco Company (of Great Britain and Ireland) Limited, a British Company of East Street, Bedminster, in the City and County of Bristol, do hereby declare this invention to be described in the following statement:-

- 1 -

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This invention relates to so-called filter tipped cigarettes. A filter tipped cigarette consists essentially of a length of plain cigarette joined to a filter by a band that encircles the filter and a short length of the plain cigarette, and which, with an adhesive, joins the two together. The filter itself is usually wrapped in a paper sleeve to maintain it in rod-like form.

It is an object of the present invention to provide means for permitting air to pass through the envelope of a filter tipped cigarette.

The present invention consists in a filter tipped cigarette in which the encircling band and the sleeve of the filter both have a plurality of perforations, whereby some perforations in the encircling band connect with some of those in the sleeve, thereby permitting air to pass through said connecting perforations into the filter tip and thence into the smoker's mouth.

The encircling band may be a cork band or an imitation cork band, in which case the band may be perforated to conform with the cork lacunae pattern. An encircling band of paper may be likewise perforated.

The encircling band may be of any other material suitable for the purpose.

Two embodiments of the present invention will now be described with reference to the accompanying drawings.

Fig. 1 shows a filter tipped cigarette, partly sectioned to show the butt joint between the plain cigarette and the filter tip, in which the encircling band comprises a perforated paper band, and a filter sleeve also perforated.

Fig. 2 shows a filter tipped cigarette, partly sectioned to show the butt joint between the plain cigarette and the filter tip, in which the encircling band comprises a perforated cork band or an imitation

cork band, and a filter sleeve also perforated.

Fig. 3 shows encircling band material with a plurality of perforations disposed on the filter side of the butt joint between the plain cigarette and the filter tip.

Figs. 4, 5 and 6 show encircling band material having a plurality of perforations of alternative form and pattern.

Fig. 7 shows a plurality of perforations in the material of the sleeve of the filter tip.

Fig. 8 shows an alternative pattern of perforations in the material of the sleeve of the filter tip.

In order to simplify explanation, the encircling band or material for same, and the perforations of whatever form or pattern have been given corresponding numbers on all nine figures. The other components of Figs. 1 and 2 have been treated likewise.

The basic dimension of the perforations illustrated in the Figures is 0.5 m.m.

Referring to Figs. 1 and 2, encircling bands 1 of paper and imitation cork respectively are shown joining the filters 2 to the plain cigarettes 3, with the patterns of the perforations 4 in the bands 1 superimposed on the patterns of the perforations 7 in the sleeves 6 of the filters 2, whereby some of the perforations 4 connect with some of the perforations 7, thereby permitting air to pass through the connecting perforations, into the filters 2 and thence to the smoker's mouth.

Referring to Fig. 3, a plurality of perforations 4 in the encircling band material 1 are disposed on the filter tip side of a line A - A which is intended to coincide with the butt joint <sup>5</sup> ~~between the plain cigarette and the filter tip~~ (Figs. 1 and 2), so that the perforations

4 are superimposed on the pattern of the perforations 7 in the sleeve 6 of the filter 2.

5 In order to provide for manufacturing variations from the desired location of the butt joint 5 between the plain cigarette 3 and the filter 2 in relation to the encircling band 1, and like variations in the disposition of the pattern of perforations 4 in the sleeve 6 of the filter 2 and in the encircling band 1 itself, Figs. 4, 5 and 6 show alternative forms and patterns for this purpose.

10 Referring to Figs. 7 and 8 the edges B and C coincide as the lap of the filter sleeve 6 and it is desirable that these edges are kept free from perforations thereby providing requisite strength for filter tip manufacturing purposes. The pattern of perforations 4 in Fig. 7 are  
15 suitable for use in conjunction with perforations 4 shown in Figs. 3 to 6 inclusive, and the pattern in Fig. 8 with those shown in Figs. 5 and 6.

It is to be understood that the pitches between the perforations 4 as illustrated in Figs. 3, 4, 6, and 8  
20 may be regular or irregular so as to ensure that some of the perforations of the encircling paper connect with some of those in the sleeve of the filter tip. (Figs. 1 and 2)

Likewise the pitches of the perforations 4 in the patterns of perforations 4 illustrated in Figs. 5 and 7.

25 It is further to be understood that the perforations 4 may be dimensionally and in form different from those illustrated in Figs. 3, 4, 5, 6, 7<sup>and 8</sup> and also of patterns, and in extent, different from those illustrated in Figs. 5 and 7.

30 Referring to Fig. 9 the encircling band material/<sup>1</sup> of imitation cork may be wholly or partially perforated so that such perforations 4 coincide with the cork lacunae pattern whereby some of the perforations connect with some of the perforations 7 in the sleeve 6 of the filter 2

thereby permitting air to pass through the connecting perforations into the filter 2 and thence to the smoker's mouth.

5 It will be appreciated that in the case of wholly perforated encircling band material or such material 1 partially perforated about the line A - A that perforation of the sleeve 6 of the filter 2 may be omitted if desired, for some of the perforations 4, on the line A - A, will coincide with the butt joint 5 between the plain cigarette 10 3 and the filter 2 (Fig.2), thereby permitting air to pass through said perforations 4 and the filter 2 into the smoker's mouth.

15 The said perforations 4 may be produced at the same time that the cork lacunae pattern is formed in manufacture of the encircling band material, or subsequent to such operation.

for THE IMPERIAL TOBACCO COMPANY  
(of Great Britain & Ireland), LIMITED.

ORIGINAL

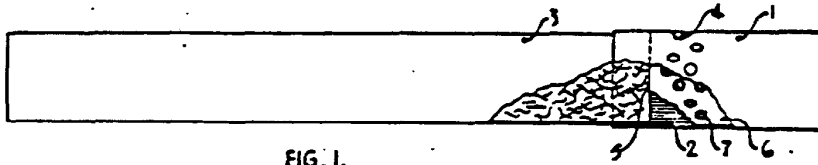


FIG. 1.

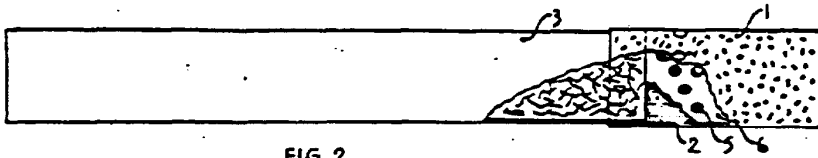
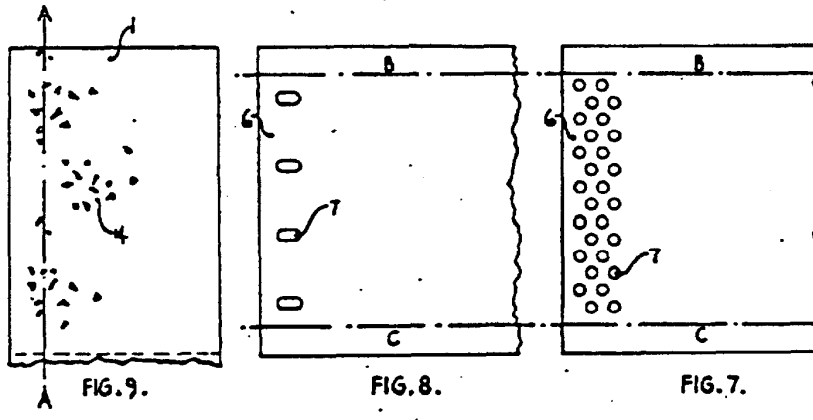
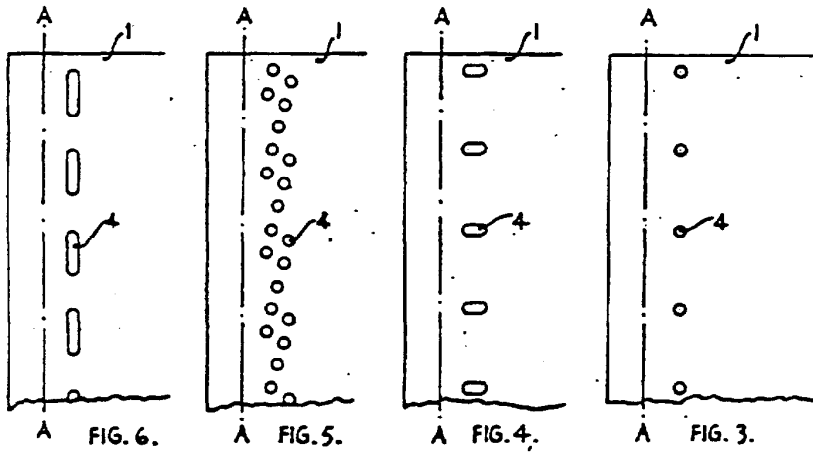


FIG. 2.



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