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## 54 **Smoking article.**

57 The present invention relates to a smoking article which produces an aerosol that resembles tobacco smoke, but contains no more than a minimal amount of incomplete combustion or pyrolysis products.

Preferred embodiments of the present smoking article comprise a short combustible carbonaceous fuel element (10), a heat stable substrate (12) bearing an aerosol forming substance, a heat conducting member (14) which contacts a portion of the fuel element (10) and the substrate (12), and an insulating jacket surrounding at least a portion of the fuel element.

The smoking article of the present invention is capable of providing an aerosol "smoke" which is chemically simple, consisting essentially of air, oxides of carbon, water, and the aerosol which carries any desired flavorants or other desired volatile materials, and trace amounts of other materials. The aerosol "smoke" from the preferred embodiments has no significant mutagenic activity as measured by the Ames Test. In addition, the article may be made virtually ashless so that the user does not have to remove any ash during use.

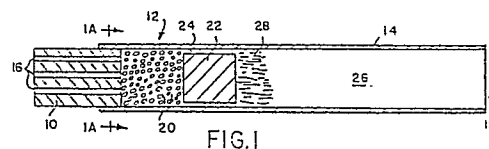


FIG.1



EP 89 11 0768

| DOCUMENTS CONSIDERED TO BE RELEVANT   |  |  |   |
|---|--|--|---|
| Category  | Citation of document with indication, where appropriate, of relevant passages                                  | Relevant to claim                              | CLASSIFICATION OF THE APPLICATION (Int. Cl.4) |
| A   | US-A-3 258 015 (ELLIS)<br>* Column 2, line 28 - column 5, line 20; figures 1-3 *                               | 1-8  | A 24 D 1/18                                   |
| A,D   | EP-A-0 117 355 (PHILIP MORRIS INC.)<br>* Page 2, line 23 - page 3, line 15; Page 7, line 11 - page 9, line 8 * | 1-8  |   |
| A   | US-A-4 340 072 (BOLT)<br>* Whole document *  | 1-8  |   |
| A   | GB-A-1 431 045 (GALLAHER LTD)<br>* Claim 1 *   | 25-28  |   |
| A   | WO-A-8 401 274 (STEINER)<br>* Page 6, line 27 - page 12; figures *   | 1-8  |   |
| A   | US-A-3 356 094 (ELLIS)   |  |   |
| A   | US-A-2 907 686 (SIEGEL)  |  |   |
|   |  |  | TECHNICAL FIELDS SEARCHED (Int. Cl.4)         |
|   |  |  | A 24 D<br>A 24 F<br>A 61 M<br>A 24 B          |
| The present search report has been drawn up for all claims  |  |  |   |
| Place of search<br>THE HAGUE  |  | Date of completion of the search<br>05-11-1989 | Examiner<br>RIEGEL R.E.                       |
| <b>CATEGORY OF CITED DOCUMENTS</b><br>X : particularly relevant if taken alone<br>Y : particularly relevant if combined with another document of the same category<br>A : technological background<br>O : non-written disclosure<br>P : intermediate document<br>T : theory or principle underlying the invention<br>E : earlier patent document, but published on, or after the filing date<br>D : document cited in the application<br>L : document cited for other reasons<br>& : member of the same patent family, corresponding document |  |  |   |