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United States Patent [19]

Collins et al.

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[54] HEATER ELEMENT OF AN ELECTRICAL SMOKING ARTICLE AND METHOD FOR MAKING SAME

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[73] Assignee: Philip Morris Incorporated, New York, N.Y.

[21] Appl. No.: 449,462

[22] Filed: May 24, 1995

Related U.S. Application Data

[60] Division of Ser. No. 943,504, Sep. 11, 1992, Pat. No. 5,505,214, and a continuation-in-part of Ser. No. 666,926, Mar. 11, 1991, abandoned, and a continuation of Ser. No. 12,799, Feb. 2, 1993, Pat. No. 5,249,586.

[51] Int. Cl.⁶ A24F 47/00

[52] U.S. Cl. 131/194; 131/329; 131/273

[58] Field of Search 131/194, 329, 131/359, 270-273; 128/202.21, 203.17, 203.27

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[57] ABSTRACT

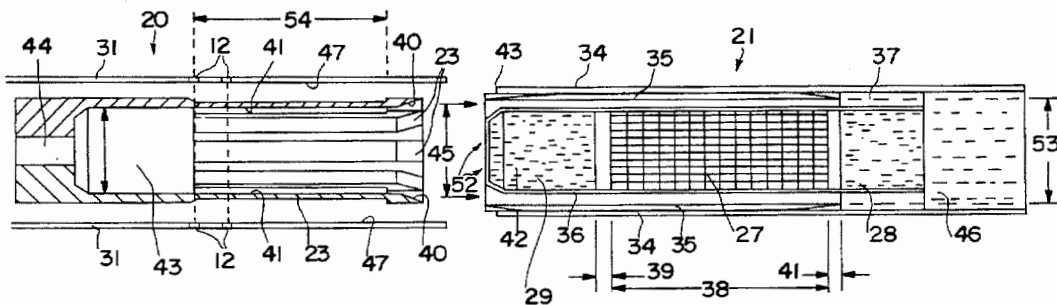
A smoking article is provided in which a replaceable tobacco flavor unit containing tobacco flavor material is electrically heated by a set of permanent reusable heaters to evolve flavors or other components in vapor or aerosol form for delivery to a smoker. Each heater heats only a portion of the available tobacco flavor material so that a plurality of individual puffs of tobacco flavor substance can be delivered sequentially to the smoker. The replaceable tobacco flavor unit can also include a filter to reduce the effect of residual aerosol which settles or condenses on the permanent portions of the article and which can result in off-tastes when reheated. A method and apparatus for manufacturing the replaceable tobacco flavor unit is also provided.

12 Claims, 12 Drawing Sheets

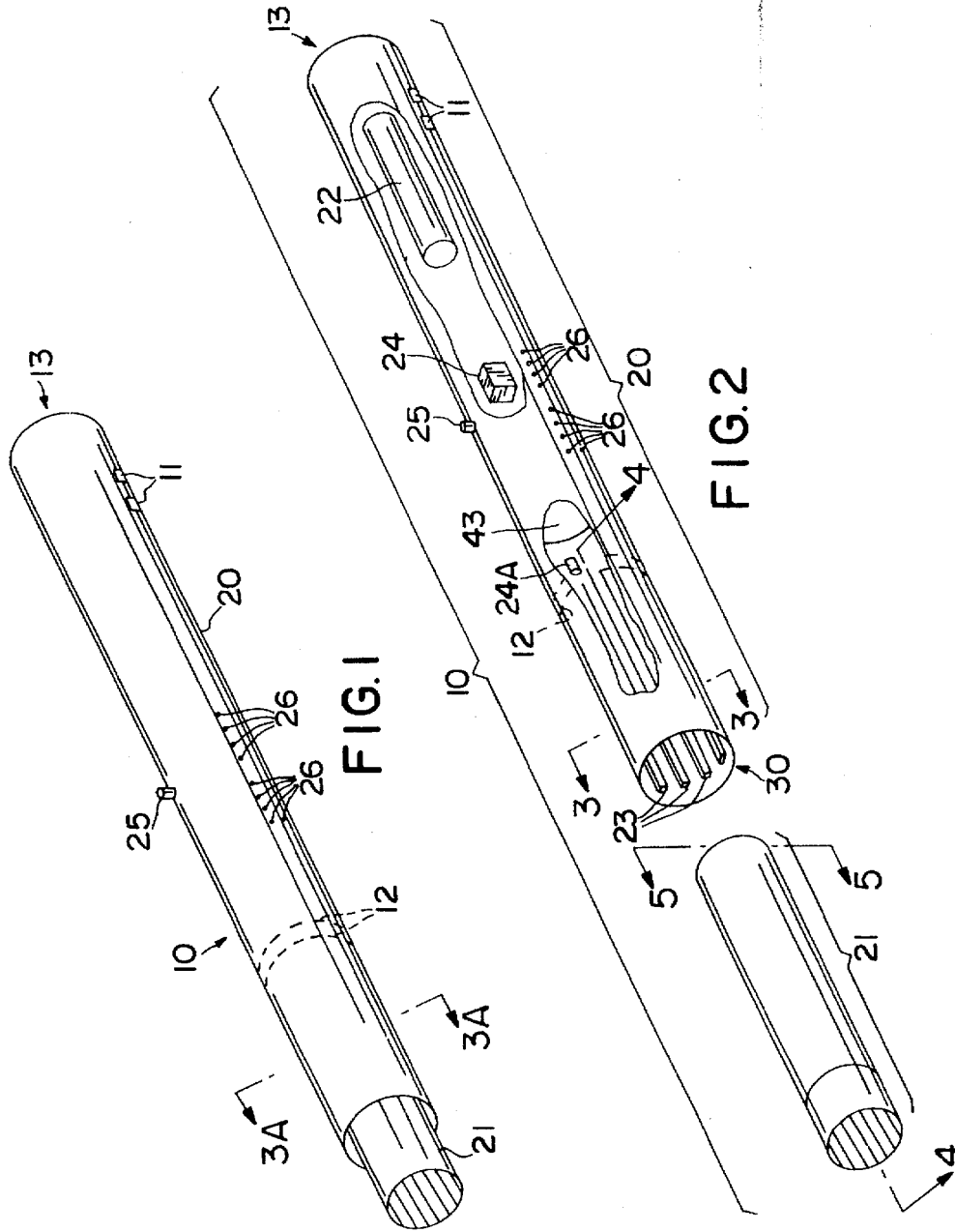
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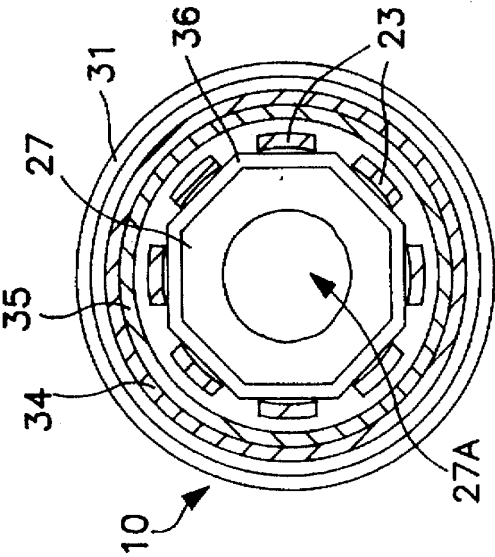


FIG. 3A

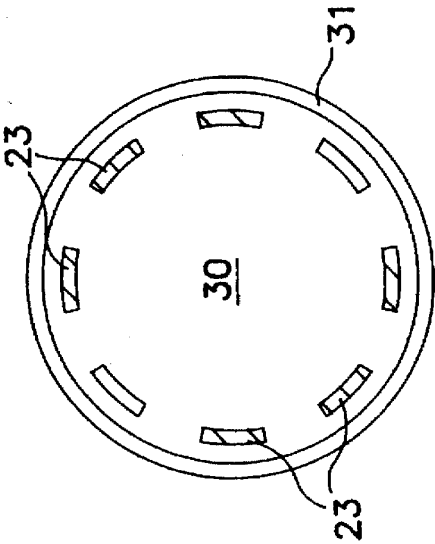


FIG. 3

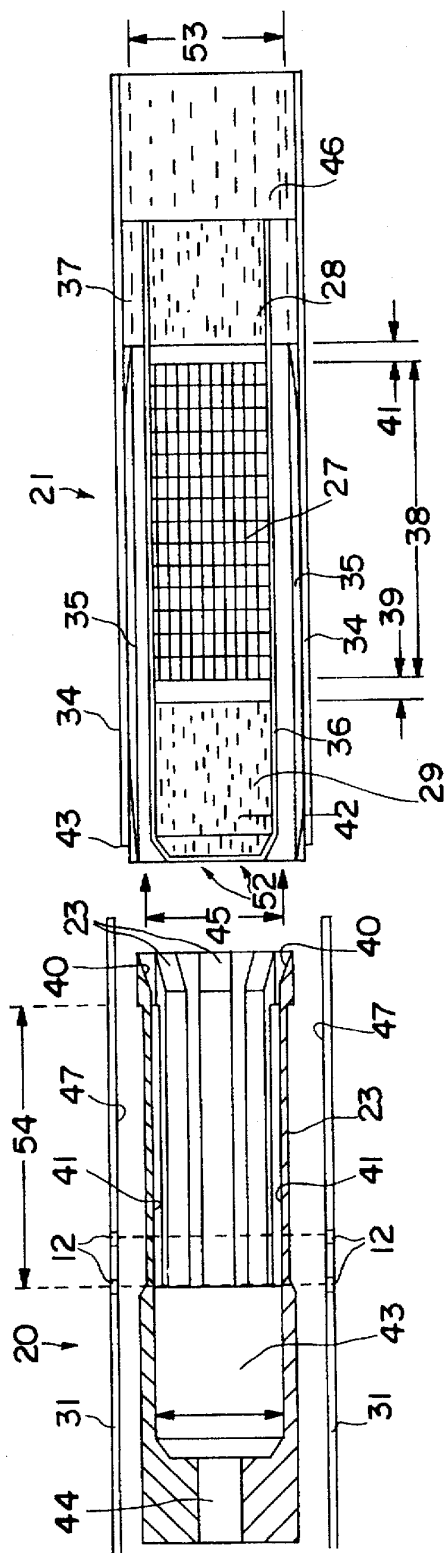


FIG. 4

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