

- [54] **SMOKING ARTICLES UTILIZING ELECTRICAL ENERGY**
- [75] **Inventors: Johnny L. Brooks; Donald L. Roberts, both of Winston-Salem; Jerry S. Simmons, Rural Hall, all of N.C.**
- [73] **Assignee: R. J. Reynolds Tobacco Company, Winston-Salem, N.C.**
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- [22] **Filed: Sep. 8, 1988**
- [51] **Int. Cl.<sup>5</sup> ..... A24D 1/00; A24F 1/00; A24F 47/00; A61M 16/00**
- [52] **U.S. Cl. .... 131/329; 131/273; 131/194; 128/202.21; 128/203.26; 128/203.27; 128/204.21**
- [58] **Field of Search ..... 131/329, 194, 273; 128/202.21, 202.27, 203.12, 203.13, 203.15, 204.21, 203.17, 203.26, 203.27, 204.13, 204.23**

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*Primary Examiner*—V. Millin

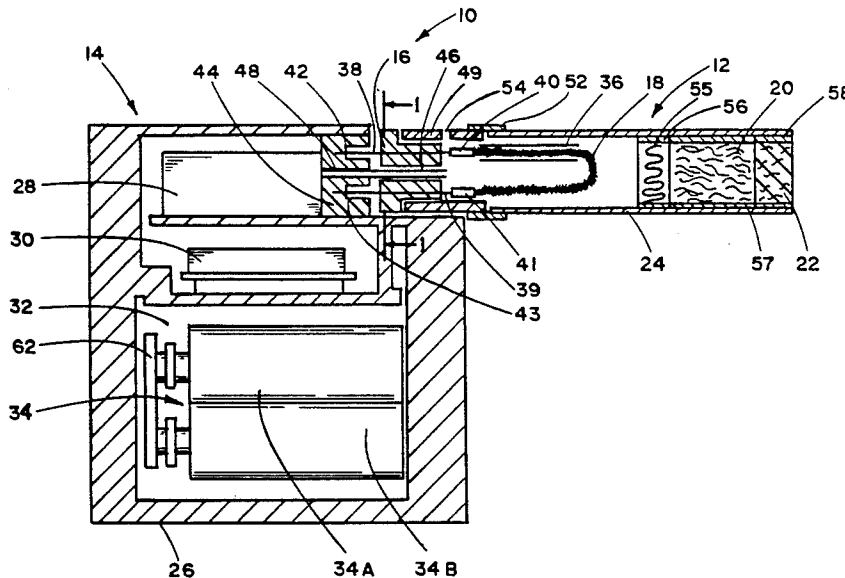
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[57] **ABSTRACT**

Smoking articles employ an electrical resistance heating element and an electrical power source to provide a tobacco-flavored smoke or aerosol and other sensations of smoking. The smoking articles advantageously comprise a disposable portion and a reusable controller. The disposable portion, which may be a cigarette, normally includes (i) an air permeable resistance heating element having a surface area greater than 1 m<sup>2</sup>/g, which usually carries an aerosol forming material, and (ii) a charge or roll of tobacco. The reusable controller normally includes a puff-actuated current actuation means, a time-based current regulating means to control the temperature of the heating element, and a battery power supply.

**202 Claims, 8 Drawing Sheets**



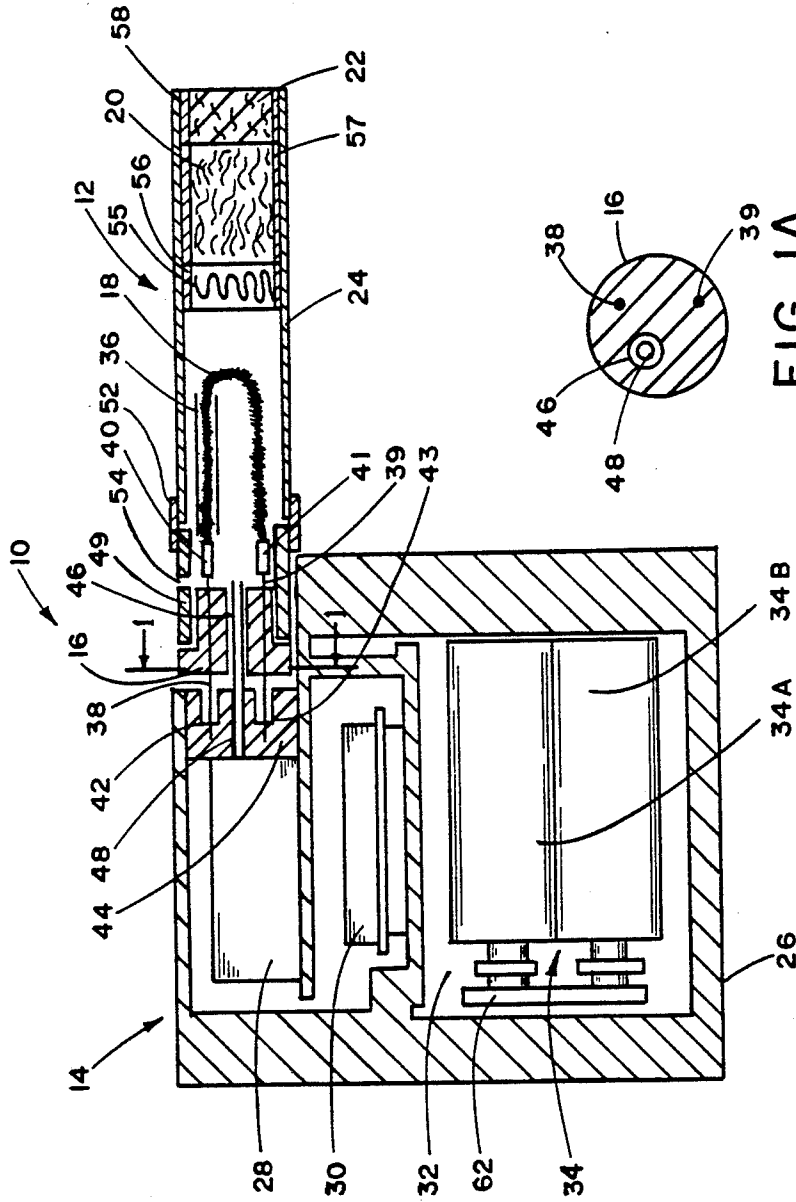


FIG. 1

FIG. 1A

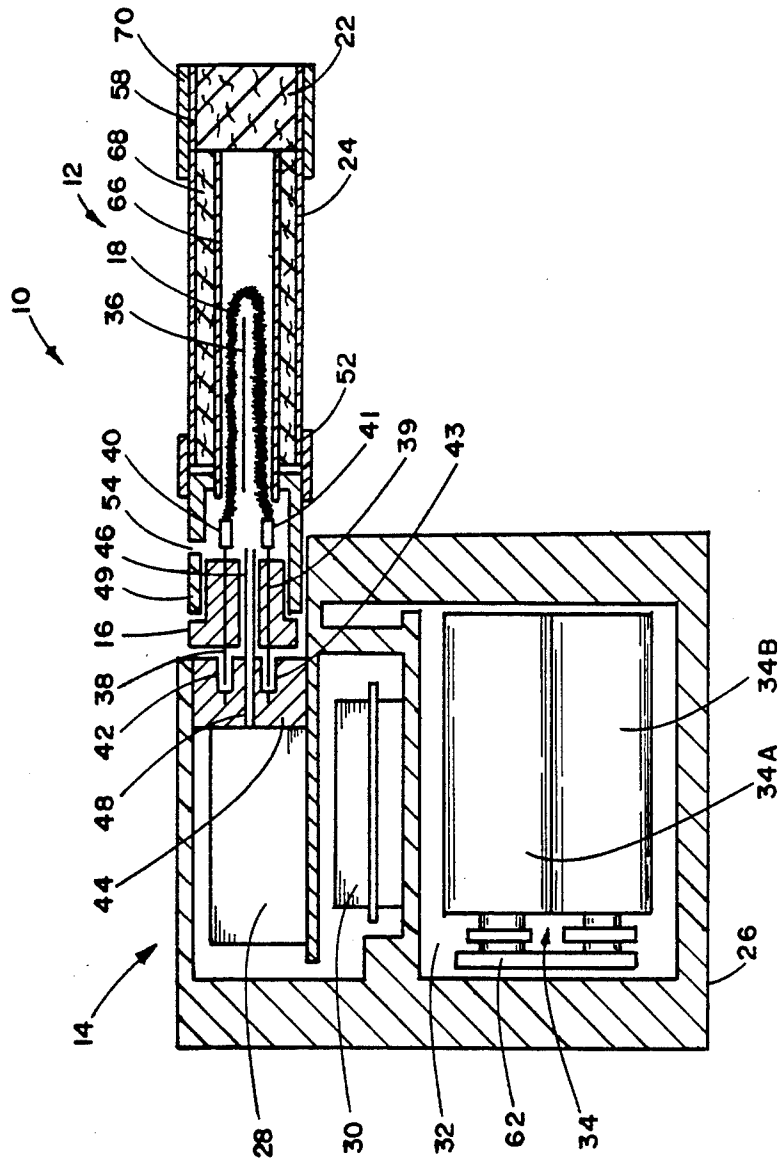


FIG. 2

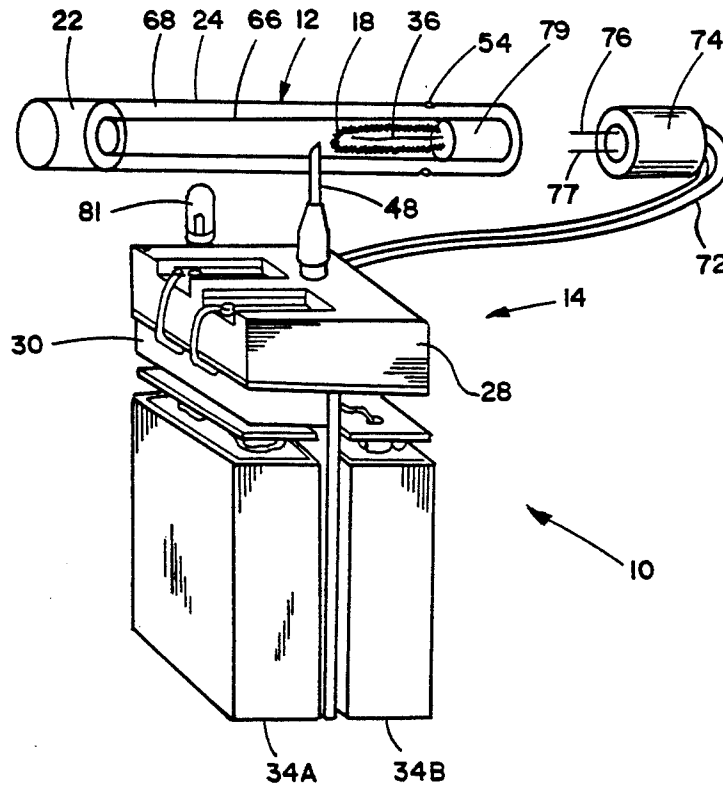


FIG. 3

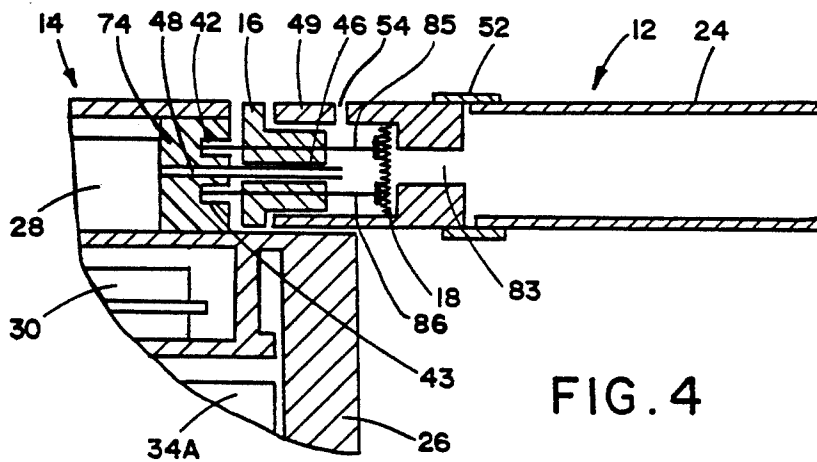


FIG. 4

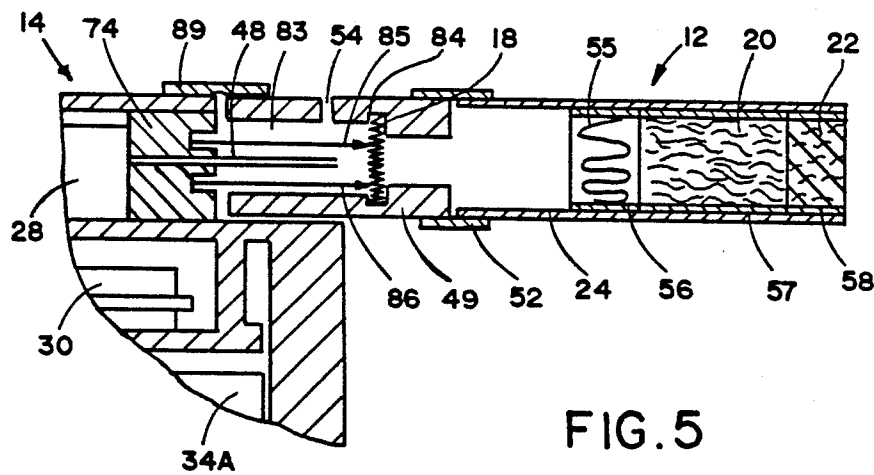


FIG. 5

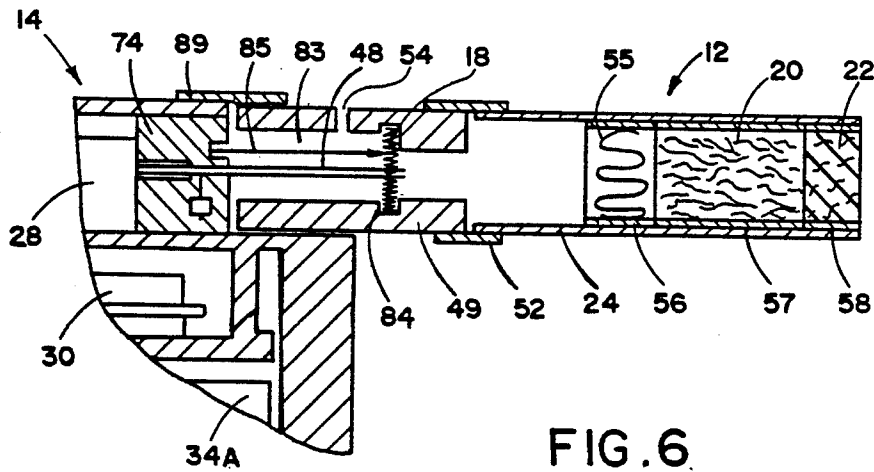


FIG. 6

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