



US006155268A

**United States Patent** [19]  
**Takeuchi**

[11] **Patent Number:** **6,155,268**  
[45] **Date of Patent:** **Dec. 5, 2000**

[54] **FLAVOR-GENERATING DEVICE**

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[75] Inventor: **Manabu Takeuchi**, Tokyo, Japan

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[73] Assignee: **Japan Tobacco Inc.**, Tokyo, Japan

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[21] Appl. No.: **09/120,457**

[22] Filed: **Jul. 23, 1998**

[30] **Foreign Application Priority Data**

Jul. 23, 1997 [JP] Japan ..... 9-197033

[51] **Int. Cl.**<sup>7</sup> ..... **A24F 47/00**

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

[58] **Field of Search** ..... **131/335, 271, 131/273, 194, 336, 272**

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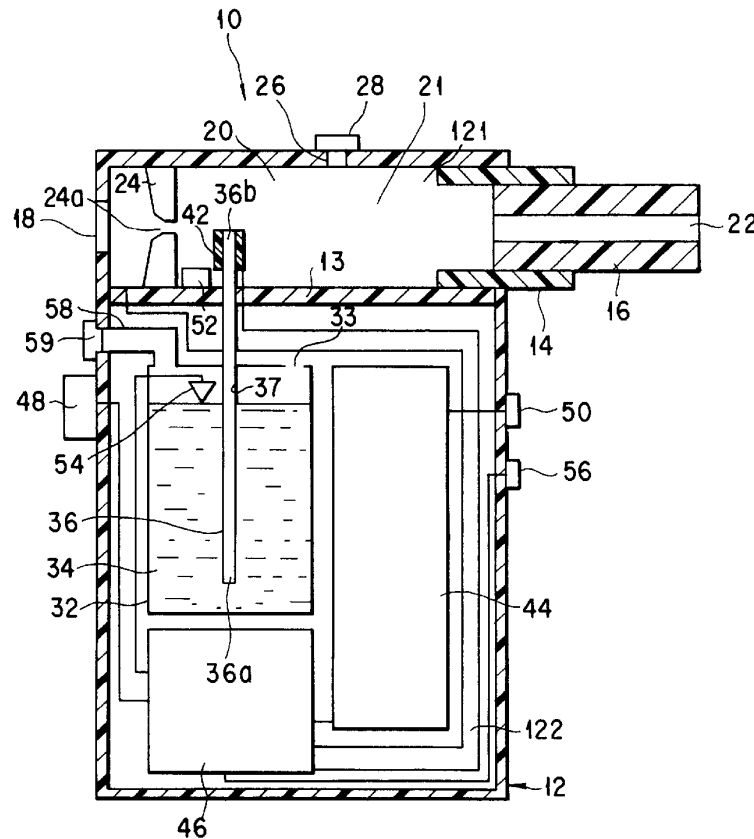
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*Primary Examiner*—James Derrington  
*Assistant Examiner*—Rob McBride  
*Attorney, Agent, or Firm*—Birch, Stewart, Kolasch & Birch, LLP

[57] **ABSTRACT**

A flavor-generating device includes a chamber having an air inlet port and a flavor inhalation port, and defining a gas passageway between the air inlet port and the inhalation port. A liquid container for storing a liquid flavor source is provided, and is maintained at substantially an atmospheric pressure. At least one liquid passageway is provided in fluid communication with the liquid flavor source at its first end portion and with the gas passageway at its second end portion. The liquid passageway transports the liquid flavor source therethrough by capillary force. A heater heats and evaporates the liquid flavor source at the second end portion of the liquid passageway.

**18 Claims, 8 Drawing Sheets**



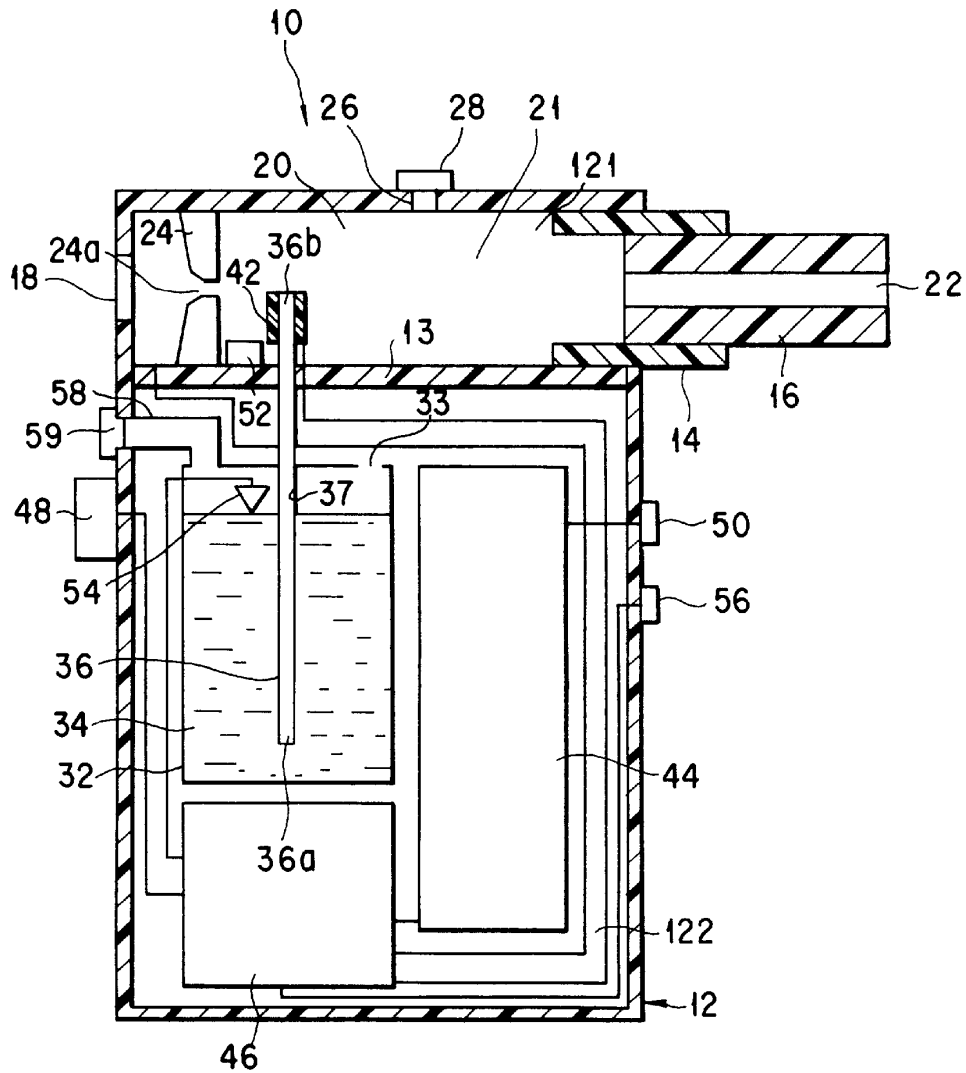


FIG. 1

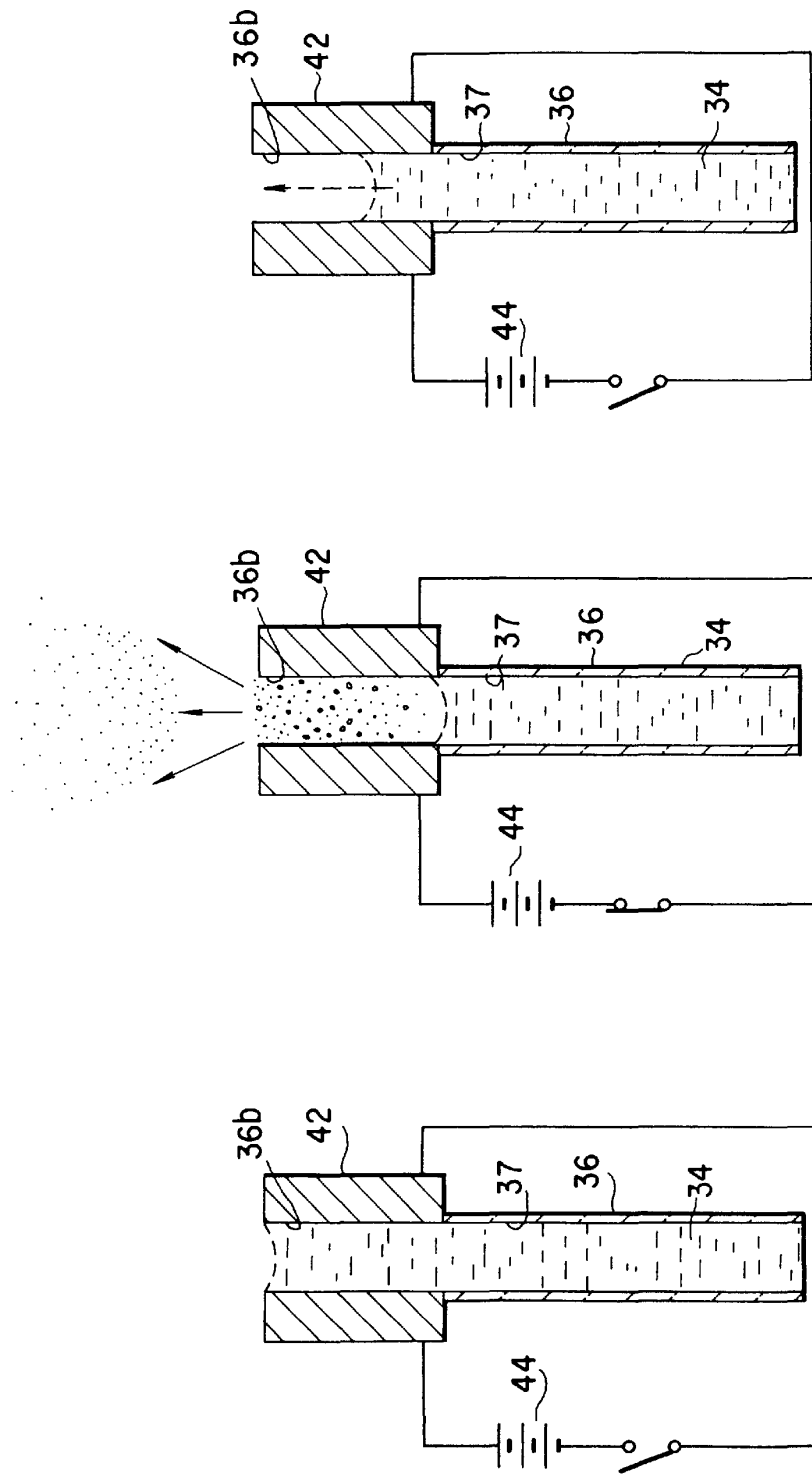


FIG. 2C

FIG. 2B

FIG. 2A

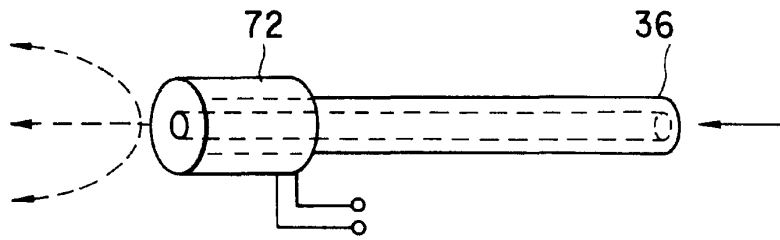


FIG. 3

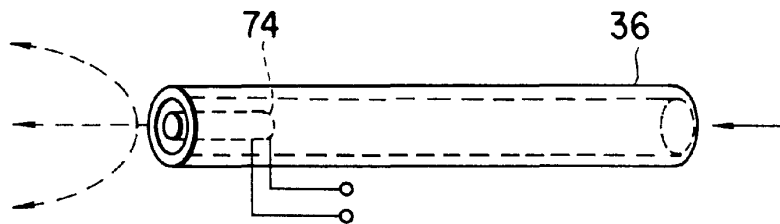


FIG. 4

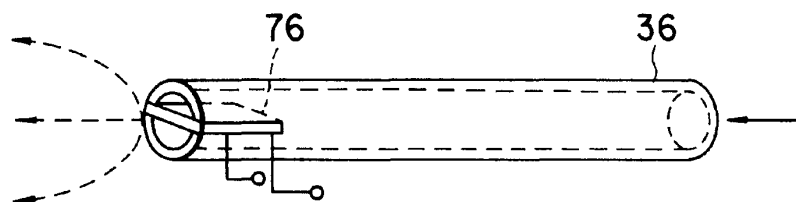


FIG. 5

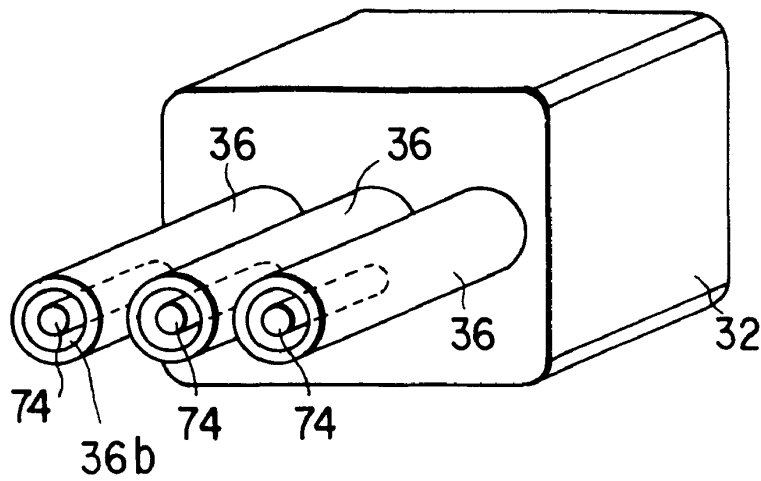


FIG. 6

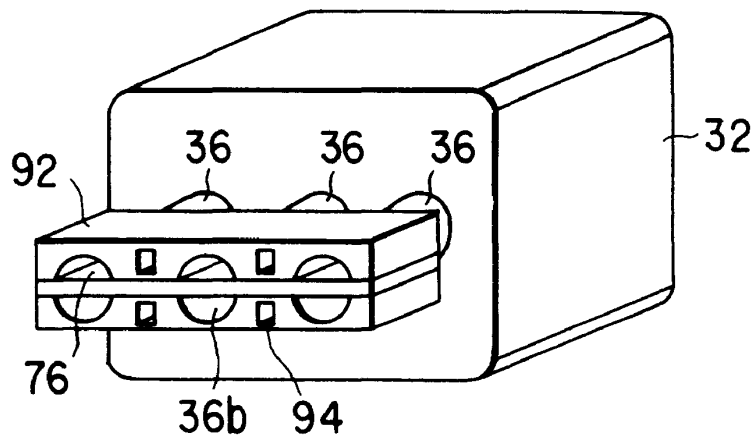


FIG. 7

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