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United States Patent [19]

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Fleischhauer et al.

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[54] **POWER CONTROLLER AND METHOD OF OPERATING AN ELECTRICAL SMOKING SYSTEM**

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

[21] Appl. No.: **08/951,255**

[22] Filed: **Oct. 16, 1997**

Related U.S. Application Data

[63] Continuation-in-part of application No. 08/755,044, Oct. 22, 1996, abandoned.

[51] Int. Cl.⁷ **H05B 1/02**

[52] U.S. Cl. **219/494**; 219/483; 219/501; 219/497; 219/492; 128/202.21; 131/329

[58] Field of Search 219/494, 497, 219/499, 501, 505, 483, 485, 486, 492; 131/194, 270, 271, 329, 273; 128/202.21, 202.27

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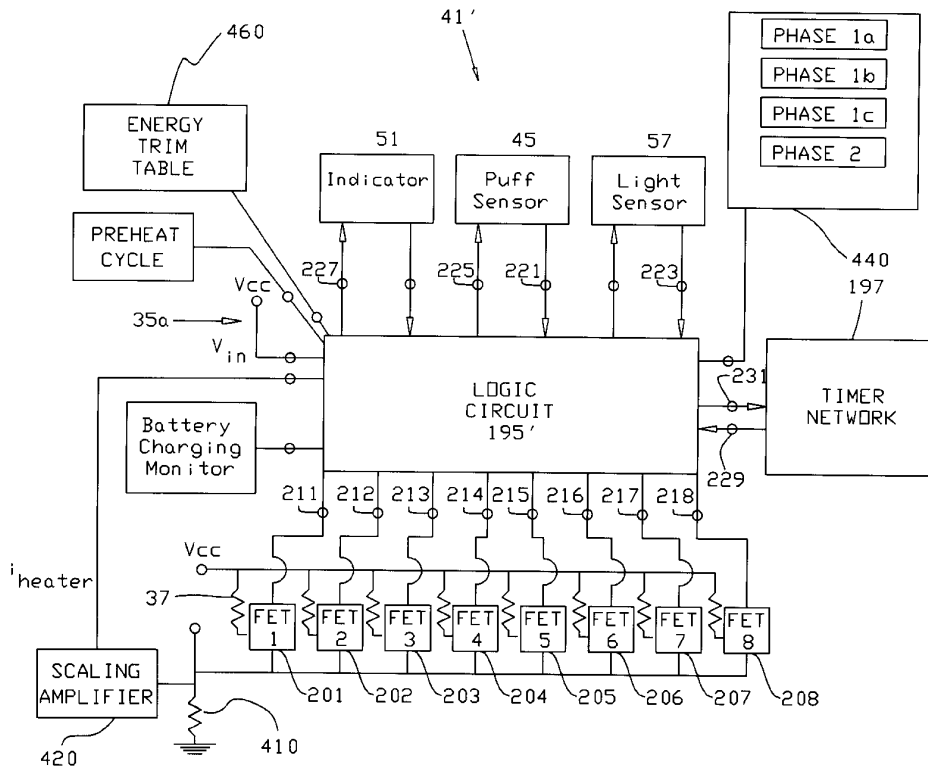
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Attorney, Agent, or Firm—Charles E. B. Glenn; Kevin B. Osborne; Clinton H. Hallman, Jr.

[57] ABSTRACT

A novel controller in an electrical smoking system and method, wherein the method includes the steps of: establishing a preferred thermal pathway to be executed with each heater activation responsively to a puff on an electrically heated cigarette; configuring a power cycle in accordance with the desired thermal pathway; dividing the power cycle into at least first and second phases each having a respective, predetermined time period and total energy input for each phase; and adjusting a respective duty cycle (or other power-adjusting factor) in each phase of the power cycle responsively to a voltage reading of the power source such that the established, respective total energy input of each phase is achieved during the time period of each power cycle.

82 Claims, 17 Drawing Sheets



RAI Strategic Holdings, Inc.
Exhibit 2017
Philip Morris Products, S.A. v. RAI Strategic Holdings, Inc.
IPR2020-00919

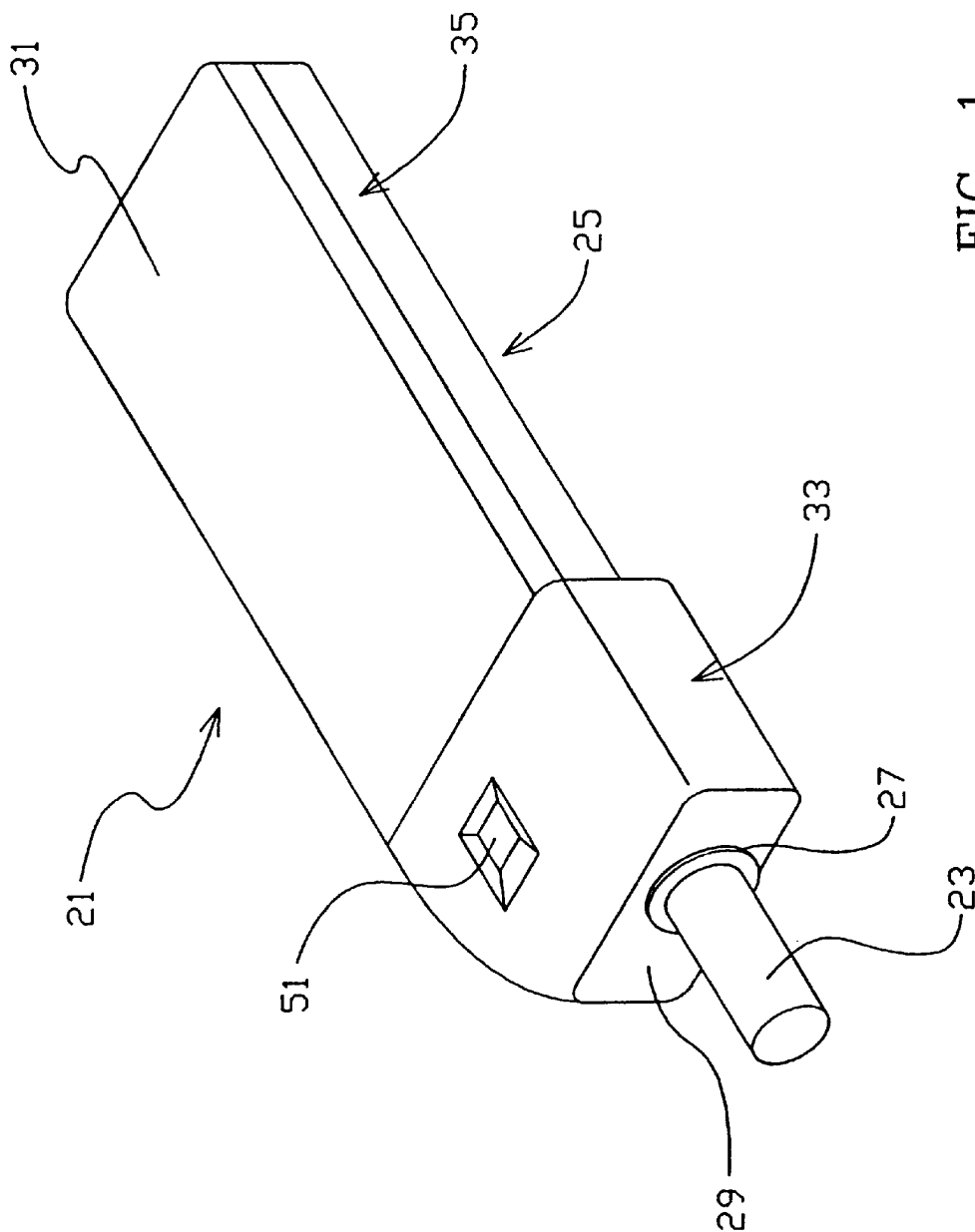


FIG. 1

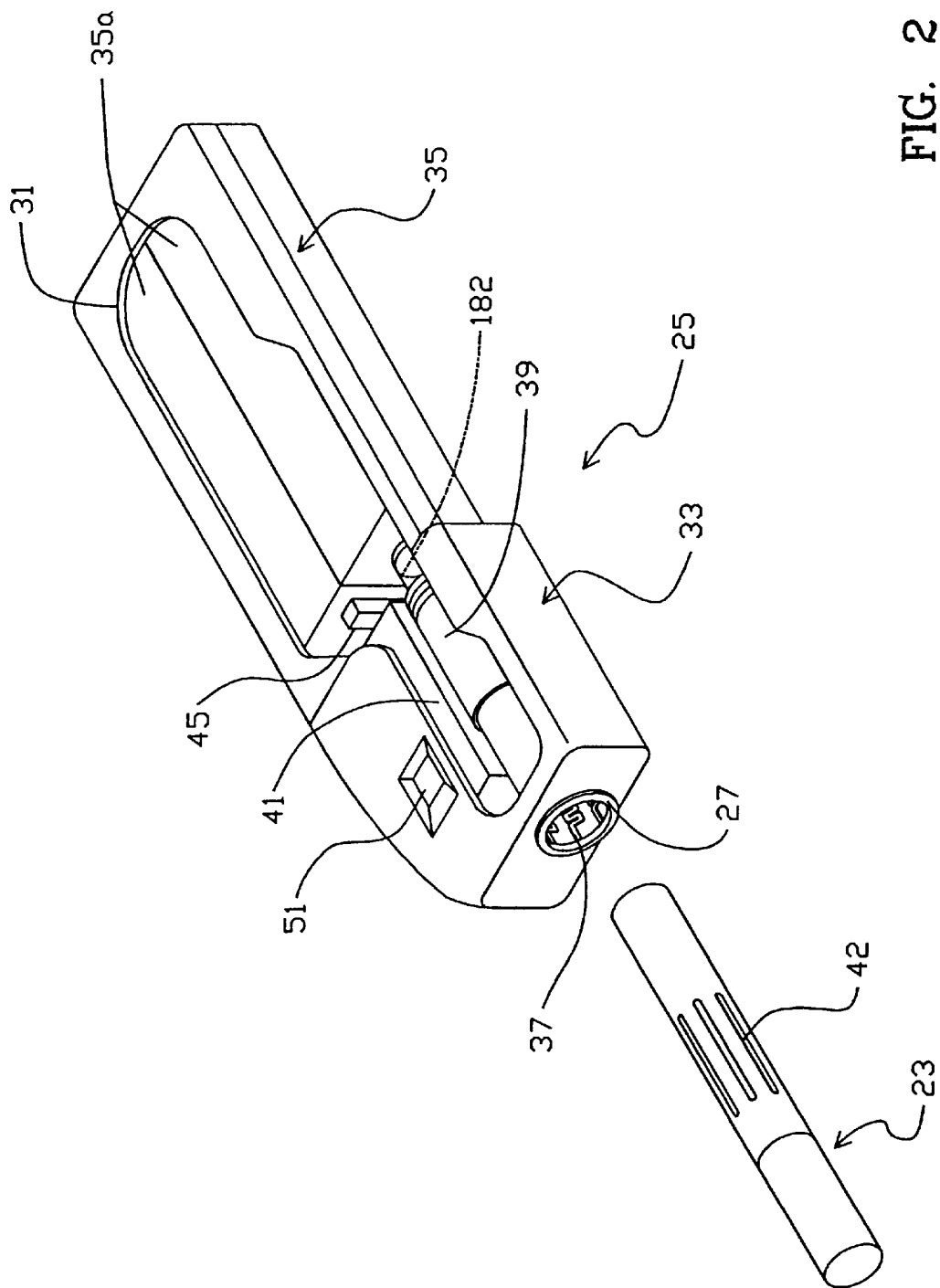


FIG. 2

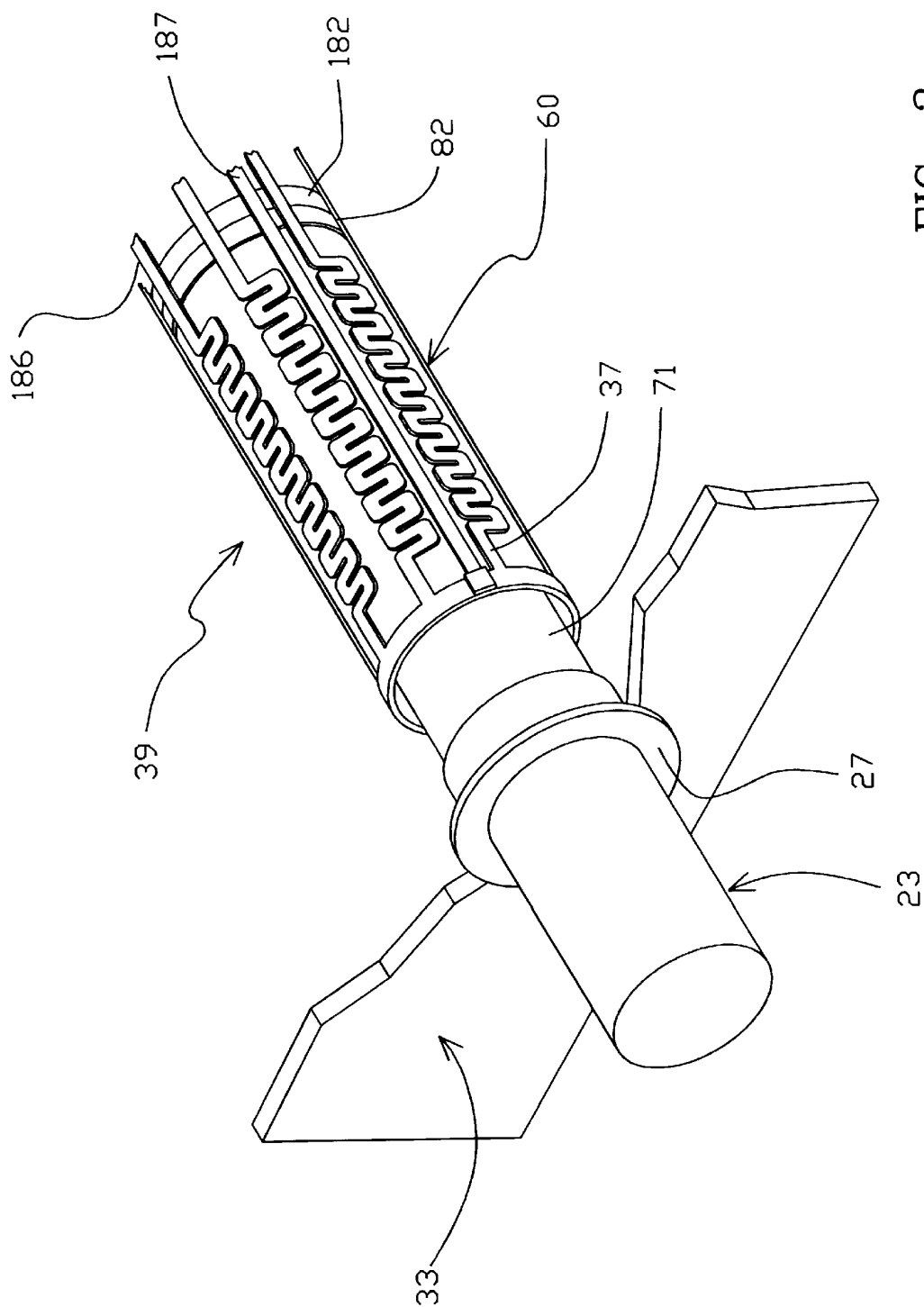


FIG. 3

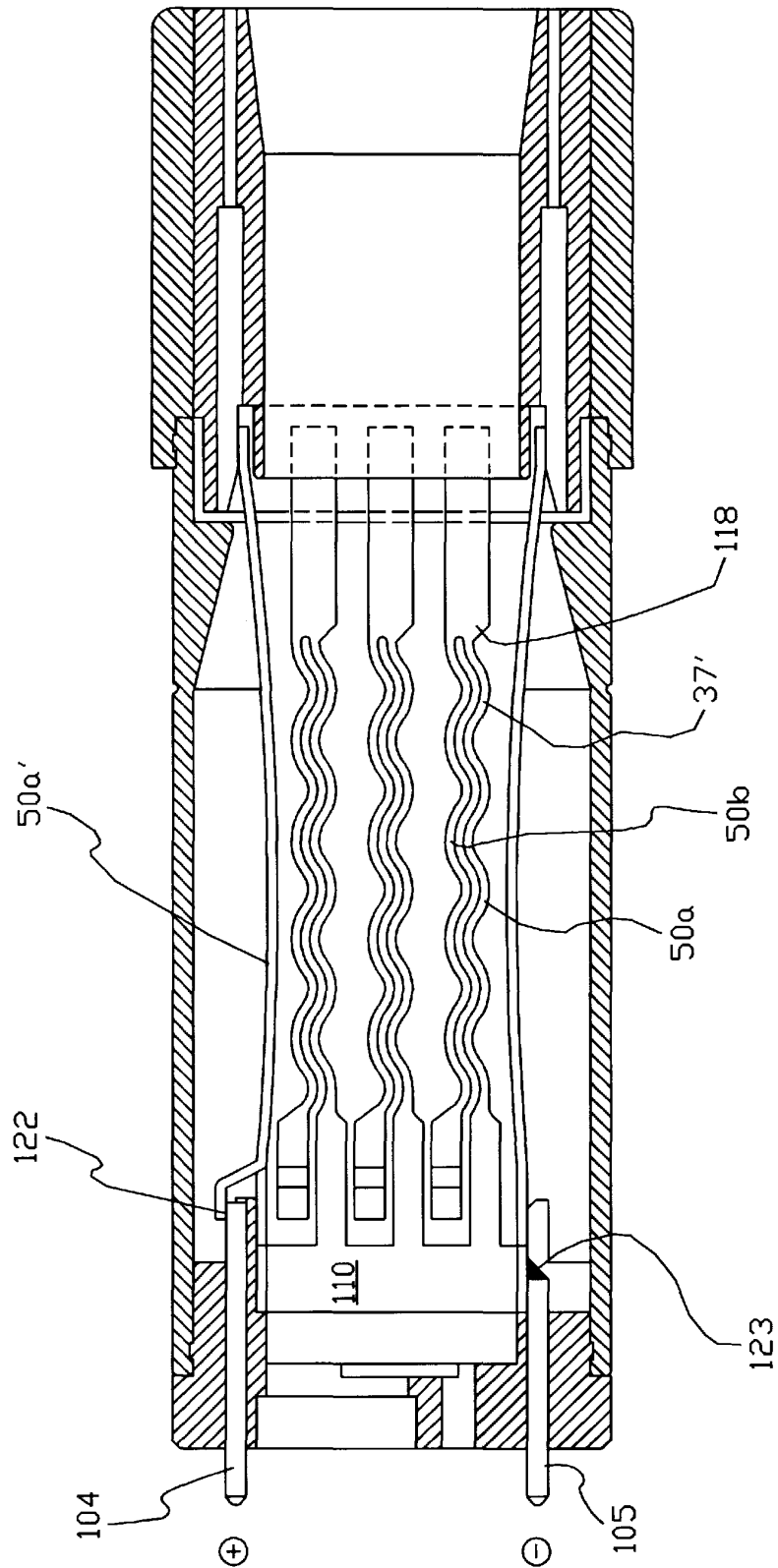


FIG. 4

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