



US005902501A

United States Patent [19]

[11] **Patent Number:** **5,902,501**

Nunnally et al.

[45] **Date of Patent:** **May 11, 1999**

[54] **LIGHTER ACTUATION SYSTEM**

2,525,040	10/1950	Luthi	219/263
3,372,306	3/1968	Koizumi	219/263
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5,613,505	3/1997	Campbell et al.	219/600

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FOREIGN PATENT DOCUMENTS

5-248635 9/1993 Japan .

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

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Attorney, Agent, or Firm—Charles E. B. Glenn; James E. Schardt; James T. Moore

[21] Appl. No.: **08/953,945**

[22] Filed: **Oct. 20, 1997**

[57] **ABSTRACT**

[51] **Int. Cl.⁶** **F23Q 7/00**
[52] **U.S. Cl.** **219/263; 219/269**
[58] **Field of Search** 219/260, 262, 219/263, 264, 265, 267, 269, 270, 386, 600; 200/61.59

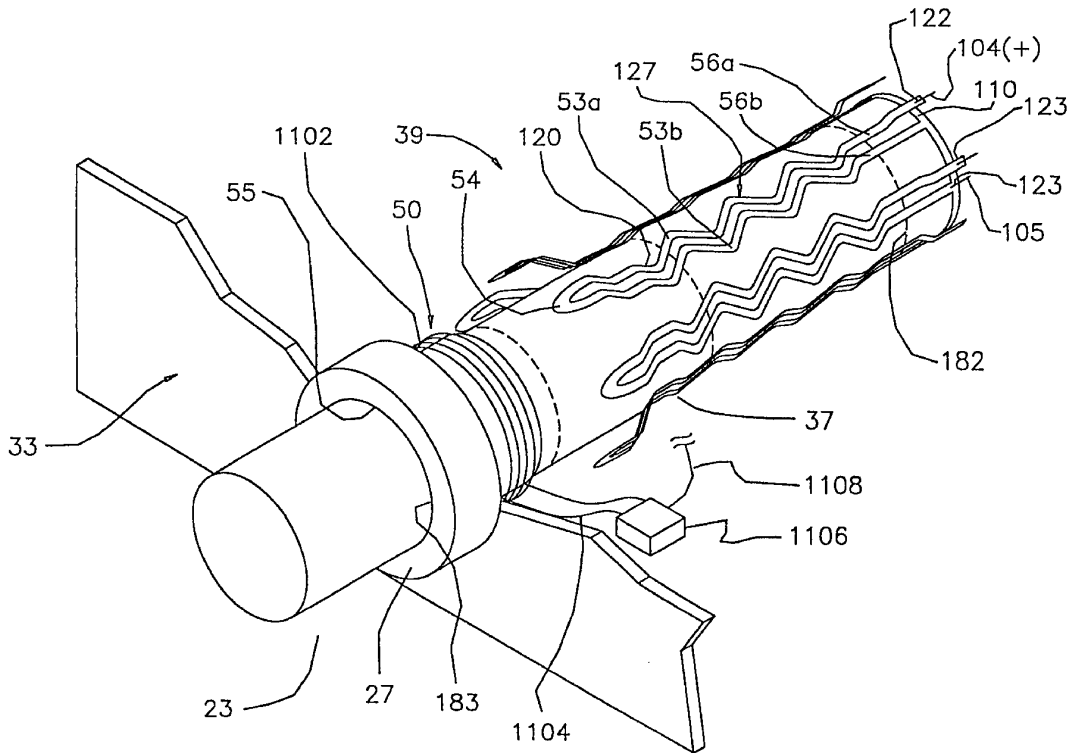
The present invention provides a cigarette identifier system comprising a coil at a location along the cigarette-receiving receptacle of the lighter, an oscillation circuit in communication with the coil and a controller configured to activate or deactivate the lighter responsively to output of the oscillator circuit.

[56] **References Cited**

U.S. PATENT DOCUMENTS

2,199,885 5/1940 Kravchuk 219/263

18 Claims, 9 Drawing Sheets



RAI Strategic Holdings, Inc.
Exhibit 2016
Philip Morris Products, S.A. v. RAI Strategic Holdings, Inc.
IPR2020-00919

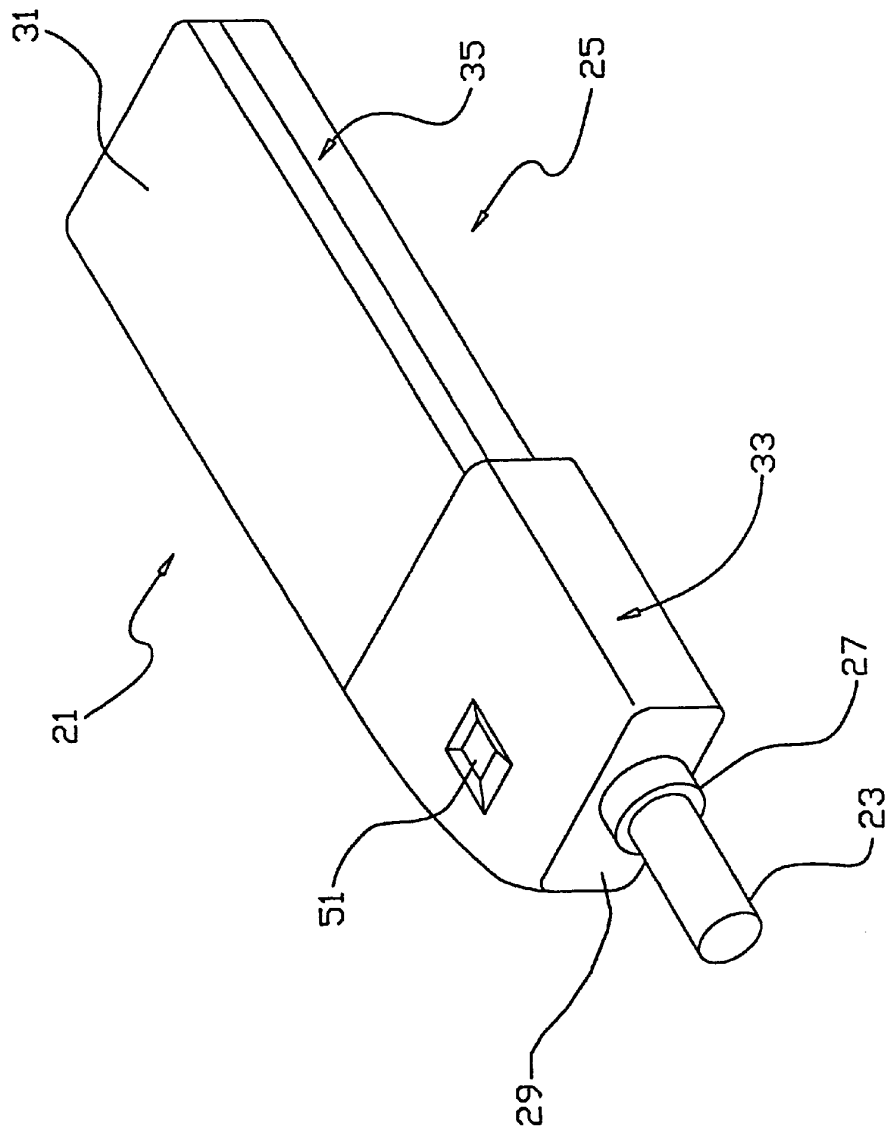


Fig. 1

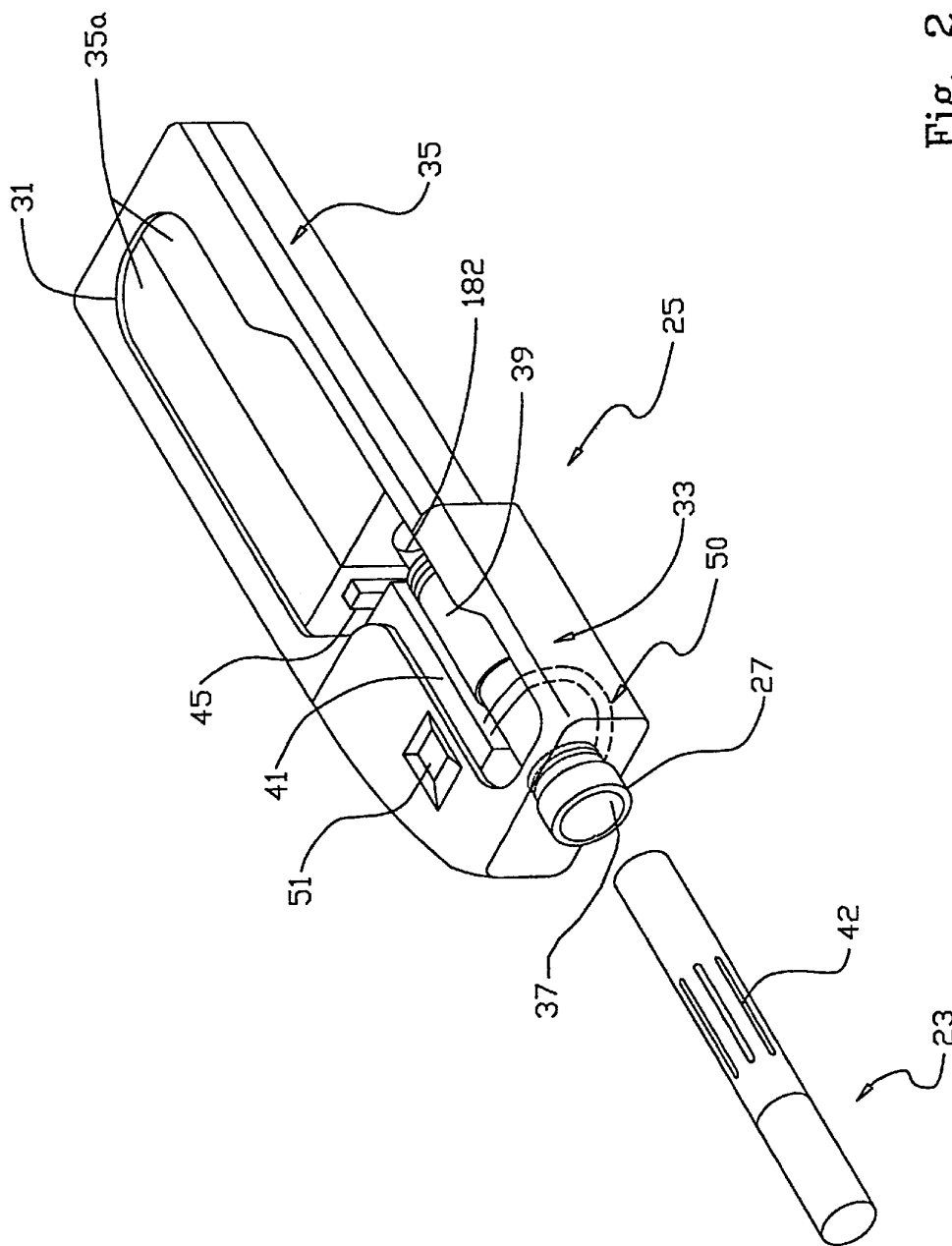


Fig. 2

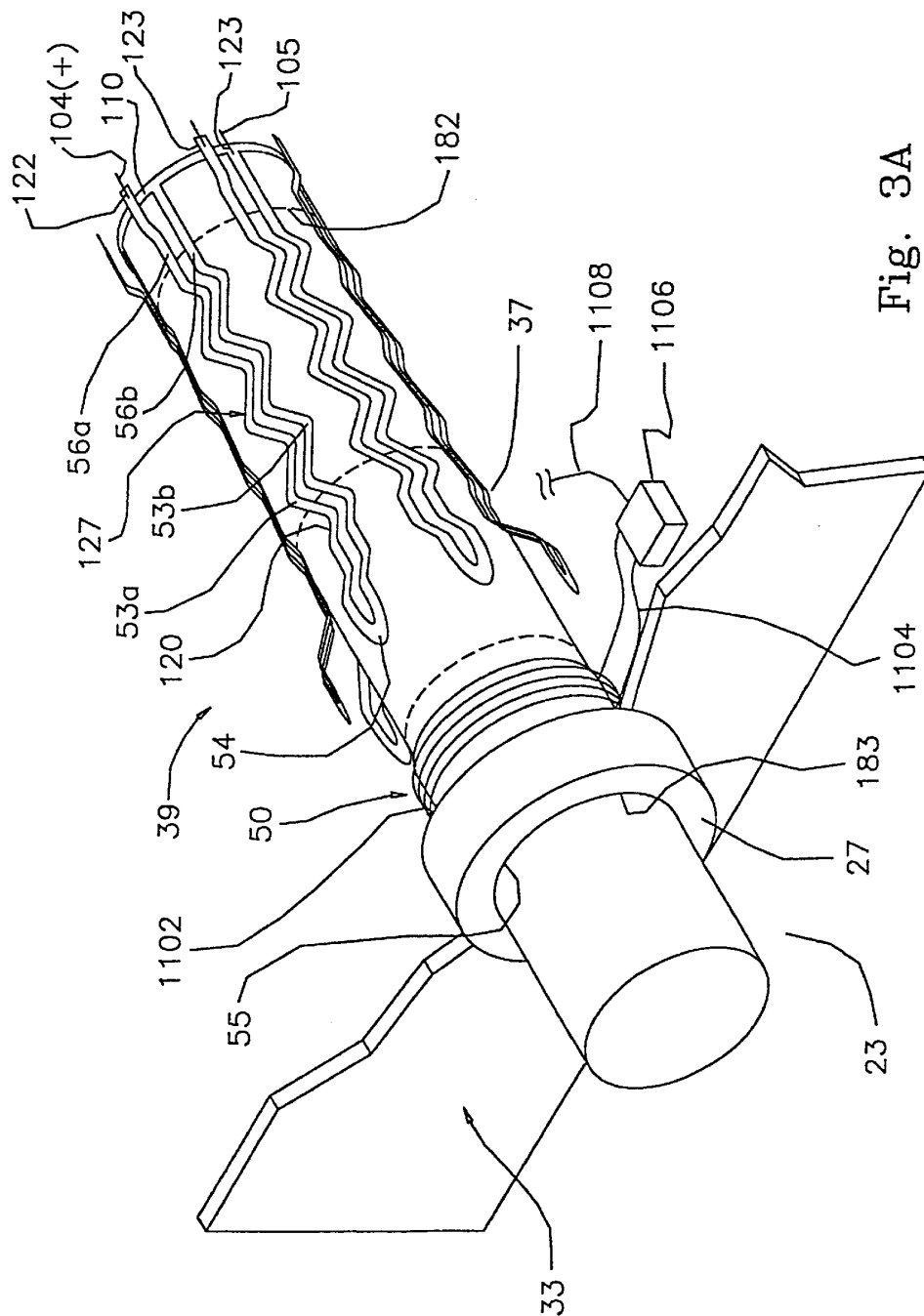


Fig. 3A

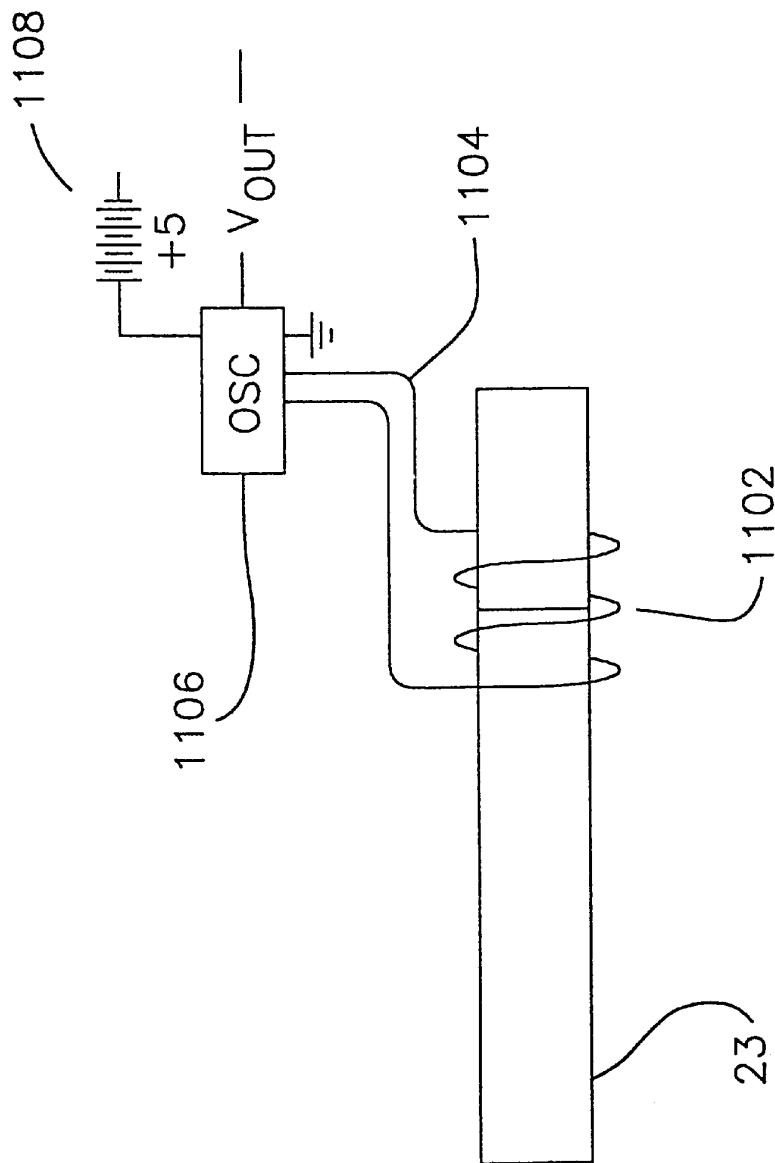


Fig. 3B

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