

PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 C.F.R. § 1.53(c).

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Docket No.	021238-811	Type a plus sign (+) inside this box
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Additional inventors are being named on the ONE separately numbered sheets attached hereto.

TITLE OF THE INVENTION (500 characters max)

ELECTRICAL SMOKING SYSTEM

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UNITED STATES OF AMERICA

ENCLOSED APPLICATION PARTS (check all that apply)

- Specification/Claims/Abstract # of Pages 19 CD(s) Number
- Drawing(s) # of Sheets 5 Other (specify):
- Total Pages in Spec/Drawings 24
- Application Data Sheet. See 37 CFR 1.76

METHOD OF PAYMENT OF FILING FEES (check one)

FILING FEE AMOUNT

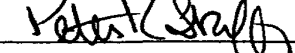
- Applicant claims small entity status. See 37 C.F.R. § 1.27.
- A check or money order is enclosed to cover the filing fees.
- The Director is hereby authorized to charge any deficiency in filing fees or credit any overpayment to **Deposit Account No. 02-4800**. This paper is submitted in duplicate.
- Payment by credit card. Form PTO-2038 is attached.

Filing Fee (1005)	\$ 200.00
Total Page Fee (101+ pages)	
Total Fee	\$ 200.00
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The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.

- No.
- Yes, the name of the U.S. Government agency and the Government contract number are:

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

SIGNATURE 

DATE September 30, 2005

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Registration No. 31,917
(if appropriate)

**PROVISIONAL APPLICATION FOR
UNITED STATES LETTERS PATENT**

FOR

ELECTRICAL SMOKING SYSTEM

by

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ELECTRICAL SMOKING SYSTEM

FIELD OF THE DISCLOSURE

[0001] This disclosure relates generally to tobacco smoking systems using electrical energy rather than combustion. More particularly, the smoking system disclosed here generates an aerosol through conductive and/or convective combustionless heating of tobacco by an electrical heating source.

SUMMARY

[0002] A quantity of tobacco is placed in contact with a heating system. Passageways are provided for air to move through the heating system and the tobacco. The heating system raises the temperature of the tobacco to the range of about 150 to about 220°C by direct contact with the tobacco, by convective heat transfer to the tobacco, and/or by heating the air which in turn heats the tobacco. The heated tobacco releases volatiles which subsequently cool to form an aerosol for delivery from the heating system.

[0003] The tobacco may have a variety of shapes including without limitation a pillow shape, a generally rotationally symmetric shape, a generally cylindrical plug, a generally cylindrical shell, a generally circular disk, a plug shape, a pellet shape, a cigarette shape, and the like.

[0004] The heating system may also have a variety of configurations. By way of example, and without limitation, the heating system may include a heating element such as a generally cylindrical heated shell with both ends open, a generally cylindrical heated shell with a closed end, an insertable heating element, a heated disk, a pair of heated disks, or the like. Such heating elements may be fabricated from an electrically resistive material which heats when electrical current passes through it. Such heating

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elements may also include either internal or external heating devices such as wires. Air may pass axially through the tobacco and the heating system. Alternatively, air may enter the tobacco radially and exit substantially axially. In addition, the heating system may be arranged such that air is preliminarily heated before being directed into the tobacco.

[0005] If desired, a mouthpiece, with or without a filter, may be used with the heating system both to define a cooling region for the tobacco volatiles, and to direct the resulting aerosol to the consumer.

BRIEF DESCRIPTION OF THE DRAWINGS

[0006] The accompanying drawings depict several embodiments of the electrically heated tobacco smoking system of this disclosure. In the accompanying drawings, like reference numerals are applied to like elements.

[0007] FIG. 1 is a cross-sectional view of an electrically heated tobacco smoking system.

[0008] FIG. 2 is a cross-sectional view of the electrically heated tobacco smoking system taken along the line 2-2 of FIG. 1.

[0009] FIG. 3 is a cross-sectional view of another embodiment of the electrically heated tobacco smoking system.

[0010] FIG. 4 is a cross-sectional view taken along the line 4-4 of FIG. 3.

[0011] FIG. 5 is a cross-sectional view of the electrically heated smoking system of FIG. 1 including a mouthpiece.

[0012] FIG. 6 is an end view of the electrically heated tobacco smoking system of FIG. 5.

[0013] FIG. 7 is a cross-sectional view of a third embodiment of the electrically heated tobacco smoking system.

[0014] FIG. 8 is an end view of the electrically heated tobacco smoking system of FIG. 7.

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