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### (54) POWER OPERATED SMOKING DEVICE

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# (57) **ABSTRACT**

A power operated smoking device that includes a an igniting portion, wherein the igniting portion includes igniting means for igniting tobacco and pipe retaining means substantially surrounding the igniting means. The smoking device also includes a power supply means electronically connected to the igniting means and switch means electronically connected between the igniting means and the power supply means, whereby the switch means is selectively operated to provide power to the igniting means. The smoking device also includes and, a pipe removeably disposed in the igniting portion, wherein the pipe includes a tobacco retaining portion to receive tobacco therein and a mouth piece portion.







#### POWER OPERATED SMOKING DEVICE

#### BACKGROUND OF INVENTION

**[0001]** This application relates generally to smoking devices. More specifically, this application relates to a power operated smoking device that allows a use to smoke a given material without the need for matches, a lighter, tobacco paper, or the need to be in a special environment to ignite the material.

#### SUMMARY

[0002] Utilizing the conventional devices such as pipes, and tobacco papers for the enjoyment of loose tobacco or other materials is often a tedious task for most people, and can generally take quite a bit of effort. For example, if using tobacco paper the user must have the requisite skill to properly roll a cigarette of sufficient quality for the tobacco to burn properly. And no matter the method, whether it's a rolled cigarette or a pipe, the smoker typically has to battle with the elements of nature such as wind and rain which act to make the task of igniting the tobacco even more difficult. Described herein is a power operated smoking device that is easy to use and solves the problems mentioned above. The device is of simple construction, inexpensive to produce, and can be used anywhere it is desirable to have a convenient smoking device. [0003] In particular, this application discloses a power operated smoking device, comprising: an igniting portion, wherein said igniting portion includes igniting means for igniting tobacco and pipe retaining means substantially surrounding said igniting means; power supply means electronically connected to said igniting means; switch means electronically connected between said igniting means and said power supply means, whereby said switch means is selectively operated to provide power to said igniting means; and, a pipe removeably disposed in said igniting portion, wherein

tobacco therein and a mouth piece portion. [0004] This application also discloses a power operated smoking device, comprising: an igniting portion, wherein said igniting portion includes igniting means for igniting tobacco and pipe retaining means substantially surrounding said igniting means; power supply means electronically connected to said igniting means, wherein the power supply means is a rechargeable battery and includes recharging means; switch means electronically connected between said igniting means and said power supply means, whereby said switch means is selectively operated to provide power to said igniting means; and, power supply monitoring means electronically connected to said power supply means for monitoring the state of charge of said power supply means; and, a pipe removeably disposed in said igniting portion, wherein said pipe includes a tobacco retaining portion to receive tobacco therein and a mouth piece portion.

said pipe includes a tobacco retaining portion to receive

**[0005]** This application further discloses a power operated smoking device, comprising: an igniting portion, wherein said igniting portion includes a wire filament for igniting tobacco and pipe retaining means substantially surrounding said wire filament; power supply means electronically connected to said wire filament; switch means electronically connected between said wire filament and said power supply means, whereby said switch means is selectively operated to provide power to said wire element; and, a pipe removeably disposed in said igniting portion, wherein said pipe includes a tobacco retaining portion to receive tobacco therein and a mouth piece portion.

## BRIEF DESCRIPTION OF THE DRAWINGS

**[0006]** The drawings, when considered in connection with the following description, are presented for the purpose of facilitating an understanding of the subject matter sought to be protected.

**[0007]** FIG. 1 is a perspective view of the powered smoking device disclosed herein;

**[0008]** FIG. **2** is a perspective side view of the device in FIG. **1** shown with a cutaway portion;

[0009] FIG. 3 is a perspective top view of the device in FIG. 1;

**[0010]** FIG. **4** is a perspective view from a slightly different angle of the device in FIG. **1**; and,

**[0011]** FIG. **5** is a perspective bottom view of the device in FIG. **1** and pipe assembly;

#### DETAILED DESCRIPTION

[0012] Referring to FIGS. 1-5, shown therein and generally designated by the reference character 10 is a power operated smoking device constructed in accordance with the following description. The device 10 includes an igniting portion 12, wherein the igniting portion includes igniting means such as a wire filament 14 for igniting tobacco or any other smokeable material. The filament may be made of any material that is sufficiently thin enough to heat up quickly during use of the device 10. Wire that is a 0.025 gage or smaller is particularly effective. Substantially surrounding the wire filament is a pipe retaining means such as a pipe retainer portion 16 made of 0.0625" coiled copper wire shaped to fit the circumference of a pipe as discussed more fully below. The device also includes power supply means such as a standard battery, a rechargeable battery, and preferably a 1.5 Volt NiCad rechargeable battery 18 that includes a recharging portion 17 made of 0.0625" coiled copper wire substantially surrounding a recharging post 19 shaped to fit the circumference of a female recharging unit (not shown). See FIG. 3. The battery 18 is electronically connected to the wire filament 14 using suitable wire means, and preferably 0.0625" copper wire, and includes an insulated hot wire 20 and a ground wire 22 each soldered to the respective ends of the wire filament 14. The wiring of the device is discussed more fully below. To control the heating of the wire filament 14, a switch 22 is electronically connected between the wire filament 14 and the battery 18 and includes an operating button 23. See FIG. 1. The wiring of the device 10 is as follows: the negative end of the wire filament 14 is connected to the negative terminal of the battery, the positive side of the wire filament 14 is attached to the negative terminal of the switch 22, and the positive terminal of the switch 22 is attached to the positive terminal of the battery 18. The power supply means may also include power supply monitoring means such a light emitting diode 24 for monitoring and providing a visual indication of the state of charge of the battery 18. See FIG. 1.

**[0013]** Referring to FIGS. **2** and **5**, the device also includes a pipe **26** removeably disposed in said igniting portion **12**. The pipe **26** includes a tobacco retaining portion **28** to receive tobacco therein and a mouth piece portion **30**. The pipe **26** may also a tobacco pusher opening **32** for allowing a tobacco pushing means to enter the tobacco retaining portion **28**. The

tobacco pushing means may include a pusher rod 34 that includes a handle portion 36 and a rod portion 38 for inserting into the tobacco pusher opening 32 and toward the tobacco retaining portion 28 to push the tobacco 42 onto the wire filament 14 to aid in its ignition. A pusher rod holder 44 may be included for housing the pusher rod 34 when not in use. The tobacco pushing means may also include a tobacco weight 40 that is inserted into the tobacco retaining portion 28 in such a way that the tobacco 42 is positioned between the tobacco weight 40 and the wire filament 14 to push the tobacco 42 onto the wire filament 14 to aid in its ignition. The tobacco weight 40 is preferably shaped so that it longer than tobacco retaining portion 28 is wide so that it does not flop around in the pipe. This is particularly important when using the pusher rod 34 to push the tobacco weight 40 against the tobacco 42 and assist pushing the tobacco against the wire filament 14. The tobacco weight 40 also helps prevent flecks of tobacco from being inhaled by the user through the mouth piece portion 30.

[0014] During operation of the device, a user would first insert the tobacco weight 40 into the tobacco retaining portion 28 of the pipe 26, and then add the tobacco 42 to the retaining portion 28. Once "loaded," the tobacco retaining portion 28 of the pipe 26 is inserted into the igniting portion 12 in such a way that the tobacco 42 is positioned between the tobacco weight 40 and the wire filament 14. A user then would draw from the mouth piece portion 30 of the pipe 26 while depressing the operating button 23 on the switch 22. Depressing the operating button 23 heats the wire filament 14 thereby igniting the tobacco and allowing the user to inhale the resultant smoke through the mouth piece portion 30. Once the operating button 23 is released, the wire filament 14 cools and the battery charge is conserved. To enhance the burning of the tobacco, the user can use the tobacco pushing means described above.

**[0015]** While the present disclosure has been described in connection with what is considered the most practical and preferred embodiment, it is understood that this disclosure is not limited to the disclosed embodiments, but is intended to cover various arrangements included within the spirit and scope of the broadest interpretation so as to encompass all such modifications and equivalent arrangements. For example, it should be readily appreciated that the above functions and arrangements of the various portions of the device **10** could be easily adaptable to a stand alone structure such that the power supply means, such as a standard battery, could be removed and replaced as needed.

What is claimed is:

- 1. A power operated smoking device, comprising:
- an igniting portion, wherein said igniting portion includes igniting means for igniting tobacco and pipe retaining means substantially surrounding said igniting means;
- power supply means electronically connected to said igniting means;
- switch means electronically connected between said igniting means and said power supply means, whereby said switch means is selectively operated to provide power to said igniting means; and,
- a pipe removeably disposed in said igniting portion, wherein said pipe includes a tobacco retaining portion to receive tobacco therein and a mouth piece portion.
- 2. The device of claim 1 wherein the power supply means is a rechargeable battery and includes recharging means.

3. The device of claim 1 further comprising power supply monitoring means electronically connected to said power supply means for monitoring the state of charge of said power supply means.

4. The device of claim 3 wherein the power supply monitoring means is a light emitting diode.

**5**. The device of claim **1** wherein said pipe includes a tobacco pusher opening for allowing a tobacco pushing means to enter said tobacco retaining portion.

6. The device of claim 5 wherein said tobacco pushing means is a pusher rod for pushing tobacco retained in said tobacco retaining portion upon said igniting means.

7. The device of claim 5 wherein said tobacco pushing means is a tobacco weight for pushing tobacco retained in said tobacco retaining portion upon said igniting means.

**8**. The device of claim **5** wherein said tobacco pushing means includes a pusher rod, and a tobacco weight, wherein said pusher rod is used to push said tobacco weight against tobacco retained in said tobacco retaining portion thereby pushing said tobacco upon said igniting means.

9. A power operated smoking device, comprising:

- an igniting portion, wherein said igniting portion includes igniting means for igniting tobacco and pipe retaining means substantially surrounding said igniting means;
- power supply means electronically connected to said igniting means, wherein the power supply means is a rechargeable battery and includes recharging means;
- switch means electronically connected between said igniting means and said power supply means, whereby said switch means is selectively operated to provide power to said igniting means; and,
- power supply monitoring means electronically connected to said power supply means for monitoring the state of charge of said power supply means
- a pipe removeably disposed in said igniting portion, wherein said pipe includes a tobacco retaining portion to receive tobacco therein and a mouth piece portion.

10. The device of claim 9 wherein the power supply monitoring means is a light emitting diode.

**11**. The device of claim **9** wherein said pipe includes a tobacco pusher opening for allowing a tobacco pushing means to enter said tobacco retaining portion.

**12**. The device of claim **11** wherein said tobacco pushing means is a pusher rod for pushing tobacco retained in said tobacco retaining portion upon said igniting means.

**13**. The device of claim **11** wherein said tobacco pushing means is a tobacco weight for pushing tobacco retained in said tobacco retaining portion upon said igniting means.

14. The device of claim 11 wherein said tobacco pushing means includes a pusher rod, and a tobacco weight, wherein said pusher rod is used to push said tobacco weight against tobacco retained in said tobacco retaining portion thereby pushing said tobacco upon said igniting means.

15. A power operated smoking device, comprising:

- an igniting portion, wherein said igniting portion includes a wire filament for igniting tobacco and pipe retaining means substantially surrounding said wire filament;
- power supply means electronically connected to said wire filament;
- switch means electronically connected between said wire filament and said power supply means, whereby said switch means is selectively operated to provide power to said wire element; and,

a pipe removeably disposed in said igniting portion, wherein said pipe includes a tobacco retaining portion to receive tobacco therein and a mouth piece portion.

16. The device of claim 15 wherein the power supply means is a rechargeable battery and includes recharging means.

17. The device of claim 16 further comprising power supply monitoring means electronically connected to said power supply means for monitoring the state of charge of said power supply means.

**18**. The device of claim **17** wherein said pipe includes a tobacco pusher opening for allowing a tobacco pushing means to enter said tobacco retaining portion.

**19**. The device of claim **18** wherein said tobacco pushing means is a pusher rod for pushing tobacco retained in said tobacco retaining portion upon said igniting means.

**20**. The device of claim **18** wherein said tobacco pushing means is a tobacco weight for pushing tobacco retained in said tobacco retaining portion upon said igniting means.

**21**. The device of claim **18** wherein said tobacco pushing means includes a pusher rod, and a tobacco weight, wherein said pusher rod is used to push said tobacco weight against tobacco retained in said tobacco retaining portion thereby pushing said tobacco upon said igniting means.

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