CLAIMS

What is claimed is:

1. A device for generating aerosol, comprising:

    a. a consumable-containing unit comprising compressed powder;

    b. a susceptor embedded within the consumable-containing unit;

    c. an inductive heating element configured to at least partially surround the consumable-containing unit;

    d. a controller to control the inductive heating element; and

    e. a case to contain the consumable-containing unit, the susceptor, the inductive heating element, and the controller,

wherein the heating element is moveable.

2. The device of claim 1, wherein the case comprises:

    a. a switch operatively connected to the inductive heating element to activate the inductive heating element; and

    b. a user interface operatively coupled with the switch and the inductive heating element to provide status information.

3. The device of claim 1, further comprising a self-resonant oscillator for controlling the heating element.

4. The device of claim 3, wherein the self-resonant oscillator comprises a capacitor operatively connected to the heating element.

5. The device of claim 1, wherein the inductive heating element comprises a plurality of coiled wires each coiled wire operatively connected to the controller for activation independent of the other coiled wires.

6. The device of claim 1, wherein the consumable-containing unit is an elongated member defining a first longitudinal axis, and wherein the inductive heating element is configured to

move axially along the first longitudinal axis.

7. The device of claim 1, wherein the consumable-containing unit defines a first longitudinal axis and the consumable-containing unit comprises a cylindrical magnet at one end of the consumable-containing unit, the cylindrical magnet defining a second longitudinal axis, wherein the inductive heating element is a cylindrical coil wrapped around the consumable-containing unit, the cylindrical coil defining a third longitudinal axis, wherein the cylindrical magnet and the inductive heating element are configured to maintain collinear alignment of the second longitudinal axis with the third longitudinal axis.

8. The device of claim 1, wherein the susceptor is a multi-pronged susceptor.

9. The device of claim 8, wherein the inductive heating element is configured to rotate about the consumable-containing unit.

10. The device of claim 9, wherein the multi-pronged susceptor comprises a plurality of prongs parallel to each other and embedded within the consumable-containing unit.

11. The device of claim 8, wherein the consumable-containing unit defines a first longitudinal axis, wherein the inductive heating element is configured to move radially relative to the first longitudinal axis.

12. The device of claim 8, wherein the consumable-containing unit defining a first longitudinal axis, the inductive heating element defining a second longitudinal axis is configured to rotate about the consumable-containing unit in an eccentric path such that the second longitudinal axis aligns collinearly with each of the prongs of the multi-pronged susceptor at some point during the rotational movement of the inductive heating element about the consumable-containing unit.

13. The device of claim 1, wherein the susceptor comprises a hollow prong.

14. The device of claim 13, wherein the hollow prong comprises an inlet and an outlet.

15. The device of claim 1, wherein the susceptor is a metal plate comprising a plurality of

openings.

16. The device of claim 15, wherein the susceptor is an elongated metal plate having a longitudinal direction, the elongated metal plate comprising sets of openings, and sets of gaps, wherein the sets of openings alternate in series with the sets of gaps along the longitudinal direction of the elongated metal plate such that each set of openings is adjacent to one of the gaps.

17. The device of claim 1, wherein the susceptor comprises steel wool.

18. The device of claim 1, further comprising a magnetic flux sensor adjacent to the inductive heating element and configured to measure a magnetic flux created by the heating element.

19. The device of claim 18, wherein the magnetic flux sensor is operatively connected to the controller to control activation of the inductive heating element based on feedback from the magnetic flux sensor.

20. The device of claim 1, further comprising a use sensor to detect whether a portion of a consumable-containing package being sensed had been heated beyond a predetermined temperature.

21. The device of claim 20, wherein the use sensor is a photoreflective sensor.

22. The device of claim 21, wherein the consumable-containing unit is contained in a consumable-containing package, and the consumable-containing package comprises a thermal sensitive dye that changes colors when heated to a predetermined temperature, wherein the change in color is detectable by the photoreflective sensor.

23. The device of claim 1, further comprising a memory for storing locations of portions of the consumable-containing unit that have been heated to a predetermined temperature.

24. The device of claim 23, further comprising a limit switch to reset the memory when a new consumable-containing unit is inserted into the case.

25. The device of claim 1, further comprising a heat sink operatively connected to the heating element.

26. The device of claim 25, wherein the heat sink is a finned cylinder encompassing the heating element.

27. The device of claim 1, further comprising an airflow controller.

28. The device of claim 1, further comprising a consumable-containing package aligner.

29. The device of claim 1, further comprising an encasement encasing the consumable-containing unit and the susceptor, wherein the encasement has a first end and a second end opposite the first end, wherein the encasement comprises an opening.

30. The device of claim 29, wherein the encasement further comprises a coating to plug the opening.

31. The device of claim 29, further comprising a filter configured to surround the encasement.

32. The device of claim 29, further comprising a plurality of encasements, wherein the inductive heating element is configured and programmed to selectively heat each encasement a predetermined number of times at a predetermined temperature selected by a user.

33. The device of claim 29, wherein one of the first or second ends of the encasement comprises a fold to space apart adjacent encasements.

34. A method of using the device of claim 1, comprising: releasing an aerosol form of a consumable from the consumable-containing unit without producing toxic byproducts associated with combustion.

35. The method of claim 34, further comprising applying heat to the consumable-containing unit by heating the susceptor to 400 degrees Celsius to 800 degrees Celsius with the induction heating element to release the aerosol form of the consumable from the consumable-containing unit without combusting the consumable-containing unit.

36. A method of manufacturing a device according to claim 1, comprising

a. embedding a susceptor into a consumable-containing unit, wherein the consumable-containing unit is pressed into a pellet to minimize oxygen within the pellet;

b. surrounding the consumable-containing unit with an inductive heating element; and

c. placing the consumable-containing unit with the susceptor, and the inductive heating element into a case.

37. The method of claim 36, wherein the consumable-containing unit is mixed with an additive to minimize oxygen within the pellet.