CLAIMS

1. A heating device (200) for heating an aerosol generating substrate below a combustion temperature of the aerosol generating substrate, the heating device comprises:

a suction portion (202) having an opening for a user to consume aerosol generated by the aerosol generating substrate;

a heating element to heat the aerosol generating substrate to produce aerosol;

an elongate structure (604), the elongate structure comprises a plurality of compartments (610, 612);

wherein at least one of the plurality of compartments (610) is shaped and dimensioned to receive the aerosol generating substrate; and wherein at least one of the remaining other compartments (612) is shaped and dimensioned to receive at least one filter (212) or is shaped and dimensioned to receive a conductor (618) for heat dissipation or is positioned vacant.

2. The heating device (200) of claim 1, wherein the elongate structure (604) is shaped to be slidably received in the heating device (200).

3. The heating device (200) of claim 1, wherein the suction portion (202, 602) is coated with a heat dissipation material.

4. The heating device (200) of claim 1, wherein the suction portion (202, 602) comprises a heat dissipation element (240) and is shaped to be slidably received in the heating device (200).

5. The heating device (200) of claim 1, wherein a plurality of O-rings (260) are positioned at various joints to facilitate proper airflow within the heating device.

6. The heating device (200) of claim 1, wherein the at least one of the plurality of compartments (610, 612) comprising a first compartment (610), the first compartment (610) comprising one or more heat conductors (614).

7. The heating device (200) of claim 6, wherein the first compartment (610) comprises an opening for easy removal of residue of the aerosol generating substrate.

8. The heating device (200) of claim 1, further comprising an end portion (608) arranged distally with respect to the mouthpiece (602) wherein the end portion (608) comprises a through-hole.

9. A heating device (200) for heating an aerosol generating substrate (205) below a combustion temperature of the aerosol generating substrate, the heating device comprises:

a suction portion (202) having an opening for a user to consume aerosol generated by the aerosol generating substrate;

a heating element (206) to heat the aerosol generating substrate (205) to produce aerosol; and

a through-hole (270) spanning across the device (200) wherein a first end (270a) of the through-hole (270) is shaped to slidably receive the suction portion (202) and the aerosol generating substrate (205), wherein the suction portion (202) is shaped and dimensioned to urge the aerosol generating substrate (205) into the through-hole (270) such that the aerosol generating substrate (205) is positioned between the first cross-sectional side (206a) and the second cross-sectional side (206b).

10. The heating device (200) of claim 9, wherein the suction portion (202) comprises a heat dissipation element (240) and is shaped to be slidably received in the heating device (200).

11. The heating device (200) of claim 9, wherein an air-seal (274) is positioned on at least one of an outer periphery of the suction portion (202) and an inner surface of the through-hole (270).

12. The heating device (200) of claim 9, wherein the heating element (206) comprises a cylindrical hollow portion surrounding a part of the through-hole (270), such that there comprises a first cross-sectional side (206a) and second cross-sectional side (206b) configured to heat the aerosol generating substrate (205) when the aerosol generating substrate (205) is positioned therebetween.

13. The heating device (200) of claim 9, wherein the through-hole (270) comprises a second end (270b) for at least one of the aerosol generating substrate (205) and filter unit (212) to be urged out of the through-hole (270) after consumption.

14. The heating device (200) of claim 9, wherein the through-hole (270) is dimensioned to receive a filter unit (500) wherein the filter unit (500) is positioned in operation such that heated aerosol is directed pass the filter unit (500) before reaching the suction portion (202).

15. The heating device (200) of claim 9, further comprising an aerosol delivery channel (208) arranged to receive aerosol generated from heating the aerosol generated substrate (205) and to direct the aerosol towards the suction portion (202) when a user apply a suction force via the suction portion (202).

16. The heating device (200) of claim 9, wherein the suction portion (202) comprises a substrate holder (204) that is integrated in the form of a jig (600) having an elongate structure, the elongate structure comprises a plurality of compartments (610, 612), wherein at least one of the plurality of compartments (610) is shaped and dimensioned to receive the aerosol generating substrate (205), and wherein at least one of the remaining other compartments (612) is shaped and dimensioned to receive at least one filter (212, 500) or is shaped and dimensioned to receive a conductor (618) for heat dissipation or is positioned vacant.

17. An aerosol generating product (100) comprising:

a core layer (102) having an aerosol generating substrate (104); and

an outer layer (106) in the form of a cover or wrapper comprising acetate tow to cover at least a surface of the aerosol generating substrate (104).

18. The aerosol generating product (100) of claim 17, wherein the outer layer (106) further comprises fibre, natural fibre (including cotton), fabric and/or paper including cellulose fibre paper, coated paper or combinations of the aforesaid materials.

19. The aerosol generating product (100) of claim 17, wherein the aerosol generating substrate (104) comprises at least one of the following: a reconstituted tobacco sheet, a cast leaf tobacco (CLT) sheet, tobacco powder, a cut tobacco roll, a natural fiber, a natural leaf, a cellulose fiber, tobacco pallets, aluminum, copper, metallic alloy, other heat conduction materials, paper, fiber, and ceramic.

20. The aerosol generating product (100) of claim 17, wherein the core layer (102) comprises a hollow portion (110) arranged adjacent to the aerosol generating substrate (104).

21. An aerosol generating product (100) comprising:

a core layer (102) having an aerosol generating substrate (104) wherein the core layer comprises a hollow portion (110) arranged adjacent to the aerosol generating substrate (104); and

an outer layer (106) in the form of a cover or wrapper comprising acetate tow to cover at least a surface of the aerosol generating substrate (104).

22. A two-segment product (700) comprising:

an aerosol generating segment (702) and an integrated support-filter segment (704) adjoining the aerosol generating segment (702);

the integrated support-filter segment (704) comprises a core acetate tow portion (706), an acetate tow hollow layer (710) having a central hollow portion defining a channel (712) and an air space (714), the channel (712) position leading from an end of the aerosol generating segment (702) to the air space (714).

23. The two-segment product (700) of claim 22, further comprising an outer layer (722), the outer layer (722) comprising acetate tow and wrapped by an outer cover (724).

24. The two-segment product (700) of claim 22, further comprising an inner layer (720), the inner layer (720) comprising aluminum patch.

25. A three-segment product (800) comprising:

an aerosol generating segment (802), a support segment (808), and a filter segment (804);

the filter segment (804) comprises a core acetate tow portion (806) positioned at an opposite end from the aerosol generating segment (802); and

the support segment (808) positioned between the aerosol generating segment (802) and the core acetate tow portion (806);

wherein the support segment (808) comprises an acetate tow layer (810) having a central hollow portion defining a channel (812).

26. The three-segment product (800) of claim 25, further comprising an outer layer (822), the outer layer (822) comprising acetate tow and wrapped by an outer cover (824).

27. The three-segment product (800) of claim 25, wherein an air space (814) positioned between the acetate tow layer (810) and the core acetate tow portion (806).