inhalers can provide a predictable and metered dose of flavoured nicotine or other optional active ingredients. Flavoured nicotine powder inhalers of the invention described herein have a similar size and configuration as a conventional cigarette and have a simple configuration.

As described herein, a flavoured nicotine powder inhaler includes a body extending between a mouthpiece and a distal end portion and an airflow channel extends along the body of the inhaler. A nicotine powder receptacle along the airflow channel holds a dose of nicotine powder. A flavour delivery element is in fluid communication with the airflow channel. The dose of nicotine powder can be inhaled into lungs of a user at an inhalation rate of less than about 5 L/min or preferable less than about 2 L/min. Preferably the dose of nicotine powder is a nicotine salt contained in a capsule that can be pierced by the inhaler.

According to a first aspect, there is provided a nicotine powder inhaler comprising: a body extending between a mouthpiece portion and a distal end portion; an airflow channel extending between the mouthpiece portion and a distal end portion; a nicotine powder receptacle disposed along the airflow channel and comprising a dose of nicotine powder comprising nicotine salt and; a flavour delivery element in fluid connection with the airflow channel; wherein the dose of nicotine powder can be inhaled into lungs of a user at an inhalation rate of less than about 5 L/min.

According to a second aspect, there is provided a method of inhaling flavoured nicotine into lungs of a user: inhaling air through the flavoured nicotine power inhaler according to the first aspect at a flow rate of less than about 2L/min to deliver flavoured powder nicotine into lungs of a user.

Various aspects of the flavoured nicotine powder inhalers described herein may have one or more advantages relative to standard dry powder inhalers. For example, the flavoured nicotine powder inhalers deliver the dry powder nicotine and the flavour particles at inhalation or air flow rates that are within conventional smoking regime inhalation or air flow rates and inhalation manner. This allows users with even compromised or impaired breathing conditions to successfully deliver the dry powder nicotine and flavourant. The flavoured nicotine powder inhalers described herein have a simplified configuration that allows the user to predetermine the metered dose of dry powder nicotine and flavourant. The dry powder nicotine can be in series or in parallel flow relation with the flavour delivery element. The flavourant can be a dry powder or a liquid flavourant. Additional advantages of one or more aspects flavour delivery

system described herein will be evident to those of skill in the art upon reading and understanding the present disclosure.

The term “nicotine” refers to nicotine and nicotine derivatives such as nicotine salts.

The term “flavourant” or “flavour” refers to organoleptic compounds, compositions, or materials that alter the taste or aroma characteristics of nicotine during consumption or inhalation thereof.

The present disclosure provides flavoured nicotine powder inhalers for inhaling dry powder nicotine and flavourant. The flavoured nicotine powder inhalers include a body extending between a mouthpiece portion and a distal end portion. An airflow channel extends between the mouthpiece portion and a distal end portion and a nicotine powder receptacle. The

CLAIMS:

1. A nicotine powder inhaler comprising:
a body extending between a mouthpiece portion and a distal end portion;
an airflow channel extending between the mouthpiece portion and a distal end portion;
a nicotine powder receptacle disposed along the airflow channel and comprising a dose of nicotine powder comprising nicotine salt and;
a flavour delivery element in fluid connection with the airflow channel;
wherein the dose of nicotine powder can be inhaled into lungs of a user at an inhalation rate of less than about 5 L/min.

2. A nicotine powder inhaler according to claim 1, wherein the flavour delivery element is upstream of the nicotine powder receptacle.

3. A nicotine powder inhaler according to claim 1, wherein the flavour delivery element is downstream of the nicotine powder receptacle.

4. A nicotine powder inhaler according to claim 1, further comprising a second airflow channel comprising a flavour receptacle wherein the flavour receptacle is in parallel flow relation with the nicotine powder receptacle.

5. A nicotine powder inhaler according to any one of the preceding claims, wherein the flavour element comprises powdered flavourant.

6. A nicotine powder inhaler according to any one of the preceding claims, wherein the flavour element comprises liquid flavourant.

7. A nicotine powder inhaler according to any one of the preceding claims, wherein the nicotine powder receptacle is configured to receive a capsule containing nicotine powder comprising nicotine salt.

8. A nicotine powder inhaler according to claim 7, wherein the capsule further contains the flavour delivery element comprising powdered flavourant.

9. A nicotine powder inhaler according to any one of the preceding claims, wherein the flavour delivery element comprises a crushable capsule that can be ruptured by a user to release flavourant.

10. A nicotine powder inhaler according to any one of the preceding claims, further comprising a filter element upstream of the nicotine powder receptacle and the flavour delivery element is disposed within the filter element.

11. A nicotine powder inhaler according to claim 10, wherein the flavour delivery element is a thread impregnated with menthol.

12. A nicotine powder inhaler according to any one of the preceding claims, further comprising dose of a second active agent.

13. A nicotine powder inhaler according to any one of the preceding claims, further comprising a swirl generator element configured to induce rotational movement in the airflow from the airflow channel.

14. A method of inhaling flavoured nicotine into lungs of a user:
inhaling air through the flavoured nicotine power inhaler according to any one of claims 1 to 14 at a flow rate of less than about 2 L/min to deliver flavoured powder nicotine into lungs of a user.