Claims

1. A nebuliser for converting a liquid being or comprising a medication into an aerosol for inhalation comprising:
one or more inputs for receiving one or more liquids; and
a plurality of droplet ejectors together in fluid communication with the one or more inputs, each droplet ejector comprising:
a nozzle portion defining a nozzle outlet in fluid communication with a one of the one or more inputs; and
a piezoelectric actuator,
wherein each piezoelectric actuator is operable to cause ejection of a liquid received by the one of the one or more inputs through the respective nozzle outlet as one or more droplets to thereby generate an aerosol comprising the one or more droplets ejected by each droplet ejector,
and wherein the nebuliser is further provided with an outlet portion in the form of a mouthpiece, or a nasal tube, or a facial mask.

2. The nebuliser according to claim 1, wherein the nozzle outlet defined by each of the plurality of droplet ejectors is among no more than one nozzle outlet defined by the respective droplet ejector and in fluid communication with the one of the one or more inputs.

3. The nebuliser according to claim 2, further comprising a storage portion defining one or more cavities for storing the one or more liquids, wherein the one or more cavities are together in fluid communication with each nozzle outlet and with the one or more inputs, optionally wherein the nebuliser further comprises the one or more liquids within the one or more cavities, and additionally or alternatively wherein the storage portion is removable.

4. The nebuliser according to any preceding claim, further comprising a housing to support the plurality of droplet ejectors, optionally wherein the storage portion is part of the housing.

5. The nebuliser according to any preceding claim, wherein the outlet portion defines a nebuliser outlet through which the aerosol can be output from the

nebuliser, optionally wherein the outlet portion is part of the housing, and alternatively or additionally wherein the outlet portion is in the form of the mouthpiece.

6. The nebuliser according to any preceding claim, further comprising a power supply circuit portion to supply power to the piezoelectric actuator of each of the plurality of droplet ejectors, optionally wherein the power supply circuit portion is supported by the housing.

7. The nebuliser according to claim 6, further comprising a power source to supply power to the power supply circuit portion.

8. The nebuliser according to any preceding claim, further comprising a switch to activate the plurality of droplet ejectors.

9. The nebuliser according to claim 8, when dependent directly or indirectly on claim 5, wherein the switch is a flow switch responsive to a flow through the nebuliser outlet.

10. The nebuliser according to any preceding claim, further comprising a controller to control operation of the plurality of droplet ejectors.

11. The nebuliser according to any preceding claim, wherein more than 50 percent, such as each, of the plurality of nozzle outlets has a maximum cross-sectional extent less than 20×10^{-6} metres (20 microns).

12. The nebuliser according to any preceding claim, wherein, for each droplet ejector, the nozzle portion and the piezoelectric actuator are formed together by fabrication.

13. The nebuliser according to any preceding claim, further comprising driving circuitry to control operation of the piezoelectric actuator responsive to control signals received thereat.

14. The nebuliser according to any preceding claim, wherein the plurality of droplet ejectors are at least 25 droplet ejectors.

15. The nebuliser according to any preceding claim, wherein the plurality of droplet ejectors are arranged such that the nozzle outlets are provided in a grid arrangement.