Claims

1. An apparatus for imparting an organoleptic quality to a recipient product using a sensate substance obtained from a donor product, the apparatus comprising:

a donor product storage chamber configured to receive a batch of donor product, and

a recipient product storage chamber configured to receive a batch of recipient product,

the apparatus being arranged to circulate a fluid repeatedly in a closed loop through the donor product storage chamber and the recipient product storage chamber so that at least one sensate substance obtained from the donor product is conveyed from the donor product storage chamber into the recipient product storage chamber and into contact with the recipient product..

2. An apparatus according to claim 1, further comprising a controller to control a parameter of contents of the apparatus whilst the sensate substance is conveyed to the recipient product.

3. An apparatus according to claim 2, wherein the controller is responsive to a measured value of a first parameter of the contents of the apparatus and configured to control a second parameter of the contents of the apparatus in response to said measured value of the first parameter.

4. An apparatus according to claim 3, wherein the first parameter is the same parameter as the second parameter.

5. An apparatus according to claim 3 or 4 wherein the first and second parameters are, respectively, at least one of: temperature, humidity, pressure, fluid flow rate.

6. An apparatus according to any preceding claim, wherein the controller is configured to vary over time the temperature of contents of the apparatus.

7. An apparatus according to any preceding claim, further comprising a heat source to heat contents of the apparatus.

8. An apparatus according to claim 7 including a heater to heat the contents of the donor product storage chamber.

9. An apparatus according to claim 7 or 8 including a heater to pre-heat the fluid entering the donor product storage chamber.

10. An apparatus according to any preceding claim, wherein the controller is configured to maintain a temperature differential between contents of different parts of the apparatus.

11. An apparatus according to any preceding claim, wherein a single charge of the recipient product is imparted with an organoleptic quality of a sensate substance obtained from a single charge of the donor product.

12. An apparatus according to any preceding claim, wherein the donor product storage chamber and/or the recipient product storage chamber comprise an agitator to agitate contents thereof.

13. An apparatus according to any preceding claim, further comprising a pump to circulate the fluid between and through the chambers.

14. An apparatus according to any preceding claim, wherein the donor product storage chamber contains a botanical.

15. An apparatus according to any preceding claim, wherein the recipient product storage chamber contains a tobacco industry product.

16. An apparatus according to any preceding claim, and charged with the fluid which comprises air.

17. An apparatus according to any preceding claim, whereby the donor product storage chamber and/or the recipient product storage chamber are operable to fluidise the contents thereof.

18. An apparatus according to any preceding claim, including a mass spectrometer to sample process fluids and monitor sensate constituents so as to permit control the temperature of the donor product storage chamber.

19. A method to impart an organoleptic quality to a recipient product using a sensate substance obtained from a donor product, utilising apparatus according to any preceding claim.

20. A method of imparting an organoleptic quality to a recipient product using a sensate substance obtained from a donor product, the method comprising: repeatedly circulating a fluid in a closed loop through a donor product storage chamber containing a donor product and the recipient product storage chamber containing a batch of recipient product so that at least one sensate substance obtained from the donor product is conveyed from the donor product storage chamber into the recipient product storage chamber and into contact with the recipient product to impart an organoleptic quality thereto.

21. A method according to claim 20 wherein the donor product is a botanical and the recipient product is a tobacco industry product

22. A method according to claim 21 including heating the botanical to a temperature within a range of 10°C - 150°C

23. A method according to claim 21 or 22, wherein the botanical is at least one of: coffee, juniper, mint, menthol and anise.

24. A method according to claim 22 wherein the donor product includes mint and is heated to up to 90°C, or coffee and heated up to 40°C, or clove and heated up to 110°C.

25. A method according to claim 23 or 24 including providing the botanical in a frozen state, and grinding the botanical prior to circulating the fluid.

26. A method according to any one of claims 21 to 25, further comprising varying the temperature of the botanical storage chamber over time.

27. A method according to claim 26 including heating the botanical to a first temperature for a first period of time to release a first sensate therefrom with a first relatively low boiling point, and then raising the temperature of the

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botanical to a second, higher temperature to release a second sensate therefrom with a higher boiling point than the first sensate.

28. A method according to any one of claims 21 to 27, wherein the tobacco industry product is one of: tobacco, snus, pouched snus, filter paper, tipping paper, filtration material, smoking articles, smoking article containers or blanks for forming smoking article containers.

29. A method according to any one of claims 21 to 28, further comprising pre-heating the fluid entering the donor product storage chamber.

30. A method according any one of claims 21 to 28, further comprising stirring the botanical.

31. A method according to any one of claims 21 to 30 including measuring the composition of the fluid circulating between the chambers.

32. A method according to any claim 22 wherein the botanical sensate is reactive with oxygen, and the fluid circulated in the apparatus is an inert gas.

~~33. A recipient product imparted with an organoleptic quality of a sensate substance obtained from a donor product according to the method of any one of claims 21 to 32.~~