Claims

1. An ~~A~~aroma container for adding an aroma substance to an air flow flowing through the aroma container ~~(10)~~, comprising:

   - an upper wall ~~(12)~~, a lower wall ~~(14)~~ and at least one side wall ~~(18)~~, which surround an aroma chamber ~~(40)~~,
   - at least one air inlet opening ~~(48)~~ into the aroma chamber ~~(40)~~; and
   - at least one air outlet opening ~~(24)~~ out of the aroma chamber ~~(40)~~; wherein
   - a carrier substance ~~(42)~~ for the aroma substance is present in the aroma chamber; and
   - the carrier substance ~~(42)~~ comprises a nonwoven material; wherein
   - the air permeability L of the nonwoven material at a differential pressure of 100 Pa is $L \geq 200$ l/(m^2·s), and preferably between 220 l/(m^2·s) and 280 l/(m^2·s).

2. The ~~A~~aroma container according to claim 1, wherein ~~characterised in that~~ a head space ~~(32)~~ between the carrier substance ~~(42)~~ and the side ~~(34)~~ of the upper wall ~~(12)~~ facing the aroma chamber ~~(40)~~ is provided.

3. The ~~A~~aroma container according to claim 1 or claim 2, wherein ~~characterised in that~~ the side wall ~~(18)~~ comprises a protrusion ~~(46)~~, at least in portions, which preferably extends outwards, substantially perpendicularly to the side wall ~~(18)~~.

4. The ~~A~~aroma container according to any of the preceding claims, ~~characterised in that~~ wherein the nonwoven material has a specific flow resistance of less than 500 Pa·s/m and preferably less than 400 Pa·s/m, and most preferably of approximately 380 Pa·s/m.

5. The ~~A~~aroma container according to any of the preceding claims, wherein ~~characterised in that~~

- the nonwoven material has an area density of less than 1500 g/m^2 and preferably of approximately 1000 g/m^2; and

- the nonwoven material has a density of less than 300 kg/m^3 and preferably a density of approximately 200 kg/m^3.

6. The ~~A~~aroma container according to any of the preceding claims, wherein ~~characterised in that~~ the thickness of the carrier substance ~~(42)~~ is at least 50% of the height between the upper wall ~~(12)~~ of the aroma container ~~(10)~~ and the lower wall ~~(14)~~ of the aroma container ~~(10)~~, and preferably at least 80% of the height between the upper wall ~~(12)~~ of the aroma container ~~(10)~~ and the lower wall ~~(14)~~ of the aroma container ~~(10)~~.

7. The ~~A~~aroma container according to any of the preceding claims, wherein ~~characterised in that~~ the at least one air inlet opening ~~(48)~~ has a diameter of at least 0.2 mm or a different geometry having an equivalent minimum opening cross-section, and preferably the at least one air inlet opening ~~(48)~~ has a diameter of no more than 20 mm.

8. The ~~A~~aroma container according to any of the preceding claims, wherein ~~characterised in that~~ porosity of the nonwoven material is between 70% and 93%, and preferably between 70% and 80%.

9. The ~~A~~aroma container according to any of the preceding claims, wherein ~~characterised in that~~ ~~the~~ the Reynolds number Re in the air inlet region of the aroma container ~~(10)~~ is greater than 2000; and wherein

the Reynolds number is defined as Re = (w·d)/v, with

the kinematic viscosity of air v [m^2/s], the diameter d [m] of the air inlet opening, and the flow speed w [m/s] upon inflow into the aroma container at an averaged volume flow between 250 ml/min and 600 ml/min.

10. The ~~A~~aroma container according to any of the preceding claims, wherein ~~characterised in that~~ the aroma container has a substantially annular geometry comprising an outer side wall ~~(18)~~ and an inner side wall ~~(16)~~.

11. The ~~A~~aroma container according to claim 10, wherein ~~characterised in that~~ the inner side wall ~~(16)~~ surrounds a space, the cross-sectional area of which is of a geometry that deviates from a circular shape.

12. The ~~A~~aroma container according to claim 11, ~~characterised in that~~ wherein the geometry of the inner side wall ~~(16)~~ defines just one single position of the aroma container ~~(10)~~ with respect to the rotation thereof in cooperation with a correspondingly formed mouthpiece of a drinking device, and wherein the space surrounded by the inner side wall ~~(16)~~ preferably has a substantially drop-shaped cross-sectional area.

13. The ~~A~~aroma container according to claim 11 or claim 12, ~~characterised in that~~ wherein for the ratio between a maximum extension L_{max} of the cross-sectional area of the space surrounded by the inner side wall ~~(16)~~, and the minimum extension L_{min} of the cross-sectional area of the space surrounded by the inner side wall, the following applies: $1.05 \leq L_{max}/L_{min} \leq 1.15$; and preferably L_{max}/L_{min} is approximately 1.1.

14. The ~~A~~aroma container according to any of claims 11 to 13, further comprising slide ribs ~~(56)~~ in the region of the inner side wall ~~(16)~~.

15. The ~~A~~aroma container according to any of the preceding claims, ~~characterised in that~~ wherein the air inlet opening ~~(48)~~ is located in the region of the lower wall ~~(14)~~ of the aroma container ~~(10)~~; and the air outlet opening ~~(24)~~ is arranged in a side wall ~~(16)~~ of the aroma container, preferably in an inner side wall ~~(16)~~ in the case of a substantially annular geometry of the aroma container having an outer side wall ~~(18)~~ and an inner side wall ~~(16)~~.

16. The ~~A~~aroma container according to any of the preceding claims, ~~characterised in that~~ wherein the aroma container comprises a lower shell ~~(22)~~ and an upper shell ~~(20)~~ that is connected to the lower shell ~~(22)~~, and wherein the air outlet opening ~~(24)~~ is arranged in the connection region between the lower shell ~~(22)~~ and upper shell ~~(20)~~.

17. A ~~D~~drinking device, comprising

- an aroma container ~~(10)~~ according to any of the preceding claims; and
- a head part ~~(80)~~, to which the aroma container ~~(10)~~ can be connected such that at least a part of the aroma container ~~(10)~~ is movable from an activated position into a non-activated position; wherein
- in the activated position the air outlet opening ~~(24)~~ is in flow connection with a transport channel for drinking liquid in the drinking device ~~(60)~~; and
- in the non-activated position there is no flow connection between the air outlet opening ~~(24)~~ and the transport channel for drinking liquid, and the air inlet opening ~~(48)~~ is preferably substantially sealed.

18. The ~~D~~drinking device according to claim 17, wherein ~~characterised in that~~

- the drinking device comprises a removable cover ~~(70)~~ which can be fitted to the head part ~~(80)~~ of the drinking device ~~(60)~~; and
- the drinking device ~~(60)~~ comprises at least one force-exerting element ~~(72; 76; 82; 84; 86)~~, by means of which the aroma container ~~(10)~~ can be moved from the non-activated position into the activated position when the cover ~~(70)~~ is removed.

19. The ~~D~~drinking device according to claim 18, ~~characterised in that~~ wherein the at least one force-exerting element comprises a stop surface ~~(72, 76)~~ on the cover ~~(70)~~, by means of which the aroma container ~~(10)~~ can be rotated from the

non-activated position into the activated position in the case of a rotation of the cover ~~(70)~~ when the cover ~~(70)~~ is unscrewed.

20. The ~~D~~drinking device according to claim 18, wherein ~~characterised in that~~

- the side wall ~~(18)~~ of the aroma container ~~(10)~~ comprises a protrusion ~~(46)~~, at least in portions, which extends outwards; and

- the at least one force-exerting element comprises a hook-shaped element ~~(86)~~ on the cover ~~(70)~~, which is arranged and designed so as to encompass the protrusion ~~(46)~~ in a form-fitting manner during removal of the cover, and to move the aroma container ~~(10)~~ from the non-activated position into the activated position.

21. The ~~D~~drinking device according to claim 18, ~~characterised in that~~ wherein the force-exerting element comprises a resilient preload element ~~(82; 84)~~ which is arranged between the aroma container ~~(10)~~ and the head part ~~(80)~~ of the drinking device ~~(60)~~, and preloads the aroma container ~~(10)~~ into the activated position when the cover is removed.