Claims

1. Dispensing device (11) for spraying a sprayable medium, in particular a fluid or powder, which device is designed as a handheld apparatus, comprising a housing (12), in which a compressed air device (86) is provided, a spray head (14) that is connected to the housing (12) and is intended for dispensing the medium, a receiving chamber (29) that is arranged in the housing (12) and is intended for a storage container (41) in which the medium to be dispensed is stored, a fluid line (44) that leads out of the storage container (41) to the spray head (14), and a supply line (36) that leads from the compressed air device (86) to the spray head (14), wherein the spray head (14) comprises a first nozzle (38) that is connected to the supply line (36) and, separately therefrom, a second nozzle (46) that is connected to the fluid line (44), wherein the second nozzle (46) is arranged at an angle of incidence **α** of 90°or less than 90°to the central axis (93) of the first nozzle (36), in the dispensing direction (65), and protrudes into an airflow emerging from the first nozzle (38), such that an atomizing zone (49) is formed outside the spray head (14), characterized in that the first or the second nozzle (38, 46) or both are formed as a hole in the spray head (14) or as an inserted tube portion in the spray head (14) and;
wherein a leading edge (96) and a trailing edge (99), opposite the leading edge (96), is provided on a front face (88) of the second nozzle (46), wherein the leading edge (96) of the second nozzle (46) is associated with the first nozzle (38) and the front face (88) of the second nozzle (46) is arranged at an angle of incident flow **β** of more than 0°relative to the central axis (93) of the first nozzle (38), such that the outlet opening (84) of the second nozzle (46) is oriented so as to face away from the outlet opening (83) of the first nozzle (38), or wherein an inside diameter of the second nozzle (46) is smaller than an inside diameter of the first nozzle (38)
and the airflow emerging from the first nozzle (38) flows around the second nozzle (48), such that the airflow forcibly sucks the medium out of the second nozzle (48) by means of vacuum effect, and
wherein a first end face (91) and a second end face (89) adjoin one another, the second end face (89) extends from the first end face (91) to the second nozzle (46) and a third end face (90) adjoins to the second end face (89) and is inclined relative thereto.

2. The dispensing device as claimed in claim 1, wherein, in a plan view of an outlet opening (83) of the first nozzle (38), the second nozzle (46) covers 1% of an internal cross section of the first nozzle (38), and in a plan view of the outlet opening (83) of the first nozzle (38) the second nozzle (46) covers 30% of the internal cross section of the outlet opening (83) of the first nozzle (38).

3. The dispensing device as claimed in claim 1, wherein the atomizing zone (49) is formed outside an end face (91) of the spray head (14) that comprises the first nozzle (38), and outside a second end face (89) of the spray head (14) that comprises the second nozzle (46), and are arranged so as to be at right-angles or at an angle of more than 90° relative to one another, or the second end face (89) has a trough-like course as far as the second nozzle (40).

4. The dispensing device as claimed in claim 1, wherein a front face (87) of the first nozzle (36) is located in the first end face (91) or protrudes relative thereto, or a front face (88) of the second nozzle (46) is located in the second end face (89) or protrudes on the spray head (14), relative to the second end face (89).

5. The dispensing device as claimed in claim 1, wherein the leading edge (96) of the second nozzle (46) is tangentially associated with the outlet opening (83) of the first nozzle (38).

6. The dispensing device as claimed in claim 1, wherein the front face (87) of the first nozzle (38) protrudes relative to the first end face (91) and is oriented so as to be at an angle of inclination γ of less than 90° relative to the central axis (93) of the first nozzle (38), and a stall edge (101) that is set back and one that protrudes, relative to the central axis (93) of the first nozzle (38), is formed in the dispensing direction (65), wherein the protruding stall edge (101) of the leading edge (96) is associated with the second nozzle (46).

7. The dispensing device as claimed in claim 1, wherein the front face (87) of the first nozzle (38) protrudes relative to the first end face (91) and comprises a cannula-like bevel (102), and a stall edge (101) that protrudes relative to the outlet opening (83) is

formed in the dispensing direction (65), which edge is associated with the second nozzle (46).

8. The dispensing device as claimed in claim 1, wherein, in a plan view of the outlet opening (83) of the first nozzle (38), the front face (88) of the second nozzle (46) is inclined relative to a plane (95) that extends horizontally through the central axis (93) of the first nozzle (38).

9. The dispensing device as claimed in claim 8, wherein a side edge (104) of the second nozzle (46), seen in a plan view of the outlet opening (83) of the first nozzle (38) is arranged above the plane (95) that extends horizontally through the central axis (93) of the first nozzle (38), and a side edge (106) opposite the side edge (104) is arranged below said plane (95), or the side edges (104, 106) of the second nozzle (46), seen in a plan view of the outlet opening (83) of the first nozzle (38), are arranged over the plane (95) that extends horizontally through the central axis (93) of the first nozzle (38).

10. The dispensing device as claimed in claim 1, wherein the central axis (94) of the second nozzle (46) is arranged so as to be offset with respect to a vertical plane extending through the central axis (93) of the first nozzle (38), and the central axis (94) of the second nozzle (46) is arranged between the vertical plane extending through the central axis (93) of the first nozzle (38) and a vertical plane (98) that is tangential to the inner wall (97) of the first nozzle (38).

11. The dispensing device as claimed in claim 1, wherein the central axis (94) of the second nozzle (46) is arranged so as to be askew relative to the central axis of the first nozzle (38).

12. The dispensing device as claimed in claim 1, wherein an outside diameter of the second nozzle (46) is smaller than an outside diameter of the first nozzle (38).

13. The dispensing device as claimed in claim 5, wherein the trailing edge (99) of the second nozzle (46) is sharp-edged.

14. The dispensing device as claimed in claim 1, wherein the spray head (14) is formed integrally with the first nozzle (38) and the second nozzle (46), as an injection molded part.

15. The dispensing device as claimed in claim 14, wherein a connection for the fluid line (44) and the compressed air line (86) is formed on the spray head (14).