

CLAIMS

1. Substrate carrier with a substrate carrier plate (1, 1a, 1b) comprising a front-sided substrate carrier surface (2), on which at least one substrate receiving area (3, 3a) for receiving a substrate (4), respectively, is provided, wherein the substrate receiving area (3, 3a) comprises an interior area (5) and an exterior area (6) extending around the interior area (5), wherein the exterior area (6) comprises spaced plateaus (7) being raised compared to a surface of the interior area (5) for the support of edge areas of the substrate (4), wherein ventilation channels (8) are provided between the plateaus (7) and wherein the ventilation channels (8), which extend from the exterior area (6) to the interior area (5), respectively, are provided as creasings being parallel or vertically aligned to each other and the plateaus (7) as bars being parallel or vertically aligned to each other and the ventilation channels (8) are at the same height level as the interior area (5) and the ventilation channels (8) are connecting fluidically the interior area (5) with a space provided above and below the substrate carrier plate (1, 1a, 1b).
2. Substrate carrier according to claim 1, **characterized in that** the plateaus (7) are provided on a same level as the front-sided substrate carrier surface (2), except for a surface of the interior area(s) (5).
3. Substrate carrier according to claim 1 or 2, **characterized in that** the ventilation channels (8) are provided circumferentially around the substrate receiving area (3a).
4. Substrate carrier according to at least one of the preceding claims, **characterized in that** the plateaus (7) are bar-shaped.
5. Substrate carrier according to at least one of the preceding claims, **characterized in that** the ventilation channels (8) are milled into the front-sided substrate carrier surface (2).

6. Substrate carrier according to at least one of the preceding claims, **characterized in that** at least one support structure (11) is provided in the interior area (5), on which the substrate (4) can at least partly be supported.
7. Substrate carrier according to at least one of the preceding claims, **characterized in that** the plateaus (7) are applied by a material coating on the front-sided substrate carrier surface (2).
8. Substrate carrier according to at least one of the preceding claims, **characterized in that** a height of the plateaus (7) and/or a depth of the ventilation channels (8) is in a range of 0.1 mm to 1 mm.
9. Substrate carrier according to at least one of the preceding claims, **characterized in that** a distance of the plateaus (7) to each other and/or a width of the ventilation channels (8) is in a range of 0.1 mm to 5 mm.
10. Substrate carrier according to at least one of the preceding claims, **characterized in that** the substrate carrier plate (1, 1a, 1b) is provided of at least one electrically conductive material and/or is coated with at least one electrically conductive material.
11. Substrate carrier according to at least one of the preceding claims, **characterized in that** at least one projection (9, 9a, 9b, 9c, 9d) projecting from the front-sided substrate carrier surface (2) is provided for a lateral limitation of a substrate support area on the substrate receiving area (3).
12. Substrate carrier according to claim 11, **characterized in that** the at least one projection (9, 9a, 9b, 9c, 9d) is a stud.
13. Substrate carrier according to claim 11 or 12, **characterized in that** the projection (9, 9a, 9b, 9c, 9d) is inserted into a blind hole (10) provided in the front-sided substrate carrier surface (2).

14. Substrate carrier according to claim 11 or 12, **characterized in that** the projection (9, 9a, 9b, 9c, 9d) is inserted from a back side (12) of the substrate carrier, wherein the projection (9, 9a, 9b, 9c, 9d) projects from an opening (13) of the front-sided substrate carrier surface (2), wherein the projection (9, 9a, 9b, 9c, 9d) is held in the opening (13) by the size of the opening (13) and wherein the projection (9, 9a, 9b, 9c, 9d) is fixed from the back side (12) in the opening (13) by a fixation element (91).
15. Substrate carrier according to claim 11 or 12, **characterized in that** the projection (9, 9a, 9b, 9c, 9d) is arranged in a groove (14) of the substrate carrier plate (1) running parallel to the front-sided substrate carrier surface (2), wherein a support element (92) of the projection (9, 9a, 9b, 9c, 9d) provided in the groove (14) is encompassed by a counter support element (15) of the groove (14).
16. Substrate carrier according to at least one of the claims 11 to 15, **characterized in that** the projection (9, 9a, 9b, 9c, 9d) is provided of at least one electrical insulator.
17. Substrate carrier according to at least one of the claims 11 to 16, **characterized in that** the projection (9, 9a, 9b, 9c, 9d) is hollow inside.
18. Substrate carrier according to at least one of the claims 11 to 17, **characterized in that** the projection (9, 9a, 9b, 9c, 9d) is tapering pointed or rounded at one end facing away from the substrate carrier plate (1).