CLAIMS

1. Downholder for holding down substrate places of a substrate, comprising

a plate (1) with a central opening (2) and with two further openings (3, 4) arranged on either side adjacent to the central opening (2),

a downholder plate (10) with an opening (11) and downholder webs (12) arranged on the bottom side at the opening (11), wherein the downholder plate (10) is mounted in an articulated manner and in such a way on the bottom side of the plate (1) that the opening (11) of the downholder plate (10) is in alignment with the central opening (2) of the plate (1),

a first and second pneumatic drive, wherein each of the first and second pneumatic drives comprises a cylinder (5, 6) and a drive element, between which a pressure chamber is formed, wherein the cylinder (5) of the first drive is fixed on the upper side of the plate (1) above the first of the further openings (3), and the cylinder (6) of the second drive is fixed on the upper side of the plate (1) above the second of the further openings (4), and

first pressure lines (9) for supplying a compressed gas to the pressure chambers of the two pneumatic drives.

2. Downholder according to claim 1, wherein the drive element of the first pneumatic drive comprises a spherical projection (17) which engages in a spherical recess (15) of the downholder plate (10), and the drive element of the second pneumatic drive comprises a spherical projection (17) which engages in an elongated recess (16) of the downholder plate (10) which comprises a middle section with a circular cross-section, wherein the spherical projection (17) of the drive element of the first pneumatic drive and the spherical recess (15) of the downholder plate (10) have a same radius, and wherein a radius of the spherical projection (17) of the drive element of the second pneumatic drive is equal to a radius of the cross-section of the middle section of the elongated recess (16) of the downholder plate (10).

3. Downholder according to claim 1 or 2, wherein the drive element of the pneumatic drives is a piston (7, 8).

4. Downholder according to claim 1 or 2, wherein the drive element of the pneumatic drives is a membrane (18, 19).

5. Downholder according to claim 3 or 4, further comprising second pressure lines (21) for supplying a gas to the pressure chambers of the two pneumatic drives and sensors for monitoring a pressure or gas flow in the second pressure lines (21), so that it can be checked in operation whether the pistons (7, 8) or the membranes (18, 19), respectively, return to a retracted position when the supply with compressed gas is terminated.

6. Downholder according to any of claims 1 to 5, wherein a bearing of the downholder plate (10) on the bottom side of the plate (1) occurs by means of screws (13), which are guided through return springs (14) arranged on the upper side of the plate (1) and through threadless boreholes in the plate (1) and are screwed into the downholder plate (10), wherein the return springs (14) are pretensioned, so that the screws (13) pull the downholder plate (10) against the bottom side of the plate (1).