## Claims

1. A plating frame unit (10) for holding a substrate (30) in a chemical and/or electrolytic surface treatment of the substrate (30), comprising:
- a front plate (11),
- a back plate (14),
- a vacuum unit (17), and
- electric contact portions (19),
wherein the front plate (11) comprises a front frame portion (12) surrounding a front recess portion (13),
wherein the back plate (14) comprises a back frame portion (15),
wherein the front frame portion (12) and the back frame portion (15) are connected to each other to hold the substrate (30) between them, and
wherein the vacuum unit (17) is configured to reduce an inner pressure between the front frame portion (12) and the back frame portion (15) below a surrounding pressure to attach the front frame portion (12) relative to the back frame portion (15),
characterized in that the electric contact portions (19) are arranged at the front frame portion (12) and the back frame portion (15) to contact the substrate (30) electrically.

2. Plating frame unit (10) according to claim 1, wherein the vacuum unit (17) comprises an internal reduced pressure source arranged within the plating frame unit (10) or a vacuum connection line (18) configured to be connected to an external reduced pressure source arranged outside the plating frame unit (10).

3. Plating frame unit (10) according to one of the preceding claims, wherein the back frame portion (15) surrounds a back recess portion (16).

4. Plating frame unit (10) according to one of the preceding claims, wherein the electric contact portions (19) extend from the front frame portion (12) into the front recess portion (13) and/or from the back frame portion (15) into the back recess portion (16).

5. Plating frame unit (10) according to one of the claims 1 or 4, wherein the electric contact portions (19) are finger-shaped.

6. Plating frame unit (10) according to one of the claims 1, 4 or 5, wherein the electric contact portions (19) at the front frame portion (12) are displaced relative to the electric contact portions (19) at the back frame portion (15).

7. Plating frame unit (10) according to one of the claims 1 or 4, wherein the electric contact portions (19) are spring loaded.

8. Plating frame unit (10) according to one of the preceding claims, further comprising a sealing unit (20) arranged at the front frame portion (12) and/or the back frame portion (15) to seal the front frame portion (12) relative to the back frame portion (15).

9. Plating frame unit (10) according to one of the preceding claims, wherein a thickness of the front frame portion (12) and the back frame portion (15) together is 15 mm or less.

10. Plating frame unit (10) according to one of the preceding claims, wherein the front frame portion (12) and/or the back frame is/are made from a material with a yield strength of 500 MPa and less, an electrical conductivity of $2*10^6$ S/m and more, and/or a thermal conductivity of 65 W/mK and more.

11. Plating frame unit (10) according to one of the preceding claims, further comprising a locking unit arranged at the front plate (11) and/or the back plate (14) to lock the front frame portion (12) relative to the back frame portion (15).

12. Plating frame unit (10) according to one of the preceding claim, further comprising a handling device (25) for a contactless holding of the substrate (30) and which is moveable relative to the front plate (11) and/or the back plate (14) to move the substrate (30) relative to the plating frame unit (10).

13. Plating frame unit (10) according to the preceding claim, further comprising a handling arm (24) for touching and holding a predetermined holding portion of the

substrate (30) and which is moveable relative to the front plate (11) and/or the back plate (14) to move the substrate (30) relative to the plating frame unit (10).

14. A method for assembling a plating frame unit (10) for holding a substrate (30) in a chemical and/or electrolytic surface treatment of the substrate (30), comprising:

- providing a front plate (11) with a front frame portion (12) surrounding a front recess portion (13),
- providing a back plate (14) with a back frame portion (15),
- providing electric contact portions (19) at the front frame portion (12) and the back frame portion (15) to contact the substrate (30) electrically,
- inserting a substrate (30) between the front frame portion (12) and the back frame portion (15) so that they hold the substrate (30) between them, and
- reducing an inner pressure between the front frame portion (12) and the back frame portion (15) below a surrounding pressure to attach the front frame portion (12) relative to the back frame portion (15).