Claims

1. A mounting apparatus for handling of a structured substrate (1) which has structures (3) , the mounting apparatus having a soft material layer (5) compliant for accommodating the structured substrate (1) on a receiving surface (5o) by an elastic deformation of the soft material (5) around the structures (3), wherein there are fixing means for fixing of the structured substrate (1) on the receiving surface, wherein the modulus of elasticity of the material layer (5) is less than 100 GPa, and wherein the material layer (5) consists of a polymer.

2. The mounting apparatus as claimed in Claim 1, wherein the material layer (5) on the receiving surface (5o) has a surface energy of less than 0.1 J/m^2, especially less than 0.01 J/m^2, preferably less than 0.001 J/m^2, even more preferably less than 0.0001 J/m^2, ideally less than 0.00001 J/m^2.

3. The mounting apparatus as claimed in one of the preceding claims, wherein the receiving surface (5o) can be exposed to a volumetric flow passing through the material layer (5) at least on one effective contact surface with the structured substrate (3).

4. The mounting apparatus as claimed in one of the preceding claims, which as fixing means has a pressurization apparatus which can be controlled especially with a software-supported control apparatus for pressurization of the material layer with negative pressure and/or overpressure.

5. A method for handling of a structured substrate (1) which has structures (3) with the

following steps, especially the following sequence:

- accommodation of the structured substrate (1) on a receiving surface (5o) of a soft material layer (5), the soft material layer (5) compliant for accommodating the structured substrate (1) on a receiving surface (5o) by an elastic deformation of the soft material (5) around the structures (3) into the soft material layer (5), wherein the modulus of elasticity of the material layer (5) is less than 100 GPa, and wherein the material layer (5) consists of a polymer, and
- fixing of the structured substrate (1) on the soft material layer (5), especially intensified by additional, preferably controllable fixing means.

6. The method as claimed in Claim 5, wherein after the processing step, detachment takes place, especially predominantly, preferably exclusively, by deactivation of the fixing, especially pressure equalization or pressurization on the receiving surface.

7. A use of a mounting apparatus as claimed in one of Claims 1 to 4 for handling of structured substrates (1), especially semiconductor substrates, with a thickness d less than 100 μm, preferably less than 50 μm, even more preferably less than 20 μm.

8. The use of a mounting apparatus as claimed in Claim 7, wherein the device is used in a debonder.