CLAIMS

1. A pProcess for machining a lens, comprising the steps of:

- holding a semi-finished product (20) through a suction holding force which is active during an entire surface machining cycle of the semi-finished product (20);

- carrying out the surface machining cycle on a surface (20b) to be machined of the semi-finished product (20); and

- activating a pressure holding force depending on the level of the mechanical stresses exerted on the semi-finished product (20) during the surface machining cycle on said surface (20b).

2. The processProcess for machining a lens according to claim 1, characterised in that the pressure holding force is activated depending on ~~the~~ an instantaneous position taken up by a machine tool (30) in the surface machining cycle.

3. The ~~Process~~ process for machining a lens according to claim 2, characterised in that the pressure holding force is kept active when the machine tool (30) is close to the outer edge of the surface to be machined (20b).

4. The ~~Process~~ process for machining a lens according to claim 2 or 3, characterised in that the pressure holding force is not active when the machine tool (30) is close to a central portion of the surface to be machined (20b).

5. The pProcess for machining a lens according to any one of the previous claims, characterised in that the surface machining cycle comprises a first step in which the semi-finished product (20) is held by the application of both the suction holding force and the pressure holding force, and a subsequent step in which the semi-finished product (20) is held by application of just the suction holding force.

6. The pProcess for machining a lens according to any one of the previous claims, characterised in that the suction holding force acts on a first surface (20a) of the semi-finished product (20) that is opposite to the surface to be machined (20b).

7. The pProcess for machining a lens according to claim 6, characterised in that the step of holding through a suction holding force comprises activating a suction group when the first surface (20a) of the semi-finished product (20) rests against a suction chamber (12) arranged in a first rotary shaft (11).

8. The pProcess for machining a lens according to claim 6 or 7, characterised in that it comprises, before the step of holding through a suction holding force, ~~the~~ a

step of adapting a deformable support element (16) to the shape of the first surface (20a) of the semi-finished product (20).

9. The pProcess for machining a lens according to claim 8, characterised in that the step of adapting the deformable support element (16) comprises:

- resting the first surface (20a) of the semi-finished product (20) against the deformable support element (16) in order to give such a deformable support element (16) a shape matching the shape of the first surface (20a); and
- locking in position the support element (16) in such a matching shape.

10. The pProcess for machining a lens according to any one of claims 6 to 9, characterised in that the pressure holding force acts on a second surface (20b, 20c) of the semi-finished product (20).

11. The pProcess for machining a lens according to claim 10, characterised in that the second surface of the semi-finished product (20) is the surface to be machined (20b).

12. The pProcess for machining a lens according to claim 10 or 11, characterised in that the step of activating the pressure holding force comprises bringing a second rotary shaft (14), parallel to the first rotary shaft (11), to an operative position thereof in contact with the surface to be machined (20b) of the semi-finished product (20) and exerting a pressure on such a surface to be machined (20b).