

Method and Device for Producing a Plurality of Microlenses

Abstract

The invention relates to a method for producing a plurality of microlenses (10) from a lens material with the following steps, especially with the following sequence:

- application of the lens material which is intended for the embossing of the microlenses (10), especially a curable fluid (2), preferably polymer, in fluid form, to a plurality of first lens molds (5) distributed on a first embossing side (3o) of a first die (3) for embossing of the microlenses (10),
- moving the first die (3) and a second die (4) located essentially parallel, specifically in an X-Y plane, and opposite the first die (3), on top of one another in a Z-direction which runs essentially perpendicular to the X-Y plane, especially by position control,
- embossing the microlenses (10) by shaping and curing the lens material, the shaping taking place by moving the first and second embossing sides (3o, 4o) on top of one another, up to a thickness D_1 of the lens material in the Z-direction,

characterized in that the lens material of each microlens (10) at least during curing is separate from the lens material of each microlens (10) which is adjacent in the X-Y plane.

Furthermore this invention relates to a corresponding device.

Figure 1d