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(54) **Title**: METHOD AND APPARATUS FOR IRRADIATING A SEMICONDUCTOR MATERIAL SURFACE BY LASER ENERGY

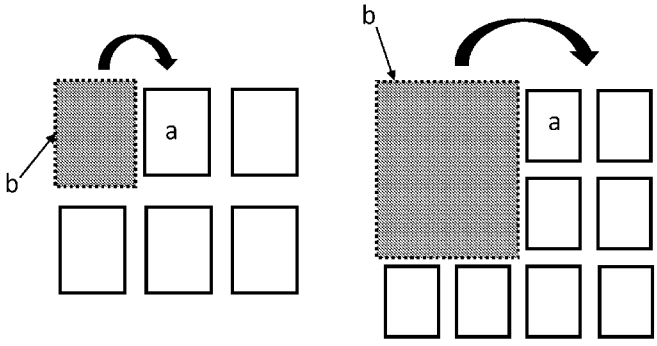


FIG 3

(57) **Abstract**: The present invention is related to a method for irradiating semiconductor material comprising: selecting a region (a) of a semiconductor material layer surface, the region (a) having a region size; irradiating the region (a) of the semiconductor material layer surface with an excimer laser having a beam spot size (b); and adjusting the beam spot size (b); wherein adjusting the beam spot size (b) comprises variably matching the beam spot size (b) to the selected region size (a). Further the present invention is related to an apparatus for irradiating semiconductor material comprising: an excimer laser for irradiating a selected region (a) of a semiconductor layer surface, the laser having a laser beam spot size (b) to the selected region (a) having a region size; and a means for adjusting the laser beam spot size; wherein that the means for adjusting the laser beam spot size (b) are adapted for variably matching the laser beam spot size (b) to the selected region size (a).

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