

ABSTRACT OF THE DISCLOSURE

The forming of a heated spot (10) by using a laser beam irradiated to a brittle substrate along a predetermined scribing line (S) and the ejecting of a cooling medium, after interruption of irradiation of laser beam, to impinge on the spot to thereby form a cooled spot (20) constitute a unit operation to be repeated. The cooled spot overlapping the heated spot (10) that has a longitudinal center line (*b*) crossing the scribing line (S) at a right angle serves to restore thermal equilibrium in and around the spots while forming unit cracks (*n*) continued one from another to form a linear crack (E,U) perpendicular to the brittle substrate surface.

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