WHAT IS CLAIMED IS:

1. A wafer processing method of processing a wafer in which each of devices having a plurality of bumps is formed in each of regions of a front surface partitioned by a plurality of division lines formed in an intersecting manner, the wafer processing method comprising:

a cut groove forming step of forming cut grooves each having a depth corresponding to a finished thickness of each of device chips by a cutting blade along the division lines from a front surface side of the wafer;

a sealing step of sealing the front surface of the wafer including the cut grooves with a sealing material, after the cut groove forming step is performed;

an alignment step of detecting an alignment mark through the sealing material by visible light imaging means from the front surface side of the wafer, and detecting the division line to be laser processed based on the alignment mark without removing the sealing material provided on the outer peripheral portion of the surface of the wafer, after the sealing step is performed;

a laser processed groove forming step of emitting a laser beam of such a wavelength as to be absorbed in the

sealing material along the division lines from the front surface side of the wafer, to form laser processed grooves having a depth corresponding to the finished thickness of the device chips in the sealing material in the cut grooves by ablation processing, after the alignment step is performed;

a protective member adhering step of adhering a protective member to the front surface of the wafer, after the laser processed groove forming step is performed; and

a dividing step of grinding the wafer from a back surface side of the wafer to the finished thickness of the device chips, to expose the laser processed grooves, and dividing the wafer into individual device chips each of which has its front surface and four side surfaces surrounded by the sealing material, after the protective member adhering step is performed,

wherein the alignment step is performed while obliquely irradiating a region to be captured by the visible light imaging means with light by oblique light means.

2. The wafer processing method according to claim 1, wherein the content of the carbon black of the sealing material is 0.1% by mass or more and 0.2%by mass or less.