

ABSTRACT OF THE DISCLOSURE

A cutting machine comprises a chucking means for holding the semiconductor wafer that is to be cut, a cutting means for cutting the semiconductor wafer held on the chucking means, a first moving means for moving the chucking means relative to the cutting means in a moving direction perpendicular to the center axis of the chucking means, and a second moving means for moving the cutting means relative to the chucking means in a direction of depth of cutting which is the direction of center axis of the chucking means. The cutting machine further comprises a thickness detecting means for detecting the thickness of the workpiece held on the chucking means, and a control means for controlling the motion of the second moving means depending upon the thickness of the workpiece detected by the thickness detecting means and for setting the position of the cutting means in the direction of depth of cutting relative to the chucking means thereby to set the depth of cutting the workpiece by the cutting means. The thickness detecting means includes a non-contact back-pressure sensor having a nozzle for flowing out a gas toward the surface of the workpiece held on the chucking means.

This Sheet Has Been Replaced.

