

ABSTRACT

CUTTING APPARATUS

Disclosed herein is a cutting apparatus having a cutting blade for cutting a workpiece held on a chuck table. The cutting apparatus includes an elastic wave detecting sensor for detecting an elastic wave due to the rotation of the cutting blade, a reference data storing section configured to store reference data as a set of reference processing elastic wave data detected in previously processing the workpiece and reference idling elastic wave data detected in the condition where the cutting blade is idling before processing, a threshold value storing section configured to store a threshold value set on the basis of the reference processing elastic wave data, a ratio calculating section configured to calculate the ratio of idling elastic wave data detected at the time just before actually processing the workpiece to the reference idling elastic wave data, and a determining section configured to divide processing elastic wave data detected during the actual processing by the ratio calculated by the ratio calculating section to thereby obtain a corrected value and then determine that the actual processing is abnormal when the corrected value is greater than the threshold value.

(Figure 3)