

DESCRIPTION

~~WORKPIECE CUTTING METHOD AND WORKING FLUID~~

TECHNICAL FIELD

[0001]

The present invention relates to a method for slicing a workpiece by use of a wire saw and a processing liquid used therefor.

BACKGROUND ART

[0002]

In recent years, an increase in size of a semiconductor wafer is demanded, and a wire saw apparatus is mainly used to slice a workpiece with this increase in size.

The wire saw apparatus is an apparatus that causes a wire (a high-tensile steel wire) to travel at a high speed, to which a workpiece (such as a silicon ingot) is pressed, to slice the workpiece while applying slurry thereto, thereby slicing the workpiece into many wafers at the same time (see Patent Document 1).

[0003]

Here, an outline of an example of a conventional general wire saw is shown in FIG. 4.

As shown in FIG. 4, a wire saw 101 mainly includes a wire 102 for slicing a workpiece, wire guides 103 around which the wire 102 is wound, a tension-applying mechanism 104 for giving the wire 102 a tensile force, a workpiece-feeding mechanism 105 for feeding the workpiece to be sliced, and nozzles 106 for supplying a processing liquid (slurry) in which abrasive grains are dispersed and mixed into coolant at the time of slicing.

DESCRIPTION

METHOD FOR SLICING WORKPIECE AND PROCESSING LIQUID

TECHNICAL FIELD

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