

DESCRIPTION

~~METHOD FOR CUTTING WORK PIECE~~

TECHNICAL FIELD

[0001]

The present invention relates to a method for slicing a workpiece into wafers with a wire saw.

BACKGROUND ART

[0002]

Conventionally, a wire saw has been known as a way to slice hard brittle workpieces, such as semiconductor ingots, into wafers. A wire saw has a wire wound around a plurality of rollers many times to form a wire row, and is configured to drive the wire at a high speed in a direction of a wire axis and to feed a workpiece to the wire row with the workpiece being cut into while appropriately supplying a machining liquid so that the workpiece is sliced at multiple positions of the wire row at the same time.

[0003]

Wire saws are generally classified into a free-abrasive-grain type and a fixed-abrasive-grain type. The feature of each of the wire saws is as follows: the free-abrasive-grain type of wire saw uses a machining liquid containing suspended abrasive grains, and the fixed-abrasive-grain type of wire saw uses a wire to which abrasive grains are bonded.

An outline of a common wire saw is now depicted in FIG. 3.

As depicted in FIG. 3, a wire saw 101 generally includes a wire 102 for slicing a workpiece W, grooved rollers 103 around which the wire 102 is wound, tensile-force-applying mechanisms 104 and 104' for applying a tension to the wire 102, a workpiece-feeding unit 105 for feeding the workpiece W from above

DESCRIPTION

METHOD FOR SLICING WORKPIECE

TECHNICAL FIELD

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