WHAT IS CLAIMED IS:

1. In a cutting apparatus including a base and a chuck table configured for holding a workpiece on a holding surface thereof, wherein the chuck table is configured and arranged to rotate with respect to the base about an axis of rotation, a processing unit having a spindle and a cutting blade detachably mounted on said spindle, transfer means supplying said workpiece to said processing unit, and cutting blade changing means changing said cutting blade;

a cutting blade changing method using a transfer jig having a plurality of receiving portions each adapted to receive a new cutting blade as a replacement component and said cutting blade changed by said cutting blade changing means, said cutting blade changing method comprising:

a transfer step of transferring said transfer jig previously stored in a cassette to said chuck table of said processing unit by using said transfer means to remove said transfer jig from said cassette in a

condition where said new cutting blade is received in one of said plurality of receiving portions of said transfer jig, said transfer means also being used in transferring the workpiece;

a transfer jig holding step of holding said transfer jig above said chuck table by using transfer jig holding means to place said transfer jig above said chuck table after performing said transfer step, the transfer jig being held above said chuck table by the transfer jig holding means such that a straight line, which extends parallel to the axis of rotation about which the chuck table rotates, intersects each of the transfer jig and the chuck table;

a removing step of removing said cutting blade from said processing unit by using said cutting blade changing means and next placing said removed cutting blade into another one of said plurality of receiving portions of said transfer jig, after performing said transfer jig holding step;

a mounting step of taking said new cutting blade from said one of said plurality of receiving portions of said transfer jig by using said cutting blade changing means and next mounting said new cutting blade to said processing unit, after performing said removing step; and

a returning step of returning said transfer jig from said processing unit to said cassette by using said transfer means in a condition where said cutting blade removed from said processing unit is received in said another one of said plurality of receiving portions of said transfer jig, after performing said mounting step.

~~a transfer jig for use in transferring a new cutting blade as a replacement component to said processing unit;~~

~~said transfer jig having a plurality of receiving portions each adapted to receive said new cutting blade and said cutting blade changed by said cutting blade changing means;~~

~~said transfer jig being adapted to be transferred by said transfer means transferring said workpiece.~~

2. The cutting blade changing method according to claim 1, wherein:

said new cutting blade and said removed cutting blade each include a respective central mounting hole; and

said plurality of receiving portions each comprise a respective cylindrical wall and a respective positioning projection formed within the

associated cylindrical wall, wherein said positioning projection is configured and arranged to receive said central mounting hole of one of said new cutting blade and said removed cutting blade.

~~2. In a cutting apparatus including a chuck table holding a workpiece, a processing unit having a spindle and a cutting blade detachably mounted on said spindle, transfer means supplying said workpiece to said processing unit, and cutting blade changing means changing said cutting blade;~~

~~a cutting blade changing method using a transfer jig having a plurality of receiving portions each adapted to receive a new cutting blade as a replacement component and said cutting blade changed by said cutting blade changing means, said cutting blade changing method comprising:~~

~~a transfer step of transferring said transfer jig previously stored in a cassette to said processing unit by using said transfer means in a condition where said new cutting blade is received in one of said receiving portions of said transfer jig;~~

~~a transfer jig holding step of holding said transfer jig above said chuck table by using transfer jig holding means after performing said transfer step~~;

~~a removing step of removing said cutting blade from said processing unit by using said cutting blade changing means and next placing said removed cutting blade into another one of said receiving portions of said transfer jig, after performing said transfer jig holding step;~~

~~a mounting step of taking said new cutting blade from said one of said receiving portions of said transfer jig by using said cutting blade changing means and next mounting said new cutting blade to said processing unit, after performing said removing step; and~~

~~a returning step of returning said transfer jig from said processing unit to said cassette by using said transfer means in a condition where said cutting blade removed from said processing unit is received in said another one of receiving portions of said transfer jig, after performing said mounting step.~~

3. The cutting blade changing method according to claim 1, wherein said transfer means includes a pair of transfer arms that are each connected to an arm portion.

4. The cutting blade changing method according to claim 1, wherein:

said workpiece comprises a semiconductor wafer, and further wherein said semiconductor wafer

is supported by an annular frame via adhesive tape; and

said cassette includes a plurality of slots that are each configured to receive either said annular frame or said transfer jig.

5. The cutting blade changing method according to claim 1, wherein said cassette is configured and arranged for storing said workpiece and said transfer jig.

6. A cutting blade changing method for use with a cutting apparatus that includes a base and a chuck table configured for holding a workpiece on a holding surface thereof, wherein the chuck table is configured and arranged to rotate with respect to the base about an axis of rotation, a processing unit having a spindle and a cutting blade detachably mounted on said spindle, transfer means for supplying said workpiece to said processing unit, and cutting blade changing means for changing said cutting blade, said cutting blade changing method using a transfer jig having a plurality of receiving portions that are each adapted to receive either a new cutting blade as a replacement component or said cutting blade changed by said cutting blade changing means, said cutting blade changing method comprising:

a transfer step of transferring said transfer jig previously stored in a cassette to said chuck table of said processing unit by using said transfer means to remove said transfer jig from said cassette in a condition where said new cutting blade is received in one of said plurality of receiving portions of said transfer jig, said transfer means also being used in transferring the workpiece;

a transfer jig holding step of holding said transfer jig above said chuck table by using transfer jig holding means to place said transfer jig above said chuck table after performing said transfer step, the transfer jig being held above said chuck table by the transfer jig holding means such that a straight line, which extends parallel to the axis of rotation about which the chuck table rotates, intersects each of the transfer jig and the chuck table;

a removing step of removing said cutting blade from said processing unit by using said cutting blade changing means and next placing said removed cutting blade into another one of said plurality of receiving portions of said transfer jig, after

performing said transfer jig holding step;

a mounting step of taking said new cutting blade from said one of said plurality of receiving portions of said transfer jig by using said cutting blade changing means and next mounting said new cutting blade to said processing unit, after performing said removing step; and

a returning step of returning said transfer jig from said processing unit to said cassette by using said transfer means in a condition where said cutting blade removed from said processing unit is received in said another one of said plurality of receiving portions of said transfer jig, after performing said mounting step.

7. The cutting blade changing method according to claim 6, wherein:

said new cutting blade and said removed cutting blade each include a respective central mounting hole; and

said plurality of receiving portions each comprise a respective cylindrical wall and a respective positioning projection formed within the associated cylindrical wall, wherein said positioning projection is configured and arranged

to receive said central mounting hole of one of said new cutting blade and said removed cutting blade.

8. The cutting blade changing method according to claim 6, wherein said transfer means includes a pair of transfer arms that are each connected to an arm portion.

9. The cutting blade changing method according to claim 6, wherein:

said workpiece comprises a semiconductor wafer, and further wherein said semiconductor wafer is supported by an annular frame via adhesive tape; and

said cassette includes a plurality of slots that are each configured to receive either said annular frame or said transfer jig.

10. The cutting blade changing method according to claim 6, wherein said cassette is configured and arranged for storing said workpiece and said transfer jig.

11. In a cutting apparatus including a chuck table holding a workpiece, a processing unit having a spindle and a cutting blade detachably mounted on said spindle, transfer means supplying said workpiece to said

processing unit, and cutting blade changing means changing said cutting blade;

a cutting blade changing method using a transfer jig having a plurality of receiving portions each adapted to receive a new cutting blade as a replacement component and said cutting blade changed by said cutting blade changing means, said cutting blade changing method comprising:

a transfer step of transferring said transfer jig previously stored in a cassette to said chuck table of said processing unit by using said transfer means to remove said transfer jig from said cassette in a condition where said new cutting blade is received in one of said plurality of receiving portions of said transfer jig;

a transfer jig holding step of holding said transfer jig above said chuck table by using transfer jig holding means to place said transfer jig above said chuck table after performing said transfer step;

a removing step of removing said cutting blade from said processing unit by using said cutting blade changing means and next placing said removed cutting blade into another one of said plurality

of receiving portions of said transfer jig, after performing said transfer jig holding step;

a mounting step of taking said new cutting blade from said one of said plurality of receiving portions of said transfer jig by using said cutting blade changing means and next mounting said new cutting blade to said processing unit, after performing said removing step; and

a returning step of returning said transfer jig from said processing unit to said cassette by using said transfer means in a condition where said cutting blade removed from said processing unit is received in said another one of said plurality of receiving portions of said transfer jig, after performing said mounting step,

wherein said cutting blade changing means includes a rotating portion configured and arranged to be rotated about a central axis, a blade chuck that is configured and arranged for holding either said new cutting blade or said removed cutting blade under suction, and a nut holder that is configured and arranged for removing and installing a fastening nut that attaches said new or removed cutting blade to said

spindle of said processing unit, wherein said blade chuck and said nut holder are both attached to said rotating portion for rotation therewith.

12. A cutting blade changing method for use with a cutting apparatus that includes a chuck table holding a workpiece, a processing unit having a spindle and a cutting blade detachably mounted on said spindle, transfer means for supplying said workpiece to said processing unit, and cutting blade changing means for changing said cutting blade, said cutting blade changing method using a transfer jig having a plurality of receiving portions that are each adapted to receive either a new cutting blade as a replacement component or said cutting blade changed by said cutting blade changing means, said cutting blade changing method comprising:

a transfer step of transferring said transfer jig previously stored in a cassette to said chuck table of said processing unit by using said transfer means to remove said transfer jig from said cassette in a condition where said new cutting blade is received in one of said plurality of receiving portions of said transfer jig;

a transfer jig holding step of holding said transfer jig above said chuck table by using

transfer jig holding means to place said transfer jig above said chuck table after performing said transfer step;

a removing step of removing said cutting blade from said processing unit by using said cutting blade changing means and next placing said removed cutting blade into another one of said plurality of receiving portions of said transfer jig, after performing said transfer jig holding step;

a mounting step of taking said new cutting blade from said one of said plurality of receiving portions of said transfer jig by using said cutting blade changing means and next mounting said new cutting blade to said processing unit, after performing said removing step; and

a returning step of returning said transfer jig from said processing unit to said cassette by using said transfer means in a condition where said cutting blade removed from said processing unit is received in said another one of said plurality of receiving portions of said transfer jig, after performing said mounting step,

wherein said cutting blade changing means includes a rotating portion configured and

arranged to be rotated about a central axis, a blade chuck that is configured and arranged for holding either said new cutting blade or said removed cutting blade under suction, and a nut holder that is configured and arranged for removing and installing a fastening nut that attaches said new or removed cutting blade to said spindle of said processing unit, wherein said blade chuck and said nut holder are both attached to said rotating portion for rotation therewith.