

WHAT IS CLAIMED IS:

1. A polishing apparatus comprising a rotatable polishing table having a surface on which a polishing pad for polishing a substrate can be positioned, wherein

the polishing table has a first attachment portion configured to allow a position guide member guiding the polishing pad to a predetermined position of the polishing table to be attached thereto and

the first attachment portion is formed at a rotational center of the surface of the polishing table,

the polishing apparatus further comprising a forth attachment portion for attaching a direction guide member guiding a direction of positioning the polishing pad, wherein

the polishing pad is configured to have a portion protruding from the polishing table when placed on the polishing table, and

the direction guide member attached to the forth attachment portion is configured to be positioned in a position corresponding to the protruding portion of the polishing pad.

2. The polishing apparatus according to claim 1, wherein the position guide member is configured to be inserted into a hole provided in the polishing pad when the polishing pad is positioned.

3. The polishing apparatus according to claim 1 or 2, wherein the polishing table includes a second attachment portion for attaching a direction guide member guiding a direction of positioning the polishing pad, and

the second attachment portion includes a hole for passing light emitted from a polishing end point detection device detecting a polishing end point of the substrate being polished.

4. The polishing apparatus according to any one of claims 1 to 3, wherein

the polishing table includes a third attachment portion for attaching a direction guide member guiding a

direction of positioning the polishing pad, and

the third attachment portion is provided on an outer peripheral edge of the polishing table.

5. The polishing apparatus according to any one of claims 1 to 4, wherein the position guide member has a non-perfect-circular outer shape in plan view in a state of being attached to the first attachment portion.

6. The polishing apparatus according to claim 5, wherein the position guide member has a rotationally asymmetric outer shape in plan view in a state of being attached to the first attachment portion.

7. A method of positioning the polishing pad on the polishing table for the polishing apparatus according to any one of claims 1 to 6, the polishing pad positioning method comprising:

a step of attaching the position guide member to

the first attachment portion;

a positioning step of positioning the polishing pad having a hole corresponding to the position guide member on the polishing table by inserting the position guide member into the hole corresponding to the position guide member.

8. A method of positioning the polishing pad on the polishing table for the polishing apparatus according to claim 3, wherein

the polishing pad includes a hole corresponding to the position guide member and a hole corresponding to the direction guide member, the polishing pad positioning method comprising:

a step of attaching the position guide member to the first attachment portion;

a step of attaching the direction guide member to the second attachment portion; and

a positioning step of positioning the polishing pad on the polishing table by inserting the position guide member into the hole corresponding to the position guide member and by inserting the direction guide member into the hole corresponding to the direction guide member.

9. A method of positioning the polishing pad on the polishing table for the polishing apparatus according to claim 4, wherein

the polishing pad includes a hole arranged at a position corresponding to the position guide member and a notched portion arranged at a position

corresponding to the direction guide member, the polishing pad positioning method comprising:

- a step of attaching the position guide member to the first attachment portion;

- a step of attaching the direction guide member to the third attachment portion; and

- a positioning step of positioning the polishing pad on the polishing table by inserting the position guide member into the hole arranged at the position corresponding to the position guide member and by inserting the direction guide member into the notched portion arranged at the position corresponding to the direction guide member.

10. A method of positioning the polishing pad on the polishing table for the polishing apparatus according to claim 1, wherein

the polishing pad includes a hole corresponding to the position guide member positioned on a rotational center thereof and a hole corresponding to the direction guide member positioned in the protruding portion, the polishing pad positioning method comprising:

- a step of attaching the position guide member to the first attachment portion;

- a step of attaching the direction guide member to the fourth attachment portion; and

- a positioning step of positioning the polishing pad on the polishing table by inserting the position guide member into the hole corresponding to the position guide member and by inserting the direction guide member into

the hole corresponding to the direction guide member.

11. A polishing pad configured to be positionable on a rotatable polishing table and provided for polishing a substrate, wherein

a hole is formed at a position corresponding to a rotational center of the polishing table,

the polishing pad is configured to have a portion protruding from the polishing table when placed on the polishing table and

a hole is formed in the protruding portion.

12. The polishing pad according to claim 11, wherein there is formed a hole for passing light emitted from a polishing end point detection device detecting a polishing end point of the substrate being polished.

13. The polishing pad according to claim 11 or 12, wherein a notched portion is formed in an outer edge portion thereof.

14. The polishing pad according to any one of claims 11 to 13, wherein the hole formed at a position corresponding to the rotational center of the polishing table is configured to allow a lid body to be attached thereto.

15. The polishing pad according to any one of claims 11 to 14, wherein the hole formed at a position corresponding to the rotational center of the polishing table has a non-perfect-circular outer periphery shape.

16. The polishing pad according to claim 15, wherein the hole formed at a position corresponding to the rotational center of the polishing table has a rotationally asymmetric outer periphery shape.

17. A polishing apparatus comprising a rotatable polishing table having a surface on which a polishing pad for polishing a substrate can be positioned, the polishing apparatus configured to include

at least one fifth attachment portion for attaching a plurality of direction guide members guiding a direction of positioning the polishing pad, wherein

the polishing pad is configured to have a portion protruding from the polishing table when placed on the polishing table and

the plurality of direction guide members attached to the fifth attachment portion are configured to be positioned at positions each corresponding to the protruding portion of the polishing pad.

18. A method of positioning the polishing pad on the polishing table for the polishing apparatus according to claim 17, wherein

the polishing pad has a plurality of holes each in the protruding portion corresponding to the direction guide member, the polishing pad positioning method comprising:

a step of attaching the plurality of direction

guide members to the fifth attachment portion, and

a positioning step of positioning the polishing pad on the polishing table by inserting the direction guide members into the holes corresponding to the direction guide members.

19. A polishing pad configured to be positionable on a rotatable polishing table and provided for polishing a substrate, wherein

the polishing pad is configured to have a portion protruding from the polishing table when placed on the polishing table, and

a hole is formed in the protruding portion.