CLAIMS

WHAT IS CLAIMED IS:

1. A dummy disk capable of being fixed to a disk holder of a dresser for measuring heights of a table surface of a polishing table before the dummy disk is to be attached to a polishing pad, the dummy disk comprising:

a first surface capable of coming into contact with the disk holder; and

a second surface which is on an opposite side of the first surface,

wherein the second surface has a plurality of liquid discharge channels, and

the plurality of liquid discharge channels extends from one end of the second surface to the other end of the second surface,

wherein the second surface has a plurality of protrusion portions and each of the plurality of protrusion portions is arranged in a straight manner in a direction from one end of the dummy disk to the other end of the dummy disk.

2. The dummy disk according to claim 1, wherein the plurality of liquid discharge channels is a plurality of grooves.

3. The dummy disk according to claim 2, wherein the plurality of grooves is a plurality of straight grooves arranged in parallel to each other.

4. The dummy disk according to claim 1, wherein the plurality of liquid discharge channels is a plurality of first grooves and a plurality of second grooves intersecting the plurality of first grooves.

5. The dummy disk according to claim 4, wherein the plurality of second grooves is perpendicular to the plurality of first grooves.

6. The dummy disk according to any one of claims 1 to 5, wherein the plurality of liquid discharge channels is uniformly distributed over the entire second surface.

7. The dummy disk according to any one of claims 1 to 6, wherein an area of the plurality of liquid discharge channels occupies 40%-81% of an area of the entire second surface.

8. The dummy disk according to claim 1, wherein two ends of each of the plurality of protrusion portions have same shapes as outer rim shapes of the dummy disk.

9. The dummy disk according to claim 1, wherein the plurality of protrusion portions and the plurality of liquid discharge channels are arranged alternately.

10. A dressing disk capable of being fixed to a disk holder of a dresser for dressing a polishing surface of a polishing pad, the dressing disk comprising:

a first surface capable of coming into contact with the disk holder; and

a second surface which is on an opposite side of the first surface,

wherein the second surface has a plurality of protrusion portions and a plurality of liquid discharge channels positioned between the plurality of protrusion portions,

the plurality of liquid discharge channels extends from one end of the second surface to the other end of the second surface,

wherein each of the plurality of protrusion portions is arranged in a straight manner in a direction from one end of the dressing disk to another end of the dressing disk, and

abrasive grains are fixed to surfaces of the plurality of protrusion portions.

11. The dressing disk according to claim 10, wherein the plurality of liquid discharge channels is a plurality of grooves.

12. The dressing disk according to claim 11, wherein the plurality of grooves is a plurality of straight grooves arranged in parallel to each other.

13. The dressing disk according to claim 10, wherein the plurality of liquid discharge channels is a plurality of first grooves and a plurality of second grooves intersecting the plurality of first grooves.

14. The dressing disk according to claim 13, wherein the plurality of second grooves is perpendicular to the plurality of first grooves.

15. The dressing disk according to any one of claims 10 to 14, wherein the plurality of liquid discharge channels is uniformly distributed on the entire second surface.

16. The dressing disk according to any one of claims 10 to 15, wherein an area of the liquid discharge channels occupies 40%-81% of an area of the entire second surface.

17. The dressing disk according to claim 10, wherein two ends of each of the plurality of protrusion portions have same shapes as outer rim shapes of the dressing disk.

18. The dressing disk according to claim 10, wherein the plurality of protrusion portions and the plurality of liquid discharge channels are arranged alternately.

19. A method, comprising

making a polishing table and a dummy disk rotate;

bringing the dummy disk into contact with a table surface of the polishing table while a liquid is supplied to the table surface;

measuring heights of the table surface at a plurality of measurement points while the dummy disk is moved on the table surface; and

creating a table profile showing tilt of the table surface from measurement values of the heights of the table surface,

wherein the dummy disk is the dummy disk according to any one of claims 1 to 9.

20. The method according to claim 19, further comprising: calculating a tilt angle of the table profile from a horizontal line; and

correcting the table profile by rotating the table profile until the tilt angle is 0.

21. The method according to claim 20, further comprising:

rotating a polishing pad arranged on the table surface along with the polishing table, and rotating a dressing disk;

bringing the dressing disk into contact with a polishing surface of the polishing pad while a liquid is supplied to the polishing surface;

measuring heights of the polishing surface at a plurality of measurement points while the dressing disk is moved on the polishing surface; and

creating an initial pad profile showing a height distribution of the polishing surface

from measurement values of the heights of the polishing surface,

wherein the dressing disk is the dressing disk according to any one of claims 10 to 18.

22. The method according to claim 21, further comprising:

correcting the initial pad profile by rotating the initial pad profile by an angle the same as the tilt angle, wherein a direction in which the initial pad profile is rotated is the same as a direction in which the table profile is rotated.

23. The method according to claim 22, further comprising:

displaying the corrected table profile and the corrected initial pad profile on a display screen.

24. The method according to claim 20, wherein the polishing table, the table surface, and the table profile are respectively a first polishing table, a first table surface, and a first table profile, and

the method further comprises:

rotating a second polishing table and the dummy disk;

bringing the dummy disk into contact with a second table surface of the second polishing table while a liquid is supplied to the second table surface;

measuring heights of the second table surface at a plurality of measurement points while the dummy disk is moved on the second table surface;

creating a second table profile showing tilt of the second table surface from measurement values of the heights of the second table surface;

calculating a tilt angle of the second table profile from the horizontal line; and

correcting the second table profile by rotating the second table profile until the tilt angle of the second table profile is 0.