CLAIMS:

1. A method for planning a wall surface polishing path, comprising:

obtaining protruding points of a wall surface to be polished, and dividing the wall surface to be polished into at least two regions;

determining a candidate protruding point in a next region of the region where a current protruding point is located;

comparing, if the region where the current protruding point is located includes an untraversed protruding point, a first distance between the untraversed protruding point and the current protruding point, with a second distance between the candidate protruding point and the current protruding point;

determining the protruding point corresponding to a minimum distance in the first distance and the second distance as a next operation point of the current protruding point; and

determining the wall surface polishing path based on the current protruding point and the next operation point of the current protruding point.

2. The method according to claim 1, wherein the obtaining the protruding points of the wall surface to be polished includes:

obtaining point cloud data of the wall surface to be polished, wherein the point cloud data includes parameter information of grid points in the wall surface to be polished;

determining, according to the point cloud data, a target wall surface for dividing the protruding point; and

determining, according to the point cloud data and the target wall surface, the protruding point protruding beyond the target wall surface.

3. The method according to claim 2, wherein the determining, according to the point cloud data, the target wall surface for dividing the protruding point includes:

determining, according to the point cloud data, protruding distances between the grid points in the wall surface to be polished and a reference wall surface; and

determining the target wall surface based on modes of the protruding distances, wherein a distance between the target wall surface and the reference wall surface is the modes of the protruding distances.

4. The method according to claim 3, wherein the determining the target wall surface based on the modes of the protruding distances includes:

determining the target wall surface based on the mode of the maximum protruding distance in the modes;

or determining the target wall surface based on the mode of the minimum protruding distance in the modes;

or determining the target wall surface based on an average value of the modes.

5. The method according to claim 1, wherein the dividing the wall surface to be polished into the at least two regions includes:

dividing the wall surface to be polished into the at least two regions according to a size of a polishing device, a width of each region being greater than a diameter of the polishing device.

6. The method according to claim 1, wherein the determining the candidate protruding point in the next region of the region where the current protruding point is located includes:

determining, in the next region of the region where the current protruding point is located, the protruding point with the shortest path from a polishing start point in a polishing path as the candidate protruding point.

7. The method according to claim 1, further comprising:

determining, if the region where the current protruding point is located does not include the untraversed protruding point, the candidate protruding point determined in the next region of the region where the current protruding point is located, as the next operation point of the current protruding point.

8. The method according to claim 1, further comprising:

determining, based on a preset traversal order, the next region of the region where the current protruding point is located; and

determining, when it is determined according to the preset traversal order that there is no next region for the region where the current protruding point is located, the next region of the region where the current protruding point is located based on a reverse order of the preset traversal order.

9. The method according to any one of claims 1 to 8, further comprising:

establishing a judgment grid for any one of the protruding points, wherein the judgment grid includes an outline representing a decreasing diffusion trend of the protruding point; and

determining a single-point polishing path of the protruding point based on the outline.

10. The method according to claim 9, wherein the determining the single-point polishing path of the protruding point based on the outline includes:

determining a direction of a current maximum protrusion of the protruding point according to the outline, and determining a current polishing direction of the protruding point based on the direction of the current maximum protrusion;

deleting the current maximum protrusion from the judgment grid, to update the judgment grid, and determining a next polishing direction based on the updated judgment grid; and

determining the single-point polishing path of the protruding point based on the current polishing direction and the next polishing direction.

11. A device for planning a wall surface polishing path, comprising:

a region division module configured to obtain protruding points of a wall surface to be polished, and divide the wall surface to be polished into at least two regions;

a candidate protruding point determination module configured to determine a candidate protruding point in a next region of the region where a current protruding point is located;

a distance comparison module configured to compare, if the region where the current protruding point is located includes an untraversed protruding point, a first distance between the untraversed protruding point and the current protruding point, with a second distance between the candidate protruding point and the current protruding pointing point;

a next operation point determination module configured to determine the protruding point corresponding to a minimum distance in the first distance and the second distance as a next operation point of the current protruding point; and

a polishing path determination module configured to determine the wall surface polishing path based on the current protruding point and the next operation point of the current protruding point.

12. The device according to claim 11, wherein the region division module includes:

a point cloud data obtaining unit configured to obtain point cloud data of the wall surface to be polished, wherein the point cloud data includes parameter information of grid points in the wall surface to be polished;

a target wall surface determination unit configured to determine, according to the point cloud data, a target wall surface for dividing the protruding point; and

a protruding point determination unit configured to determine, according to the point cloud data and the target wall surface, the protruding point protruding beyond the target wall surface.

13. The device according to claim 12, wherein the target wall surface determination unit includes:

a protruding distance determination sub-unit configured to determine, according to the point cloud data, protruding distances between the grid points in the wall surface to be polished and a reference wall surface; and

a target wall surface determination sub-unit configured to determine the target wall surface based on modes of the protruding distances, wherein a distance between the target wall surface and the reference wall surface is the modes of the protruding distances.

14. An apparatus for planning a wall surface polishing path, comprising:

one or more processors; and

a storage device configured to store one or more programs,

wherein the one or more programs, when executed by the one or more processors, cause the one or more processors to implement the method for planning the wall surface polishing path according to any one of claims 1 to 10.

15. A computer-readable storage medium, having a computer program stored therein, wherein the program, when executed by a processor, implements the method for planning the wall surface polishing path according to any one of claims 1 to 10.