

WHAT IS CLAIMED IS:

1. A wafer cleaning and drying device, comprising:

a box (1) used to clean a wafer (8), and an opening is arranged at a top of the box (1) for the wafer (8) to enter and exit the box;

5 a support part (2) arranged inside the box (1) and used to hold the wafer (8), and the support part (2) is movable upwardly and downwardly;

wherein the support part (2) comprises:

a 1st slide block (21), and a pin (211) is arranged on the 1st slide block (21) and protruding from the 1st slide block (21), an end of the pin (211) contacts a side of the wafer (8); and

10 a 2nd slide block (22), and a groove is arranged on the 2nd slide block (22) to clamp the wafer (8);

spraying pipes (3) arranged at the opening and used to spray drying gas onto surfaces of the cleaned wafer (8);

claws (4) used to clamp an upper part of the wafer (8) when the wafer (8) protrudes from
15 the opening, wherein the claws (4) are located outside the box (1) and no parts of the claws (4) extend into the box (1), wherein a guide rail (5) which is rotatable is arranged at the top of the box (1), and the claws (4) are slidably arranged in the guide rail (5); and

a bracket (6) used to clamp the wafer (8) after the wafer (8) is fully dried, and the bracket (6) is retractable, wherein an overturning part (7) is arranged at the top of the box (1), the guide
20 rail (5) is connected with an output end of the overturning part (7), and a fixing part of the bracket (6) is fixedly connected with the guide rail (5),

wherein the opening for the wafer (8) to enter and exit the box (1) is a single opening, when the guide rail (5) is arranged at the top of the box (1), the claws (4) are located at a path that the wafer (8) passes through the opening, when the wafer (8) enters the box (1), the overturning part
25 (7) drives the claws (4) to rotate to a yielding position such that the claws (4) leave the path so as

to allow the wafer (8) to pass through the opening,

wherein when the overturning part (7) drives the guide rail (5) to rotate, the guide rail (5) drives both the claws (4) and the bracket (6) to synchronously rotate and makes the wafer (8) clamped between the claws (4) and the bracket (6) rotate accordingly and away from the opening
5 of the box (1), so that the opening is available for a next to-be-cleaned wafer (8) to enter the box (1).

2. The wafer cleaning and drying device as recited in claim 1, wherein a number of the spraying pipes (3) is 2, and the 2 spraying pipes (3) are arranged in a staggered manner to respectively spray the drying gas onto the surfaces which are the front and rear surfaces of the
10 wafer (8).

3. The wafer cleaning and drying device as recited in claim 1, wherein a linear drive part is arranged outside the box (1), a 1st magnet is arranged at an output end of the linear drive part, a 2nd magnet is fixedly arranged on the support part, and the 1st magnet is attracted to an opposite pole of the 2nd magnet; when the linear drive part outputs reciprocating motions, the 2nd
15 magnet drives the support part (2) to synchronously move upward and downward.

4. The wafer cleaning and drying device as recited in claim 3, wherein a guide post or a guide groove is fixedly arranged inside the box (1) to guide moving upward and downward of the support part (2).