

Claims

1. A substrate processing device for processing a plurality of substrates disposed at predetermined intervals, the substrate processing device comprising:

a processing bath that is configured to store processing liquid, and has a side surface extending along a thickness direction of the plurality of substrates and a bottom surface; and

a discharge unit that is disposed in a bottom portion of the processing bath, and is configured to discharge processing liquid in an upward direction toward the side surface, wherein

the side surface of the processing bath is connected to the bottom surface via a sloped surface, and the discharge unit is disposed in a vicinity of a boundary between the bottom surface and the sloped surface,

the processing bath is provided with a drain port on the bottom surface, and

the discharge unit includes a first discharge port configured to discharge processing liquid in a first direction, and a second discharge port configured to discharge processing liquid in a second direction lower than the first direction, and wherein a flow dividing plate including an inclined portion on a side of the discharge unit, and an upstand portion on a side of the side surface is provided between the discharge unit and the side surface so as to separate a stream flow of processing liquid discharged from the first discharge port, and a stream flow of processing liquid discharged from the second discharge port, from each other.

2. The substrate processing device according to claim 1, wherein the upstand portion of the flow dividing plate

rises up from an upper end of the inclined portion along the side surface of the processing bath.

3. The substrate processing device according to claim 1 or 2, wherein the flow dividing plate is disposed so that the upstand portion is positioned on an outside of outer edges of the plurality of substrates that are closest to the side surface of the processing bath.

4. A substrate processing device for processing a plurality of substrates disposed at predetermined intervals, the substrate processing device comprising:

- a processing bath that is configured to store processing liquid, and has a side surface extending along a thickness direction of the plurality of substrates and a bottom surface; and

- a discharge unit that is disposed in a bottom portion of the processing bath, and is configured to discharge processing liquid in an upward direction toward the side surface, wherein

- the discharge unit is disposed so as to be positioned on a lower side of outer edges of the plurality of substrates that are closest to the bottom surface of the processing bath.

5. A substrate processing device for processing a plurality of substrates disposed at predetermined intervals, the substrate processing device comprising:

- a processing bath that is configured to store processing liquid, and has a side surface extending along a thickness direction of the plurality of substrates and a bottom surface; and

- a discharge unit that is disposed in a bottom portion of the processing bath, and is configured to

discharge processing liquid in an upward direction toward the side surface, wherein

the discharge unit is disposed so as to be positioned on an inner side of outer edges of the plurality of substrates that are closest to the side surface of the processing bath.

6. A substrate processing device for processing a plurality of substrates disposed at predetermined intervals, the substrate processing device comprising:

a processing bath that is configured to store processing liquid, and has a side surface extending along a thickness direction of the plurality of substrates and a bottom surface; and

a discharge unit that is disposed in a bottom portion of the processing bath, and is configured to discharge processing liquid in an upward direction toward the side surface, wherein

the side surface of the processing bath is each of a pair of surfaces extending in a direction perpendicular to the bottom surface.

7. A substrate processing device for processing a plurality of substrates disposed at predetermined intervals, the substrate processing device comprising:

a processing bath that is configured to store processing liquid, and has a side surface extending along a thickness direction of the plurality of substrates and a bottom surface; and

a discharge unit that is disposed in a bottom portion of the processing bath, and is configured to discharge processing liquid in an upward direction toward the side surface, wherein

the substrate processing device is configured to generate stream flows dropping toward the bottom portion

of the processing bath in a center vicinity of the substrate that is distant from the side surfaces of the processing bath.

8. The substrate processing device according to claim 7, wherein

the substrate processing device is configured to generate stream flows moving upward along the side surface of the processing bath by discharging processing liquid in the upward direction toward the side surface of the processing bath, and then the stream flows moving upward along the side surface flow into the center vicinity of the substrate to generate the stream flows dropping toward the bottom portion of the processing bath.