CLAIMS

1. A method for simulating polishing amount in a case where a polishing pad of a smaller size than a substrate is used to buff the substrate, the method including:

measuring distributions of pressure that is applied from the polishing pad to the substrate according to each overhang amount of the polishing pad relative to the substrate by using a pressure sensor;

correcting the pressure that is used in the polishing amount simulation in accordance with the overhang amounts and the measured pressure distributions;

quantifying the measured distributions of the pressure applied to the substrate with respect to the each overhang amount of the polishing pad relative to the substrate;

one-dimensionalizing the quantified pressure distributions with respect to the each overhang amount along a radial direction of the substrate;

summing the one-dimensionalized pressure distributions of the each overhang amount in the radial direction of the substrate; and

determining a pressure correction value by dividing the total of the pressure distributions of the polishing pad in the each radial position of the substrate by distance of the polishing pad on the substrate.

2. The simulation method of claim 1, wherein:

a buffing condition that is required to achieve a given target polishing amount is calculated.

3. The simulation method of claim 2, wherein:

the buffing condition to be calculated is oscillation velocity of the polishing pad.

4. A computer program including a command for carrying out the simulation of claim 1.

5. A storage medium that stores the computer program of claim 4.