

ABSTRACT

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[PROBLEM TO BE SOLVED]

In a wet etching process for reducing foreign matter defects on a mask blank substrate, a method of manufacturing a mask blank substrate that can reduce in-plane defect removing distribution as well as promote efficiency in wet etching process is provided.

[MEANS FOR SOLVING THE PROBLEM]

In introducing etching liquid 201 to first main surface 101 which is a front surface of mask blank substrate 100 for wet etching first main surface 101, the wet etching liquid is adjusted to a temperature higher than normal temperature when introduced, and liquid 202 adjusted to a temperature higher than normal temperature is supplied to second main surface 102 which is a rear surface of mask blank substrate 100. Preferably, the temperature difference between etching liquid 201 and liquid 202 adjusted to a temperature higher than normal temperature is adjusted within $\pm 10^{\circ}\text{C}$.

[SELECTED DRAWING] FIG. 2