

ABSTRACT

A semiconductor inspection method by an observation system 1 includes a step of acquiring a first pattern image showing a pattern of a semiconductor device S, a step of acquiring a second pattern image showing a pattern of the semiconductor device S and having a different resolution from a resolution of the first pattern image, a step of learning a reconstruction process of the second pattern image using the first pattern image as training data by machine learning, and reconstructing the second pattern image into a reconstructed image having a different resolution from a resolution of the second pattern image by the reconstruction process based on a result of the learning, and a step of performing alignment based on a region calculated to have a high degree of certainty by the reconstruction process in the reconstructed image and the first pattern image.

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Figure 5