

ABSTRACT

SEMICONDUCTOR DEVICE INSPECTION DEVICE AND SEMICONDUCTOR DEVICE INSPECTION METHOD

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A semiconductor device inspection system includes a laser beam source, a tester for applying a test signal that operates a semiconductor device, an optical sensor for detecting reflected light and outputting a detection signal, a first spectrum analyzer for measuring first phase information serving as phase information of the detection signal, a reference signal generating unit for generating a reference signal of a predetermined frequency, a second spectrum analyzer for measuring second phase information serving as phase information of a reference signal, and an analysis unit for deriving phase information of the detection signal at the predetermined frequency based on the first phase information and the second phase information, wherein the first spectrum analyzer measures the first phase information with respect to the reference frequency, the second spectrum analyzer measures the second phase information with respect to the reference frequency, and the frequency of the base signal of the first spectrum analyzer and the phase thereof are synchronized with the frequency of the base signal of the second spectrum analyzer and the phase thereof.

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FIG. 1