Abstract

IMPROVED ISTS METHOD AND APPARATUS FOR FILM-THICKNESS MEASUREMENTS

The invention describes a method for measuring a property of a sample by: 1) irradiating a portion of the sample with an excitation pattern characterized by at least one spatial phase and spatial period; 2) diffracting a portion of a probe beam off a surface of the sample; 3) detecting the diffracted portion of the probe beam with an optical detector to generate a light-induced signal; 4) adjusting the spatial phase of the excitation pattern; 5) repeating the irradiating, diffracting and detecting steps to generate an additional light-induced signal; and
6) processing the light-induced signals to determine a property of the sample.

Figure 1A

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