SYSTEM AND METHOD FOR CAPTURING ILLUMINATION REFLECTED IN MULTIPLE DIRECTIONS

Abstract

An optical inspection system in accordance with the disclosure can be configured to simultaneously capture illumination reflected in multiple directions from the surface of a substrate, thereby overcoming inaccurate or incomplete characterization of substrate surface aspects as a result of reflected intensity variations that can arise when illumination is captured only from a single direction. Such a system includes a set of illuminators and an image capture device configured to simultaneously capture at least two beams of illumination that are reflected off the surface. The at least two beams of illumination that are simultaneously captured by the image capture device have different angular separations between their reflected paths of travel. The set of illuminators can include a set of thin line illuminators positioned and configured to supply one or more beams of thin line illumination incident to the surface. For instance, two beams of thin line illumination can be directed to the surface at different angles of incidence to a normal axis of the surface.

FIG. 27a