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(54) Title: OPTICAL INSPECTION METHOD AND APPARATUS UTILIZING A COLLECTION ANGLE DESIGN

(57) Abstract: Method and apparatus for optical inspection of a patterned article are presented. A region on the article is illuminated with incident light to produce light returned from the illuminated region. An image of the illuminated region is acquired and analyzed for determining the intensity distribution of light components scattered from the pattern of the illuminated region within a certain collection angular field located outside a solid angle of propagation of specularly reflected light. Based on the determined distribution, light components scattered from the illuminated region and propagating with at least one predetermined solid angle segment of the certain collection angle are collected and directed to a dark-field detection unit