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(54) **Title:** AN AUTOMATIC OPACITY DETECTION SYSTEM FOR CORTICAL CATARACT DIAGNOSIS

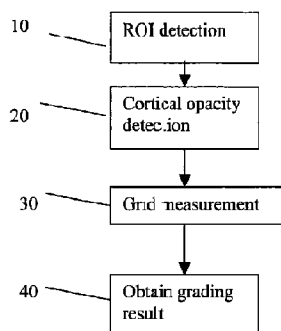


Fig. 1

(57) **Abstract:** A method performed by a computer system for detecting opacity in an image of the lens of an eye. The method includes detecting a region of interest in a picture of the lens, and processing the region of interest to produce a modified image using an algorithm which emphasizes opacity associated with a cortical cataract relative to opacity caused by other types of opacity, such as opacity caused by posterior sub-capsular cataracts (PSC). The modified image may be used for grading the level of cortical opacity, by measuring, in the modified image, the proportion of opacity in at least one area of the region of interest.