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(54) Title: METHOD OF ACCURATELY LOCATING THE FRACTIONAL POSITION OF A TEMPLATE MATCH POINT

(57) Abstract

A method of accurately locating a sub-pixel maximum on a two-dimensional grid (100) having an x axis and a y axis is provided. The method, which is suitable for locating a sub-pixel maximum, which falls at intermediate (200) grid points, begins identifying a grid point having a maximum grid point value (300). Then, a quadrangle containing a sub-pixel maximum is determined by locating neighboring grid points along the x and y axes (400), which have the greatest grid point values. Next, four one-dimensional, fractional maxima are computed along each side of a quadrangle. Next, two lines connecting one-dimensional maxima along the opposite sides of the quadrangle are computed. Finally, a location for the sub-pixel maximum is calculated where the two computed lines intersect (500).

