

The present invention relates to automation and computer engineering and can be used for analyzing images in computer vision systems. The proposed method for determining the angular orientation of a planar figure implies using the reference image of the controlled figure, which is stored in a memory unit, and consists in centering the image of the figure, turning the image relative to its center, transforming the image that is presented in the rectangular coordinate system into the image that is presented in the polar coordinate system, defining two circles, which centers coincide with the center of the figure, so that one of the circles is tangent to the point of the figure that is least distant from the center of the figure, and the other circle is tangent to the point that is most distant from the center of the figure, dividing the circle with the maximal radius into a number of sectors, determining, for each sector, the area of the section between the figure outline and the circle with the maximal radius and area of the section between the figure outline and the circle with the minimal radius, turning the image of the figure at a defined angle, and comparing the areas of the said sections of the figure with the areas of the corresponding sections of the reference figure. The procedure described above is repeated until the said areas are equal. The angle orientation of the figure is determined by the numbers of the discrete turns of the figure. The present invention provides a possibility to increase measurement accuracy and speed of response in determining angle orientation of planar figures.