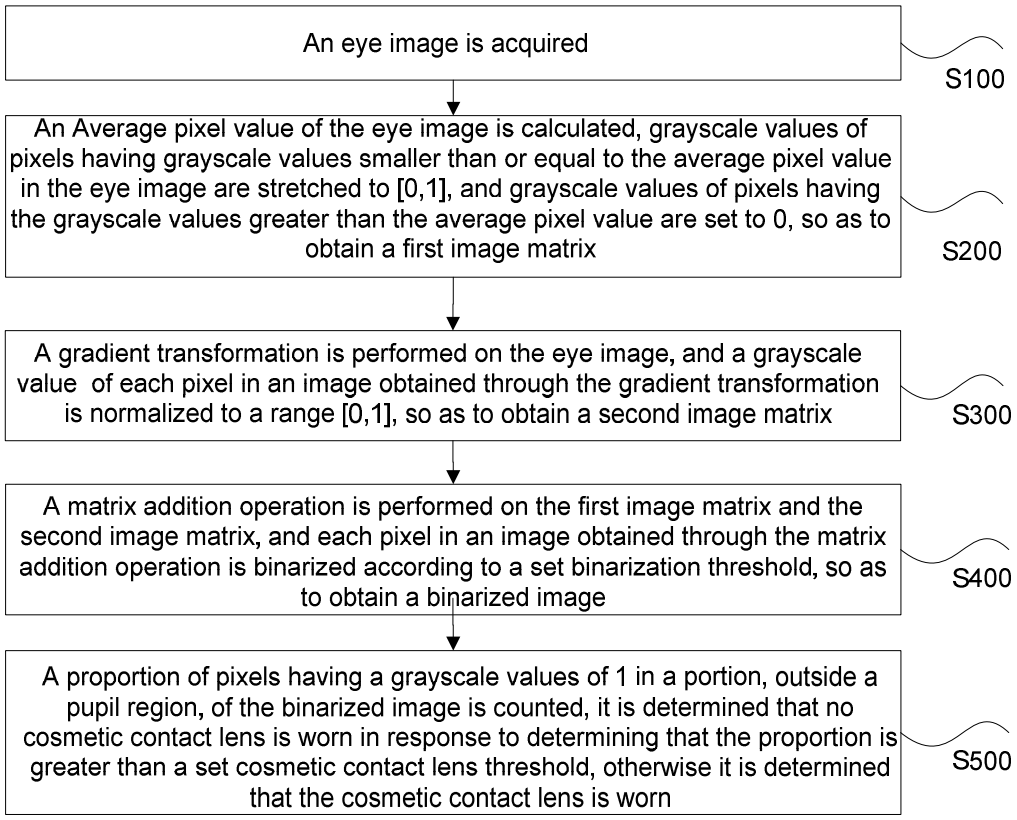

An eye image is acquired
S100
An Average pixel value of the eye image is calculated, grayscale values of pixels having grayscale values smaller than or equal to the average pixel value in the eye image are stretched to [0,1], and grayscale values of pixels having the grayscale values greater than the average pixel value are set to 0, so as to obtain a first image matrix
S200
A gradient transformation is performed on the eye image, and a grayscale value of each pixel in an image obtained through the gradient transformation is normalized to a range [0,1], so as to obtain a second image matrix
S300
A matrix addition operation is performed on the first image matrix and the second image matrix, and each pixel in an image obtained through the matrix addition operation is binarized according to a set binarization threshold, so as to obtain a binarized image
S400
A proportion of pixels having a grayscale values of 1 in a portion, outside a pupil region, of the binarized image is counted, it is determined that no cosmetic contact lens is worn in response to determining that the proportion is greater than a set cosmetic contact lens threshold, otherwise it is determined that the cosmetic contact lens is worn
S500

Fig. 4

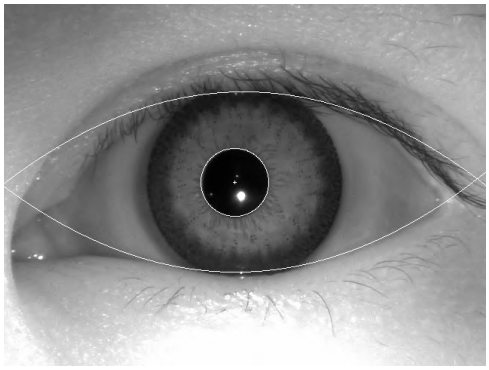


Fig. 5