A Binarization Approach for Wafer ID Based on Star-Shape Filter

Wei-Chih Hsu¹, Tsan-Ying Yu²*, and Kuan-Liang Chen¹

¹Department of Computer and Communication, National Kaohsiung First University of Science and Technology, Kaohsiung, Taiwan, ROC.
²Institute of Mechanical and Electro-Mechanical Engineering, National Formosa University, Yunlin, Taiwan, ROC.

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Abstract

The binarization of wafer ID image is one of the key techniques of wafer ID recognition system and its results influence the accuracy of the segmentation of characters and their identification directly. The process of binarization of wafer ID is similar to that of the car license plate characters. However, due to some unique characteristics, such as non-uniform illumination, the unsuccessive strokes of wafer ID, it is more difficult to make of binarization of wafer ID than the car license plate characters. In this paper, a wafer ID recognition scheme based on Star-shape filter is proposed to cope with the serious influence of uneven luminance. The testing results show that our proposed approach is efficient even in situations of overexposure and underexposure the wafer ID with high performance.

Keywords: binarization, wafer ID, star-shape filter, car license plate

References


* Corresponding author. E-mail address: yotnyg@gmail.com
Tel.: +886-7-6077139; Fax: +886-7-607709