A Study on the Extension and Expansion of Wallace-Ikatura Rule for Tm of Oligonucleotide

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ABSTRACT

This thesis is mainly aimed at the combination of motion control and image processing techniques for automated welding application. Image recognition is based on a modified Hopfield neural network method. The proposed method in this study has the features of parallel processing, high error tolerance and learning-recalling intelligence capacity. To demonstrate the feasibility and effectiveness of the proposed method, a Cartesian robot arm on which a CCD is rigidly mounted performs precision position control over work pieces. Experimental results indicate that the manipulator is successfully applied to the automated welding work. Moreover, the proposed method significantly enhances reliability, quality and efficiency.

Keywords : Automated Welding Machine ; Neural Network ; Image Vision ; Motion Control ; Servo Motor

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