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Empirical study on AGV guiding in indoor manufacturing system using color sensor (Conference Paper)

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Abstract

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The automated guided vehicle (AGV) is one of the main components in the industry. The development of the AGV is getting advance and improve widely according to the high demands in the industry. They are most likely used as a material handling system to achieve flexible manufacturing system (FMS). The technology selections for the AGV are very important to increase the capability and reliability. However, many companies are using the magnetic sensor track; this technique is effective and accurate. In contrast, this technique is costly and inflexible. One of the alternatives that can be effective, more flexible and lower cost is by using a color sensor. In this study an empirical test have been implemented to test and conduct a new algorithm using different types of color sensors. The results show an effectiveness of using color sensors in addition to cost saving due to minimize the operational cost. © 2017 IEEE.

Author keywords

Automated Guided Vehicle (AGV) Guiding color sensor manufacturing system

Indexed keywords

Engineering controlled terms: Color Costs Flexible manufacturing systems Information analysis Magnetic levitation vehicles Manufacture Materials handling Mobile robots Transportation

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