Abstract

DC motor has wide range of applications ranging from industrial applications to household applications. In industrial applications several parameters have to be considered for optimized production i.e. rate of production. DC motor speed and orientation control provides sustainable systems with smoother operation, controlled torque, utilization of one system for different processes etc. This paper provides wireless speed control of DC motor for efficient utilization in industrial applications. The system consists of a transmitter which generates control signals which are wirelessly transmitted to the receiver. The receiver according to the control signals controls the speed of the DC motor provided by Pulse Width Modulation (PWM). The control signals are transmitted using RF wireless module Zigbee. Hence forth the speed of the DC Motor can be controlled wirelessly through a control room which makes the system
Wireless Personal Area Network based Simulation and Design to Control the Speed of Permanent Magnet DC Motor using Zigbee Transceiver Protocol

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Index Terms

Computer Science Control Systems
Keywords
DC Motor  Wireless speed control  Pulse Width Modulation  Zigbee  sustainable