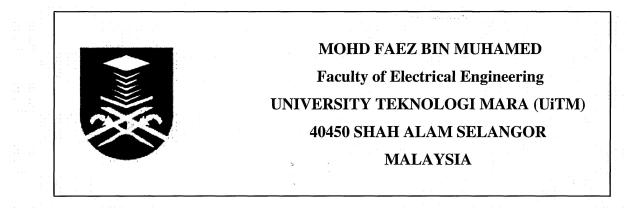
SPEED CONTROL OF TWO QUADRANT DRIVE USING MODEL ORDER REDUCTION TECHNIQUE

This thesis is presented in partial fulfillment for the award of the Bachelor of Engineering (Hons) Electrical UNIVERSITI TEKNOLOGI MARA MALAYSIA



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ABSTRACT

DC Motor control means direction and speed control of a DC motor. It is very popular until now due to useful speed range, the ability to control to desired speed and also high efficiency in operating. In this thesis a two quadrant DC motor drive is simulated by using Matlab Simulink software. Separately excited DC motor is designed and complete DC drive mechanism achieved. The chopper receives signal from controller and gives variable voltage. The designing of current and speed controller is carried out. Finer controller gain value for the dc drive is obtained for after the proposed technique model order reduction method applied. The model of the drive, the design of the devices and some experimental results are shown and clearly explained.

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