Abstract

A modified Direct Torque Control (DTC) by using Space Vector Modulation (DTC-SVM) for
A novel MATLAB/Simulink model of PMSM drive using direct torque control with SVM

Permanent magnet synchronous machine (PMSM) drive is proposed in this paper. DTC-SVM technique improves the basic DTC performances, which features low torque and flux ripple and also fixed switching frequency. The computer simulation results, in Matlab/Simulink, demonstrate the effectiveness of the proposed control scheme which improves the performance of the PMSM.

References

- K. Chikh, A. Saad, M. Khafallah and D. Yousfi "PMSM Vector control
performance improvement by using pulse width modulation and ant windup PI controller; the second international conference on multimedia computing and systems 2011.

**Index Terms**

Computer Science                     Control Systems

**Keywords**

Pmsm  Dtc  Dtc-svm  Torque Ripple  Flux Ripple  Fixed Switching Frequency.