Convergence Analysis of Reactive Power Based Schemes Used in Sensorless Control of Induction Motors

Authors : N. Ben Si Ali, N. Benalia, N. Zerzouri
Abstract : Many electronic drivers for the induction motor control are based on sensorless technologies. Speed and torque control is usually attained by application of a speed or position sensor which requires the additional mounting space, reduce the reliability and increase the cost. This paper seeks to analyze dynamical performances and sensitivity to motor parameter changes of reactive power based technique used in sensorless control of induction motors. Validity of theoretical results is verified by simulation.