ABSTRACT

Induction motor is the most electric machine often use in industry. Therefore many research conducted to know performance of induction motor as anticipation of trouble at induction motor which causing motor suddenly stop operating.

Motor Current Signature Analysis (MCSA) is one methode which often used for on-line detection of motor fault. This methode can differentiate fault that caused by rotor asymmetry, stator winding fault, bearing fault and air-gap eccentricity. The usage of transient current motor which is processed using wavelet transform already used for rotor-bar fault detection.

This research, suggest a method for motor fault on-line detection using wavelet transform and Fuzzy Logic. Wavelet transform used for magnitude detection on certain range frequency, whereas Fuzzy Logic used for signal pattern recognition which indicate abnormal condition.

Key words: MCSA, wavelet, fuzzy.