

**ABSTRACT****ANGLE CONTROLLER FOR A SWITCHED RELUCTANCE DRIVE
UTILIZING A HIGH FREQUENCY CLOCK**

A circuit and method for controlling a switched reluctance drive having at least one phase winding and a rotor position encoder that provides a set of signals corresponding to the absolute position of the rotor relative to the stator. The circuit monitors the set of signals and generates a high frequency clock signal having a frequency substantially proportional to the frequency at which the set of signals changes state. The high frequency clock signal comprises a number of digital pulses for each rotor revolution that is an integral multiple of the number of digital pulses from the rotor position transducer for each rotor revolution and corresponds to the incremental position of the rotor. The high frequency clock signal is applied to a counter that is reset upon each change in state of the set of signals. The output of the counter is compared to predetermined values and the at least one phase winding is energised and de-energised in response to the results of the comparison.