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(54) METHOD FOR POSITIONING ROTOR OF SWITCHED RELUCTANCE MOTOR WITH PULSE NUMBER BEING SELF-ADJUSTABLE ALONG WITH SPEED

(71) Applicant: **Changsha University of Science and Technology**, Changsha, Hunan (CN)

(72) Inventor: **Hui Cai**, Changsha, Hunan (CN)

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(57) **ABSTRACT**

The present invention discloses an all-speed-range estimation method for a rotor position of a switched reluctance motor. Under a low-speed working condition, a sector is selected for triggering according to comparison between a current response value and a current threshold, so as to determine the rotor position of the motor; under a medium-speed working condition, the rotor position of the motor is determined, according to a change of the number of injected pulses with the motor speed, by querying a preset data table; under a high-speed working condition, a capacitor charging loop is designed since there is a small number of injected pulses; a response current formed by during injection of a pulse voltage charges a capacitor; the capacitor is detected to measure a voltage; and the rotor position is determined by querying a preset voltage-rotor position data table according to a voltage value.