

TITLE OF INVENTION: CONTROL METHOD FOR ELECTRIC MOTORS IN SERIES CONNECTION

ABSTRACT

The present disclosure discloses a control method for electric motors in series connection, relating to the technical field of electric motor control and solving problems of rotational speed synchronization, energy consumption and emergency protection of electric motors with axes connected in series connection. The control method includes: connecting axes of n electric motors in series connection, and collecting basic parameters of each electric motor; synthesizing a voltage space vector reference value; acquiring an expected voltage output vector; realizing the rotational speed synchronization and load balancing of the electric motors with the axes connected in series connection; and monitoring a working process of the electric motors with the axes connected in series connection in real time and solving the fault. The present disclosure greatly improves a collaboration ability of the electric motors, enhances fault detection and coping abilities and reduces resource consumption costs.

FIG. 1