



Magnetization State Control Method And Magnetization State Control Device

[View U.S. Patent No. 10,784,804 in PDF format.](#)

WARF: P150275US01

Inventors: Robert Lorenz, Brent Gagas, Kensuke Sasaki, Takashi Kato, Takashi Fukushima

The Invention

A magnetization state control method for a variable magnetization machine, the method includes generating a flux linkage vector while changing a magnetization state of the variable magnetization machine such that a trajectory of the flux linkage vector has a curved clockwise trajectory on a dq-axis plane and a magnitude of the flux linkage vector temporally changes, with the dq-axis plane being a synchronous reference frame with a d-axis pointing in a direction of a permanent magnet flux and a q-axis being 90 degrees ahead of the d-axis in a rotational direction of a rotor.

Tech Fields

- [Engineering : Electric machines](#)
- [Engineering : Engine technologies](#)

For current licensing status, please contact Michael Carey at mccarey@warf.org or 608-960-9867