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## Axial Asynchronous Motor with A Rotor Two-section Cone-cylindrical Magnetic Circuit

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### Краткое описание

The possibilities of improving the axial asynchronous engine by formation of two-section magnetic circuit and rotor winding with radial conical surfaces of teeth, tangential displacement of the core parts of sections and intermediate short-circuiting rings are shown. The displacement of the core sections of winding within of the toothed division limits is equivalent to the slots slope of machines with a cylindrical gap and weakens the electromotive forces and additional moments from the higher harmonics of the magnetic field. The condition for sectional components of the rotor currents compensation from the magnetic field toothed harmonics is obtained. © 2019 IEEE.

### Ключевые слова автора

axial asynchronous motor; conical-cylindrical magnetic conduit; induction distribution; intermediate ring; rotor sections; tooth harmonics

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### Engineering controlled terms

Harmonic analysis; Induction motors; Magnetic fields; Motors; Rotors (windings); Timing circuits; Winding

### Engineering uncontrolled terms

Additional moment; Asynchronous engines; conical-cylindrical magnetic conduit; Higher harmonics; Induction distribution; Short circuiting; Tangential displacements; tooth harmonics

### Engineering main heading

Magnetic circuits

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**Название темы** Permanent Magnets; Synchronous Machine; Rotor

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