MATHEMATICAL MODEL
OF THE PERMANENT MAGNET FIELD
IN THE AIR GAP OF ELECTRICAL MACHINE

SUMMARY  The paper deals with an analytical model of the magnetic field in the air gap of electrical machine with permanent magnets. In this model, the source of radial and tangential magnet fields can be assumed as a system of equivalent current-carrying buses, which thickness depends on permanent magnet properties. Appropriate formulas that describe the problem in question have been derived.

Keywords: Electrical machines, magnetic field, permanent magnets