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## DOUBLE-CIRCUIT PASSIVE SHIELDING OF THE MAGNETIC FIELD OF HIGH-VOLTAGE CABLE LINES IN JUNCTION ZONES

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### Abstract

*The article holds dipole modeling of the magnetic field in junction zone of three-phase cable line for a typical case of the removal of the points of observation at a distance, in two or more times greater than the distance between the cables. It is shown that the magnetic field of a three-phase cable lines in the case of the symmetry of supply voltages can be determined by dipole magnetic moments of the only two current circuits that justifies the possibility of effective use of its two-circuit shielding instead of the well-known three-circuit shielding. A two-circuit*

*passive shielding system proposed for junction zones of underground high-voltage three-phase cable lines. It characterized by a reduced number of elements (ferromagnetic cores), while maintaining the shielding factor greater than 10, which has experimental verification. Reference s 9, figures 7.*

**Key words:** cable line, magnetic field, contour passive shielding.

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