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SOLUTION OF THE PROBLEM OF THE MAGNETIC FIELD CONTINUATION FROM CYLINDRICAL SURFACE BY USING GREEN'S FUNCTION

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Abstract

The method for solving of the problem of continuing magnetic flux from cylindrical surface with a given distribution of the tangential component of the magnetic induction is developed. The using of circular infinitely thin conductors with the currents and the responding of Green's function is proposed. An example of determining the profile of massive single-turn solenoid, for generating given induction distribution of pulsed magnetic field on surface of the long cylindrical shell with sharp skin effect in conductors. References 7, figures 3.

Key words: problem of the magnetic flux continuation, Green's function, pulse magnetic field, profile of massive solenoid, a sharp skin effect.

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