

On the Dirichlet problem for a mixed-type equation of the second kind with strong degeneration

Khairullin R.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

By separation of variables, we construct particular solutions of an equation of mixed elliptic-hyperbolic type of the second kind with strong degeneration in a rectangular domain. We pose certain transmission conditions on the singular line. The constructed solutions satisfy the equation in the entire mixed domain and are used to study the uniqueness of the solution of the Dirichlet problem for this domain. © 2013 Pleiades Publishing, Ltd.

<http://dx.doi.org/10.1134/S0012266113040113>
