Abstracts

A Ferrite Boundary-Value Problem in a Rectangular Waveguide

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A solution is obtained for the electric field at the air-ferrite interface (z=0) in a rectangular waveguide filled with ferrite in the semi-infinite half (z>0) and magnetized in the direction of the electric field. The field is expressed in terms of a Neumann series obtained by iteration of a singular integral equation which satisfies the boundary conditions at the interface. The equivalent circuit for the junction is also presented.

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