

# Abstracts

## Analysis of Discontinuities in Dielectric Waveguides by Means of the Least Squares Boundary Residual Method

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*K. Morishita, S.-I. Inagaki and N. Kumagai. "Analysis of Discontinuities in Dielectric Waveguides by Means of the Least Squares Boundary Residual Method." 1979 Transactions on Microwave Theory and Techniques 27.4 (Apr. 1979 [T-MTT]): 310-315.*

A novel approach to analyze the discontinuities in open-type transmission lines is proposed. The method used is the least squares boundary residual technique which has been applied previously to treat the boundary-value problems in closed-type transmission lines. As an example of application of our approach the reflected, transmitted, and radiated waves caused by the transverse displacement at the junction of two dielectric slab waveguides are calculated.

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