Abstracts

Combination of the Source Method with Absorbing Boundary Conditions in the Method of Lines

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The Method of Lines (MoL) is extended to improve the analysis of discontinuities in microstrip lines and antennas. Therefore the source method is developed by integrating absorbing boundary conditions in the reference plane. With the new approach a higher accuracy is reached by using fewer discretization points. This reduction of the numerical effort becomes necessary to develop effective software to analyze complex structures. The new procedure is demonstrated by calculating the end effect of an open-end. A comparison is then made between the results obtained by former and other methods. The improvement over the former procedure is made obvious.

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