Abstracts

Modeling and Computer Simulation of a Microwave-to-DC Energy Conversion Element (Dec. 1975 [T-MTT])

J.J. Nahas. "Modeling and Computer Simulation of a Microwave-to-DC Energy Conversion Element (Dec. 1975 [T-MTT])." 1975 Transactions on Microwave Theory and Techniques 23.12 (Dec. 1975 [T-MTT] (1975 Symposium Issue)): 1030-1035.

A microwave-to-dc energy conversion element consisting of a dipole antenna, a low-pass filter, a Schottky-barrier diode, and a dc filter has been modeled using a distributed transmission-line modeling technique that includes skin-effect losses. Computer simulation has shown 80-percent conversion efficiency and has indicated that the diode generates significant power at higher harmonics due to a resonance effect.

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