Abstracts

Modeling and Computer Simulation of a Microwave-to-DC Energy Conversion Element (1975 [MWSYM])

J.J. Nahas. "Modeling and Computer Simulation of a Microwave-to-DC Energy Conversion Element (1975 [MWSYM])." 1975 MTT-S International Microwave Symposium Digest of Technical Papers 75.1 (1975 [MWSYM]): 194-196.

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 modeling technique that includes skin-effect losses in transmission lines. Computer simulation has shown seventy percent conversion efficiency and has indicated that the diode generates significant power at higher harmonics due to a resonance effect.

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