Abstracts

A Dual Polarized Circular Patch Rectifying Antenna at 2.45 GHz for Microwave Power Conversion and Detection

J.O. McSpadden and K. Chang. "A Dual Polarized Circular Patch Rectifying Antenna at 2.45 GHz for Microwave Power Conversion and Detection." 1994 MTT-S International Microwave Symposium Digest 94.3 (1994 Vol. III [MWSYM]): 1749-1752.

A novel circular patch rectifying antenna (rectenna) has been developed which converts microwave energy into DC power at 2.45 GHz, Dual polarization is achieved by two orthogonal microstrip feed lines. Rectification is achieved by GaAs Schottky-barrier diodes located on each feed line. A 48% conversion efficiency from microwave power to DC power was achieved. The design was based on a nonlinear circuit analysis.

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