Abstracts

A low noise active integrated antenna receiver for monopulse radar applications

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A low noise active integrated antenna receiver is presented. This new design consists of a pair of low noise amplifiers (LNA) integrated on each feed of a dual-feed planar quasi-Yagi antenna. The outputs of the LNAs are combined to form a sum and difference radiation pattern suitable for monopulse radar applications. Simulation and measurement methodology for designing a low noise active integrated antenna receiver is also presented. A peak gain of 7.7 dB and minimum noise figure of 3.6 dB is measured for a C-band prototype.

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