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[54] METHOD OF AMPLITUDE SHADING IN THE TIME DOMAIN TO CONTROL SIDE LOBES IN THE FREQUENCY DOMAIN

5,309,409 5/1994 Jones et al. 367/103

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[57] ABSTRACT

[21] Appl. No.: 919,179

A method of amplitude shading in the time domain is used to control side lobes in the frequency domain. Each of a plurality of limited dynamic range amplifiers is capable of generating a corresponding output with a frequency response when input power is applied thereto. The amplitude of the input power supplied to each amplifier is controlled in accordance with an amplitude shading function in order to modify each of the corresponding amplifier outputs. Each amplifier output is modified such that the width of each main lobe is realized while the side lobes are reduced. The amplitude shading function used by the present method is a one-half cycle \cos^2 function with a DC offset.

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[52] U.S. Cl. 367/138; 367/905

[58] Field of Search 367/131, 138, 367/137, 905, 103

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6 Claims, 2 Drawing Sheets

