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(54) Title: METHOD OF AND APPARATUS FOR FILTERING INTERMODULATION PRODUCTS IN A RADIOCOMMUNICATION SYSTEM ✓

(57) Abstract

An improved feed-forward multicarrier power amplifier architecture is described along with a novel array antenna wherein the improved amplifier may be advantageously put to use. The improved amplifier provides for independent control of unwanted intermodulation products generated in the amplifier. When used in the novel array structure, a separate radiation lobe containing the unwanted intermodulation products may be steered independently from a main radiation lobe. In a cellular base station application, the radiation lobe containing the unwanted intermodulation products may be steered away from the main radiation lobe thereby providing spatial filtering of the unwanted signals. The radiation lobe containing the unwanted intermodulation products may be steered rapidly in time using, for example, a noise like function to provide statistical averaging of the interference in the direction of desired communications.

