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DISTORTION COMPENSATOR

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Classification: - international: **H03F1/32; H03F3/24**
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Abstract of JP2013115725 (A)

PROBLEM TO BE SOLVED: To improve distortion compensation accuracy of a power amplifier. ;**SOLUTION:** An LMS algorithm using a feedback signal that is an output signal of a power amplifier 1 input via an attenuator 15 and pseudorandom data calculates a delay of an input signal to the power amplifier 1. A delay of an input signal to the power amplifier 1 is adjusted on the basis of the calculated delay to match timing of the input signal to the power amplifier 1 with a feedback signal including a fractional delay, and the delay-adjusted input signal where the timing is matched is used for distortion compensation of the input signal to the power amplifier 1 to improve DPD mode distortion compensation accuracy. ;**COPYRIGHT:**

(C)2013,JPO&INPIT;**PROBLEM TO BE SOLVED:** To improve distortion compensation accuracy of a power amplifier.**SOLUTION:** An LMS algorithm using a feedback signal that is an output signal of a power amplifier 1 input via an attenuator 15 and pseudorandom data calculates a delay of an input signal to the power amplifier 1. A delay of an input signal to the power amplifier 1 is adjusted on the basis of the calculated delay to match timing of the input signal to the power amplifier 1 with a feedback signal including a fractional delay, and the delay-adjusted input signal where the timing is matched is used for distortion compensation of the input signal to the power amplifier 1 to improve DPD mode distortion compensation accuracy.