TRANSMITTER ARCHITECTURE AND RELATED METHODS

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This patent is subject to a terminal disclaimer.

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ABSTRACT

A radio frequency (RF) transmitter includes one or more power amplifiers and a controller that is configured to adjust amplitudes and phases of RF input signals of the one or more power amplifiers and supply voltages applied to the one or more power amplifiers. In embodiments where multiple power amplifiers are used, a combiner may be provided to combine outputs of the power amplifiers. In at least one implementation, amplitude adjustment of the RF input signals of the one or more power amplifiers may be used to provide transmit power control and/or power backoff for the RF transmitter.

30 Claims, 17 Drawing Sheets