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HSU et al.(10) **Pub. No.: US 2024/0214015 A1**(43) **Pub. Date: Jun. 27, 2024**(54) **SIGNAL PREDISTORTION CIRCUIT  
CONFIGURATION**(71) Applicant: **REALTEK SEMICONDUCTOR  
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**ABSTRACT**

A signal predistortion circuit configuration includes a digital predistortion (DPD) circuit, a first transceiver, and a second transceiver, and can reduce the influence of poor signal path insulation when performing a DPD training. During the DPD training, the DPD circuit transmits a training signal through a first signal path to adjust first predistortion parameters, and transmits a training signal through a second signal path to adjust second predistortion parameters. The first signal path includes: a transmitting circuit and an analog-front-end circuit of the first transceiver, a receiving analog circuit and a switch circuit of the second transceiver, and a switch circuit and an analog-to-digital converter (ADC) of the first transceiver. The second signal path includes: a transmitting circuit and an analog-front-end circuit of the second transceiver, a receiving analog circuit and the switch circuit of the first transceiver, and the switch circuit and an ADC of the second transceiver.

