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(43) **Pub. Date: Dec. 22, 2022**(54) **AMPLIFIERS WITH FEEDFORWARD CANCELLATION**(52) **U.S. Cl.**
CPC **H03F 1/3223** (2013.01); **H03F 1/3205** (2013.01); **H03F 2200/387** (2013.01)(71) Applicant: **TEXAS INSTRUMENTS INCORPORATED, DALLAS, TX (US)**(57) **ABSTRACT**(72) Inventors: **SIRAJ AKHTAR, RICHARDSON, TX (US); SWAMINATHAN SANKARAN, ALLEN, TX (US)**

A circuit includes a main amplifier having a first input and a first output. A main bias circuit is coupled to the main amplifier, and the main bias circuit configured to operate the main amplifier in a first frequency band. A feedforward cancellation amplifier has a second input and a second output, in which the second input is coupled to the first input, and the second output is coupled to the first output. A filter is coupled between the first input and the second input. A feedforward bias circuit is coupled to the feedforward cancellation amplifier. The feedforward bias circuit is configured to operate the feedforward cancellation amplifier in a second frequency band within and narrower than the first frequency band.

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