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### (54) MISMATCH ERROR CALIBRATION METHOD AND APPARATUS OF A TIME INTERLEAVING DIGITAL-TO-ANALOG **CONVERTER**

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#### (57)ABSTRACT

A mismatch error calibration method and apparatus of a time interleaved digital-to-analog converter. The method includes: sampling an output signal of a time interleaved digital-to-analog converter to obtain a measurement signal; preprocessing the measurement signal to obtain a preprocessed measurement signal; and estimating a coefficient of a digital impairment equalizer according to an input signal of the digital impairment equalizer, an output signal of the digital impairment equalizer, and the preprocessed measurement signal. By preprocessing a non-ideal feedback channel, interferences caused by non-ideality of the feedback channel is eliminated, so as to achieve better mismatch error calibration performance of a TI-DAC.

- 101 sampling an output signal of the time interleaved digital-to-analog converter to obtain a measurement signal - 102 preprocessing the measurement signal to obtain a preprocessed measurement signal -103

estimating a coefficient of a digital impairment equalizer according to an input signal of the digital impairment equalizer, an output signal of the digital impairment equalizer, and the preprocessed measurement signal