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(54) **REAL-TIME CORRECTION METHOD FOR OVEN CONTROLLED CRYSTAL OSCILLATOR AND ELECTROMAGNETIC RECEIVER**

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ABSTRACT

The present disclosure provides a real-time correction method for an Oven Controlled Crystal (Xtal) Oscillator (OCXO) and an electromagnetic receiver. The real-time correction method for an OCXO includes: performing frequency multiplication on a reference clock signal to generate a first measurement signal and a second measurement signal; identifying a rising edge of each pulse per second on the basis of the first measurement signal to obtain a gate time T; obtaining a frequency of the second measurement signal according to the gate time T; and adjusting a frequency of the reference clock signal at least on the basis that an absolute value of a difference between two adjacent frequencies obtained of the second measurement signal is greater than a standard frequency difference.

Perform frequency multiplication on a reference clock signal to generate a first measurement signal and a second measurement signal

..... S101

Identify a rising edge of each pulse per second on the basis of the first measurement signal to obtain a gate time T

..... S103

Obtain a frequency of the second measurement signal according to the gate time T

..... S105

Adjust a frequency of the reference clock signal at least on the basis that an absolute value of a difference between two adjacent frequencies obtained of the second measurement signal is greater than a standard frequency difference

..... S107