

RANGING METHOD AND RELATED APPARATUS

ABSTRACT

This application discloses a ranging method and a related apparatus, and relates to the field of communication technologies. The ranging method includes: A first device sends a first measurement frame to a second device on a first frequency (S301), and receives, on the first frequency, a second measurement frame sent by the second device (S302); the first device sends a third measurement frame to the second device on a second frequency (S303), and receives, on the second frequency, a fourth measurement frame sent by the second device (S304), where the second frequency is different from the first frequency; and the first device obtains a first measurement result based on the second measurement frame (S305); the first device obtains a third measurement result based on the fourth measurement frame (S306); and the first device sends the first measurement result and the third measurement result to a third device (S307). In this method, a joint measurement result of the first frequency and a joint measurement result of the second frequency are not affected by a random initial phase caused by frequency switching of a device, and may be coherently combined, so that a bandwidth greater than a bandwidth of a measurement frame of a single frequency can be used to calculate a ranging result, and ranging accuracy is improved.

FIG. 3