

COMMUNICATION METHOD AND APPARATUS

ABSTRACT

Embodiments of this application provide a communication method and apparatus, and relate to the field of communication technologies, to reduce feedback overheads, reserve relative phase information between subcarriers and between pulses, and implement effective sensing. The method includes: A first device determines channel state information based on a first frame that is used for channel measurement and that is sent by a second device, performs conjugate transpose and QR decomposition to obtain a matrix R and a matrix Q, and sends, to the second device, the matrix Q indicating attribute information of a target path, where a dimension of the channel state information is a quantity of antennas of the first device $\times$ a quantity of antennas of the second device $\times$ a quantity of subcarriers that carry the first frame, in the first L rows of the matrix R, at least one row meets that plus or minus signs of elements on a corresponding diagonal are consistent in a subcarrier dimension and/or a sample dimension, L is a quantity of target paths between the first device and the second device, and the sample dimension is a sample dimension corresponding to a plurality of pieces of channel state information obtained by performing a plurality of times of channel measurement in a time dimension.

Figure 8