

ABSTRACT

This application relates to an ultra-wideband-based signal transmission method and apparatus. The method includes: sending a signal, where the signal includes a signal generated based on a
5 codeword obtained by encoding first PHR information, the codeword includes a codeword, in a first codeword set, that corresponds to the first PHR information, and the first PHR information indicates a data rate of a physical layer payload field. In this application, coding performance of the first PHR information can be improved. This application is applied to a UWB-based WPAN system, a sensing system, and the like, including an 802.15 series protocol, for example, the
10 802.15.4a protocol, the 802.15.4z protocol, or the 802.15.4ab protocol; and is also applicable to WLAN systems of 802.11 series protocols such as a next-generation Wi-Fi protocol of 802.11ax, for example, 802.11be, Wi-Fi 7, or EHT, and a next-generation protocol of 802.11be like Wi-Fi 8. (Fig.8)