

ABSTRACT

METHODS AND APPARATUSES FOR SENDING AND RECEIVING PHYSICAL LAYER PROTOCOL DATA UNIT

This application provides methods and apparatuses for sending and receiving a physical layer
5 protocol data unit. The method includes: generating a physical layer protocol data unit PPDU,
where the PPDU includes a short training field, a length of a frequency domain sequence of the
short training field is greater than a first length, and the first length is a length, for example, 2048,
of a frequency domain sequence of a short training field that is transmitted over a 160 MHz-
bandwidth channel; and sending the PPDU over a target channel, where a bandwidth of the target
10 channel is greater than 160 MHz. According to embodiments of this application, a larger actual
channel bandwidth can be achieved, and backward compatibility is implemented. In addition,
exhaustive simulation is performed on parameters to verify that a short training sequence provided
in the embodiments of this application has a comparatively small peak to average power ratio
PAPR and comparatively good performance. This improves an estimation effect of an automatic
15 gain control circuit at a receive end, and reduces a receive bit error rate.

Figure 5