

METHOD FOR DETERMINING LENGTH OF LDPC CODE WORD IN UWB SYSTEM AND RELATED APPARATUS

ABSTRACT

This application relates to a method for determining a length of an LDPC code word in a
5 UWB system and a related apparatus. The method includes: A communication apparatus
determines a length of an LDPC code based on a length of a to-be-encoded information bit. When
the length of the information bit ranges from 0 to 324, a 648-bit LDPC code is selected. When the
length of the information bit ranges from 325 to 648 or from 973 to 1296, a 1296-bit LDPC code
is selected. When the length of the information bit ranges from 649 to 972, a 1944-bit LDPC code
10 is selected. According to embodiments of this application, higher performance gain can be
achieved. This application is applied to a UWB-based wireless personal local area network system,
sensing system, or the like, including an 802.15 series protocol, such as the 802.15.4ab protocol
or a next-generation UWB protocol of the 802.15.4ab protocol; and may be further applied to a
wireless local area network system based on an 802.11 series protocol, such as 802.11be or a next-
15 generation protocol of 802.11be, or Wi-Fi 8.

FIG. 7