CLAIMS

What is claimed is:

1. A puncturing information indication method, wherein the method comprises:

generating a physical layer protocol data unit, PPDU comprising a preamble, wherein the preamble comprises a universal-SIG, U-SIG field, the universal field comprises mode indication information and corresponding indication information, the mode indication information indicates different modes, and the corresponding indication information indicates preamble puncturing status corresponding to a mode indicated by the mode indication information; and

sending the PPDU.

2. A puncturing information indication method, wherein the method comprises:

receiving a physical layer protocol data unit, PPDU comprising a preamble, wherein the preamble comprises a universal-SIG, U-SIG field, the universal field comprises mode indication information and corresponding indication information, the mode indication information indicates different modes, and the corresponding indication information indicates the preamble puncturing status corresponding to a mode indicated by the mode indication information; and

determining the preamble puncturing status, based on the mode indication information and corresponding indication information.

3. The method according to claim 1 or 2, wherein the mode indication information indicates a mode, the corresponding indication information is a bitmap indicating the preamble puncturing status corresponding to the mode.

4. The method according to claim 3, the bitmap indicates the preamble puncturing status of a subchannel of 80MHz.

5. The method according to any one of claims 1 to 4, wherein the mode indication information indicates a mode, the corresponding indication information is an index indicating preamble puncturing status corresponding to the mode.

6. The method according to any one of claims 1 to 5, wherein the U-SIG field further comprises a bandwidth subfield, and the bandwidth subfield indicates that a bandwidth of the PPDU is any one of the following:

20 MHz, 40 MHz, 80 MHz, 160 MHz, or 320 MHz.

7. The method according to any one of claims 1 to 6, wherein the mode indication information and the corresponding indication information are located in a same subfield in the U-SIG field; or

the mode indication information and the corresponding indication information are located in different subfields in the U-SIG field.

8. A puncturing information indication apparatus, wherein the apparatus comprises:

generating unit, configured to generate a physical layer protocol data unit, PPDU comprising a preamble, wherein the preamble comprises a universal-SIG, U-SIG field, the universal field comprises mode indication information and corresponding indication information, the mode indication information indicates different modes, and the corresponding indication information indicates preamble puncturing status corresponding to a mode indicated by the mode indication information; and

sending unit, configured to send the PPDU.

9. A puncturing information indication apparatus, wherein the apparatus comprises:

receiving unit, configured to receive a physical layer protocol data unit, PPDU comprising a preamble, wherein the preamble comprises a universal-SIG, U-SIG field, the universal field comprises mode indication information and corresponding indication information, the mode indication information indicates different modes, and the corresponding indication information indicates the preamble puncturing status corresponding to a mode indicated by the mode indication information; and

processing unit, configured to determine the preamble puncturing status, based on the mode indication information and corresponding indication information.

10. The apparatus according to claim 8 or 9, wherein the mode indication information indicates a mode, the corresponding indication information is a bitmap indicating the preamble puncturing status corresponding to the mode.

11. The apparatus according to claim 10, the bitmap indicates the preamble puncturing status of a subchannel of 80MHz.

12. The apparatus according to any one of claims 8 to 11, wherein the mode indication information indicates a mode, the corresponding indication information is an index indicating preamble puncturing status corresponding to the mode.

13. The apparatus according to any one of claims 8 to 12, wherein the U-SIG field further

comprises a bandwidth subfield, and the bandwidth subfield indicates that a bandwidth of the PPDU is any one of the following:

20 MHz, 40 MHz, 80 MHz, 160 MHz, or 320 MHz.

14. The apparatus according to any one of claims 8 to 13, wherein the mode indication information and the corresponding indication information are located in a same subfield in the U-SIG field; or

the mode indication information and the corresponding indication information are located in different subfields in the U-SIG field.

15. A computer-readable storage medium, wherein the computer-readable storage medium is configured to store a computer program used to perform the method according to any one of claims 1 to 7.