CLAIMS

What is claimed is:

1. A puncturing information indication method, carried out by a transmit device, wherein the method comprises:

generating a physical layer protocol data unit, PPDU comprising a preamble, wherein the preamble comprises location indication information and preamble puncturing information, wherein the preamble puncturing information is used to determine a usage status of a subchannel of a bandwidth of the PPDU; and

sending the PPDU comprising the preamble,

wherein the preamble puncturing information is located on a first content channel, wherein the first content channel is distributed over a number of subchannels of the bandwidth of the PPDU,

wherein the location indication information indicates a frequency domain location of the first content channel, and

wherein a total bandwidth of the first content channel is less than the bandwidth of the PPDU.

2. The method according to claim 1, wherein the preamble puncturing information includes a bitmap to indicate whether a subchannel in the bandwidth of the PPDU is punctured.

3. The method according to claim 1 or 2 wherein a bandwidth of the subchannel is 20MHz.

4. The method according to any one of claims 1 to 3, wherein the bandwidth of the PPDU is 80MHz, 160MHz, 240MHz, or 320MHz.

5. The method according to any one of claims 1 to 4, wherein the location indication information is located in a universal-SIG, U-SIG, field, and the preamble puncturing information is located in an extremely high throughput signal field, EHT-SIG, field after the U-SIG field.

6. An apparatus comprising:

at least one processor and at least one machine-readable medium storing executable

instructions which when executed by the at least one processor configure the apparatus for:

generating a physical layer protocol data unit, PPDU comprising a preamble, wherein the preamble comprises location indication information and preamble puncturing information, wherein the preamble puncturing information is used to determine a usage status of a subchannel of a bandwidth of the PPDU; and

sending the PPDU comprising the preamble,

wherein the preamble puncturing information is located on a first content channel, wherein the first content channel is distributed over a number of subchannels of the bandwidth of the PPDU,

wherein the location indication information indicates a frequency domain location of the first content channel, and

wherein a total bandwidth of the first content channel is less than the bandwidth of the PPDU.

7. The apparatus according to claim 6, wherein the preamble puncturing information includes a bitmap to indicate whether a subchannel in the bandwidth of the PPDU is punctured.

8. The apparatus according to claim 6 or 7, wherein a bandwidth of the subchannel is 20MHz.

9. The apparatus according to any one of claims 6 to 8, wherein the bandwidth of the PPDU is 80MHz, 160MHz, 240MHz, or 320MHz.

10. The apparatus according to any one of claims 6 to 9, wherein the location indication information is located in a universal-SIG, U-SIG, field, and the preamble puncturing information is located in an extremely high throughput signal field, EHT-SIG, field after the U-SIG field.

11. An apparatus, configured to perform the method according to any one of claims 1 to 5.

12. A computer-readable storage medium, wherein the computer-readable storage medium is configured to store a computer program comprising instructions which, when the program is executed by a computer, cause the computer to carry out the steps of the method according to any one of claims 1 to 5.