## CLAIMS

What is claimed is:

1. A communication method applied in a wireless local area network, wherein the method comprises:

generating, by a communication apparatus, a physical layer protocol data unit (PPDU), wherein a transmission bandwidth of the PPDU is divided into a plurality of segments, the PPDU comprises a universal signal (U-SIG) field and an extremely high throughput-signal (EHT-SIG) field, the U-SIG field and the EHT-SIG field being carried on at least one segment of the plurality of segments, the transmission bandwidth of the PPDU is used for non-orthogonal frequency division multiple access, non-OFDMA transmission, the EHT-SIG field does not comprise a resource unit allocation subfield, the U-SIG field indicates number of EHT-SIG Symbols, and the PPDU further comprises a first field, the first field being carried on the at least one segment of the plurality of segments, and indicating number of multi-user multiple-input multiple-output (MU-MIMO) users; and

sending, by the communication apparatus, the PPDU to a station.

2. The method according to claim 1, wherein the first field indicating the number of MU-MIMO users is different from a preamble puncturing indication field.

3. The method according to claim 1 or 2, wherein the number of EHT-SIG Symbols is directly notified to the station for the station to accurately determine the number of EHT-SIG Symbols.

4. The method according to claim 1, wherein EHT-SIG fields carried on different segments in the PPDU are the same.

5. The method according to claim 1, wherein EHT-SIG fields carried on different channels in a same segment in the PPDU are the same.

6. The method according to claim 5, wherein each channel of the different channels is 20MHz.

7. The method according to any one of claims 1 to 6, wherein the at least one segment of the plurality of segments is 80MHz.

8. The method according to any one of claims 1 to 7, wherein the U-SIG field further comprises a compression field, if the transmission bandwidth of the PPDU is used for non-OFDMA transmission, the compression field indicates a compression mode, and when the compression field indicates the compression mode, the EHT-SIG field does not include the

resource unit allocation subfield.

9. A communication method applied in a wireless local area network, wherein the method comprises:

receiving, by a communication apparatus, a physical layer protocol data unit (PPDU), wherein a transmission bandwidth of the PPDU is divided into a plurality of segments, the PPDU comprises a universal signal (U-SIG) field and an extremely high throughput-signal (EHT-SIG) field, the U-SIG field and the EHT-SIG field being carried on at least one segment of the plurality of segments, the transmission bandwidth of the PPDU is used for non-orthogonal frequency division multiple access, non-OFDMA transmission, the EHT-SIG field does not comprise a resource unit allocation subfield, the U-SIG field indicates number of EHT-SIG Symbols, and the PPDU further comprises a first field, the first field being carried on the at least one segment of the plurality of segments, and indicating number of multi-user multiple-input multiple-output (MU-MIMO) users.

10. The method according to claim 9, wherein the method further comprises:

determining, by the communication apparatus, the number of EHT-SIG Symbols and the number of MU-MIMO users based on the U-SIG field and the first field respectively.

11. The method according to claim 9 or 10, wherein the first field indicating the number of MU-MIMO users is different from a preamble puncturing indication field.

12. The method according to any one of claims 9 to 11, wherein the number of EHT-SIG Symbols is directly notified to the station for the station to accurately determine the number of EHT-SIG Symbols.

13. The method according to claim 9 or 10, wherein EHT-SIG fields carried on different segments in the PPDU are the same.

14. The method according to claim 9 or 10, wherein EHT-SIG fields carried on different channels in a same segment in the PPDU are the same.

15. The method according to claim 14, wherein each channel of the different channels is 20MHz.

16. The method according to any one of claims 9 to 15, wherein the at least one segment of the plurality of segments is 80MHz.

17. The method according to any one of claims 9 to 16, wherein the U-SIG field further comprises a compression field, if the transmission bandwidth of the PPDU is used for non-

OFDMA transmission, the compression field indicates a compression mode, and when the compression field indicates the compression mode, the EHT-SIG field does not include the resource unit allocation subfield.

18. A communication apparatus, wherein the communication apparatus comprises a processor, and when the processor executes a computer program in a memory, the method according to any one of claims 1 to 8 or claims 9 to 17 is performed.

19. A computer-readable storage medium, wherein the computer-readable storage medium is configured to store computer-executable instructions, and when the computer-executable instructions are executed, the method according to any one of claims 1 to 8 or claims 9 to 17 is implemented.

20. A computer program product, wherein the computer program product comprises a computer program, and when the computer program is executed, the method according to any one of claims 1 to 8 or claims 9 to 17 is implemented.

21. A computer program, wherein when the computer program is executed, the method according to any one of claims 1 to 8 or claims 9 to 17 is implemented.