CLAIMS

What is claimed is:

1. A communication method, comprising:

receiving a physical layer (PHY) protocol data unit (PPDU), wherein the PPDU comprises type instruction information, wherein the type instruction information is configured to indicate whether the PPDU carries a compressed PHY service data unit (PSDU); and

processing the information carried by the received PPDU.

2. A communication method, comprising:

generating a physical layer PHY data unit (PPDU);

transmitting the PPDU, wherein the PPDU comprises type instruction information, wherein the type instruction information is configured to indicate whether the PPDU carries a compressed PHY service data unit (PSDU).

3. The method according to claim 1 or 2, wherein the type instruction information is carried by a payload field of the PPDU.

4. The method according to claim 3, wherein the type instruction information occupies N bits within the payload of the PPDU, N is a positive integer,

when a value of the N bits of the payload field of the PPDU is a first preset value, the PPDU carries the compressed PSDU; or

when a value of the N bits of the payload field of the PPDU is different from the first preset value, the PPDU carries a first wireless frame, wherein the first wireless frame is different from the compressed PSDU.

5. The method according to claim 4, wherein the N bits of the payload field of the PPDU are a first 3 bits of the compressed PSDU, and bits 3 to 7 or bits 3 to 10 are configured to indicate a type of information carried by the compressed PSDU; or

the N bits of the payload field of the PPDU are 3 bits of a frame type field of the first wireless frame.

6. The method according to claim 4 or 5, wherein the first preset value is 100.

7. The method according to claim 4, wherein when the value of N bits of the payload field of the PPDU is the first preset value, the compressed PSDU is carried by a second wireless frame, and the second wireless frame is carried by the payload of the PPDU, wherein a type of the second wireless frame is different a type of the first wireless frame.

8. The method according to claim 7, wherein the N bits comprise 3 bits of a frame type field of the second wireless frame and 3 bits of an extended frame type field of the second wireless

frame, wherein the 3 bits of the frame type field indicates that the type of the second wireless frame is an extended frame, and the 3 bits of the extended frame type field indicates that the payload field of the extended frame carries the compressed PSDU.

9. The method according to claim 7, wherein the N bits comprise 3 bits of a frame type field of a frame control field of the second wireless frame, and the 3 bits of the frame type field indicate that the type of the second wireless frame is a multipurpose frame, and

the N bits further comprise 2 bits of a destination addressing mode field and 2 bits of a source addressing mode field of the frame control field of the second wireless frame, wherein the 2 bits of the destination addressing mode field indicate that a length of a destination address is 3 octets, or, the 2 bits of the source addressing mode field indicate that a length of a source address is 3 octets.

10. The method according to any one of claims 1 to 9, wherein the PPDU comprises a message control field, and the message control field comprises a common information (info) field, UWB AP info field, and UWB Per-Session Info(s) field.

11. The method according to claim 10, wherein the common info field comprises a NB AP Type field, a UWB AP Present field, a Type of UWB Per-Session Info field and a Next NB AP field.

12. A communication apparatus, comprising units for performing the method according to any one of claims 1 to 11.

13. A communication apparatus, comprising:

a memory, configured to store instructions; and

a processor, configured to execute the instructions stored in the memory, wherein the processor executes the instructions stored in the memory, so that the communication apparatus is enabled to perform the method according to any one of claims 1 to 11.

14. A chip system, comprising: a memory and a processor, wherein the memory is configured to store a computer program, and the processor is configured to invoke the computer program from the memory and run the computer program, so that A communication apparatus on which the chip is disposed performs the method according to any one of claims 1 to 11.

15. A computer-readable storage medium, wherein the computer-readable storage medium stores a computer program, and when the computer program is executed by a computer, the computer is enabled to implement the method according to any one of claims 1 to 11.

16. A computer program product comprising instructions, wherein when the instructions are executed by a computer, the computer is enabled to implement the method according to any one of claims 1 to 11.