CLAIMS

1. A synchronization method, wherein the method comprises:

generating, by a first device, a synchronization signal, wherein the synchronization signal is generated in an orthogonal frequency division multiplexing OFDM manner, the synchronization signal comprises a first signal and/or a second signal, the first signal is used to determine a time domain start position occupied by data sent by the first device to a second device, and the second signal is used to determine a frequency at which the second device sends data to the first device; and

sending, by the first device, the synchronization signal to the second device.

2. The method according to claim 1, wherein the synchronization signal comprises the first signal and the second signal, and the second signal is after the first signal.

3. The method according to claim 2, wherein the first signal and the second signal are located in a same OFDM symbol.

4. The method according to any one of claims 1 to 3, wherein a waveform of the synchronization signal is a cyclic prefix-orthogonal frequency division multiplexing CP-OFDM waveform.

5. The method according to claim 4, wherein the waveform of the synchronization signal is generated in a CP-OFDM manner based on a first sequence.

6. The method according to any one of claims 1 to 5, wherein a time domain resource of the first signal comprises first K time units in N time units corresponding to a wanted signal in one OFDM symbol, K is a positive integer, and the wanted signal in the OFDM symbol is a part other than a cyclic prefix CP in the OFDM symbol.

7. The method according to claim 6, wherein the time domain resource of the first signal further comprises a part of time units corresponding to the CP in the OFDM symbol in which the first signal is located.

8. The method according to any one of claims 1 to 7, wherein a signal carried in last S time units in the N time units corresponding to the wanted signal in the OFDM symbol in which the first signal is located is a low-level signal, a time length of the last S time units is greater than or equal to a time length of the CP in the OFDM symbol in which the first signal is located, and the wanted signal in the OFDM symbol is the part other than the CP in the OFDM symbol.

9. A synchronization method, comprising:

receiving, by a second device, a synchronization signal from a first device, wherein the synchronization signal is generated in an orthogonal frequency division multiplexing OFDM manner,

the synchronization signal comprises a first signal and/or a second signal, the first signal is used to determine a start position occupied by data sent by the first device to the second device, and the second signal is used to determine a frequency at which the second device sends data to the first device; and

performing, by the second device, time synchronization and/or frequency synchronization based on the synchronization signal.

10. The method according to claim 9, wherein the synchronization signal comprises the first signal and the second signal, and the second signal is after the first signal.

11. The method according to claim 10, wherein the first signal and the second signal are located in a same OFDM symbol.

12. The method according to any one of claims 9 to 11, wherein a waveform of the synchronization signal is a cyclic prefix-orthogonal frequency division multiplexing CP-OFDM waveform.

13. The method according to claim 12, wherein the waveform of the synchronization signal is generated in a CP-OFDM manner based on a first sequence.

14. The method according to any one of claims 9 to 13 , wherein a time domain resource of the first signal comprises first K time units in N time units corresponding to a wanted signal in one OFDM symbol, K is a positive integer, and the wanted signal in the OFDM symbol is a part other than a CP in the OFDM symbol.

15. The method according to claim 14, wherein the time domain resource of the first signal further comprises a part of time units corresponding to the CP in the OFDM symbol in which the first signal is located.

16. The method according to any one of claims 9 to 15, wherein a signal carried in last S time units in the N time units corresponding to the wanted signal in the OFDM symbol in which the first signal is located is a low-level signal, a time length of the last S time units is greater than or equal to a time length of the CP in the OFDM symbol in which the first signal is located, and the wanted signal in the OFDM symbol is the part other than the CP in the OFDM symbol.

17. The method according to any one of claims 9 to 16, wherein a time domain resource of the second signal comprises M of the N time units corresponding to the wanted signal in the OFDM symbol, M is a positive integer, and the wanted signal in the OFDM symbol is the part other than the CP in the OFDM symbol.

18. A communication apparatus, wherein the communication apparatus is configured to perform the synchronization method according to any one of claims 1 to 8 .

19. A communication apparatus, wherein the communication apparatus is configured to perform the synchronization method according to any one of claims 9 to 16 .

20. A computer-readable storage medium, wherein the computer-readable storage medium comprises a computer program or instructions, and when the computer program or the instructions are run on a computer, the computer is enabled to perform the synchronization method according to any one of claims 1 to 16.