CLAIMS

1. A signal synchronization method applied to an ultra-wideband system, comprising:

sending a narrowband signal, wherein a physical layer protocol data unit (PPDU) of the narrowband signal comprises at least one pilot symbol, the at least one pilot symbol is used by a receiving device to obtain time-frequency synchronization information of the narrowband signal, and the at least one pilot symbol is a symbol agreed on by a sending device and the receiving device; and

sending an ultra-wideband signal, wherein

the time-frequency synchronization information of the narrowband signal is used by the receiving device to obtain time-frequency synchronization information of the ultra-wideband signal.

2. The method according to claim 1, wherein a physical layer service data unit (PSDU) in the PPDU comprises the at least one pilot symbol.

3. The method according to claim 1 or 2, wherein each pilot symbol comprises M bits of 0, and M is an integer multiple of 4.

4. The method according to any one of claims 1 to 3, wherein the narrowband signal and the ultra-wideband signal have a common local clock.

5. A communication apparatus, comprising:

a sending unit, configured to send a narrowband signal, wherein a physical layer protocol data unit (PPDU) of the narrowband signal comprises at least one pilot symbol, the at least one pilot symbol is used by a receiving device to obtain time-frequency synchronization information of the narrowband signal, and the at least one pilot symbol is a symbol agreed on by the communication apparatus and the receiving device, wherein

the sending unit is further configured to send an ultra-wideband signal; and

the time-frequency synchronization information of the narrowband signal is used by the receiving device to obtain time-frequency synchronization information of the ultra-wideband signal.

6. The apparatus according to claim 5, wherein a physical layer service data unit (PSDU) in the PPDU comprises the at least one pilot symbol.

7. The apparatus according to claim 5 or 6, wherein each pilot symbol comprises M bits of 0, and M is an integer multiple of 4.

8. The apparatus according to any one of claims 5 to 7, wherein the narrowband signal and the ultra-wideband signal have a common local clock.

9. A computer-readable storage medium, wherein the computer-readable storage medium

stores computer instructions, and when the computer instructions are run on a computer, the method according to any one of claims 1 to 4 is performed.

10. A computer program product, wherein the computer program product comprises computer program code, and when the computer program code is run on a computer, the method according to any one of claims 1 to 4 is performed.

11. A wireless communication system, wherein the wireless communication system comprises the communication apparatus according to any one of claims 5 to 8.