CLAIMS

1. A communication method, comprising:

determining a frequency hopping periodicity index of a terminal based on a first time unit, wherein the first time unit is associated with a time unit corresponding to a sounding reference signal SRS;

determining a first frequency hopping parameter based on the frequency hopping periodicity index of the terminal and a frequency hopping pattern, wherein the first frequency hopping parameter indicates a subband-level offset of the SRS within a range of a configured bandwidth of the SRS, and the frequency hopping pattern is associated with the first frequency hopping parameter; and

sending the SRS to a network device based on the first frequency hopping parameter.

2. The method according to claim 1, wherein the determining a frequency hopping periodicity index of a terminal based on a first time unit comprises:

determining the frequency hopping periodicity index of the terminal based on an SRS counter and a frequency hopping periodicity, wherein the SRS counter is associated with the first time unit.

3. The method according to claim 2, wherein the hopping periodicity index $n_{\mathrm{RB_hop}}$ satisfies:

$$n_{\mathrm{RB_hop}} = \left\lfloor \frac{n_{\mathrm{SRS}}}{T_{\mathrm{RB_hop}}} \right\rfloor mod\ P_F$$

n_{SRS} represents the SRS counter, $T_{\mathrm{RB_hop}}$ represents the frequency hopping periodicity, P_F represents a partial frequency sounding coefficient.

4. The method according to any of one of claims 1 to 3, wherein the frequency hopping periodicity is a periodicity for sounding an SRS frequency hopping bandwidth, and the frequency hopping periodicity satisfies:

$$T_{\mathrm{RB_hop}} = \prod_{b'=b_{\mathrm{hop}}}^{B_{\mathrm{SRS}}} N_{b'}$$

b_{hop} and B_{SRS} are configured by a higher-layer parameter freqHopping.

5. A communication method, comprising:

determining a frequency hopping periodicity index of a terminal based on a first time unit, wherein the first time unit is associated with a time unit corresponding to a sounding reference channel SRS;

determining a first frequency hopping parameter based on the frequency hopping periodicity index of the terminal and a frequency hopping pattern, wherein the first frequency hopping parameter indicates a subband-level offset of the SRS within a range of a configured bandwidth of the SRS, and the frequency hopping pattern is associated with the first frequency hopping

parameter; and

receiving, based on the first frequency hopping parameter, the SRS corresponding to the terminal.

6. The method according to claim 5, wherein the determining a frequency hopping periodicity index of a terminal based on a first time unit comprises:

determining the frequency hopping periodicity index of the terminal based on an SRS counter and a frequency hopping periodicity, wherein the SRS counter is associated with the first time unit.

7. The method according to claim 6, wherein the hopping periodicity index $n_{\mathrm{RB_hop}}$ satisfies:

$$n_{\mathrm{RB_hop}} = \left\lfloor \frac{n_{\mathrm{SRS}}}{T_{\mathrm{RB_hop}}} \right\rfloor mod\ P_F$$

n_{SRS} represents the SRS counter, $T_{\mathrm{RB_hop}}$ represents the frequency hopping periodicity, P_F represents a partial frequency sounding coefficient.

8. The method according to any of one of claims 5 to 7, wherein the frequency hopping periodicity is a periodicity for sounding an SRS frequency hopping bandwidth, and the frequency hopping periodicity satisfies:

$$T_{\mathrm{RB_hop}} = \prod_{b'=b_{\mathrm{hop}}}^{B_{\mathrm{SRS}}} N_{b'}$$

b_{hop} and B_{SRS} are configured by a higher-layer parameter freqHopping.

9. A communication apparatus, comprising:

a processor, configured to determine a frequency hopping periodicity index of a terminal based on a first time unit, wherein the first time unit is associated with a time unit corresponding to a sounding reference signal SRS;

the processor is further configured to determine a first frequency hopping parameter based on the frequency hopping periodicity index of the terminal and a frequency hopping pattern, wherein the first frequency hopping parameter indicates a subband-level offset of the SRS within a range of a configured bandwidth of the SRS, and the frequency hopping pattern is associated with the first frequency hopping parameter; and

a transmitter, configured to send the SRS to a network device based on the first frequency hopping parameter.

10. the communication apparatus according to claim 9, wherein the processor is further configured to determine the frequency hopping periodicity index of the terminal based on an SRS counter and a frequency hopping periodicity, wherein the SRS counter is associated with the first time unit.

11. the communication apparatus according to claim 10, wherein the hopping periodicity index $n_{\mathrm{RB_hop}}$ satisfies:

$$n_{\mathrm{RB_hop}} = \left\lfloor \frac{n_{\mathrm{SRS}}}{T_{\mathrm{RB_hop}}} \right\rfloor mod\ P_F$$

n_{SRS} represents the SRS counter, $T_{\mathrm{RB_hop}}$ represents the frequency hopping periodicity, P_F represents a partial frequency sounding coefficient.

12. The communication apparatus according to any of one of claims 9 to 11, wherein the frequency hopping periodicity is a periodicity for sounding an SRS frequency hopping bandwidth, and the frequency hopping periodicity satisfies:

$$T_{\mathrm{RB_hop}} = \prod_{b'=b_{\mathrm{hop}}}^{B_{\mathrm{SRS}}} N_{b'}$$

b_{hop} and B_{SRS} are configured by a higher-layer parameter freqHopping.

13. A communication apparatus, comprising:

a processor, configured to determine a frequency hopping periodicity index of a terminal based on a first time unit, wherein the first time unit is associated with a time unit corresponding to a sounding reference channel SRS;

the processor, further configured to determine a first frequency hopping parameter based on the frequency hopping periodicity index of the terminal and a frequency hopping pattern, wherein the first frequency hopping parameter indicates a subband-level offset of the SRS within a range of a configured bandwidth of the SRS, and the frequency hopping pattern is associated with the first frequency hopping parameter; and

a receiver, configured to receive, based on the first frequency hopping parameter, the SRS corresponding to the terminal.

14. The communication apparatus according to claim 13, wherein the processor, further configured to determine the frequency hopping periodicity index of the terminal based on an SRS counter and a frequency hopping periodicity, wherein the SRS counter is associated with the first time unit.

15. The communication apparatus according to claim 14, wherein the hopping periodicity index $n_{\mathrm{RB_hop}}$ satisfies:

$$n_{\mathrm{RB_hop}} = \left\lfloor \frac{n_{\mathrm{SRS}}}{T_{\mathrm{RB_hop}}} \right\rfloor mod\ P_F$$

n_{SRS} represents the SRS counter, $T_{\mathrm{RB_hop}}$ represents the frequency hopping periodicity, P_F represents a partial frequency sounding coefficient.

16. The communication apparatus according to any of one of claims 13 to 15, wherein the frequency hopping periodicity is a periodicity for sounding an SRS frequency hopping bandwidth, and the frequency hopping periodicity satisfies:

$$T_{\mathrm{RB_hop}} = \prod_{b'=b_{\mathrm{hop}}}^{B_{\mathrm{SRS}}} N_{b'}$$

b_{hop} and B_{SRS} are configured by a higher-layer parameter freqHopping.

17. A communication device, comprising:

at least one processor configured with processor-executable instructions to perform operations comprising:

determining a frequency hopping periodicity index of a terminal based on a first time unit, wherein the first time unit is associated with a time unit corresponding to a sounding reference signal SRS;

determining a first frequency hopping parameter based on the frequency hopping periodicity index of the terminal and a frequency hopping pattern, wherein the first frequency hopping parameter indicates a subband-level offset of the SRS within a range of a configured bandwidth of the SRS, and the frequency hopping pattern is associated with the first frequency hopping parameter; and

sending the SRS to a network device based on the first frequency hopping parameter.

18. A communication device, comprising:

determining a frequency hopping periodicity index of a terminal based on a first time unit, wherein the first time unit is associated with a time unit corresponding to a sounding reference channel SRS;

determining a first frequency hopping parameter based on the frequency hopping periodicity index of the terminal and a frequency hopping pattern, wherein the first frequency hopping parameter indicates a subband-level offset of the SRS within a range of a configured bandwidth of the SRS, and the frequency hopping pattern is associated with the first frequency hopping parameter; and

receiving, based on the first frequency hopping parameter, the SRS corresponding to the terminal.