CLAIMS

1. A wireless communication method, comprising:

monitoring, by a network device based on M candidate time positions for a Synchronous Signal block (SSB), whether a carrier in an unlicensed band is idle, the M candidate time positions being at least part of L candidate time positions of the SS block and the L candidate time positions being all candidate time positions in a single sending cycle of the SS block,

wherein the method further comprises:

sending, by the network device according to a monitoring result, the SS block at at least one of the M candidate time positions.

2. The method of claim 1, wherein monitoring, by the network device based on the M candidate time positions of the SS block, whether the carrier in the unlicensed band is idle comprises:

sequentially monitoring, before each of the M candidate time positions, whether the carrier in the unlicensed band is idle until it is detected that the carrier in the unlicensed band is idle before N candidate time positions or until monitoring of the carrier in the unlicensed band is completed before a last candidate time position in the M candidate time positions, N being a number of candidate time positions where the network device expects to send the SS block and N being a positive integer less than or equal to M.

3. The method of claim 1 or 2, further comprising:

sending, by the network device, second indication information at a time position after the at least one candidate time position,

the second indication information being configured to indicate a pattern of one or

more candidate time positions where the SS block is practically sent or a number of the one or more candidate time positions where the SS block is practically sent.

4. The method of claim 3, wherein the second indication information is configured to indicate the pattern of the one or more candidate time positions where the SS block is practically sent; and

each of the at least one candidate time position corresponds to a respective one of at least one sending beam according to an arrangement sequence;

wherein sending, by the network device, the second indication information at a time position after the at least one candidate time position comprises:

sending, by the network device through the carrier in the unlicensed band, the second indication information at a time position after the at least one candidate time position.

5. The method of claim 3 or 4, wherein sending, by the network device, the second indication information at a time position after the at least one candidate time position comprises:

sending, by the network device through the carrier in the licensed band, the second indication information at a time position after the at least one candidate time position;

wherein sending, by the network device through the carrier in the licensed band, the second indication information comprises:

sending, by the network device, the second indication information by use of a carrier corresponding to the primary cell in the licensed band,

the carrier in the unlicensed band being a carrier corresponding to the secondary cell of the network device in a band.

6. A wireless communication method, comprising:

determining, by a terminal device, M candidate time positions for a Synchronous Signal (SS) block, the M candidate time positions being at least part of L candidate time positions of the SS block, the L candidate time positions being all candidate time positions in a single sending period of the SS block; and

performing, by the terminal device based on the M candidate time positions, signal reception on a carrier of an unlicensed band to acquire the SS block.

7. The method of claim 6, wherein performing, by the terminal device based on the M candidate time positions, signal reception on the carrier of the unlicensed band comprises:

sequentially performing a detection for the SS block at each candidate time position in the M candidate time positions on the carrier of the unlicensed band until the SS block is acquired at N candidate time positions or until the detection for the SS block is performed at the last candidate time position in the M candidate time positions, N being a number of candidate time positions where a network device expects to send the SS block and N being a positive integer less than or equal to M.

8. The method according to claim 6 or 7, further comprising:

receiving, by the terminal device, second indication information sent by the network device at a time position after at least one candidate time position, the at least one candidate time position being at least one candidate time position where the SS block is practically sent,

the second indication information comprising a pattern of the at least one candidate time position where the SS block is practically sent or the number of the at least one candidate time position where the SS block is practically sent.

9. The method of claim 8, wherein the second indication information is configured to indicate a pattern of the at least one candidate time position where the SS block is practically sent, and each of the at least one candidate time position corresponds to a respective one of at least one

sending beam according to an arrangement sequence; and

the method further comprises:

determining, by the terminal device according to a time sequence of the at least one candidate time position where the SS block is practically sent, a sending beam adopted by the network device to send the SS block at each candidate time position in the at least one candidate time position;

wherein receiving, by the terminal device, the second indication information sent by the network device at a time position after the at least one candidate time position comprises:

receiving, by the terminal device, the second indication information sent by the network device at a time position after the at least one candidate time position on the carrier of the unlicensed band.

10. The method of claim 8 or 9, wherein receiving, by the terminal device, the second indication information sent by the network device at a time position after the at least one candidate time position comprises:

receiving, by the terminal device, the second indication information sent by the network device at a time position after the at least one candidate time position on the carrier of the licensed band;

wherein receiving, by the terminal device, the second indication information sent by the network device at a time position after the at least one candidate time position on the carrier of the licensed band comprises:

receiving, by the terminal device, the second indication information sent by the network device at a time position after the at least one candidate time position on a carrier corresponding to the primary cell in the licensed band,

the carrier in the unlicensed band being a carrier corresponding to the secondary cell of the network device in a band.

11. A network device, comprising a monitoring unit and a sending unit, wherein

the monitoring unit is configured to monitor, based on M candidate time positions for a Synchronous Signal (SS) block, whether a carrier in an unlicensed band is idle, the M candidate time positions being at least part of L candidate time positions of the SS block, the L candidate time positions being all candidate time positions in a single sending cycle of the SS block,

wherein the sending unit is configured to send, according to a monitoring result, the SS block at at least one of the M candidate time positions.

12. The device of claim 11, wherein the monitoring unit is further configured to:

sequentially monitor, before each candidate time position in the M candidate time positions, whether the carrier in the unlicensed band is idle until it is detected that the carrier in the unlicensed band is idle before N candidate time positions or until monitoring of the carrier in the unlicensed band is completed before a last candidate time position in the M candidate time positions, N being a number of candidate time positions where the network device expects to send the SS block and N being a positive integer less than or equal to M.

13. The device of claim 11 or 12, wherein the sending unit is further configured to:

send second indication information at a time position after the at least one candidate time position,

the second indication information being configured to indicate a pattern of one or more candidate time positions where the SS block is practically sent or a number of the one or more candidate time positions where the SS block is practically sent.

14. The device of claim 13, wherein the second indication information is configured to

indicate the pattern of the one or more candidate time positions where the SS block is practically sent; and

each of the at least one candidate time position corresponds to a respective one of at least one sending beam according to an arrangement sequence;

wherein the sending unit is further configured to:

send, through the carrier in the unlicensed band, the second indication information at a time position after the at least one candidate time position.

15. The device of claim 13 or 14, wherein the sending unit is further configured to:

send, through the carrier in the licensed band, the second indication information at a time position after the at least one candidate time position;

wherein the sending unit is further configured to:

send the second indication information by use of a carrier corresponding to the primary cell in the licensed band,

the carrier in the unlicensed band being a carrier corresponding to the secondary cell of the network device in a band.

16. A terminal device, comprising a processing unit and a communication unit, wherein

the processing unit is configured to determine M candidate time positions for a Synchronous Signal (SS) block, the M candidate time positions being at least part of L candidate time positions of the SS block and the L candidate time positions being all candidate time positions in a single sending cycle of the SS block; and

the communication unit is configured to perform, based on the M candidate time positions, signal reception on a carrier of an unlicensed band to acquire the SS block.

17. The device of claim 16, wherein the communication unit is further configured to:

sequentially perform a detection for the SS block at each candidate time position in the M candidate time positions on the carrier of the unlicensed band until the SS block is acquired at N candidate time positions or until the detection for the SS block is performed at the last candidate time position in the M candidate time positions, N being a number of candidate time positions where a network device expects to send the SS block and N being a positive integer less than or equal to M.

18. The device of claim 16 or 17, wherein the communication unit is further configured to:

receive second indication information sent by the network device at a time position after at least one candidate time position, the at least one candidate time position being at least one candidate time position where the SS block is practically sent,

the second indication information comprising a pattern of the at least one candidate time position where the SS block is practically sent or the number of the at least one candidate time position where the SS block is practically sent.

19. The device of claim 18, wherein the second indication information is configured to indicate a pattern of the at least one candidate time position where the SS block is practically sent, and each of the at least one candidate time position corresponds to a respective one of at least one sending beam according to an arrangement sequence; and

the processing unit is further configured to:

determine, according to a time sequence of the at least one candidate time position where the SS block is practically sent, a sending beam adopted by the network device to send the SS block at each candidate time position in the at least one candidate time position;

wherein the communication unit is further configured to:

receive the second indication information sent by the network device at a time position after the at least one candidate time position on the carrier of the unlicensed band.

20. The device of claim 18 or 19, wherein the communication unit is further configured to:

receive the second indication information sent by the network device at a time position after the at least one candidate time position on the carrier of the licensed band;

wherein the communication unit is further configured to:

receive the second indication information sent by the network device at a time position after the at least one candidate time position on a carrier corresponding to the primary cell in the licensed band,

the carrier in the unlicensed band being a carrier corresponding to the secondary cell of the network device in a band.