CLAIMS

1. A method for information transmission, comprising:

receiving, by a terminal device in a first slot or a first mini-slot, a first synchronization signal (SS) block and a first physical downlink control channel (PDCCH) sent by a network device, the first slot or the first mini-slot comprising N symbols, the first SS block occupying M consecutive symbols in the first slot or the first mini-slot, the first SS block comprising an SS and a physical broadcast channel (PBCH), wherein M and N are positive integers, and $M \leq N$,

wherein the symbols occupied by the first PDCCH are at least partially overlapped with the symbols occupied by the first SS block, and frequency domain resources occupied by the first PDCCH are non-overlapped with frequency domain resources occupied by the first SS block.

2. The method of claim 1, further comprising:

receiving, by the terminal device in a second slot or a second mini-slot, a second PDCCH sent by the network device, wherein the second slot or the second mini-slot is non-overlapped with a slot or mini-slot including an SS block, and the position of the second PDCCH in the second slot or the second mini-slot is the same as the position of the first PDCCH in the first slot or the first mini-slot.

3. The method of claim 1, further comprising:

receiving, by the terminal device in a second slot or a second mini-slot, a second PDCCH sent by the network device, wherein the second slot or the second mini-slot is non-overlapped with a slot or mini-slot including an SS block, and the position of the second PDCCH in the second slot or the second mini-slot is different from the position of the first PDCCH in the first slot or the first mini-slot.

4. The method of claim 3, further comprising:

receiving, by the terminal device, first indication information and second indication information, wherein the first indication information is configured for

indicating the position of the first PDCCH in the first slot or the first mini-slot, and the second indication information is configured for indicating the position of the second PDCCH in the second slot or the second mini-slot;

determining, by the terminal device, the position of the first PDCCH in the first slot or the first mini-slot and the position of the second PDCCH in the second slot or the second mini-slot according to the first indication information and the second indication information.

5. The method of claim 4, wherein at least one of the first indication information or the second indication information is carried in the PBCH or a system message.

6. The method of any one of claims 1 to 5, wherein the first PDCCH is configured for scheduling at least one of the following physical downlink data channels: a physical downlink data channel in the first slot or the first mini-slot, a physical downlink data channel in at least one slot or mini-slot after the first slot or the first mini-slot, or a physical downlink data channel in at least one slot or mini-slot prior to the first slot or the first mini-slot.

7. The method of claim 6, wherein downlink control information carried on the first PDCCH is configured for indicating that the physical downlink data channel scheduled by the first PDCCH is in at least one slot or mini-slot prior to the first slot or the first mini-slot, and the method further comprises:

receiving, by the terminal device, third indication information, wherein the third indication information is configured for indicating positions of physical downlink data channels, capable of being scheduled by the first PDCCH, in the at least one slot or mini-slot;

caching, by the terminal device according to the third indication information, data carried on the physical downlink data channels, capable of being scheduled by the first PDCCH, in the at least one slot or mini-slot;

acquiring, by the terminal device according to the first PDCCH, data corresponding to the first PDCCH from the data cached by the terminal device and carried on the physical downlink data channels, capable of being scheduled by the

first PDCCH, in the at least one slot or mini-slot.

8. A terminal device for information transmission, comprising:

a receiving unit, configured to receive, in a first slot or a first mini-slot, a first synchronization signal (SS) block and a first physical downlink control channel (PDCCH) sent by a network device, the first slot or the first mini-slot comprising N symbols, the first SS block occupying M consecutive symbols in the first slot or the first mini-slot, the first SS block comprising an SS and a physical broadcast channel (PBCH), wherein M and N are positive integers, and $M \leq N$,

wherein the symbols occupied by the first PDCCH are at least partially overlapped with the symbols occupied by the first SS block at least partially overlap, and frequency domain resources occupied by the first PDCCH are non-overlapped with frequency domain resources occupied by the first SS block do not overlap.

9. The terminal device of claim 8, wherein the receiving unit is further configured to:

receive, in a second slot or a second mini-slot, a second PDCCH sent by the network device, wherein the second slot or the second mini-slot is non-overlapped with a slot or mini-slot including an SS block, and the position of the second PDCCH in the second slot or the second mini-slot is the same as the position of the first PDCCH in the first slot or the first mini-slot.

10. The terminal device of claim 8, wherein the receiving unit is further configured to:

receive, in a second slot or a second mini-slot, a second PDCCH sent by the network device, wherein the second slot or the second mini-slot is non-overlapped with a slot or mini-slot including an SS block, and the position of the second PDCCH in the second slot or the second mini-slot is different from the position of the first PDCCH in the first slot or the first mini-slot.

11. The terminal device of claim 10, wherein the receiving unit is further configured to:

receive first indication information and second indication information, wherein the first indication information is configured for indicating the position of the

first PDCCH in the first slot or the first mini-slot, and the second indication information is configured for indicating the position of the second PDCCH in the second slot or the second mini-slot;

the terminal device further comprises:

a determining unit, configured to determine the position of the first PDCCH in the first slot or the first mini-slot and the position of the second PDCCH in the second slot or the second mini-slot according to the first indication information and the second indication information.

12. The terminal device of claim 11, wherein at least one of the first indication information or the second indication information is carried in the PBCH or a system message.

13. The terminal device of any one of claims 8 to 12, wherein the first PDCCH is configured for scheduling at least one of the following physical downlink data channels: a physical downlink data channel in the first slot or the first mini-slot, a physical downlink data channel in at least one slot or mini-slot after the first slot or the first mini-slot, or a physical downlink data channel in at least one slot or mini-slot prior to the first slot or the first mini-slot.

14. The terminal device of any one of claims 8 to 13, wherein the receiving unit is further configured to:

receive, in a third slot or a third mini-slot, a second SS block and a third PDCCH sent by the network device, wherein the second SS block comprises an SS and a PDCCH, and the first SS block is different from the second SS block.