

CLAIMS

What is claimed is:

1. An information transmission method, performed by a terminal device or a chip of the terminal device, comprising:

5 receiving first indication information for monitoring combination from a network device, wherein the first indication information presents at least two candidate monitoring behaviors through whether the first indication information including a third specific parameter and whether including a fourth specific parameter, wherein the third specific parameter indicates a skipped duration in which physical downlink control channel (PDCCH) monitoring is stopped and the
10 fourth specific parameter indicates an index of a search space set group (SSSG) to which a search space belongs;

receiving downlink control information (DCI) from the network device, wherein the DCI indicates a monitoring behavior of the terminal device, and the monitoring behavior is one of the at least two candidate monitoring behaviors; and

15 performing the monitoring behavior based on the first indication information and the DCI.

2. The method according to claim 1, wherein

when the first indication information includes the third specific parameter but not includes the fourth specific parameter, the first indication presents a first monitoring combination comprising a first candidate monitoring behavior and a second candidate monitoring behavior;

20 when the first indication information includes the third specific parameter and includes the fourth specific parameter, the first indication information presents a second monitoring combination comprising the second candidate monitoring behavior, a third candidate monitoring behavior, and a fourth candidate monitoring behavior;

when the first indication information does not include the third specific parameter but
25 includes the fourth specific parameter and the fourth specific parameter has two types of values with 0 and 1, the first indication information presents a fourth monitoring combination comprising the third candidate monitoring behavior and the fourth candidate monitoring behavior; or

when the first indication information does not include the third specific parameter but includes the fourth specific parameter and the fourth specific parameter at least has three types of
30 values with 0, 1 and 2, the first indication information presents a fifth monitoring combination comprising the third candidate monitoring behavior, the fourth candidate monitoring behavior, and the fifth candidate monitoring behavior, wherein

the first candidate monitoring behavior indicates to perform PDCCH monitoring based on a configured search space set, the second candidate monitoring behavior indicates to stop PDCCH

monitoring within preset duration, the third candidate monitoring behavior indicates to perform PDCCH monitoring based on a search space set in a first search space set group, the fourth candidate monitoring behavior indicates to perform PDCCH monitoring based on a search space set in a second search space set group, and the fifth candidate monitoring behavior indicates to perform PDCCH monitoring based on a search space set in a third search space set group.

3. The method according to claim 1 or 2, wherein the first indication information further indicates a monitoring combination of a first bandwidth part, BWP, and the method further comprises:

receiving second indication information for monitoring combination from the network device, wherein the second indication information presents a monitoring combination of a second BWP.

4. The method according to any one of claims 1 to 3, further comprising:

sending supported monitoring combination information to the network device via UE capability information, wherein the supported monitoring combination information indicates a monitoring combination supported by the terminal device and the supported monitoring combination includes at least one of: the first monitoring combination, the second monitoring combination, the third monitoring combination, the fourth monitoring combination and the fifth monitoring combination.

5. The method according to claim 4, wherein the UE capability information includes *PdcchSkipping* information element and the supported monitoring combination includes the first monitoring combination.

6. The method according to claim 4, wherein the UE capability information includes *PdcchSkippingAndSearchSpaceSetGroupSwitching* information element and the supported monitoring combination includes the second monitoring combination.

7. The method according to any one of claims 1 to 6, wherein the monitoring behavior is used for a type 3 common search space set and a terminal device-specific search space set.

8. An information transmission method, performed by a network device or a chip of the network device, comprising:

sending first indication information for monitoring combination to a terminal device, wherein the first indication information for monitoring combination presents at least two candidate monitoring behaviors through whether the first indication information including a third specific parameter and whether including a fourth specific parameter, wherein the third specific parameter indicates a skipped duration in which physical downlink control channel (PDCCH) monitoring is stopped and the fourth specific parameter indicates an index of a search space set group (SSSG) to which a search space belongs; and

sending downlink control information (DCI) to the terminal device, wherein the DCI indicates a monitoring behavior of the terminal device and the monitoring behavior is one of the at least two candidate monitoring behaviors.

9. The method according to claim 8, wherein

when the first indication information includes the third specific parameter but not includes the fourth specific parameter, the first indication presents a first monitoring combination comprising a first candidate monitoring behavior and a second candidate monitoring behavior;

when the first indication information includes the third specific parameter and includes the fourth specific parameter, the first indication information presents a second monitoring combination comprising the second candidate monitoring behavior, a third candidate monitoring behavior, and a fourth candidate monitoring behavior;

when the first indication information does not include the third specific parameter but includes the fourth specific parameter and the fourth specific parameter has two types of values with 0 and 1, the first indication information presents a fourth monitoring combination comprising the third candidate monitoring behavior and the fourth candidate monitoring behavior; or

when the first indication information does not include the third specific parameter but includes the fourth specific parameter and the fourth specific parameter at least has three types of values with 0, 1 and 2, the first indication information presents a fifth monitoring combination comprising the third candidate monitoring behavior, the fourth candidate monitoring behavior, and the fifth candidate monitoring behavior, wherein

the first candidate monitoring behavior indicates to perform PDCCH monitoring based on a configured search space set, the second candidate monitoring behavior indicates to stop PDCCH monitoring within preset duration, the third candidate monitoring behavior indicates to perform PDCCH monitoring based on a search space set in a first search space set group, the fourth candidate monitoring behavior indicates to perform PDCCH monitoring based on a search space set in a second search space set group, and the fifth candidate monitoring behavior indicates to perform PDCCH monitoring based on a search space set in a third search space set group.

10. The method according to claim 8 or 9, wherein the first indication information further indicates a monitoring combination of a first bandwidth part, BWP, and the method further comprises:

sending second indication information for monitoring combination to the terminal device, wherein the second indication information indicates a monitoring combination of a second BWP.

11. The method according to any one of claims 8 to 10, further comprising:

receiving UE capability information including supported monitoring combination information from the terminal device, wherein the supported monitoring combination information

indicates a monitoring combination supported by the terminal device, and the supported monitoring combination includes at least one of: the first monitoring combination, the second monitoring combination, the third monitoring combination, the fourth monitoring combination and the fifth monitoring combination.

5 12. The method according to claim 11, wherein the UE capability information includes *PdcchSkipping* information element and the supported monitoring combination includes the first monitoring combination.

10 13. The method according to claim 11, wherein the UE capability information includes *PdcchSkippingAndSearchSpaceSetGroupSwitching* information element and the supported monitoring combination includes the second monitoring combination.

14. The method according to any one of claims 8 to 13, wherein the monitoring behavior is used for a type 3 common search space set and a terminal device-specific search space set.

15 15. An apparatus, which is configured to perform the method according to any one of claims 1 to 7, or the method according to any one of claims 8 to 14.

15 16. A computer-readable storage medium, wherein the computer-readable storage medium stores computer-executable instructions, and when the computer-executable instructions are executed by a processor, the method according to any one of claims 1 to 7, or the method according to any one of claims 8 to 14 is implemented.

20 17. A computer program product, wherein the computer program product comprises computer-executable instructions, and when the computer-executable instructions are executed, the method according to any one of claims 1 to 7, or the method according to any one of claims 8 to 14 is implemented.

18. A chip, comprising a processing circuit configured to perform the method according to any one of claims 1 to 7, or the method according to any one of claims 8 to 14.