

What is claimed is:

1. A method for configuring a physical downlink control channel (PDCCH) time domain monitoring position, applied to a terminal, comprising:

receiving PDCCH search space configuration signaling, wherein the PDCCH search space configuration signaling comprises a PDCCH monitoring periodicity, a PDCCH monitoring offset, and indication signaling for indicating a starting position of a first symbol in which a PDCCH is located; and

determining a time domain position for monitoring the PDCCH according to the PDCCH search space configuration signaling;

wherein the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located acts by using at least one of following manners of indication:

Manner 2: the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located comprises one piece of slot-based second bitmap indication information, and the second bitmap indication information indicates a starting position of a first symbol in which the PDCCH is located in each slot of N consecutive slots, and a first slot in the N consecutive slots meets a predetermined condition;

Manner 3: the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located comprises one piece of third bitmap indication information with a length of $14 \cdot N$, the third bitmap indication information indicates a starting position of a first symbol in which the PDCCH is located in a corresponding slot, and the third bitmap indication information corresponds to N consecutive slots, and a first slot in the N consecutive slots meets a predetermined condition;

the predetermined condition is: $(n_f \cdot N_{\text{slot}}^{\text{frame}, \mu} + n_{s, f}^{\mu} - O) \bmod K = 0$,

wherein n_f is a number of a radio frame in which the first slot is located, $N_{\text{slot}}^{\text{frame}, \mu}$ is a quantity of slots comprised in one radio frame, $n_{s, f}^{\mu}$ is a slot number of the first slot, μ is associated with a subcarrier spacing, N is an integer greater than 1, O is the PDCCH monitoring offset, and K is a quantity of slots comprised in the PDCCH monitoring periodicity.

2. The method according to claim 1, wherein

the PDCCH monitoring periodicity comprises at least one quantity of slots among following quantities of slots: 40, 80, 160, 320, 640, and 1280; or

the PDCCH monitoring periodicity comprises at least one quantity of slots among following quantities of slots: $5 \cdot 2^u$, $10 \cdot 2^u$, $20 \cdot 2^u$, $40 \cdot 2^u$, $80 \cdot 2^u$, and $160 \cdot 2^u$, wherein u is determined according to a subcarrier spacing;

~~and~~/or,

wherein when the PDCCH monitoring periodicity comprises at least one quantity of slots among following quantities of slots: 40, 80, 160, 320, 640, and 1280 or the PDCCH monitoring periodicity comprises at least one quantity of slots among following quantities of slots: $5 \cdot 2^u$, $10 \cdot 2^u$, $20 \cdot 2^u$, $40 \cdot 2^u$, $80 \cdot 2^u$, and $160 \cdot 2^u$, a value range of the PDCCH monitoring offset O is $0 \leq O < M$, wherein O is an integer, $M < K - 1$, K is a quantity of slots comprised in the PDCCH monitoring periodicity, and u is determined according to a subcarrier spacing;

~~and~~/or,

wherein a value range of the PDCCH monitoring offset O is determined according to a time domain position candidate value that is determined from a synchronization signal block (SSB) number and master information block (MIB) signaling, or a value range of the PDCCH monitoring offset O is determined according to K and u , wherein K is a quantity of slots comprised in the PDCCH monitoring periodicity, and u is determined according to a subcarrier spacing;

~~and~~/or,

wherein the determining the time domain position for monitoring the PDCCH further comprises:

when the terminal is in a beam failure recovery (BFR) procedure, or after the terminal initiates a BFR request and before a BFR procedure is completed, or after the terminal initiates a random access procedure for BFR and before a BFR procedure is completed, monitoring at least one of following PDCCHs: a PDCCH with an aggregation level greater than a reference aggregation level, a PDCCH in a common search space, a PDCCH corresponding to a random access response, or a search space or a control resource set (CORESET) configured in BFR configuration information, wherein a PDCCH with the reference aggregation level is predefined or is configured through radio resource control (RRC) signaling or is determined according to a

beam failure detection threshold, and the beam failure detection threshold is a threshold used for determining a beam failure or a threshold used for determining whether to enter a BFR procedure;

and/or,

wherein the PDCCH search space configuration signaling further comprises a search space identifier, and the search space identifier is an integer greater than or equal to x, wherein x is an integer greater than 0.

3. The method according to claim 1, wherein the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located acts by using at least one of following manners of indication:

Manner 1: the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located comprises N pieces of slot-based first bitmap indication information, and the first bitmap indication information indicates a starting position of a first symbol in which the PDCCH is located in a corresponding slot, wherein the N pieces of first bitmap indication information are in a one-to-one correspondence with N consecutive slots, and a first slot in the N consecutive slots meets a predetermined condition;

~~Manner 2: the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located comprises one piece of slot-based second bitmap indication information, and the second bitmap indication information indicates a starting position of a first symbol in which the PDCCH is located in each slot of N consecutive slots, and a first slot in the N consecutive slots meets a predetermined condition;—~~

~~Manner 3: the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located comprises one piece of third bitmap indication information with a length of $14 \cdot N$, the third bitmap indication information indicates a starting position of a first symbol in which the PDCCH is located in a corresponding slot, and the third bitmap indication information corresponds to N consecutive slots, and a first slot in the N consecutive slots meets a predetermined condition;—~~

~~the predetermined condition is:—~~
$$(n_f \cdot N_{\text{slot}}^{\text{frame}, \mu} + n_{s, f}^{\mu} - 0) \bmod K = 0,$$

~~wherein n_f is a number of a radio frame in which the first slot is located, $N_{\text{slot}}^{\text{frame}, \mu}$ is a quantity of slots comprised in one radio frame, $n_{s, f}^{\mu}$ is a slot number of the first slot, u is~~

~~associated with a subcarrier spacing, N is an integer greater than 1, O is the PDCCH monitoring offset, and K is a quantity of slots comprised in the PDCCH monitoring periodicity;~~

~~and/or,~~

wherein the PDCCH search space configuration signaling further comprises N consecutive slots representing a PDCCH monitoring duration, and a first slot in the N consecutive slots meets the following condition:

$$(n_f \cdot N_{\text{slot}}^{\text{frame}, \mu} + n_{s, f}^{\mu} - O) \bmod K = 0,$$

wherein n_f is a number of a radio frame in which the first slot is located, $N_{\text{slot}}^{\text{frame}, \mu}$ is a quantity of slots comprised in one radio frame, $n_{s, f}^{\mu}$ is a slot number of the first slot, μ is associated with a subcarrier spacing, N is an integer greater than 1, O is the PDCCH monitoring offset, and K is a quantity of slots comprised in the PDCCH monitoring periodicity.

4. The method according to claim 3, wherein when a synchronization signal block (SSB) and control resource set (CORESET) multiplexing pattern 1 is concerned, N is 2.

5. The method according to claim 1 or 2, wherein a Type0-PDCCH search space is determined according to a synchronization signal block (SSB) number and master information block (MIB) signaling, and the search space identifier of the Type0-PDCCH search space is 0, wherein the Type0-PDCCH search space comprises a Type0-PDCCH search space corresponding to an SSB selected during initial access, or a Type0-PDCCH search space corresponding to all SSBs in an accessed cell or carrier.

6. A method for configuring a physical downlink control channel (PDCCH) time domain monitoring position, applied to a base station, comprising:

transmitting PDCCH search space configuration signaling, wherein the PDCCH search space configuration signaling comprises a PDCCH monitoring periodicity, a PDCCH monitoring offset, and indication signaling for indicating a starting position of a first symbol in which a PDCCH is located;

wherein the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located acts by using at least one of following manners of indication:

Manner 2: the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located comprises one piece of slot-based second bitmap indication information, and the second bitmap indication information indicates a starting position of a first symbol in which the PDCCH is located in each slot of N consecutive slots, and a first slot in the N consecutive slots meets a predetermined condition;

Manner 3: the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located comprises one piece of third bitmap indication information with a length of $14 \cdot N$, the third bitmap indication information indicates a starting position of a first symbol in which the PDCCH is located in a corresponding slot, and the third bitmap indication information corresponds to N consecutive slots, and a first slot in the N consecutive slots meets a predetermined condition;

the predetermined condition is: $(n_f \cdot N_{\text{slot}}^{\text{frame}, \mu} + n_{s, f}^{\mu} - O) \bmod K = 0$,

wherein n_f is a number of a radio frame in which the first slot is located, $N_{\text{slot}}^{\text{frame}, \mu}$ is a quantity of slots comprised in one radio frame, $n_{s, f}^{\mu}$ is a slot number of the first slot, u is associated with a subcarrier spacing, N is an integer greater than 1, O is the PDCCH monitoring offset, and K is a quantity of slots comprised in the PDCCH monitoring periodicity.

7. The method according to claim 6, wherein

the PDCCH monitoring periodicity comprises at least one quantity of slots among following quantities of slots: 40, 80, 160, 320, 640, and 1280; or

the PDCCH monitoring periodicity comprises at least one quantity of slots among following quantities of slots: $5 \cdot 2^u$, $10 \cdot 2^u$, $20 \cdot 2^u$, $40 \cdot 2^u$, $80 \cdot 2^u$, and $160 \cdot 2^u$, wherein u is determined according to a subcarrier spacing;

~~and/or~~,

wherein when the PDCCH monitoring periodicity comprises at least one quantity of slots among following quantities of slots: 40, 80, 160, 320, 640, and 1280 or the PDCCH monitoring periodicity comprises at least one quantity of slots among following quantities of slots: $5 \cdot 2^u$, $10 \cdot 2^u$, $20 \cdot 2^u$, $40 \cdot 2^u$, $80 \cdot 2^u$, and $160 \cdot 2^u$, a value range of the PDCCH monitoring offset O is $0 \leq O < M$, wherein O is an integer, $M < K - 1$, K is a quantity of slots comprised in the PDCCH monitoring periodicity, and u is determined according to a subcarrier spacing;

and/or,

wherein a value range of the PDCCH monitoring offset O is determined according to a time domain position candidate value that is determined from a synchronization signal block (SSB) number and master information block (MIB) signaling, or a value range of the PDCCH monitoring offset O is determined according to K and u , wherein K is a quantity of slots comprised in the PDCCH monitoring periodicity, and u is determined according to a subcarrier spacing;

and/or,

wherein the PDCCH search space configuration signaling further comprises a search space identifier, and the search space identifier is an integer greater than or equal to x , wherein x is an integer greater than 0.

8. The method according to claim 6, wherein the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located acts by using at least one of following manners of indication:

Manner 1: the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located comprises N pieces of slot-based first bitmap indication information, and the first bitmap indication information indicates a starting position of a first symbol in which the PDCCH is located in a corresponding slot, wherein the N pieces of first bitmap indication information are in a one-to-one correspondence with N consecutive slots, and a first slot in the N consecutive slots meets a predetermined condition;

~~Manner 2: the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located comprises one piece of slot-based second bitmap indication information, and the second bitmap indication information indicates a starting position of a first symbol in which the PDCCH is located in each slot of N consecutive slots, and a first slot in the N consecutive slots meets a predetermined condition;—~~

~~Manner 3: the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located comprises one piece of third bitmap indication information with a length of $14*N$, the third bitmap indication information indicates a starting position of a first symbol in which the PDCCH is located in a corresponding slot, and the third bitmap indication information corresponds to N consecutive slots, and a first slot in the N consecutive slots meets a predetermined condition;—~~

~~the predetermined condition is: $(n_f \cdot N_{\text{slot}}^{\text{frame}, \mu} + n_{s, f}^{\mu} - O) \bmod K = 0$,~~

~~wherein n_f is a number of a radio frame in which the first slot is located, $N_{\text{slot}}^{\text{frame}, \mu}$ is a quantity of slots comprised in one radio frame, $n_{s, f}^{\mu}$ is a slot number of the first slot, μ is associated with a subcarrier spacing, N is an integer greater than 1, O is the PDCCH monitoring offset, and K is a quantity of slots comprised in the PDCCH monitoring periodicity;~~

~~and/or,~~

wherein the PDCCH search space configuration signaling further comprises N consecutive slots representing a PDCCH monitoring duration, and a first slot in the N consecutive slots meets the following condition:

$$(n_f \cdot N_{\text{slot}}^{\text{frame}, \mu} + n_{s, f}^{\mu} - O) \bmod K = 0,$$

wherein n_f is a number of a radio frame in which the first slot is located, $N_{\text{slot}}^{\text{frame}, \mu}$ is a quantity of slots comprised in one radio frame, $n_{s, f}^{\mu}$ is a slot number of the first slot, μ is associated with a subcarrier spacing, N is an integer greater than 1, O is the PDCCH monitoring offset, and K is a quantity of slots comprised in the PDCCH monitoring periodicity.

9. The method according to claim 8, wherein when a synchronization signal block (SSB) and control resource set (CORESET) multiplexing pattern 1 is concerned, N is 2.

10. A method for configuring a physical downlink control channel (PDCCH) time domain monitoring position, applied to a base station, comprising:

transmitting PDCCH search space configuration signaling, wherein the PDCCH search space configuration signaling comprises a search space identifier, and the search space identifier is search space configuration information greater than or equal to x , wherein x is an integer greater than 0, and a search space with a search space identifier of 0 corresponds to a Type0-PDCCH search space.

11. A terminal, comprising a processor and a transceiver, wherein

the transceiver is configured to receive physical downlink control channel (PDCCH) search space configuration signaling, the PDCCH search space configuration signaling comprises a

PDCCH monitoring periodicity, a PDCCH monitoring offset, and indication signaling for indicating a starting position of a first symbol in which a PDCCH is located; and

the processor is configured to determine a time domain position for monitoring the PDCCH according to the PDCCH search space configuration signaling;

wherein the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located acts by using at least one of following manners of indication:

Manner 2: the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located comprises one piece of slot-based second bitmap indication information, and the second bitmap indication information indicates a starting position of a first symbol in which the PDCCH is located in each slot of N consecutive slots, and a first slot in the N consecutive slots meets a predetermined condition;

Manner 3: the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located comprises one piece of third bitmap indication information with a length of $14 \cdot N$, the third bitmap indication information indicates a starting position of a first symbol in which the PDCCH is located in a corresponding slot, and the third bitmap indication information corresponds to N consecutive slots, and a first slot in the N consecutive slots meets a predetermined condition;

the predetermined condition is: $(n_f \cdot N_{\text{slot}}^{\text{frame}, \mu} + n_{s, f}^{\mu} - O) \bmod K = 0$,

wherein n_f is a number of a radio frame in which the first slot is located, $N_{\text{slot}}^{\text{frame}, \mu}$ is a quantity of slots comprised in one radio frame, $n_{s, f}^{\mu}$ is a slot number of the first slot, μ is associated with a subcarrier spacing, N is an integer greater than 1, O is the PDCCH monitoring offset, and K is a quantity of slots comprised in the PDCCH monitoring periodicity.

12. The terminal according to claim 11, wherein

the PDCCH monitoring periodicity comprises at least one quantity of slots among following quantities of slots: 40, 80, 160, 320, 640, and 1280; or

the PDCCH monitoring periodicity comprises at least one quantity of slots among following quantities of slots: $5 \cdot 2^u$, $10 \cdot 2^u$, $20 \cdot 2^u$, $40 \cdot 2^u$, $80 \cdot 2^u$, and $160 \cdot 2^u$, wherein u is determined according to a subcarrier spacing;

and/or,

wherein when the PDCCH monitoring periodicity comprises at least one quantity of slots among following quantities of slots: 40, 80, 160, 320, 640, and 1280 or the PDCCH monitoring periodicity comprises at least one quantity of slots among following quantities of slots: $5 \cdot 2^u$, $10 \cdot 2^u$, $20 \cdot 2^u$, $40 \cdot 2^u$, $80 \cdot 2^u$, and $160 \cdot 2^u$, a value range of the PDCCH monitoring offset O is $0 \leq O < M$, wherein O is an integer, $M < K - 1$, K is a quantity of slots comprised in the PDCCH monitoring periodicity, and u is determined according to a subcarrier spacing;

~~and~~/or,

wherein a value range of the PDCCH monitoring offset O is determined according to a time domain position candidate value that is determined from a synchronization signal block (SSB) number and master information block (MIB) signaling, or a value range of the PDCCH monitoring offset O is determined according to K and u , wherein K is a quantity of slots comprised in the PDCCH monitoring periodicity, and u is determined according to a subcarrier spacing;

~~and~~/or,

wherein the processor is further configured to:

when the terminal is in a beam failure recovery (BFR) procedure, or after the terminal initiates a BFR request and before a BFR procedure is completed, or after the terminal initiates a random access procedure for BFR and before a BFR procedure is completed, monitor at least one of following PDCCHs: a PDCCH with an aggregation level greater than a reference aggregation level, a PDCCH in a common search space, a PDCCH corresponding to a random access response, and a search space or a control resource set (CORESET) configured in BFR configuration information, wherein a PDCCH with the reference aggregation level is predefined or is configured through radio resource control (RRC) signaling or is determined according to a beam failure detection threshold, and the beam failure detection threshold is a threshold used for determining a beam failure or a threshold used for determining whether to enter a BFR procedure;

~~and~~/or,

wherein the PDCCH search space configuration signaling further comprises a search space identifier, and the search space identifier is an integer greater than or equal to x , wherein x is an integer greater than 0.

13. The terminal according to claim 11, wherein the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located acts by using at least one of following manners of indication:

Manner 1: the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located comprises N pieces of slot-based first bitmap indication information, and the first bitmap indication information indicates a starting position of a first symbol in which the PDCCH is located in a corresponding slot, wherein the N pieces of first bitmap indication information are in a one-to-one correspondence with N consecutive slots, and a first slot in the N consecutive slots meets a predetermined condition;

~~Manner 2: the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located comprises one piece of slot-based second bitmap indication information, and the second bitmap indication information indicates a starting position of a first symbol in which the PDCCH is located in each slot of N consecutive slots, and a first slot in the N consecutive slots meets a predetermined condition;—~~

~~Manner 3: the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located comprises one piece of third bitmap indication information with a length of $14 \cdot N$, the third bitmap indication information indicates a starting position of a first symbol in which the PDCCH is located in a corresponding slot, and the third bitmap indication information corresponds to N consecutive slots, and a first slot in the N consecutive slots meets a predetermined condition;—~~

~~the predetermined condition is:—~~
$$\left(n_f \cdot N_{\text{slot}}^{\text{frame}, \mu} + n_{s, f}^{\mu} - O \right) \bmod K = 0,$$

~~wherein—~~ n_f ~~is a number of a radio frame in which the first slot is located, —~~ $N_{\text{slot}}^{\text{frame}, \mu}$ ~~is a quantity of slots comprised in one radio frame, —~~ $n_{s, f}^{\mu}$ ~~is a slot number of the first slot, u is associated with a subcarrier spacing, N is an integer greater than 1, O is the PDCCH monitoring offset, and K is a quantity of slots comprised in the PDCCH monitoring periodicity;~~

~~and/or,~~

wherein the PDCCH search space configuration signaling further comprises N consecutive slots representing a PDCCH monitoring duration, and a first slot in the N consecutive slots meets the following condition:

$$(n_f \cdot N_{\text{slot}}^{\text{frame}, \mu} + n_{s, f}^{\mu} - O) \bmod K = 0,$$

wherein n_f is a number of a radio frame in which the first slot is located, $N_{\text{slot}}^{\text{frame}, \mu}$ is a quantity of slots comprised in one radio frame, $n_{s, f}^{\mu}$ is a slot number of the first slot, μ is associated with a subcarrier spacing, N is an integer greater than 1, O is the PDCCH monitoring offset, and K is a quantity of slots comprised in the PDCCH monitoring periodicity.

14. The terminal according to claim 11 or 12, wherein a Type0-PDCCH search space is determined according to a synchronization signal block (SSB) number and master information block (MIB) signaling, the search space identifier of the Type0-PDCCH search space is 0, and the Type0-PDCCH search space comprises a Type0-PDCCH search space corresponding to an SSB selected during initial access, or a Type0-PDCCH search space corresponding to all SSBs in an accessed cell or carrier.

15. A base station, comprising a processor and a transceiver, wherein the transceiver is configured to transmit physical downlink control channel (PDCCH) search space configuration signaling, wherein the PDCCH search space configuration signaling comprises a PDCCH monitoring periodicity, a PDCCH monitoring offset, and indication signaling for indicating a starting position of a first symbol in which a PDCCH is located;

wherein the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located acts by using at least one of following manners of indication:

Manner 2: the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located comprises one piece of slot-based second bitmap indication information, and the second bitmap indication information indicates a starting position of a first symbol in which the PDCCH is located in each slot of N consecutive slots, and a first slot in the N consecutive slots meets a predetermined condition;

Manner 3: the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located comprises one piece of third bitmap indication information with a length of $14 \cdot N$, the third bitmap indication information indicates a starting position of a first symbol in which the PDCCH is located in a corresponding slot, and the third bitmap indication

information corresponds to N consecutive slots, and a first slot in the N consecutive slots meets a predetermined condition;

the predetermined condition is: $(n_f \cdot N_{\text{slot}}^{\text{frame}, \mu} + n_{s,f}^{\mu} - O) \bmod K = 0$,

wherein n_f is a number of a radio frame in which the first slot is located, $N_{\text{slot}}^{\text{frame}, \mu}$ is a quantity of slots comprised in one radio frame, $n_{s,f}^{\mu}$ is a slot number of the first slot, u is associated with a subcarrier spacing, N is an integer greater than 1, O is the PDCCH monitoring offset, and K is a quantity of slots comprised in the PDCCH monitoring periodicity.

16. The base station according to claim 15, wherein

the PDCCH monitoring periodicity comprises at least one quantity of slots among following quantities of slots: 40, 80, 160, 320, 640, and 1280; or

the PDCCH monitoring periodicity comprises at least one quantity of slots among following quantities of slots: $5 \cdot 2^u$, $10 \cdot 2^u$, $20 \cdot 2^u$, $40 \cdot 2^u$, $80 \cdot 2^u$, and $160 \cdot 2^u$, wherein u is determined according to a subcarrier spacing;

and/or,

wherein when the PDCCH monitoring periodicity comprises at least one quantity of slots among following quantities of slots: 40, 80, 160, 320, 640, and 1280 or the PDCCH monitoring periodicity comprises at least one quantity of slots among following quantities of slots: $5 \cdot 2^u$, $10 \cdot 2^u$, $20 \cdot 2^u$, $40 \cdot 2^u$, $80 \cdot 2^u$, and $160 \cdot 2^u$, a value range of the PDCCH monitoring offset O is $0 \leq O < M$, wherein O is an integer, $M < K - 1$, K is a quantity of slots comprised in the PDCCH monitoring periodicity, and u is determined according to a subcarrier spacing;

and/or,

wherein a value range of the PDCCH monitoring offset O is determined according to a time domain position candidate value that is determined from a synchronization signal block (SSB) number and master information block (MIB) signaling, or a value range of the PDCCH monitoring offset O is determined according to K and u, wherein K is a quantity of slots comprised in the PDCCH monitoring periodicity, and u is determined according to a subcarrier spacing;

and/or,

wherein the PDCCH search space configuration signaling further comprises a search space identifier, and the search space identifier is an integer greater than or equal to x, wherein x is an integer greater than 0.

17. The base station according to claim 15, wherein the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located acts by using at least one of following manners of indication:

Manner 1: the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located comprises N pieces of slot-based first bitmap indication information, and the first bitmap indication information indicates a starting position of a first symbol in which the PDCCH is located in a corresponding slot, wherein the N pieces of first bitmap indication information are in a one-to-one correspondence with N consecutive slots, and a first slot in the N consecutive slots meets a predetermined condition;

~~Manner 2: the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located comprises one piece of slot-based second bitmap indication information, and the second bitmap indication information indicates a starting position of a first symbol in which the PDCCH is located in each slot of N consecutive slots, and a first slot in the N consecutive slots meets a predetermined condition;~~

~~Manner 3: the indication signaling for indicating the starting position of the first symbol in which the PDCCH is located comprises one piece of third bitmap indication information with a length of $14 \cdot N$, the third bitmap indication information indicates a starting position of a first symbol in which the PDCCH is located in a corresponding slot, and the third bitmap indication information corresponds to N consecutive slots, and a first slot in the N consecutive slots meets a predetermined condition;~~

~~the predetermined condition is:~~
$$\left(n_f \cdot N_{\text{slot}}^{\text{frame}, \mu} + n_{s,f}^{\mu} - O \right) \bmod K = 0$$

~~wherein n_f is a number of a radio frame in which the first slot is located, $N_{\text{slot}}^{\text{frame}, \mu}$ is a quantity of slots comprised in one radio frame, $n_{s,f}^{\mu}$ is a slot number of the first slot, μ is associated with a subcarrier spacing, N is an integer greater than 1, O is the PDCCH monitoring offset, and K is a quantity of slots comprised in the PDCCH monitoring periodicity;~~

~~and/or,~~

wherein the PDCCH search space configuration signaling further comprises N consecutive slots representing a PDCCH monitoring duration, and a first slot in the N consecutive slots meets the following condition:

$$(n_f \cdot N_{\text{slot}}^{\text{frame}, \mu} + n_{s, f}^{\mu} - O) \bmod K = 0,$$

wherein n_f is a number of a radio frame in which the first slot is located, $N_{\text{slot}}^{\text{frame}, \mu}$ is a quantity of slots comprised in one radio frame, $n_{s, f}^{\mu}$ is a slot number of the first slot, μ is associated with a subcarrier spacing, N is an integer greater than 1, O is the PDCCH monitoring offset, and K is a quantity of slots comprised in the PDCCH monitoring periodicity.

18. A base station, comprising a processor and a transceiver, wherein

the transceiver is configured to transmit physical downlink control channel (PDCCH) search space configuration signaling, wherein the PDCCH search space configuration signaling comprises a search space identifier, and the search space identifier is search space configuration information greater than or equal to x, wherein x is an integer greater than 0, and a search space with a search space identifier of 0 corresponds to a Type0-PDCCH search space.

19. A communication device, comprising a processor and a storage storing a computer program, wherein the processor is configured to execute the computer program to implement the method according to any one of claims 1 to 10.

20. A computer-readable storage medium, comprising instructions, wherein the instructions are configured to be executed by a computer to implement the method according to any one of claims 1 to 10.