

CLAIMS

What is claimed is:

1. A PDCCH monitoring method, applied to a terminal and comprising:

5 receiving configuration information sent by a network device, wherein the configuration information is used to configure a monitoring duration;

determining M first monitoring durations from monitoring durations in each DRX cycle, wherein M is a positive integer, and the number N of monitoring durations in at least one DRX cycle is greater than M; and

10 monitoring a PDCCH in the M first monitoring durations, wherein the PDCCH is used to transmit power saving indication information,

15 wherein the power saving indication information is used to indicate whether the terminal needs to monitor a PDCCH in an on duration of a first DRX in a plurality of serving cells, wherein the on duration of the first DRX is an on duration of a current DRX or an on duration of next T DRXs after a current time point, and T is a positive integer.

2. The method according to claim 1, wherein the M first monitoring durations are located before a target OFDM symbol, and the target OFDM symbol is a starting OFDM symbol of an on duration of the DRX cycle.

20 3. The method according to claim 2, wherein the M first monitoring durations are last M monitoring durations among L monitoring durations sorted in chronological order, and the L monitoring durations are monitoring durations located before the target OFDM symbol among monitoring durations corresponding to the DRX cycle.

25 4. The method according to claim 3, wherein a time interval between an end time of the M first monitoring durations and the target OFDM symbol is greater than a preset value.

5. The method according to any one of claims 1 to 4, wherein a value of M is 1 or 2.

6. The method according to claim 5, wherein in a case that the value of M is 2, PDCCHs monitored in different first monitoring durations of one DRX cycle are of the same or different types.

7. The method according to claim 6, wherein a type of the PDCCH comprises at least one of group common PDCCH or UE specific PDCCH; or,
wherein a type of the PDCCH is indicated by the network device.

8. The method according to claim 1, wherein the PDCCH is not monitored in N-M second monitoring durations, and the N-M second monitoring durations are monitoring durations other than the M first monitoring durations among the monitoring durations corresponding to the DRX cycle.

9. The method according to claim 1, wherein the first monitoring duration comprises at least one valid monitoring occasion;

wherein the valid monitoring occasion satisfies at least one of the following conditions:

an OFDM symbol in which the monitored PDCCH is located does not comprise a first symbol indicated by higher layer signaling, and the first symbol is an uplink symbol and/or a flexible symbol;

an OFDM symbol in which the monitored PDCCH is located does not comprise a second symbol indicated by DCI, and the second symbol is an uplink symbol and/or a flexible symbol;

an OFDM symbol in which the monitored PDCCH is located does not comprise a third symbol indicated by RRC, and the third symbol is a symbol for performing SSB or CSI-RS measurement; or

an OFDM symbol in which the monitored PDCCH is located does not comprise K symbols before or after the second symbol, wherein K is a positive integer.

10. A terminal, comprising:

a receiving module, configured to receive configuration information sent by a network device, wherein the configuration information is used to configure a monitoring duration;

a determining module, configured to determine M first monitoring durations from monitoring durations in each DRX cycle, wherein M is a positive integer, and the number N of monitoring durations in at least one DRX cycle is greater than M; and

5 a monitoring module, configured to monitor a PDCCH in the M first monitoring durations, wherein the PDCCH is used to transmit power saving indication information,

wherein the power saving indication information is used to indicate whether the terminal needs to monitor a PDCCH in an on duration of a first DRX in a plurality
10 of serving cells, wherein the on duration of the first DRX is an on duration of a current DRX or an on duration of next T DRXs after a current time point, and T is a positive integer.

11. The terminal according to claim 10, wherein the M first monitoring durations are located before a target OFDM symbol, and the target OFDM symbol is a starting
15 OFDM symbol of an on duration of the DRX cycle.

12. The terminal according to claim 11, wherein the M first monitoring durations are last M monitoring durations among L monitoring durations sorted in chronological order, and the L monitoring durations are monitoring durations located before the target OFDM symbol among monitoring durations corresponding to the
20 DRX cycle.

13. The terminal according to claim 12, wherein a time interval between an end time of the M first monitoring durations and the target OFDM symbol is greater than a preset value.

14. The terminal according to any one of claims 10 to 13, wherein a value of M
25 is 1 or 2.

15. The terminal according to claim 14, wherein in a case that the value of M is 2, PDCCHs monitored in different first monitoring durations of one DRX cycle are of the same or different types.

16. The terminal according to claim 15, wherein a type of the PDCCH comprises
30 at least one of group common PDCCH or UE specific PDCCH; or,

wherein a type of the PDCCH is indicated by the network device.

17. The terminal according to claim 10, wherein the PDCCH is not monitored in N-M second monitoring durations, and the N-M second monitoring durations are monitoring durations other than the M first monitoring durations among the monitoring durations corresponding to the DRX cycle.

18. The terminal according to claim 10, wherein the first monitoring duration comprises at least one valid monitoring occasion;

wherein the valid monitoring occasion satisfies at least one of the following conditions:

10 an OFDM symbol in which the monitored PDCCH is located does not comprise a first symbol indicated by higher layer signaling, and the first symbol is an uplink symbol and/or a flexible symbol;

an OFDM symbol in which the monitored PDCCH is located does not comprise a second symbol indicated by DCI, and the second symbol is an uplink symbol and/or a flexible symbol;

an OFDM symbol in which the monitored PDCCH is located does not comprise a third symbol indicated by RRC, and the third symbol is a symbol for performing SSB or CSI-RS measurement; or

20 an OFDM symbol in which the monitored PDCCH is located does not comprise K symbols before or after the second symbol, wherein K is a positive integer.

19. A terminal, comprising a memory, a processor, and a program stored in the memory and capable of running on the processor, wherein when the program is executed by the processor, the steps of the PDCCH monitoring method according to any one of claims 1 to 9 are implemented.

25 20. A computer-readable storage medium, wherein the computer-readable storage medium stores a computer program, and when the computer program is executed by a processor, the steps of the PDCCH monitoring method according to any one of claims 1 to 9 are implemented.