

WHAT IS CLAIMED IS:

1. A method for monitoring a physical downlink control channel (PDCCH), comprising:

switching from a source band width part (BWP) to a target BWP; and

monitoring the PDCCH according to a monitoring strategy based on a result that a first wake-up signal is monitored, in response to missing a monitoring moment of the first wake-up signal on the target BWP.

2. The method of claim 1, wherein monitoring the PDCCH according to the monitoring strategy based on the result that the first wake-up signal is monitored comprises:

monitoring the PDCCH according to the monitoring strategy within on-durations of an effective range of the first wake-up signal based on the result that the first wake-up signal is monitored.

3. The method of claim 2, wherein monitoring the PDCCH within the on-durations of the effective range of the first wake-up signal comprises:

when the first wake-up signal corresponds to one of the on-durations, and the on-duration for the first wake-up signal has started, monitoring the PDCCH within a remaining duration of the on-duration for the first wake-up signal that has started at a current moment.

4. The method of claim 2, wherein monitoring the PDCCH within the on-durations of the effective range of the first wake-up signal comprises:

when the first wake-up signal corresponds to one of the on-durations, and the on-duration for the first wake-up signal has not started, monitoring the PDCCH within the on-duration for the first wake-up signal.

5. The method of claim 2, wherein monitoring the PDCCH within the on-durations of the effective range of the first wake-up signal comprises:

when the first wake-up signal corresponds to N on-durations, and the N on-durations for the first wake-up signal have started, monitoring the PDCCH within a remaining duration of the currently started on-duration and within M remaining on-durations behind the currently started on-duration for the first wake-up signal, where N is a positive integer being not less than 2, and M is a positive integer being less than N.

6. The method of claim 2, wherein monitoring the PDCCH within the on-durations of the effective range of the first wake-up signal comprises:

when the first wake-up signal corresponds to N on-durations, and the N on-durations for the first wake-up signal have started, monitoring the PDCCH within M on-durations behind the currently started on-duration for the first wake-up signal, where N is a positive integer being not less than 2, and M is a positive integer being less than N.

7. The method of claim 2, wherein monitoring the PDCCH within the on-durations of the effective range of the first wake-up signal comprises:

when the first wake-up signal corresponds to N on-durations, and M on-durations for the first wake-up signal have not started, monitoring the PDCCH within the M on-durations for the first wake-up signal, where M is a positive integer being less than or equal to N.

8. The method of claim 1, further comprising:

stopping monitoring the PDCCH according to a monitoring strategy based on a result that the first wake-up signal is not monitored, in response to switching from the source BWP to the target BWP and missing the monitoring moment of the first wake-up signal on the target BWP.

9. The method of claim 8, wherein stopping monitoring the PDCCH based on the result that the first wake-up signal is not monitored, comprises:

stopping monitoring the PDCCH according to the monitoring strategy within on-durations of the effective range of the first wake-up signal based on the result that the first wake-up signal is not monitored.

10. The method of claim 9, wherein stopping monitoring the PDCCH within the on-durations of the effective range of the first wake-up signal, comprises:

when the first wake-up signal corresponds to one of the on-durations, and the on-duration for the first wake-up signal has started, stopping monitoring the PDCCH within a remaining duration of the on-duration for the first wake-up signal that has started at a current moment.

11. The method of claim 9, wherein stopping monitoring the PDCCH within the on-durations of the effective range of the first wake-up signal, comprises:

when the first wake-up signal corresponds to one of the on-durations, and the

on-duration for the first wake-up signal has not started, stopping monitoring the PDCCH within the on-duration for the first wake-up signal.

12. The method of claim 9, wherein stopping monitoring the PDCCH within the on-durations of the effective range of the first wake-up signal, comprises:

when the first wake-up signal corresponds to N on-durations, and the N on-durations for the first wake-up signal have started, stopping monitoring the PDCCH within a remaining duration of the currently started on-duration and within M remaining on-durations behind the currently started on-duration, where N is a positive integer being not less than 2, and M is a positive integer being less than N.

13. The method of claim 9, wherein stopping monitoring the PDCCH within the on-durations of the effective range of the first wake-up signal, comprises:

when the first wake-up signal corresponds to N on-durations, and M on-durations for the first wake-up signal have not started, stopping monitoring the PDCCH within the M on-durations for the first wake-up signal, where N is a positive integer being not less than 2, and M is a positive integer being less than or equal to N.

14. The method of any one of claims 1 to 13, further comprising:

determining the result that the first wake-up signal is monitored or the result that the first wake-up signal is not monitored, in response to switching from the source BWP to the target BWP and missing the monitoring moment of the first wake-up signal on the target BWP.

15. The method of claim 14, wherein determining the result that the first wake-up signal is monitored or the result that the first wake-up signal is not monitored comprises:

determining the result that the first wake-up signal is monitored or the result that the first wake-up signal is not monitored based on configuration information.

16. The method of claim 14, wherein determining the result that the first wake-up signal is monitored or the result that the first wake-up signal is not monitored comprises:

determining the result that the first wake-up signal is monitored or the result that the first wake-up signal is not monitored based on a monitoring result of a second wake-up signal, wherein the second wake-up signal is a wake-up signal whose monitoring moment is before the monitoring moment of the first wake-up signal.

17. The method of claim 16, wherein determining the result that the first wake-up signal is monitored or the result that the first wake-up signal is not monitored based on the monitoring result of the second wake-up signal comprises:

determining the result that the first wake-up signal is monitored when W1 second wake-up signals are continuously monitored on the source BWP before the current moment, where W1 is a positive integer; or

determining the result that the first wake-up signal is monitored when W2 second wake-up signals are continuously monitored on the source BWP in a predetermined duration, where W2 is a positive integer.

18. The method of claim 14, wherein determining the result that the first wake-up signal is monitored or the result that the first wake-up signal is not monitored comprises:

determining the result that the first wake-up signal is monitored or the result that the first wake-up signal is not monitored based on determination information.

19. The method of any one of claims 1 to 13, further comprising:

configuring the monitoring strategy in which the first wake-up signal corresponds to one of the on-durations, in response to switching from the source BWP to the target BWP and missing the monitoring moment of the first wake-up signal on the target BWP; or

configuring the monitoring strategy in which the first wake-up signal corresponds to the N on-durations, in response to switching from the source BWP to the target BWP and missing the monitoring moment of the first wake-up signal on the target BWP, where N is a positive integer not less than 2.

20. A method for sending a signaling, comprising:

sending a signaling including determination information, wherein the signaling comprises: a broadcast signaling or a dedicated signaling; and

determining a result that a first wake-up signal is monitored based on the determination information, in response to switching from a source bandwidth part (BWP) to a target BWP, and missing the first wake-up signal on the target BWP.

21. An apparatus for monitoring a physical downlink control channel (PDCCH), comprising:

a monitoring module, configured to switch from a source band width part (BWP) to a

target BWP, and monitor the PDCCH according to a monitoring strategy based on a result that a first wake-up signal is monitored, in response to missing a monitoring moment of the first wake-up signal on the target BWP.

22. The apparatus of claim 21, wherein the monitoring module is configured to monitor the PDCCH according to the monitoring strategy within on-durations of an effective range of the first wake-up signal based on the result that the first wake-up signal is monitored.

23. The apparatus of claim 21, wherein the monitoring module is configured to switch from the source BWP to the target BWP, and stop monitoring the PDCCH according to a monitoring strategy based on a result that the first wake-up signal is not monitored, in response to missing the monitoring moment of the first wake-up signal on the target BWP.

24. The apparatus of claim 23, wherein the monitoring module is configured to stop monitoring the PDCCH according to the monitoring strategy within on-durations of the effective range of the first wake-up signal based on the result that the first wake-up signal is not monitored.

25. An apparatus for sending a signaling, comprising:
a sending module, configured to send a signaling including determination information, wherein the signaling comprises: a broadcast signaling or a dedicated signaling; wherein the determination information is used to determine a result that a first wake-up signal is monitored based on the determination information, in response to switching from a source bandwidth part (BWP) to a target BWP, and missing the first wake-up signal on the target BWP.

26. A communication device, comprising:
a transceiver;
a memory; and
a processor, respectively connected to the transceiver and the memory, wherein the processor is configured to control transmission and reception of the transceiver by executing computer-executable instructions stored on the memory, so that the method according to any one of claims 1 to 19 ~~or the method according to claim 20~~ is implemented.

27. A communication device, comprising:

a transceiver;

a memory; and

a processor, respectively connected to the transceiver and the memory, wherein the processor is configured to control transmission and reception of the transceiver by executing computer-executable instructions stored on the memory, so that the method according to claim 20 is implemented.

~~27~~28. A non-transitory computer-readable storage medium on which computer-executable instructions are stored, wherein when the computer-executable instructions are executed by a processor, the method according to any one of claims 1 to 19 ~~or the method according to claim 20~~ is implemented.

29. A non-transitory computer-readable storage medium on which computer-executable instructions are stored, wherein when the computer-executable instructions are executed by a processor, the method according to claim 20 is implemented.