

WHAT IS CLAIMED IS:

1. A first device comprising:
at least one processor; and
5 at least one memory including computer program codes;
the at least one memory and the computer program codes are configured to, with the
at least one processor, cause the first device to:

receive, at the first device and from a second device, first information indicating
that candidate occasions are to be skipped for monitoring physical downlink control channel;
10 determine a target occasion from the candidate occasions based on second
information ~~about a physical downlink control channel which is applicable to skipping
monitoring~~indicating that skipping monitoring is applicable to a physical downlink control
channel with a downlink control information format for scheduling downlink assignment or
uplink grant, wherein the skipping monitoring does not apply to wake up signaling occasions;
15 and

~~in response to the target occasion overlapping with a duration for monitoring wake
up signaling, skip monitoring the wake up signaling on the duration.~~skip monitoring the
physical downlink control channel on the target occasion.

20 2. The first device of claim 1, wherein the first device is further caused to ~~determine
the target occasion by:~~
in response to the second information indicating a physical downlink control channel which
is addressed to a cell radio network temporary identifier is applicable to skipping monitoring,
~~determining~~determine, as ~~the~~a target occasion, one of the candidate occasions addressed to
25 the cell radio network temporary identifier.

3. The first device of claim 1, wherein the first device is caused to determine the target
occasion by:
in response to the second information indicating a physical downlink control channel
30 with a downlink control information format for scheduling downlink assignment or uplink
grant is applicable to skipping monitoring, determining, as the target occasion, one of the
candidate occasions with the downlink control information format for scheduling downlink
assignment or uplink grant.

4. The first device of claim 1, wherein the first device is further caused to ~~determine the target occasion by:~~

in response to the second information indicating downlink control information for ~~the~~ wake up signaling is inapplicable to skipping monitoring, ~~determining~~determine, as ~~the~~a target occasion, one of the candidate occasions without the downlink control information for the wake up signaling.

5. The first device of claim 1, wherein the first device is further caused to ~~determine the target occasion by:~~

in response to the second information indicating all the physical downlink control channels are applicable to skipping monitoring, ~~determining~~determine all the candidate occasions to be the target occasion.

6. The first device of any one of claims 1-5, wherein the first device is further caused to:

receive the second information via at least one of radio resource control signaling and a MAC control element.

7. The first device of claim 1, wherein the second information is pre-defined.

8. The first device of claim 1, wherein the first device is further caused to:
in response to the target occasion overlapping with a duration for monitoring wake up signaling, skip monitoring the wake up signaling on the duration.

9. The first device of claim 8, wherein the first device is further caused to:

receive a skipping indication as to whether the first device monitors at least one of the wake up signaling and the physical downlink control channel after the duration; and

monitor, based on the skipping indication, the at least one of the wake up signaling and the physical downlink control channel after the duration.

910. The first device of claim +8, wherein the first device is further caused to:

receive a skipping indication as to whether the first device monitors at least one of the wake up signaling and the physical downlink control channel in the duration; and

monitor, based on the skipping indication, the at least one of the wake up signaling and the physical downlink control channel in the duration.

5 ~~10~~11. The first device of claim 1, wherein the first device is a terminal device and the second device is a network device.

11.—12. A second device comprising:
at least one processor; and
at least one memory including computer program codes;
10 the at least one memory and the computer program codes are configured to, with the at least one processor, cause the second device to:
transmit, to a first device, first information indicating that candidate occasions are to be skipped for monitoring physical downlink control channel;
determine a target duration for transmitting a wake up signaling based on second
15 information ~~about a physical downlink control channel which is applicable to skipping monitoring~~indicating that skipping monitoring is applicable to a physical downlink control channel with a downlink control information format for scheduling downlink assignment or uplink grant, wherein the skipping monitoring does not apply to wake up signaling occasions;
and
20 transmit the wake up signaling on the target duration.

~~12~~13. The second device of claim ~~11~~12, wherein the second device is further caused to ~~determine the target duration by:~~
in response to the second information indicating a physical downlink control channel
25 which is addressed to a cell radio network temporary identifier is applicable to skipping monitoring, ~~determining~~determine a duration which is non-overlapping with the candidate occasions addressed to the cell radio network temporary identifier to be ~~the~~a target duration.

~~13~~14. The second device of claim ~~12~~12, wherein the second device is caused to
30 determine the target duration by:
in response to the second information indicating a physical downlink control channel with a downlink control information format for scheduling downlink assignment or uplink grant is applicable to skipping monitoring, determining a duration which is non-overlapping with the candidate occasions with the downlink control information format to be the target

duration.

~~1415.~~ The second device of claim ~~1412~~, wherein the second device is further caused to ~~determine the target duration by:~~

5 in response to the second information indicating downlink control information for the wake up signaling is inapplicable to skipping monitoring, ~~determining~~determine a duration with the downlink control information to be ~~the~~a target duration.

~~1516.~~ The second device of claim ~~1012~~, wherein the second device is further caused to ~~determine the target duration by:~~

10 in response to the second information indicating all the physical downlink control channels are applicable to skipping monitoring, determining a duration which is non-overlapping with all the candidate occasions to be the target duration.

~~1617.~~ The second device of any one of claims ~~111512-16~~, wherein the second device is further caused to:

 transmit the second information via at least one of radio resource control signaling and a MAC control element.

~~1718.~~ The second device of claim ~~1412~~, wherein the second information is pre-defined.

~~1819.~~ The second device of claim ~~1412~~, wherein the second device is further caused to:

25 generate a skipping indication as to whether the first device monitors at least one of the wake up signaling and the physical downlink control channel after a period which is skipped for monitoring the physical downlink control channel; and
 transmit the skipping indication to the first device.

~~1920.~~ The second device of claim ~~1412~~, wherein the second device is further caused to:

30 generate a skipping indication as to whether the first device monitors at least one of the wake up signaling and the physical downlink control channel during a period which is skipped for monitoring the physical downlink control channel; and

transmit the skipping indication to the first device.

2021. The second device of claim 412, wherein the first device is a terminal device and the second device is a network device.

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2122. A method comprising:

receiving, at a first device and from a second device, first information indicating that candidate occasions are to be skipped for monitoring physical downlink control channel;

determining a target occasion from the candidate occasions based on second information ~~about a physical downlink control channel which is applicable to skipping monitoring~~indicating that skipping monitoring is applicable to a physical downlink control channel with a downlink control information format for scheduling downlink assignment or uplink grant, wherein the skipping monitoring does not apply to wake up signaling occasions; and

15 ~~in response to the target occasion overlapping with a duration for monitoring wake up signaling, skipping monitoring the wake up signaling on the duration.~~

22~~skipping monitoring the physical downlink control channel on the target occasion.~~

20 23. The method of claim 21, ~~wherein determining the target occasion comprises~~22, further comprising:

in response to the second information indicating a physical downlink control channel which is addressed to a cell radio network temporary identifier is applicable to skipping monitoring, determining, as ~~the~~a target occasion, one of the candidate occasions addressed to the cell radio network temporary identifier.

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2324. The method of claim 2122, wherein determining the target occasion comprises:

in response to the second information indicating a physical downlink control channel with a downlink control information format for scheduling downlink assignment or uplink grant is applicable to skipping monitoring, determining, as the target occasion, one of the candidate occasions with the downlink control information format for scheduling downlink assignment or uplink grant.

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2425. The method of claim 21, ~~wherein determining the target occasion comprises~~22,

further comprising:

in response to the second information indicating downlink control information for ~~the~~ wake up signaling is inapplicable to skipping monitoring, determining, as ~~the~~ target occasion, one of the candidate occasions without the downlink control information for the wake up signaling.

~~25~~26. The method of claim ~~21, wherein determining the target occasion comprises~~22, further comprising:

in response to the second information indicating all the physical downlink control channels are applicable to skipping monitoring, determining all the candidate occasions to be the target occasion.

~~26~~27. The method of any one of claims ~~21-25~~22-26, further comprising:
receiving the second information via at least one of radio resource control signaling and a MAC control element.

~~27-28~~. The method of claim ~~24~~22, wherein the second information is pre-defined.

~~28-29~~. The method of claim ~~22~~, further comprising:
in response to the target occasion overlapping with a duration for monitoring wake up signaling, skipping monitoring the wake up signaling on the duration.~~24~~

30. The method of claim 29, further comprising:
receiving a skipping indication as to whether the first device monitors at least one of the wake up signaling and the physical downlink control channel after the duration; and
monitoring, based on the skipping indication, the at least one of the wake up signaling and the physical downlink control channel after the duration.

~~29~~31. The method of claim ~~24~~29, further comprising:
receiving a skipping indication as to whether the first device monitors at least one of the wake up signaling and the physical downlink control channel in the duration; and
monitoring, based on the skipping indication, the at least one of the wake up signaling and the physical downlink control channel in the duration.

~~3032~~. The method of claim ~~2422~~, wherein the first device is a terminal device and the second device is a network device.

~~3433~~. A method comprising:

5 transmitting, to a first device and from a second device, first information indicating that candidate occasions are to be skipped for monitoring physical downlink control channel; determining a target duration for transmitting a wake up signaling based on second information ~~about a physical downlink control channel which is applicable to skipping~~
10 ~~monitoring~~ indicating that skipping monitoring is applicable to a physical downlink control channel with a downlink control information format for scheduling downlink assignment or uplink grant, wherein the skipping monitoring does not apply to wake up signaling occasions;
and
transmitting the wake up signaling on the target duration.

15 ~~3234~~. The method of claim ~~31, wherein determining the target duration comprises~~~~33~~, further comprising:

in response to the second information indicating a physical downlink control channel which is addressed to a cell radio network temporary identifier is applicable to skipping monitoring, determining a duration which is non-overlapping with the candidate occasions
20 addressed to the cell radio network temporary identifier to be ~~the~~a target duration.

~~3335~~. The method of claim ~~3433~~, wherein determining the target duration comprises:

in response to the second information indicating a physical downlink control channel with a downlink control information format for scheduling downlink assignment or uplink
25 grant is applicable to skipping monitoring, determining a duration which is non-overlapping with the candidate occasions with the downlink control information format to be the target duration.

~~3436~~. The method of claim ~~31, wherein determining the target duration comprises~~~~33~~, further comprising:
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in response to the second information indicating downlink control information for the wake up signaling is inapplicable to skipping monitoring, determining a duration with the downlink control information to be ~~the~~a target duration.

~~3537.~~ The method of claim ~~31, wherein determining the target duration comprises~~33,
further comprising:

in response to the second information indicating all the physical downlink control
channels are applicable to skipping monitoring, determining a duration which is non-
5 overlapping with all the candidate occasions to be the target duration.

~~3638.~~ The method of any one of claims ~~31-35~~33-37, further comprising:

transmitting the second information via at least one of radio resource control signaling
and a MAC control element.

~~3739.~~ The method of claim ~~31~~33, wherein the second information is pre-defined.

~~3840.~~ The method of claim ~~31~~33, further comprising:

generating a skipping indication as to whether the first device monitors at least one of
15 the wake up signaling and the physical downlink control channel after a period which is
skipped for monitoring the physical downlink control channel; and
transmitting the skipping indication to the first device.

~~3941.~~ The method of claim ~~31~~33, further comprising:

generating a skipping indication as to whether the first device monitors at least one of
20 the wake up signaling and the physical downlink control channel during a period which is
skipped for monitoring the physical downlink control channel; and
transmitting the skipping indication to the first device.

~~40-42.~~ The method of claim ~~31~~33, wherein the first device is a terminal device and
the second device is a network device.

~~41. An apparatus comprising:~~

~~means for receiving, at a first device and from a second device, first information~~
30 ~~indicating that candidate occasions are to be skipped for monitoring physical downlink~~
~~control channel;~~

~~means for determining a target occasion from the candidate occasions based on~~
~~second information about a physical downlink control channel which is applicable to~~
~~skipping monitoring; and~~

~~means for in response to the target occasion overlapping with a duration for monitoring wake up signaling, skipping monitoring the wake up signaling on the duration.~~

~~42. An apparatus comprising:~~

~~means for transmitting, to a first device, first information indicating that candidate occasions are to be skipped for monitoring physical downlink control channel;~~

~~means for determining a target duration for transmitting a wake up signaling based on second information about a physical downlink control channel which is applicable to skipping monitoring; and~~

~~means for transmitting the wake up signaling on the target duration.~~

43. A computer readable storage medium comprising program instructions stored thereon, the instructions, when executed by an apparatus, causing the apparatus to perform the method of any one of claims ~~21-30~~22-32.

44. A computer readable storage medium comprising program instructions stored thereon, the instructions, when executed by an apparatus, causing the apparatus to perform the method of any one of claims ~~31-40~~33-42.