

CLAIMS

1. A method for receiving information, the method being ~~applied to~~ performed by User Equipment (UE) and comprising:

~~synchronization or~~ acquiring association relationships between paging bandwidths and ~~synchronization or~~ reference signals, each association relationship comprising a Quasi-Co-Location (QCL) relationship, each paging bandwidth being located on a respective one of a plurality of Bandwidth Parts (BWPs), and each paging bandwidth being a frequency domain bandwidth or a frequency domain position, which is corresponding to a Control Resource Set (CORESET) for paging; and

acquiring a reference signal having an association relationship with a paging bandwidth corresponding to the UE in the association relationships, a BWP on which the paging bandwidth corresponding to the UE is located being different from a BWP on which a detected reference signal is located; and

receiving a paging message in ~~a~~ the paging bandwidth corresponding to the UE, according to ~~a synchronization or~~ the reference signal having ~~an~~ the association relationship with the paging bandwidth corresponding to the UE in the association relationships.

2. The method of claim 1, wherein acquiring the QCL relationships between the paging bandwidths and the reference signals comprises: acquiring indication information indicating the association relationships between the paging bandwidths and the reference signals.

23. The method of claim 1, wherein ~~acquiring the association relationships between the paging bandwidths and the synchronization or~~ acquiring the association relationships between the paging bandwidths and the synchronization or reference signals comprises:

receiving Remaining Minimum System Information (RMSI) or Other System Information (OSI), wherein the RMSI or the OSI is used for notifying indication information of each of the paging bandwidths and indication information of ~~a synchronization or~~ a reference signal having an association relationship with the paging bandwidth.

34. The method of claim 1, wherein acquiring the association relationships between the paging bandwidths and the ~~synchronization or reference~~ signals comprises:

defining each association relationship according to a preset association relationship establishment strategy,

wherein the preset association relationship establishment strategy comprises one of:

a paging message in a paging bandwidth has an association relationship with a ~~synchronization or reference~~ signal on a BandWidth Part (BWP) on which the paging bandwidth is located, wherein the paging bandwidth is a part of the BWP and the BWP is a part of a system bandwidth;

a paging message in a paging bandwidth has an association relationship with a ~~synchronization or reference~~ signal that is closest to the paging bandwidth in a frequency domain; or

a paging message in a paging bandwidth has an association relationship with a preset ~~synchronization or reference~~ signal.

45. The method of claim 1, wherein the ~~synchronization or reference~~ signal comprises at least one of: ~~a Synchronization Signal block (SS block)~~, a Channel State Information Reference Signal (CSI-RS), or a Tracking Reference Signal (TRS).

56. The method of claim 45, wherein the ~~synchronization or reference~~ signal is configured by a network side to the UE; and ~~the SS block and the CSI-RS are~~ is used for Radio Resource Management (RRM) and mobility measurement, and the TRS is used for time frequency tracking.

6. ~~The method of claim 1, further comprising:~~

~~responsive to that the paging bandwidth corresponding to the UE has no association relationship with a detected synchronization or reference signal, acquiring the association relationships between paging bandwidths and synchronization or reference signals, and receiving the paging message in the paging bandwidth corresponding to the UE, according to the synchronization or reference signal having the association relationship with the paging bandwidth corresponding to the UE in the association relationships.~~

~~7. The method of claim 6, wherein the paging bandwidth corresponding to the UE has no association relationship with the detected synchronization or reference signal comprises one of:~~

~~a BWP on which the paging bandwidth corresponding to the UE is located is different from a BWP on which the detected synchronization or reference signal is located; or~~

~~a distance between a frequency domain location of the paging bandwidth corresponding to the UE and a frequency domain location of the detected synchronization or reference signal is greater than a set distance threshold; or~~

~~a frequency domain location of the paging bandwidth corresponding to the UE and a frequency domain location of the detected synchronization or reference signal belong to different Radio Frequency (RF) chains.~~

~~8. The method of any one of claims 1 to 7, wherein each association relationship comprises a Quasi-Co-Location (QCL) relationship.~~

~~97. A method for receiving information, the method being applied to performed by a network device and comprising:~~

~~sending association relationships between paging bandwidths and reference signals, each association relationship comprising a Quasi-Co-Location (QCL) relationship, each paging bandwidth being located on a respective one of a plurality of Bandwidth Parts (BWPs), and each paging bandwidth being a frequency domain bandwidth or a frequency domain position, which is corresponding to a Control Resource Set (CORESET) for paging; and~~

~~sending a reference signal having an association relationship with a paging bandwidth corresponding to User Equipment (UE) in the association relationships, a BWP on which the paging bandwidth corresponding to the UE is located being different from a BWP on which a detected reference signal is located;~~

~~wherein the reference signal having the association relationship with the paging bandwidth corresponding to the UE is used for reception of a paging message in the paging bandwidth corresponding to the UE by the UE carrying, in Remaining Minimum System Information (RMSI) or Other System Information (OSI),~~

~~indication information of a paging bandwidth corresponding to User Equipment (UE) and indication information of a synchronization or reference signal having an association relationship with the paging bandwidth; and~~
~~sending the RMSI or the OSI to the UE.~~

8. The method of claim 7, wherein sending the QCL relationships between the paging bandwidths and the reference signals comprises: sending indication information indicating the association relationships between the paging bandwidths and the reference signals.

9. The method of claim 7, wherein sending the association relationships between the paging bandwidths and the reference signals comprises:

sending Remaining Minimum System Information (RMSI) or Other System Information (OSI), wherein the RMSI or the OSI is used for notifying indication information of each of the paging bandwidths and indication information of a reference signal having an association relationship with the paging bandwidth.

10. The method of claim 7, wherein the reference signal comprises at least one of: a Channel State Information Reference Signal (CSI-RS), or a Tracking Reference Signal (TRS);

wherein the reference signal is configured by a network side to the UE; and the CSI-RS is used for Radio Resource Management (RRM) and mobility measurement, and the TRS is used for time frequency tracking.

~~10. The method of claim 9, wherein the association relationship comprises a Quasi-Co-Location (QCL) relationship.~~

11. User Equipment (UE), comprising: an a first acquisition portion, a second acquisition portion and a receiving portion, wherein

the first acquisition portion is configured to acquire association relationships between paging bandwidths and synchronization or reference signals, each association relationship comprising a Quasi-Co-Location (QCL) relationship, each paging bandwidth being located on a respective one of a plurality of Bandwidth Parts (BWPs), and each paging bandwidth being a frequency domain bandwidth or a

frequency domain position, which is corresponding to a Control Resource Set (CORESET) for paging; and

the second acquisition portion is configured to acquire a reference signal having an association relationship with a paging bandwidth corresponding to the UE in the association relationships, a BWP on which the paging bandwidth corresponding to the UE is located being different from a BWP on which a detected reference signal is located; and

the receiving portion is configured to receive, according to ~~a~~the ~~synchronization or~~ reference signal having ~~an~~the association relationship with ~~a~~the paging bandwidth corresponding to the UE in the association relationships, a paging message in the paging bandwidth corresponding to the UE.

12. The UE of claim 11, wherein the first acquisition portion is configured to acquire indication information indicating the association relationships between the paging bandwidths and the reference signals.

~~12~~13. The UE of claim 11, wherein the first acquisition portion is configured to:
receive Remaining Minimum System Information (RMSI) or Other System Information (OSI), wherein the RMSI or the OSI is used for notifying indication information of each of the paging bandwidths and indication information of a ~~synchronization or~~ reference signal having an association relationship with the paging bandwidth.

~~13~~14. The UE of claim 11, wherein the first acquisition portion is configured to:
define each association relationship according to a preset association relationship establishment strategy,
wherein the preset association relationship establishment strategy comprises one of:

a paging message in a paging bandwidth has an association relationship with a ~~synchronization or~~ reference signal on a BandWidth Part (BWP) on which the paging bandwidth is located, wherein the paging bandwidth is a part of the BWP and the BWP is a part of a system bandwidth;

a paging message in a paging bandwidth has an association relationship with

a ~~synchronization or~~ reference signal that is closest to the paging bandwidth in a frequency domain; or

a paging message in a paging bandwidth has an association relationship with a preset ~~synchronization or~~ reference signal.

~~1415.~~ The UE of claim 11, wherein the ~~synchronization or~~ reference signal comprises at least one of: a ~~Synchronization Signal block (SS block)~~, a Channel State Information Reference Signal (CSI-RS), or a Tracking Reference Signal (TRS).

~~1516.~~ The UE of claim ~~1415~~, wherein the ~~synchronization or~~ reference signal is configured by a network side to the UE; and ~~the SS block and the CSI-RS are~~ is used for Radio Resource Management (RRM) and mobility measurement, and the TRS is used for time frequency tracking.

~~16.~~ The UE of claim 11, further comprising a ~~determination portion, configured to: determine whether the paging bandwidth corresponding to the UE has an association relationship with a detected synchronization or reference signal, and trigger, responsive to that the paging bandwidth corresponding to the UE has no association relationship with the detected synchronization or reference signal, the acquisition portion.~~

~~17.~~ The UE of claim ~~16~~, wherein the ~~determination portion determines that the paging bandwidth corresponding to the UE has no association relationship with the detected synchronization or reference signal comprises one of:~~

a BWP on which the paging bandwidth corresponding to the UE is located is different from a BWP on which the ~~detected synchronization or reference signal is located~~; or

a ~~distance between a frequency domain location of the paging bandwidth corresponding to the UE and a frequency domain location of the detected synchronization or reference signal is greater than a set distance threshold~~; or

a ~~frequency domain location of the paging bandwidth corresponding to the UE and a frequency domain location of the detected synchronization or reference signal belong to different Radio Frequency (RF) chains.~~

~~18. The UE of any one of claims 11 to 17, wherein each association relationship comprises a Quasi-Co-Location (QCL) relationship.~~

~~1917. A network device, comprising a carrying portion and a sending portion, wherein~~

~~the carrying portion is configured to carry, in Remaining Minimum System Information (RMSI) or Other System Information (OSI), indication information of a paging bandwidth corresponding to User Equipment (UE) and indication information of a synchronization or reference signal having an association relationship with the paging bandwidth; and~~

~~the sending portion is configured to send association relationships between paging bandwidths and reference signals, each association relationship comprising a Quasi-Co-Location (QCL) relationship, each paging bandwidth being located on a respective one of a plurality of Bandwidth Parts (BWPs), and each paging bandwidth being a frequency domain bandwidth or a frequency domain position, which is corresponding to a Control Resource Set (CORESET) for paging; and~~

~~send a reference signal having an association relationship with a paging bandwidth corresponding to User Equipment (UE) in the association relationships, a BWP on which the paging bandwidth corresponding to the UE is located being different from a BWP on which a detected reference signal is located;~~

~~wherein the reference signal having the association relationship with the paging bandwidth corresponding to the UE is used for reception of a paging message in the paging bandwidth corresponding to the UE by the UE~~the RMSI or the OSI to the UE.~~~~

18. The network device of claim 17, wherein the sending portion is configured to send indication information indicating the association relationships between the paging bandwidths and the reference signals.

19. The network device of claim 17, wherein the sending portion is configured to send Remaining Minimum System Information (RMSI) or Other System Information (OSI), wherein the RMSI or the OSI is used for notifying indication

information of each of the paging bandwidths and indication information of a reference signal having an association relationship with the paging bandwidth.

20. The network device of claim 17, wherein the reference signal comprises at least one of: a Channel State Information Reference Signal (CSI-RS), or a Tracking Reference Signal (TRS);

wherein the reference signal is configured by a network side to the UE; and the CSI-RS is used for Radio Resource Management (RRM) and mobility measurement, and the TRS is used for time frequency tracking.~~20. The network device of claim 19, wherein the association relationship comprises a Quasi Co-Location (QCL) relationship.~~