

CLAIMS

1. A signal processing method, comprising:
 - determining, by a terminal device, a Quasi-Co-Location identifier (QCL ID)
 - 5 corresponding to a first port set for a first downlink signal;
 - determining, by the terminal device, a second downlink signal in QCL with the first port set for the first downlink signal based on the QCL ID; and
 - processing, by the terminal device, signals on the first port set for the first downlink signal based on QCL information obtained from the second downlink signal,
 - 10 wherein the QCL ID is beam ID, and determining, by the terminal device, the second downlink signal in QCL with the first port set for the first downlink signal based on the QCL ID, comprises:
 - determining, by the terminal device, a synchronization signal (SS) block containing the beam ID as the second downlink signal in QCL with the first port set
 - 15 for the first downlink signal, each signal in the SS block containing the beam ID.
2. The method of claim 1, wherein the first port set comprises part or all of ports for the first downlink signal.
- 20 3. The method of claim 1 or 2, wherein a beam adopted to transmit or receive the second downlink signal is used to determine a beam adopted to transmit or receive the signal on the first port set for the first downlink signal.
4. The method of claim 3, wherein the second downlink signal is the SS block, and
 - 25 a beam adopted to transmit or receive an SS in the SS block or a physical broadcast channel (PBCH) is used to determine the beam adopted to transmit or receive the signal on the first port set for the first downlink signal.
5. The method of any one of claims 1-4, wherein the QCL information further
- 30 comprises beam information.
6. The method of claim 5, wherein processing, by the terminal device, the signals on the first port set for the first downlink signal based on the QCL information obtained

from the second downlink signal comprises:

determining, by the terminal device, a beam adopted to receive the second downlink signal as a target beam adopted to receive the signal on the first port set for the first downlink signal; and

5 adopting the target beam to receive the signals on the first port set for the first downlink signal.

7. The method of any one of claims 1-6, wherein the first downlink signal is one of the following: a demodulation reference signal (DMRS), a Channel State Information-
10 reference signal (CSI-RS), an SS block, an SS, and a synchronization channel.

8. A signal processing apparatus, comprising:

a determination module, configured to determine a Quasi-Co-Location identifier (QCL ID) corresponding to a first port set for a first downlink signal and
15 determine a second downlink signal in QCL with the first port set for the first downlink signal based on the QCL ID; and

a processing module, configured to process signals on the first port set for the first downlink signal based on QCL information obtained from the second downlink signal,

20 wherein the QCL ID is beam ID, and in determining the second downlink signal in QCL with the first port set for the first downlink signal based on the QCL ID, the determination module is further configured to determine a synchronization signal (SS) block containing the beam ID as the second downlink signal in QCL with the first port set for the first downlink signal, each signal in the SS block containing the
25 beam ID.

9. The apparatus of claim 8, wherein the first port set comprises part or all of ports for the first downlink signal.

30 10. The apparatus of claim 8 or 9, wherein a beam adopted to transmit or receive the second downlink signal is used to determine a beam adopted to transmit or receive the signal on the first port set for the first downlink signal.

11. The apparatus of claim 10, wherein the second downlink signal is the SS block,
and

5 a beam adopted to transmit or receive an SS in the SS block or a physical
broadcast channel (PBCH) is used to determine the beam adopted to transmit or
receive the signal on the first port set for the first downlink signal.

12. The apparatus of any one of claims 8-11, wherein the QCL information further
comprises beam information.

10 13. The apparatus of claim 12, wherein the processing module is specifically
configured to:

determine a beam adopted to receive the second downlink signal as a target
beam adopted to receive the signal on the first port set for the first downlink signal;
and

15 the apparatus further comprises:

a communication module, configured to adopt the target beam to receive the
signal on the first port set for the first downlink signal.

14. The apparatus of any one of claims 8-13, wherein the first downlink signal is one
20 of the following: a demodulation reference signal (DMRS), a channel state
information-reference signal (CSI-RS), an SS block, or an SS, or a synchronization
channel.

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