

CLAIMS

1. A measurement relaxation method, performed by a user equipment (UE), comprising:
obtaining at least one relaxation criterion of a first version configured by a network device;
and

performing a measurement relaxation operation, wherein the UE meets one or more relaxation criteria of the at least one relaxation criterion of the first version,

wherein the at least one relaxation criterion of the first version comprises at least one of:

a first criterion being a criterion for a UE to detect stationary mobility; or

a second criterion being a criterion for a UE to detect that it is not at cell edge while stationary;

wherein obtaining the at least one relaxation criterion of the first version configured by the network device comprises:

receiving a first indication message from the network device, wherein the first criterion and the second criterion are configured for the UE, and the first indication message is configured to instruct the UE whether to perform the measurement relaxation operation when the network device configures the first criterion and the second criterion for the UE and the UE meets the first criterion.

2. The method according to claim 1, wherein the measurement relaxation operation comprises at least one of:

stopping measurement for a preset duration; or

relaxing a measurement interval with an expansion coefficient.

3. The method according to claim 2, wherein the UE is located in a non-cell-center area, and a cell to be measured corresponding to the UE is at least one of:

an intra-frequency cell of a cell where the UE is located;

an equal priority inter-frequency cell of the cell where the UE is located;

a low priority inter-frequency cell of the cell where the UE is located; or

a high priority inter-frequency cell of the cell where the UE is located.

4. The method according to claim 3, wherein obtaining the at least one relaxation criterion of the first version configured by the network device comprises:

obtaining the first criterion and the second criterion configured by the network device.

5. The method according to claim 4, wherein performing the measurement relaxation operation comprises at least one of:

performing a first measurement relaxation operation by the UE, wherein the UE meets the first criterion and the second criterion;

performing a second measurement relaxation operation by the UE, wherein the UE meets the first criterion and the UE meeting a first preset condition, wherein the first preset condition comprises: the first indication message not being received by the UE; or the first indication message being received by the UE, wherein the first indication message comprises a first bearer field, and a first indication value carried by the first bearer field is a first value; or

not performing, according to the relaxation criterion of the first version, the measurement relaxation operation by the UE, wherein the UE meets the first criterion and a second preset condition, wherein the second preset condition comprises: the first indication message being received by the UE, wherein the first indication message comprises the first bearer field, and the first indication value carried by the first bearer field is a second value.

6. The method according to claim 3, wherein obtaining the at least one relaxation criterion of the first version configured by the network device comprises:

obtaining the first criterion configured by the network device.

7. The method according to claim 6, wherein performing the measurement relaxation operation comprises:

performing a second measurement relaxation operation by the UE, wherein the UE meets the first criterion.

8. The method according to any one of claims 3 to 7, wherein relaxation levels of measurement relaxation operations performed for cases where cells to be measured are respectively the intra-frequency cell, the equal priority inter-frequency cell, and the low priority inter-frequency cell, are the same; and

a relaxation level of the measurement relaxation operation performed for the cell to be measured which is the high priority inter-frequency cell is the same as or greater than the relaxation level of the measurement relaxation operation performed for the cell to be measured which is the intra-frequency cell, the equal priority inter-frequency cell or the low priority inter-frequency cell.

9. The method according to claim 2, wherein the UE is located in a cell center, and a cell to be measured corresponding to the UE is a high priority inter-frequency cell of a cell where the UE is located.

10. The method according to claim 9, wherein obtaining the at least one relaxation criterion of the first version configured by the network device comprises:

obtaining the first criterion and the second criterion configured by the network device.

11. The method according to claim 10, wherein performing the measurement relaxation operation comprises at least one of:

performing a third measurement relaxation operation by the UE, wherein the UE meets the first criterion, the second criterion, and a third preset condition, wherein the third preset condition comprises: a second indication message being received by the UE, wherein the second indication message comprises a second bearer field, and a second indication value carried by the second bearer field is a third value;

not performing, according to the relaxation criterion of the first version, the measurement relaxation operation by the UE, wherein the UE meets the first criterion, the second criterion, and a fourth preset condition, wherein the fourth preset condition comprises: the second indication message being received by the UE, wherein the second indication message comprises the second bearer field, and the second indication value carried by the second bearer field is a fourth value;

performing a third measurement relaxation operation by the UE. wherein the UE meets the first criterion, the second criterion, and a fifth preset condition, wherein the fifth preset condition comprises: a second indication message being received by the UE, wherein the second indication message comprises a second bearer field, and a second indication value is carried by the second bearer field;

not performing, according to the relaxation criterion of the first version, the measurement relaxation operation by the UE, wherein the UE meets the first criterion, the second criterion, and a sixth preset condition, wherein the sixth preset condition comprises at least one of: the second indication message not being received by the UE; the second indication message being received by the UE, wherein the second indication message does not comprise the second bearer field;

performing, according to a second indication message, the measurement relaxation operation by the UE, wherein the UE meets the first criterion and a first preset condition, wherein the first preset condition comprises at least one of: a first indication message not being received by the UE; the first indication message being received by the UE, wherein the first indication message comprises a first bearer field, and a first indication value carried by the first bearer field is a first value; or

not performing, according to the relaxation criterion of the first version, the measurement relaxation operation by the UE, wherein the UE meets the first criterion and a second preset condition, wherein the second preset condition comprises: the first indication message being

received by the UE, wherein the first indication message comprises the first bearer field, and the first indication value carried by the first bearer field is a second value.

12. The method according to claim 11, wherein performing, according to the second indication message, the measurement relaxation operation by the UE comprises at least one of:

performing a fourth measurement relaxation operation by the UE, wherein the UE meets a fifth preset condition, wherein the fifth preset condition comprises: the second indication message being received by the UE, wherein the second indication message comprises a second bearer field, and a second indication value is carried by the second bearer field;

not performing, according to the relaxation criterion of the first version, the measurement relaxation operation by the UE, wherein the UE meeting a sixth preset condition, wherein the sixth preset condition comprises at least one of: the second indication message being not received by the UE; or the second indication message being received by the UE, wherein the second indication message does not comprise the second bearer field;

performing a fourth measurement relaxation operation by the UE, wherein the UE meeting a third preset condition, wherein the third preset condition comprises: the second indication message being received by the UE, wherein the second indication message comprises a second bearer field, and a second indication value carried by the second bearer field is a third value; or

not performing, according to the relaxation criterion of the first version, the measurement relaxation operation by the UE, wherein the UE meets a fourth preset condition, wherein the fourth preset condition comprises: the second indication message being received by the UE, wherein the second indication message comprises the second bearer field, and the second indication value carried by the second bearer field is a fourth value.

13. The method according to claim 9, wherein obtaining the at least one relaxation criterion of the first version configured by the network device comprises:

obtaining the first criterion configured by the network device; and

wherein performing the measurement relaxation operation comprises at least one of:

performing a fourth measurement relaxation operation by the UE, wherein the UE meets the first criterion and a fifth preset condition, wherein the fifth preset condition comprises: a second indication message being received by the UE, wherein the second indication message comprises a second bearer field, and a second indication value is carried by the second bearer field;

not performing, according to the relaxation criterion of the first version, the measurement relaxation operation by the UE, wherein the UE meets the first criterion and a sixth preset condition, wherein the sixth preset condition comprises at least one of: the second indication message not

being received by the UE; the second indication message being received by the UE, wherein the second indication message does not comprise the second bearer field;

performing a fourth measurement relaxation operation by the UE, wherein the UE meets the first criterion and a third preset condition, wherein the third preset condition comprises: a second indication message being received by the UE, wherein the second indication message comprises a second bearer field, and a second indication value carried by the second bearer field is a third value;

not performing, according to the relaxation criterion of the first version, the measurement relaxation operation by the UE, wherein the UE meets the first criterion and a fourth preset condition, wherein the fourth preset condition comprises: the second indication message being received by the UE, wherein the second indication message comprises the second bearer field, and the second indication value carried by the second bearer field is a fourth value.

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

obtaining at least one relaxation criterion of a second version configured by the network device; and

performing the measurement relaxation operation according to the at least one relaxation criterion of the second version, wherein the UE meets no relaxation criterion of the first version.

15. A measurement relaxation method, performed by a network device, comprising:

configuring at least one relaxation criterion of a first version for a user equipment (UE),

wherein the at least one relaxation criterion of the first version comprises at least one of:

a first criterion being a criterion for a UE to detect stationary mobility; or

a second criterion being a criterion for a UE to detect that it is not at cell edge while stationary;

wherein configuring the at least one relaxation criterion of the first version for the UE comprises:

sending a first indication message to the UE, wherein the first criterion and the second criterion are configured for the UE, and the first indication message is configured to instruct the UE whether to perform the measurement relaxation operation when the network device configures the first criterion and the second criterion for the UE and the UE meets the first criterion.

16. The method according to claim 15, wherein configuring the at least one relaxation criterion of the first version for the UE further comprises:

sending a second indication message to the UE, wherein the first criterion is configured for the UE, and the second indication message is configured to indicate whether the UE located in a cell center performs the measurement relaxation operation for a high priority inter-frequency cell.

17. A communication device, comprising:
a processor, and
a memory having stored therein a computer program that, when executed by the processor,
causes the device to implement the method according to any one of claims 1 to 16.

18. A computer-readable storage medium having stored therein instructions that, when
executed, cause the method according to any one of claims 1 to 16 to be implemented.