

CLAIMS

What is claimed is:

- 1 1. A method for wireless communication, comprising:
2 identifying a beam failure condition;
3 determining whether a reference signal beam satisfies a beam strength threshold;
4 and
5 transmitting, based at least in part on a result of the determining, a beam failure
6 recovery (BFR) signal using resources associated with the reference signal beam.
- 1 2. The method of claim 1, further comprising:
2 detecting a set of reference signal beams and determining that the reference signal
3 beams of the set fail to satisfy the beam strength threshold; and
4 selecting any reference signal beam from the set of detected reference signal
5 beams as the reference signal beam.
- 1 3. The method of claim 1, further comprising:
2 detecting a set of reference signal beams and determining that the reference signal
3 beams of the set fail to satisfy the beam strength threshold; and
4 selecting a reference signal beam from among the set of reference signal beams
5 that has a highest beam strength as the reference signal beam.
- 1 4. The method of claim 1, further comprising:
2 receiving a configuration message that indicates the beam strength threshold.
- 1 5. The method of claim 1, wherein determining whether a reference signal
2 beam satisfies the beam strength threshold comprises:
3 determining that the reference signal beam is received with a beam strength
4 metric satisfying the beam strength threshold.
- 1 6. The method of claim 5, wherein the beam strength metric comprises one
2 or more of a reference signal received power (RSRP) metric, or a reference signal received

3 quality (RSRQ) metric, or a signal-to-interference-plus-noise ratio (SINR), or an estimated block
4 error ratio (BLER), or a combination thereof.

1 7. The method of claim 1, further comprising:
2 detecting a set of reference signal beams and determining that more than one of
3 the reference signal beams of the set satisfy the beam strength threshold; and
4 selecting any of the more than one reference signal beams as the reference signal
5 beam.

1 8. The method of claim 1, further comprising:
2 detecting a set of reference signal beams and determining that more than one of
3 the reference signal beams of the set satisfy the beam strength threshold; and
4 selecting the reference signal beam from the more than one reference signal
5 beams having a highest beam strength as the reference signal beam

1 9. An apparatus for wireless communication, comprising:
2 a processor;
3 memory in electronic communication with the processor; and
4 instructions stored in the memory and executable by the processor to cause the
5 apparatus to:
6 identify a beam failure condition;
7 determine whether a reference signal beam satisfies a beam strength threshold;
8 and
9 an antenna configured to transmit, based at least in part on a result of the
10 determining, a beam failure recovery (BFR) signal using resources associated with the reference
11 signal beam.

1 10. The apparatus of claim 9, wherein the instructions are further executable
2 by the processor to cause the apparatus to:
3 detect a set of reference signal beams and determining that the reference signal
4 beams of the set fail to satisfy the beam strength threshold; and
5 select any reference signal beam from the set of detected reference signal beams
6 as the reference signal beam.

1 11. The apparatus of claim 9, wherein the instructions are further executable
2 by the processor to cause the apparatus to:
3 detect a set of reference signal beams and determining that the reference signal
4 beams of the set fail to satisfy the beam strength threshold; and
5 select a reference signal beam from among the set of reference signal beams that
6 has a highest beam strength as the reference signal beam.

1 12. The apparatus of claim 9, wherein the instructions are further executable
2 by the processor to cause the apparatus to:
3 receive a configuration message that indicates the beam strength threshold.

1 13. The apparatus of claim 9, wherein the instructions to determine whether a
2 reference signal beam satisfies the beam strength threshold are executable by the processor to
3 cause the apparatus to:
4 determine that the reference signal beam is received with a beam strength metric
5 satisfying the beam strength threshold.

1 14. The apparatus of claim 13, wherein the beam strength metric comprises
2 one or more of a reference signal received power (RSRP) metric, or a reference signal received
3 quality (RSRQ) metric, or a signal-to-interference-plus-noise ratio (SINR), or an estimated block
4 error ratio (BLER), or a combination thereof.

1 15. The apparatus of claim 9, wherein the instructions are further executable
2 by the processor to cause the apparatus to:
3 detect a set of reference signal beams and determining that more than one of the
4 reference signal beams of the set satisfy the beam strength threshold; and
5 select any of the more than one reference signal beams as the reference signal
6 beam.

1 16. The apparatus of claim 9, wherein the instructions are further executable
2 by the processor to cause the apparatus to:
3 detect a set of reference signal beams and determining that more than one of the
4 reference signal beams of the set satisfy the beam strength threshold; and

5 select the reference signal beam from the more than one reference signal beams
6 having a highest beam strength as the reference signal beam.

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1 17. An apparatus for wireless communication, comprising:
2 means for identifying a beam failure condition;
3 means for determining whether a reference signal beam satisfies a beam strength
4 threshold; and
5 means for transmitting, based at least in part on a result of the determining, a
6 beam failure recovery (BFR) signal using resources associated with the reference signal beam.

1 18. The apparatus of claim 17, further comprising:
2 means for detecting a set of reference signal beams and determining that the
3 reference signal beams of the set fail to satisfy the beam strength threshold; and
4 means for selecting any reference signal beam from the set of detected reference
5 signal beams as the reference signal beam.

1 19. The apparatus of claim 17, further comprising:
2 means for detecting a set of reference signal beams and determining that the
3 reference signal beams of the set fail to satisfy the beam strength threshold; and
4 means for selecting a reference signal beam from among the set of reference
5 signal beams that has a highest beam strength as the reference signal beam.

1 20. The apparatus of claim 17, further comprising:
2 means for receiving a configuration message that indicates the beam strength
3 threshold.

1 21. The apparatus of claim 17, wherein the means for determining whether a
2 reference signal beam satisfies the beam strength threshold comprises:
3 means for determining that the reference signal beam is received with a beam
4 strength metric satisfying the beam strength threshold.

1 22. The apparatus of claim 21, wherein the beam strength metric comprises
2 one or more of a reference signal received power (RSRP) metric, or a reference signal received

3 quality (RSRQ) metric, or a signal-to-interference-plus-noise ratio (SINR), or an estimated block
4 error ratio (BLER), or a combination thereof.

1 23. The apparatus of claim 17, further comprising:
2 means for detecting a set of reference signal beams and determining that more
3 than one of the reference signal beams of the set satisfy the beam strength threshold; and
4 means for selecting any of the more than one reference signal beams as the
5 reference signal beam.

1 24. The apparatus of claim 17, further comprising:
2 means for detecting a set of reference signal beams and determining that more
3 than one of the reference signal beams of the set satisfy the beam strength threshold; and
4 means for selecting the reference signal beam from the more than one reference
5 signal beams having a highest beam strength as the reference signal beam.

1 25. A non-transitory computer-readable medium storing code for wireless
2 communication, the code comprising instructions executable by a processor to:
3 identify a beam failure condition;
4 determine whether a reference signal beam satisfies a beam strength threshold;
5 and
6 transmit, based at least in part on a result of the determining, a beam failure
7 recover (BFR) signal using resources associated with the reference signal beam.

1 26. The non-transitory computer-readable medium of claim 25, wherein the
2 instructions are further executable by the processor to:
3 detect a set of reference signal beams and determining that the reference signal
4 beams of the set fail to satisfy the beam strength threshold; and
5 select any reference signal beam from the set of detected reference signal beams
6 as the reference signal beam.

1 27. The non-transitory computer-readable medium of claim 25, wherein the
2 instructions are further executable by the processor to:

3 detect a set of reference signal beams and determining that the reference signal
4 beams of the set fail to satisfy the beam strength threshold; and
5 select a reference signal beam from among the set of reference signal beams that
6 has a highest beam strength as the reference signal beam.

1 28. The non-transitory computer-readable medium of claim 25, wherein the
2 instructions are further executable by the processor to:
3 receive a configuration message that indicates the beam strength threshold.

1 29. The non-transitory computer-readable medium of claim 25, wherein the
2 instructions to determine whether a reference signal beam satisfies the beam strength threshold
3 are executable by the processor to:
4 determine that the reference signal beam is received with a beam strength metric
5 satisfying the beam strength threshold.

1 30. The non-transitory computer-readable medium of claim 29, wherein the
2 beam strength metric comprises one or more of a reference signal received power (RSRP)
3 metric, or a reference signal received quality (RSRQ) metric, or a signal-to-interference-plus-
4 noise ratio (SINR), or an estimated block error ratio (BLER), or a combination thereof.

1 31. The non-transitory computer-readable medium of claim 25, wherein the
2 instructions are further executable by the processor to:
3 detect a set of reference signal beams and determining that more than one of the
4 reference signal beams of the set satisfy the beam strength threshold; and
5 select any of the more than one reference signal beams as the reference signal
6 beam.

1 32. The non-transitory computer-readable medium of claim 25, wherein the
2 instructions are further executable by the processor to:
3 detect a set of reference signal beams and determining that more than one of the
4 reference signal beams of the set satisfy the beam strength threshold; and
5 select the reference signal beam from the more than one reference signal beams
6 having a highest beam strength as the reference signal beam.