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### (54) UE CAPABILITY REPORTING

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#### (57)ABSTRACT

Provided is a method for a user equipment (UE). The UE performs at least one of: reporting, to a base station (BS), a UE capability related to port selection codebooks, in accordance with a determination that an active bandwidth part (BWP) has less than a threshold number of physical resource blocks (PRBs), operating according to a rule that the UE is not expected to report, to the BS, the port selection codebooks, or in accordance with a determination that the active BWP has less than the threshold number of PRBs and that the UE is configured with the port selection codebooks by the BS, assuming that a subset of parameters has a predefined value, wherein the parameters comprise a number, M, of selected frequency basis, a percentage,  $\alpha$ , of number of selected ports, a percentage, β, of number of reported non-zero coefficients, and a number, R, of precoding matrix indicator (PMI) sub-bands per channel quality information (CQI) sub-band.

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REPORTING, TO A BS, A UE CAPABILITY RELATED TO PORT SELECTION CODEBOOKS

IN ACCORDANCE WITH A DETERMINATION THAT AN ACTIVE BWP HAS LESS THAN A THRESHOLD NUMBER OF PRBS, OPERATING ACCORDING TO A RULE THAT THE UE IS NOT EXPECTED TO REPORT, TO THE BS, THE PORT SELECTION CODEBOOKS

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IN ACCORDANCE WITH A DETERMINATION THAT THE ACTIVE BWP HAS LESS THAN THE THRESHOLD NUMBER OF PRBS AND THAT THE UE IS CONFIGURED WITH THE PORT SELECTION CODEBOOKS BY THE BS, ASSUMING THAT A SUBSET OF PARAMETERS HAS A PREDEFINED VALUE, WHEREIN THE PARAMETERS COMPRISE A NUMBER, M, OF SELECTED FREQUENCY BASIS, A PERCENTAGE, A, OF NUMBER OF SELECTED PORTS, A PERCENTAGE, B, OF NUMBER OF REPORTED NON-ZERO COEFFICIENTS, AND A NUMBER, R, OF PMI SUB-BANDS PER **CQI SUB-BAND** 

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