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(54) Title: SYSTEMS AND METHODS FOR NON-CODEBOOK BASED MULTI-TRP PUSCH

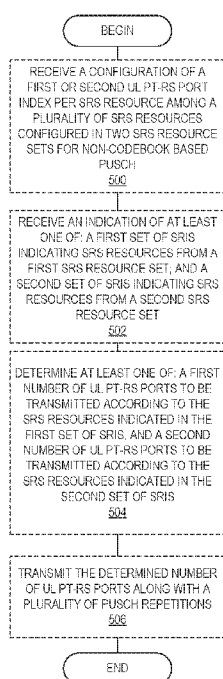


FIG. 5

(57) Abstract: Systems and methods for non-codebook based multi-Transmit and Reception Point (TRP) Physical Uplink Shared Channel (PUSCH) are provided. In some embodiments, a method performed by a wireless device includes: receiving a configuration of a first or second Phase-Tracking Reference Signals (PT-RS) port index per Sounding Reference Signal (SRS) resource in two SRS resource sets for non-codebook based PUSCH; receiving indication of: a first set of SRS Resource Indicators (SRIs) from a first SRS resource set; and/or a second set of SRIs from a second SRS resource set; determining at least one of: a first number of PT-RS ports to be transmitted according to the SRS resources indicated in the first set of SRIs; and a second number of PT-RS ports to be transmitted according to the SRS resources indicated in the second set of SRIs; and transmitting the determined number of PT-RS ports along with a plurality of PUSCH repetitions.

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