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- (71) Applicant: **FRAUNHOFER GESELLSCHAFT ZUR FÖRDERUNG DER ANGEWANDTEN FORSCHUNG E.V.** [DE/DE]; Hansastrasse 27 c, 80686 MÜNCHEN (DE).
- (72) Inventors: **GROSSMANN, Marcus**; C/O Fraunhofer-Institut für Integrierte Schaltungen IIS Am Wolfsmantel 33, 91058 Erlangen (DE). **LANDMANN, Markus**; C/O Fraunhofer-Institut für Integrierte Schaltungen IIS Am Wolfsmantel 33, 91058 Erlangen (DE). **VARATHARAJAN, Sutharshun**; C/O Fraunhofer-Institut für Integrierte Schaltungen IIS Am Wolfsmantel 33, 91058 Erlangen (DE).
- (74) Agent: **GROTH & CO KB**; P.O. Box 6107, 102 32 STOCKHOLM (SE).
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(54) Title: METHODS AND APPARATUSES FOR ENHANCING THE RELIABILITY AND PERFORMANCE OF THE PHYSICAL DOWNLINK CONTROL CHANNEL IN A WIRELESS COMMUNICATIONS NETWORK

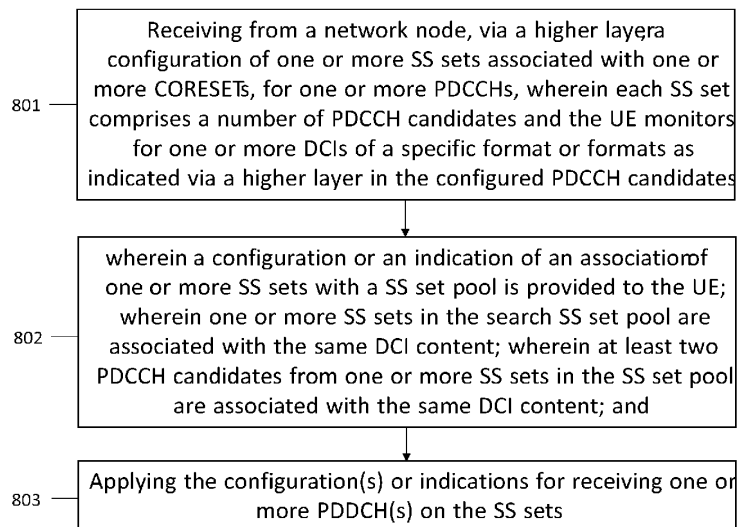


Figure 8

(57) Abstract: The embodiment of the present disclosure relates to methods and apparatuses for enhancing the reliability and performance of the PDCCH in a wireless network. The method performed by a UE comprises: receiving (801) a configuration of one or more search space sets for the PDCCH, each search space set comprises a number of PDCCH candidates and each PDCCH candidate is made up of a number of resource elements, the UE monitors for one or more DCIs of a specific format as indicated in the configured PDCCH candidates; (802) wherein a configuration or an indication of an association of one or more search space sets with a search space set pool is provided to UE, and at least two PDCCH candidates from one or more search space sets are associated with the same DCI content; or an association of two or more TCI states with a single CORESET is obtained from the network node; and applying

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