ABSTRACT

BAND COMBINATION CONSTRAINT ON THE NUMBER OF SUPPORTED MIMO LAYERS USED IN CARRIER AGGREGATION BASED COMMUNICATION SYSTEMS

The disclosure relates to reduced signaling to carry out the linking between new radio (NR) carrier aggregation (CA) band combinations and NR band processing combinations (BPCs), and includes apparatus and methods of receiving, at a modem of a user equipment (UE), a UE configuration from a base station based on UE band combination constraint information, configuring the UE, by a processor of the UE, according to the UE configuration, and performing a communication with the base station, via the modem of the UE, according to the UE configuration. In an implementation, the disclosure includes transmitting the UE band combination constraint information, such as in the form of receiving a total number of layers supported in a CA band combination, and wherein receiving the UE configuration further comprises receiving a CA combination and a BPC configuration in response to the UE band combination constraint information.

Fig. 3