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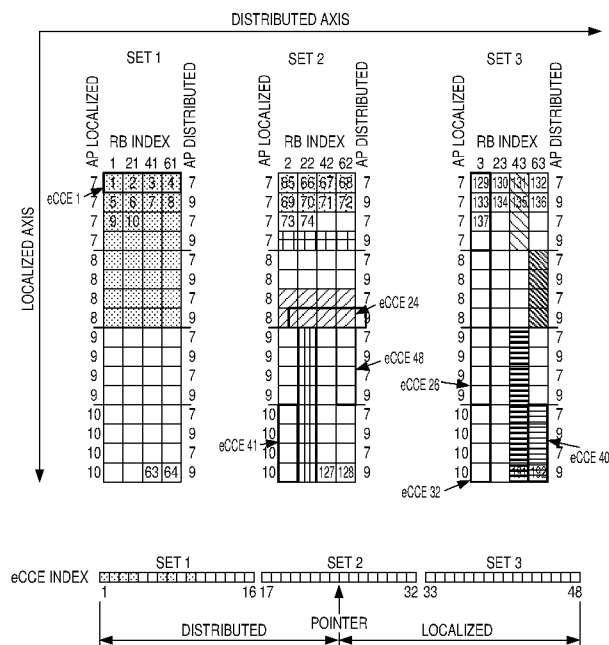


FIG. 16

(57) Abstract: Techniques for supporting both localized and frequency-distributed control channel messages in the same enhanced control region are disclosed. An example method begins with receiving (2010) a downlink signal comprising an enhanced control region consisting of at least two sets of physical resource block (PRB) pairs. The method continues with the forming (2020) of one or more distributed enhanced control-channel elements (eCCEs) from a first set of PRB pairs by aggregating physical layer building blocks from multiple PRB pairs to form each distributed eCCE. One or more localized eCCEs are formed (2030) from a second set of PRB pairs by aggregating physical layer building blocks such that each of the localized eCCEs is formed from physical layer building blocks from within a single PRB pair of the second set. Control channel message candidates are formed (2050) from the distributed eCCEs and localized eCCEs, respectively, and decoded (2060).

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