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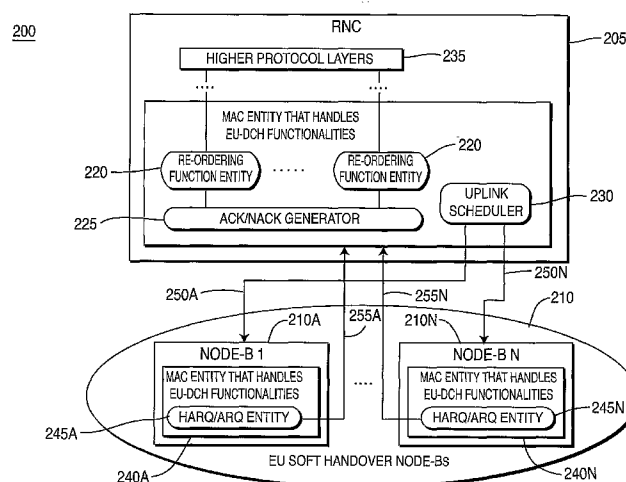
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(54) Title: WIRELESS COMMUNICATION METHOD AND APPARATUS WITH RECONFIGURABLE ARCHITECTURE FOR SUPPORTING AN ENHANCED UPLINK SOFT HANDOVER OPERATION



(57) Abstract: A method and apparatus for supporting an enhanced uplink soft handover (EU-SHO) operation for a wireless transmit/receive unit (WTRU). The apparatus may be a multi-cell wireless communication system including at least two EU-SHO Node-Bs and a radio network controller (RNC). The RNC includes a medium access control (MAC) entity that handles enhanced uplink dedicated channel (EU-DCH) functionalities. The RNC is configured according to a first architecture when an EU-SHO operation for the WTRU is not taking place, and the RNC is configured according to a second architecture when the WTRU is operating in an EU-SHO operation. According to the second architecture, the MAC entity of the RNC includes an ACK/NACK generator which generates signals indicating whether or not an EU transmission originating from the WTRU has been successfully received by the RNC, and an uplink scheduler for scheduling an EU transmission for the WTRU.

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