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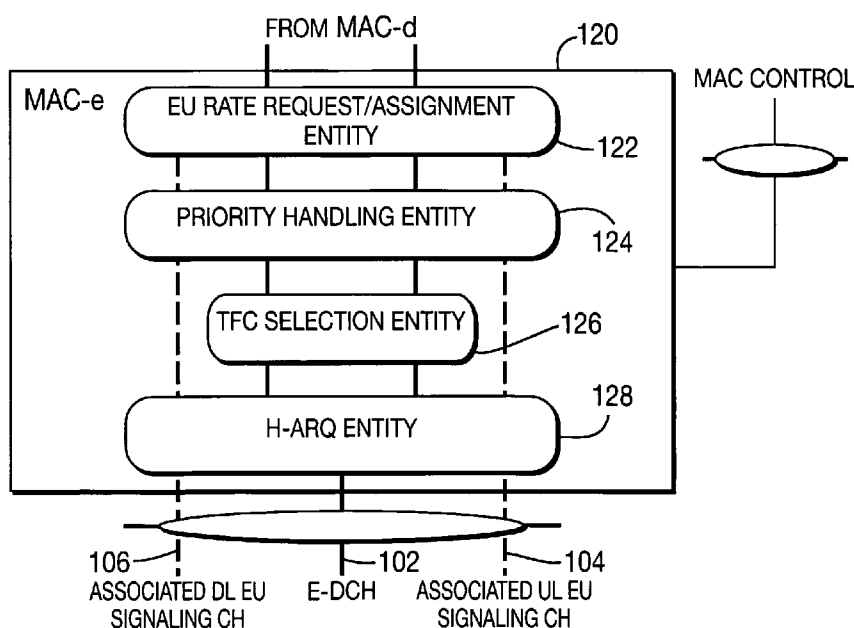
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(54) Title: MAC LAYER ARCHITECTURE FOR SUPPORTING ENHANCED UPLINK



(57) Abstract: A medium access control (MAC) layer architecture and functionality for supporting enhanced uplink (EU). A MAC entity for EU, (i.e., a MAC-e entity) (120), is incorporated into a wireless transmit/receive unit (WTRU), a Node-B and a radio network controller (RNC). The WTRU MAC-e handles hybrid-automatic repeat request (H-ARQ) (128) transmissions and retransmissions, priority handling, MAC-e (120) multiplexing, and transport format combination (TFC) (126) selection. The Node-B MAC-e (120) entity handles H-ARQ (128) transmissions and retransmissions, E-DCH (102) scheduling and MAC-e (120) de-multiplexing. The RNC MAC-e entity provides in-sequence delivery and handles combining of data from different Node-Bs.

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