

METHOD AND APPARATUS FOR ENHANCED TRANSPORT FORMAT COMBINATION SELECTION IN WIRELESS COMMUNICATIONS

Abstract

Efficient enhanced transport format combination (E-TFC) selection methods and apparatus support flexible radio link control (RLC) packet data unit (PDU) size and medium access control (MAC) layer segmentation. Methods for filling an enhanced medium access control (MAC-e) packet data unit (PDU) with data from logical channels as part of E-TFC selection are provided. In one embodiment, the E-TFC selection algorithm employs a single request from the MAC layer to the RLC layer to request the number of bits it is allowed to send for a logical channel to create enhanced MAC-e PDUs. In another embodiment, the MAC entity performs multiple requests to the RLC entity. In another embodiment, the MAC entity makes a single request to the RLC entity to create one or more enhanced MAC-e PDUs of a set size. A technique is also provided for maintaining a guaranteed bit rate (GBR) for non-scheduled data flows with variable-length headers.

Fig. 3A