ABSTRACT

METHOD AND APPARATUS FOR SUPPORTING DATA TRANSMISSION IN A MULTI-CARRIER COMMUNICATION SYSTEM

Techniques for supporting data transmission on multiple carriers in a wireless communication system are described, A user equipment (UE) may determine available transmit power for data transmission on multiple carriers. The UE may distribute the available transmit power Lo multiple carriers (e.g., using uniform power distribution, greedy filling, water filling, etc.) to obtain allocated transmit power for data for each carrier. The UE may send at least one resource request with information indicative of the allocated transmit power for each of the multiple carriers to a Node B. The UE may receive at least one resource grant with information indicative of granted transmit power for each of at least one carrier, which may be all or a subset of the multiple carriers. The UE may send data on the at least one carrier and may limit its transmit power for each carrier to the granted transmit power for that carrier.

Figure 6