ABSTRACT

FAST CARRIER ALLOCATION IN MULTI-CARRIER SYSTEMS

Providing for fast allocation of additional carriers (402) in multi-carrier wireless' communication systems is described herein. By way of example, high layer protocols can be employed to allocate additional carriers to UEs (304) in a wireless network. Additionally, management of the additional carriers can be accomplished via high, speed lower layer signaling protocols (206B). Management can involve activating/deactivating the ' additional carriers, instructing the UE to provide carrier feedback, monitor pilot or control channels of such carriers, or the like. Because lower layer signaling is relatively fast, activation or deactivation of the additional carrier can be quickly implemented in response to contemporaneous changes in channel conditions. Thus, changes to signal quality or network loading can be determined and utilized to customize carrier activation in near real-time, providing efficient resource allocation' while conserving UE battery life.

Figure 3