ABSTRACT

METHODS AND APPARATUS FOR USE IN A WIRELESS COMMUNICATIONS SYSTEM THAT USES A MULTI-MODE BASE STATION

A multi-mode base station includes a transmit standby mode and an active mode. Transmit standby mode of base station operation is a low power/low interference level of operation as compared to active mode. In transmit standby mode at least some of the synchronization signaling such as pilot tone signaling is reduced in power level and/or rate with respect to the active mode. In transmit standby mode, the base station has no active state registered wireless terminals being serviced but may have some sleep state registered wireless terminals being serviced. Mode transitions from active to transmit standby may be in response to: a detected period of inactivity, scheduling information, base station mode change signals, and/or detected wireless terminal state transition. Mode transitions from transmit standby to active may be in response to: scheduling information, access signals, wake-up signals, hand-off signals, wireless terminal state change signals, and/or base station mode change signals.

Figure 13A