

ABSTRACT**UPLINK TIMING CONTROL**

Systems and methodologies are described that facilitate evaluating and utilizing timing updates in a wireless communications network. A base station can transmit timing adjustment commands to mobile devices as needed as opposed to a periodic timing update where timing adjustment commands are always sent within a certain period. However, the mobile devices need to stay awake to monitor the timing adjustment message resulting in high power consumption. On the other hand, with periodic update, the mobile devices can wake up to check whether there is a timing adjustment for itself and, if not, return to a sleep mode. With the proposed method, a mobile device can sleep for a period of time to check for timing adjustment commands upon waking. Thus, both the mobile power consumption and downlink signaling overhead are reduced.

Figure 6