

POWER AMPLIFIER POWER MANAGEMENT IN USER EQUIPMENT

ABSTRACT OF THE DISCLOSURE

Apparatus and methods for power amplifier power management are disclosed. In certain embodiments, a mobile device includes a transceiver that generates a radio frequency signal, a front-end system including a first power amplifier module that amplifies the radio frequency signal, and a power management system including an envelope tracking power management unit that provides an envelope tracking supply voltage to the first power amplifier module, and a first average power tracking power management unit that provides an average power tracking supply voltage to the first power amplifier module. The first power amplifier module is configured to selectively switch between the envelope tracking supply voltage and the average power tracking supply voltage.

Fig. 5