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(12) United States Patent

Tofighbakhsh et al.

(54) CONTROLLING WIRELESS TRANSITION TIMERS BASED ON APPLICATION AND CONTENT

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(57) ABSTRACT

Wireless transition timers associated with wireless transition states are adaptively controlled in relation to use of applications by user equipment (UE). A UE can include a transition management component (TMC) that can adaptively control wireless transition timers associated with wireless states based on application type, session content, or other factors. The TMC monitors data flow associated with an application and, for a current or subsequent communication session, controls the length of wireless transition timers and switching between wireless states to improve UE, application, and/or network performance while maintaining QOE for the user. The TMC can access a timer look-up table that maps wireless transition timers to application type, content type, user behavior, or other factors. The TMC also can desirably control maintaining persistence or always-on connections by controlling switching between wireless states using the adapted wireless transition timers.

16 Claims, 13 Drawing Sheets

