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(54) Title: SYNCHRONIZATION IN TDMA SYSTEMS IN A NON-REAL-TIME FASHION

(57) Abstract

A method and apparatus for synchronization between a base station sub-system (250) and a mobile station (200). The mobile station (200) listens for a message frame number which is generated by the base station sub-system (250). The mobile station (200) includes a mobile frame number counter (280) which tracks the progression of frame numbers. When first powered-up, the mobile frame number counter (280) may not be synchronized with the base station sub-system (250). The frame numbers of the base station sub-system (250) and the mobile frame number counter (280) values are continuously incremented to track the progression of frame numbers in real-time. To effect synchronization, a received and decoded frame number is loaded into the counter (280). Then, a time-lag is calculated which represents the delay inherent in receiving and decoding, within the mobile station and its components, frame numbers from the base station sub-system (250). The time lag is then added to the mobile frame number counter (280) of the mobile station so that the mobile frame number counter is synchronized with the base station sub-system (250).

