Title (en)
IN-BAND SIGNALLING FOR SYNCHRONIZATION IN A VOICE COMMUNICATIONS NETWORK

Title (de)
INBAND SIGNALISIERUNG ZUR SYNCHRONISATION IN EINEM SPRACH-KOMMUNIKATIONS-NETZWERK

Title (fr)
SIGNALISATION INTRABANDE POUR LA SYNCHRONISATION DANS UN RESEAU DE COMMUNICATIONS VOCALES

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Abstract (en)
[origin: WO0103344A1] Methods for determining a system latency of an audio call path of a voice communications network, and for synchronizing a remote unit (108) with a reference oscillator of a reference station (102) involve transmitting a reference signal (106) over the audio call path from the reference station (102) to the remote unit (108), where a reply signal (112) is generated and transmitted back to the reference station (102) over the call path after a preselected reply delay interval (tdel). A round-trip time difference (tRT) is used to determine total system latency, which is then taken into account in synchronizing the remote unit (108) with the reference oscillator. The reference and reply signals (106, 112) are generated as audio-frequency signals resembling human voice sounds to avoid destructive attenuation by the voice communications network. One embodiment includes a wireless telephone unit having an on-board SPS receiver. The SPS receiver includes an oscillator that can be synchronized using the method to improve performance of the SPS receiver. Convenient and efficient methods of synchronization and location data reporting within existing wireless communication network infrastructures are disclosed.

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