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(54) Title: METHOD AND APPARATUS FOR PROVIDING A CONE OF SILENCE IN A CELLULAR COMMUNICATION SYSTEM

(57) Abstract

In a communications network, a remote unit (125) communicates with another user (30) via at least one base station (B_{1A}). The network has a plurality of base stations (B_{1A}-B_{1E}) controlled by a mobile switching center (MSC-I). Each base station of the plurality of base stations (B_{1A}-B_{1E}) transmits an identifying pilot signal. Defining an area in which communication between a set of the base stations and the remote unit (125) is forbidden, an auxiliary antenna (130) transmits a silent region identifying pilot signal. The remote unit (125) measures a signal strength of a set of identifying pilot signals corresponding to a neighbor set of base stations (B_{2A}-B_{2B}) and measures a signal strength of the silent region identifying pilot signal. The remote unit (125) sends a pilot strength measurement report to the mobile switching center (MSC-I) via a first base station (B_{1A}) with which the remote unit (125) has established communication. A handoff of the established communication between the remote unit (125) and the first base station (B_{1A}) is initiated if the pilot strength measurement report comprises an entry corresponding to the silent region identifying pilot signal.

