

ABSTRACT OF THE DISCLOSURE

CALL TRANSFER WITHIN CELLULAR COMMUNICATIONS SYSTEMS

A system and method provides multiple sequential call-forwarding transfers to a sequence of C-numbers within a conventional cellular radio communications system by providing a unique identifier for each call and enabling a home location register (HLR) (14) to coordinate and disseminate multiple calls made to the same mobile station. The HLR (14) stores, within a subscriber database, a sequence of C-numbers on a call-forwarding priority list to which calls are to be forwarded in the event a call cannot be completed to the mobile station. Each C-number is associated with sets of unique identification numbers and time stamps. When an incoming call is received at an originating mobile switching center (MSC) (11), a transfer-to-number request message (86), containing a unique number identifying the request, is transmitted from the MSC (11) to the HLR (14) containing the subscriber database. In response, the HLR (14) analyzes the request, searches the C-number priority list, and transmits to the MSC (11), the optimum C-number for completing the call. The HLR (14) then updates the time stamp associated with that particular C-number and unique identifier. The MSC (11) then attempts to complete the call. If the call cannot be completed, the process is repeated until the call is completed, the call is terminated, or the call-forwarding priority list is exhausted.

(Figure 5)

