ADAPTIVE ADMISSION CONTROL METHOD AND APPARATUS FOR GUARANTEING HANDOFF QOS IN A WIRELESS NETWORK

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References Cited
U.S. PATENT DOCUMENTS

ABSTRACT

An adaptive control apparatus for keeping a dropping probability of a handoff call requested without user mobility information below a predefined level, to guarantee a quality of service (QoS). The apparatus adaptively controls an admission threshold of each cell in a wireless network to maintain the handoff dropping probability below a predefined level. The admission threshold is dynamically adjusted based on handoff drop events. The apparatus can guarantee QoS and maximize channel utilization. Since the apparatus is simply based on the handoff drop events of each cell rather than mobility of the respective calls, it is possible to remarkably decrease the complexity as compared with the existing mobile-oriented apparatus. In addition, the apparatus can solve the inter-cell unfairness problem.

26 Claims, 30 Drawing Sheets