Inter-Cell-Interference Mitigation Scheme in Wireless Communication System

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Abstract: Mobile communication has been developing very rapidly since it appeared. However, although mobile communication market has been rapidly developing, many mobile users are not offered good quality of service (QoS) due to increment of the amount of data traffic. Recently, femtocell is very hot issue in mobile communication because femtocell can solve the problems of data traffic and offer better QoS to mobile users. However, the deployment of femtocell in existing macrocell coverage area is not so simple due to the influence of inter-cell-interference (ICI) with existing macrocell. Thus, this paper proposes femtocell scheme which is able to reduce the influence of ICI to deploy femtocell easily.

Keywords : CDD, femtocell, interference, macrocell, OFDM

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