ABSTRACT

METHOD AND APPARATUS FOR USING UPLINK CONTROL INFORMATION FOR INTER-CELL DECODING AND INTERFERENCE CANCELLATION

Techniques for supporting data transmission on the uplink in a wireless network are described. In an aspect, a user equipment (UE) may send a data transmission to a serving base station and may send uplink control information (UCI) to a non-serving base station. The UCI may include pertinent information to allow the non-serving base station to process the data transmission from the UE. In one design, the UCI may allow the non-serving base station to estimate the interference due to the data transmission from the UE and to cancel the interference at the non-serving base station. The interference cancellation may improve the received signal quality at the non-serving base station. After the interference cancellation, the non-serving base station may process a data transmission from another UE served by the base station.

Figure 2A