Secondary eNB (SeNB) which may be used for exchanging user plane data. This form of dual connectivity may also be referred to as Inter-eNB Carrier Aggregation (inter-eNB CA). In this case, the WTRU may be configured with different MAC entities, one for each configured Uu interface.

[0005] Some prioritization and power scaling mechanisms have been specified for intra-eNB CA, however these mechanisms involve minimal if any coordination between schedulers, and control plane data is only transmitted using a single Uu interface.

## SUMMARY

[0006] Methods and devices for offloading and/or aggregation of resources to coordinate uplink transmissions when interacting with different schedulers are disclosed herein. A method in a WTRU includes functionality for coordinating with a different scheduler for each eNB associated with the WTRU's configuration. Disclosed methods include autonomous WTRU grant selection and power scaling, and dynamic prioritization of transmission and power scaling priority.

[0006a] According to an aspect, there is provided a method for allocating uplink transmission power of a wireless transmit/receive unit (WTRU) during a time interval, the method comprising: configuring the WTRU with a first minimum guaranteed power for first uplink transmissions that use uplink resources of at least one cell of a first cell group (CG); configuring the WTRU with a second minimum guaranteed power for second uplink transmissions that use uplink resources of at least one cell of a second CG; wherein the first minimum guaranteed power and the second minimum guaranteed power are each a ratio of a total power (Pcmax) available to the WTRU for uplink transmissions during the time interval; and on a condition that, during the time interval, an earliest transmission is scheduled to occur using the uplink resources of the at least one cell of the first CG, allocating the second minimum guaranteed power for the second uplink transmissions, and allocating the first minimum guaranteed power plus any difference between Pcmax and a sum of the first minimum guaranteed power and the second minimum guaranteed power for the first uplink transmissions; and on a

condition that, during the time interval, the earliest transmission is scheduled to occur using the uplink resources of the at least one cell of the second CG, allocating the first minimum guaranteed power for the first uplink transmissions, and allocating the second minimum guaranteed power plus any difference between Pcmax and the sum of the first minimum guaranteed power and the second minimum guaranteed power for the second uplink transmissions.

[0006b] According to another aspect, there is provided a transmit/receive unit (WTRU) configured for allocating uplink transmission power of a wireless during a time interval, the WTRU comprising: circuitry adapted to configure the WTRU with a first minimum guaranteed power for first uplink transmissions that use uplink resources of at least one cell of a first cell group (CG); and circuitry adapted to configure the WTRU with a second minimum guaranteed power for second uplink transmissions that use uplink resources of at least one cell of a second CG; wherein the first minimum guaranteed power and the second minimum guaranteed power are each a ratio of a total power (Pcmax) available to the WTRU for uplink transmissions during the time interval; and on a condition that, during the time interval, an earliest transmission is scheduled to occur using the uplink resources of the at least one cell of the first CG, allocating the second minimum guaranteed power for the second uplink transmissions, and allocating the first minimum guaranteed power plus any difference between Pcmax and a sum of the first minimum guaranteed power and the second minimum guaranteed power for the first uplink transmissions; and on a condition that, during the time interval, the earliest transmission is scheduled to occur using the uplink resources of the at least one cell of the second CG, allocating the first minimum guaranteed power for the first uplink transmissions, and allocating the second minimum guaranteed power plus any difference between Pcmax and a sum of the first minimum guaranteed power and the second minimum guaranteed power for the second uplink transmissions.

## BRIEF DESCRIPTION OF THE DRAWINGS

[0007] A more detailed understanding may be had from the following description, given by way of example in conjunction with the accompanying drawings wherein:

[0008] FIG. 1A is a system diagram of an example communications system in which one or more disclosed embodiments may be implemented;

[0009] FIG. 1B is a system diagram of an example wireless transmit/receive unit (WTRU) that may be used within the communications system illustrated in FIG. 1A; and,

[0010] FIG. 1C is a system diagram of an example radio access network and an example core network that may be used within the communications system illustrated in FIG. 1A.

[0011] FIG. 2 is a system diagram of an example system operating using dual connectivity.