

(12) United States Patent

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(54) POWER CONTROL FOR TRANSMISSION OF UPLINK CONTROL INFORMATION ON TWO CELLS IN CARRIER AGGREGATION

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ABSTRACT (57)

Methods and apparatus are provided for a network to control a power of transmissions from a User Equipment (UE) on a first Cell Group (CG) or on a second CG depending on a communication delay between the two CGs. Methods and apparatus are also provided for a UE configured with a first CG and a second CG in Carrier Aggregation (CA) operation to determine whether or not to transmit a channel conveying control information when the UE needs to reduce a respective nominal transmission power. Methods and apparatus are additionally provided for a network to transmit and for a UE to receive a Transmission Power Control (TPC) command for transmission on a cell of a first CG or on a cell of a second CG.

20 Claims, 8 Drawing Sheets

