CLAIMS

1. A method for receiving, by a user equipment (UE), downlink signals in a wireless communication system, the method comprising:

starting, by the UE, a downlink (DL) discontinuous reception (DRX) retransmission timer for a DL hybrid automatic repeat and request (HARQ) process of the UE;

receiving, by the UE, a physical downlink control channel (PDCCH) indicating an uplink (UL) transmission; and

stopping, by the UE, the DL DRX retransmission timer for the DL HARQ process based on receiving the PDCCH indicating the UL transmission,

wherein the UE supports multiple DL HARQ processes including the DL HARQ process, and

wherein stopping, by the UE, the DL DRX retransmission timer for the DL HARQ process based on receiving the PDCCH indicating the UL transmission comprises:

stopping all of respective DL DRX retransmission timers for the multiple DL HARQ processes based on receiving the PDCCH indicating the UL transmission.

2. The method according to claim 1, wherein the UE stops the DL DRX retransmission timer for the DL HARQ process based on an UL grant configured for a UL HARQ process.

3. The method according to claim 1, wherein the UE is a UE operating in half duplex.

4. The method according to claim 1, wherein the UE is a narrowband internet of things (NB-IoT) UE.

5. The method according to claim 1, wherein the UE stops the DL DRX retransmission timer for the DL HARQ process based on receiving the PDCCH indicating the UL transmission, in a state where the UE does not receive a PDCCH indicating a DL transmission for the DL HARQ process.

6. The method according to claim 1, further comprising:

receiving, by the UE, DRX configuration information including a value for the DL DRX retransmission timer.

7. The method according to claim 1, further comprising:

performing, by the UE, the UL transmission.

8. A device for a user equipment (UE) in a wireless communication system, the device comprising:

at least one processor; and

at least one computer memory that is operably connectable to the at least one processor and that has stored thereon instructions which, when executed, cause the at least one processor to perform operations comprising:

starting a downlink (DL) discontinuous reception (DRX) retransmission timer for a DL hybrid automatic repeat and request (HARQ) process;

receiving a physical downlink control channel (PDCCH) indicating an uplink (UL) transmission; and

stopping the DL DRX retransmission timer for the DL HARQ process based on receiving the PDCCH indicating the UL transmission,

wherein the UE supports multiple DL HARQ processes including the DL HARQ process, and

wherein stopping, by the UE, the DL DRX retransmission timer for the DL HARQ process based on receiving the PDCCH indicating the UL transmission comprises:

stopping all of respective DL DRX retransmission timers for the multiple DL HARQ processes based on receiving the PDCCH indicating the UL transmission.

9. The device according to claim 8, wherein the operations further comprise:

stopping the DL DRX retransmission timer for the DL HARQ process based on an UL grant configured for a UL HARQ process.

10. The device according to claim 8, wherein the UE is a UE operating in half duplex.

11. The device according to claim 8, wherein the UE is a narrowband internet of things (NB-IoT) UE.

12. The device according to claim 8, wherein the operations stop the DL DRX retransmission timer for the DL HARQ process based on receiving the PDCCH indicating the UL transmission, in a state where a PDCCH indicating a DL transmission for the DL HARQ process is not received.

13. The device according to claim 8, wherein the operations further comprise:

receiving DRX configuration information including a value for the DL DRX retransmission timer.

14. The device according to claim 8, wherein the operations further comprise:

transmitting, via a transceiver of the UE, the UL transmission.