

WHAT IS CLAIMED IS:

1. A method for starting a discontinuous reception (DRX) timer, performed by a terminal, comprising:

starting the DRX timer according to a transmission type of at least one of an uplink transmission or a downlink transmission;

wherein the transmission type comprises one of:

an uplink transmission based on configured grant (CG);

an uplink transmission based on physical downlink control channel (PDCCH) dynamic scheduling;

a downlink transmission based on PDCCH dynamic scheduling; or

a downlink transmission based on configured downlink assignment;

wherein the method further comprising:

determining the transmission type of the uplink transmission is the uplink transmission based on PDCCH dynamic scheduling; and

wherein starting the DRX timer comprises:

starting an uplink DRX retransmission timer and an uplink DRX hybrid automatic repeat request (HARQ) round-trip-time (RTT) timer according to a predetermined processing pattern.

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

determining the transmission type of the uplink transmission is the uplink transmission based on CG; and

increasing a timing period of an uplink DRX hybrid automatic repeat request (HARQ) round-trip-time (RTT) timer by a predetermined duration.

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

determining the transmission type of the uplink transmission is the uplink transmission based on CG; and

disabling an uplink DRX hybrid automatic repeat request (HARQ) round-trip-time (RTT) timer.

4. The method according to claim 3, wherein disabling the uplink DRX HARQ RTT timer comprises:

determining an HARQ retransmission being disabled, and disabling the uplink DRX HARQ RTT timer.

5. The method according to claim 1, wherein the predetermined processing pattern comprises one of:

- a pattern of starting the uplink DRX retransmission timer after receiving data on the PDCCH;

- a pattern of starting the uplink DRX retransmission timer from a first orthogonal frequency division multiplexing (OFDM) symbol after the uplink transmission ends;

- a pattern of starting the uplink DRX retransmission timer from an initial orthogonal frequency division multiplexing (OFDM) symbol of the uplink transmission;

- a pattern of starting the uplink DRX retransmission timer from a first orthogonal frequency division multiplexing (OFDM) symbol after a first retransmission of the uplink transmission;

- a pattern of starting the uplink DRX retransmission timer after generating a corresponding physical uplink shared channel (PUSCH) data packet according to a PDCCH indication; or

- a pattern of starting the uplink DRX retransmission timer after a processing delay when data on the PDCCH are received.

6. A terminal, configured to perform the method of any one of claims 1 to 5.

7. A computer storage medium having stored thereon computer executable instructions that, when executed by a processor, the method of any one of claims 1 to 5 is performed.