

【CLAIMS】

1. A method of reporting received power related information related to a beam reporting by a user equipment (UE) in a wireless communication system, the method comprising:

receiving downlink control information (DCI) that triggers a reporting of the received power related information;

receiving a CSI-reference signal (CSI-RS) for the reporting of the received power related information; and

reporting, to a base station, the received power related information that is determined based on the received CSI-RS,

wherein the reporting of the received power related information is performed after at least a minimum required time from a timing of receiving the DCI,

wherein the minimum required time is configured based on (i) a first timing parameter related to a time duration between a last timing of the CSI-RS and a reporting timing of the received power related information, and (ii) a second timing parameter related to a time duration between a timing of a DCI triggering of the CSI-RS and a reception timing of the CSI-RS, and

wherein the method further comprises reporting, to the base station, information regarding the first timing parameter and the second timing parameter as UE capability information.

2. The method of claim 1, wherein the received power related information is based on reporting information that comprises a CSI-RS resource indicator (CRI) and a reference signal received power (RSRP).

3. The method of claim 2, wherein the minimum required time is configured as a sum of the first timing parameter and the second timing parameter.

4. The method of claim 3, wherein the CSI-RS is configured to be an aperiodic CSI-RS.

5. The method of claim 1, wherein a number of CSI processing units that are utilized to report the received power related information is equal to 1.

6. The method of claim 1, wherein:

(i) the first timing parameter indicates a UE capability for a minimum required time between the last timing of the CSI-RS and the reporting timing of the received power related information, and

(ii) the second timing parameter indicates the UE capability for a minimum required time between the timing of DCI triggering of the CSI-RS and the reception timing of the CSI-RS.

7. A user equipment (UE) configured to report received power related information related to a beam reporting in a wireless communication system, the UE comprising:

a transceiver;

at least one processor; and

at least one memory functionally connected to the at least one processor,

wherein the at least one processor is configured to control operations comprising:

receiving, through the transceiver, downlink control information (DCI) that triggers a reporting of the received power related information;

receiving, through the transceiver, a CSI-reference signal (CSI-RS) for the reporting of the received power related information; and

reporting, to a base station through the transceiver, the received power related information that is determined based on the received CSI-RS,

wherein the reporting of the received power related information is performed after at least a minimum required time from a timing of receiving the DCI,

wherein the minimum required time is configured based on (i) a first timing parameter related to a time duration between a last timing of the CSI-RS and a reporting timing of the received power related information, and (ii) a second timing parameter related to a time duration between a timing of a DCI triggering of the CSI-RS and a reception timing of the CSI-RS, and

wherein the operations further comprise reporting, to the base station, information regarding the first timing parameter and the second timing parameter as UE capability information.

8. The UE of claim 7, wherein the received power related information is based on reporting information that comprises a CSI-RS resource indicator (CRI) and a reference signal received power (RSRP).

9. The UE of claim 8, wherein the minimum required time is configured as a sum of the first timing parameter and the second timing parameter.

10. The UE of claim 9, wherein the CSI-RS is configured to be an aperiodic CSI-RS.

11. The UE of claim 7, wherein a number of CSI processing units that are utilized to report the received power related information is equal to 1.

12. The UE of claim 7, wherein for the first timing parameter, the reporting timing of the received power related information corresponds to a starting symbol of a Physical Uplink Shared Channel (PUSCH) containing the received power related information.

13. A base station configured to receive a reporting of received power related information related to beam reporting in a wireless communication system, the base station comprising:

a transceiver;

at least one processor; and

at least one memory functionally connected to the at least one processor,

wherein the at least one processor is configured to control operations comprising:

transmitting, through the transceiver, downlink control information (DCI) that triggers the reporting of the received power related information;

transmitting, through the transceiver, a CSI-reference signal (CSI-RS) for the reporting of the received power related information; and

receiving, from a user equipment (UE) through the transceiver, the reporting of the received power related information that is determined based on the CSI-RS,

wherein the reporting of the received power related information is performed after at least a minimum required time from a timing of receiving, by the UE, the DCI,

wherein the minimum required time is configured based on (i) a first timing parameter related to a time duration between a last timing of the CSI-RS and a reporting timing of the received power related information, and (ii) a second timing parameter related to a time duration between a timing of a DCI triggering of the CSI-RS and a reception timing of the CSI-RS, and

wherein the operations further comprise receiving, from the UE, information regarding the first timing parameter and the second timing parameter as UE capability information.