CLAIMS

1. A method of transmitting a sounding reference signal, SRS, by a user equipment, UE, the method comprising:

receiving SRS configuration information related with configuration of SRS resources;

transmitting a first SRS for a first antenna port in a first SRS resource based on the SRS configuration information; and

transmitting a second SRS for a second antenna port in a second SRS resource based on the SRS configuration information,

wherein the first SRS resource and the second SRS resource are configured in a same slot,

wherein the first SRS resource includes one or more first SRS symbols and the second SRS resource includes one or more second SRS symbols,

wherein the SRS configuration information includes consecutive Orthogonal Frequency Division Multiplexing, OFDM, symbols configured for the first SRS resource and the second SRS resource,

wherein the SRS configuration information includes a parameter related to SRS antenna switching,

wherein the first SRS and the second SRS are transmitted according to antenna switching based on the parameter,

wherein at least one empty symbol is configured between the first SRS resource and the second SRS resource for antenna switching, and

wherein each of the at least one empty symbol is a symbol in time domain.

2. The method of claim 1,

wherein the SRS configuration information includes an indicator for antenna switching, and

wherein the each of the at least one empty symbol is a symbol in which the UE does not transmit data.

3. The method of claim 1,

wherein the at least one empty symbol is configured based on a multiple of 15 kHz subcarrier-spacing.

4. The method of claim 1,

wherein the number of the one or more first SRS symbols are one, two or four.

5. The method of claim 1,

wherein the number of the one or more second SRS symbols are one, two or four.

6. The method of claim 1,

wherein the SRS configuration information further includes information on frequency.

7. The method of claim 6, wherein the information on frequency includes frequency position and frequency hopping.

8. The method of claim 1,

wherein the SRS configuration information includes a number of SRS ports and a transmission comb type.

9. The method of claim 1, wherein the SRS configuration information is received through any one of radio resource control, RRC, a medium access control channel element, MAC CE, or downlink control information, DCI.

10. A user equipment, UE, for transmitting a sounding reference signal, SRS, the UE comprising:

a transceiver connected with at least one processor; and

the at least one processor configured to:

receive SRS configuration information related with configuration of SRS resources;

transmit a first SRS for a first antenna port in a first SRS resource based on the SRS configuration information; and

transmit a second SRS for a second antenna port in a second SRS resource based on the SRS

configuration information,

wherein the first SRS resource and the second SRS resource are configured in a same slot,

wherein the first SRS resource includes one or more first SRS symbols and the second SRS resource includes one or more second SRS symbols,

wherein the SRS configuration information includes consecutive Orthogonal Frequency Division Multiplexing, OFDM, symbols configured for the first SRS resource and the second SRS resource,

wherein the SRS configuration information includes a parameter related to SRS antenna switching,

wherein the first SRS and the second SRS are transmitted according to antenna switching based on the parameter,

wherein at least one empty symbol is configured between the first SRS resource and the second SRS resource for antenna switching, and

wherein each of the at least one empty symbol is a symbol in time domain.

11. The UE of claim 10,

wherein the SRS configuration information includes an indicator for antenna switching, and

wherein the each of the at least one empty symbol is a symbol in which the UE does not transmit data.

12. The UE of claim 10,

wherein the at least one empty symbol is configured based on a multiple of 15 kHz subcarrier-spacing.

13. The UE of claim 10, wherein the number of the one or more first SRS symbols are one, two or four.

14. The UE of claim 10,

wherein the number of the one or more second SRS symbols are one, two or four.

15. The UE of claim 10,

wherein the SRS configuration information further includes information on frequency.