

CLAIMS

What is claimed is:

1. A sidelink information transmission method, applied to a first terminal side, wherein the sidelink information transmission method comprises:

receiving sidelink control information (SCI); and

determining, based on a sidelink transmission identifier indicated by the SCI, whether to receive or demodulate a physical sidelink shared channel (PSSCH) or not,

wherein the sidelink transmission identifier comprises at least one of a broadcast identifier, a multicast identifier, and a unicast identifier;

characterized in that the step of determining, based on a sidelink transmission identifier indicated by the SCI, whether to receive or demodulate a physical sidelink shared channel PSSCH or not comprises one of the following:

receiving or demodulating the PSSCH if the SCI indicates the broadcast identifier;

receiving or demodulating the PSSCH if the multicast identifier indicated by the SCI is a target multicast identifier; and

receiving or demodulating the PSSCH if the unicast identifier indicated by the SCI is a target unicast identifier;

wherein after the step of determining, based on a sidelink transmission identifier indicated by the SCI, whether to receive or demodulate a physical sidelink shared channel PSSCH or not, the method further comprises:

if it is determined to receive or demodulate the PSSCH, feeding back response information based on a PSSCH processing result, wherein the response information is encoded and fed back at a physical layer of the first terminal~~wherein the sidelink transmission identifier is determined based on at least some bits of at least one of a layer 2 identity, an application layer identifier, and an address identifier.~~

2. The sidelink information transmission method according to claim 1, wherein the sidelink transmission identifier further comprises at least one of a sender identifier, and a receiver identifier, ~~a broadcast identifier, a multicast identifier, and a unicast identifier.~~

3. The sidelink information transmission method according to claim 2, wherein the step of determining, based on a sidelink transmission identifier indicated by the SCI, whether to receive or demodulate a physical sidelink shared channel PSSCH or not further comprises one of the following:

receiving or demodulating the PSSCH if the sender identifier indicated by the SCI is a target sender identifier; and

receiving or demodulating the PSSCH if the receiver identifier indicated by the SCI is a target receiver identifier;

~~receiving or demodulating the PSSCH if the SCI indicates the broadcast identifier;~~

~~receiving or demodulating the PSSCH if the multicast identifier indicated by the SCI is a target multicast identifier; and~~

~~receiving or demodulating the PSSCH if the unicast identifier indicated by the SCI is a target unicast identifier.~~

4. The sidelink information transmission method according to claim 1, wherein the sidelink transmission identifier is carried in an indicator field of the SCI, or the sidelink transmission identifier is a cyclic redundancy check (CRC) for scrambling the SCI.

5. The sidelink information transmission method according to claim 4, wherein the indicator field comprises one of the following:

a first indicator field comprising at least some bits of the sidelink transmission identifier; and

a second indicator field with a preset quantity of bits, constructed according to a preset rule.

6. The sidelink information transmission method according to claim 4, wherein the indicator field is further used to indicate at least one of response information, a hybrid automatic repeat request (HARQ) process number, resource allocation, and a modulation and coding scheme (MCS).

7. The sidelink information transmission method according to claim 1, wherein after the step of determining, based on a sidelink transmission identifier indicated by the SCI, whether to receive or demodulate a physical sidelink shared channel PSSCH or not, the method further comprises:

if it is determined not to receive or demodulate the PSSCH, performing resource sensing and/or resource reservation based on a resource scheduled or reserved by the SCI; ~~or~~

~~if it is determined to receive or demodulate the PSSCH, feeding back response information based on a PSSCH processing result.~~

8. A terminal, wherein the terminal is a first terminal and comprises:

a receiving module, configured to receive sidelink control information (SCI); and

a first processing module, configured to determine, based on a sidelink transmission identifier indicated by the SCI, whether to receive or demodulate a physical sidelink shared channel (PSSCH) or not,

characterized in that the sidelink transmission identifier comprises at least one of a broadcast identifier, a multicast identifier, and a unicast identifier;

wherein the first processing module comprises one of the following:

a third processing sub-module, configured to receive or demodulate the PSSCH if the SCI indicates the broadcast identifier;

a fourth processing sub-module, configured to receive or demodulate the PSSCH if the multicast identifier indicated by the SCI is a target multicast identifier; and

a fifth processing sub-module, configured to receive or demodulate the PSSCH if the unicast identifier indicated by the SCI is a target unicast identifier;

the terminal further comprises:

a third processing module, configured to: if it is determined to receive or demodulate the PSSCH, feed back response information based on a PSSCH processing result, wherein the response information includes a feedback identifier, and the feedback identifier is a sidelink feedback identifier; and

9. The terminal according to claim 8, wherein the sidelink transmission identifier further comprises at least one of a sender identifier, and a receiver identifier, a broadcast identifier, a multicast identifier, and a unicast identifier.

10. The terminal according to claim 9, wherein the first processing module further comprises one of the following:

a first processing sub-module, configured to receive or demodulate the PSSCH if the sender identifier indicated by the SCI is a target sender identifier; and

a second processing sub-module, configured to receive or demodulate the PSSCH if the receiver identifier indicated by the SCI is a target receiver identifier;

~~a third processing sub-module, configured to receive or demodulate the PSSCH if the SCI indicates the broadcast identifier;~~

~~a fourth processing sub-module, configured to receive or demodulate the PSSCH if the multicast identifier indicated by the SCI is a target multicast identifier; and~~

~~a fifth processing sub-module, configured to receive or demodulate the PSSCH if the unicast identifier indicated by the SCI is a target unicast identifier.~~

11. The terminal according to claim 8, wherein the sidelink transmission identifier is carried in an indicator field of the SCI, or the sidelink transmission identifier is a cyclic redundancy check (CRC) for scrambling the SCI.

12. The terminal according to claim 11, wherein the indicator field comprises one of the following:

a first indicator field comprising at least some bits of the sidelink transmission identifier; and

a second indicator field with a preset quantity of bits, constructed according to a preset rule.

13. The terminal according to claim 11, wherein the indicator field is further used to

indicate at least one of response information, a hybrid automatic repeat request (HARQ) process number, resource allocation, and a modulation and coding scheme (MCS).

14. The terminal according to claim 8, further comprising:

a second processing module, configured to: if it is determined not to receive or demodulate the PSSCH, perform resource sensing and/or resource reservation based on a resource scheduled or reserved by the SCI;

~~a third processing module, configured to: if it is determined to receive or demodulate the PSSCH, feed back response information based on a PSSCH processing result.~~

15. A terminal, wherein the terminal is a second terminal and comprises:

a sending module, configured to send sidelink control information (SCI), wherein the SCI is used to indicate a sidelink transmission identifier,

characterized in that the sidelink transmission identifier comprises at least one of a broadcast identifier, a multicast identifier, and a unicast identifier;

the terminal further comprises:

a receiving module, configured to receive response information, wherein the response information is fed back at a physical layer of the first terminal based on a PSSCH processing result;
~~wherein the sidelink transmission identifier is determined based on at least some bits of at least one of a layer 2 identity, an application layer identifier, and an address identifier.~~

16. The terminal according to claim 15, wherein the sidelink transmission identifier comprises at least one of a sender identifier, and a receiver identifier, ~~a broadcast identifier, a multicast identifier, and a unicast identifier.~~

17. The terminal according to claim 15, wherein the sidelink transmission identifier is carried in an indicator field of the SCI, or the sidelink transmission identifier is a cyclic redundancy check (CRC) for scrambling the SCI.

18. The terminal according to claim 17, wherein the indicator field comprises one of the following:

a first indicator field comprising at least some bits of the sidelink transmission identifier;
and

a second indicator field with a preset quantity of bits, constructed according to a preset rule.

19. The terminal according to claim 17, wherein the indicator field is further used to indicate at least one of response information, a hybrid automatic repeat request (HARQ) process number, resource allocation, and a modulation and coding scheme (MCS).

20. A computer-readable storage medium, wherein the computer-readable storage medium stores a computer program, and when a processor executes the computer program, the steps of

the sidelink information transmission method according to any one of claims 1 to 7 are implemented.