CLAIMS

We claim:

1. A communication method, comprising:

sending, by a first device, a first priority and a second priority to a second device, wherein the first priority is used for the second device in selecting a resource for sidelink transmission of the first device, the first priority is carried in sidelink control information (SCI) on a physical sidelink shared channel (PSSCH), and/or a medium access control control element (MAC CE), and the second priority indicates a priority of the PSSCH, the second priority is carried in SCI on a physical sidelink control channel (PSCCH).

2. The method according to claim 1, wherein,

sending, by the first device, a coordination request to the second device.

3. The method according to claim 2, wherein,

the coordination request comprises the first priority and the second priority.

4. The method according to claim 1, wherein,

the value of the second priority is 1.

5. The method according to claim 1, wherein,

the first priority is carried in SCI 2-C on the PSSCH, the SCI 2-C comprises a fifth field, the fifth field indicates the first priority, the fifth field occupied 3 bits.

6. The method according to claim 1, wherein,

the second priority is carried in SCI 1 on the PSCCH.

7. The method according to claim 2, wherein,

the first priority is obtained based on the coordination request.

8. The method according to claim 1, wherein the first priority is carried in a first sub-protocol data unit, the first sub-protocol data unit is a medium access control sub-protocol data unit, the first sub-protocol data unit comprises a first subheader and a first control element, the first subheader comprises a first field, and the first field indicates a logical channel number.

9. The method according to claim 8, wherein a first value of the first field in the first subheader indicates that the first priority is transmitted.

10. A communication method, comprising:

receiving, by a second device, a first priority and a second priority from a first device, wherein

the first priority is used for the second device in selecting a resource for sidelink transmission of the first device, the first priority is carried in sidelink control information (SCI) on a physical sidelink shared channel (PSSCH), and/or a medium access control control element (MAC CE), and the second priority indicates a priority of the PSSCH, the second priority is carried in SCI on a physical sidelink control channel (PSCCH); and

selecting, by the second device based on the first priority, a resource for sidelink transmission of the first device.

11. The method according to claim 10, wherein,

receiving, by the second device, a coordination request from the first device.

12. The method according to claim 11, wherein,

the coordination request comprises the first priority and the second priority.

13. The method according to claim 10, wherein,

the value of the second priority is 1.

14. The method according to claim 10, wherein,

the first priority is carried in SCI 2-C on the PSSCH, the SCI 2-C comprises a fifth field, the fifth field indicates the first priority, the fifth field occupied 3 bits.

15. The method according to claim 10, wherein,

the second priority is carried in SCI 1 on the PSCCH.

16. The method according to claim 11, wherein,

the first priority is obtained based on the coordination request.

17. The method according to claim 10, wherein the first priority is carried in a first sub-protocol data unit, the first sub-protocol data unit is a medium access control sub-protocol data unit, the first sub-protocol data unit comprises a first subheader and a first control element, the first subheader comprises a first field, and the first field indicates a logical channel number.

18. The method according to claim 17, wherein a first value of the first field in the first subheader indicates that the first priority is transmitted.

19. The method according to claim 10, wherein,

selecting, by the second device, the resource for sidelink transmission of the first device, based on the first priority, a location and a length of a resource sensing window, a quantity of resource selection frequency domain sub-bandwidths, a transmission period, and resource pool information.

20. A wireless apparatus, comprising:

one or more processors; and

a memory, wherein the memory stores instructions, and when executing the instructions stored in the memory, the one or more processors executes operations comprising:

sending a first priority and a second priority to a second device, wherein

the first priority is used for the second device in selecting a resource for sidelink transmission of a first device, the first priority is carried in sidelink control information (SCI) on a physical sidelink shared channel (PSSCH), and/or a medium access control control element (MAC CE), and the second priority indicates a priority of the PSSCH, the second priority is carried in SCI on a physical sidelink control channel (PSCCH).

21. The wireless apparatus according to claim 20, wherein the operations further comprising:

sending a coordination request to the second device.

22. The wireless apparatus according to claim 21, wherein,

the coordination request comprises the first priority and the second priority.

23. The wireless apparatus according to claim 20, wherein,

the value of the second priority is 1.

24. The wireless apparatus according to claim 20, wherein,

the first priority is carried in SCI 2-C on the PSSCH, the SCI 2-C comprises a fifth field, the fifth field indicates the first priority, the fifth field occupied 3 bits.

25. The wireless apparatus according to claim 20, wherein,

the second priority is carried in SCI 1 on the PSCCH.

26. The wireless apparatus according to claim 21, wherein,

the first priority is obtained based on the coordination request.

27. The wireless apparatus according to claim 20, wherein the first priority is carried in a first sub-protocol data unit, the first sub-protocol data unit is a medium access control sub-protocol data unit, the first sub-protocol data unit comprises a first subheader and a first control element, the first subheader comprises a first field, and the first field indicates a logical channel number.

28. The wireless apparatus according to claim 27, wherein a first value of the first field in the first subheader indicates that the first priority is transmitted.

29. A wireless apparatus, comprising:

one or more processors; and

a memory, wherein the memory stores instructions, and when executing the instructions stored in the memory, the one or more processors executes operations comprising:

receiving a first priority and a second priority from a first device, wherein the first priority is used for selecting a resource for sidelink transmission of the first device, the first priority is carried in sidelink control information, SCI, on a physical sidelink shared channel, PSSCH, and/or a medium access control control element MAC CE, and the second priority indicates a priority of the PSSCH, the second priority is carried in SCI on a physical sidelink control channel, PSCCH; and

selecting, based on the first priority, a resource for sidelink transmission of the first device.

30. The wireless apparatus according to claim 29, wherein,

receiving a coordination request from the first device.

31. The wireless apparatus according to claim 30, wherein,

the coordination request comprises the first priority and the second priority.

32. The wireless apparatus according to claim 29, wherein,

the value of the second priority is 1.

33. The wireless apparatus according to claim 29, wherein,

the first priority is carried in SCI 2-C on the PSSCH, the SCI 2-C comprises a fifth field, the fifth field indicates the first priority, the fifth field occupied 3 bits.

34. The wireless apparatus according to claim 29, wherein,

the second priority is carried in SCI 1 on the PSCCH.

35. The wireless apparatus according to claim 30, wherein,

the first priority is obtained based on the coordination request.

36. The wireless apparatus according to claim 29, wherein the first priority is carried in a first sub-protocol data unit, the first sub-protocol data unit is a medium access control sub-protocol data unit, the first sub-protocol data unit comprises a first subheader and a first control element, the first subheader comprises a first field, and the first field indicates a logical channel number.

37. The wireless apparatus according to claim 36, wherein a first value of the first field in the first subheader indicates that the first priority is transmitted.

38. The wireless apparatus according to claim 29, wherein,

selecting the resource for sidelink transmission of the first device, based on the first priority, a location and a length of a resource sensing window, a quantity of resource selection frequency

domain sub-bandwidths, a transmission period, and resource pool information.

39. A first device, configured to implement the method steps as claimed in any one of claims 1 to 9.

40. A second device, configured to implement the method steps as claimed in any one of claims 10 to 19.

41. A communication apparatus, comprising a processor and a communication interface, wherein

the communication interface is configured to implement connection and communication between the communication apparatus and a peripheral; and

the processor is configured to implement the method according to any one of claims 1 to 9 or the method according to any one of claims 10 to 19.

42. A computer-readable storage medium, wherein the computer-readable storage medium stores a computer program, and when the computer program is run, the method according to any one of claims 1 to 9 or the method according to any one of claims 10 to 19 is implemented.