CLAIMS

What is claimed is:

1. A communication method, comprising:

receiving, by a first device, second information from a second device, wherein the second information indicates ~~that the second device provides~~ resource assistance information provided by the second device for the first device;

determining, by the first device, a communication resource according to the resource assistance information.

~~2. The method according to claim 1, wherein~~

~~the second information is used to indicate that the second device provides the resource assistance information for the first device; or~~

~~the second information is used to indicate whether the second device provides the resource assistance information for the first device.~~

~~3~~2. The method according to claim 1~~ or 2~~, before the receiving, by a first device, second information from a second device, further comprising:

sending, by the first device, first information to the second device, wherein the first information is used to request to obtain the resource assistance information.

~~4~~3. The method according to ~~any one of claims 1 to 3~~claim 1 or 2, wherein the second information is carried by a first channel, and the first channel is a physical sidelink feedback channel PSFCH.

~~5~~4. The method according to claim ~~4~~3, wherein

~~when the second information indicates that the second device provides the resource assistance information for the first device, the second information corresponds to a first sequence cyclic shift value of the first channel; or when the second information indicates that the second device does not provide the resource assistance information for the first device, the second information corresponds to a second sequence cyclic shift value of the first channel;~~

~~or~~

~~when the second information indicates that the second device provides the resource assistance information for the first device,~~ the second information corresponds to a third sequence cyclic shift value of the first channel.

~~6~~5. The method according to claim 3 or 4 ~~or 5~~, wherein

~~the first channel is a physical sidelink feedback channel PSFCH; and~~

the second information is carried in a first resource set, wherein the first resource set is a complementary set that is of a resource set used for carrying hybrid automatic repeat request HARQ information and that is comprised in a resource set used for transmitting the PSFCH.

~~7~~6. The method according to ~~claim 6~~ any one of claims 2 to 5, wherein

the first device sends the first information in a first slot, and the first device receives the second information in a second slot; and

the second slot is the 1st slot that comprises the PSFCH and that is after a slot in which the last symbol of the first information is located, or the second slot is the 1st slot that comprises the PSFCH and that is at an interval of N time units from the first slot, wherein N is a positive integer.

7. The method according to any one of claims 1 to 6, wherein a resource carrying the resource assistance information is different from a resource carrying HARQ information.

8. The method according to any one of claims 1 to 7, wherein the resource assistance information is carried in a first resource set and HARQ information is carried in a second resource set.

9. The method according to claim 8, wherein the first resource set and the second resource set are represented by using different bitmaps.

10. The method according to any one of claims 1 to 9, wherein the sequence cyclic shift value of the resource assistance information is 0.

~~8. The method according to claim 4 or 5, wherein~~

~~the second information is carried in a resource set used for transmitting the first channel; and~~

~~the resource set used for transmitting the first channel and a resource set used for transmitting a PSFCH are in frequency division multiplexing; or~~

~~the resource set used for transmitting the first channel and the resource set used for transmitting the PSFCH are configured independently.~~

~~9. The method according to claim 4, wherein~~

~~the second information corresponds to a plurality of bits of the first channel, wherein the plurality of bits are used to indicate whether the second device provides the resource assistance information for the first device, and indicate whether the second device successfully receives data sent by the first device.~~

~~10. The method according to claim 9, wherein~~

~~the second information is carried in a resource set used for transmitting a PSFCH; and~~

~~the resource set used for transmitting the PSFCH is further used by the second device to send HARQ information to the first device.~~

~~11. The method according to claim 10, wherein~~

~~the first device sends the first information in a first slot, and the first device receives the second information in a second slot; and~~

~~the second slot is the 1st slot that comprises the PSFCH and that is at an interval of M time units from the first slot, wherein M is a positive integer.~~

~~12. The method according to any one of claims 1 to 11, wherein~~

~~after the first device receives the second information sent by the second device, wherein the second information indicates that the second device does not provide the resource assistance information for the first device, or after the first device sends the first information and does not receive the second information in a first time period, the method further comprises:~~

~~sending, by the first device, the first information to a fourth device; or sending, by the first device, the first information to the second device; or determining, by the first device, a communication resource without using the resource assistance information.~~

~~13. The method according to any one of claims 1 to 11, wherein~~

~~the first device receives the second information sent by the second device, wherein the second information indicates that the second device provides the resource assistance information for the first device, the method further comprises:~~

~~receiving, at least once by the first device in a second time period, the resource assistance information sent by the second device.~~

~~14. The method according to claim 13, wherein the receiving, by the first device in a second time period, the resource assistance information sent by the second device comprises:~~

~~sending, by the first device, the first information to the second device in the second time period; and~~

~~receiving, by the first device, the resource assistance information sent by the second device based on the first information.~~

~~15~~11. A communication method, comprising:

sending, by a second device, second information to a first device, wherein the second

information indicates ~~that the second device provides~~ resource assistance information for the first device.

~~16. The method according to claim 15, wherein~~

~~the second information is used to indicate that the second device provides the resource assistance information for the first device; or~~

~~the second information is used to indicate whether the second device provides the resource assistance information for the first device.~~

~~17~~12. The method according to claim ~~15 or 16~~11, before the sending, by a second device, second information to a first device, further comprising:

receiving, by the second device, first information from the first device, wherein the first information is used to request to obtain the resource assistance information.

~~18~~13. The method according to ~~any one of claims 15 to 17~~claim 11 or 12, wherein the second information is carried by a first channel, and the first channel is a physical sidelink feedback channel PSFCH.

~~19~~14. The method according to claim ~~18~~13, wherein

~~when the second information indicates that the second device provides the resource assistance information for the first device, the second information corresponds to a first sequence cyclic shift value of the first channel; or when the second information indicates that the second device does not provide the resource assistance information for the first device, the second information corresponds to a second sequence cyclic shift value of the first channel;~~

~~or~~

~~when the second information indicates that the second device provides the resource assistance information for the first device,~~ the second information corresponds to a third sequence cyclic shift value of the first channel.

~~20~~15. The method according to claim ~~18 or 19~~13 or 14, wherein

~~the first channel is a physical sidelink feedback channel PSFCH; and~~

the second information is carried in a first resource set, wherein the first resource set is a complementary set that is of a resource set used for carrying hybrid automatic repeat request HARQ information and that is comprised in a resource set used for transmitting the PSFCH.

~~21~~16. The method according to ~~claim 20~~ any one of claims 12 to 15, wherein

the second device sends the second information in a second slot, and the second device

receives the first information in a first slot; and

the second slot is the 1st slot that comprises the PSFCH and that is after a slot in which the last symbol of the first information is located, or the second slot is the 1st slot that comprises the PSFCH and that is at an interval of N time units from the first slot, wherein N is a positive integer.

17. The method according to any one of claims 11 to 16, wherein a resource carrying the resource assistance information is different from a resource carrying HARQ information.

18. The method according to any one of claims 11 to 17, wherein the resource assistance information is carried in a first resource set and HARQ information is carried in a second resource set.

19. The method according to claim 18, wherein the first resource set and the second resource set are represented by using different bitmaps.

20. The method according to any one of claims 11 to 19, wherein the sequence cyclic shift value of the resource assistance information is 0.

~~22. The method according to claim 18 or 19, wherein~~

~~the second information is carried in a resource set used for transmitting the first channel; and~~

~~the resource set used for transmitting the first channel and a resource set used for transmitting a PSFCH are in frequency division multiplexing; or~~

~~the resource set used for transmitting the first channel and the resource set used for transmitting the PSFCH are configured independently.~~

~~23. The method according to claim 18, wherein~~

~~the second information corresponds to a plurality of bits of the first channel, wherein the plurality of bits are used to indicate whether the second device provides the resource assistance information for the first device, and indicate whether the second device successfully receives data sent by the first device.~~

~~24. The method according to claim 23, wherein~~

~~the second information is carried in a resource set used for transmitting a PSFCH; and~~

~~the resource set used for transmitting the PSFCH is further used by the second device to send HARQ information to the first device.~~

~~25. The method according to claim 24, wherein~~

~~the second device sends the second information in a second slot, and the second device receives the first information in a first slot; and~~

~~the second slot is the 1st slot that comprises the PSFCH and that is at an interval of M time units from the first slot, wherein M is a positive integer.~~

~~26. The method according to any one of claims 15 to 25, wherein the second information indicates that the second device provides the resource assistance information for the first device, and the method further comprises:~~

~~sending, by the second device, the resource assistance information to the first device at least once in a second time period.~~

~~27. The method according to claim 26, wherein the sending, by the second device, the resource assistance information to the first device in a second time period comprises:~~

~~receiving, by the second device, the first information from the first device in the second time period; and~~

~~sending, by the second device, the resource assistance information to the second device based on the first information.~~

~~28. A communication apparatus, comprising a communication module and a processing module, wherein~~

~~the communication module is configured to implement communication between the communication apparatus and with another apparatus; and~~

~~the processing module is configured to implement the method according to any one of claims 1 to 14 or according to any one of claims 15 to 27.~~

~~29. A communication apparatus, comprising a processor and a communication interface, wherein~~

~~the communication interface is configured to implement communication between the communication apparatus and another apparatus; and~~

~~the processor is configured to implement the method according to any one of claims 1 to 14 or according to any one of claims 15 to 27.~~

21. An apparatus comprising a processor configured to perform the method according to any one of claims 1 to 10, or according to any one of claims 11 to 20.

22. ~~30.~~ 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 ~~14~~ 10 or according to any one of claims ~~15~~ 11 to ~~27~~ 20 ~~may be~~is implemented.

23. A computer program comprising instructions which, when executed by a computer, cause

the computer to carry out the method according to any one of claims 1 to 10, or according to any one of claims 11 to 20.