CLAIMS

What is claimed is:

1. A communication method, wherein the method is applied to a first terminal, and the method comprises:

determining one or more sidelink resources, wherein the one or more sidelink resources comprise at least a sidelink resource located in sidelink discontinuous reception-active time of a second terminal; and

sending data to the second terminal on a first sidelink resource in the one or more sidelink resources, wherein the first sidelink resource is located in the sidelink discontinuous reception-active time; and

selecting, from the one or more sidelink resources, a second sidelink resource within a first time, wherein the first time comprises the sidelink discontinuous reception-active time and a third time period, and the third time period is determined based on the first sidelink resource; and

sending data to the second terminal on the second sidelink resource.

2. The method according to claim 1, wherein the determining one or more sidelink resources comprises:

determining, by a physical layer of the first terminal, the one or more sidelink resources from the candidate resource set; and

reporting, by the physical layer, the one or more sidelink resources to a medium access control entity of the first terminal; and

the method further comprises:

selecting, by the medium access control entity from the one or more sidelink resources, the first sidelink resource located in the sidelink discontinuous reception-active time.

3. The method according to claim 2, wherein the method further comprises:

sending, by the medium access control entity, first information to the physical layer, wherein the first information indicates the sidelink discontinuous reception-active time; and

the determining, by a physical layer of the first terminal, the one or more sidelink resources from the candidate resource set comprises:

determining, according to sidelink discontinuous reception-activation time by the physical layer, the one or more sidelink resources from the candidate resource set based on the first information.

4. The method according to any one of claims 1 to 3, wherein the first time comprises a running time of a sidelink retransmission timer assumed according to the first sidelink resource.

5. The method according to claim 3, wherein the sending, by the medium access control entity, first information to the physical layer comprises:

when the remaining time of the sidelink discontinuous reception-active time is less than or equal to a remaining packet delay budget, sending, by the medium access control entity, the first information to the physical layer.

6. The method according to claim 3 or 5, wherein the first information further comprises information used to indicate the start time of the sidelink discontinuous reception-active time.

7. The method according to claim 6, wherein when a time unit 1 is earlier than the start time of the sidelink discontinuous reception-active time, the medium access control entity of the first terminal sends, to the physical layer of the first terminal, the information used to indicate the start time of the sidelink discontinuous reception-active time, wherein the time unit 1 is a moment at which the physical layer of the first terminal determines to sense sidelink resources.

8. The method according to any one of claims 1 to 7, wherein

a quantity of sidelink resources, located in a first time period, in the one or more sidelink resources is greater than or equal to a first threshold; and

a start moment of the first time period is a start moment corresponding to a candidate resource set, and an end moment of the first time period is end time of the sidelink discontinuous reception-active time.

9. The method according to any one of claims 1 to 8, wherein the one or more sidelink resources are sidelink resources determined from the candidate resource set, and the start moment corresponding to the candidate resource set is later than or equal to start time of the sidelink discontinuous reception-active time; or,

the one or more sidelink resources are sidelink resources determined from the candidate resource set, and an end moment corresponding to the candidate resource set is earlier than or equal to retransmission end time of the data.

10. The method according to any one of claims 2 to 7, wherein the method further comprises:

determining the retransmission end time of the data or remaining retransmission time of the data; and

determining, based on the retransmission end time or the remaining retransmission time, the end moment corresponding to the candidate resource set, wherein the end moment corresponding to the candidate resource set is earlier than or equal to the retransmission end time.

11. The method according to claim 10, wherein the method further comprises:

sending, by the medium access control entity, second information to the physical layer, wherein the second information is used to indicate the retransmission end time of the data or used to indicate the remaining retransmission time of the data; and

the determining the retransmission end time of the data or remaining retransmission time of the data comprises:

determining, by the physical layer, the retransmission end time or the remaining retransmission time based on the second information.

12. The method according to claim 11, wherein

if the remaining packet delay budget is greater than or equal to the remaining retransmission time, the medium access control entity provides one or more of the retransmission end time or the remaining retransmission time for the physical layer, or the medium access control entity provides a minimum value in the remaining packet delay budget and the retransmission end time for the physical layer.

13. The method according to any one of claims 2 to 12, wherein the method further comprises:

if the quantity of sidelink resources located in the first time period is less than or equal to the first threshold, updating a threshold indicating whether the candidate resource set is excluded; and

determining the one or more sidelink resources from the candidate resource set based on an updated threshold.

14. The method according to any one of claims 1 to 13, wherein a quantity of sidelink resources, located in a second time period, in the one or more sidelink resources is greater than or equal to a second threshold; and

the second time period is determined based on an end moment of the sidelink discontinuous reception-active time and the end moment corresponding to the candidate resource set.

15. The method according to any one of claims 1 to 14, wherein the first sidelink resource is a sidelink resource used to initially transmit the data, and the second sidelink resource is used to retransmit the data.

16. The method according to claims 1 to 15, wherein a time interval between the first sidelink resource and the second sidelink resource is greater than or equal to a minimum time interval; or

wherein when a resource pool in which the first sidelink resource and the second sidelink resource are located is configured with a physical sidelink feedback control channel resource, a time interval between the first sidelink resource and the second sidelink resource is greater than or equal to a minimum time interval.

17. The method according to any one of claims 1 to 16, wherein if there is no sidelink resource used to transmit the data for the first time and/or no sidelink resource used to retransmit the data in the sidelink discontinuous reception-active time, the first terminal triggers a sidelink resource selection/reselection process.

18. The method according to any one of claims 1 to 13 and 17, wherein

if the sidelink resource used to initially transmit the data is not located in the sidelink discontinuous reception-active time, the first sidelink resource is a sidelink resource used to retransmit the data; and

the method further comprises:

if the sidelink resource used to initially transmit the data is not located in the sidelink discontinuous reception-active time, stopping, by the first terminal, sending the data on the second sidelink resource used to retransmit the data.

19. A computer-readable storage medium, wherein the readable storage medium stores instructions, and when the instructions are executed, the method according to any one of claims 1 to 18 is implemented.

20. A chip, wherein the chip comprises a processor, the processor is coupled to a communication interface, the processor is configured to run a computer program or instructions to implement the method according to any one of claims 1 to 18, and the communication interface is configured to communicate with another module other than the chip.

21. A terminal, comprising at least one processor, wherein the at least one processor is coupled to a memory, and the at least one processor is configured to run instructions stored in the memory to perform the method according to any one of claims 1 to 18.