CLAIMS

1. A communication method, comprising:

receiving, by an initiator, an advertising-response (ADV-RESP) frame from a responder, wherein the ADV-RESP frame is used by the responder to request ranging mode for multi-millisecond (MMS) ranging; and

transmitting, by the initiator, a start of ranging (SOR) frame to the responder according to the ADV-RESP frame.

2. The method according to claim 1, wherein the ADV-RESP frame comprises a first ranging mode field indicating the mode requested for the MMS ranging.

3. The method according to claim 2, wherein a value of the first ranging mode field is any one of 0, 1 or 2; wherein the value of 0 indicates one-to-one ranging, the value of 1 indicates serial one-to-many ranging, the value of 2 indicates time efficient one-to-many ranging.

4. The method according to claim 2, wherein the SOR frame comprises a second ranging mode field, the second ranging mode field is used for confirming the mode requested for the MMS ranging.

5. The method according to claim 4, wherein a value of the second ranging mode field is any one of 0, 1 or 2; wherein the value of 0 indicates one-to-one ranging, the value of 1 indicates serial one-to-many ranging, the value of 2 indicates time efficient one-to-many ranging.

6. The method according to any one of claims 1-5, wherein before the receiving, by the initiator, the ADV-RESP frame from the responder, the method further comprises:

transmitting, by the initiator, an advertising-poll (ADV-POLL) frame to the responder, wherein the ADV-POLL frame is used to indicate a maximum number of K responder supported for the MMS ranging, and $K \geq 1$.

7. A communication method, comprising:

transmitting, by a responder, an advertising-response (ADV-RESP) frame to an initiator, wherein the ADV-RESP frame is used for requesting ranging mode for multi-millisecond (MMS) ranging; and

receiving, by the responder, a start of ranging (SOR) frame from the initiator.

8. The method according to claim 7, wherein the ADV-RESP frame comprises a first ranging mode field indicating the mode requested for the MMS ranging.

9. The method according to claim 8, wherein a value of the first ranging mode field is any one of 0, 1 or 2; wherein the value of 0 indicates one-to-one ranging, the value of 1 indicates serial one-to-many ranging, the value of 2 indicates time efficient one-to-many ranging.

10. The method according to claim 8 or 9, wherein the SOR frame comprises a second ranging mode field, the second ranging mode field is used for confirming the mode requested for the MMS ranging.

11. The method according to claim 10, wherein a value of the second ranging mode field is any one of 0, 1 or 2; wherein the value of 0 indicates one-to-one ranging, the value of 1 indicates serial one-to-many ranging, the value of 2 indicates time efficient one-to-many ranging.

12. The method according to any one of claims 7 to 9, wherein before the transmitting, by the responder, the ADV-RESP frame to the initiator, the method further comprises:

receiving, by the responder, an advertising-poll (ADV-POLL) frame from the initiator, wherein the ADV-POLL frame is used to indicate a maximum number of K responder supported for the MMS ranging, and $K \geq 1$.

13. A communication apparatus, comprising units for performing the method according to any one of claims 1-3, or units for carrying out the method according to any one of claims 7-9.

14. An electronic device comprising processing circuitry for performing the method according to any one of claims 1-3, or processing circuitry for carrying out the method according to any one of claims 7-9.

15. A chip, comprising an input/output (I/O) interface and a processor, wherein the processor is configured to call and run a computer program stored in a memory, to enable a device installing with the chip to execute the method according to any one of claims 1-3.

16. A chip, comprising an input/output (I/O) interface and a processor, wherein the processor is configured to call and run a computer program stored in a memory, to enable a device installing with the chip to execute the method according to any one of claims 7-9.

17. An electronic device, comprising:

one or more processors; and

a non-transitory computer-readable storage medium coupled to the one or more processors and storing programming for execution by the processors, wherein the programming, when executed by the processors, configures the electronic device to perform the method according to any one of claims 1-3.

18. An electronic device, comprising:

one or more processors; and

a non-transitory computer-readable storage medium coupled to the processors and storing programming for execution by the processors, wherein the programming, when executed by the processors, configures the electronic device to perform the method according to any one of claims 7-9.

19. A non-transitory computer-readable medium carrying a program code which, when executed by a computer device, causes the computer device to perform the method according to any one according to claims 1-3 or the method of any one according to claims 7-9.

20. A computer program product comprising program code for performing the method according to any one according to claims 1-3 or the method according to any one according to claims 7-9 when executed on a computer or a processor.