CLAIMS

What is claimed is:

1. A channel contention method, wherein the method comprises:

after data transmission on a first link is completed or after a block acknowledgment corresponding to data is received on the first link, performing, by a first non-access point station of a first multi-link device, clear channel assessment CCA detection on a second link in a first time period, wherein a start moment corresponding to the first time period is the same as a moment at which the data transmission on the first link is completed; and

when the CCA detection on the second link fails, performing, by the first non-access point station, channel contention on the second link based on a second time period.

2. The method according to claim 1, wherein a CCA threshold is –82 dbm, –72 dbm, or –62 dbm.

3. The method according to claim 1 or 2, wherein a start moment of the second time period is a moment at which failure of CCA detection changes to success.

~~6~~4. The method according to any one of claims 1 to 3, wherein the performing channel contention on the second link based on a second time period comprises:

if the CCA detection on the second link fails and no start of a physical layer protocol data unit PPDU is detected, starting to perform channel contention on the second link after the second time period from the moment at which failure of CCA detection changes to success.

~~4~~5. The method according to any one of claims 1 to 3, wherein the performing channel contention on the second link based on a second time period comprises:

if an end moment corresponding to the second time period is earlier than an end moment corresponding to the first time period, performing, by the first non-access point station, channel contention on the second link after the end moment corresponding to the second time period.

~~5~~6. The method according to any one of claims 1 to ~~4~~3, wherein the performing channel contention on the second link based on a second time period comprises:

if an end moment corresponding to the second time period is later than an end moment corresponding to the first time period, performing, by the first non-access point station, channel contention on the second link after the end moment corresponding to the first time period or after the end moment corresponding to the second time period.

~~6. The method according to any one of claims 1 to 3, wherein the performing channel contention on the second link based on a second time period comprises:~~

~~if the CCA detection on the second link fails and no start of a physical layer protocol data unit PPDU is detected, starting to perform channel contention on the second link after the second time period from the moment at which failure of CCA detection changes to success.~~

7. The method according to any one of claims 1 to 6, wherein the second time period is extended inter-frame space EIFS time.

8. A communication apparatus, wherein the communication apparatus ~~is a first non-access point station in a first multi-link device, and~~ comprises:

a processing unit, configured to: after data transmission on a first link is completed or after a block acknowledgment corresponding to data is received on the first link, perform clear channel assessment CCA detection on a second link in a first time period, wherein a start moment corresponding to the first time period is the same as a moment at which the data transmission on the first link is completed; and

the processing unit is further configured to: when the CCA detection on the second link fails, perform channel contention on the second link based on a second time period.

9. The apparatus according to claim 8, wherein a CCA threshold is –82 dbm, –72 dbm, or –62 dbm.

10. The apparatus according to claim 8 or 9, wherein a start moment of the second time period is a moment at which failure of CCA detection changes to success.

~~13~~11. The apparatus according to any one of claims 8 to 10, wherein the performing channel contention on the second link based on a second time period comprises:

if the CCA detection on the second link fails and no start of a physical layer protocol data unit PPDU is detected, starting to perform channel contention on the second link after the second time period from the moment at which failure of CCA detection changes to success.

~~11~~12. The apparatus according to any one of claims 8 to 10, wherein when channel contention is performed on the second link based on the second time period,

if an end moment corresponding to the second time period is earlier than an end moment corresponding to the first time period, the processing unit is configured to perform channel contention on the second link after the end moment corresponding to the second time period.

~~12~~13. The apparatus according to any one of claims 8 to 10, wherein when channel contention

is performed on the second link based on the second time period,

if an end moment corresponding to the second time period is later than an end moment corresponding to the first time period, the processing unit is configured to perform channel contention on the second link after the end moment corresponding to the first time period or after the end moment corresponding to the second time period.

~~13. The apparatus according to any one of claims 8 to 10, wherein the performing channel contention on the second link based on a second time period comprises:~~

~~if the CCA detection on the second link fails and no start of a physical layer protocol data unit PPDU is detected, starting to perform channel contention on the second link after the second time period from the moment at which failure of CCA detection changes to success.~~

14. The apparatus according to any one of claims 8 to 13, wherein the second time period is extended inter-frame space EIFS time.

15. A communication apparatus, comprising a processor and a memory, wherein the memory is configured to store instructions, and when the processor runs the instructions, the communication apparatus is enabled to perform the method according to any one of claims 1-7.

16. A wireless communication system, comprising a first multi-link device, wherein

the first multi-link device comprises the communication apparatus according to any one of claims 8 to 14.

17. A readable storage medium, wherein the readable storage medium stores program instructions, and when the program instructions are run, the method according to any one of claims 1 to 7 is performed.

18. A computer program product, wherein the computer program product including instructions, and when the instructions are run on a computer, the computer is enabled to perform the channel contention method according to any one of claims 1-7.