

CLAIMS

1. A downlink assignment index DAI counting method, applied to a terminal, comprising:

in a case that physical downlink control channel PDCCH repetition is configured,
5 incrementing a DAI count at a reference PDCCH monitoring occasion.

2. The method according to claim 1, wherein the reference PDCCH monitoring occasion comprises any one of the following:

a PDCCH monitoring occasion indicated by a network device; or

the first PDCCH monitoring occasion or the last PDCCH monitoring occasion in
10 M PDCCH monitoring occasions corresponding to M PDCCHs in repetition, wherein M is an integer greater than 1.

3. The method according to claim 1, wherein a location of the reference PDCCH monitoring occasion is determined based on any one of the following:

the first PDCCH monitoring occasion in M PDCCH monitoring occasions
15 corresponding to M PDCCHs in repetition, wherein M is an integer greater than 1; or

first indication information carried by a PDCCH, wherein the first indication information is used to indicate an ordinal position of the PDCCH in M PDCCHs.

4. The method according to claim 1, wherein the incrementing a DAI count at a reference PDCCH monitoring occasion comprises:

20 in a case that M PDCCHs in repetition have the same DAI value, incrementing the DAI count at the reference PDCCH monitoring occasion for a DAI value in a detected PDCCH.

5. The method according to claim 1, further comprising:

determining whether to increment a count of a DAI cycle counter.

25 6. The method according to claim 5, wherein the determining whether to increment a count of a DAI cycle counter comprises:

in a case that a preset condition is satisfied, skipping incrementing the count of the DAI cycle counter, wherein

the preset condition comprises that:

N PDCCHs have been detected at PDCCH monitoring occasions for PDCCH repetition, the N PDCCHs carrying the same DAI value.

7. The method according to claim 6, wherein the preset condition further comprises that:

5 the N PDCCHs have the same physical downlink shared channel PDSCH scheduling information.

8. The method according to claim 7, wherein the PDSCH scheduling information comprises at least one of the following: a new data indicator, a HARQ process number, a PDSCH resource, a transport block size, a redundancy version, a HARQ codebook
10 priority, and a modulation and coding scheme.

9. The method according to claim 1, wherein after the incrementing a DAI count at a reference PDCCH monitoring occasion, the method further comprises:

15 determining a hybrid automatic repeat request acknowledgement HARQ-ACK codebook based on DAI values in L PDCCHs detected and a counted downlink control information DCI repetition number in the L PDCCHs, wherein L is a positive integer greater than 1.

10. The method according to claim 1, wherein the DAI comprises at least one of a counter DAI and a total DAI.

20 11. A downlink assignment index DAI counting control method, applied to a network device, comprising:

in a case that physical downlink control channel PDCCH repetition is configured for a terminal, transmitting target information to the terminal, wherein the target information is used for the terminal to determine a reference PDCCH monitoring occasion so as to increment a DAI count at the reference PDCCH monitoring occasion.

25 12. The method according to claim 11, wherein the target information comprises any one of the following:

first indication information carried by a PDCCH, wherein the first indication information is used to indicate an ordinal position of the PDCCH in M PDCCHs in repetition, and M is an integer greater than 1; or

second indication information used to indicate the first PDCCH monitoring occasion in M PDCCH monitoring occasions corresponding to M PDCCHs in repetition, wherein M is an integer greater than 1.

13. The method according to claim 11, wherein the reference PDCCH monitoring occasion comprises any one of the following:

a PDCCH monitoring occasion indicated by the network device; or

the first PDCCH monitoring occasion or the last PDCCH monitoring occasion in M PDCCH monitoring occasions corresponding to M PDCCHs in repetition, wherein M is an integer greater than 1.

14. A terminal, comprising:

a processing module, configured to, in a case that physical downlink control channel PDCCH repetition is configured, increment a downlink assignment index DAI count at a reference PDCCH monitoring occasion.

15. The terminal according to claim 14, wherein the reference PDCCH monitoring occasion comprises any one of the following:

a PDCCH monitoring occasion indicated by a network device; or

the first PDCCH monitoring occasion or the last PDCCH monitoring occasion in M PDCCH monitoring occasions corresponding to M PDCCHs in repetition, wherein M is an integer greater than 1.

16. The terminal according to claim 14, wherein a location of the reference PDCCH monitoring occasion is determined based on any one of the following:

the first PDCCH monitoring occasion in M PDCCH monitoring occasions corresponding to M PDCCHs in repetition, wherein M is an integer greater than 1; or

first indication information carried by a PDCCH, wherein the first indication information is used to indicate an ordinal position of the PDCCH in M PDCCHs.

17. A network device, comprising:

a transmitting module, configured to, in a case that physical downlink control channel PDCCH repetition is configured for a terminal, transmit target information to the terminal, wherein the target information is used for the terminal to determine a

reference PDCCH monitoring occasion so as to increment a downlink assignment index DAI count at the reference PDCCH monitoring occasion.

18. The network device according to claim 17, wherein the target information comprises any one of the following:

5 first indication information carried by a PDCCH, wherein the first indication information is used to indicate an ordinal position of the PDCCH in M PDCCHs; or

second indication information used to indicate the first PDCCH monitoring occasion in M PDCCH monitoring occasions corresponding to M PDCCHs in repetition, wherein M is an integer greater than 1.

10 19. The network device according to claim 18, wherein the reference PDCCH monitoring occasion comprises any one of the following:

a PDCCH monitoring occasion indicated by the network device; or

the first PDCCH monitoring occasion or the last PDCCH monitoring occasion in M PDCCH monitoring occasions corresponding to M PDCCHs in repetition, wherein

15 M is an integer greater than 1.

~~20. A terminal, comprising a memory, a processor, and a program or instructions stored in the memory and capable of running on the processor, wherein when the program or instructions are executed by the processor, the steps of the downlink assignment index DAI counting method according to any one of claims 1 to 10 are implemented.~~

~~21. A network device, comprising a memory, a processor, and a program or instructions stored in the memory and capable of running on the processor, wherein when the program or instructions are executed by the processor, the steps of the downlink assignment index DAI counting control method according to any one of claims 11 to 13 are implemented.~~

~~22~~20. A readable storage medium, wherein the readable storage medium stores a program or instructions, and when the program or instructions are executed by a processor, the steps of the downlink assignment index DAI counting method according to any one of claims 1 to 10 or the steps of the DAI counting control method according to any one of claims 11 to 13 are implemented.

23. ~~A chip, wherein the chip comprises a processor and a communications interface, wherein the communications interface is coupled to the processor, and the processor is configured to run a program or instructions so as to implement the downlink assignment index DAI counting method according to any one of claims 1 to 10 or the DAI counting control method according to any one of claims 11 to 13.~~

24. ~~A terminal, configured to execute the downlink assignment index DAI counting method according to any one of claims 1 to 10.~~

25. ~~A network device, configured to execute the downlink assignment index DAI counting control method according to any one of claims 11 to 13.~~

26. ~~A computer program product, wherein the computer program product is executed by at least one processor to implement the downlink assignment index DAI counting method according to any one of claims 1 to 10 or the DAI counting control method according to any one of claims 11 to 13.~~