CLAIMS

What is claimed is:

1. A multi-link group addressed traffic transmission method, comprising:

generating, by a first access point (AP) of an access point multi-link device (AP MLD), group addressed traffic indication information comprising a set of bits in a partial virtual bitmap field in a traffic indication map (TIM) element, wherein the set of bits in the partial virtual bitmap field in the TIM element indicates whether each AP of one or more second APs has a group addressed traffic, the one or more second APs being one or more other APs of the AP MLD except the first AP; and

sending, by the first AP, the group addressed traffic indication information.

2. The method according to claim 1, wherein

an association identifier (AID) corresponding to each bit of the group addressed traffic indication information is different from an AID of a station managed by each AP of the AP MLD; or

an AID corresponding to each bit of the group addressed traffic indication information is different from an AID of a station multilink device (STA MLD) associated with the AP MLD, and multiple stations (STAs) of the STA MLD share one AID.

3. The method according to claim 1, wherein the set of bits in the partial virtual bitmap field comprises a fixed quantity of consecutive bits for the one or more second APs of the AP MLD.

4. The method according to claim 1, wherein in the set of bits in the partial virtual bitmap field, one or more first bits correspond to the one or more second APs of the AP MLD, and one or more second bits for the AP MLD are set to zero.

5. The method according to claim 1, wherein the set of bits in the partial virtual bitmap field comprises a plurality of consecutive bits correspond to the one or more second APs, in ascending order according to link identifiers of the one or more second APs.

6. A first access point (AP) of an access point multi-link device (AP MLD), comprising:

a processor configured to generate group addressed traffic indication information compriseing a set of bits in a partial virtual bitmap field in a traffic indication map (TIM) element, wherein the set of bits in the partial virtual bitmap field in the TIM element indicates whether each AP of one or more second APs has a group addressed traffic, the one or more second APs being one or more other APs of the AP MLD except the first AP; and

a transceiver coupled to the processor and configured to send the group addressed traffic indication information.

7. The first AP according to claim 6, wherein an association identifier (AID) corresponding to each bit of the group addressed traffic indication information is different from an AID of a station managed by each AP of the AP MLD; or

an AID corresponding to each bit of the group addressed traffic indication information is different from an AID of a station multilink device (STA MLD) associated with the AP MLD, and multiple stations (STAs) of the STA MLD share one AID.

8. The first AP according to claim 6, wherein the set of bits in the partial virtual bitmap field comprises a fixed quantity of consecutive bits for the one or more second APs of the AP MLD.

9. The first AP according to claim 6, wherein in the set of bits in the partial virtual bitmap field, one or more first bits correspond to the one or more second APs of the AP MLD, and one or more second bits for the AP MLD are set to zero.

10. The first AP according to claim 6, wherein the set of bits in the partial virtual bitmap field comprises a plurality of consecutive bits correspond to the one or more second APs, in ascending order according to link identifiers of the one or more second APs.

11. The first AP according to claim 6, wherein the group addressed traffic indication information is carried in a delivery traffic indication map (DTIM) beacon frame.

12. A chip applied for a first access point (AP) of an access point multi-link device (AP MLD),

comprising:

a processor configured to generate group addressed traffic indication information comprising a set of bits in a partial virtual bitmap field in a traffic indication map (TIM) element, wherein the set of bits in the partial virtual bitmap field in the TIM element indicates whether each access point (AP) of one or more second APs has a group addressed traffic, the one or more second APs being one or more other APs of the AP MLD except the first AP; and

an interface coupled to the processor and configured to output the group addressed traffic indication information.

13. The chip according to claim 12, wherein an association identifier (AID) corresponding to each bit of the group addressed traffic indication information is different from an AID of a station managed by each AP of the AP MLD; or

an AID corresponding to each bit of the group addressed traffic indication information is different from an AID of a station multilink device (STA MLD) associated with the AP MLD, and multiple stations (STAs) of the STA MLD share one AID.

14. The chip according to claim 12, wherein the set of bits in the partial virtual bitmap field comprises a fixed quantity of consecutive bits for the one or more second APs of the AP MLD.

15. The chip according to claim 12, wherein in the set of bits in the partial virtual bitmap field, one or more first bits correspond to the one or more second APs of the AP MLD, and one or more second bits for the AP MLD are set to zero.

16. The chip according to claim 12, wherein the set of bits in the partial virtual bitmap field comprises a plurality of consecutive bits correspond to the one or more second APs, in ascending order according to link identifiers of the one or more second APs.

17. An access point multilink device (AP MLD), comprising a first access point (AP) and one or more second APs, wherein the first AP is configured to:

generate group addressed traffic indication information comprising a set of bits in a partial virtual bitmap field in a traffic indication map (TIM) element, wherein the set of bits in the partial

virtual bitmap field in the TIM element indicates whether each AP of the one or more second APs has a group addressed traffic, the one or more second APs being one or more other APs of the AP MLD except the first AP; and

send the group addressed traffic indication information.

18. The AP MLD according to claim 17, wherein an association identifier (AID) corresponding to each bit of the group addressed traffic indication information is different from an AID of a station managed by each AP of the AP MLD; or

an AID corresponding to each bit of the group addressed traffic indication information is different from an AID of a station multilink device (STA MLD) associated with the AP MLD, and multiple stations (STAs) of the STA MLD share one AID.

19. The AP MLD according to claim 17, wherein the set of bits in the partial virtual bitmap field comprises a fixed quantity of consecutive bits for the one or more second APs of the AP MLD.

20. The AP MLD according to claim 17, wherein in the set of bits in the partial virtual bitmap field, one or more first bits correspond to the one or more second APs of the AP MLD, and one or more second bits for the AP MLD are set to zero.

21. The AP MLD according to claim 17, wherein the set of bits in the partial virtual bitmap field comprises a plurality of consecutive bits correspond to the one or more second APs, in ascending order according to link identifiers of the one or more second APs.

22. The AP MLD according to claim 17, wherein the group addressed traffic indication information is carried in a diliverytraffic indication map (DTIM) beacon frame.