

CLAIMS

1. A method of wireless communication by a first user terminal, comprising: receiving, from an access point, a downlink (DL) multi-user (MU) physical layer convergence protocol (PLCP) protocol data unit (PPDU) (DL MU PPDU), wherein the DL MU PPDU includes: a first aggregate medium access control (MAC) protocol data unit (A-MPDU), a block acknowledgement (BA) trigger, and an acknowledgement policy that instructs the first user terminal when to transmit a BA to the access point, wherein the first A-MPDU includes a plurality of MPDUs, wherein the BA trigger is different from the acknowledgement policy; and transmitting, to the access point, a first BA based on the BA trigger and the acknowledgement policy, wherein the first BA acknowledges one or more MPDUs of the plurality of MPDUs.
2. The method of claim 1, wherein the first A-MPDU includes the BA trigger.
3. The method of claim 1, wherein each MPDU of the first A-MPDU includes the BA trigger.
4. The method of claim 1, wherein the DL MU PPDU includes a preamble that includes the BA trigger.
5. The method of claim 4, wherein the preamble includes an HE-SIG B field that includes the BA trigger.
6. The method of claim 1, wherein each MPDU of the first A-MPDU includes the acknowledgement policy.
7. The method of claim 1, wherein the acknowledgement policy that instructs the first user terminal when to transmit a BA to the access point includes a policy that instructs the first user terminal to transmit the first BA immediately upon receipt of the BA trigger.
8. The method of claim 1, wherein the acknowledgement policy that instructs the first user terminal when to transmit a BA to the access point includes a policy that instructs the first user terminal to transmit the first BA after a period of time upon receipt of the BA trigger, wherein the period of time is measured from an end point of the DL MU PPDU.
9. The method of claim 8, wherein the period of time includes a short interframe space (SIFS).
10. The method of claim 1, further comprising: transmitting data to the access point only after the first BA is transmitted to the access point.
11. A method of wireless communication by an access point, comprising: transmitting, to a first user terminal, a downlink (DL) multi-user (MU) physical layer convergence protocol (PLCP) protocol data unit (PPDU) (DL MU PPDU), wherein the DL MU PPDU includes: a first aggregate medium access control (MAC) protocol data unit (A-MPDU), a block

acknowledgement (BA) trigger, and an acknowledgement policy that instructs the first user terminal when to transmit a BA to the access point, wherein the first A-MPDU includes a plurality of MPDUs, wherein the BA trigger is different from the acknowledgement policy; and receiving, from the first user terminal, a first BA based on the BA trigger and the acknowledgement policy, wherein the first BA acknowledges one or more MPDUs of the plurality of MPDUs.

12. The method of claim 11, wherein the first A-MPDU includes the BA trigger.

13. The method of claim 11, wherein each MPDU of the first A-MPDU includes the BA trigger.

14. The method of claim 11, wherein the DL MU PPDU includes a preamble that includes the BA trigger.

15. The method of claim 14, wherein the preamble includes an HE-SIG B field that includes the BA trigger.

16. The method of claim 11, wherein each MPDU of the first A-MPDU includes the acknowledgement policy.

17. The method of claim 11, wherein the acknowledgement policy that instructs the first user terminal when to transmit a BA to the access point includes a policy that instructs the first user terminal to transmit the first BA immediately upon receipt of the BA trigger.

18. The method of claim 11, wherein the acknowledgement policy that instructs the first user terminal when to transmit a BA to the access point includes a policy that instructs the first user terminal to transmit the first BA after a period of time upon receipt of the BA trigger, wherein the period of time is measured from an end point of the DL MU PPDU.

19. The method of claim 18, wherein the period of time includes a short interframe space (SIFS).

20. The method of claim 11, further comprising: receiving data from the first user terminal only after the first BA is received from the first user terminal.

21. A first user terminal for wireless communication, comprising: a memory; and at least one processor coupled to the memory, wherein the at least one processor is configured to: receive, from an access point, a downlink (DL) multi-user (MU) physical layer convergence protocol (PLCP) protocol data unit (PPDU) (DL MU PPDU), wherein the DL MU PPDU includes: a first aggregate medium access control (MAC) protocol data unit (A-MPDU), a block acknowledgement (BA) trigger, and an acknowledgement policy that instructs the first user terminal when to transmit a BA to the access point, wherein the first A-MPDU includes a plurality of MPDUs, wherein the BA trigger is different from the acknowledgement policy; and transmit, to the access point, a first BA based on the BA trigger and the acknowledgement

policy, wherein the first BA acknowledges one or more MPDUs of the plurality of MPDUs.

22. The first user terminal of claim 21, wherein the first A-MPDU includes the BA trigger.

23. The first user terminal of claim 21, wherein the DL MU PPDU includes a preamble that includes the BA trigger.

24. The first user terminal of claim 21, wherein the acknowledgement policy that instructs the first user terminal when to transmit a BA to the access point includes a policy that instructs the first user terminal to transmit the first BA immediately upon receipt of the BA trigger.

25. The first user terminal of claim 21, wherein the acknowledgement policy that instructs the first user terminal when to transmit a BA to the access point includes a policy that instructs the first user terminal to transmit the first BA after a period of time upon receipt of the BA trigger, wherein the period of time is measured from an end point of the DL MU PPDU.

26. A non-transitory computer-readable medium having code stored thereon that, when executed, causes a first user terminal to: receive, from an access point, a downlink (DL) multi-user (MU) physical layer convergence protocol (PLCP) protocol data unit (PPDU) (DL MU PPDU), wherein the DL MU PPDU includes: a first aggregate medium access control (MAC) protocol data unit (A-MPDU), a block acknowledgement (BA) trigger, and an acknowledgement policy that instructs the first user terminal when to transmit a BA to the access point, wherein the first A-MPDU includes a plurality of MPDUs, wherein the BA trigger is different from the acknowledgement policy; and transmit, to the access point, a first BA based on the BA trigger and the acknowledgement policy, wherein the first BA acknowledges one or more MPDUs of the plurality of MPDUs.

27. The non-transitory computer-readable medium of claim 26, wherein the first A-MPDU includes the BA trigger.

28. The non-transitory computer-readable medium of claim 26, wherein the DL MU PPDU includes a preamble that includes the BA trigger.

29. The non-transitory computer-readable medium of claim 26, wherein the acknowledgement policy that instructs the first user terminal when to transmit a BA to the access point includes a policy that instructs the first user terminal to transmit the first BA immediately upon receipt of the BA trigger.

30. The non-transitory computer-readable medium of claim 26, wherein the acknowledgement policy that instructs the first user terminal when to transmit a BA to the access point includes a policy that instructs the first user terminal to transmit the first BA after a period of time upon receipt of the BA trigger, wherein the period of time is measured from an end point of the DL MU PPDU.

31. An access point for wireless communication, comprising: a memory; and at least one processor coupled to the memory, wherein the at least one processor is configured to: transmit, to a first user terminal, a downlink (DL) multi-user (MU) physical layer convergence protocol (PLCP) protocol data unit (PPDU) (DL MU PPDU), wherein the DL MU PPDU includes: a first aggregate medium access control (MAC) protocol data unit (A-MPDU), a block acknowledgement (BA) trigger, and an acknowledgement policy that instructs the first user terminal when to transmit a BA to the access point, wherein the first A-MPDU includes a plurality of MPDUs, wherein the BA trigger is different from the acknowledgement policy; and receive, from the first user terminal, a first BA based on the BA trigger and the acknowledgement policy, wherein the first BA acknowledges one or more MPDUs of the plurality of MPDUs.

32. The access point of claim 31, wherein the first A-MPDU includes the BA trigger.

33. The access point of claim 31, wherein the DL MU PPDU includes a preamble that includes the BA trigger.

34. The access point of claim 31, wherein the acknowledgement policy that instructs the first user terminal when to transmit a BA to the access point includes a policy that instructs the first user terminal to transmit the first BA immediately upon receipt of the BA trigger.

35. The access point of claim 31, wherein the acknowledgement policy that instructs the first user terminal when to transmit a BA to the access point includes a policy that instructs the first user terminal to transmit the first BA after a period of time upon receipt of the BA trigger, wherein the period of time is measured from an end point of the DL MU PPDU.

36. A non-transitory computer-readable medium having code stored thereon that, when executed, causes an access point to: transmit, to a first user terminal, a downlink (DL) multi-user (MU) physical layer convergence protocol (PLCP) protocol data unit (PPDU) (DL MU PPDU), wherein the DL MU PPDU includes: a first aggregate medium access control (MAC) protocol data unit (A-MPDU), a block acknowledgement (BA) trigger, and an acknowledgement policy that instructs the first user terminal when to transmit a BA to the access point, wherein the first A-MPDU includes a plurality of MPDUs, wherein the BA trigger is different from the acknowledgement policy; and receive, from the first user terminal, a first BA based on the BA trigger and the acknowledgement policy, wherein the first BA acknowledges one or more MPDUs of the plurality of MPDUs.

37. The non-transitory computer-readable medium of claim 36, wherein the first A-MPDU includes the BA trigger.

38. The non-transitory computer-readable medium of claim 36, wherein the DL MU PPDU includes a preamble that includes the BA trigger.

39. The non-transitory computer-readable medium of claim 36, wherein the acknowledgement policy that instructs the first user terminal when to transmit a BA to the access point includes a policy that instructs the first user terminal to transmit the first BA immediately upon receipt of the BA trigger.

40. The non-transitory computer-readable medium of claim 36, wherein the acknowledgement policy that instructs the first user terminal when to transmit a BA to the access point includes a policy that instructs the first user terminal to transmit the first BA after a period of time upon receipt of the BA trigger, wherein the period of time is measured from an end point of the DL MU PPDU.