the AP has received the EHT PPDU. FIG. 4 is a schematic diagram of a time sequence of a trigger frame–based uplink transmission scheduling method. As shown in FIG. 4, an AP sends a trigger frame. After receiving the trigger frame, a STA 1 and a STA 2 separately send an EHT PPDU after a time period. After receiving the EHT PPDUs, the AP returns multiple station block acknowledgment (Multiple STA Block Acknowledge, M-BA) frames after a time period.

[00114] Optionally, for meanings of fields that may be included in the EHT PPDU, refer to Table 1.

Table 1

English abbreviation	**Full English description**	**Chinese expression**	Function
L-STF	Legacy Short Training Field	Legacy short training sequence	It is used for PPDU discovery, coarse synchronization, and automatic gain control.
L-LTF	Legacy Long Training Field	Legacy long training sequence	It is used for precise synchronization and channel estimation.
L-SIG	Legacy Signal Field ~~A~~	Legacy signal field	It is used to carry signaling information related to a PPDU length to ensure coexistence.
RL-SIG	Repeated Legacy Signal Field	Repeated legacy signal field	It is the same as the L-SIG, and is used for automatic detection together with the L-SIG to improve reliability.
U-SIG	Universal SIG	Universal signal field	It is similar to HE-SIG-A, and a difference lies in that it starts from an EHT PPDU. A unified signal field is used in a subsequent standard uses a universal

CLAIMS

What is claimed is:

1. A method for indicating an uplink parameter of a physical layer protocol data unit, PPDU, comprising:

generating, by an access point (AP), a trigger frame, wherein the trigger frame comprises an uplink length field, and the uplink length field is used to indicate lengths indicated by legacy signal L-SIG fields in a high efficient trigger based physical layer protocol data unit (HE TB PPDU) and an extremely high throughput physical layer protocol data unit (EHT PPDU), or the uplink length field is used to indicate the length indicated by the L-SIG field in the EHT PPDU; and

sending, by the AP, the trigger frame.

2. The method according to claim 1, wherein the length value indicated by the uplink length field is a positive integer and is a multiple of 3 minus 2.

3. The method according to claim 1 or 2, further comprises:

detecting, by the AP, an EHT TB PPDU according to whether the length indicated in the L-SIG field is a multiple of three.

4. The method according to any one of claims 1 to 3, wherein a reserved bit in a common information field in the trigger frame and an HE uplink bandwidth field in the common information field jointly indicate an uplink bandwidth used for sending the EHT PPDU; or an EHT common information field in the trigger frame and an HE uplink bandwidth field in a common information field in the trigger frame jointly indicate an uplink bandwidth used for sending the EHT PPDU, wherein

the HE uplink bandwidth field in the common information field in the trigger frame is used to indicate an uplink bandwidth used for sending the HE TB PPDU.

5. The method according to any one of claims 1 to 4, wherein the trigger frame further comprises indication information, and the indication information is used to indicate a difference between a quantity of EHT-LTF symbols and a quantity of HE-LTF symbols.

6. The method according to any one of claims 1 to 5, wherein a sum of quantities of EHT-LTF symbols and EHT data symbols of the EHT PPDU is equal to a sum of quantities of HE-LTF symbols and HE data symbols of the HE TB PPDU.

7. The method according to claim 5 or 6, wherein the indication information is carried in the

reserved bit in the common information field in the trigger frame or is carried in the EHT common information field in the trigger frame.

8. The method according to any one of claims 1 to 7, wherein the trigger frame is further used to indicate a type of the scheduled uplink EHT PPDU, and the type of the EHT PPDU comprises a trigger-based EHT PPDU and an EHT single user PPDU.

9. The method according to claim 8, wherein the type of the EHT PPDU is indicated by a trigger frame type field in the trigger frame or is indicated by a reserved bit in the trigger frame.

10. The method according to claim 8 or 9, wherein the trigger frame indicates that the type of the scheduled uplink EHT PPDU is an EHT single user PPDU; and the trigger frame is further used to indicate whether the scheduled uplink EHT PPDU is an EHT single user low power indoor (SU LPI) PPDU.

11. The method according to claim 10, wherein whether the scheduled uplink EHT PPDU is an EHT SU LPI PPDU is indicated by a modulation and coding scheme field in the trigger frame or is indicated by a reserved bit in an EHT user information field in the trigger frame.

12. A method for indicating an uplink parameter of a physical layer protocol data unit PPDU, comprising:

receiving, by a station (STA), a trigger frame, wherein the trigger frame comprises an uplink length field;

generating, by the STA, an EHT PPDU, wherein the length indicated by an L-SIG field in the EHT PPDU is equal to a length value indicated by the uplink length field plus 2; and

sending, by the STA, the EHT PPDU.

13. The method according to claim 12, wherein the length value indicated by the uplink length field is a positive integer and is a multiple of 3 minus 2.

14. The method according to claim 12 or 13, wherein the uplink length field is used to indicate lengths indicated by L-SIG fields in an HE TB PPDU and an EHT PPDU, or the uplink length field is used to indicate the length indicated by the L-SIG field in the EHT PPDU.

15. The method according to any one of claims 12 to 14, wherein a reserved bit in a common information field in the trigger frame and an HE uplink bandwidth field in the common information field jointly indicate an uplink bandwidth used for sending the EHT PPDU; or an EHT common information field in the trigger frame and an HE uplink bandwidth field in a common information

field in the trigger frame jointly indicate an uplink bandwidth used for sending the EHT PPDU.

16. The method according to any one of claims 12 to 15, wherein the trigger frame further comprises indication information, and the indication information is used to indicate a difference between a quantity of EHT-LTF symbols and a quantity of HE-LTF symbols.

17. The method according to any one of claims 12 to 16, wherein a sum of quantities of EHT-LTF symbols and EHT data symbols of the EHT PPDU is equal to a sum of quantities of HE-LTF symbols and HE data symbols of the HE TB PPDU.

18. The method according to claim 16 or 17, wherein the indication information is carried in the reserved bit in the common information field in the trigger frame or is carried in the EHT common information field in the trigger frame.

19. The method according to any one of claims 12 to 18, wherein the trigger frame is further used to indicate a type of the scheduled uplink EHT PPDU, and the type of the EHT PPDU comprises a trigger-based EHT PPDU and an EHT single user PPDU.

20. The method according to claim 19, wherein the type of the EHT PPDU is indicated by a trigger frame type field in the trigger frame or is indicated by a reserved bit in the trigger frame.

21. The method according to claim 19 or 20, wherein the trigger frame indicates that the type of the scheduled uplink EHT PPDU is an EHT single user PPDU; and the trigger frame is further used to indicate whether the scheduled uplink EHT PPDU is an EHT single user low power indoor (SU LPI) PPDU.

22. The method according to claim 21, wherein whether the scheduled uplink EHT PPDU is an EHT SU LPI PPDU is indicated by a modulation and coding scheme field in the trigger frame or is indicated by a reserved bit in an EHT user information field in the trigger frame.

23. A communications apparatus, configured to perform the method according to any one of claims 1 to 11.

24. A communications apparatus, configured to perform the method according to any one of claim 12 to 22.

25. A computer-readable storage medium, wherein the computer-readable storage medium stores instructions; and when the instructions are run on a computer, the computer is enabled to perform the method according to any one of claims 1 to 22.

2~~6~~6. A computer program product comprising instructions, wherein when the instructions are run on a computer, the computer is enabled to perform the method according to any one of claims 1 to ~~11~~22.

2~~7~~7.~~.~~ A chip or a chip system, comprising an input/output interface and a processing circuit, wherein the input/output interface is configured to receive code instructions and transmit the code instructions to the processing circuit; and the processing circuit is configured to run the code instructions to perform the method according to any one of claims 1 to ~~11~~22.

~~1. A method for indicating an uplink parameter of a physical layer protocol data unit PPDU, comprising:~~

~~generating, by an access point AP, a trigger frame, wherein the trigger frame comprises an uplink length field, and the uplink length field is used to indicate lengths indicated by legacy signal L-SIG fields in a high efficient trigger based physical layer protocol data unit HE TB PPDU and an extremely high throughput physical layer protocol data unit EHT PPDU, or the uplink length field is used to indicate the length indicated by the L-SIG field in the EHT PPDU; and~~

~~sending, by the AP, the trigger frame.~~

~~2. A method for indicating an uplink parameter of a physical layer protocol data unit PPDU, comprising:~~

~~receiving, by a station STA, a trigger frame, wherein the trigger frame comprises an uplink length field, and the uplink length field is used to indicate lengths indicated by L-SIG fields in an HE TB PPDU and an EHT PPDU, or the uplink length field is used to indicate the length indicated by the L-SIG field in the EHT PPDU;~~

~~generating, by the STA, the EHT PPDU, wherein the length indicated by the L-SIG field in the EHT PPDU is equal to a length value indicated by the uplink length field plus 2; and~~

~~sending, by the STA, the generated EHT PPDU.~~

~~3. The method according to claim 1 or 2, wherein the length value indicated by the uplink length field is a positive integer and is a multiple of 3 minus 2.~~

~~4. The method according to any one of claims 1 to 3, wherein a reserved bit in a common information field in the trigger frame and an HE uplink bandwidth field in the common information field jointly indicate an uplink bandwidth used for sending the EHT PPDU; or an EHT common information field in the trigger frame and an HE uplink bandwidth field in a common information field in the trigger frame jointly indicate an uplink bandwidth used for sending the EHT PPDU,~~

wherein

the HE uplink bandwidth field in the common information field in the trigger frame is used to indicate an uplink bandwidth used for sending the HE TB PPDU.

5. The method according to any one of claims 1 to 4, wherein the trigger frame further comprises indication information, and the indication information is used to indicate a difference between a quantity of EHT-LTF symbols and a quantity of HE-LTF symbols.

6. The method according to claims 1 to 5, wherein a sum of quantities of EHT-LTF symbols and EHT data symbols of the EHT PPDU is equal to a sum of quantities of HE-LTF symbols and HE data symbols of the HE TB PPDU.

7. The method according to claim 5 or 6, wherein the indication information is carried in the reserved bit in the common information field in the trigger frame or is carried in the EHT common information field in the trigger frame.

8. The method according to any one of claims 1 to 7, wherein the trigger frame is further used to indicate a type of the scheduled uplink EHT PPDU, and the type of the EHT PPDU comprises a trigger-based EHT PPDU and an EHT single user PPDU.

9. The method according to claim 8, wherein the type of the EHT PPDU is indicated by a trigger frame type field in the trigger frame or is indicated by a reserved bit in the trigger frame.

10. The method according to claim 8 or 9, wherein the trigger frame indicates that the type of the scheduled uplink EHT PPDU is an EHT single user PPDU; and the trigger frame is further used to indicate whether the scheduled uplink EHT PPDU is an EHT single user low power indoor SU LPI PPDU.

11. The method according to claim 10, wherein whether the scheduled uplink EHT PPDU is an EHT SU LPI PPDU is indicated by a modulation and coding scheme field in the trigger frame or is indicated by a reserved bit in an EHT user information field in the trigger frame.

12. A communications apparatus, comprising:

a processing unit, configured to generate a trigger frame, wherein the trigger frame comprises an uplink length field, and the uplink length field is used to indicate lengths indicated by legacy signal L-SIG fields in a high efficient trigger based physical layer protocol data unit HE TB PPDU and an extremely high throughput physical layer protocol data unit EHT PPDU, or the uplink length field is used to indicate the length indicated by the L-SIG field in the EHT PPDU; and

a transceiver unit, configured to send the trigger frame.

~~13. A communications apparatus, comprising:~~

~~a transceiver unit, configured to receive a trigger frame, wherein the trigger frame comprises an uplink length field, and the uplink length field is used to indicate lengths indicated by L-SIG fields in an HE TB PPDU and an EHT PPDU, or the uplink length field is used to indicate the length indicated by the L-SIG field in the EHT PPDU; and~~

~~a processing unit, configured to generate the EHT PPDU, wherein the length indicated by the L-SIG field in the EHT PPDU is equal to a length value indicated by the uplink length field plus 2, wherein~~

~~the transceiver unit is further configured to send the generated EHT PPDU.~~

~~14. The communications apparatus according to claim 12 or 13, wherein the length value indicated by the uplink length field is a positive integer and is a multiple of 3 minus 2.~~

~~15. The communications apparatus according to any one of claims 12 to 14, wherein a reserved bit in a common information field in the trigger frame and an HE uplink bandwidth field in the common information field jointly indicate an uplink bandwidth used for sending the EHT PPDU; or an EHT common information field in the trigger frame and an HE uplink bandwidth field in a common information field in the trigger frame jointly indicate an uplink bandwidth used for sending the EHT PPDU, wherein~~

~~the HE uplink bandwidth field in the common information field in the trigger frame is used to indicate an uplink bandwidth used for sending the HE TB PPDU.~~

~~16. The communications apparatus according to any one of claims 12 to 15, wherein the trigger frame further comprises indication information, and the indication information is used to indicate a difference between a quantity of EHT-LTF symbols and a quantity of HE-LTF symbols.~~

~~17. The communications apparatus according to any one of claims 12 to 16, wherein a sum of quantities of EHT-LTF symbols and EHT data symbols of the EHT PPDU is equal to a sum of quantities of HE-LTF symbols and HE data symbols of the HE TB PPDU.~~

~~18. The communications apparatus according to claim 16 or 17, wherein the indication information is carried in the reserved bit in the common information field in the trigger frame or is carried in the EHT common information field in the trigger frame.~~

~~19. The communications apparatus according to any one of claims 12 to 18, wherein the trigger frame is further used to indicate a type of the scheduled uplink EHT PPDU, and the type of the EHT PPDU comprises a trigger-based EHT PPDU and an EHT single user PPDU.~~

20. The communications apparatus according to claim 19, wherein the type of the EHT PPDU is indicated by a trigger frame type field in the trigger frame or is indicated by a reserved bit in the trigger frame.

21. The communications apparatus according to claim 19 or 20, wherein the trigger frame indicates that the type of the scheduled uplink EHT PPDU is an EHT single user PPDU; and the trigger frame is further used to indicate whether the scheduled uplink EHT PPDU is an EHT single user low power indoor SU LPI PPDU.

22. The communications apparatus according to claim 21, wherein whether the scheduled uplink EHT PPDU is an EHT SU LPI PPDU is indicated by a modulation and coding scheme field in the trigger frame or is indicated by a reserved bit in an EHT user information field in the trigger frame.

23. A communications apparatus, comprising a processor and a transceiver, wherein the processor is configured to generate a trigger frame, wherein the trigger frame comprises an uplink length field, and the uplink length field is used to indicate lengths indicated by L-SIG fields in an HE TB PPDU and an EHT PPDU, or the uplink length field is used to indicate the length indicated by the L-SIG field in the EHT PPDU; and the transceiver is configured to send the trigger frame.

24. A communications apparatus, comprising a processor and a transceiver, wherein the transceiver is configured to receive a trigger frame, wherein the trigger frame comprises an uplink length field, and the uplink length field is used to indicate lengths indicated by L-SIG fields in an HE TB PPDU and an EHT PPDU, or the uplink length field is used to indicate the length indicated by the L-SIG field in the EHT PPDU; the processor is configured to generate the EHT PPDU, wherein the length indicated by the L-SIG field in the EHT PPDU is equal to a length value indicated by the uplink length field plus 2; and the transceiver is further configured to send the generated EHT PPDU.

25. A computer-readable storage medium, wherein the computer-readable storage medium stores instructions; and when the instructions are run on a computer, the computer is enabled to perform the method according to any one of claims 1 to 11.

26. A computer program product comprising instructions, wherein when the instructions are run on a computer, the computer is enabled to perform the method according to any one of claims 1 to 11.

27. A chip or a chip system, comprising an input/output interface and a processing circuit,

~~wherein the input/output interface is configured to receive code instructions and transmit the code instructions to the processing circuit; and the processing circuit is configured to run the code instructions to perform the method according to any one of claims 1 to 11.~~