CLAIMS

1. A method for transmitting a physical layer protocol data unit, comprising:

generating, a physical layer protocol data unit, PPDU, wherein the PPDU comprises a long training field carrying an LTF sequence, a 320 MHz 4x LTF sequence is $4xEHT_LTF_320M_{-2036:2036}$,

$4xEHT_LTF_320M_{-2036:2036}$ ={4xEHT_LTF_partA, 0_5, 4xEHT_LTF_partB, 0_{23}, 4xEHT_LTF_partA, 0_5, −4xEHT_LTF_partB, 0_{23}, −4xEHT_LTF_partA, 0_5, −4xEHT_LTF_partB, 0_{23}, −4xEHT_LTF_partA, 0_5, 4xEHT_LTF_partB }, wherein 4xEHT_LTF_partA is a sequence segment including ± 1, 4xEHT_LTF_partB is a sequence segment including ± 1, 0_5 represents 5 consecutive 0s, 0_{23} represents 23 consecutive 0s;

sending the PPDU.

2. The method according to claim 1, 4xEHT_LTF_partA includes 498 elements, 4xEHT_LTF_partB includes 498 elements.

3. The method according to claim 1 or 2, wherein

4xEHT_LTF_partA =

{ 1 −1 −1 −1 −1 1 −1 −1 1 −1 −1 −1 1 1
−1 −1 −1 1 −1 −1 1 −1 1 1 1 −1 1 −1
1 −1 −1 −1 −1 1 1 1 1 1 −1 −1 1 −1
1 −1 −1 −1 1 1 −1 −1 1 −1 −1 −1 1 1
1 −1 −1 1 1 −1 −1 1 −1 1 1 −1 1 −1
1 1 1 −1 1 −1 1 1 1 1 1 1 −1 −1
−1 1 −1 1 −1 −1 −1 1 −1 −1 1 1 1 1
1 1 −1 1 −1 1 1 −1 1 −1 1 −1 1 −1
1 −1 −1 1 1 1 1 −1 −1 −1 −1 −1 −1 −1
−1 1 −1 −1 1 −1 −1 1 1 1 −1 1 −1 −1
−1 1 1 1 −1 1 1 −1 −1 1 −1 −1 −1 1
1 1 1 −1 1 1 1 1 1 1 −1 1 −1 −1
1 −1 1 −1 −1 1 1 1 1 1 −1 1 1 −1
−1 1 1 1 −1 1 1 −1 1 1 −1 −1 1 1
−1 −1 −1 −1 1 1 1 1 1 −1 1 1 1 1
1 −1 1 −1 1 −1 −1 1 −1 −1 −1 −1 −1 1
−1 −1 −1 1 1 −1 1 −1 1 −1 −1 −1 −1 −1
1 1 1 1 −1 1 −1 −1 1 1 −1 −1 −1 1
1 1 1 1 −1 1 −1 1 −1 −1 1 1 1 −1
1 1 1 1 1 −1 1 1 −1 1 −1 1 −1 −1
−1 −1 −1 1 −1 −1 −1 −1 −1 1 1 1 1 −1

```
    -1     1     1    -1    -1     1    -1    -1     1    -1    -1    -1     1     1
    -1    -1     1    -1    -1    -1    -1    -1     1     1    -1     1    -1     1
     1    -1     1    -1    -1    -1    -1    -1    -1     1    -1    -1    -1    -1
     1     1     1    -1     1     1    -1    -1     1    -1    -1    -1     1     1
     1    -1     1    -1     1    -1    -1    -1     1    -1     1    -1     1    -1
    -1    -1     1    -1    -1     1    -1     1     1    -1    -1    -1     1     1
    -1    -1    -1    -1     1    -1     1     1    -1     1    -1     1     1     1
     1     1     1    -1    -1     1    -1    -1    -1     1    -1     1    -1    -1
    -1     1     1     1     1     1     1    -1     1    -1     1     1     1    -1
     1    -1     1     1    -1     1    -1    -1     1     1    -1    -1     1     1
     1    -1    -1    -1     1    -1    -1     1     1    -1    -1    -1     1    -1
     1    -1    -1     1     1     1     1     1    -1    -1    -1    -1     1    -1
     1    -1     1     1     1    -1     1    -1    -1     1    -1    -1    -1     1
     1    -1    -1    -1     1    -1    -1     1    -1    -1    -1    -1     1    -1
     1     1    -1    -1    -1     1    -1    -1};

4xEHT_LTF_partB =

    {-1    -1     1    -1     1     1     1     1     1     1    -1    -1    -1    -1
     1    -1    -1     1    -1    -1    -1     1     1    -1    -1    -1     1    -1
    -1     1    -1     1     1     1    -1     1    -1     1    -1    -1    -1    -1
     1     1     1     1     1    -1    -1     1    -1     1    -1    -1    -1     1
     1    -1    -1     1    -1    -1    -1     1     1     1    -1    -1     1     1
    -1    -1     1    -1     1     1    -1     1    -1     1     1     1    -1     1
    -1     1     1     1     1     1     1    -1    -1    -1     1    -1     1    -1
    -1    -1     1    -1    -1     1     1     1     1     1     1    -1     1    -1
     1     1    -1     1    -1    -1    -1    -1     1     1    -1    -1    -1     1
     1    -1     1    -1    -1     1    -1    -1    -1     1    -1     1    -1     1
    -1    -1    -1     1    -1     1    -1     1     1     1    -1    -1    -1     1
    -1    -1     1     1    -1     1     1     1    -1    -1    -1    -1     1    -1
    -1    -1    -1    -1    -1     1    -1     1     1    -1     1    -1     1     1
    -1    -1    -1    -1    -1     1    -1    -1     1     1    -1    -1    -1     1
    -1    -1     1    -1    -1     1     1    -1    -1     1     1     1     1    -1
    -1    -1    -1    -1     1    -1    -1    -1    -1    -1     1    -1     1    -1
     1     1    -1     1     1     1     1     1    -1     1     1     1    -1    -1
     1    -1     1    -1     1     1     1     1     1    -1    -1    -1     1     1
    -1     1     1    -1     1    -1     1    -1    -1    -1    -1    -1     1    -1
    -1    -1    -1    -1     1     1     1     1    -1    -1     1     1    -1    -1
     1    -1    -1     1    -1    -1    -1     1     1    -1    -1     1    -1    -1
    -1    -1    -1     1     1    -1     1    -1     1     1    -1     1    -1    -1
```

−1 −1 −1 −1 1 −1 −1 −1 −1 1 1 1 −1 1
1 −1 −1 1 −1 −1 −1 1 1 1 −1 1 −1 −1
−1 1 1 −1 1 1 −1 1 1 1 1 1 1 1
1 −1 −1 −1 −1 1 1 −1 1 −1 1 −1 1 −1
1 −1 −1 1 −1 1 −1 −1 −1 −1 −1 −1 1 1
−1 1 1 1 −1 1 −1 1 1 1 −1 −1 −1 −1
−1 −1 1 −1 1 −1 −1 −1 1 −1 1 −1 −1 1
−1 1 1 −1 −1 1 1 −1 −1 −1 1 1 1 −1
1 1 −1 −1 1 1 1 −1 1 −1 1 1 −1 −1
−1 −1 −1 1 1 1 1 −1 1 −1 1 −1 −1 −1
1 −1 1 1 −1 1 1 1 −1 −1 1 1 1 −1
1 1 −1 1 1 1 1 −1 }.

4. A method for transmitting a physical layer protocol data unit, comprising:

receiving a physical layer protocol data unit, PPDU; and

parsingthe received PPDU to obtain an LTF sequence carried in a long training field of the PPDU;and

estimating a channel according to the obtained LTF sequence and a specified LTF sequence, wherein a specified 320 MHz 4x LTF sequence is $4xEHT_LTF_320M_{-2036:2036}$,

$4xEHT_LTF_320M_{-2036:2036}=\{4xEHT_LTF_160M_{-1012:1012}, 0_{23}, -4xEHT_LTF_160M_{-1012:1012}\}=$ $\{4xEHT_LTF_partA, 0_5, 4xEHT_LTF_partB, 0_{23}, 4xEHT_LTF_partA, 0_5, -4xEHT_LTF_partB, 0_{23}, -4xEHT_LTF_partA, 0_5, -4xEHT_LTF_partB, 0_{23}, -4xEHT_LTF_partA, 0_5, 4xEHT_LTF_partB\}$, wherein $4xEHT_LTF_partA$ is a sequence segment including ± 1, $4xEHT_LTF_partB$ is a sequence segment including ± 1, 0_5 represents 5 consecutive 0s, 0_{23} represents 23 consecutive 0s.

5. The method according to claim 4, $4xEHT_LTF_partA$ includes 498 elements, $4xEHT_LTF_partB$ includes 498 elements.

6. The method according to claim 4 or 5, wherein

$4xEHT_LTF_partA =$

{ 1 −1 −1 −1 −1 1 −1 −1 1 −1 −1 −1 1 1
−1 −1 −1 1 −1 −1 1 −1 1 1 1 −1 1 −1
1 −1 −1 −1 −1 1 1 1 1 1 −1 −1 1 −1
1 −1 −1 −1 1 1 −1 −1 1 −1 −1 −1 1 1
1 −1 −1 1 1 −1 −1 1 −1 1 1 −1 1 −1
1 1 1 −1 1 −1 1 1 1 1 1 1 −1 −1
−1 1 −1 1 −1 −1 −1 1 −1 −1 1 1 1 1
1 1 −1 1 −1 1 1 −1 1 −1 1 −1 1 −1
1 −1 −1 1 1 1 1 −1 −1 −1 −1 −1 −1 −1

−1 1 −1 −1 1 −1 −1 1 1 1 −1 1 −1 −1
−1 1 1 1 −1 1 1 −1 −1 1 −1 −1 −1 1
1 1 1 −1 1 1 1 1 1 1 −1 1 −1 −1
1 −1 1 −1 −1 1 1 1 1 1 −1 1 1 −1
−1 1 1 1 −1 1 1 −1 1 1 −1 −1 1 1
−1 −1 −1 −1 1 1 1 1 1 −1 1 1 1 1
1 −1 1 −1 1 −1 −1 1 −1 −1 −1 −1 −1 1
−1 −1 −1 1 1 −1 1 −1 1 −1 −1 −1 −1 −1
1 1 1 1 −1 1 −1 −1 1 1 −1 −1 −1 1
1 1 1 1 −1 1 −1 1 −1 −1 1 1 1 −1
1 1 1 1 1 −1 1 1 −1 1 −1 1 −1 −1
−1 −1 −1 1 −1 −1 −1 −1 −1 1 1 1 1 −1
−1 1 1 −1 −1 1 −1 −1 1 −1 −1 −1 1 1
−1 −1 1 −1 −1 −1 −1 −1 1 1 −1 1 −1 1
1 −1 1 −1 −1 −1 −1 −1 −1 1 −1 −1 −1 −1
1 1 1 −1 1 1 −1 −1 1 −1 −1 −1 1 1
1 −1 1 −1 1 −1 −1 −1 1 −1 1 −1 1 −1
−1 −1 1 −1 −1 1 −1 1 1 −1 −1 −1 1 1
−1 −1 −1 −1 1 −1 1 1 −1 1 −1 1 1 1
1 1 1 −1 −1 1 −1 −1 −1 1 −1 1 −1 −1
−1 1 1 1 1 1 1 −1 1 −1 1 1 1 −1
1 −1 1 1 −1 1 −1 −1 1 1 −1 −1 1 1
1 −1 −1 −1 1 −1 −1 1 1 −1 −1 −1 1 −1
1 −1 −1 1 1 1 1 1 −1 −1 −1 −1 1 −1
1 −1 1 1 1 −1 1 −1 −1 1 −1 −1 −1 1
1 −1 −1 −1 1 −1 −1 1 −1 −1 −1 −1 1 −1
1 1 −1 −1 −1 1 −1 −1 };

4xEHT_LTF_partB =

{−1 −1 1 −1 1 1 1 1 1 1 −1 −1 −1 −1
1 −1 −1 1 −1 −1 −1 1 1 −1 −1 −1 1 −1
−1 1 −1 1 1 1 −1 1 −1 1 −1 −1 −1 −1
1 1 1 1 1 −1 −1 1 −1 1 −1 −1 −1 1
1 −1 −1 1 −1 −1 −1 1 1 1 −1 −1 1 1
−1 −1 1 −1 1 1 −1 1 −1 1 1 1 −1 1
−1 1 1 1 1 1 1 −1 −1 −1 1 −1 1 −1
−1 −1 1 −1 −1 1 1 1 1 1 1 −1 1 −1
1 1 −1 1 −1 −1 −1 −1 1 1 −1 −1 −1 1
1 −1 1 −1 −1 1 −1 −1 −1 1 −1 1 −1 1
−1 −1 −1 1 −1 1 −1 1 1 1 −1 −1 −1 1
−1 −1 1 1 −1 1 1 1 −1 −1 −1 −1 1 −1

−1 −1 −1 −1 −1 1 −1 1 1 −1 1 −1 1 1
−1 −1 −1 −1 −1 1 −1 −1 1 1 −1 −1 −1 1
−1 −1 1 −1 −1 1 1 −1 −1 1 1 1 1 −1
−1 −1 −1 −1 1 −1 −1 −1 −1 −1 1 −1 1 −1
1 1 −1 1 1 1 1 1 −1 1 1 1 −1 −1
1 −1 1 −1 1 1 1 1 1 −1 −1 −1 1 1
−1 −1 −1 −1 −1 −1 −1 −1 1 1 1 1 1 −1
1 −1 1 −1 −1 1 1 1 −1 1 1 1 1 1
−1 1 1 −1 1 −1 1 −1 −1 −1 −1 −1 1 −1
−1 −1 −1 −1 1 1 1 1 −1 −1 1 1 −1 −1
1 −1 −1 1 −1 −1 −1 1 1 −1 −1 1 −1 −1
−1 −1 −1 1 1 −1 1 −1 1 1 −1 1 −1 −1
−1 −1 −1 −1 1 −1 −1 −1 −1 1 1 1 −1 1
1 −1 −1 1 −1 −1 −1 1 1 1 −1 1 −1 −1
−1 1 1 −1 1 1 −1 1 1 1 1 1 1 1
1 −1 −1 −1 −1 1 1 −1 1 −1 1 −1 1 −1
1 −1 −1 1 −1 1 −1 −1 −1 −1 −1 −1 1 1
−1 1 1 1 −1 1 −1 1 1 1 −1 −1 −1 −1
−1 −1 1 −1 1 −1 −1 −1 1 −1 1 −1 −1 1
−1 1 1 −1 −1 1 1 −1 −1 −1 1 1 1 −1
1 1 −1 −1 1 1 1 −1 1 −1 1 1 −1 −1
−1 −1 −1 1 1 1 1 −1 1 −1 1 −1 −1 −1
1 −1 1 1 −1 1 1 1 −1 −1 1 1 1 −1
1 1 −1 1 1 1 1 −1}.

7. An apparatus for transmitting a physical layer protocol data unit, comprising:

a generating unit, configured to generate a physical layer protocol data unit, PPDU, wherein the PPDU comprises a long training field carrying an LTF sequence, a 320 MHz 4x LTF sequence is $4xEHT_LTF_320M_{-2036:2036}$, $4xEHT_LTF_320M_{-2036:2036}$ = {4xEHT_LTF_partA, 0_5, 4xEHT_LTF_partB, 0_{23}, 4xEHT_LTF_partA, 0_5, −4xEHT_LTF_partB, 0_{23}, −4xEHT_LTF_partA, 0_5, −4xEHT_LTF_partB, 0_{23}, −4xEHT_LTF_partA, 0_5, 4xEHT_LTF_partB }, wherein 4xEHT_LTF_partA is a sequence segment including ± 1, 4xEHT_LTF_partB is a sequence segment including ± 1, 0_5 represents 5 consecutive 0s, 0_{23} represents 23 consecutive 0s;

a sending unit, configured to send the PPDU.

8. The apparatus according to claim 7, 4xEHT_LTF_partA includes 498 elements, 4xEHT_LTF_partB includes 498 elements.

9. The apparatus according to claim 7 or 8, wherein

4xEHT_LTF_partA =

{ 1 −1 −1 −1 −1 1 −1 −1 1 −1 −1 −1 1 1
−1 −1 −1 1 −1 −1 1 −1 1 1 1 −1 1 −1
1 −1 −1 −1 −1 1 1 1 1 1 −1 −1 1 −1
1 −1 −1 −1 1 1 −1 −1 1 −1 −1 −1 1 1
1 −1 −1 1 1 −1 −1 1 −1 1 1 −1 1 −1
1 1 1 −1 1 −1 1 1 1 1 1 1 −1 −1
−1 1 −1 1 −1 −1 −1 1 −1 −1 1 1 1 1
1 1 −1 1 −1 1 1 −1 1 −1 1 −1 1 −1
1 −1 −1 1 1 1 1 −1 −1 −1 −1 −1 −1 −1
−1 1 −1 −1 1 −1 −1 1 1 1 −1 1 −1 −1
−1 1 1 1 −1 1 1 −1 −1 1 −1 −1 −1 1
1 1 1 −1 1 1 1 1 1 1 −1 1 −1 −1
1 −1 1 −1 −1 1 1 1 1 1 −1 1 1 −1
−1 1 1 1 −1 1 1 −1 1 1 −1 −1 1 1
−1 −1 −1 −1 1 1 1 1 1 −1 1 1 1 1
1 −1 1 −1 1 −1 −1 1 −1 −1 −1 −1 −1 1
−1 −1 −1 1 1 −1 1 −1 1 −1 −1 −1 −1 −1
1 1 1 1 −1 1 −1 −1 1 1 −1 −1 −1 1
1 1 1 1 −1 1 −1 1 −1 −1 1 1 1 −1
1 1 1 1 1 −1 1 1 −1 1 −1 1 −1 −1
−1 −1 −1 1 −1 −1 −1 −1 −1 1 1 1 1 −1
−1 1 1 −1 −1 1 −1 −1 1 −1 −1 −1 1 1
−1 −1 1 −1 −1 −1 −1 −1 1 1 −1 1 −1 1
1 −1 1 −1 −1 −1 −1 −1 −1 1 −1 −1 −1 −1
1 1 1 −1 1 1 −1 −1 1 −1 −1 −1 1 1
1 −1 1 −1 1 −1 −1 −1 1 −1 1 −1 1 −1
−1 −1 1 −1 −1 1 −1 1 1 −1 −1 −1 1 1
−1 −1 −1 −1 1 −1 1 1 −1 1 −1 1 1 1
1 −1 −1 1 1 1 −1 −1 1 −1 −1 −1 1 −1
−1 1 1 1 1 1 1 −1 1 −1 1 1 1 −1
1 −1 1 1 −1 1 −1 −1 1 1 −1 −1 1 1
1 −1 −1 −1 1 −1 −1 1 1 −1 −1 −1 1 −1
1 −1 −1 1 1 1 1 1 −1 −1 −1 −1 1 −1
1 −1 1 1 1 −1 1 −1 −1 1 −1 −1 −1 1
1 −1 −1 −1 1 −1 −1 1 −1 −1 −1 −1 1 −1
1 1 −1 −1 −1 1 −1 −1 };

4xEHT_LTF_partB =

$$\{-1\quad -1\quad 1\quad -1\quad 1\quad 1\quad 1\quad 1\quad 1\quad 1\quad -1\quad -1\quad -1\quad -1$$
$$1\quad -1\quad -1\quad 1\quad -1\quad -1\quad -1\quad 1\quad 1\quad -1\quad -1\quad -1\quad 1\quad -1$$
$$-1\quad 1\quad -1\quad 1\quad 1\quad 1\quad -1\quad 1\quad -1\quad 1\quad -1\quad -1\quad -1\quad -1$$
$$1\quad 1\quad 1\quad 1\quad 1\quad -1\quad -1\quad 1\quad -1\quad 1\quad -1\quad -1\quad -1\quad 1$$
$$1\quad -1\quad -1\quad 1\quad -1\quad -1\quad -1\quad 1\quad 1\quad 1\quad -1\quad -1\quad 1\quad 1$$
$$-1\quad -1\quad 1\quad -1\quad 1\quad 1\quad -1\quad 1\quad -1\quad 1\quad 1\quad 1\quad -1\quad 1$$
$$-1\quad 1\quad 1\quad 1\quad 1\quad 1\quad 1\quad -1\quad -1\quad -1\quad 1\quad -1\quad 1\quad -1$$
$$-1\quad -1\quad 1\quad -1\quad -1\quad 1\quad 1\quad 1\quad 1\quad 1\quad 1\quad -1\quad 1\quad -1$$
$$1\quad 1\quad -1\quad 1\quad -1\quad -1\quad -1\quad -1\quad 1\quad 1\quad -1\quad -1\quad -1\quad 1$$
$$1\quad -1\quad 1\quad -1\quad -1\quad 1\quad -1\quad -1\quad -1\quad 1\quad -1\quad 1\quad -1\quad 1$$
$$-1\quad -1\quad -1\quad 1\quad -1\quad 1\quad -1\quad 1\quad 1\quad 1\quad -1\quad -1\quad -1\quad 1$$
$$-1\quad -1\quad 1\quad 1\quad -1\quad 1\quad 1\quad 1\quad -1\quad -1\quad -1\quad -1\quad 1\quad -1$$
$$-1\quad -1\quad -1\quad -1\quad -1\quad 1\quad -1\quad 1\quad 1\quad -1\quad 1\quad -1\quad 1\quad 1$$
$$-1\quad -1\quad -1\quad -1\quad -1\quad 1\quad -1\quad -1\quad 1\quad 1\quad -1\quad -1\quad -1\quad 1$$
$$-1\quad -1\quad 1\quad -1\quad -1\quad 1\quad 1\quad -1\quad -1\quad 1\quad 1\quad 1\quad 1\quad -1$$
$$-1\quad -1\quad -1\quad -1\quad 1\quad -1\quad -1\quad -1\quad -1\quad -1\quad 1\quad -1\quad 1\quad -1$$
$$1\quad 1\quad -1\quad 1\quad 1\quad 1\quad 1\quad 1\quad -1\quad 1\quad 1\quad 1\quad -1\quad -1$$
$$1\quad -1\quad 1\quad -1\quad 1\quad 1\quad 1\quad 1\quad 1\quad -1\quad -1\quad -1\quad 1\quad 1$$
$$-1\quad -1\quad -1\quad -1\quad -1\quad -1\quad -1\quad -1\quad 1\quad 1\quad 1\quad 1\quad 1\quad -1$$
$$1\quad -1\quad 1\quad -1\quad -1\quad 1\quad 1\quad 1\quad -1\quad 1\quad 1\quad 1\quad 1\quad 1$$
$$-1\quad 1\quad 1\quad -1\quad 1\quad -1\quad 1\quad -1\quad -1\quad -1\quad -1\quad -1\quad 1\quad -1$$
$$-1\quad -1\quad -1\quad -1\quad 1\quad 1\quad 1\quad 1\quad -1\quad -1\quad 1\quad 1\quad -1\quad -1$$
$$1\quad -1\quad -1\quad 1\quad -1\quad -1\quad -1\quad 1\quad 1\quad -1\quad -1\quad 1\quad -1\quad -1$$
$$-1\quad -1\quad -1\quad 1\quad 1\quad -1\quad 1\quad -1\quad 1\quad 1\quad -1\quad 1\quad -1\quad -1$$
$$-1\quad -1\quad -1\quad -1\quad 1\quad -1\quad -1\quad -1\quad -1\quad 1\quad 1\quad 1\quad -1\quad 1$$
$$1\quad -1\quad -1\quad 1\quad -1\quad -1\quad -1\quad 1\quad 1\quad 1\quad -1\quad 1\quad -1\quad -1$$
$$-1\quad 1\quad 1\quad -1\quad 1\quad 1\quad -1\quad 1\quad 1\quad 1\quad 1\quad 1\quad 1\quad 1$$
$$1\quad -1\quad -1\quad -1\quad -1\quad 1\quad 1\quad -1\quad 1\quad -1\quad 1\quad -1\quad 1\quad -1$$
$$1\quad -1\quad -1\quad 1\quad -1\quad 1\quad -1\quad -1\quad -1\quad -1\quad -1\quad -1\quad 1\quad 1$$
$$-1\quad 1\quad 1\quad 1\quad -1\quad 1\quad -1\quad 1\quad 1\quad 1\quad -1\quad -1\quad -1\quad -1$$
$$-1\quad -1\quad 1\quad -1\quad 1\quad -1\quad -1\quad -1\quad 1\quad -1\quad 1\quad -1\quad -1\quad 1$$
$$-1\quad 1\quad 1\quad -1\quad -1\quad 1\quad 1\quad -1\quad -1\quad -1\quad 1\quad 1\quad 1\quad -1$$
$$1\quad 1\quad -1\quad -1\quad 1\quad 1\quad 1\quad -1\quad 1\quad -1\quad 1\quad 1\quad -1\quad -1$$
$$-1\quad -1\quad -1\quad 1\quad 1\quad 1\quad 1\quad -1\quad 1\quad -1\quad 1\quad -1\quad -1\quad -1$$
$$1\quad -1\quad 1\quad 1\quad -1\quad 1\quad 1\quad 1\quad -1\quad -1\quad 1\quad 1\quad 1\quad -1$$
$$1\quad 1\quad -1\quad 1\quad 1\quad 1\quad 1\quad -1\}.$$

10. An apparatus for transmitting a physical layer protocol data unit, comprising:

a receiving unit, configured to receive a physical layer protocol data unit, PPDU; and

a parsing unit, configured to parse the received PPDU to obtain an LTF sequence carried in a long training field of the PPDU; and

an estimating unit, configured to estimate a channel according to the obtained LTF sequence and a specified LTF sequence, wherein a specified 320 MHz 4x LTF sequence is $4xEHT_LTF_320M_{-2036:2036}$, $4xEHT_LTF_320M_{-2036:2036}$ = {4xEHT_LTF_partA, 0_5, 4xEHT_LTF_partB, 0_{23}, 4xEHT_LTF_partA, 0_5, -4xEHT_LTF_partB, 0_{23}, -4xEHT_LTF_partA, 0_5, -4xEHT_LTF_partB, 0_{23}, -4xEHT_LTF_partA, 0_5, 4xEHT_LTF_partB }, wherein 4xEHT_LTF_partA is a sequence segment including ± 1, 4xEHT_LTF_partB is a sequence segment including ± 1, 0_5 represents 5 consecutive 0s, 0_{23} represents 23 consecutive 0s.

11. The apparatus according to claim 10, 4xEHT_LTF_partA includes 498 elements, 4xEHT_LTF_partB includes 498 elements.

12. The apparatus according to claim 10 or 11, wherein

4xEHT_LTF_partA =

{ 1 -1 -1 -1 -1 1 -1 -1 1 -1 -1 -1 1 1
-1 -1 -1 1 -1 -1 1 -1 1 1 1 -1 1 -1
1 -1 -1 -1 -1 1 1 1 1 1 -1 -1 1 -1
1 -1 -1 -1 1 1 -1 -1 1 -1 -1 -1 1 1
1 -1 -1 1 1 -1 -1 1 -1 1 1 -1 1 -1
1 1 1 -1 1 -1 1 1 1 1 1 1 -1 -1
-1 1 -1 1 -1 -1 -1 1 -1 -1 1 1 1 1
1 1 -1 1 -1 1 1 -1 1 -1 1 -1 1 -1
1 -1 -1 1 1 1 1 -1 -1 -1 -1 -1 -1 -1
-1 1 -1 -1 1 -1 -1 1 1 1 -1 1 -1 -1
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1 1 −1 1 1 1 1 −1 }；

13. A computer program, wherein the computer program comprises instructions used to perform the method according to any one of claims 1 to 6.

14. A computer-readable storage medium, configured to store a computer program, wherein the computer program comprises instructions used to perform the method according to any one of claims 1 to 6.