CLAIMS

1. A method for determining a quantized value, comprising:

determining, according to association information of quantized values corresponding respectively to at least one index number among I index numbers, quantized values corresponding respectively to the I index numbers, wherein the quantized values are associated with a time domain channel property; and

indicating the quantized values using X bits, wherein I encoded values corresponding to the X bits correspond respectively to the quantized values, where $I=2^X$, and X and I are positive integers.

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

determining the quantized difference according to the quantized values corresponding respectively to two index numbers among the I index numbers.

3. The method according to claim 1, wherein for each of the quantized values, the association information of the quantized value comprises an intermediate independent variable used to calculate the quantized value, wherein the quantized value is determined based on the intermediate independent variable and a first calculation rule.

4. The method according to claim 3, wherein

determining, according to the association information of the quantized values corresponding respectively to the at least one index number among the I index numbers, the quantized values corresponding respectively to the I index numbers comprises:

determining, according to the quantized values corresponding respectively to the at least one index number and the first calculation rule, the intermediate independent variables corresponding respectively to the at least one quantized value;

determining, according to the intermediate independent variables corresponding respectively to the at least one quantized value and a second calculation rule, the intermediate independent variables corresponding respectively to the quantized values; and

determining, according to the intermediate independent variables corresponding respectively to the quantized values and the first calculation rule, the quantized values.

5. The method according to claim 4, wherein determining, according to the quantized values corresponding respectively to the at least one index number and the first calculation rule, the intermediate independent variables corresponding respectively to the at least one quantized value

comprises:

determining, according to a first quantized value corresponding to a maximum value of the I index numbers and a second quantized value corresponding to a minimum value of the I index number, a first intermediate independent variable corresponding to the first quantized value and a second intermediate independent variable corresponding to the second quantized value through the first calculation rule; and

determining, according to the intermediate independent variables corresponding respectively to the at least one quantized value and the second calculation rule, the intermediate independent variables corresponding respectively to the quantized values comprises:

determining, according to the first intermediate independent variable and the second intermediate independent variable and the second calculation rule, the intermediate independent variables corresponding respectively to the quantized values.

6. The method according to claim 4, wherein determining, according to the quantized values corresponding respectively to the at least one index number and the first calculation rule, the intermediate independent variables corresponding respectively to the at least one quantized value comprises:

determining, according to a third quantized value corresponding to any of the I index numbers and the first calculation rule, a third intermediate independent variable corresponding to the third quantized value; and

determining, according to the intermediate independent variables corresponding respectively to the at least one quantized value and the second calculation rule, the intermediate independent variables corresponding respectively to the quantized values comprises:

determining the intermediate independent variable corresponding respectively to the quantized values according to the third intermediate independent variable and a predetermined difference between the intermediate independent variables corresponding respectively to the quantized values.

7. The method according to claim 4, wherein

determining, according to the association information of the quantized values corresponding respectively to the at least one index number among the I index numbers, the quantized values corresponding respectively to the I index numbers comprises:

determining the quantized values corresponding respectively to the index numbers according to the intermediate independent variables of the quantized values corresponding respectively to the

index numbers and the first calculation rule, wherein an independent variable difference between two intermediate independent variables of two quantized values corresponding respectively to any two adjacent index numbers is the same, or an variable ratio of two intermediate independent variables of two quantized values corresponding respectively to any two adjacent index numbers is the same.

8. The method according to any one of claims 1 to 7, wherein the I index numbers comprise I consecutive natural numbers.

9. An apparatus for determining a quantized value, comprising:

a processing module configured to determine, according to association information of quantized values corresponding respectively to at least one index number among I index numbers, quantized values corresponding respectively to the I index numbers, wherein the quantized values are associated with a time domain channel property; and indicate the quantized values using X bits, wherein I encoded values corresponding to the X bits correspond respectively to the quantized values, where $I=2^X$, and X and I are positive integers.

10. The apparatus according to claim 9, wherein

the processing module is further configured to determine the quantized difference according to the quantized values corresponding respectively to two index numbers among the I index numbers.

11. The apparatus according to claim 9, wherein for each of the quantized values, the association information of the quantized value comprises an intermediate independent variable used to calculate the quantized value, wherein the quantized value is determined based on the intermediate independent variable and a first calculation rule.

12. The apparatus according to claim 11, wherein the processing module is further configured to determine, according to the quantized values corresponding respectively to the at least one index number and the first calculation rule, the intermediate independent variables corresponding respectively to the at least one quantized value; determine, according to the intermediate independent variables corresponding respectively to the at least one quantized value and a second calculation rule, the intermediate independent variables corresponding respectively to the quantized values; and determine, according to the intermediate independent variables corresponding respectively to the quantized values and the first calculation rule, the quantized values;

wherein the processing module is further configured to determine, according to a first quantized value corresponding to a maximum value of the I index numbers and a second quantized value

corresponding to a minimum value of the I index number, a first intermediate independent variable corresponding to the first quantized value and a second intermediate independent variable corresponding to the second quantized value through the first calculation rule; and determine, according to the first intermediate independent variable and the second intermediate independent variable and the second calculation rule, the intermediate independent variables corresponding respectively to the quantized values; or

the processing module is further configured to: determine, according to a third quantized value corresponding to any of the I index numbers and the first calculation rule, a third intermediate independent variable corresponding to the third quantized value; and determine the intermediate independent variable corresponding respectively to the quantized values according to the third intermediate independent variable and a predetermined difference between the intermediate independent variables corresponding respectively to the quantized values; or

the processing module is further configured to determine the quantized values corresponding respectively to the index numbers according to the intermediate independent variables of the quantized values corresponding respectively to the index numbers and the first calculation rule, wherein an independent variable difference between two intermediate independent variables of two quantized values corresponding respectively to any two adjacent index numbers is the same, or an variable ratio of two intermediate independent variables of two quantized values corresponding respectively to any two adjacent index numbers is the same.

13. The apparatus according to any one of claims 9 to 12, wherein the I index numbers comprise I consecutive natural numbers.

14. A communication device, comprising:

a processor;

a transceiver;

a memory; and

executable programs stored in the memory and capable of being run by the processor, wherein the processor executes the method for determining the quantized value according to any one of claims 1 to 8 when running the executable programs.

15. A computer storage medium having stored therein executable programs that, when executed by a processor, cause the method for determining the quantized value according to any one of claims 1 to 8 to be implemented.