CLAIMS

1. A blockchain-based method for confirming a property right, comprising:

a user A:

presetting encoded information corresponding to a property;

obtaining a corresponding wallet address according to the encoded information;

storing a correspondence between the encoded information and the wallet address in a smart contract of a blockchain;

a user B:

generating a random number and sending the random number to the user A;

obtaining a first wallet address corresponding to a target property in the smart contract obtained by the user A according to the random number, target encoded information corresponding to the target property, and a target private key;

obtaining a target wallet address corresponding to the target encoded information in the smart contract according to the correspondence; and

judging whether the first wallet address is consistent with the target wallet address, and if yes, determining that the user A owns the target property; otherwise, determining that the user A does not own the target property.

2. The blockchain-based method for confirming a property right of claim 1, wherein the step of obtaining a corresponding wallet address according to the encoded information comprises:

randomly generating a private key according to the encoded information, and obtaining a corresponding public key with an elliptic curve algorithm and according to the private key; and

obtaining the corresponding wallet address with a hash algorithm and according to the public key.

3. The blockchain-based method for confirming a property right of claim 1, wherein the step of obtaining a first wallet address corresponding to a target property in the smart contract obtained

by the user A according to the random number, target encoded information corresponding to the target property, and a target private key comprises:

obtaining first private key signature information obtained by the user A according to the random number, the target encoded information corresponding to the target property, and the target private key;

obtaining a corresponding first public key according to the first private key signature information; and

obtaining the first wallet address corresponding to the target property in the smart contract according to the first public key.

4. The blockchain-based method for confirming a property right of claim 3, wherein the step of obtaining first private key signature information obtained by the user A according to the random number, the target encoded information corresponding to the target property, and the target private key comprises:

obtaining a hash value calculated by the user A with an asymmetric encryption algorithm and according to the random number and the target encoded information corresponding to the target property; and

obtaining the first private key signature information calculated by the user A according to the target private key corresponding to the target property and the hash value; and

the step of obtaining a corresponding first public key according to the first private key signature information comprises:

calculating the corresponding first public key according to the first private key signature information and the hash value.

5. A blockchain-based method for transferring the ownership of a property, wherein the ownership transferring method is implemented based on the blockchain-based method for confirming a property right according to any one of claims 1 to 4, and the ownership transferring method comprises:

presetting ownership transfer data corresponding to a to-be-traded property;

generating a transaction request according to the ownership transfer data and sending the transaction request to a blockchain node; and

upon receiving the transaction request on the blockchain node, transferring the ownership of the to-be-traded property according to the ownership transfer data.

6. The blockchain-based method for transferring the ownership of a property of claim 5, wherein the ownership transfer data comprises a smart contract address, transaction parameters, and a transaction signature;

wherein the transaction parameters comprise a transfer instruction, first encoded information corresponding to the to-be-traded property, and a new wallet address;

the step of transferring the ownership of the to-be-traded property according to the ownership transfer data comprises:

transferring the address of the to-be-traded property in a smart contract to a new wallet address according to the first encoded information; and/or

after the step of generating a transaction request according to the ownership transfer data and sending the transaction request to the blockchain node, and before the step of transferring the ownership of the to-be-traded property according to the ownership transfer data, the method further comprises:

judging whether a data format of the ownership transfer data satisfies a preset condition, and if yes, executing the step of transferring the ownership of the to-be-traded property according to the ownership transfer data; otherwise, generating an alert message.

7. The blockchain-based method for transferring the ownership of a property of claim 5, wherein the step of presetting ownership transfer data corresponding to a to-be-traded property comprises:

generating an authorization instruction for transferring the ownership of the to-be-traded property to an authorized object; and

presetting the ownership transfer data corresponding to the to-be-traded property according to the authorization instruction; and

the step of transferring the ownership of the to-be-traded property according to the ownership transfer data comprises:

transferring the ownership of the to-be-traded property to the authorized object according to the ownership transfer data.

8. The blockchain-based method for transferring the ownership of a property of claim 5, wherein the step of presetting ownership transfer data corresponding to a to-be-traded property comprises:

obtaining an application request sent by a requesting object for requesting the ownership of the to-be-traded property; and

presetting the ownership transfer data corresponding to the to-be-traded property according to the application request; and

the step of transferring the ownership of the to-be-traded property according to the ownership transfer data comprises:

transferring the ownership of the to-be-traded property to the requesting object according to the ownership transfer data.

9. A blockchain-based system for confirming a property right, the system for confirming a right comprising an information preset module, a wallet address obtaining module, a storage module, a generating module, a first address obtaining module, a target address obtaining module, and a first judging module;

wherein the information preset module is configured to preset, by a user A, encoded information corresponding to a property;

the wallet address obtaining module is configured to obtain, by the user A, a corresponding wallet address according to the encoded information by the user A;

the storage module is configured to store, by the user A, a correspondence between the encoded information and the wallet address in a smart contract of a blockchain;

the generating module is configured to generate a random number and send the random number by a user B to the user A;

the first address obtaining module is configured to obtain, by the user B, a first wallet address corresponding to a target property in the smart contract obtained by the user A according to the random number, the target encoded information corresponding to the target property, and a target private key;

the target address obtaining module is configured to obtain, by the user B, a target wallet address corresponding to the target encoded information in the smart contract according to the correspondence; and

the first judging module is configured to judge, by the user B, whether the first wallet address is consistent with the target wallet address, and if yes, determine that the user A owns the target property; otherwise, determine that the user A does not own the target property.

10. The blockchain-based system for confirming a property right of claim 9, wherein the wallet address obtaining module is configured to randomly generate a private key according to the encoded information, and obtain a corresponding public key with an elliptic curve algorithm and according to the private key; and

the wallet address obtaining module is further configured to obtain the corresponding wallet address with a hash algorithm and according to the public key.

11. The blockchain-based system for confirming a property right of claim 9, wherein the first address obtaining module comprises a signature information obtaining unit, a first public key obtaining unit, and a first address obtaining unit;

the signature information obtaining unit is configured to obtain first private key signature information obtained by the user A according to the random number, the target encoded information corresponding to the target property, and the target private key;

the first public key obtaining unit is configured to obtain a corresponding first public key according to the first private key signature information; and

the first address obtaining unit is configured to obtain the first wallet address corresponding to the target property in the smart contract according to the first public key.

12. The blockchain-based system for confirming a property right of claim 11, wherein the signature information obtaining unit is configured to obtain a hash value that is calculated by the user A with an asymmetric encryption algorithm and according to the random number and the target encoded information corresponding to the target property;

obtain the first private key signature information that is calculated by the user A according to the target private key corresponding to the target property and the hash value; and

the first public key obtaining unit is configured to calculate the corresponding first public key according to the first private key signature information and the hash value.

13. A blockchain-based system for transferring the ownership of a property, the ownership transferring system being implemented based on the blockchain-based system for confirming a property right of any one of claims 9 to 12, and the ownership transferring system comprising a data preset module, a request generating module, and a transfer module;

wherein the data preset module is configured to preset ownership transfer data corresponding to a to-be-traded property;

the request generating module is configured to generate a transaction request according to the ownership transfer data and sending the transaction request to a blockchain node; and

the transfer module is configured to, upon receiving the transaction request on the blockchain node, transfer the ownership of the to-be-traded property according to the ownership transfer data.

14. The blockchain-based system for transferring the ownership of a property of claim 13, wherein the ownership transfer data comprises a smart contract address, transaction parameters, and a transaction signature;

wherein the transaction parameters comprise a transfer instruction, first encoded information corresponding to the to-be-traded property, and a new wallet address;

the transfer module is configured to transfer the address of the to-be-traded property in a smart contract to a new wallet address according to the first encoded information; and/or

the ownership transferring system comprises a second judging module; and

the second judging module is configured to judge whether a data format of the ownership transfer data satisfies a preset condition, and if yes, execute the step of transferring the ownership of the to-be-traded property according to the ownership transfer data; otherwise, generate an alert message.

15. The blockchain-based system for transferring the ownership of a property of claim 13, wherein the data preset module is configured to generate an authorization instruction for transferring the ownership of the to-be-traded property to an authorized object, and preset the ownership transfer data corresponding to the to-be-traded property according to the authorization instruction; and

the transfer module is configured to transfer the ownership of the to-be-traded property to the authorized object according to the ownership transfer data.

16. The blockchain-based system for transferring the ownership of a property of claim 13, wherein the data preset module is configured to obtain an application request sent by a requesting object for requesting the ownership of the to-be-traded property, and preset the ownership transfer data corresponding to the to-be-traded property according to the application request; and

the transfer module is configured to transfer the ownership of the to-be-traded property to the requesting object according to the ownership transfer data.

17. An electronic device, comprising a memory, a processor, and a computer program stored on the memory and runnable on the processor, wherein when executing the computer program, the processor implements the blockchain-based method for confirming a property right of any one of

claims 1-4 and/or the blockchain-based method for transferring the ownership of a property of any one of claims 5-8.

18. A computer-readable storage medium with a computer program stored thereon, wherein when the computer program is executed by a processor, the blockchain-based method for confirming a property right of any one of claims 1-4 and/or the blockchain-based method for transferring the ownership of a property of any one of claims 5-8 is implemented.