【CLAIMS】

【Claim 1】

A method for providing a tax refund using block chain-based crypto-currency, the method comprising:

when a foreigner purchases goods at a tax refund shop, generating first crypto-currency trading data in which a subject to get a tax refund for the goods is designated to be different according to conditions;

when the first crypto-currency trading data is signed with a private key of the tax refund shop, generating second crypto-currency trading data in which a customhouse is a recipient;

when the generated second crypto-currency trading data is signed with a private key of the customhouse, generating third crypto-currency trading data for providing the crypto-currency to the foreigner; and

when the generated second crypto-currency trading data is not signed with the private key of the customhouse, generating fourth crypto-currency trading data for providing the crypto-currency to the National Tax Service (NTS) or the tax refund shop,

wherein the first crypto-currency trading data is data in which signatures of a plurality of subjects are set on the foregoing conditions.

【Claim 2】

The method of claim 1, further comprising:

when the second crypto-currency trading data is generated, transmitting the second crypto-currency trading data to a node device of the customhouse using a public key of the customhouse included in the generated second crypto-currency trading data.

【Claim 3】

The method of claim 2, further comprising:

when the third crypto-currency trading data is generated, broadcasting the generated third crypto-currency trading data to node devices of a peer-to-peer (P2P) network; or

when the fourth crypto-currency trading data is generated, broadcasting the generated fourth crypto-currency trading data to the node devices of the P2P network.

【Claim 4】

The method of claim 1, wherein the tax refund shop, the customhouse, the NTS, and the foreigner each include a node device performing the crypto-currency processing, and each node device may store a private key for verifying ownership for trading in advance.

【Claim 5】

The method of claim 1, wherein the first crypto-currency trading data includes trading details information including information of the tax refund shop, goods amount information, tax refund information, and passport information, as metadata.

【Claim 6】

The method of claim 1, wherein the first crypto-currency trading data includes a lock script in which an address of a recipient of trading data and the foregoing conditions are recorded and a release script in which a signature signed by a sender transmitting the trading data through a private key is recorded.

【Claim 7】

The method of claim 6, wherein, in the lock script, a condition value indicating that a signature is to be made using a tax refund public key, a customhouse public key, a foreigner public key, an NTS public key, and at least two private keys are recorded.

【Claim 8】

The method of claim 7, wherein, in the release script of the third crypto-currency trading data, a signature made

through the private key of the tax refund shop and a signature made through the private key of the customhouse is recorded.

【Claim 9】

A computer-readable recording medium in which a program for performing the tax refund method of one of claims 1 to 5 or claims 6 to 8 is recorded.

【Claim 10】

A computer program stored in a computer-readable recording medium for performing the tax refund method of one of claims 1 to 5 or claims 6 to 8.