

WHAT IS CLAIMED IS:

1. A method for enabling refund of a non-fungible token (NFT),
comprising:
 - receiving, by a receiver of a processing server, a transaction message for a
5 payment transaction related to purchase of the NFT;
 - processing, by a processor of the processing server, the payment transaction
using at least the transaction message, where processing includes generating a
transaction identifier for the payment transaction;
 - transmitting, by a transmitter of the processing server, the transaction
10 identifier to a first computing device;
 - receiving, by the receiver of the processing server, a notification message
including at least the transaction identifier and a token identifier, where the token
identifier is associated with the NFT;
 - receiving, by the receiver of the processing server, a refund request message
15 from a second computing device, where the refund request message includes at least
the transaction identifier;
 - processing, by the processor of the processing server, a refund transaction for
the payment transaction; and
 - submitting, by the transmitter of the processing server, at least the transaction
20 identifier as input into a smart contract stored in a blockchain associated with the NFT
by identifying the smart contract using the transaction identifier,
 - the smart contract executes using the transaction identifier as input to reverse a
prior transfer of ownership of the NFT on the blockchain associated with the NFT by
identifying the ownership of the NFT using the token identifier stored in the identified
25 smart contract.
2. The method of claim 1, wherein
 - the transaction message is an authorization request formatted according to one
or more standards; and
 - 30 the payment transaction is for payment from a first transaction account to a
second transaction account using a fiat currency.

3. The method of claim 1, wherein
the transaction message is a data message for a blockchain transaction; and
the payment transaction is processed using one or more blockchain nodes in a
blockchain network.
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4. The method of claim 3, wherein the blockchain transaction is added to
a second blockchain different from the blockchain associated with the NFT.
5. The method of claim 1, wherein the smart contract includes at least the
transaction identifier, token identifier, buyer address, and seller address.
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6. The method of claim 1, further comprising:
verifying, by the processor of the processing server, transfer of ownership of
the NFT after receiving the notification message, wherein verifying transfer of
ownership of the NFT includes identifying a block in the blockchain associated with
the NFT that includes a blockchain data entry including at least the token identifier
and the transaction identifier.
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7. The method of claim 1, wherein the transaction identifier is submitted
into the smart contract as input in a function call included in the smart contract.
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8. A system for enabling refund of a non-fungible token (NFT),
comprising:
a first computing device;
a second computing device;
a blockchain associated with the NFT; and
a processing server, the processing server including
a receiver receiving a transaction message for a payment transaction
related to purchase of the NFT,
a processor processing the payment transaction using at least the
transaction message, where processing includes generating a transaction identifier for
the payment transaction, and
a transmitter transmitting the transaction identifier to the first
computing device, wherein
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the receiver of the processing server further receives
a notification message including at least the transaction
identifier and a token identifier, where the token identifier is associated with the NFT,
and
5 a refund request message from the second computing device,
where the refund request message includes at least the transaction identifier,
the processor of the processing server further processes a
refund transaction for the payment transaction,
the transmitter of the processing server further submits at least
10 the transaction identifier as input into a smart contract stored in the blockchain
associated with the NFT by identifying the smart contract using the transaction
identifier, and
the smart contract executes using the transaction identifier as input to reverse a
prior transfer of ownership of the NFT on the blockchain associated with the NFT by
15 identifying the ownership of the NFT using the token identifier stored in the identified
smart contract.

9. The system of claim 8, wherein
the transaction message is an authorization request formatted according to one
20 or more standards; and
the payment transaction is for payment from a first transaction account to a
second transaction account using a fiat currency.

10. The system of claim 8, wherein
25 the transaction message is a data message for a blockchain transaction; and
the payment transaction is processed using one or more blockchain nodes in a
blockchain network.

11. The system of claim 10, wherein the blockchain transaction is added to
30 a second blockchain different from the blockchain associated with the NFT.

12. The system of claim 8, wherein the smart contract includes at least the
transaction identifier, token identifier, buyer address, and seller address.

13. The system of claim 8, wherein
the processor of the processing server further verifies transfer of ownership of
the NFT after receiving the notification message, and
verifying transfer of ownership of the NFT includes identifying a block in the
5 blockchain associated with the NFT that includes a blockchain data entry including at
least the token identifier and the transaction identifier.

14. The system of claim 8, wherein the transaction identifier is submitted
into the smart contract as input in a function call included in the smart contract.