METHODS AND SYSTEMS FOR TRANSMITTING INFORMATION

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of U.S. Provisional Application No. 63/382,995, filed November 9, 2022; U.S. Provisional Application No. 63/578,514, filed August 24, 2023, and U.S. Patent Application No. 18/503,881, filed November 7, 2023. This application is a Continuation-in-Part of US Patent Application No. 17/806,677, filed June 13, 2022, which claims priority to US Provisional Application No. 63/209,858 filed June 11, 2021 and is also a Continuation-in-Part of US Application No.17/121,510 filed December 14, 2020, which claims priority to US Provisional Application No. 62/948,136, filed December 13, 2019. This application is a Continuation-in-Part of US Patent Application No. 18/046,689, filed October 14, 2022, which is a continuation of US Application No. 17/121,510, filed December 14, 2020, which claims the benefit of U.S. Provisional Application No. 62/948,136, filed December 13, 2019. All of these applications are incorporated by reference in their entirety.

[0002] This application is also related to PCT/US2020/064934 filed December 14, 2020 and PCT/US2022/033269 filed June 13, 2022. This application is incorporated by reference in its entirety.

SUMMARY

[0002a] According to a first aspect of the present disclosure, there is provided a non-transitory computer readable medium storing instructions that, when executed by one or more processors of a computing system having a communications infrastructure, cause the computing system to store, retrieve, and execute a method, including: creating, using a platform, a fractionalized risk pool for a real estate property, the fractionalized risk pool comprising asset tokens and an occupancy token, the asset tokens and the occupancy token issued using blockchain, wherein the asset tokens are fungible and linked to the occupancy token, and wherein the occupancy token is non-fungible and comprises an updateable metadata field comprising a valuation of the real estate property and a highwater-mark value of the real estate property; transmitting, by a first computing device of the first computing system, a first network function through the communications infrastructure request to a decentralized network, the first network function request including first information comprising a first sale of a first portion of the asset tokens to a first asset token holder, wherein the first sale comprises a first blockchain based smart contract to a decentralized network, wherein the first portion of the asset tokens are associated with the highwater-mark value at a first state; logging, by the platform, a decrease in the valuation in the updateable metadata field; and transmitting, by a second computing device of the second computing system, a second network function request through the communications infrastructure to the

decentralized network, the second network function request including second information comprising a second sale of a second portion of the asset tokens to a second asset token holder, wherein the second sale comprises a second blockchain based smart contract to the decentralized network, wherein the second portion of the asset tokens are associated with the highwater-mark value at a second state based on the decrease in the valuation.

[0002b] According to a second aspect of the present disclosure, there is provided a computer system, including: a platform configured to create a fractionalized risk pool for a real estate property, the fractionalized risk pool comprising asset tokens and an occupancy token, the asset tokens and the occupancy token issued using blockchain, wherein the asset tokens are fungible and linked to the occupancy token, and wherein the occupancy token is non-fungible and comprises an updateable metadata field comprising a valuation of the real estate property and a highwater-mark value of the real estate property; a first computing device configured to transmit a first network function request through a communications infrastructure to a decentralized network, the first network function request including first information comprising a first sale of a first portion of the asset tokens to a first asset token holder, wherein the first sale comprises a first blockchain based smart contract to a decentralized network, wherein the first portion of the asset tokens are associated with the highwater-mark value at a first state; wherein the platform is further configured to log a decrease in the valuation in the updateable metadata field; and a second computing device configured to transmit a second network function request through the communications infrastructure to the decentralized network, the second network function request including second information comprising a second sale of a second portion of the asset tokens to a second asset token holder, wherein the second sale comprises a second blockchain based smart contract to the decentralized network, wherein the second portion of the asset tokens are associated with the highwater-mark value at a second state based on the decrease in the valuation.

BRIEF DESCRIPTION OF THE FIGURES

[0003] FIGS. 1-4 illustrate various structures that may be used in investing, according to aspects of the disclosure.

[0004] FIG. 5 illustrates an example computer system, according to aspects of the disclosure.

[0005] FIG. 6 illustrates an example method for using blockchain, according to aspects of the disclosure.

[0006] FIG. 7 illustrates an example of an MRE calculation flow, according to aspects of the disclosure.

[0007] FIG. 8 illustrates an example of using blockchain for investing, according to aspects of the disclosure.

CLAIMS

1. A non-transitory computer-readable medium storing instructions that, when executed by one or more processors of a computing system having a communications infrastructure, cause the computing system to store, retrieve, and execute a method comprising:

creating, using a platform, a fractionalized risk pool for a real estate property, the fractionalized risk pool comprising asset tokens and an occupancy token, the asset tokens and the occupancy token issued using blockchain, wherein the asset tokens are fungible and linked to the occupancy token, and wherein the occupancy token is non-fungible and comprises an updateable metadata field comprising a valuation of the real estate property and a highwater-mark value of the real estate property;

transmitting, by a first computing device of the first computing system, a first network function request through the communications infrastructure to a decentralized network, the first network function request including first information comprising a first sale of a first portion of the asset tokens to a first asset token holder, wherein the first sale comprises a first blockchain based smart contract to a decentralized network, wherein the first portion of the asset tokens are associated with the highwater-mark value at a first state;

logging, by the platform, a decrease in the valuation in the updateable metadata field; and

transmitting, by a second computing device of the second computing system, a second network function request through the communications infrastructure to the decentralized network, the second network function request including second information comprising a second sale of a second portion of the asset tokens to a second asset token holder, wherein the second sale comprises a second blockchain based smart contract to the decentralized network, wherein the second portion of the asset tokens are associated with the highwater-mark value at a second state based on the decrease in the valuation.

2. The method of claim 1, wherein the occupancy token confers rights to occupy the real estate property.

3. The method of claim 1, further comprising:

updating the highwater-mark value based on changes in the valuation of the real estate property.

4. The method of claim 1, wherein the asset tokens represent fractional ownership interests in the real estate property.

5. The method of claim 1, further comprising:

distributing payments to the first asset token holder and the second asset token holder using blockchain.

6. The method of claim 1, wherein the fractionalized risk pool further comprises HPI tokens representing home price appreciation rights.

7. The method of claim 6, further comprising:

unlocking a portion of the HPI tokens based on an increase in the valuation of the real estate property.

8. The method of claim 6, wherein the first blockchain based smart contract contains an agreement to assign appreciation to a fractionalized pool of the HPI tokens, and in exchange issues HPI tokens.

9. The method of claim 1, further comprising:

calculating a minimum retained equity for an occupant of the real estate property.

10. The method of claim 9, wherein minimum retained equity is determined based on risk of an occupant and global risk pool performance.

11. A computing system, comprising:

a platform configured to create a fractionalized risk pool for a real estate property, the fractionalized risk pool comprising asset tokens and an occupancy token, the asset tokens and the occupancy token issued using blockchain, wherein the asset tokens are fungible and linked to the occupancy token, and wherein the occupancy token is non-fungible and comprises an updateable metadata field comprising a valuation of the real estate property and a highwater-mark value of the real estate property;

a first computing device configured to transmit a first network function request through a communications infrastructure to a decentralized network, the first network function request including first information comprising a first sale of a first portion of the

asset tokens to a first asset token holder, wherein the first sale comprises a first blockchain based smart contract to a decentralized network, wherein the first portion of the asset tokens are associated with the highwater-mark value at a first state;
wherein the platform is further configured to log a decrease in the valuation in the updateable metadata field; and

a second computing device configured to transmit a second network function request through the communications infrastructure to the decentralized network, the second network function request including second information comprising a second sale of a second portion of the asset tokens to a second asset token holder, wherein the second sale comprises a second blockchain based smart contract to the decentralized network, wherein the second portion of the asset tokens are associated with the highwater-mark value at a second state based on the decrease in the valuation.

12. The computing system of claim 11, wherein the occupancy token confers rights to occupy the real estate property.

13. The computing system of claim 11, wherein the platform is further configured to update the highwater-mark value based on changes in the valuation of the real estate property.

14. The computing system of claim 11, wherein the asset tokens represent fractional ownership interests in the real estate property.

15. The computing system of claim 11, wherein the platform is further configured to distribute payments to the first asset token holder and the second asset token holder using blockchain.

16. The computing system of claim 11, wherein the fractionalized risk pool further comprises HPI tokens representing home price appreciation rights.

17. The computing system of claim 16, wherein the platform is further configured to unlock a portion of the HPI tokens based on an increase in the valuation of the real estate property.

18. The computing system of claim 16, wherein the first blockchain based smart contract contains an agreement to assign appreciation to a fractionalized pool of the HPI tokens, and in exchange issues HPI tokens.

19. The computing system of claim 11, wherein the platform is further configured to calculate a minimum retained equity for an occupant of the real estate property.

20. The computing system of claim 19, wherein minimum retained equity is determined based on risk of an occupant and global risk pool performance.