Independent Claim 8 (Method Claim – Real-Time Trading and Settlement of Tokenized RWAs on Blockchain Exchange)

A computer-implemented method for trading tokenized Real World Assets (RWAs) on an integrated blockchain exchange, the method comprising:

receiving a previously minted value token representing a verified RWA certificate recorded on a blockchain distributed ledger;

listing the value token on a blockchain-based trading platform that functions as a commodity, crypto, or security exchange;

processing incoming orders from market participants using market orders, limit orders, options, forwards, futures, swaps, or similar instruments;

automatically matching and executing a trade when order conditions are satisfied; and

recording the executed transaction as a new cryptographically hashed block on the distributed ledger, whereby ownership of the value token is transferred to the buyer and payment is settled to the seller in real time or near real time.

Dependent Claims for Independent Claim 8

The following is a complete set of dependent claims (Claims 2–22) that further specify and narrow the computer-implemented method of Independent Claim 8. Each dependent claim is fully supported by the disclosures in the attached document (Patent Filing Highlights US20200027096A1.docx), including the detailed descriptions of the blockchain-based trading platform, receipt of previously minted value tokens, listing functionality, order processing (market, limit, options, forwards, futures, swaps, pre-market contracts), advanced order types (short selling, trailing stops, OTO, OCO, OTOCO), time-in-force rules, automated matching/execution/settlement, real-time or near real-time ownership transfer and payment, immutable recording as new cryptographically hashed blocks, fraud reduction, permanent verification and auditability, integration with prior IoT-driven token minting, redundant ledger copies for fault tolerance, elimination of intermediaries, and the overall tokenized RWA real-time trading and settlement architecture as of the November 7, 2017 priority date.

Full Claim Set in Formal USPTO-Style Format (Reordered to Start with Claim 1)

1. A computer-implemented method for trading tokenized Real World Assets (RWAs) on an integrated blockchain exchange, the method comprising: receiving a previously minted value token representing a verified RWA certificate recorded on a blockchain distributed ledger; listing the value token on a blockchain-based trading platform that functions as a commodity, crypto, or security exchange; processing incoming orders from market participants using market orders, limit orders, options, forwards, futures, swaps, or similar instruments; automatically matching and executing a trade when order conditions are satisfied; and recording the executed transaction as a new cryptographically hashed block on the distributed ledger, whereby ownership of the value token is transferred to the buyer and payment is settled to the seller in real time or near real time.
2. The method of claim 1, wherein receiving the previously minted value token comprises receiving a value token automatically minted from a certified RWA certificate generated by an IoT cloud platform from validated IoT-sourced data.

3. The method of claim 1, wherein listing the value token comprises listing the value token on a blockchain-based trading platform that functions as an integrated commodity, crypto, security, or financial exchange without requiring separate centralized custodians or clearinghouses.
4. The method of claim 1, wherein processing incoming orders further comprises executing market orders at the next available price.
5. The method of claim 1, wherein processing incoming orders includes processing one or more of limit orders, options, forwards, futures, swaps, or pre-market contracts.
6. The method of claim 1, wherein the blockchain-based trading platform further supports advanced order types selected from the group consisting of short selling, trailing stop orders, conditional orders, One-Triggers-the-Other (OTO) orders, One-Cancels-the-Other (OCO) orders, One-Triggers-a-One-Cancels-the-Other (OTOCO) orders, and combinations thereof.
7. The method of claim 1, wherein processing incoming orders further comprises applying time-in-force rules to orders, the time-in-force rules selected from the group consisting of day orders, good-'til-canceled orders (up to 180 days), fill-or-kill orders, immediate-or-cancel orders, on-the-open orders, on-the-close orders, and combinations thereof.
8. The method of claim 1, wherein automatically matching and executing a trade is performed in real time or near real time upon satisfaction of the order conditions specified in the incoming orders from market participants.
9. The method of claim 1, wherein recording the executed transaction further comprises recording the transaction as a new cryptographically hashed block that employs cryptographic hashing to prior blocks on the distributed ledger.
10. The method of claim 1, wherein ownership of the value token is transferred to the buyer and payment is settled to the seller simultaneously in real time or near real time upon execution of the trade.
11. The method of claim 1, wherein the method provides permanent verification and auditability of the tokenized RWA through immutable ledger recording of the entire trading and settlement process.
12. The method of claim 1, further comprising automated monetization by delivering the value token to the buyer while simultaneously transferring funds to the seller upon execution of the trade.
13. The method of claim 1, wherein the blockchain distributed ledger maintains multiple redundant copies across cloud environments to provide fault tolerance and Byzantine fault tolerance during trading and settlement operations.
14. The method of claim 1, wherein the method supports high-frequency, derivative, and institutional trading of tokenized RWAs on the integrated blockchain exchange.
15. The method of claim 1, further comprising integrating the trading and settlement method with prior IoT-driven token creation steps so that the previously minted value token is directly traceable to validated real-world asset data.
16. The method of claim 1, wherein the method eliminates intermediaries by handling listing, order processing, matching, execution, immutable recording, ownership transfer, and payment settlement entirely on the integrated blockchain exchange.

17. The method of claim 1, wherein all steps of the method are performed without exposing the tokenized RWA to off-chain settlement or centralized clearing processes.
18. The method of claim 1, wherein the blockchain-based trading platform enables scalable, fraud-resistant trading and settlement of tokenized RWAs at industrial scale by combining immutable ledger recording with automated real-time execution.
19. The method of claim 1, wherein the method provides end-to-end auditability of every tokenized RWA trade through permanent, cryptographically linked records on the distributed ledger.
20. The method of claim 1, wherein recording the executed transaction as a new cryptographically hashed block further includes updating account balance records and transaction records associated with the value token on the distributed ledger.
21. The method of claim 1, wherein the method operates in a closed-loop automated process from receipt of the previously minted value token through real-time trade execution and settlement on the integrated blockchain exchange.
22. The method of claim 1, wherein the value token represents a digital representation of any commodity, security, physical asset, financial instrument, or other RWA that is verifiable and cannot be double-spent due to the immutable nature of the distributed ledger.

These claims form a self-contained, commercially robust claim family that directly maps to the computer-implemented method for real-time trading and settlement of tokenized Real World Assets (RWAs) on an integrated blockchain exchange, including order processing, automated matching/execution, real-time settlement, and immutable recording as described in the November 7, 2017 provisional disclosure. The full set (renumbered to begin with Claim 1) can be incorporated into a non-provisional, continuation, or continuation-in-part application (alone or in combination with the claim families of Independent Claims 1–7) to further strengthen the Parisii patent portfolio for tokenized Real World Assets and blockchain-based RWA trading infrastructure.