

### **Independent Claim 5 (Business Method Claim)**

A business method for monetizing verified Real World Assets (RWAs) using IoT and blockchain, the method comprising:

deploying IoT sensors, edge routers, and gateways to monitor data from any commodity, security, physical asset, financial instrument, or other RWA;  
issuing a value token on a blockchain ledger that stores validation data; and  
offering the token for trading on a blockchain-based commodity, crypto, security, or financial exchange that executes orders in real time and automatically transfers the token and payment upon a completed trade.

### **Dependent Claims for Independent Claim 5**

The following is a complete set of dependent claims (Claims 2–21) that further specify and narrow the business method of Independent Claim 5. Each dependent claim is fully supported by the disclosures in the attached document (Patent Filing Highlights US20200027096A1.docx), including the detailed descriptions of IoT sensor/edge-router/gateway deployment for continuous monitoring, automated validation and digital RWA certificate generation, value token issuance on a blockchain ledger (primary-market activity, immutable recording with validation data, user/equipment registration), blockchain-based trading platform functionality (real-time order execution, automated token and payment transfer), specific order types and advanced trading mechanics, fraud reduction through permanent immutable records, redundant ledger copies, elimination of intermediaries, and the overall IoT-and-blockchain monetization cycle for tokenized RWAs as of the November 7, 2017 priority date.

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

1. A business method for monetizing verified Real World Assets (RWAs) using IoT and blockchain, the method comprising: deploying IoT sensors, edge routers, and gateways to monitor data from any commodity, security, physical asset, financial instrument, or other RWA; issuing a value token on a blockchain ledger that stores validation data; and offering the token for trading on a blockchain-based commodity, crypto, security, or financial exchange that executes orders in real time and automatically transfers the token and payment upon a completed trade.
2. The business method of claim 1, wherein deploying the IoT sensors, edge routers, and gateways further comprises configuring the devices to communicate using one or more wireless protocols selected from the group consisting of Bluetooth, Zigbee, WiFi, Z-Wave, Sub-Gigahertz, Cellular, Satellite, LoRaWAN, Sigfox, and combinations thereof.
3. The business method of claim 1, wherein deploying the IoT sensors, edge routers, and gateways comprises instrumenting physical facilities or infrastructure for continuous or real-time monitoring of data associated with the RWA.
4. The business method of claim 1, wherein issuing the value token further comprises performing automated validation of the monitored data and generating a digital RWA certificate prior to recording the value token on the blockchain ledger.
5. The business method of claim 1, wherein the blockchain ledger records the value token as an immutable digital asset that includes validation data, public-key addresses,

cryptographic block linking, timestamps, transaction data, user identifiers, and equipment identifiers.

6. The business method of claim 1, wherein issuing the value token on the blockchain ledger comprises registering all participants and equipment on the distributed ledger to prevent double-spending or fraud.
7. The business method of claim 1, wherein issuing the value token is performed as a primary market activity based on validated data from the deployed IoT sensors, edge routers, and gateways.
8. The business method of claim 1, wherein offering the token for trading 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.
9. The business method of claim 1, wherein the blockchain-based exchange executes orders in real time using market orders, limit orders, options, forwards, futures, swaps, or pre-market contracts.
10. The business method of claim 1, wherein the blockchain-based exchange 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.
11. The business method of claim 1, wherein the blockchain-based exchange applies 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.
12. The business method of claim 1, wherein automatically transferring the token and payment upon a completed trade comprises recording the executed transaction as a new cryptographically linked block on the distributed ledger and delivering payment to the seller while transferring ownership of the value token to the buyer in real time or near real time.
13. The business method of claim 1, wherein all transactions, ownership transfers, and payments are permanently recorded on the blockchain ledger to reduce fraud and ensure permanent verification and auditability of the tokenized RWA.
14. The business method of claim 1, wherein the blockchain ledger maintains multiple redundant copies across cloud environments to provide fault tolerance and Byzantine fault tolerance during trading and monetization operations.
15. The business method of claim 1, further comprising automated monetization of the tokenized RWA by transferring funds to the seller upon execution of a winning bid while simultaneously delivering the value token to the buyer.
16. The business method of claim 1, wherein the business method operates in a closed-loop automated process from IoT data monitoring through value token issuance and real-time trading on the integrated blockchain-based exchange.
17. The business method of claim 1, wherein the distributed ledger employs cryptographic hashing of each new block to prior blocks to ensure immutability of all RWA-related records and trading transactions.

18. The business method of claim 1, wherein the method eliminates intermediaries by performing end-to-end monetization—including deployment, monitoring, validation, token issuance, trading, and settlement—directly through the IoT-and-blockchain integrated platform.
19. The business 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 blockchain ledger.
20. The business method of claim 1, wherein the method supports high-frequency, derivative, and institutional trading of tokenized RWAs on the blockchain-based exchange while maintaining permanent auditability and fraud reduction.
21. The business method of claim 1, wherein the blockchain-based exchange enables scalable, fraud-resistant monetization of tokenized RWAs at industrial scale by combining real-time IoT monitoring with automated blockchain execution and settlement.

These claims form a self-contained, commercially robust claim family that directly maps to the business method for IoT-and-blockchain monetization of verified Real World Assets (RWAs), including deployment, token issuance, and real-time trading/settlement on an integrated blockchain-based exchange 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 1–4) to further strengthen the Parisii patent portfolio for tokenized Real World Assets and blockchain-based RWA infrastructure.