

Full Claim Set in Formal USPTO-Style Format USPTO Filing US19362415 (Priority October 20, 2024)

- 1.** (System Claim) A system for compliant and privacy-preserving Web4 tokenized banking, comprising: one or more AI Agents configured to perform KYC/AML verification at onboarding and ongoing compliance monitoring; tokenization logic for any physical asset, commodity, security, contract, intangible asset, financial instrument, natural resource, property, or other Real World Asset (RWA) into digital bearer instruments recorded on a blockchain; special custody accounts providing segregated, FDIC-aligned asset protections; and fractional reserve operations that maintain user privacy during normal transactions.
- 2.** The system of claim 1, wherein the one or more AI Agents are trained using Retrieval-Augmented Generation (RAG) and Large Language Model (LLM) architectures on data from IoT systems, Digital MRV systems, Internet sources, or combinations thereof.
- 3.** The system of claim 1 or 2, wherein the tokenization logic creates value tokens that function as digital bearer instruments.
- 4.** The system of any one of claims 1–3, wherein the special custody accounts implement pledge mechanics via smart contracts that preserve original ownership of the RWA collateral without transferring legal title.
- 5.** The system of any one of claims 1–4, wherein the special custody accounts are configured to provide FDIC-aligned segregation across multiple accounts.
- 6.** The system of any one of claims 1–5, further comprising hypothecation logic that enables fractional reserve token issuance using the RWA collateral held in the special custody accounts.
- 7.** The system of any one of claims 1–6, further comprising a tokenized banking module configured to execute deposits, withdrawals, payments, transfers, interest-free loans, staking, and yield generation.
- 8.** The system of any one of claims 1–7, wherein the system maintains user privacy by storing minimal metadata on the blockchain during normal operations and activating full transaction history only upon a legally mandated disclosure event.
- 9.** The system of any one of claims 1–8, wherein the one or more AI Agents perform ongoing compliance monitoring while the fractional reserve operations continue to maintain user privacy.
- 10.** The system of any one of claims 1–9, further comprising integration with one or more commodity, cryptocurrency, security, or hybrid exchanges for trading of the digital bearer instruments.
- 11.** The system of any one of claims 1–10, wherein the AI Agents are configured to function as a drop-in module for autonomous management of financial operations within a corporate, institutional, governmental, or individual network.
- 12.** The system of any one of claims 1–11, further comprising network-effect logic that requires loan repayments in external assets or currencies different from issued loan tokens to drive additional token minting and liquidity.
- 13.** The system of any one of claims 1–12, further comprising clawback mechanisms for defaulted loans using smart contract enforcement.
- 14.** The system of any one of claims 1–13, wherein the system supports no-fee payments and transfers using the digital bearer instruments.

15. The system of any one of claims 1–14, further comprising yield generation and staking services based on performance or reinvestment of the underlying RWA collateral held in special custody accounts.

This provides a **complete and logically structured set of dependent claims** for Independent Claim 12 (now renumbered as Claim 1). The dependents are carefully drafted to maximize fallback protection while fully covering compliance, privacy features, AI Agents, broad RWA tokenization, digital bearer instruments, special custody accounts, fractional reserve operations, and integration with other banking and trading functions from the October 20, 2024 provisional.