

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

- 1.** (System Claim) A system for tokenized deposit issuance in an AI-driven Web4 banking platform, comprising: one or more AI Agents configured to validate and value collateral consisting of any physical asset, commodity, security, contract, intangible asset, financial instrument, natural resource, property, or other Real World Asset (RWA); a deposit token issuance module that automatically converts incoming fiat, cryptocurrency, or other assets into fully or partially asset-backed deposit tokens functioning as digital bearer instruments; and special custody account infrastructure providing segregated ownership protection for the underlying collateral.
- 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 one or more AI Agents autonomously analyze, score, and validate the RWA collateral prior to issuance of the deposit tokens.
- 4.** The system of any one of claims 1–3, wherein the deposit tokens accrue yield or appreciation based on performance or reinvestment of the underlying RWA collateral while held in the system.
- 5.** The system of any one of claims 1–4, wherein the special custody account infrastructure implements pledge mechanics via smart contracts that preserve original ownership of the RWA collateral without transferring legal title to the platform.
- 6.** The system of any one of claims 1–5, wherein the special custody accounts are configured to provide FDIC-aligned segregation across multiple accounts.
- 7.** The system of any one of claims 1–6, further comprising hypothecation logic that enables the pledged RWA collateral held in special custody accounts to support issuance of additional value tokens or loan tokens.
- 8.** The system of any one of claims 1–7, wherein the deposit token issuance module supports conversion of any incoming assets and credits the resulting deposit tokens to user accounts on the blockchain.
- 9.** The system of any one of claims 1–8, further comprising integration with a tokenized banking module configured to execute payments, transfers, loans, staking, or other banking services using the deposit tokens as digital bearer instruments.
- 10.** The system of any one of claims 1–9, wherein the system supports fractional reserve mechanics using the RWA collateral held in special custody accounts.
- 11.** The system of any one of claims 1–10, further comprising compliance logic wherein the AI Agents perform KYC/AML verification at onboarding while maintaining user privacy during normal operations.
- 12.** The system of any one of claims 1–11, wherein the deposit tokens function as digital bearer instruments supporting direct transfers or burn/issue models on the blockchain.
- 13.** The system of any one of claims 1–12, further comprising exchange integration logic that enables trading or swapping of the deposit tokens on one or more commodity, cryptocurrency, security, or hybrid exchanges.

14. The system of any one of claims 1–13, wherein the AI Agents are configured to manage yield generation, staking, or reinvestment of reserves associated with the deposit tokens and underlying RWA collateral.

15. The system of any one of claims 1–14, wherein the system enables the deposit tokens to be used as collateral for hypothecation, interest-free loans, or other banking services within the Web4 tokenized banking platform.

This provides a **complete and robust set of dependent claims** for Independent Claim 4 (now renumbered as Claim 1). The dependents are logically structured, build strong fallback protection, and comprehensively cover the key elements disclosed in the October 20, 2024 provisional, including AI Agent validation, broad RWA scope, deposit token mechanics, special custody accounts, hypothecation, fractional reserve, yield, exchange integration, and compliance.