

## **PATENT BY 3SD SOLUTIONS AND SERVICES PRIVATE LIMITED**

1. **PATENT NUMBER:** 07
2. **PROVISIONAL PATENT NO:** TEMP/E-1/88447/2025-KOL
3. **APPLICATION NUMBER:** 202531079569

**4. PATENT REMARKS:**

DYNAMIC NFT-BASED INVOICE TRADING MARKETPLACE WITH INTEGRATED ESCROW AND RISK-MANAGED SETTLEMENT

**5. FIELD OF INVENTION:**

This invention introduces a novel Dynamic Invoice NFT Marketplace with Escrow that is absent in existing solutions, combining blockchain technology with specialized workflows including invoice tokenization, AI-powered financial risk scoring, programmable escrow, arbitration workflows, and automated liquidity mechanisms to enable secure, transparent, and dispute-resilient invoice settlement.

## **6. DESCRIPTION OF PATENT:**

- a)** The invention provides a Dynamic Invoice NFT Marketplace that converts traditional invoices into blockchain-based tokenized assets, such as non-fungible tokens (NFTs), enriched with compliance metadata, AI-based risk assessment, and embedded settlement logic.
- b)** It addresses inefficiencies in conventional invoice financing, settlement, and dispute resolution by combining decentralized ledger technology, programmable escrow workflows, AI-powered financial validation, and automated liquidity pooling.
- c)** In operation, the system issues a risk-scored NFT for each invoice, embedding metadata fields such as trading restrictions, disclosure requirements, invoice status, KYB (Know-Your-Business) verification, and AI-derived buyer/seller risk tiers.
- d)** The invention integrates built-in escrow and arbitration modules, allowing funds to be held and released according to milestone-based unlock conditions (e.g., delivery confirmation, payment verification), with dispute settlement workflows enabling fair resolution without centralized intermediaries.
- e)** A Risk Fall back mechanism is included to manage contingencies—such as auto-refunds, reserve triggers, and buyer risk tier adjustments—ensuring safety for both parties in case of default or dispute.
- f)** The marketplace supports an Order Book/Automated Market Maker (AMM) where bids/asks for tokenized invoices are placed, enabling programmable liquidity and fractional invoice trading in decentralized finance (DeFi) environments.
- g)** The system incorporates hybrid chain–external call backs so that AI oracles can update risk scores in real time, improving decision-making for liquidity providers, traders, and underwriters.
- h)** Automated liquidity governance enables tokenized invoices and BNPL-like contracts to be traded or pooled, with smart contracts executing on-chain ROI pay outs to liquidity providers, ensuring transparency and immutable audit trails.
- i)** The invention supports DAO-based governance for policy updates, rule adjustments, and dispute arbitration, fostering community-led control without centralized oversight.
- j)** Key benefits include faster settlement through blockchain automation, immutable compliance and audit data embedded in invoice NFTs, reduced counterparty risk via escrow-backed transactions, greater market liquidity through AMM integration, and regulatory alignment through AI-powered KYB/AML checks.
- k)** The technology applies to multiple sectors, including supply chain finance, cross-border trade, embedded fintech APIs, and decentralized credit marketplaces, operating seamlessly across multi-chain blockchain environments.

## 7. PATENT DIAGRAMS:

Diagram 1:

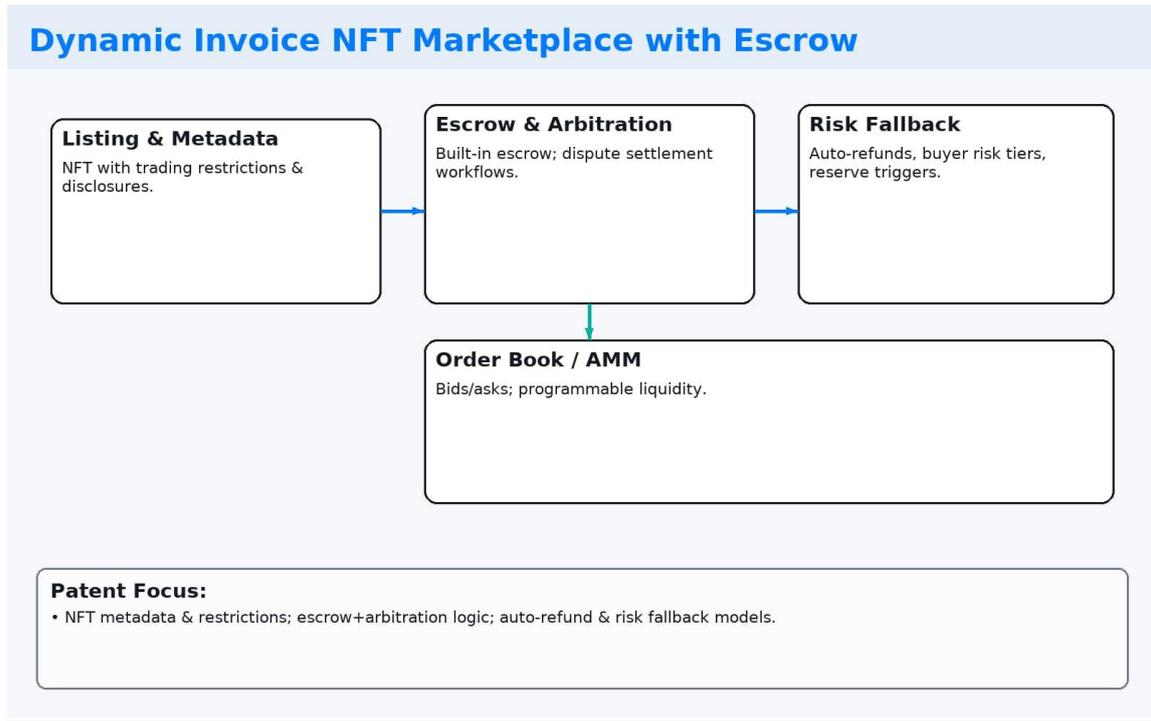
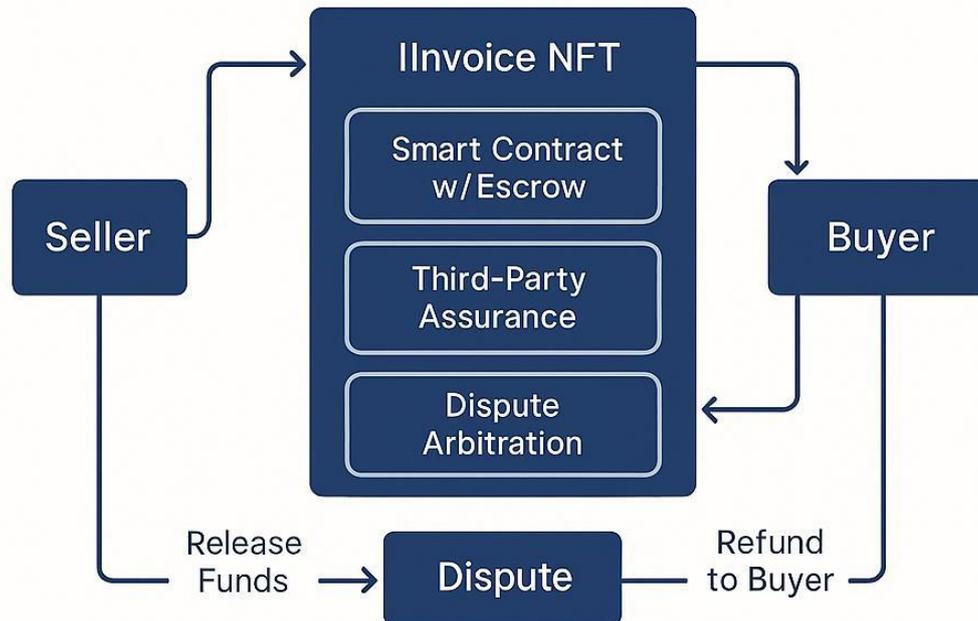


Diagram 2:

## Dynamic Invoice NFT Marketplace with Escrow



### Patent Focus:

- NFT metadata and trading restrictions
  - Built-in escrow and arbitration logic in smart contracts
  - Auto-refund and buyer risk fallback models
-