

PATENT BY 3SD SOLUTIONS AND SERVICES PRIVATE LIMITED

1. **PATENT NUMBER:** 06
2. **PROVISIONAL PATENT NO:** TEMP/E-1/88437/2025-KOL
3. **APPLICATION NUMBER:** 202531079192

4. **PATENT REMARKS:**

MODULAR BUY-NOW-PAY-LATER (BNPL) API LAYER FOR DECENTRALIZED FINANCIAL SERVICES AND CREDIT WORKFLOWS

5. **FIELD OF INVENTION:**

This invention introduces a novel **Modular BNPL-as-a-Service API Layer** that is absent in existing solutions, combining blockchain technology with specialized workflows including invoice tokenization, AI-powered financial risk scoring, milestone-based settlement mechanisms, and modular escrow capabilities to enable secure, transparent, and automated invoice settlement and financing.

6. DESCRIPTION OF PATENT:

- a)** The invention provides a Modular BNPL-as-a-Service API Layer that delivers risk-based, blockchain-powered "Buy Now, Pay Later" (BNPL) services, integrating API contracts, AI-driven offer generation, milestone-based settlement, and immutable on-chain logging.
- b)** API Contracts define BNPL limits, tenor periods, and merchant category rules for each invoice. The Offer Generator applies AI-derived risk scores, KYB/AML checks, and historical data to set dynamic pricing and terms linked to the invoice ID.
- c)** An On-chain Log stores acceptance, terms, and performance data on a blockchain, ensuring transparency and tamper resistance. Settlement is handled via programmable escrow pools that release funds when conditions such as payment confirmation or delivery completion are met.
- d)** Hybrid chain–external call backs allow AI oracles to update risk metrics in real time, enabling liquidity providers and merchants to adjust offers dynamically. Automated liquidity governance supports trading or pooling tokenized invoices and BNPL contracts in DeFi markets, with smart contracts managing ROI pay outs.
- e)** DAO-enabled governance allows community-driven rule updates and dispute resolution without centralized control. The system delivers faster settlement, embedded compliance, immutable audit trails, optimized liquidity, and regulatory alignment, with applications in supply chain finance, cross-border trade, embedded fintech APIs, and decentralized credit marketplaces across multi-chain environments.

7. PATENT DIAGRAMS:

Diagram 1:

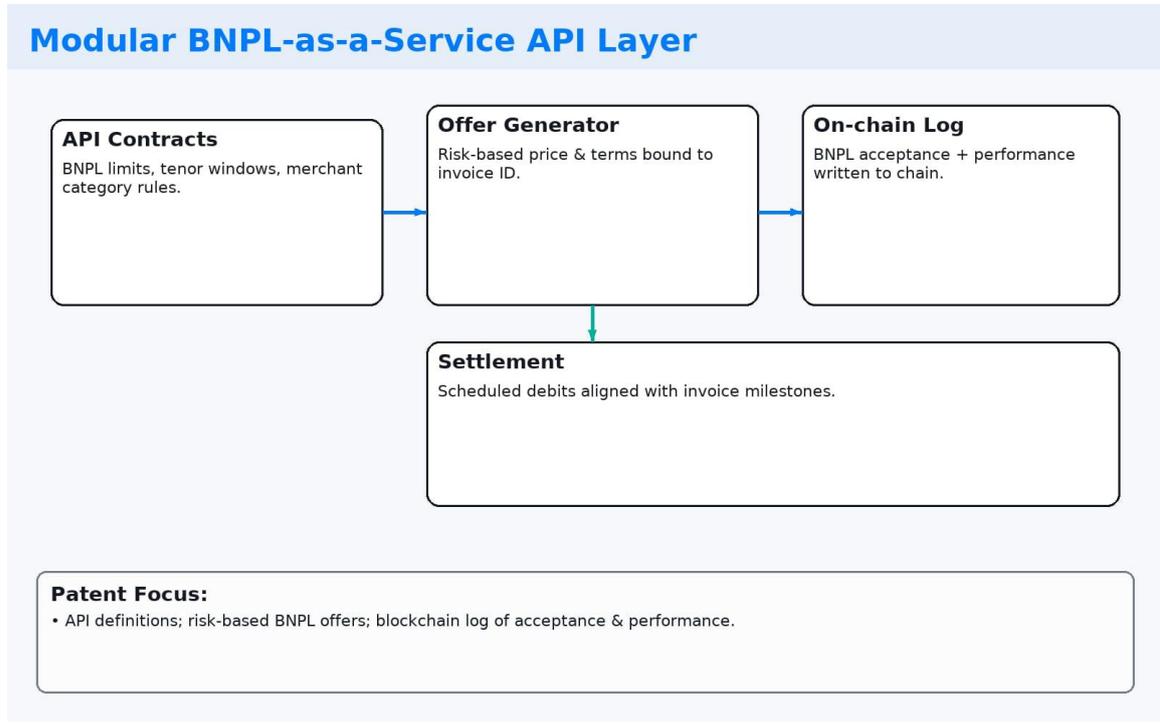


Diagram 2:

Modular BNPL-as-a-Service API Layer

