(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/10/2025
(21) Application No.202511099385 A
(43) Publication Date : 05/12/2025

(54) Title of the invention : A QUANTUM CRYPTOGRAPHY DEVICE FOR SECURE INTERBANK TRANSACTIONS

(51) International classification	:H04L0009080000, G06N0010000000, G09C0001000000, G06Q0040020000, H04L0009120000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No Filing Date	: :01/01/1900
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

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(57) Abstract :
The invention discloses a Quantum Cryptography Device for Secure Interbank Transactions integrating a quantum key distribution module (101), transaction processor (102), synchronization unit (103), and monitoring interface (104). The device provides unbreakable security by leveraging quantum mechanics for key generation, ensuring real-time encryption of interbank communications. Eavesdropping attempts are instantly detected, while fail-over mechanisms guarantee uninterrupted services. The invention enables scalable, low-latency, and tamper-proof banking operations, safeguarding financial infrastructures against future quantum computing threats while remaining compatible with existing transaction protocols.

No. of Pages : 14 No. of Claims : 1