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(31) Priority Document No	:NA	(72) Name of Inventor :
(32) Priority Date	:NA	1)SOVERS SINGH BISHT
(33) Name of priority country	:NA	2)ANAMIKA CHAUDHARY
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(57) Abstract :

The invention discloses an AI-based model for detecting anomalies in financial markets. The system comprises a data acquisition module (101), preprocessing unit (102), feature extraction module (103), anomaly detection engine (104), explainability layer (105), and visualization interface (106). By integrating multimodal data and hybrid AI techniques, the invention enables real-time detection of irregularities, fraudulent activities, and systemic risks. The explainability layer (105) ensures interpretability, while the visualization interface (106) provides actionable insights. The invention enhances fraud detection, regulatory compliance, and investor confidence in financial markets.

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