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(71)**Name of Applicant :**
1)NOIDA INSTITUTE OF ENGINEERING & TECHNOLOGY
Address of Applicant :19, Knowledge Park-II, Institutional Area, Greater Noida – 201306, Uttar Pradesh, India. Uttar Pradesh India
(72)**Name of Inventor :**
1)ANURADHA SINGH
2)SURYA PRAKASH SHARMA

(57) Abstract :
The invention discloses an automated translation system using context-aware neural networks. The system comprises an input module (101), preprocessing unit (102), context-aware neural network engine (103), domain-adaptation module (104), feedback learning loop (105), and output generation interface (106). By leveraging hierarchical embeddings, domain-specific knowledge, and reinforcement learning, the system ensures accurate, fluent, and adaptive translations across multiple languages. The invention preserves contextual meaning, enables real-time multilingual communication, and supports domain specialization, thereby offering a scalable, intelligent solution for global communication challenges.

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