(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :14/10/2025
(21) Application No.202511099351 A
(43) Publication Date : 05/12/2025

(54) Title of the invention : A ROBOTIC CONTROL SYSTEM FOR SMART FACTORY PROCESS AUTOMATION

(51) International classification	:G05B0019418000, G05B0023020000, G05B0019042000, H04L0067120000, A61B0034300000
(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

(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)VIVEK RANJAN
2)AJAY KUMAR

(57) Abstract :
The invention discloses a robotic control system for smart factory process automation, comprising robotic arms (101), central controller (102), sensor array (103), AI decision-making module (104), IoT communication unit (105), and factory process interface (106). The system ensures adaptive task execution, predictive maintenance, energy optimization, and seamless integration with existing infrastructure. By employing artificial intelligence and real-time sensor feedback, the invention enables intelligent decision-making, fault detection, and synchronized factory operations, thereby enhancing efficiency, safety, and sustainability in industrial environments.

No. of Pages : 15 No. of Claims : 6