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(51) International classification :B25J0009160000, G05D0001020000, G08B0019000000, G08B0013196000, G06N0005040000 (86) International Application No :NA Filing Date :NA (87) International Publication No : NA (61) Patent of Addition to Application Number :NA Filing Date :NA (62) Divisional to Application Number :NA Filing Date :NA	(71)Name of Applicant : 1)Dr Ajay Somkuwar Address of Applicant :MANIT Bhopal, Bhopal, Madhya Pradesh, India, 452003. ----- 2)Dr Asit K. Panda 3)Dr. Shrishailappa Patil 4)Ashwini Patil 5)Ms.M.Madhuvathani 6)Dr. M.Seenivasulu 7)Dr. P.Srihari Reddy 8)G Nagendra Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1)Dr Ajay Somkuwar Address of Applicant :MANIT Bhopal, Bhopal, Madhya Pradesh, India, 452003. ----- 2)Dr Asit K. Panda Address of Applicant :NIST (Autonomous), Pallur Hills, Berhampur, Odisha, India, 761008. ----- 3)Dr. Shrishailappa Patil Address of Applicant :Vishwakarma Institute of Technology , Upper Indiranagar, Bibwewadi, Pune, Maharashtra, India - 411037. ----- 4)Ashwini Patil Address of Applicant :Capgemini Engineering, Gothenburg, Sweden. ----- 5)Ms.M.Madhuvathani Address of Applicant :Panimalar Engineering College, Chennai, India – 600123. ----- 6)Dr. M.Seenivasulu Address of Applicant :N.B.K.R.Institute Of Science and Technology Vidyanagar.,Kota, Tirupati, Andhra Pradesh,India, 524413. ----- 7)Dr. P.Srihari Reddy Address of Applicant :N.B.K.R.Institute Of Science and Technology Vidyanagar.,Kota, Tirupati, Andhra Pradesh,India, 524413. ----- 8)G Nagendra Address of Applicant :Vidya Jyothi Institute of Tchnology, Aziz Nagar, Hyderabad, Telangana, India, 500 075. -----
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(57) Abstract :

The IoT-Enhanced Autonomous Surveillance Robot System designed for both industrial and home applications integrates cutting-edge technologies to redefine security and monitoring paradigms. Focused on safety and adaptability, the system incorporates the MQ2 gas sensor and a dedicated smoke sensor, providing intelligent hazard recognition capabilities. Leveraging advanced navigation algorithms and real-time IoT connectivity, the robot moves dynamically and communicates seamlessly. The real-time IoT connectivity establishes a responsive communication network, allowing for immediate remote monitoring and control. Incorporating user-friendly interfaces, the system serves both industrial and home purposes seamlessly, providing tailored security solutions. Supported by parameter proofs and adaptability metrics, this IoT-enhanced autonomous surveillance robot system signifies a technological leap, promising enhanced safety and monitoring capabilities across a spectrum of environments.

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