

(12) PATENT APPLICATION PUBLICATION		(21) Application No.202441037331 A	
(19) INDIA			
(22) Date of filing of Application :12/05/2024		(43) Publication Date : 24/05/2024	
(54) Title of the invention : AI-ENHANCED AUTONOMOUS MILITARY ROBOT FOR MINE DETECTION AND THREAT IDENTIFICATION			
(51) International classification :G06N0003080000, G06N0020000000, G06N0003040000, G06K0009620000, B25J0009160000 (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)D S DEEPIKA Address of Applicant :Assistant Professor, Dept Of CSE, Velammal Institute of technology, Chennai-kolkottaNational highway, Panchetti, ponneri, Thiruvallur (DT)-601204 ----- 2)ARAVIND RAJ N 3)DASARI MOHAN SUBHASH 4)SANTOSH C S 5)THARUN KUMAR N 6)VENATI YASWANTH 7)VINOTH KUMAAR 8)VISHNU VARDHAN REDDY ALLAMPATI 9)NAVEEN K 10)LEELA KRISHNA GADIRAJU Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1)D S DEEPIKA Address of Applicant :Assistant Professor, Dept Of CSE, Velammal Institute of technology, Chennai-kolkottaNational highway, Panchetti, ponneri, Thiruvallur (DT)-601204 ----- 2)ARAVIND RAJ N Address of Applicant :UG Scholar, Dept Of CSE, Velammal Institute of technology, Chennai-kolkottaNational highway, Panchetti, ponneri, Thiruvallur (DT)-601204 ----- 3)DASARI MOHAN SUBHASH Address of Applicant :UG Scholar, Dept Of CSE, Velammal Institute of technology, Chennai-kolkottaNational highway, Panchetti, ponneri, Thiruvallur (DT)-601204 ----- 4)SANTOSH C S Address of Applicant :UG Scholar, Dept Of CSE, Velammal Institute of technology, Chennai-kolkottaNational highway, Panchetti, ponneri, Thiruvallur (DT)-601204 ----- 5)THARUN KUMAR N Address of Applicant :UG Scholar, Dept Of CSE, Velammal Institute of technology, Chennai-kolkottaNational highway, Panchetti, ponneri, Thiruvallur (DT)-601204 ----- 6)VENATI YASWANTH Address of Applicant :UG Scholar, Dept Of CSE, Velammal Institute of technology, Chennai-kolkottaNational highway, Panchetti, ponneri, Thiruvallur (DT)-601204 ----- 7)VINOTH KUMAAR Address of Applicant :UG Scholar, Dept Of CSE, Velammal Institute of technology, Chennai-kolkottaNational highway, Panchetti, ponneri, Thiruvallur (DT)-601204 ----- 8)VISHNU VARDHAN REDDY ALLAMPATI Address of Applicant :UG Scholar, Dept Of CSE, Velammal Institute of technology, Chennai-kolkottaNational highway, Panchetti, ponneri, Thiruvallur (DT)-601204 ----- 9)NAVEEN K Address of Applicant :UG Scholar, Dept Of CSE, Velammal Institute of technology, Chennai-kolkottaNational highway, Panchetti, ponneri, Thiruvallur (DT)-601204 ----- 10)LEELA KRISHNA GADIRAJU Address of Applicant :UG Scholar, Dept Of CSE, Velammal Institute of technology, Chennai-kolkottaNational highway, Panchetti, ponneri, Thiruvallur (DT)-601204 -----	
(57) Abstract : The development of an advanced autonomous military robot that employs artificial intelligence (AI) and deep learning (DL) techniques for mine detection and threat identification. The machine learning model, trained to recognize mine patterns, allows the robot to identify potential threats through image analysis. Upon detection, the system provides precise latitude and longitude coordinates of the mine's location. Utilizing its trained deep learning model, the robot can identify and capture images of individuals displaying threatening behavior.			
No. of Pages : 13 No. of Claims : 6			