

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202541097128 A

(19) INDIA

(22) Date of filing of Application :08/10/2025

(43) Publication Date : 14/11/2025

(54) Title of the invention : RAILWAY TRACK INSPECTION SYSTEM

(51) International classification	:B61L0023040000, H04N0007180000, B61K0009080000, E01H0008060000, E01H0008100000	(71) Name of Applicant : 1)SR University Address of Applicant :Ananthasagar, Hasanparthy (PO), Warangal-506371, Telangana, India. Warangal Telangana India
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Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A railway track inspection system, comprises of a housing 101 adapted to translate over railway tracks, with a plurality of motorized rail wheels 102 installed underneath the housing 101 to enable smooth and controlled translation along the tracks, a sensing unit 103 is mounted on the housing 101 to detect obstacles on the railway tracks, including their dimensions and positions, a cutting unit 104 is installed on the housing 101 to cut and remove obstacles detected on the tracks, an obstacle removing unit 105 is provided at the front portion of the housing 101 to push and remove obstacles deemed suitable for displacement, a gripping means 106 is installed with the housing 101 to securely grip and hold objects on the railway tracks that not be removed by the cutting unit 104 or the obstacle removing unit 105, enabling safe collection and retrieval.

No. of Pages : 24 No. of Claims : 10