

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202411026904 A

(19) INDIA

(22) Date of filing of Application :31/03/2024

(43) Publication Date : 03/05/2024

(54) Title of the invention : DRIVER ASSIST AND COLLISION AVOIDANCE SYSTEM FOR CRANE VEHICLES

(51) International classification :G06N0003080000, B60R0001000000, B60Q0009000000, B60W0030080000, B60W0010200000

(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)Chitkara University

Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway (NH - 64), Village Jhansla, Rajpura, Punjab 140401, India Rajpura -----

2)Chitkara Innovation Incubator Foundation

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Dr. Rajneesh Talwar

Address of Applicant :Department of Interdisciplinary Courses in Engineering (DICE), Chitkara University, Chandigarh-Patiala National Highway (NH - 64), Village Jhansla, Rajpura, Punjab 140401, India Rajpura -----

2)Dr. Manvinder Sharma

Address of Applicant :Department of Interdisciplinary Courses in Engineering (DICE), Chitkara University, Chandigarh-Patiala National Highway (NH - 64), Village Jhansla, Rajpura, Punjab 140401, India Rajpura -----

(57) Abstract :

ABSTRACT The present disclosure introduces driver assist and collision avoidance system for crane vehicles 100 revolutionizes industrial vehicle safety by addressing visibility challenges and mitigating collision risks. It comprises of wide-angle cameras 102, deep learning algorithms 104, controller 106, ultrasonic sensors 108, display unit 110, automatic speed reduction system 112, alert system 114, side object detection technology 116 and distance calculation system 118. The camera, sensor, deep learning algorithms 104, and side object detection technology work synergistically to provide comprehensive surveillance of the vehicle's surroundings. Reference Fig 1

No. of Pages : 22 No. of Claims : 10