(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/09/2021

(21) Application No.202141040652 A
(43) Publication Date : 17/09/2021

(54) Title of the invention : Design and Implementation for Traffic Violation Detection of Vehicles using OCR Algorithm Based on Artificial Intelligence Technique

(51) International classification	:G06N0003040000, G06N0003080000, G07B0015020000, G06K0009620000, G08G0001096000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No Filing Date	:PCT// :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)N.Rajeswaran
Address of Applicant :Department of EEE Malla Reddy Engineering College Maisammaguda Secunderabad Telangana State India Telangana India
2)Dr.S.RAVICHAND
3)Dr TAVANAM VENKATA RAO
4)Dr. U. YEDUKONDALU
5)Mr. JAYA KUMAR A
6)Dr. KOTESWARARAO SEELAM
7)Dr.V.VIJAYASRI BOLISETTY
8)Dr.N.SATHEESH KUMAR
9)Dr. REKHARANI MADDULA
10)Dr. P. SIVA KUMAR
11)Mr.T.SUMAN
12)G K SIVASANKARA YADAV
13)Mr. AMANCHA THIRUPATHI
14)D.MAGDALENE DELIGHTA ANGELINE
15)KESAVA VAMSI KRISHNA V.
16)Dr.D.RAJA REDDY
17)Dr.MOORTHY VEERASAMY
18)Dr.P. MARIMUTHU

(72)**Name of Inventor :**
1)N.Rajeswaran
2)Dr.S.RAVICHAND
3)Dr TAVANAM VENKATA RAO
4)Dr. U. YEDUKONDALU
5)Mr. JAYA KUMAR A
6)Dr. KOTESWARARAO SEELAM
7)Dr.V.VIJAYASRI BOLISETTY
8)Dr.N.SATHEESH KUMAR
9)Dr. REKHARANI MADDULA
10)Dr. P. SIVA KUMAR
11)Mr.T.SUMAN
12)G K SIVASANKARA YADAV
13)Mr. AMANCHA THIRUPATHI
14)D.MAGDALENE DELIGHTA ANGELINE
15)KESAVA VAMSI KRISHNA V.
16)Dr.D.RAJA REDDY
17)Dr.MOORTHY VEERASAMY
18)Dr.P. MARIMUTHU

(57) Abstract :
This poses a big challenge for the regulators to be put in place for an effective system to enforce motorist to wear helmet. It is very difficult to increase the traffic personals as it will increase the cost to the government. Also the problem is with general public mindset, who is watching us Most of the Accidents are happening at early & late hours of the day, so most of the traffic personals & signal systems are shut down by that time. We need the help of AI to resolve the challenge in all the Dimensions (human interference, cost, accuracy, data retrieval & punish the violators). To address this challenge we have taken the help of AI deep learning based Convolution Neural Networks (CNN) to enforce the road safety to save innocent human lives from offensive drivers, where by implementing an automated enforcement system to identify and capture images of motorcyclists without wearing a helmet at signals and send it to a Traffic Control Center back-office to generate violation events and challans. The proposed approach has 98% accuracy compared to the existing AI techniques.

No. of Pages : 8 No. of Claims : 5