

Home (<http://ipindia.nic.in/index.htm>) About Us (<http://ipindia.nic.in/about-us.htm>) Who's Who (<http://ipindia.nic.in/whos-who-page.htm>)
 Policy & Programs (<http://ipindia.nic.in/policy-pages.htm>) Achievements (<http://ipindia.nic.in/achievements-page.htm>) RTI (<http://ipindia.nic.in/right-to-information.htm>)
 Feedback (<https://ipindiaonline.gov.in/feedback>) Sitemap (<http://ipindia.nic.in/itemap.htm>) Contact Us (<http://ipindia.nic.in/contact-us.htm>)
 Help Line (<http://ipindia.nic.in/helpline-page.htm>)

Skip to Main Content Screen Reader Access ([screen-reader-access.htm](http://ipindia.nic.in/screen-reader-access.htm))



(<http://ipindia.nic.in/index.htm>)



(<http://ipindia.nic.in/index.htm>)

Patent Search

Invention Title	I-AUTOMOBILE: INTELLIGENT AUTOMOBILE WITH COMBINATION OF CAMERA, RADAR , ADVANCED SENCER-Q7 AND RADIO FREQUENCY COMMUNICATION WORK TOGETHER WITH SENSOR FUSION.
Publication Number	51/2019
Publication Date	20/12/2019
Publication Type	INA
Application Number	201941050888
Application Filing Date	09/12/2019
Priority Number	
Priority Country	
Priority Date	
Field Of Invention	MECHANICAL ENGINEERING
Classification (IPC)	B60Q0001340000,G06Q0040080000,B60Q0001400000,B60Q0001380000,B62J0006000000

Inventor

Name	Address	Country	Nationality
DR. NALUGURU UDAYA KUMAR	MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT, DUNDIGAL, HYDERABAD, TELANGANA 500043, INDIA joyudaya@gmail.com	India	India
DR. SHIJIN KUMAR P.S	MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT, DUNDIGAL, HYDERABAD, TELANGANA 500043, INDIA shijinkumarps@yahoo.com	India	India
DR. ABHILASH K.S	JAI BHARATH COLLEGE OF MANAGEMENT AND ENGINEERING TECHNOLOGY, PERUMBAVOOR, COCHIN, KERALA, 683556, INDIA dr.abhilashks@gmail.com	India	India
DR. CHUKKA SANTHAI AH (ASSOCIATE PROFESSOR, CSE DEPT.)	INSTITUTE OF AERONAUTICAL ENGINEERING, DUNDIGAL ROAD, DUNDIGAL, HYDERABAD, TELANGANA 500043, INDAI e-mail:chukka.santh@gmail.com	India	India
INSTITUTE OF AERONAUTICAL ENGINEERING	INSTITUTE OF AERONAUTICAL ENGINEERING, DUNDIGAL ROAD, DUNDIGAL, HYDERABAD, TELANGANA 500043, INDAI	India	India

Applicant

Name	Address	Country	Nationality
DR. NALUGURU UDAYA KUMAR	MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT, DUNDIGAL, HYDERABAD, TELANGANA 500043, INDIA joyudaya@gmail.com	India	India
DR. SHIJIN KUMAR P.S	MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT, DUNDIGAL, HYDERABAD, TELANGANA 500043, INDIA shijinkumarps@yahoo.com	India	India
DR. ABHILASH K.S	JAI BHARATH COLLEGE OF MANAGEMENT AND ENGINEERING TECHNOLOGY, PERUMBAVOOR, COCHIN, KERALA, 683556, INDIA dr.abhilashks@gmail.com	India	India
DR. CHUKKA SANTHAI AH (ASSOCIATE PROFESSOR, CSE DEPT.)	INSTITUTE OF AERONAUTICAL ENGINEERING, DUNDIGAL ROAD, DUNDIGAL, HYDERABAD, TELANGANA 500043, INDAI e-mail:chukka.santh@gmail.com	India	India
INSTITUTE OF AERONAUTICAL ENGINEERING	INSTITUTE OF AERONAUTICAL ENGINEERING, DUNDIGAL ROAD, DUNDIGAL, HYDERABAD, TELANGANA 500043, INDAI	India	India

Abstract:

I-AUTOMOBILE: INTELLIGENT AUTOMOBILE WITH COMBINATION OF CAMERA, RADAR , ADVANCED SENCER-Q7 AND RADIO FREQUENCY COMMUNICATION WORK TOGETHER WITH SENSOR FUSION. ABSTRACT My invention "I-AUTOMOBILE" An intelligent turn signaling system is disclosed which uses trip information and global positioning system data to automatically activate the turn lights for a vehicle. In one implementation, the system can optimize vehicular flow by receiving trip information from nearby vehicles and prepare the vehicle and driver accordingly. In other implementations, the system can also optimize insurance premium for drivers who allow the system to recommend conservative driving techniques and also protect the accident possibility , accident location alert according to previous data base. 1. An intelligent turn signal control system for a driver, comprising a processor. 2. a positioning system coupled to the processor to provide vehicle position and turn-by-turn command. 3. an accelerometer coupled to the processor to sense vehicle acceleration. 4. a turn signal driver interface switch assembly configured to receive driver input to the processor. 5. a turn signal lamp actuation circuit configured to connect the processor to a plurality of turn signal lamps, wherein the processor selectively determines whether the turn signal lamp actuation circuit is turned on or off based at least on the positioning system turn-by-turn command and accelerometer output.

Complete Specification

Claims:

WE CLAIMS

1. An intelligent turn signal control system for a driver, comprising: a processor; a positioning system coupled to the processor to provide vehicle position and turn-by-turn command; an accelerometer coupled to the processor to sense vehicle acceleration; a turn signal driver interface switch assembly configured to receive driver input to the processor; and a turn signal lamp actuation circuit configured to connect the processor to a plurality of turn signal lamps, wherein the processor selectively determines whether the turn signal lamp actuation circuit is turned on or off based at least on the positioning system turn-by-turn command and accelerometer output, provide the accident alert and their location.
2. According to claims 1# the invention is to comprising a camera coupled to the processor to a capture street view and also wherein the processor stores images captured by the camera and uploads the images and location data to a server collecting street view data from a collection of drivers, wherein the server runs code for crowd-sourcing the street views to generate a mapping system.
3. According to claims 1,2# the invention is to wherein the processor detects driver drowsiness using a camera image of the driver and also comprising a radar coupled to the processor to detect nearby obstacles.
4. According to claims 1# the invention is to comprising a gyroscope or a magnetometer coupled to the processor and also comprising at least one vehicle speed sensor to measure wheel rotation, transmission rotation.
5. According to claims 1-3# the invention is to wherein the processor simultaneously switches left and right turn signals on and off to emulate a hazard function and also

[View Application Status](#)

Terms & conditions (<http://ipindia.gov.in/terms-conditions.htm>) Privacy Policy (<http://ipindia.gov.in/privacy-policy.htm>) Copyright (<http://ipindia.gov.in/copyright.htm>)
Hyperlinking Policy (<http://ipindia.gov.in/hyperlinking-policy.htm>) Accessibility (<http://ipindia.gov.in/accessibility.htm>) Archive (<http://ipindia.gov.in/archive.htm>)
Contact Us (<http://ipindia.gov.in/contact-us.htm>) Help (<http://ipindia.gov.in/help.htm>)

Content Owned, updated and maintained by Intellectual Property India, All Rights Reserved.

Page last updated on: 26/06/2019



Office of the Controller General of Patents, Designs & Trade Marks
Department of Industrial Policy & Promotion,
Ministry of Commerce & Industry,
Government of India

सत्यमेव जयते

(<http://ipindia.nic.in/index.htm>)



(<http://ipindia.nic.in/index.htm>)

Application Details

APPLICATION NUMBER	201941050888
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	09/12/2019
APPLICANT NAME	1 . DR. NALUGURU UDAYA KUMAR 2 . DR. SHIJIN KUMAR P.S 3 . DR. ABHILASH K.S 4 . DR. CHUKKA SANTHAIAH (ASSOCIATE PROFESSOR, CSE DEPT.) 5 . INSTITUTE OF AERONAUTICAL ENGINEERING
TITLE OF INVENTION	I-AUTOMOBILE: INTELLIGENT AUTOMOBILE WITH COMBINATION OF CAMERA, RADAR , ADVANCED SENCER-Q7 AND RADIO FREQUENCY COMMUNICATION WORK TOGETHER WITH SENSOR FUSION.
FIELD OF INVENTION	MECHANICAL ENGINEERING
E-MAIL (As Per Record)	dr.bksarkar2003@yahoo.in
ADDITIONAL-EMAIL (As Per Record)	dr.bksarkar2003@yahoo.in
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	20/12/2019

Application Status

APPLICATION STATUS	Awaiting Request for Examination
--------------------	---

[View Documents](#)

➡ Filed ➡ Published ➡ RQ Filed ➡ Under Examination ➡ Disposed

In case of any discrepancy in status, kindly contact ipo-helpdesk@nic.in

<p align="center">FORM 1</p> <p>THE PATENTS ACT 1970 (39 of 1970) & The Patents Rules, 2003 APPLICATION FOR GRANT OF PATENT (See sections 7, 54 & 135 and rule 20(1))</p>	<p align="center"><u>(FOR OFFICE USE ONLY)</u></p> <p>Application No: Filing Date Amount of Fees Paid: CBR NO: Signature:</p>
<p>1. APPLICANTS REFERENCE / IDENTIFICATION NO. (AS ALLOTTED BY OFFICE)</p>	

2. TYPE OF APPLICATION [Please tick (✓) at the appropriate category]

Ordinary (✓)		Convention ()		PCT-NP ()	
Divisional ()	Patent of Addition ()	Divisional ()	Patent of Addition ()	Divisional ()	Patent of Addition ()

3A. APPLICANT(S):

Name	Country of Residence	Nationality	Address
DR. NALUGURU UDAYA KUMAR , (DEPARTMENT OF ECE)	INDIA	AN INDIAN NATIONAL	MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT, DUNDIGAL, HYDERABAD, TELANGANA 500043, INDIA joyudaya@gmail.com
DR. SHIJIN KUMAR P.S (ASSOCIATE PROFESSOR, DEPARTMENT OF ECE)	INDIA	AN INDIAN NATIONAL	MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT, DUNDIGAL, HYDERABAD, TELANGANA 500043, INDIA shijinkumarps@yahoo.com
DR. ABHILASH K.S (PRINCIPAL)	INDIA	AN INDIAN NATIONAL	JAI BHARATH COLLEGE OF MANAGEMENT AND ENGINEERING TECHNOLOGY, PERUMBAVOOR, COCHIN, KERALA, 683556, INDIA dr.abhilashks@gmail.com
DR. CHUKKA SANTHAIAH (ASSOCIATE PROFESSOR, CSE DEPT.)	INDIA	AN INDIAN NATIONAL	INSTITUTE OF AERONAUTICAL ENGINEERING, DUNDIGAL ROAD, DUNDIGAL, HYDERABAD, TELANGANA 500043, INDIA e-mail:chukka.santh@gmail.com
INSTITUTE OF AERONAUTICAL ENGINEERING	INDIA	AN INDIAN NATIONAL	INSTITUTE OF AERONAUTICAL ENGINEERING, DUNDIGAL ROAD, DUNDIGAL, HYDERABAD, TELANGANA 500043, INDIA

3B. CATEGORY OF APPLICANT [Please tick (✓) at the appropriate category]

Natural Person (✓)	Other than Natural Person ()		
	Small Entity ()	Startup ()	Others ()

4. INVENTOR(S): [Please tick (✓) at the appropriate category]

Are all the inventor(s) same as the applicant(s) named above?	Yes (✓)	No ()
--	----------------	---------------

If "No", furnish the details of the inventor(s) **N.A**

Name	Nationality	Country of Residence	Address
NA	NA	NA	NA

5. TITLE OF THE INVENTION:

I-AUTOMOBILE: INTELLIGENT AUTOMOBILE WITH COMBINATION OF CAMERA, RADAR , ADVANCED SENCER-Q7 AND RADIO FREQUENCY COMMUNICATION WORK TOGETHER WITH SENSOR FUSION.

6. AUTHORISED REGISTERED PATENT AGENT(S)		NA
ADDITIONAL PATENT AGENTS	NA	

7. ADDRESS FOR SERVICE OF APPLICANT/ PATENT AGENT(S) IN INDIA DR. NALUGURU UDAYA KUMAR , (DEPARTMENT OF ECE) Address: MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT, DUNDIGAL, HYDERABAD, TELANGANA 500043, INDIA . joyudaya@gmail.com	Mobile No.: 8059794469 E-mail: dr.bksarkar2003@yahoo.in joyudaya@gmail.com.
--	--

8. IN CASE OF APPLICATION CLAIMING PRIORITY OF APPLICATION FILED IN CONVENTION COUNTRY, PARTICULARS OF CONVENTION APPLICATION: N.A

Country	Appln. Number	Filing Date	Name of the Applicant	Title of the Invention	IPC (as classified in the convention country)
NA	NA	NA	NA	NA	NA

9. IN CASE OF PCT NATIONAL PHASE APPLICATION, PARTICULARS OF INTERNATIONAL APPLICATION FILED UNDER PATENT CO-OPERATION TREATY (PCT):

International application number	International filing date as allotted by the receiving office.
NA	NA

10. IN CASE OF DIVISIONAL APPLICATION FILED UNDER SECTION 16, PARTICULARS OF ORIGINAL (FIRST) APPLICATION : N.A

Original (first) application number	Date of filing of Original (first) application
N.A.	N.A.

11. IN CASE OF PATENT OF ADDITION FILED UNDER SECTION 54, PARTICULARS OF MAIN APPLICATION OR PATENT: N.A

Main application / patent Number	Date of filing of main application
----------------------------------	------------------------------------

12. DECLARATIONS:**(i) Declaration by the Inventor:**

(In case the applicant is an assignee: the inventor(s) may sign herein below or the applicant may upload the assignment or enclose the assignment with this application for patent or send the assignment by post/electronic transmission duly authenticated within the prescribed period).

We, the above named inventor are the true & first inventor for this invention and declare that the applicant herein is my assignee or legal representative:

NA

(ii) Declaration by the applicant/s in the convention country:

(In case the applicant in India is different than the applicant in the convention country: the applicant in the convention country may sign herein below or applicant in India may upload the assignment from the applicant in the convention country or enclose the said assignment with this application for patent or send the assignment by post/electronic transmission duly authenticated within the prescribed period)

I/~~We~~, the applicant(s) in the convention country declare that the applicant(s) herein is/~~are my/our~~ assignee or legal representative. : **N.A.**

(iii) Declaration by the applicants:

We, the applicants hereby declare that: -

1. We are in possession of the above-mentioned invention.
2. The **Complete Specification** relating to the invention is filed with this application.
3. The invention as disclosed in the specification uses the biological material from India and the necessary permission from the competent authority shall be submitted by us before the grant of patent to us: **N.A.**
4. There is no lawful ground of objection to the grant of the patent to me/ us.
5. We are the assignees or legal representatives of true and first inventors:
6. The application or each of the applications, particulars of which are given in Para – 8 was the first application in convention country/countries in respect of our invention: **N.A.**
7. We claim the priority from the above mentioned application filed in convention country/countries and state that no application for protection in respect of the invention had been made in a convention country before that date by us or by any person from which we derive the title: **YES**
8. Our application in India is based on international application under Patent Cooperation Treaty (PCT) as mentioned in Para-9: **N.A.**
9. The application is divided out of our application particulars of which is given in Para-10 and prays that this application may be treated as deemed to have been filed on N.A. Under sec.16 of the Act: **N.A.**

10. The said invention is an improvement in or modification of the invention particulars of which are given in Para-11 :**N.A.**

FOLLOWING ARE THE ATTACHMENTS WITH THE APPLICATION

(a) Form 2

Item	Details	Fee	Remarks
Complete specification) #	No. of pages:		
Claim(s)	No. of claims: No. of pages:		
Abstract	No. of pages:		
Drawing(s)	No. of drawings: No. of pages:		

In case of a complete specification, if the applicant desires to adopt the drawings filed with his provisional specification as the drawings or part of the drawings for the complete specification under rule 13(4), the number of such pages filed with the provisional specification are required to be mentioned here.

1. Complete specification (in conformation with the international application)/as amended before the International Preliminary Examination Authority (IPEA), as applicable (2 copies) **N.A**
2. Sequence listing in electronic form **N.A**
3. Drawings (in conformation with the international application)/as amended before the International Preliminary Examination Authority (IPEA), as applicable (2 copies) **N.A**
4. Statement and Undertaking on Form-3
5. Declaration of Inventor ship on Form-5
6. Request For Publication Form9 , 2750.Rs
7. Form18 Examination Request, 4400.Rs
8. Power of Authority
9. Other Form 4 to 31 According to needed can fill.

Total fee Rs/- **in Cash/ Banker's Cheque /Bank Draft bearing No.....**

Date.....on..... Bank.

We hereby declare that to the best of my knowledge, information and belief the facts and matters stated herein are correct and I request that a patent may be granted to me for the said invention.

Dated :9/11/19

DR. NALUGURU UDAYA KUMAR (DEPARTMENT OF ECE)

DR. SHIJIN KUMAR P.S (ASSOCIATE PROFESSOR, DEPARTMENT OF ECE)
DR. ABHILASH K.S (PRINCIPAL)
DR. CHUKKA SANTHAIAH (ASSOCIATE PROFESSOR, CSE DEPT.)
INSTITUTE OF AERONAUTICAL ENGINEERING

To,
The Controller of Patent,
The Patent Office, at