

15 Documents

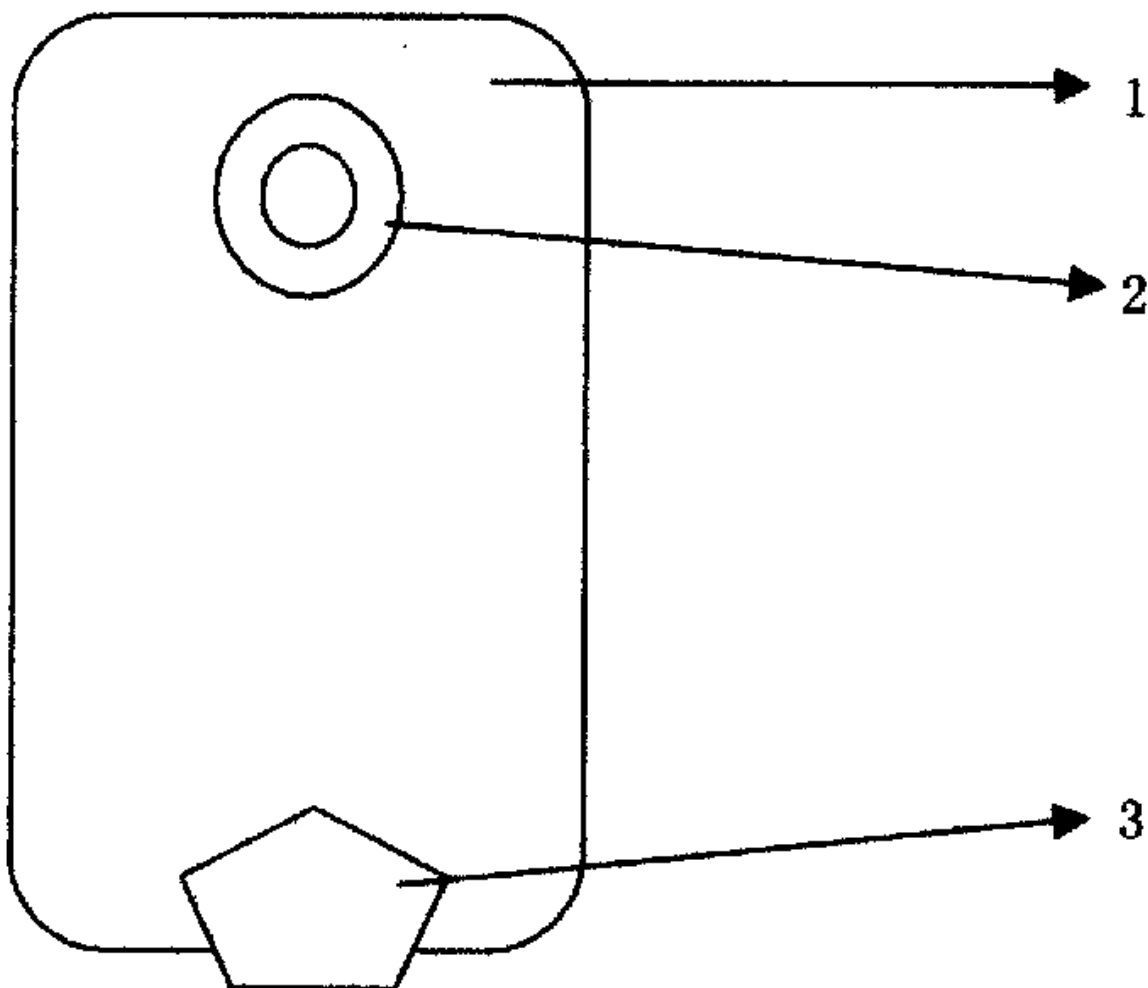
Publication numbers	Title	Current assignees
CN1622141 A	Multifunctional traffic signal lamp system	SHANGHAI ZHONGCE INDUSTRY & TRADING
EP3652721 A1	A method and apparatus for collecting and using sensor data from a vehicle	NNG SOFTWARE DEVELOPMENT & COMMERCIAL
CN108806261 A	Smart traffic duty robot and commercial mode thereof	ZHIHUSHI HOLDING
EP1606784 A2	A device for detection of road surface condition	LIWAS
US20190005825 A1	Fleet manager based vehicle control	SPEEDGAUGE
US20180233041 A1	Identification of driver abnormalities in a traffic flow	SPEEDGAUGE
CN104867324 A	Method of recognizing boarding of passenger in taxi taking service and related device	BEIJING SMARTMI TECHNOLOGY
US20170358208 A1	Parking event detection and location estimation	APPLE
EP1481344 A1	Vehicle monitoring system	LICENSING & INVENTION
CN203276566U U	Vehicle-mounted terminal for intelligent scheduling of public transport	SHENZHEN LANTAIYUAN ELECTRONIC TECHNOLOGY
CN108831170 A	Intelligent highway patrol robot, sharing system and business mode	ZHIHUSHI HOLDING
CN108734951 A	Electronic fence setting method and computing equipment	HANGZHOU QEEBIKE TECHNOLOGY
EP1358634 A1	Control method for use in a toll determination system	TOLL COLLECT
CN105513358 A	Driving behavior assessment and vehicle driving state monitoring early warning system and method	YANTAI WELLSYS ELECTRONIC TECHNOLOGY
US20200175851 A1	Method and apparatus for electromagnetic wave communications associated with vehicular traffic	AT&T

Family 1/15 - FAMPAT - ©Questel

Title

(CN1622141)

Multifunctional traffic signal lamp system

Images**Publication numbers with kind code & date**[CN1622141](#)

A

2005-06-01

CN1622141

**Abstract**

(CN1622141)

The present invention relates to one kind of multifunctional traffic signal lamp system and belongs to the field of signal lamp and **CCD** cameran application. The present invention mounts **CCD** camera with small size and powerful function onto traffic signal lamp so as to obtain the traffic signal lamp and road state at all time. The present invention has the advantages of raising traffic safety, facilitating accident treatment and remote monitoring traffic signal lamp.

Inventors

LIN MINGYAO

Latest standardized assignees - inventors removed

SHANGHAI ZHONGCE INDUSTRY & TRADING

Family 2/15 - FAMPAT - ©Questel

Title

(EP3652721)

A method and apparatus for collecting and using sensor data from a vehicle

Images

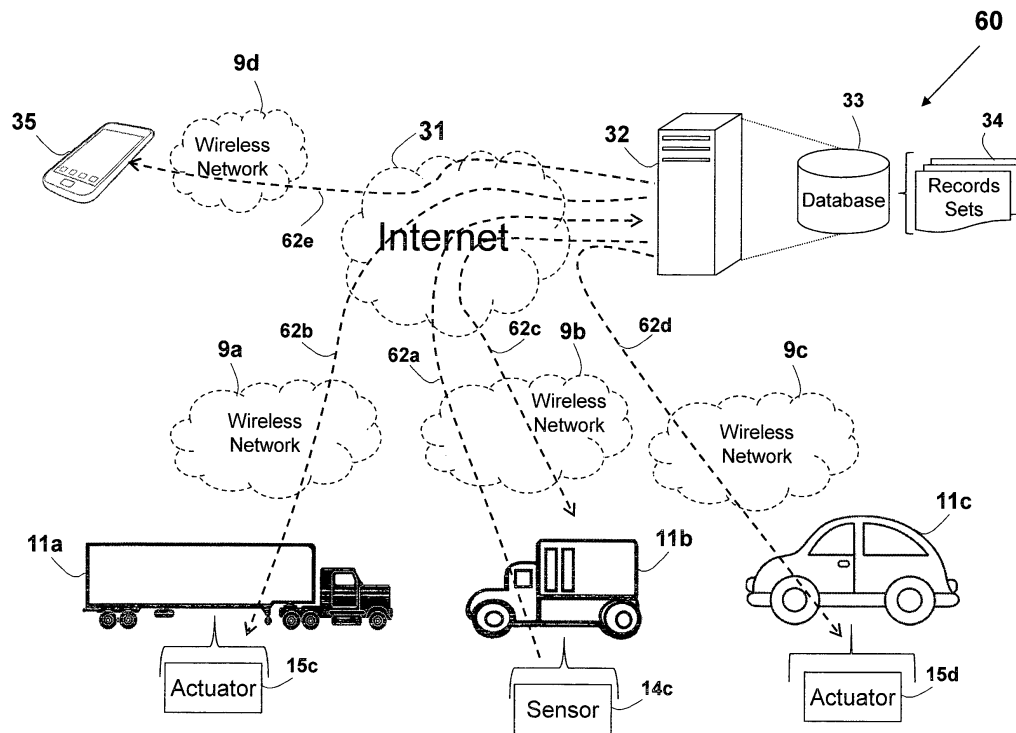


FIG. 6

Publication numbers with kind code & date

EP3652721	A1	2020-05-20	EP3652721
CN111149141	A	2020-05-12	CN111149141
WO2019/043446	A1	2019-03-07	WO201943446

**Abstract**

(EP3652721)

A road hazard, such as a traffic collision, traffic regulation violation, road surface damage, or any other traffic obstruction, is detected by a sensor in a vehicle. The sensor data is sent periodically, or upon detecting the anomaly, to a server over the Internet via a first wireless network, together with a vehicle identifier (Vehicle Identification Number (VIN) or the license plate number) and its GNSS or GPS geographic location. The server analyzes the sensor data, and in response sends a notification message to a client device, such as a smartphone, or to a group of vehicles in close vicinity to the first vehicle, via a wireless network over the Internet. The received message may be used by each of the vehicles in the group for controlling, limiting, activating, or otherwise affecting an actuator operation, or may be used for notifying the driver using a dashboard display.

Inventors

KERECSEN TAMAS

Latest standardized assignees - inventors removed

NNG SOFTWARE DEVELOPMENT & COMMERCIAL

Family 3/15 - FAMPAT - ©Questel

Title

(CN108806261)

Smart traffic duty robot and commercial mode thereof

Images



CN108806261

A

2018-11-13

CN108806261

**Abstract**

(CN108806261)

The invention discloses a smart traffic duty robot comprising a vehicle chassis and a vehicle body. An automatic driving system for unmanned driving is arranged on the vehicle chassis. In addition, the smart traffic duty robot also includes a central controller, a communication module, a lifting traffic light device, a mobile traffic violation capturing device, a mobile speed measuring device, an automatic fire extinguishing device, a small printer, and an intelligent robot arm for automatically printing a printed bill to a corresponding vehicle. The smart traffic duty robot is used for replacing a traffic police man to carry out traffic guidance at a traffic road section, so that the manpower is relieved; and the own traffic light device can be started to work as an emergency temporary traffic light for traffic guidance at a road section without a traffic light under the condition of heavy traffic. The smart traffic duty robot uses the automatic driving system and can be drive to the traffic road section needing traffic guidance automatically to carry out traffic duty work under the remote controlling by the traffic command and control center; and thus the robot can move to the traffic accident site timely and conveniently to carry out traffic duty work and accident shooting or video recording for evidence storage, so that the follow-up accident accountability can be carried out conveniently.

Inventors

JIANG ZHENGYUN

SUN QIHONG

BO TIANPENG

Latest standardized assignees - inventors removed

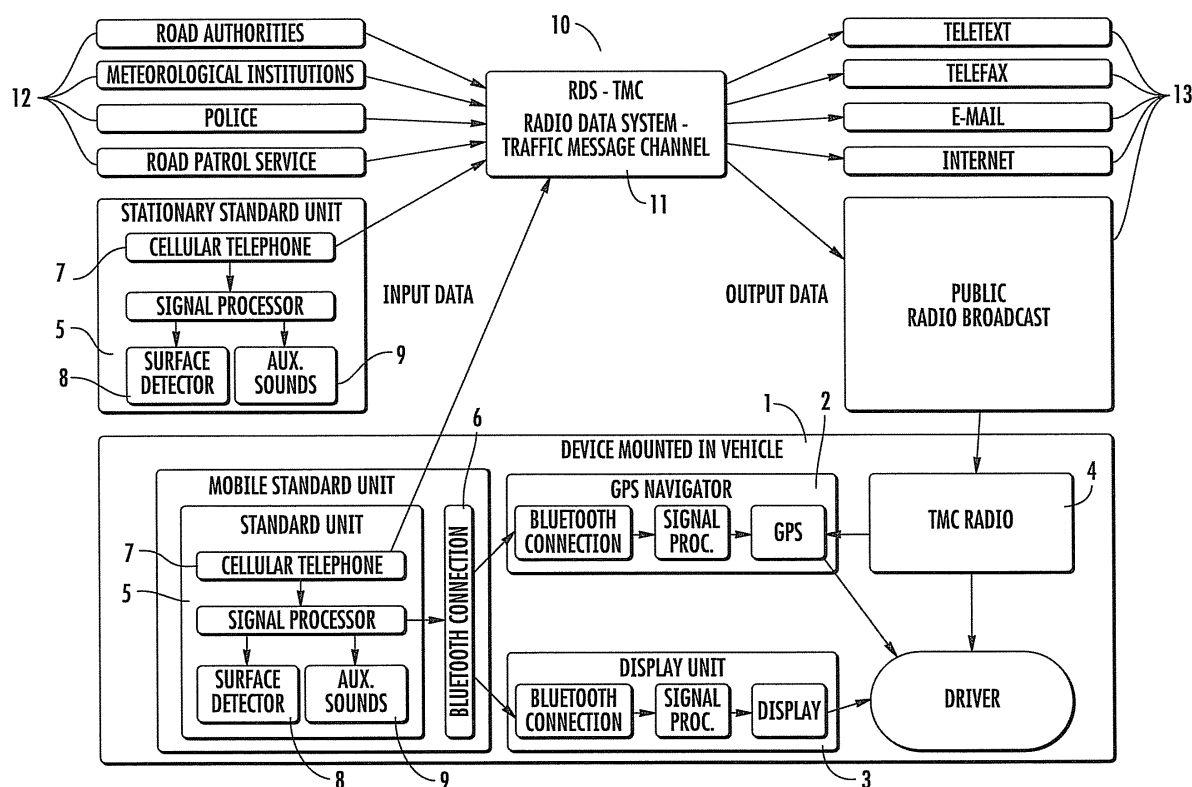
ZHIHUI SHI HOLDING

Family 4/15 - FAMPAT - ©Questel

Title

(EP1606784)

A device for detection of road surface condition

Images**Publication numbers with kind code & date**

HK1117903

A1

2012-09-14

HK1117903

CN1809853

B

2012-07-11

CN1809853B



CN1809853	B	2012-07-11	CN1809853B				
DK1890128	T3	2012-03-19	DK1890128T				
AT534896	T	2011-12-15	ATE534896				
EP1890128	B1	2011-11-23	EP1890128				
US8040248	B2	2011-10-18	US8040248				
JP4492883	B2	2010-04-16	JP4492883				
US20100085175	A1	2010-04-08	US20100085175				
US7652584	B2	2010-01-26	US7652584				
AU2009240864	A1	2009-12-17	AU2009240864				
AU2004219513	B2	2009-08-27	AU2004219513				
NZ568833	A	2009-05-31	NZ-568833				
NZ542080	A	2008-07-31	NZ-542080				
DE602004009422	T2	2008-07-24	DE602004009422				
EP1890128	A3	2008-04-23	EP1890128				
ES2295838	T3	2008-04-16	ES2295838				
PL1606784	T3	2008-03-31	PL1606784				
EP1890128	A2	2008-02-20	EP1890128				
DK1606784	T3	2008-02-11	DK1606784T				
DE602004009422	D1	2007-11-22	DE602004009422				
AT375585	T	2007-10-15	ATE375585				
EP1606784	B1	2007-10-10	EP1606784				
EA008399	B1	2007-04-27	EA---8399				
US20060261975	A1	2006-11-23	US20060261975				
JP2006523336	A	2006-10-12	JP2006523336				
CN1809853	A	2006-07-26	CN1809853				
EA200501458	A1	2006-06-30	EA200501458				
EP1606784	A2	2005-12-21	EP1606784				
KR20050109565	A	2005-11-21	KR20050109565				
NO20054213	D0	2005-09-12	NO200504213				
NO20054213	L	2005-09-12	NO20054213				
WO2004/081897	A3	2004-11-04	WO200481897				
AU2004219513	A1	2004-09-23	AU2004219513				
AU2004219513	A2	2004-09-23	AU2004219513				
CA2518386	A1	2004-09-23	CA2518386				
WO2004/081897	A2	2004-09-23	WO200481897				

Abstract

(EP1606784)

A device is disclosed for detection of surface properties or conditions, in particular detection of water, snow and ice and in particular to read surfaces by means of detector means mounted on individual vehicles, and transmitting the data from the vehicle, preferably together with position data of the vehicle, to be used by drivers of other vehicles for warning of slippery road conditions ahead of the vehicle. According to a particular aspect, it has been realised that the fact that polarized light which is mirror reflected by e.g. ice or water on a surface, preserves its polarization, whereas polarized light which is diffuse reflected largely becomes depolarized, may be utilised to separate the two types of reflection and thus provide a much more compact sensor device for surface properties, in which the light may be emitted close to or parallel to the road surface normal.

Inventors

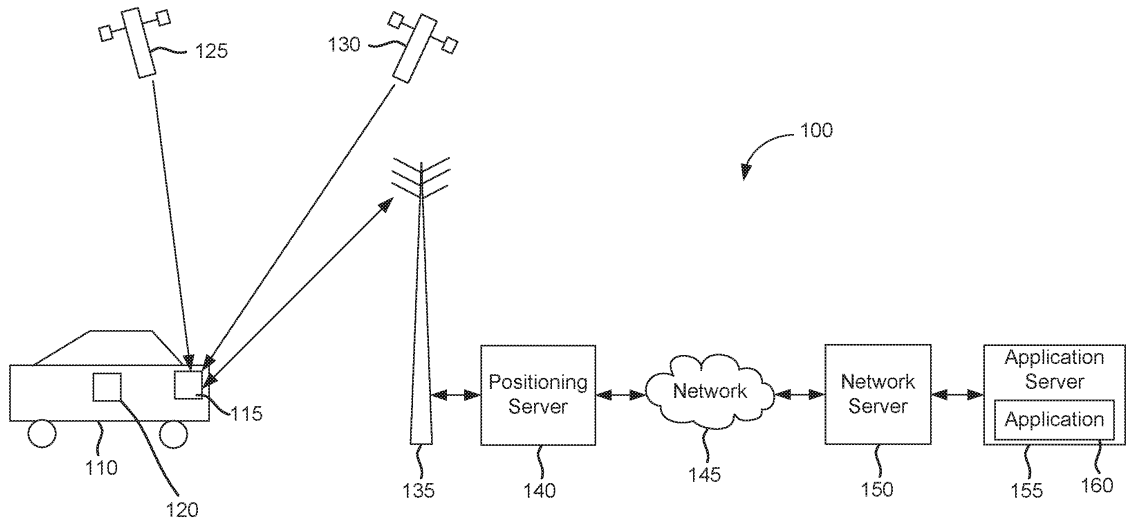
FRIDTHJOF JACK

Latest standardized assignees - inventors removed

LIWAS

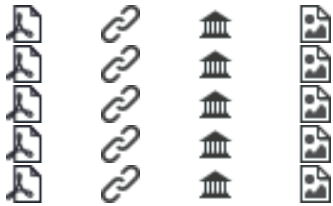
Family 5/15 - FAMPAT - ©Questel

Title
(US20190005825)
Fleet manager based vehicle control
Images



Publication numbers with kind code & date

US20190005825	A1	2019-01-03	US20190005825
US10170004	B2	2019-01-01	US10170004
US20170076609	A1	2017-03-16	US20170076609
US9478074	B2	2016-10-25	US9478074
US20150206355	A1	2015-07-23	US20150206355



Abstract

(US20190005825)

A fleet manager may communicate desired driving behavior, including maximum speed, desired route, areas to avoid, and other information to operators of vehicles in the fleet. The communication may be via an application on a mobile device, vehicle computer, or other device associated with each driver or vehicle. In operation, an administrator, such as, for example, a fleet manager, may communicate instructions to one or more vehicles, for example a vehicle of a fleet of vehicles.

Inventors

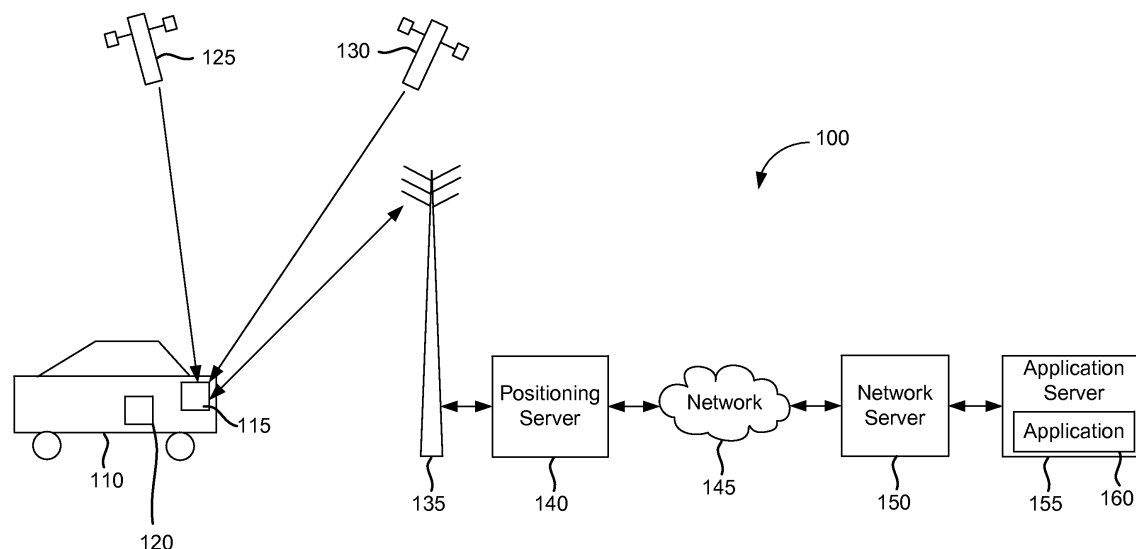
HUBBARD JONATHAN
KANTARJIEV CHRISTOPHER A

Latest standardized assignees - inventors removed

SPEEDGAUGE

Family 6/15 - FAMPAT - ©Questel

Title
(US20180233041)
Identification of driver abnormalities in a traffic flow
Images



Publication numbers with kind code & date

US20180233041	A1	2018-08-16	US20180233041
US9858814	B2	2018-01-02	US9858814
US20170018180	A1	2017-01-19	US20170018180
US9396660	B2	2016-07-19	US9396660
US20150206436	A1	2015-07-23	US20150206436



Abstract

(US20180233041)

Driving behavior may be analyzed based on other vehicles in proximity to a tracked or monitored vehicle. GPS data is collected from the monitored vehicle and other vehicles in physical or geographic proximity thereto. A determination is made as to whether the vehicle in the physical or geographical area is exhibiting aberrant behavior. The aberrant behavior may be determined in view of other vehicles in the geographical area. If aberrant behavior is detected, an alert may be generated and transmitted to an administrator.

Inventors

HUBBARD JONATHAN

KANTARJIEV CHRISTOPHER A

Latest standardized assignees - inventors removed

SPEEDGAUGE

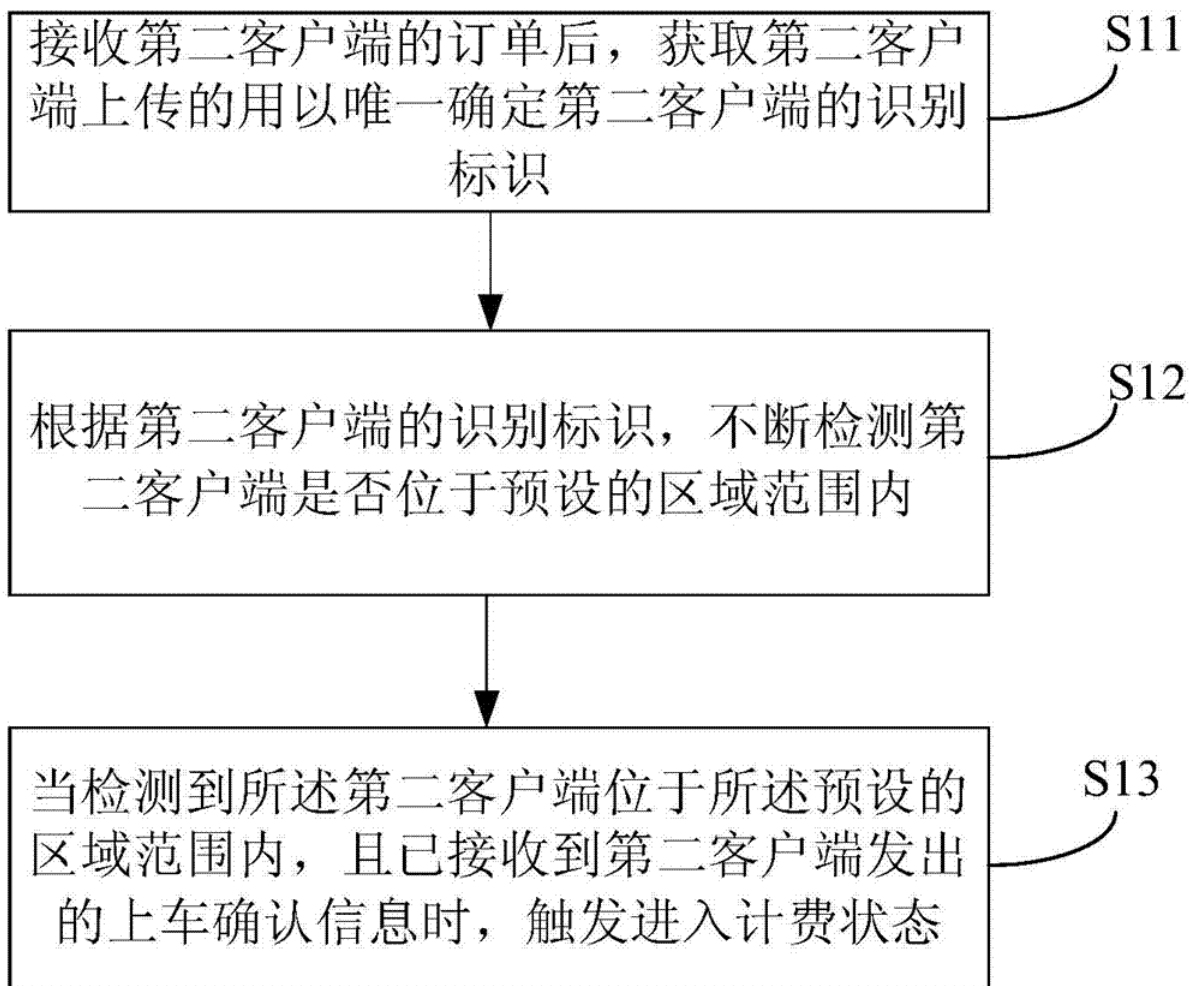
Family 7/15 - FAMPAT - ©Questel

Title

(CN104867324)

Method of recognizing boarding of passenger in taxi taking service and related device

Images

**Publication numbers with kind code & date**

CN104867324	B	2018-07-27	CN104867324B
CN104867324	A	2015-08-26	CN104867324

**Abstract**

(CN104867324)

The invention relates to a method of recognizing boarding of a passenger in taxi taking service and a related device. According to the method of recognizing boarding of a passenger in taxi taking service provided by the embodiment of the invention, after a first client and a second client receives an order, whether the second client is located in a preset region range is continuously detected; when the second client is located in the preset region range, whether the passenger finally boards the vehicle is determined further according to the vehicle driving state; and when the passenger is determined to board the vehicle whose driver receives the order, the second client and the first client automatically enter a to-be-paid state and a metering state respectively. The whole process is completed automatically, the driver or the passenger does not need to participate, operation of the two is simplified, the boarding time and the boarding site of the user can be accurately and effectively determined, metering is accurately carried out, and use experience of the user is improved.

Inventors

ZHANG PENGFEI
XIA YONGFENG
SU JUN

Latest standardized assignees - inventors removed

BEIJING SMARTMI TECHNOLOGY

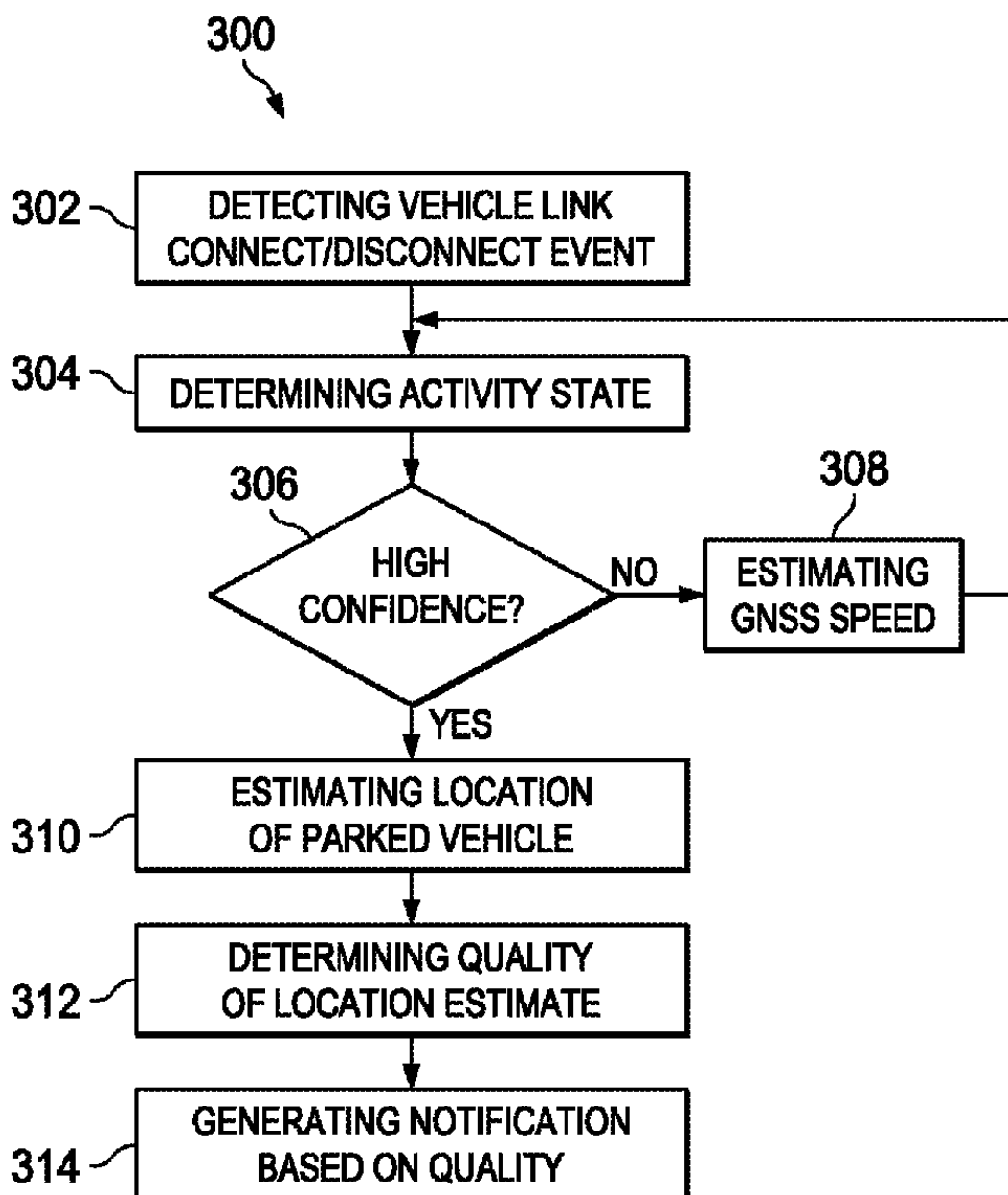
Family 8/15 - FAMPAT - ©Questel

Title

(US10121374)

Parking event detection and location estimation

Images



Publication numbers with kind code & date

[US10121374](#)

B2 2018-11-06

US10121374

[US20170358208](#)

A1 2017-12-14

US20170358208



Abstract

(US20170358208)

Systems, methods, devices and computer-readable mediums are disclosed for parking event detection and location estimation. In some implementations, a method comprises: determining, by a processor of a mobile device, a first activity state indicative of a possible parking event; obtaining, by the processor, a speed of the mobile device from a global navigation satellite system (GNSS) of the mobile device; obtaining, by the processor, pedometer data from a digital pedometer of the mobile device; determining, by the processor, a second activity state indicative of a possible parking event based at least in part on the GNSS speed and pedometer data; and responsive to the second activity state, estimating, by the processor, a location of the vehicle.

Inventors

KAZEMI PEJMAN LOTFALI

CAO LILI

CHOW SUNNY KAI PANG

DERVISOGLU GUNES

PHAN ANH

SHELBY RYAN DAVID

HUANG RONALD K

Latest standardized assignees - inventors removed

APPLE

Family 9/15 - FAMPAT - ©Questel

Title

(EP1481344)

Vehicle monitoring system

Images

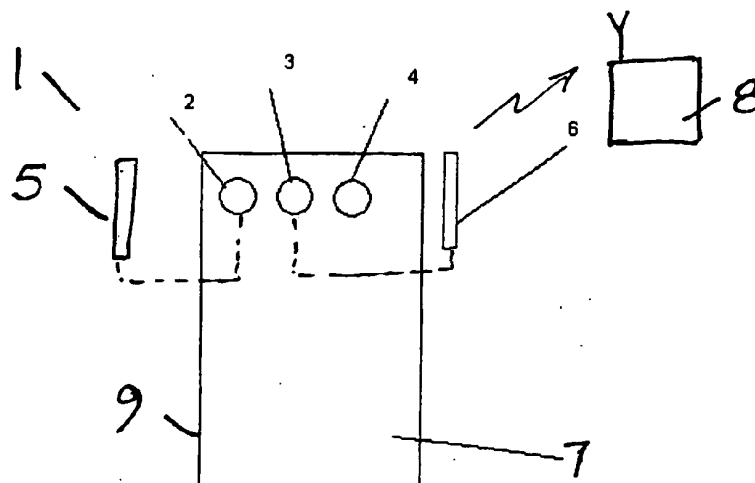


Fig 1

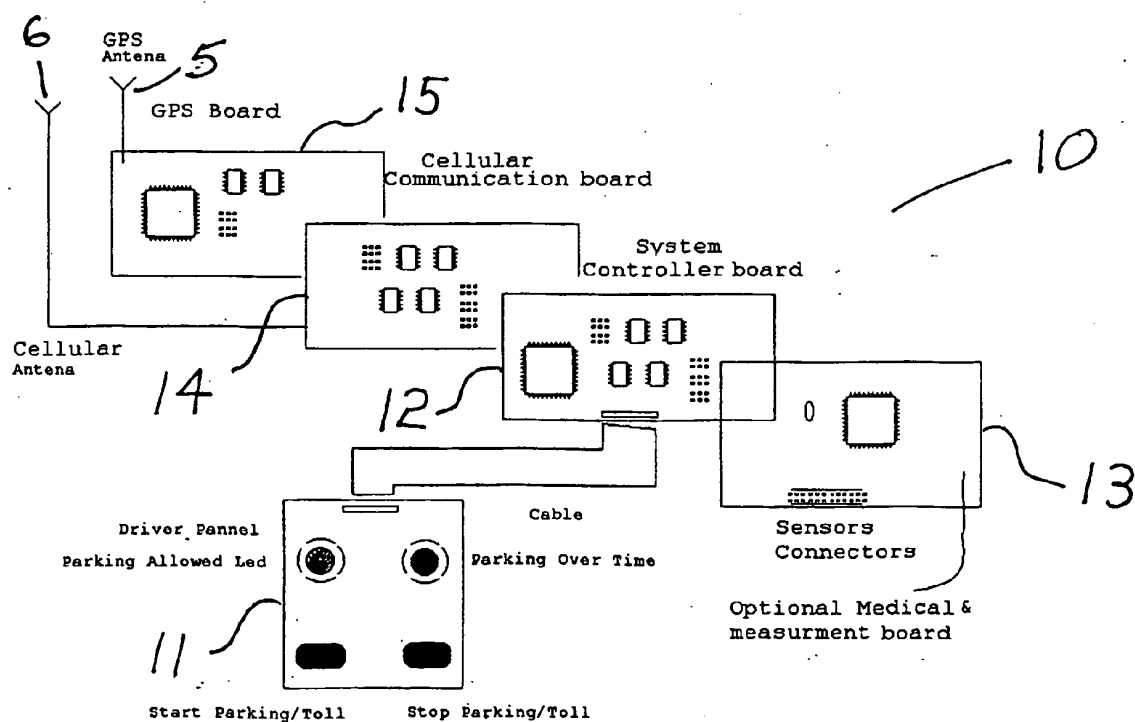


Fig 2

Publication numbers with kind code & date

DE60328085	D1	2009-08-06	DE60328085
AT434812	T	2009-07-15	ATE434812
EP1481344	B1	2009-06-24	EP1481344
EP1481344	A1	2004-12-01	EP1481344
AU2003206101	A1	2003-09-09	AU2003206101
WO03/073339	A1	2003-09-04	WO200373339
IE20030135	A1	2003-09-03	IE200300135



Abstract

(EP1481344)

A vehicle monitoring system 1 has a vehicle mounted electronic device 7 and an associated remote monitoring station 8 which are interconnected by a communications link. The device 7 is connected to a GPS system which provides speed and location data for the vehicle which is independent of driver control. Additional data relevant to safe operation of the vehicle can also be collected. Some of the data is stored at intervals in the device 7 for later transmission to the remote monitoring station 8. The length of the intervals between data storage operations depends on the measured speed of the vehicle and the rate of change of speed of the vehicle. The data collected can be used to generate a report profile of the manner in which the driver drives the vehicle in order to calculate a suitable insurance premium for that driver.

Inventors

CHAMBERLAIN BRIAN

MCCLEAN DEREK

MARTIN LEO

REDLER Y

LALLY ROBERT

WILEY MICHAEL

Latest standardized assignees - inventors removed

LICENSING & INVENTION

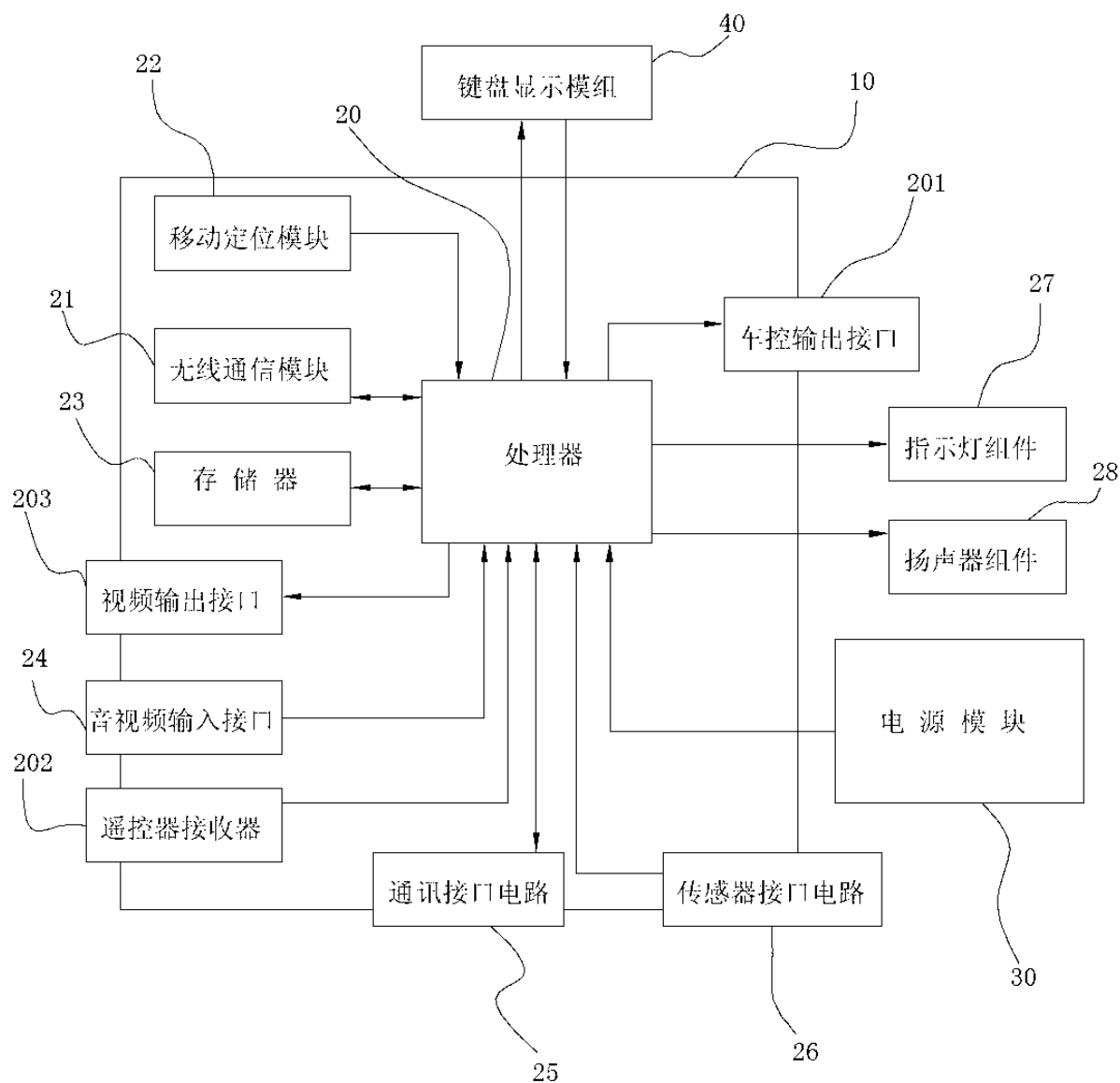
Family 10/15 - FAMPAT - ©Questel

Title

(CN203276566U)

Vehicle-mounted terminal for intelligent scheduling of public transport

Images



Publication numbers with kind code & date

CN203276566

U

2013-11-06

CN203276566U



Abstract

(CN203276566)

The utility model discloses a vehicle-mounted terminal for the intelligent scheduling of public transport, which comprises a host shell, a processor arranged in the host shell, a power supply module, a keyboard display module, a wireless communication module, a mobile positioning module and a memory. The power supply module, the keyboard display module, the wireless communication module, the mobile positioning module and the memory are connected with the processor. According to the technical scheme of the utility model, due to the adoption of the embedded processor in cooperation with the wireless communication module and the mobile positioning module, the remote scheduling and data acquisition can be realized. In this way, the systematized and intelligent vehicle scheduling operation at a scheduling center is facilitated. Meanwhile, the functions of replaying a moving track, analyzing the track and the like are also realized. In addition, due to the adoption of the modularized design, the vehicle-mounted terminal has multiple functions and is stable in operation. The shell seat of the vehicle-mounted terminal is of a modularized drawer structure composed of a main control module and a power supply module, thus is convenient in installation, simple in appearance, high-temperature resistant and vibration resistant. The on-line maintenance of the vehicle-mounted terminal is enabled, so that the vehicle-mounted terminal is free from being disassembled for ever.

Inventors

GOU JIARUI

CHEN DONGYUE

LUO KAI

ZHANG CHI

Latest standardized assignees - inventors removed

SHENZHEN LANTAIYUAN ELECTRONIC TECHNOLOGY

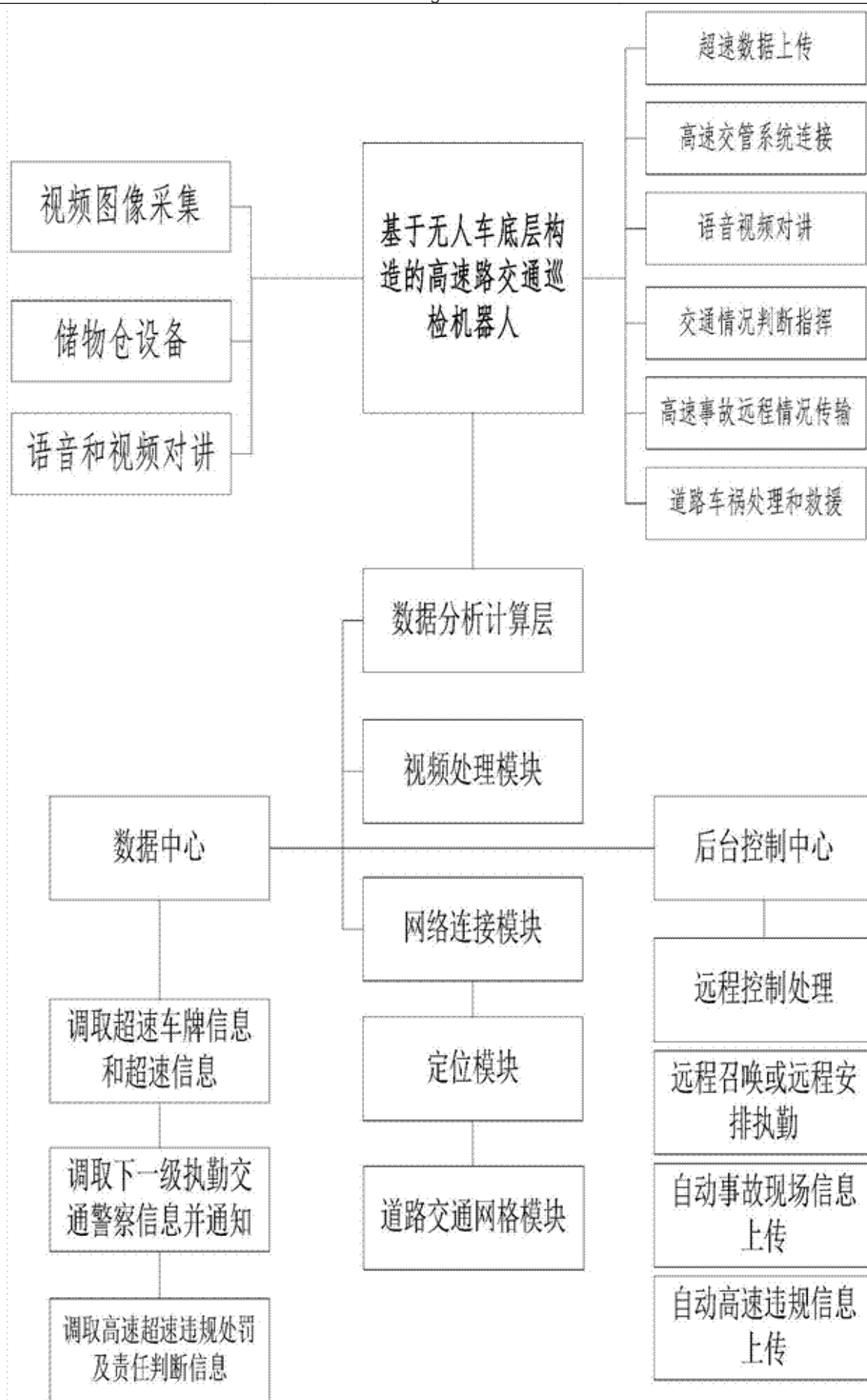
Family 11/15 - FAMPAT - ©Questel

Title

(CN108831170)

Intelligent highway patrol robot, sharing system and business mode

Images



(CN108831170)

The invention discloses an intelligent highway patrol robot, which at least comprises a vehicle chassis and a vehicle body. The vehicle chassis is provided with an automatic driving system for unmanned driving. The intelligent highway patrol robot also comprises a central controller, a communication module, a mobile signal lamp device, an image capture, video recording and remote transmission system, a speech and video intercom system, a mobile velocity measurement device, an emergency alarm module and an emergency rescue pack. The intelligent highway patrol robot liberates manpower and places invisible pressure on the vehicles driving on the highway to make the drivers to realize self-discipline and strictly observe the traffic rules, thereby reducing accident rate; when a traffic accident occurs, the intelligent traffic control robot starts a mobile signal lamp apparatus and conducts traffic command, thereby preventing occurrence of a follow-up vehicle stacking accident; and the robot can take pictures or record videos of the scene of a traffic accident to keep evidence for accident responsibility, damage assessment and insurance assessment of the traffic accident, thereby helping to quickly recover normal operation of the accident road section.

Inventors

JIANG ZHENGYUN

SUN QIHONG

BO TIANPENG

Latest standardized assignees - inventors removed

ZHIHUI SHI HOLDING

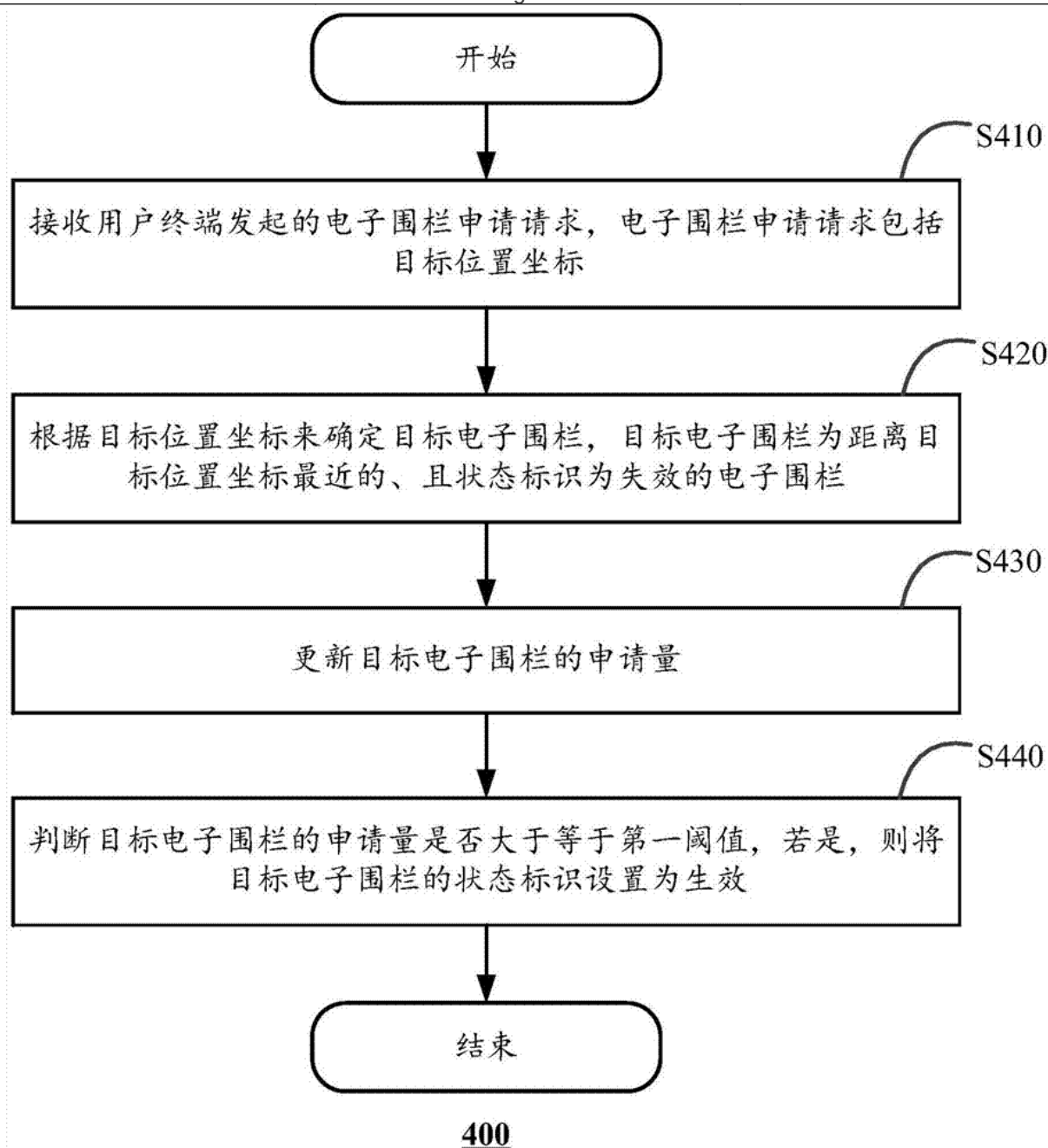
Family 12/15 - FAMPAT - ©Questel

Title

(CN108734951)

Electronic fence setting method and computing equipment

Images

**Publication numbers with kind code & date**

CN108734951

A

2018-11-02

CN108734951

**Abstract**

(CN108734951)

The invention discloses an electronic fence setting method, which is executed in computing equipment. The computing equipment is connected with a data storage device. The data storage device stores a plurality of electronic fence records, each electronic fence record comprises an application quantity and state identifiers of electronic fences, and the state identifiers comprise validation and invalidation. The electronic fence setting method comprises the steps of: receiving an electronic fence application request initiated by a user terminal, wherein the electronic fence application request comprises target location coordinates; determining a target electronic fence according to the target location coordinates, wherein the target electronic fence is an electronic fence which is closest to the target location coordinates and has the state identifier of invalidation; updating the application quantity of the target electronic fence; and judging whether the application quantity of the target electronic fence is greater than or equal to a first threshold value, if so, setting the state identifier of the target electronic fence as validation. The invention further discloses corresponding computing equipment.

Inventors

WANG YINAN

CHENG CHAOCHAO

LUO LIUQING

Latest standardized assignees - inventors removed

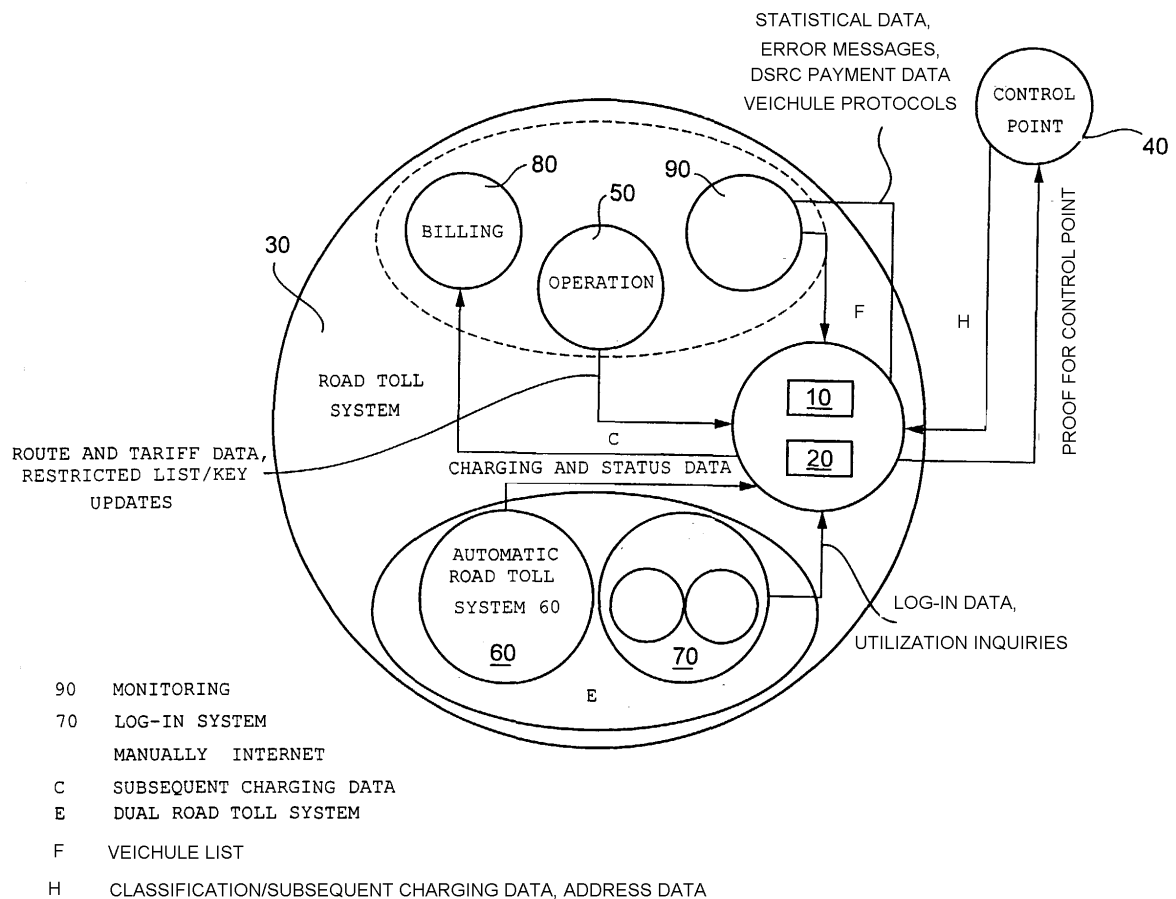
HANGZHOU QEEBIKE TECHNOLOGY

Family 13/15 - FAMPAT - ©Questel

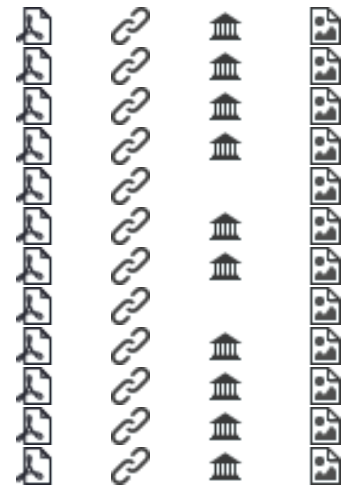
Title

(EP1358634)

Control method for use in a toll determination system

Images**Publication numbers with kind code & date**

CA2437301	C	2013-02-12	CA2437301
DE10104502	B4	2013-02-07	DE10104502
JP4567943	B2	2010-08-13	JP4567943
AU2002219167	B2	2006-07-27	AU2002219167
PL366238	A1	2005-01-24	PL2001366238
JP2004526234	A	2004-08-26	JP2004526234
CN1493061	A	2004-04-28	CN1493061
CZ20032049	A3	2004-04-14	CZ20032049
EP1358634	A1	2003-11-05	EP1358634
DE10104502	A1	2002-08-14	DE10104502
CA2437301	A1	2002-08-08	CA2437301
WO02/61690	A1	2002-08-08	WO200261690

**Abstract**

(EP1358634)

The invention relates to a control method for use in a toll determination system, comprising a control system (10) with a plurality of acquisition devices for vehicle information and with a trigger device for timely activating the acquisition devices. The invention is further characterized in that the individual acquisition devices are activated at points in time at which the

spatial disposition of the vehicle and the acquisition device acquiring the respective vehicle information are optimal. The control system (10) associates the various pieces of vehicle information of a vehicle separately acquired by the acquisition devices in terms of space and time with the vehicle and with a reference point in time.

Inventors

BIET WERNER

Latest standardized assignees - inventors removed

TOLL COLLECT

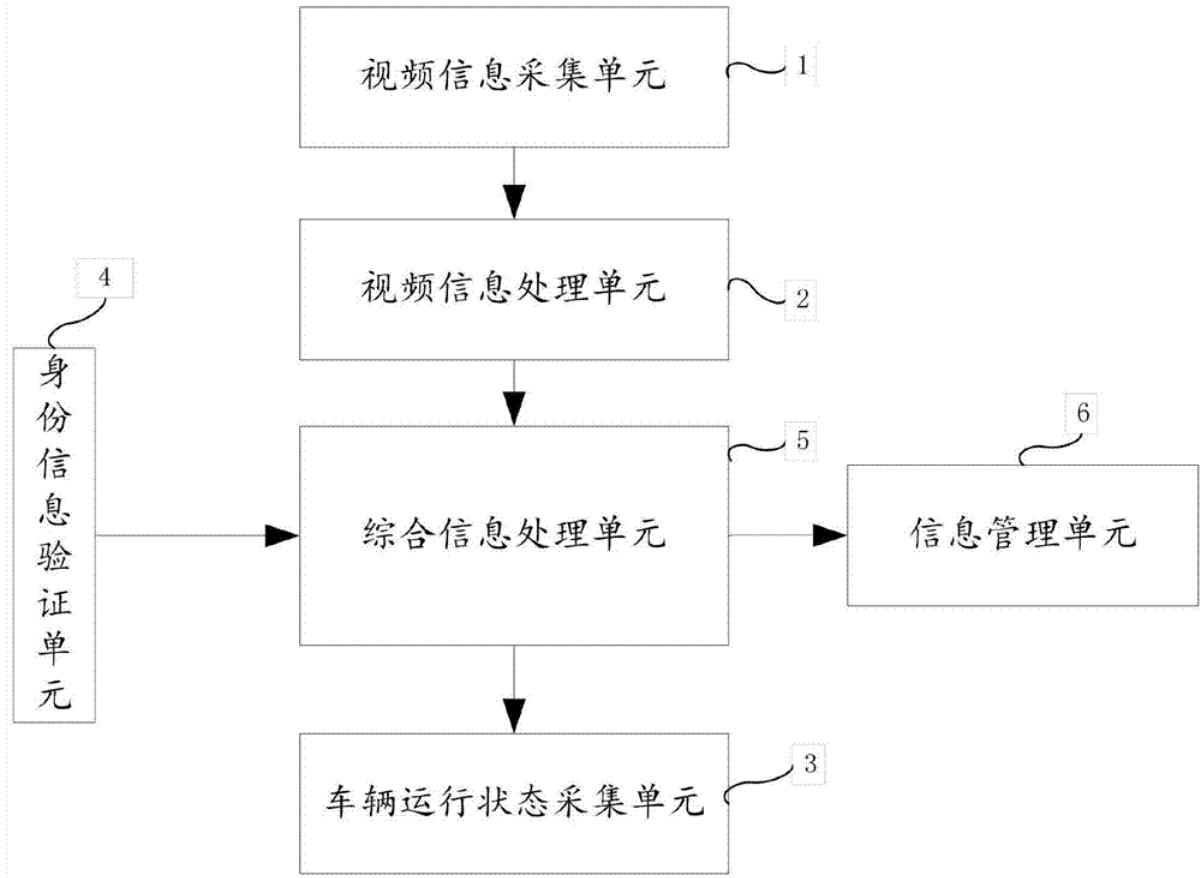
Family 14/15 - FAMPAT - ©Questel

Title

(CN105513358)

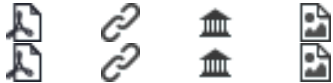
Driving behavior assessment and vehicle driving state monitoring early warning system and method

Images



Publication numbers with kind code & date

CN105513358	B	2018-07-03	CN105513358B
CN105513358	A	2016-04-20	CN105513358



Abstract

(CN105513358)

The invention relates to a driving behavior assessment and vehicle driving state monitoring early warning system and method. The method comprises a video information collection unit, a video information processing unit, an identity information verification unit, a vehicle running state collection unit, an integrated information processing unit and an information management unit. The system constructs an assessment mechanism specific to driving behaviors, collects road condition video information, vehicle driving state information and driver vehicle operation process data information, excavates data characteristics, and performs weight distribution, information fusion and comprehensive determination, thereby realizing real time assessment of driving behaviors, and providing early warning specific to possible dangers.

Inventors

SUN RUICHUAN

LI TIE

ZHAO JIANFENG

ZHAO HUIBO

TAN YUANBO

YU LIANYONG

ZHU ZHENYING

LI JUNDA

Latest standardized assignees - inventors removed

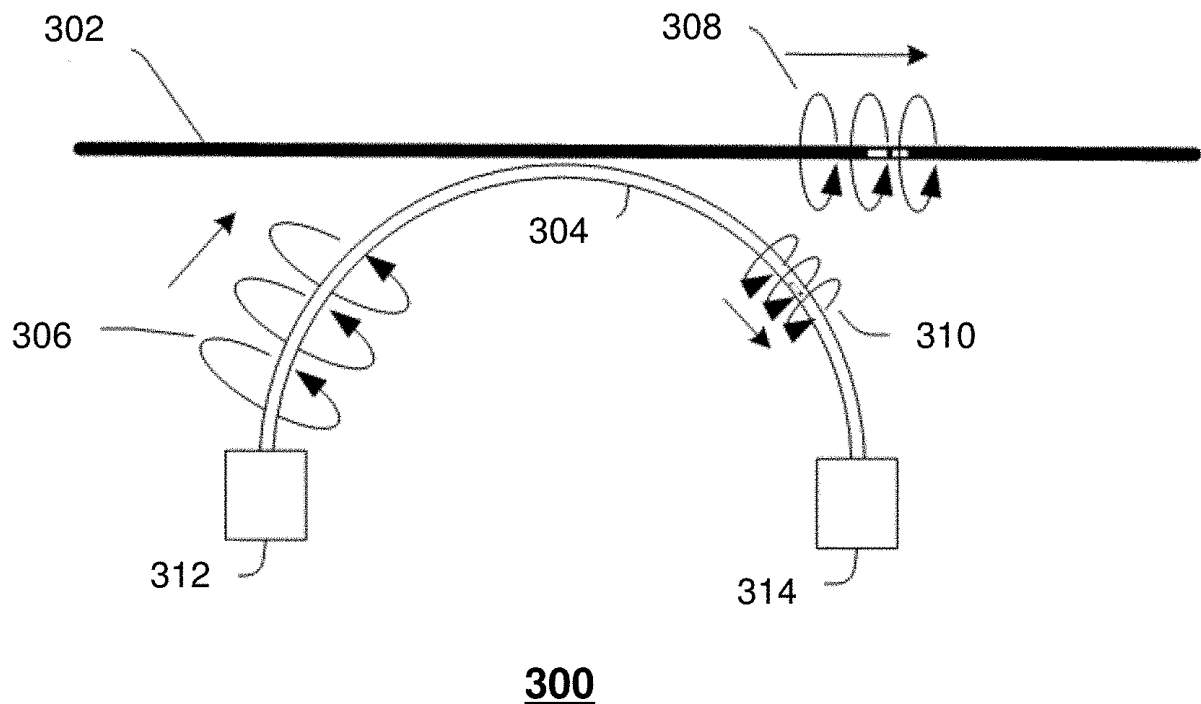
YANTAI WELLSYS ELECTRONIC TECHNOLOGY

Family 15/15 - FAMPAT - ©Questel

Title

(US20200175851)

Method and apparatus for electromagnetic wave communications associated with vehicular traffic

Images**Publication numbers with kind code & date**[US20200175851](#)

A1 2020-06-04

US20200175851

**Abstract**

(US20200175851)

Aspects of the subject disclosure may include, a communication system that facilitates generating, by a waveguide system of the communication system based on a first wireless signal, first electromagnetic waves that convey sensor data, where the first electromagnetic waves propagate along a transmission medium to a server, where the transmission medium comprises an external surface, and where the first electromagnetic waves propagate along the transmission medium without requiring an electrical return path; and receiving, by the waveguide system, second electromagnetic waves that convey instruction information, where the second electromagnetic waves propagate along the transmission medium to the waveguide system, where the second electromagnetic waves propagate along the transmission medium without requiring the electrical return path, and wherein the instruction information is generated by the server according to the sensor data. Other embodiments are disclosed.

Inventors

SERBAN CRISTINA

LEVY DONALD

GROSS DAVID

RAMACHANDRAN JAYARAMAN

Latest standardized assignees - inventors removed

AT&T