

La integración de las tecnologías de la Información y Comunicaciones (TIC) en vehículos e infraestructuras viales se ha mostrado muy provechosa a la hora de obtener soluciones avanzadas a los problemas del transporte de hoy en día.

Los Sistemas de Coches Inteligentes buscan facilitar la interacción entre el conductor, el vehículo y la carretera, de manera que los sistemas autónomos de abordaje se complementan con sistemas que cooperan entre los diferentes vehículos o entre los vehículos y las infraestructuras, para mejorar, de este modo, aspectos de gran relevancia, tales como la reducción de accidentes, la eficiencia energética o la reducción de la contaminación.

El presente boletín, elaborado por la Unidad de Información Tecnológica de la Oficina Española de Patentes y Marcas (OEPM), pretende revisar la evolución de la innovación, en el marco de las patentes de las tecnologías TIC en relación con algunos

de los sectores prioritarios contemplados en el desarrollo del “Coche Inteligente”, tales como: los sistemas de gestión optimizada del tráfico, las redes sensoriales o de comunicaciones integradas en los vehículos, los sistemas de gestión de plazas de aparcamiento o de peajes, y los sistemas de notificación de accidentes o averías a servicios de emergencia u otros conductores cercanos.

De este modo, el boletín, de periodicidad trimestral, recogerá las publicaciones más recientes de solicitudes internacionales de patente (solicitudes PCT) publicadas en el trimestre inmediatamente anterior a su elaboración. Se ha restringido el ámbito de este boletín a solicitudes PCT por considerarse que al ser estas solicitudes con las que las empresas pretenden proteger sus invenciones en distintos países, se corresponden con invenciones de una cierta relevancia tecnológica.

CONTENIDO:

- Gestión del tráfico
- Redes vehiculares
- Gestión de aparcamientos y peajes
- Notificación de accidentes

- Otras referencias

Solicitudes de Patente Publicadas

Los datos que aparecen en la tabla corresponden a una selección de las solicitudes de patentes PCT publicadas durante el trimestre analizado. Se puede acceder al documento completo haciendo clic sobre el mismo.

GESTIÓN DEL TRÁFICO

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO2014010407A1	NISSAN MOTOR CO LTD	System for provisioning traffic information, has transmission control unit which makes communication unit to transmit detected positional information to server, when judging that terminal device exists in information transmission area
WO2014019461A1	ZTE CORP	Arterial traffic light optimization and control method involves calculating cycle of each subsystem and green ratio of each junction to obtain green wave control parameter
WO2014027247A2	UNIV KING ABDULLAH SCI & TECHNOLOGY	Monitoring traffic data while preserving privacy, involves estimating transmitter position, and mapping estimated transmitter position to roadway
WO2014027799A1	LEE H S	Traffic signal control center server for providing traffic information to vehicle i.e. car, in crosswalk, has broadcast signal generator generating broadcast signal that is provided with branch offset time information and control command
WO2013190202A1	MORPHO	Method for regrouping data attached to image of vehicle for monitoring road traffic, involves using common characteristics of identification zone to extract portions from image group, and using comparing unit to gather data
WO2014007762A1	TAN S L	Method for facilitating monitoring of traffic of e.g. sedans on roads, involves processing visual information by violation detection software routine to determine whether element of traffic is in violation of traffic protocol
WO2014009214A2	BOSCH GMBH ROBERT	Method for operating vehicle moving on track, involves taking lateral guiding of vehicle in order to reduce lateral spacing between vehicle and one of following vehicles if detected traffic flow corresponds to traffic jam

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REDES VEHICULARES

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO2014017454A1	ZMP INC	Vehicle-mounted information communication apparatus has control unit which attaches time information to information regarding state of inspection system sequentially inputted from units, and outputs to channel of communication unit
WO2014028377A2	INSURANCE SERVICES OFFICE INC	Driving performance computer system for detecting driving performance data, has driving performance engine to verify vehicle or driver of vehicle, detect vehicle dynamics, record driving performance data and receive insurance information
WO2014033171A1	VOLKSWAGEN AG	Method for monitoring e.g. electronic drive control device connected to controller area network bus of passenger car, involves determining presence of apparatus in correct state when message comprises monitoring sign-out message
WO2014016620A1	WUNELLI LTD	System for monitoring driving behavior has on-board diagnostics module with vehicle usage monitor to monitor usage of vehicle and generate vehicle usage data based on usage characteristic of vehicle, and server to generate alert signal
WO2014039174A1	SMITH J I	Computer-implemented method for verifying completion of circuit with respect to e.g. van, involves causing processor to verify whether circuit is completed by individual within predetermined time interval to qualify vehicle
WO2014004745A2	INTEL CORP BASKIN L MALAMUD A	Apparatus for remote management and control of vehicular functions via multiple networks, determines second network of networks for sending second message, and sending second message over second network
WO2014016249A1	BAYERISCHE MOTOREN WERKE AG	Method for communicating vehicle data of vehicle, involves automatically determining presence of vehicle in specified environment region of service unit, where predetermined amount of vehicle data is provided by communication interface
WO2014013176A2	ERTF ETUD & REAL TECH FR COMMUNICATION ETUD & REAL TECH FR EN COMMUNICATION	Method for assisting-in overtaking of e.g. motor vehicle in racing, involves manually/automatically transmitting radio frequency signal to requestor vehicle so as to notify that receiving vehicle has been notified of imminent overtaking
WO2014015922A1	AUDI AG	Method for operating motor car, involves providing warning to user of motor car depending on evaluation of vehicle-external data that is indicative of existence of dangerous situation and in-vehicle data

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GESTIÓN DE APARCAMIENTOS Y PEAJES

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO2014036335A1	INTEGRITY VEHICLE SOLUTIONS COMPANY LLC	Transportation Control And Regulation System And Method For For-Hire Vehicles
WO2014014500A1	NAGDA P L NAVMAN WIRELESS NORTH AMERICA LP UMASHANKKAR B	Method for managing fleet of vehicles, involves generating report including aggregated statistics and goal and industry average so as to illustrate progress toward goal, efficacy of training, and optimal asset allocation
WO2014014331A1	RODRIGUEZ GARZA I I	Electronic system for authorizing and searching for parking spaces for vehicle, has electronic device that calculates geographical location of vehicle in real time, to process information and wirelessly send modified status of vehicle
WO2014036331A1	INTEGRITY VEHICLE SOLUTIONS COMPANY LLC	Mobile For-Hire-Vehicle Hailing System And Method
WO2014018485A1	PAYURTOLL LLC	Mobile device e.g. smart phone for processing toll-based payment transaction of motor vehicle in toll booth payment system, has processor to communicate second audio signal to toll tag device for transmission to identified toll plaza
WO2014014494A1	DUNCAN SOLUTIONS INC	Electronic single-space parking meter mechanism used in parking space of vehicle, has electronic display screen that is supported by inner housing, and portion of antenna is located above portion of electronic display screen
WO2014019600A1	SIEMENS AG	Device for managing parking space with charging function for electric cars, has access control system controlling access of persons into company premises, and detection system detecting user and/or vehicle
WO2014033727A1	GOEL S	Centralized parking payment and monitoring system for parking spaces, includes monitoring inputs from geo location enabled device to identify vehicle being parked to parking spaces, and generating time duration for which vehicle is parked
WO2014012132A1	BALAKRISHNAN J MAJUMDER I	System for managing automated parking of e.g. car, has citation module that determines whether vehicle parked in parking bay contravenes designated parking rule based on arrival and departure triggers received from sensor module
WO2014012885A1	REVOLUTION 3 SRL	System for paying parking fees for e.g. motor vehicle in urban or densely populated regions, has mobile device comprising decoding unit for decoding control code and unit utilizing decoding to acquire subset of information
WO2013190566A2	GOEL S	System for facilitating centralized toll tracking and toll fees payment of car entering in toll highways using e.g. pager, generates user-perceptible conforming vehicle-output with enforcement device upon toll authority status of vehicle
WO2014020186A1	UNIV REY JUAN CARLOS	Method for coordinating fleets for performing event assistance in dynamic environment, involves beginning assistance at arrival time that is time that elapses from detection of event to moment, when vehicle arrives at place of event

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NOTIFICACIÓN DE ACCIDENTES

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO2014011106A2	QURE AB	Computer-readable recording medium for informing about e.g. accident within alarm community, has set of instructions for sending alarm signal to alarm server if handheld device is exposed to acceleration above predetermined threshold
WO2014035597A2	MOTOROLA SOLUTIONS INC	Method for dynamically reconfiguring subscriber unit usage of e.g. land mobile radio access network across desired geographic area associated with incident scene, involves instructing subscriber units to move to higher priority network
WO2014040725A1	AUDI AG	Method for detecting traffic and accident data at nodal points in traffic by vehicle, involves sending pre-processed data of cross-traffic representing data of vehicle control unit, to external receivers and central processing station
WO2014008899A1	WARNING SYSTEMS APS	Warning method for alerting drivers of vehicles to be made aware of presence of emergency vehicles involves transmitting interception radio signal that includes information in Radio Data System (RDS) frequency range of second radio channel
WO2014036355A1	AGERO INC	Method for determining risk profile of driver of vehicle using improved driver metrics, involves comparing determined driver characteristics to normal distribution curve of driving characteristic data at locations encountered by driver
WO2014039408A1	YOUSAFI KHAN ALI	Identification System

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OTRAS REFERENCIAS

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO2014006676A1	TOYOTA JIDOSHA KK	Apparatus for managing operation of on-demand vehicle e.g. on-demand bus for transportation of e.g. foodstuff, has traffic control unit to determine two operation schedules in which user and good or service is transported to location
WO2014021855A2	BUNTEL C J EMPIRE TECHNOLOGY DEV LLC HASHIZUME K LONDERGAN T WAN F	Method for controlling traffic pollution in vehicle e.g. automobile, involves calculating financial incentive based on environmental score at processing device operably connectable to pollution recording unit
WO2014015470A1	RENESAS MOBILE CORP	Apparatus for performing vehicle gateway access in cellular network, has processor that transmits RRC connection setup information and allocates resource for vehicle communication, when connection establishment request is received
WO2014032682A1	VOLVO TRUCK CORP	Method for handling e.g. voice message in lorry by commercial driver during event relating to traffic jam, involves creating geomessage comprising vehicle event information, and providing geomessage to vehicle or geomessage handling system
WO2014005200A1	DIETEREN SA NV	Management system for managing shared utilization of cars, has wireless communication apparatus including control module that has wireless communication unit operatively connected to steering electronics of transponder key of vehicle
WO2013190233A1	MEDIAMOBILE	Method for estimating run time of vehicle i.e. automobile, in highway network, involves calculating crossing moment from climatic mean velocity for given segment, and calculating run time of vehicle from crossing time of segment
WO2014023838A2	BEME M	Processor-implemented method for synchronizing media in e.g. formats across e.g. smart phone, involves generating changed context synchronization response, and sending changed context synchronization response to user device
WO2014000161A1	RENESAS MOBILE CORP	Method for cooperative data collection by electronic device e.g. surveillance device, involves capturing information related to proximate event using sensor to transmit report message to central repository
WO2014044671A1	CONTINENTAL AUTOMOTIVE GMBH	Vehicle communication method involves transmitting data from one vehicle to server using communication protocol and transmitting data received in server to other vehicle
WO2014035920A2	AMAZON TECHNOLOGIES INC	Determination system for approximating geocoordinates of location has vendor server to communicate with user application to receive geocoordinates of destination site and communicate geocoordinates of site to delivery application
WO2014025321A1	ADACTA INT LTD	Method for reading vehicle odometer data for monitoring mileage by insurance companies or vehicle rentals, involves acquiring absolute odometer parameters and optionally storing absolute odometer parameters into custom built database