

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

WO2011028092 A1	UNIV MALAYA UM	Integrated traffic monitoring and enforcement system for use in traffic engineering has roadside central processing unit which has an industrial microprocessor with signal conditioning and data acquisition board, charged amplifier
WO2011025563 A1	RAYTHEON CO	Network of traffic behavior-monitoring unattended ground sensors (NeTBUGS) for detecting anomalous behavior of individual vehicles during off-peak, low density conditions, has autonomously powered sensor nodes in ordered network
WO2011016819 A1	TELE ATLAS NORTH AMERICA INC	Method of verifying or filling in attribute information of transportation network, involves populating attribution from segments based on correlation to database in question to fill in missing or verify unreliable database attribution
WO2011019706 A1	CERTUSVIEW TECHNOLOGIES LLC	Vehicle-related complex event e.g. excessive speed event, occurrences assessing method for delivery truck in commercial application, involves publishing indication of occurrence of event on output stream of engine when event has occurred
WO2011019627 A1	TELCORDIA TECHNOLOGIES INC	Distributed traffic navigation method for vehicular network with multiple road junctions and set of vehicles operating on road segments, involves generating route for header vehicle based on matrix and broadcasting matrix
WO2011015817 A2	HATTON TRAFFIC MANAGEMENT LTD	Traffic control system for use as temporary traffic light system associated with roadworks, has control unit controlling signals output by traffic control device in dependence on detector output signal by detector
WO2010149796 A1	MASAT BV	Moving sensor node e.g. gas sensor, location information determining method for e.g. motorbike to communicate with fixed two-dimensional multi-hop communication network for drilling rig, involves transforming information into coordinates
WO2011000740 A1	SIEMENS AG	Method for determining traffic information in e.g. Global System for Mobile communications radio network, involves monitoring radio channel by radio module such that change of radio cells is recognized and used to drive vehicle

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REDES VEHICULARES

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO2011026089 A1	TELCORDIA TECHNOLOGIES INC	Public Key infrastructure operation supporting method for vehicle network, involves sending certificate revocation list to seeded vehicles within coverage area of satellite via communication channels
WO2011026611 A1	NEC EURO LTD	Method for enabling multi-channel signaling in vehicular ad hoc network, involves intending service channel to be employed for specific service and application by communication nodes with respective sent messages
WO2011014531 A1	MOTOROLA INC MOTOROLA MOBILITY INC	Method for executing simulated network hold with e.g. master short range accessory for communication devices, involves creating secondary audio connection between interface accessory and secondary communication device
WO2011005602 A1	HONDA MOTOR CO LTD	Method for operating e.g. motor vehicle, on highway by communication system, involves reducing transmitting power when number of remote vehicles is greater than maximum allowed number
WO2010149890 A1	RENAULT SAS	Method for digital communication between e.g. car and electric infrastructure, involves establishing internet protocol connection and connecting vehicle to internet network, where method utilizes powerline communication technology
WO2010144490 A1	ZIPCAR INC	Mobile voice communication device for mobile device-based vehicle control system to communicate with vehicle in car-sharing service, has transmitter transmitting signal comprising identification information that identifies user or device
WO2010144815 A2	PANASONIC AVIONICS CORP	Security appliance suitable for use in e.g. aircraft, has security system associated with single system element, and external communication connection unit providing secure information to processing system
WO2010143686 A1	RENESAS ELECTRONICS CORP	Control system for motor vehicle, has controller-area network internet protocol (CANIP) that performs protocol stack which determines presence or absence of update of signal to protocol data unit (PDU)

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GESTIÓN DE APARCAMIENTOS Y PEAJES

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO2011029062 A2	IPS GROUP INC	Meter device i.e. parking meter, has controller receiving indication of additional time being paid for parking session, and controlling display to update displayed time remaining to reflect additional time
WO2011023004 A1	ZTE CORP	Implementation method of electronic toll collection of vehicle, involves setting ground sensor in antenna communication range of lane reader-writer that is triggered after vehicle is driven into antenna communication area
WO2011023292 A1	VALEO SCHALTER&SENSOREN GMBH	Parking space detecting method for vehicle, involves transmitting message containing parking space position to network by transmitter arranged on vehicles, and forwarding message via network to other vehicles
WO2011020942 A1	ELECTRONIC ENGINE SOLUTIONS SL	Vehicle parking space managing system for e.g. car park, has sensors arranged in communication with control unit, where control unit includes microprocessor for processing and managing information received from sensors
WO2011003674 A1	SIEMENS AG	Parking space-management system i.e. sipark system, for use in parking facility for identifying free parking covers in parking spaces in multistory car park, has parking space sensor attached in ground of parking spaces
WO2011002583 A1	POTKONJAK M TECHNOLOGY CURRENTS LLC	Computer storage medium storing program for parking facility management in parking deck includes instructions for managing allocation of parking spaces to establish prices for parking spaces based on usage models

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NOTIFICACIÓN DE ACCIDENTES

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO2011028145 A1	COULON J R M DRAZIC M RT-RK ZA SISTEME ZASNOVANE NA RAAOEUNARI SIMIC A TESLIC N	Signaling device for road monitoring and signalization system and mounted near road edge has built in intelligence that is capable of switching the device to different working modes dependent on the surrounding conditions
WO2011023222 A1	TELEFONAKTIEBOLA GET ERICSSON L M	System for providing localized information service in cellular wireless telephone network, has filter to block sending of network upload message in preset context relationship with previous message to service destination terminals
WO2011023207 A1	CONTINENTAL AUTOMOTIVE GMBH	Method for emergency registration of vehicle network access device for service call, involves initiating registration of vehicle network access device, based on analyzing vehicle risk indicators
WO2011023221 A1	TELEFONAKTIEBOLA GET ERICSSON L M	System for providing localized information service to network entity, mounted in vehicle, is automatically operated in connected mode of network by defining spatial zone, and source and destination terminals are inside zone
WO2011024237 A1	FUJITSU LTD	Mobile communication apparatus mounted in moving object e.g. motor vehicle, has response request determination unit that determines whether moving object is non-priority moving object
WO2011019194 A2	UD TECH CO LTD	Intelligent accident lifesaving system for use in vehicle i.e. car, has intelligent terminal delivering accident information to control server, database server storing member information, and map server producing address data
WO2011021067 A1	LEBLANC B LEBLANC D	Apparatus for alert notification used in car, has power mode detector to detect predefined change in power mode of mobile phone
WO2011018168 A1	SCHUBERTH GMBH	System for detecting accident situation and emergency call activation, has protective helmet that is equipped with sensor unit for detecting accident characteristics
WO2011013238 A1	PIONEER CORP	Driving assistance device e.g. vehicle mounted navigation apparatus, has specific alerting unit alerting instruction information required for evacuation action of general vehicle in response to vehicle in emergency driving state
WO2010151442 A1	ESURANCE INC	Vehicle roadside assistance providing medium, has set of instructions for receiving request regarding stranded vehicle from mobile device, and delivering information about location of stranded vehicle to mobile device
WO2011000083 A1	GROVES T	Traffic notification system for warning approach of emergency vehicle, has series of signal receivers each associated to one signal relay, to receive emergency signal from emergency vehicle and propagate it along roadway using relay

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OTRAS REFERENCIAS

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO2011031049 A2	LEE M S	Emergency display device for vehicle i.e. car, has laser output unit comprising light-emitting unit, and computing unit computing distance of objects to rear by detecting and measuring sensing signal propagation and reflected wave reception
WO2011025758 A1	ALCATEL-LUCENT USA INC BRUNS G R HOBBY J D KUMAR B	Method for alerting mobile telephone call participants e.g. driver of vehicle, involves providing audible alert automatically to one of remote parties for conversation based on situation requiring elevated attention level of driver
WO2011031425 A1	ALCATEL-LUCENT USA INC	Speed alerts providing method for operator of e.g. automobile, involves providing indication indicating that vehicle travels at speed that is greater than appropriate maximum speed to operator of vehicle
WO2011019445 A1	CHANG P A C GINSBERG M L KEENAN E O MCCRADY L V ON TIME SYSTEMS INC	Traffic communication system for providing traffic data to vehicle drivers has routing subsystem that receives prediction from a traffic signal subsystem and determines a proposed route which is in turn transmitted to primary user device
WO2011016886 A1	FORD GLOBAL TECHNOLOGIES LLC	Apparatus for transmitting vehicle information to occupant communication device (OCD), has module transmit transmission mode of vehicle to OCD to disable OCD from controlling by switch if transmission mode enable movement of vehicle
WO2011013076 A1	NXP BV	Apparatus of road charging for use of roads by vehicle, has positioning data and road charging data which are provided with national marine electronic association (NMEA) protocol
WO2011007067 A1	PEUGEOT CITROEN AUTOMOBILES SA	Remote diagnosis assisting device for motor vehicle, has storage unit storing identification table that has codes defining types of requests authorized for diagnosis and assembly of identification codes for each request type defining code
WO2011003469 A1	TOMTOM INT BV	Alert content reception apparatus in navigation apparatus, has processing resource that cooperates with communication interface in order to retrieve alert content through bidirectional data communication service
WO2010143679 A1	JVC KENWOOD HOLDINGS INC	Vehicle information delivery system determines whether or not to transmit license plate data based on identification data received from center device