

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 mas 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

WO2010068106 A1	NEDERLANDSE ORG TOEGEPAST NATUURWETENS CH	Object tracking system for traffic management of vehicles, has message interpreter comprising database updating facility for updating object database facility based on messages provided by sensor nodes
WO2010058058 A1	4DESTIA OY	Processing arrangement for facilitating management of cross-border traffic, provides determined performance indicia and traffic control data to external parties such that traffic control data are derived from performance indicia
WO2010056139 A2	ARBOLERAS E P DE GUZMAN R T	Integrated vehicular monitoring and regulating system for monitoring and governing use of loading and unloading zones by public transport vehicle has on-board electronics that controls vehicle operation within loading and unloading station
WO2010050664 A1	SK TELECOM CO LTD	Traffic information providing system for use in vehicle, has application server connected to service server through mobile radio communication/public switched telephone network to provide traffic information requested by navigation terminal
WO2010050162 A1	PASCO CORP	Road measuring device for generating map information, selects formation parameter based on height and angle, at which image pick-up direction is parallel to acquired road surface to generate scale image based on parameter
WO2010048296 A1	BOWEN W R CLEAN TRANSPORT OLIVER R G WARE D	Multiple driver occupied passenger vehicles transporter system for use in metropolitan traffic management system, actuates terminal lane directional aides and vehicle compartments based on location and status information of vehicles
WO2010042973 A1	NAT ICT AUSTRALIA LTD WARE D	Estimation method used for vehicles in a queue involves predicting number of vehicles in queue based on previous estimate of number of vehicles in queue, estimated inflow rate and estimated outflow rate
WO2010046063 A1	CONTINENTAL AUTOMOTIVE FRANCE	Traffic information managing method for road network, involves conditionally transmitting traffic information to traffic application server based on information feedback criteria and improving dynamic circulation model based on information
WO2010037581 A1	SIEMENS AG	Method for optimizing vehicle traffic control at traffic signal-controlled intersection in road traffic network, involves implementing specified traffic strategy according to individual determination and weighting of traffic parameters
WO2010034065 A1	NAT ICT AUSTRALIA LTD	Vehicle detection method for computer based traffic surveillance system, involves determining probability of each point for set forming of windshield in image is determined based on correlation of detected horizontal edges in image

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REDES VEHICULARES

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO2010064350 A1	MITSUBISHI ELECTRIC CORP	Vehicle-mounted information system has vehicle equipment that transmits processing result corresponding to command selected from device operation screen by mobile device, to mobile device via external communication unit
WO2010064381 A1	HITACHI AUTOMOTIVE SYSTEMS LTD	Real time control network system for controlling vehicle, starts operation of transmitter or receiver when reference signal and communication cycle are coincided with condition of filtering condition table
WO2010040372 A1	NEC EURO LTD	Wireless communication channel load controlling method for wireless local area network-based vehicular ad hoc network, involves allowing mobile nodes to take action, upon identification of received message as extraordinary message
WO2010034919 A1	FRANCE TELECOM FRANCE TELECOM SA	Mobile terminal authenticating method for mobile packet transmission network e.g. vehicular network, involves allowing authenticated mobile terminal to perform authentication of another mobile terminal based on comparison result
WO2010033779 A1	DELPHI TECHNOLOGIES INC MONARCH ANTENNA INC	Multi-beam, cognitive antenna of e.g. wireless local area network (WLAN) system, has control arrangement that creates discrete beam patterns over narrow frequency band by interconnecting antenna elements with increased gain
WO2010036740 A3	MICROSOFT CORP	Traffic information collecting and disseminating method for e.g. Bluetooth car-to-car ad-hoc network, involves boosting transmission power of mobile Bluetooth enabled device in mobile vehicle to increase device's transmission range
WO2010033896 A1	TELCORDIA TECHNOLOGIES INC	High-rate multi-hop data delivery performing method for multi-hop vehicular network, involves initializing matrix, estimating delay on outgoing road segments if matrix is not present in broadcast, and broadcasting matrix from header vehicle

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GESTIÓN DE APARCAMIENTOS Y PEAJES

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO2010064178 A1	KONINK PHILIPS ELECTRONICS NV	Navigational unit of navigational device for route planner system mounted in vehicle e.g. car, determines suggestions on location for switching from existing to other mode of transport, based on physical activity goal of user
WO2010058068 A1	UPM RAFLATAC OY	Radio frequency identification (RFID) tag for attachment to vehicle, has protective dot that is placed locally over integrated circuit for protecting integrated circuit from environmental effects
WO2010058482 A1	PIONEER CORP	Information display apparatus for navigation apparatus of four-wheeled vehicle e.g. car, displays parking point corresponding to user selection, when destination point is different from parking point of desired parking lot
WO2010059721 A1	3M INNOVATIVE PROPERTIES CO	Radio frequency identification (RFID) tag for managing article e.g. book in library, has tuning component which is coupled with radiating component of tag
WO2010052719 A1	LIDROR O	Portable electronic parking permit tag for vehicles of disabled persons, has component for deactivating and powering the tag
WO2010046165 A1	BOSCH GMBH ROBERT	Positioning method for determining actual position in traffic path network, for vehicle navigation system, involves determining active traffic path as probable location based on comparison between inclination and information
WO2010043635 A1	SOFT MOBILITY SERVICES SOFT MOBILITY SERVICES SARL	Electronic management system for use on bicycle, has data capture circuits formed of badge reader and keyboard and data transmission circuits arranged so as to recognize data for sending unlock command to coupling device
WO2010042923 A1	BALACHANDRAN S K RENT A TOLL LTD	Vehicular violation e.g. toll violation, processing method, involves disputing responsibility for vehicular violation when unique vehicle identifier is not associated with predefined vehicle
WO2010034317 A1	SIVEX INT AS	Management method of queue of vehicles e.g. truck, car, bus at border-crossing involves receiving queue reservation request from customer via e.g. Internet, mobile communication, operator then allocating queue position of customer
WO2010037790 A1	ELECTRICITE DE FRANCE ELECTRICITE DE FRANCE SA	Electric energy supplying method for e.g. car, involves charging mobile equipment, and delivering reserve value of energy units by embarked module from number of units corresponding to quantity of supplied energy

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NOTIFICACIÓN DE ACCIDENTES

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO2010058395 A1	V T A TECHNOLOGIES LTD	Vocal traffic alerts system for providing vocal traffic alerts to vehicle driver, has wireless receiver with decision unit that decides whether digital address matches vehicle's driving direction, and output unit playing vocal traffic alert
WO2010058828 A1	NEC CORP	Mobile communication terminal e.g. mobile telephone for alarm system for, e.g. hybrid vehicle, produces alert signal when predetermined radio signal is received after reaching to preset communication areas
WO2010057724 A1	BOSCH GMBH ROBERT	Vehicle, particularly hybrid vehicle, has electrical unit, which has inadmissibly high voltage level for contact by person
WO2010043658 A1	CONTINENTAL TEVES & CO OHG AG	Position determination device for use in e.g. driver assistance system of car, has communication unit receiving validation data, and controller performing validation of determined position based on validation data
WO2010040958 A1	EL HAMRI N	Parallelepiped road safety device for e.g. vehicle, has triggering unit generating signal on vehicle, where signal is perceptible by another vehicle situated in disruption zone to warn latter vehicle about disruption
WO2010037625 A2	BOSCH GMBH ROBERT	Method for displaying warning message in vehicle, involves transmitting warning signal and position data by vehicle with respect to its position to another vehicle in which warning message is displayed
WO2010034958 A1	BOUDY C UNIV LIMOGES	Alarm i.e. theft alarm, activating method for vehicle i.e. car, involves generating alarm signal if two consecutive positioning values of vehicle are different and electric current characteristics correspond to non-operating status of motor
WO2010031839 A1	CONTINENTAL AUTOMOTIVE GMBH	On-board unit system for use in vehicle i.e. truck, has position-finding device and/or radio communication device coupled to on-board unit, where on-board unit is designed to replace vehicle device in terms of function
WO2010031836 A1	CONTINENTAL AUTOMOTIVE GMBH	Recording system i.e. accident data recorder, for recording collision data of motor vehicle, has control unit detecting accident events based on acceleration values above limit values, where values below limit values are recorded

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OTRAS REFERENCIAS

Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

WO2010064345 A1	MITSUBISHI ELECTRIC CORP	Wireless communication system has sound reproducing device to control volume of reproduced sound during viewing and listening when positioned in area in which vehicle approach message is receivable from vehicle-mounted information device
WO2010062899 A1	AMIN H S ASQUITH B COLLOPY F KROSKY R C MURPHY P S NARD C A NARVAEZ G A NOONAN D SHARIFI T S V TUROCY G VISIBLE INSURANCE LLC	Insurance information rendering system for providing insurance coverage to operator of car in automobile insurance industry, has rendering component rendered on display with insurance rate based on result of evaluation of information
WO2010059995 A1	BARNES E N CHILDERS R L GELFAND M A UNIVERSAL SAFETY RESPONSE INC SHARIFI T S V	Anchor for use with vehicle restraining system, for e.g. mobile checkpoint, has set of connection members joined at end of matrix of vertical members, where set of connection members is joined at end of connector
WO2010048740 A1	TAI C TAI S	Traffic signal lamp controlling method for crossroad, involves outputting signal to control box of traffic signal lamp by controller unit to change traffic signal lighting mode, and monitoring vehicles in each direction on crossroad
WO2010041315 A1	TOYOTA JIDOSHA KK	Driving assistance apparatus for use in vehicle e.g. car, determines lighting time of yellow-traffic light which is illuminated after illumination of arrow lamp device, when arrow lamp device is turned-ON based on signal information
WO2010040649 A3	GEVAS SOFTWARE SYSTEMENTWICKLUNG & VERKE GEVAS SOFTWARE SYSTEMENTWICKLUNG & VERKEHRSINFORMATIK GMBH	Traffic controller for influencing traffic flow within limited road or traffic network of big city, has repair mechanism utilized during relative or sequential coding to obtain time frame within which phase transitions take place
WO2010037564 A1	FRAUNHOFER GES FOERDERUNG ANGEWANDTEN EV UNIV PIECK ROSTOCK WILHELM	Method for detecting fall of person during passenger car accident, involves evaluating measurement value of air pressure sensor that is arranged at body of person, and detecting fall of person when value meets predefined criterion
WO2010031700 A3	BUNDESDRUCKEREI GMBH	Telecommunication method for administration of e.g. document, of user of motor vehicle, involves signing soft-token by identification-provider-computer system, and transmitting soft-token to service computer system