

# Boletín VT

## COCHE INTELIGENTE

2º trimestre 2024

58

Vigilancia Tecnológica

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 abordo 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**

NIPO: 220-24-013-6



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# 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
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<a href="#">WO2024068527A1</a>	CONTINENTAL AUTOMOTIVE TECH GMBH	A computer-implemented method for forecasting traffic indicators in a road network
<a href="#">WO2024104666A1</a>	VOLKSWAGEN AG	Method for adjusting a driving route and/or speed of a motor vehicle, method for a special response vehicle and a control device
<a href="#">WO2024121394A1</a>	SONY GROUP CORP	Multi-user navigation system and information processing method
<a href="#">WO2024084645A1</a>	SUBARU CORP	Management control system for vehicles
<a href="#">WO2024127463A1</a>	HITACHI ASTEMO LTD	Traffic flow control system
<a href="#">WO2024096836A2</a>	SANCAKTAR TUNCAY	A warning device, a warning system and control device for the warning system
<a href="#">WO2024090093A1</a>	SUMITOMO ELECTRIC INDUSTRIES	Traffic-volume estimation device, update device, traffic-volume estimation method, update method, and computer program
<a href="#">WO2024081190A1</a>	MOTIONAL AD LLC	Ensemble-based vehicle motion planner
<a href="#">WO2024094825A1</a>	VOLKSWAGEN AG	Method and fleet management system for operating a vehicle fleet
<a href="#">WO2024094942A1</a>	STELLANTIS AUTO SAS	Method and device for controlling an adaptive cruise control system of a vehicle that is changing traffic lane
<a href="#">WO2024126439A1</a>	VALEO SCHALTER & SENSOREN GMBH	Method for providing information for a motor vehicle about whether driving on a hard shoulder is permitted and/or forbidden
<a href="#">WO2024127754A1</a>	KONICA MINOLTA INC	Wrong-way travel detection system and wrong-way travel detection program
<a href="#">WO2024068792A1</a>	VAY TECH GMBH	Systems and methods for fleet management associated with remote driving systems
<a href="#">WO2024129772A1</a>	UBER TECHNOLOGIES INC	Network computer system to manage congestion
<a href="#">WO2024075516A1</a>	SOFTBANK GROUP CORP	Multi heat map

[..ver más](#)

## REDES VEHICULARES

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO2024099489A1</a>	SHALA TAULAND	Method for ascertaining, analyzing, and presenting traffic information for vehicles on a traffic route network
<a href="#">WO2024070538A1</a>	DENSO CORP	Message control device and message control method
<a href="#">WO2024078891A1</a>	AUDI AG	Automatic authentication of a civilian emergency vehicle
<a href="#">WO2024127415A1</a>	TVS MOTOR CO LTD	A system and method for communication between a vehicle and a rider accessory device
<a href="#">WO2024078681A1</a>	HUAWEI TECH CO LTD	A hybrid wired-wireless in-vehicle network for in-vehicle communication
<a href="#">WO2024121338A1</a>	ECOLE NAT DE LAVIATION CIVILE	Optimization of message generation frequency and compression
<a href="#">WO2024066588A1</a>	HUAWEI TECH CO LTD	Vehicle control method and related apparatus
<a href="#">WO2024106126A1</a>	SONY GROUP CORP	Information processing device, information processing method, information processing system, and remote assistance server
<a href="#">WO2024082916A1</a>	HUAWEI TECH CO LTD	Vehicle-mounted remote control method, device, and system

[..ver más](#)

## GESTIÓN DE APARCAMIENTOS Y PEAJES

### Nº PUBLICACIÓN SOLICITANTE CONTENIDO TÉCNICO

<a href="#">WO2024116239A1</a>	NEC CORP	Parking lot reservation system, information processing device, information processing method, and recording medium
<a href="#">WO2024075032A1</a>	ATOBE MOBILITY TECH S A	An automated and fixed device based computational method and system for the determination of the lane which a vehicle crosses, from a plurality of lanes of a road toll
<a href="#">WO2024067078A1</a>	HUAWEI TECH CO LTD	Vehicle positioning method and electronic device
<a href="#">WO2024122302A1</a>	DENSO CORP	Notification control device and notification control method
<a href="#">WO2024098724A1</a>	UNIV CHONGQING POSTS & TELECOM	Driving system in area outside enhanced autonomous valet parking lot, and application method thereof
<a href="#">WO2024133583A1</a>	YELLOW LINE PARKING LTD	Automated parking tool
<a href="#">WO2024096230A1</a>	HANWHA VISION CO LTD	Method and device for setting parking spaces on basis of occupied or unoccupied areas
<a href="#">WO2024111925A1</a>	LIGHTVISION CORP	Method for providing parking system and proxy payment using qr code
<a href="#">WO2024087642A1</a>	BYD CO LTD	Parking space determination method, storage medium, controller, and vehicle
<a href="#">WO2024080151A1</a>	HONDA MOTOR CO LTD	Map information creation device and map information creation method
<a href="#">WO2024112092A1</a>	AV GENIUS CO LTD	Remote valet parking service system and method
<a href="#">WO2024115241A1</a>	VALEO SCHALTER & SENSOREN GMBH	Method and system for providing an automatic parking service for a motor vehicle in a parking environment
<a href="#">WO2024076570A1</a>	MUNICIPAL PARKING SERVICES INC	Device, method and system for detecting parked vehicles
<a href="#">WO2024087281A1</a>	UNIV SOUTHEAST	Highway toll station lane allocation method considering short-term vehicle flow
<a href="#">WO2024109525A1</a>	NIO SMART TECH CO LTD	Underground parking lot vehicle searching method, electronic apparatus, vehicle, mobile terminal, and medium
<a href="#">WO2024119548A1</a>	NANCHANG AUTOMOTIVE INST OF INTELLIGENCE AND NEW ENERGY	Parking spot allocation and planning control method for multiple driving modes
<a href="#">WO2024132982A1</a>	MAGNA POWERTRAIN GMBH & CO KG	Method for allocating a parking space on a parking lot system, and parking lot system
<a href="#">WO2024124621A1</a>	TECH TRAFFIC ENG GROUP CO LTD	Highway toll collection management system and method based on qr code technology
<a href="#">WO2024084111A1</a>	UNIV ALICANTE	System and method for managing parking spaces for people with reduced mobility
<a href="#">WO2024087278A1</a>	UNIV SOUTHEAST	Free flow tolling method for linked switching of lanes with different types of tolling
<a href="#">WO2024068299A1</a>	MERCEDES BENZ GROUP AG	Method for interacting with a toll system, and vehicle

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## NOTIFICACIÓN DE ACCIDENTES

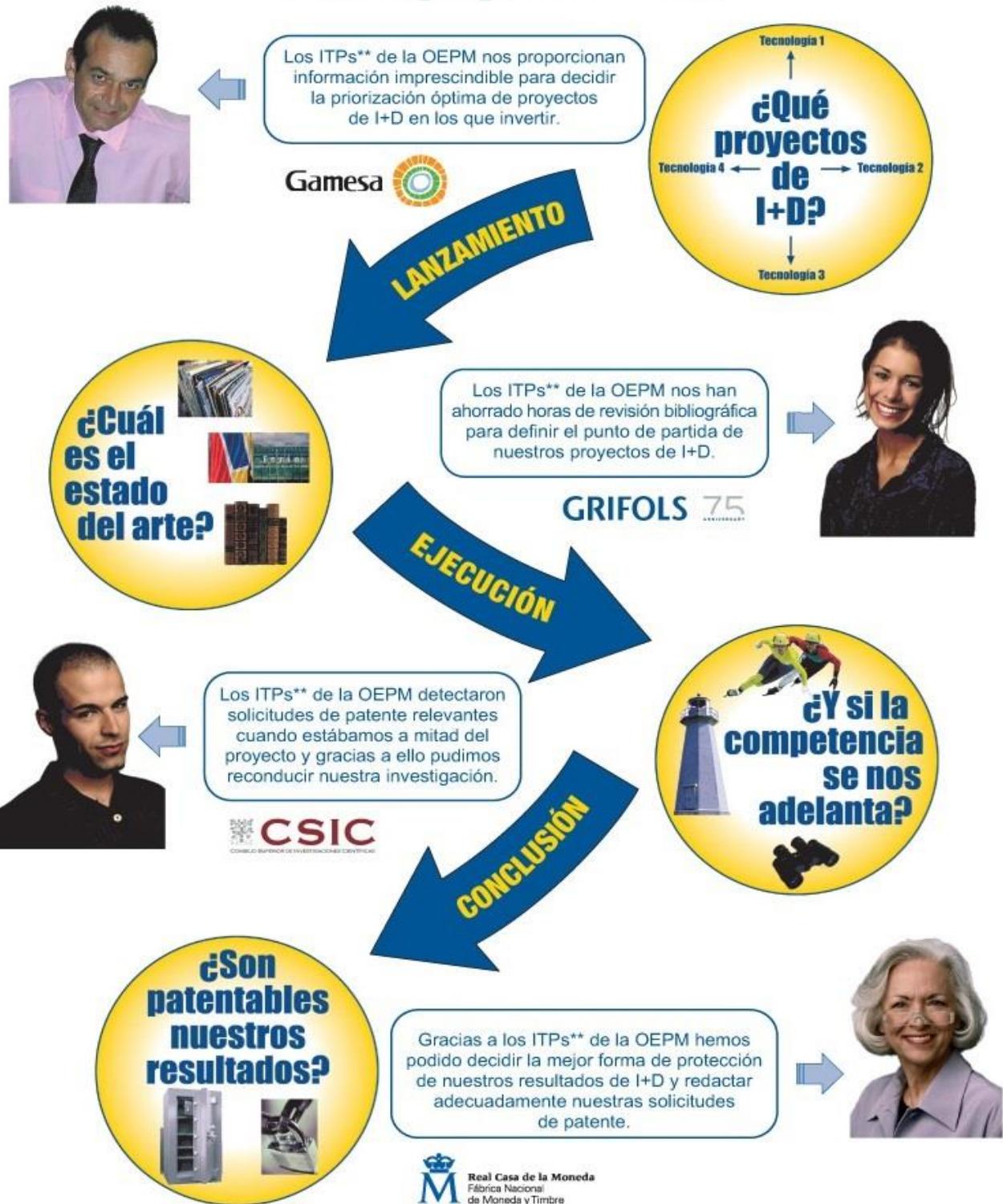
Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO2024113020A1</a>	J HUMBLE & A MUTHIAH	A sensor fusion based early warning system
<a href="#">WO2024089753A1</a>	SUBARU CORP	Management control system for vehicle
<a href="#">WO2024135914A1</a>	ROPE INC	Vehicle accident notification system comprising vehicle accident notification device having accident occurrence signal noise removal and update function
<a href="#">WO2024087082A1</a>	QUALCOMM INC	Transmitting personal safety messages involving vulnerable road users

[...ver más](#)

## OTRAS REFERENCIAS

Nº PUBLICACIÓN	SOLICITANTE	CONTENIDO TÉCNICO
<a href="#">WO2024099797A1</a>	BOSCH GMBH ROBERT	Method for training a neural network for determining features of objects for object tracking
<a href="#">WO2024110706A1</a>	STELLANTIS AUTO SAS	Method and device for controlling a semi-automatic lane change (salc) function of a vehicle
<a href="#">WO2024084552A1</a>	HITACHI ASTEMO LTD	Information processing device and information processing method
<a href="#">WO2024115835A1</a>	STELLANTIS AUTO SAS	Monitoring of food and medication consumption of the driver of a motor vehicle
<a href="#">WO2024083049A1</a>	GEELY HOLDING GROUP CO LTD	A vehicular system and method for notifying a vehicle occupant of a nearby emergency vehicle
<a href="#">WO2024104012A1</a>	TENCENT TECH SHENZHEN CO LTD	Lane positioning method and apparatus, and computer device, computer-readable storage medium and computer program product
<a href="#">WO2024078181A1</a>	GUANGZHOU AUTOMOBILE GROUP CO	Driving assessment method and system, and new-energy vehicle and computer-readable storage medium
<a href="#">WO2024132807A1</a>	AMPERE S A S	Analytical system for analysing a manual vehicle-parking manoeuvre
<a href="#">WO2024108932A1</a>	CHINA FAW CO LTD	Automatic leveling method and apparatus for automotive headlamp
<a href="#">WO2024077940A1</a>	CHINA FAW CO LTD	Vehicle four-wheel emergency risk avoidance method and apparatus, and storage medium and electronic device
<a href="#">WO2024104851A1</a>	VALEO SCHALTER & SENSOREN GMBH	Method for locating a vehicle
<a href="#">WO2024080960A1</a>	OYAK RENAULT OTOMOBIL FABRIKALARI ANONIM SIRKETI	System for improving visibility at corners during turns
<a href="#">WO2024126864A1</a>	VALEO VISION	Vehicle lighting system comprising means for emitting a luminous signal coded at very high frequency
<a href="#">WO2024075617A1</a>	SONY GROUP CORP	Vehicle-external sound reproducing device and vehicle device
<a href="#">WO2024079233A1</a>	VITESCO TECH GMBH	Sensing road unevenness by evaluating the operating current of an electric vehicle drive
<a href="#">WO2024078824A1</a>	MERCEDES BENZ GROUP AG	Method for reducing motion sickness-related disturbances of an occupant on a vehicle seat
<a href="#">WO2024094350A1</a>	MERCEDES BENZ GROUP AG	Method for assessing the driving safety of a driver of a vehicle

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