

From: Ulrich, Gretchen

Sent: 6/27/2016 11:12:52 AM

To: TTAB E Filing

CC:

Subject: U.S. TRADEMARK APPLICATION NO. 79131389 - IDEPLATE - 60725.004US - REMAND REQUEST TO TTAB - Message 1 of 3

\*\*\*\*\*

Attachment Information:

Count: 25

Files: 2-1.jpg, 2-2.jpg, eplate 2\_Page\_1.jpg, eplate 2\_Page\_2.jpg, eplate 2\_Page\_3.jpg, eplate 2\_Page\_4.jpg, eplate 2\_Page\_5.jpg, eplate 2\_Page\_6.jpg, eplate white paper (1)\_Page\_01.jpg, eplate white paper (1)\_Page\_02.jpg, eplate white paper (1)\_Page\_03.jpg, eplate white paper (1)\_Page\_04.jpg, eplate white paper (1)\_Page\_05.jpg, eplate white paper (1)\_Page\_06.jpg, eplate white paper (1)\_Page\_07.jpg, eplate white paper (1)\_Page\_08.jpg, eplate white paper (1)\_Page\_09.jpg, eplate white paper (1)\_Page\_10.jpg, eplate white paper (1)\_Page\_11.jpg, 3-1.jpg, 3-2.jpg, 3-3.jpg, 3-4.jpg, 4-1.jpg, 79131389.doc

# UNITED STATES PATENT AND TRADEMARK OFFICE (USPTO)

U.S. APPLICATION SERIAL NO. 79131389

MARK: IDEPLATE



**CORRESPONDENT ADDRESS:**

LAURENCE P COLTON

SMITH TEMPEL BLAHA LLC

TWO RAVINIA DRIVE SUITE 700

ATLANTA, GA 30346

**APPLICANT:** Tönnjes ISI Patent Holding GmbH

**CORRESPONDENT'S REFERENCE/DOCKET NO:**

60725.004US

**CORRESPONDENT E-MAIL ADDRESS:**

lcolton@srtslaw.com

## MOTION TO REMAND

**INTERNATIONAL REGISTRATION NO. 1163525**

BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD ON APPEAL

TRADEMARK EXAMINING ATTORNEY'S REQUEST FOR REMAND

The trademark examining attorney requests that the Trademark Trial and Appeal Board remand this case to the trademark examining attorney under 37 C.F.R. §2.142(d) for the reason(s) that follow.

Specifically, the attached non-cumulative evidence, including applicant's website and attachments available therein, was previously unavailable. The publication dates, copyright dates and availability of the attached evidence postdate October 29, 2015, the date that the final Office action was issued. This evidence demonstrates the descriptive nature of the applied-for mark. Therefore, the trademark examining attorney requests that this case be remanded so that this additional evidence may be made of record.

Respectfully submitted,

/N. Gretchen Ulrich/

Trademark Examining Attorney

(Odette Bonnet, Managing Attorney)

Law Office 113

571-272-1951

## The E-Plate

Neology's E-Plate is challenging the way we think of the traditional license plate. With passive RFID technology incorporated into the plate design, the E-Plate finally connects the physical license plate to the digital world. No longer restricted to vehicle registration and enforcement, this technology innovation has demonstrable benefits for government agencies, law enforcement, legislators, and consumers alike.



### E-PLATE

#### "THE PRODUCT SOLUTION"

Neology developed the E-PLATE: an RFID-enabled license plate designed to use the license plate as part of the resonator and configured to transmit signals generated by an embedded RFID chip.

#### AUTOMATIC IDENTIFICATION IS KEY

The integration of passive RFID technology with the metal license plate allows for increased read distance and performance.

#### NO "LINE OF SIGHT" REQUIREMENT



### *The E-Plate*

#### *Electronic License Plate*

Since its first introduction, the physical license plate has been used to visually identify the vehicle and verify registration status. Over time, advances have been made to more quickly read and identify the vehicle plate, including improvements in retroreflective sheeting and optical character recognition of camera images. While these advances proved to be useful in various applications, high error rates and concerns centered around misidentification remained.

Neology's E-Plate provides a solution to the long desired ability to automate license plate number recognition, with the benefit of high accuracy rates and integration into a wide array of applications. Incorporating passive RFID into the plate design allows the license plate to communicate wirelessly, eliminating the "line of sight" requirement for identification. The result is a technology advancement that enables transmitting the license plate identification at much greater read distances and with a higher degree of performance and reliability.

#### *Security, Use Cases, and Benefits*

The use of the E-Plate has a positive impact on security and provides higher levels of efficiency within vehicle applications using RFID. During the

The use of the E-Plate has a positive impact on security and provides higher levels of efficiency within vehicle applications using RFID. During the registration process, pertinent identification data related to the vehicle is capable of being stored in the RFID memory of the E-Plate, including the Vehicle Identification Number, make, model, and color of the vehicle. This information is accessible when interrogated by an RFID reader; however, access may be restricted by cryptographic authentication. The ability to read this information accurately and from a far distance is beneficial to law enforcement in the process of authenticating that the license plate matches the vehicle. With an embedded reader in police vehicles, this process is automated, allowing law enforcement to quickly validate the vehicle identification and owner information while keeping their eyes focused on vehicle occupants. Another layer of security made possible with the E-Plate is the ability to immobilize a vehicle in the event that the license plate is removed, for example, by a car thief. This can be accomplished when car manufacturers install a low cost reader in the vehicle that allows the E-Plate to communicate wirelessly with the vehicle's on-board computer to properly authenticate plate authenticity. The combination of an alarm, instant notification to the vehicle owner via SMS or email, instant notification to law enforcement, and vehicle immobilization will deter and/or eliminate license plate and vehicle theft.

The E-Plate can be integrated into many other applications, including Electronic Toll Collection, Parking and Access Control, Road Use Charge environments, Smart City initiatives, and automatic payment scenarios. The scalability of use cases and applications available with the E-Plate provides benefits that are far-reaching, improving efficiency and increasing security and convenience for government agencies, law enforcement, legislators, and consumers alike.

## Resources



### *Neology E-Plate: Electronic License Plate*

Neology's E-Plate is challenging the way we think of the traditional license plate. With passive RFID technology incorporated into the plate design, the E-Plate finally connects the physical license plate to the digital world.



### *E-Plate White Paper*

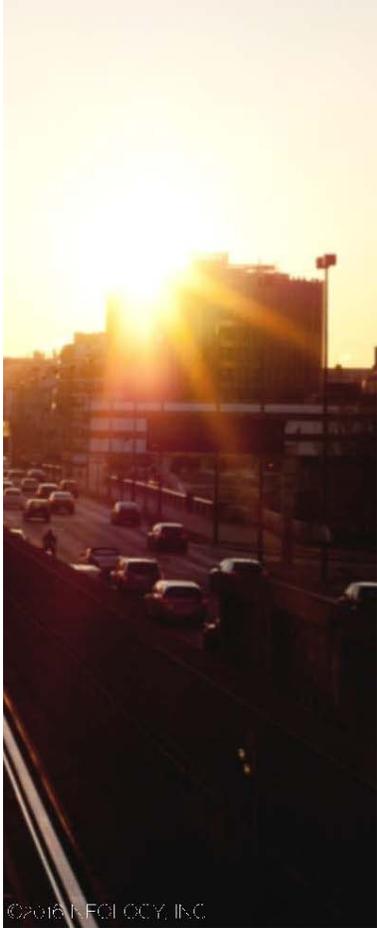
The E-Plate white paper, by Joe Mullis and Sheshi Nyalamadugu, explains the background behind the design of the E-Plate, including its construction, and offers more information relating to its use in various applications.



# E-PLATE



ELECTRONIC LICENSE PLATE



# E-PLATE

"THE PRODUCT SOLUTION"

---

Neology developed the E-PLATE: an RFID-enabled license plate designed to use the license plate as part of the resonator and configured to transmit signals generated by an embedded RFID chip.

## **AUTOMATIC IDENTIFICATION IS KEY**

The integration of passive RFID technology with the metal license plate allows for increased read distance and performance.

## **NO "LINE OF SIGHT" REQUIREMENT**

# E-PLATE

---

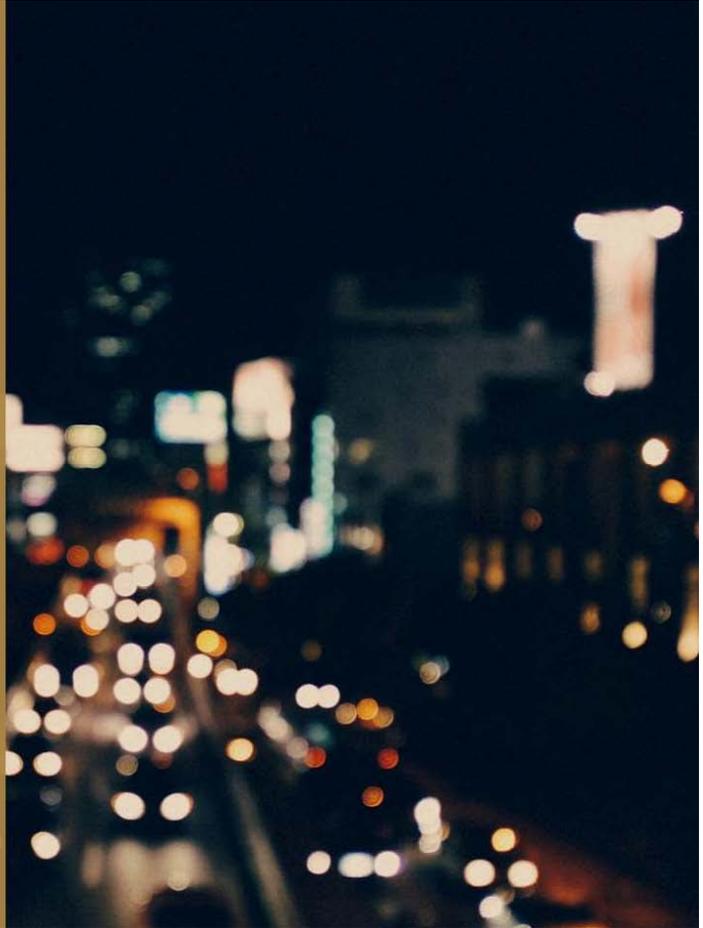
the use cases  
are endless

---

- Vehicle Registration
  - Toll Collection
  - Enforcement
  - Parking
  - Road Use Charge
  - Plate Theft Prevention
  - Smart City
  - Access Control
- 

Our product enables vehicle  
communication with an ever  
expanding infrastructure.

©2016 N.O. COMM, INC.



# E-PLATE

---

INTEROPERABILITY ACROSS  
VARIOUS AGENCIES

EXISTING INFRASTRUCTURE

GROWING WORLDWIDE  
ECOSYSTEM OF 6C + NFC

---



# E-PLATE

## RFID + NFC

UHF: Long Range

NFC (Optional): Maintenance, Controlled Access, Smog Certification, Enforcement

## BENEFITS:

- Integrated toll and other connected technology on the vehicle with an RFID-enabled license plate
- Increased security against potential license plate theft





©2016 NEOLOGIC, INC.

SYSTEM ARCHITECTURE

# E-PLATE

## CATEGORY OVERVIEW

### PEOPLE

VEHICLE REGISTRATION

### PRODUCTS

E-PLATE, URBANPASS, SWITCH TAG,  
TRANSPORTATION CARD

### APPLICATIONS

TOLL ROAD, PARKING, ACCESS CONTROL,  
SMART CITY

### AGENCIES

DMV'S, LAW ENFORCEMENT,  
TRANSPORTATION AGENCIES  
AND OPERATORS



# White Paper on the E-PLATE

A VISION FOR A MORE ADVANCED LICENSE PLATE

April 2016

By Joe Mullis & Sheshi Nyalamdugu

## Contents

<b>Executive Summary</b> .....	2
<b>Overview</b> .....	3
<b>1. E-Plate Introduction</b> .....	4
1.1 Background of Invention.....	4
1.2 How is the E-Plate constructed? .....	5
<b>2. Security</b> .....	6
<b>3. Benefits</b> .....	7
<b>4. Conclusion</b> .....	9
<b>5. References</b> .....	10

## Executive Summary

The license plate has been around for longer than there have been automobiles and the vast majority of countries utilize a metal plate for official identification. Since the late 1800's, license plates have been introduced to properly identify the vehicle as part of the vehicle registration process. The very first license plates introduced in Europe began with a sequential number starting with 1, but soon evolved to account for a growing population of vehicles and eventually included both numeric and alphanumeric characters.

Government agencies globally have historically held specific requirements for plate style, serial format, imaging, and design. However, the size and spacing of characters, as well as the character length, were almost universally thought to improve the ability for quick read and proper identification. Advances in retroreflective sheeting further enabled the character readability, especially at night when light is reflected from the plate surface.

The ability for automatic license plate number recognition had long been desirable by law enforcement and government agencies in particular. The introduction of optical character recognition of camera images in recent years offered, for the first time, a more automatic way in which the license plate could be read and quickly identified. This proved to be a useful tool to various police forces and as a method for cataloging vehicles, electronic-toll-

collection and pay-per use roads. The downside of this technology has been high error rates and concerns centered around misidentification.

The physical license plate has been used to visually identify the vehicle since its first introduction. And, as noted, many advances have been made over time to more quickly and accurately read and identify the vehicle plate. However, the world we live in today is not the world as it was even a few years ago. We live in a digital age where electronic pulses and beeps remind us of just how much things have changed; where the physical world is somehow always connected to the digital world. The E-Plate finally connects the physical license plate to the digital world.

Incorporating passive RFID into the plate design allows the license plate to communicate wirelessly and eliminates the "line-of-sight" requirement for identification. The result is a technology advancement that enables transmitting the license plate identification at much greater read distances with a higher degree of performance and reliability.

Like anything connected to the digital world, the E-Plate possibilities are endless!

## Overview

Section 1 of this white paper explains the key technology innovations in the design and how it works. Section 2 discusses security as it relates to plate fraud, plate theft deterrence, and wireless data transmission. Section 3 focuses on the benefits that this new design enables.

Section 4, the Conclusion, summarizes our analysis.

## 1. E-Plate Introduction

What is an E-Plate? By now, most of us have come to understand that the “E” in E-Plate is synonymous with electronic. We see its use everyday terms like e-mail, e-waste, e-commerce, and so on. For lack of a better description, the E-Plate is simply an “electronic” license plate.

You might envision the E-Plate as an overly complex device full of wires, circuit boards, or even batteries to power it up. How else would it work, right?

### 1.1 Background of Invention

RFID technology has long been used for electronic vehicle tolling applications. In such applications, an RFID reader, or interrogator, is positioned over or near a roadway at a point where a toll is to be collected. An RFID tag is placed in each vehicle that includes an identifier by which the vehicle can be recognized, e.g., the vehicle’s license plate number. The interrogator uses RF signals to interrogate the vehicle’s tag and obtain the identifier so that the toll can be applied to the correct vehicle, or account.

Generally, the RFID tag to interrogator communication is achieved through a form of modulation known as backscatter modulation. In a backscatter modulation system, the tag does not generate its own RF carrier signal when transmitting information to the interrogator. Rather, the interrogator generates an RF carrier and modulates the carrier with data intended for the tag,

e.g., a request for the tag’s identifier information. The tag receives the modulated signal, decides the data and then performs actions in accordance therewith, e.g., accesses the memory and obtains the requested identifier information. The interrogator continues to transmit the RF carrier, now with no data on it. The tag receives this unmodulated carrier and reflects it back to the interrogator. In order to send data back to the interrogator, e.g., identifier, the tag modulates the reflected, or backscatter signal, with the data.

For example, the tag modulates the backscatter signal by reflecting or not reflecting the signal based on the data, i.e., “1’s” and “0’s,” to be sent. The interrogator receives the modulated backscatter signal and decodes the information received thereon.

Early on, such tags were active devices, meaning they possessed their own power source, such as a battery. An active tag was necessary, for example, in order to generate enough power in the reflected signal to transmit information over extended distances. But more recently, passive tag technology has become more viable. A passive tag does not include a battery or power source of its own. Rather, energy in the RF signals received from the interrogator is used to power up the tag. For example, the received RF signal can be rectified and used to charge up a capacitor that is then used to power the tag.

As antenna and RFID integrated circuit technology has evolved, larger and larger distances can be achieved with passive technology.

### 1.2 How is the E-Plate constructed?

The E-Plate is constructed by using the license plate or a retro-reflective layer, formed as part of the resonator, configured to transmit signals generated by an RFID passive chip integrated with the license plate. The RFID chip can be directly connected to or electrically coupled, either capacitive or inductively, with the metal component of the license plate and can be a single or multi-frequency resonant structure. In essence, the metal license plate does not interfere with the operation of the RFID, it actually assists in the performance.

As noted above, there are a number of methods for creating an antenna structure directly on (1) a metal license plate, (2) a metalized retro-reflective foil covering a non-metal license plate, or (3) a metalized retro-reflective foil covering the metal license plate. The technology is such that just about any license plate design or structure is capable of incorporating an RFID passive chip that does not significantly impair the aesthetics, design, or integrity of the plate itself. Once converted, the E-Plate is capable of being read at significant distance and speed. [1]

## 2. Security

### Plate Fraud

Every new vehicle is outfitted with a license plate during the registration process. The Vehicle Identification Number (VIN #) and other pertinent identification data, i.e., color, make, model, etc., is capable of being stored in the RFID memory of the E-Plate. This information might be particularly important to authenticate that the license plate matches the vehicle. Law Enforcement, for example, might better and more efficiently read the E-Plate with an embedded reader in the police car to identify whether the E-Plate belongs to the vehicle in question. The vehicle registered owner data also appears automatically, allowing Law Enforcement to keep his or her eyes focused on the vehicle occupants. The ability to more quickly validate the vehicle identification and owner information is a considerable safety benefit to Law Enforcement.

### Plate Theft Deterrence

Stolen license plates are statistically increasing in occurrence and common in the commission of a crime. Car thieves, for example, are known to replace the stolen vehicle plate with that of another vehicle to reduce the likelihood of detection. The ability to communicate wirelessly with the E-Plate allows the vehicle's on-board computer to properly identify the plate authenticity. Car manufacturers are therefore capable of implementing a low cost reader intended

to read the E-Plate and interfaces with the vehicles on-board computer. In the event the plate is removed by a thief, the alarm of the car is set off, the vehicle owner notified via SMS or email, and law enforcement is immediately notified. The vehicle is capable of being immobilized until the vehicle owner utilizes his or her key fob to override the alert. This prevents or limits the potential for the car owner to falsely claim that he or she was not aware the E-Plate had been removed.

### Wireless Data Transmission

The ability to read the E-Plate at significant speeds and distances may raise concerns related to the unauthorized reading of the RFID memory. As noted above, this information is accessible when interrogated by an RFID reader; however, access may be restricted by cryptographic authentication, the kind of technology used in bank cards, credit cards, and ePassports. Only an authorized reader with access to secure cryptographic keys can derive the tag's unique identity. Given its secure, long-range, the E-Plate may employ cryptographic algorithms with high-speed reading performance, making it ideally suited for automotive payments as well.

### 3. Benefits

#### Tolling

The ability to read at significant speed and distance enables the E-Plate to be used in traditional RFID applications, like Electronic Tolling. The E-Plate can also be used in highly challenging environments, like High Occupancy Toll (HOT) lanes, where drivers in many cases use self-declaration transponders with up to three different settings to identify the number of passengers in the vehicle. To illustrate, consider the previous section whereby the vehicle is able to wirelessly communicate with the on-board computer. In this case, upon approaching a HOT lane, the driver would be signaled by the vehicle's dashboard screen with an option to select the number of passengers in the vehicle. Upon selecting the appropriate option, e.g. 1, 2, or 3+ persons, the on-board computer interfaces with the reader and writes a bit accordingly within the designated location of the RFID memory of the E-Plate. The option chosen would then signal the appropriate charge to be recognized upon passing through the toll road. Further, Law Enforcement is able to visually identify the number of persons and validate the driver's selection of number of occupants, provided the appropriate permissions are granted to access the E-Plate's memory.

#### Parking and Access Control

The E-Plate can be used in parking and access control applications, such as granting access to a home gate or garage, residential or commercial property, parking garage or parking meter, as well as an airport, Military Base, and just about any other scenario where restricted access is concerned. In these situations, it is most likely that the reader antenna is mounted overhead on a gantry or possibly on a pole; however, one of the benefits of the E-Plate over other traditional RFID passive transponders is the ability to be read from an underground reader antenna given its location and proximity to the ground. This may be preferable in situations where the cost of infrastructure would be too burdensome and or unsightly.

#### Road Use Charge (RUC)

Another application where this configuration might be useful is for Federal and State Governments that face reduced fuel use tax revenue as a result of the sharp rise in fuel efficiency. Embedding reader antennas underground on all highways and public roadways to read the E-Plate would help assess a Road Use Tax (RUC) according to actual miles driven.

#### Smart City

The E-Plate compliments many Smart City initiatives that consider various Information and Communication

Technology (ITC) solutions to tackle inefficiencies in the way city assets are managed. The objective is, of course, to improve the efficiency of services and quality of life of the city's residents. By strategically placing readers throughout the city, the E-Plate is able to be read and the collection of data might help identify driver behavior, ease flow of roadways, and enable city managers to react more quickly to improve congestion.

### Payment

Consider the option to setup your E-Plate as a payment card whereby you can pay for parking, buy gas, and automatically pay in the drive-thru of your favorite coffee shop or fast food restaurant. You personally have the ability to sign-up at your choosing, just as you might any loyalty card program, knowing the transaction is secure and without the need for a card or phone. You might also consider automatically paying your car registration or insurance renewal, not to mention automotive repairs at your local mechanic shop with the E-Plate!

## 4. Conclusion

The E-Plate is challenging the way we think of a traditional license plate. No longer restricted to vehicle registration and enforcement; this technology innovation has demonstrable benefits for government agencies, law enforcement, legislators, and consumers alike, as well as countless use cases ranging from “Smart City” to Road Use Charge. The full potential of the E-Plate is highly dependent on technology acceptance by the various players; however, the unique aspect of the technology is the use case scalability following initial introduction through the plate issuance process. In other words, it’s not necessary to have the entire infrastructure in place on day one to realize the benefits of the E-Plate. This allows adoption over time with a growing network and infrastructure to leverage!

## 5. References

[1] Jeffrey Zhu, Chih-chuan Yen, Jun Liu, Joe Mullis. Systems And Methods For A RFID Enabled Metal License Plate. US Patent No.: US 8,344,890, Dec. 20, 2007



Categories From The Editor About Events Verne Global

## NXP's Plans to Make License Plates and Cities Smarter with RFID Technology

By Automotive IT News

Jun 1 2016

By Doug Newcomb

License plates are required on all cars worldwide. But in an age when conventional vehicle parts from radios to rearview are becoming smarter and connected, the standard-issue metal license plate is still just a dumb, thin piece of metal.

But that could change with the easy and inexpensive application of RFID tagging technology to license plates that chipmaker NXP showed at its recent FTF Technology Forum in Austin, Texas. And the company announced at FTF that it will supply the winning city with the plates as part of its support of the U.S. Department of Transportation's \$40 million Smart City Challenge.

NXP has already pledged to provide vehicle-to-vehicle and vehicle-to-infrastructure (V2X) technology to the winner of the Smart City Challenge, which will be announced in June. The addition of the RFID license plate technology will allow for "automatic vehicle identification and more streamlined traffic and toll payments," NXP said in a statement accompanying the announcement.



At the FTF conference, I sat down with Peter Esser, NXP's head of government affairs, for a deep dive into RFID license plate technology and advantages. "The benefits are multifaceted to municipalities and to states," Esser explained. "It facilitates automated fare collection for tolling, city parking garages, metered parking spaces and even for cities that have residential

parking districts with preferred parking for residents."

While camera technology is currently used in many cities and by private enterprises to track things tolling and such, "several states have told us that they have difficulty reading specialty license plate," Esser said. "The complex graphics often throw off the cameras. For tolling

### Search

Type keywords here

### Categories

Autonomous Car, Connected Car, Data Security & Privacy, Design, Testing, & Simulation, HPC and Cloud, Sustainability

### Topics Mentioned

Doug Newcomb

purposes, that leads to lost revenue. If these plates were RFID-enabled, there's no more revenue lost and the program pays for itself."

Esser pointed out that RFID-enabled license plates can also be used by states to track cars as part of a vehicle-miles-traveled (VMT) road tax program, which is now being piloted in Oregon and has undergone similar smaller-scale pilot programs in other states. He added that in addition the technology allows for the tracking of stolen cars.

While Esser declined to quote prices for the RFID plate technology, he noted that "the cost for these are very viable. One of the cities in the challenge is looking at deploying 50,000. And it doesn't require having to go to plate manufacturing lines and having to retool. It's easy and simple and you can code it anyway you see fit." "In border states like Texas, vehicle theft is rampant," Esser said. "And once a car makes it into Mexico, it's usually gone forever. An RFID license plate, he added, could be easily identified before it leaves the country at a border checkpoint. "You could even configure the RFID tag so that it's read by an engine control module that would disable the vehicle is someone tried to swap out the plates."

He added that technology is also available "in a UHF sticker format if a city decides it doesn't want to go through the expense" of creating a license plate version. "This is a low-cost but equally versatile solution," he said. "It's basically a window sticker. Same technology, same solutions."

Esser noted that the technology has other uses for cities, such as tagging bicycles. "Let's say a city has a bicycle anti-theft registration program," he said. "In exchange for registering your bike, you're offered one of these stickers. You can unscrew your seat and put it in the saddle tube."

Esser added that the RFID tag can also allow a bike to "become a passive beacon to vehicles" as part of a V2X system, and this can also be applied to pedestrians. "Stick this onto a backpack or in a purse and a car with the right equipment can read it," he explained. "So at a blind intersection or at night, drivers could be alerted to pedestrians ahead. It's one more way to provide benefits to citizens and municipalities."



1 Comment Automotive IT News

Login ▾

Recommend

↗ Share

Sort by Best ▾



Join the discussion...



CManigandan · 14 days ago

Simple and interesting! Are these UHF stickers battery operated. What is the practical read range possible? [Considering there'll be a lot of metal around]

△ | ▾ · Reply · Share ▾

ALSO ON AUTOMOTIVE IT NEWS

### Radio and CD Players: Now You See Them, Now You Don't

24 comments • 2 years ago

 ryanov — Seems awfully stupid to eliminate AM radio, given it's where a lot of the traffic channels are. Then ...

### What Daimler CEO's Scouting Trips to Silicon Valley Mean

2 comments • 5 months ago

 Roger Atkins — 100% in agreement with you Doug! I shared some similar thought very ...

### Despite Tesla's Optimism, The Fully Autonomous Car is Still Decades ...

2 comments • 2 years ago

 Tate — Really good points, Mark. After sale revenues are really driving the decisions of the auto makers ...

### A Simple Laser Pointer Can Hack Autonomous Cars

1 comment • 10 months ago

 Cahit Buçkün — False images will be more difficult to handle than security.

 Subscribe

 Add Disqus to your site

 Privacy

DISQUS

#### Related Articles

Volkswagen Groups MQB Platform Explained

*also categorized in Design, Testing, & Simulation*

McLaren's New Supercar Is Hunting Ferraris and Lambos

*also categorized in Design, Testing, & Simulation*

3-D Printers Could Help Build Tomorrow's Massive Data Centers

*also categorized in Design, Testing, & Simulation*

Advanced Driver Assistance Systems Might Hurt While They Help

*also published in Automotive IT News*

Augmented Reality May Be Coming To A Car Windshield Near You – ReadWrite

*also categorized in Design, Testing, & Simulation*

How data-driven design could filter down

from the McLaren P1 to your next car  
*also categorized in Design, Testing, & Simulation*

Nokia HERE and Atos Worldline plan joint  
Connected Car solutions  
*also categorized in Design, Testing, & Simulation*

Do We Really Need a New Rearview  
Mirror? Nissan Thinks So  
*also categorized in Design, Testing, & Simulation*

Why Formula 1 Cars Are So Ugly This Year  
*also categorized in Design, Testing, & Simulation*

GM introducing new generation of modular  
3- and 4-cylinder Ecotec engines; 11  
variants from 1.0L to 1.5L  
*also categorized in Design, Testing, & Simulation*

#### Recent Comments

 **CManigandan** "Simple and interesting! Are these UHF stickers battery operated. What is the practical read range possible? [Considering there'll be a lot of metal around]"

NXP's Plans to Make License Plates and Cities Smarter with RFID Technology · 2 weeks ago

 **Masterpieced** "I travel a lot and love to listen to audio books on cd. This pisses me off."

Radio and CD Players: Now You See Them, Now You Don't · 1 month ago

#### Featured Articles

Cartoon: Batman & the Latest Automotive Technology

BMW Runs Crash-Test Sims in Iceland, Goes Green With Geothermal Computers

#### Get Connected:



Home



From the Editor

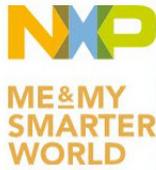
About



Register

Login

Verne Global



## Turn your car into an authentic credential for loyalty, access, and

APRIL 28, 2016

Not too long ago, with the introduction of NFC-enabled mobile phones, people started using their cell phones as payment cards. Now think about doing something similar, but with your car.



By placing a special tag, equipped with secure, long-range UHF RFID, on your windshield or license plate, your car becomes an authentic credential which can serve the same purpose as your loyalty, access, or micro-payment card. You can buy gas, pay for parking, enter a toll road, or pick up a drive-through meal – all without reaching for your wallet (or your phone).

### Charge it to my car

The tag can be read at high speeds and over a long distance, so you don't have to stop or even slow down to make a payment. Also, the transaction is made secure with cryptographic authentication, the kind of technology used in bank cards, credit cards, and ePassports. What's more, the tag works with any car, anywhere in the world, not just the newest, most technologically advanced models. Simply mount the sticker or an ePlate onto your existing vehicle, and you're ready to go.

Anywhere you take your car, the payment capability goes with you. Think parking facilities, car washes, repair shops, drive-through restaurants, or digital entertainment you enjoy while you're on the road.

MAHDI MEKIC

Mahdi Mekic has been in the RFID industry for almost 10 years and has had a broad range of roles involving product development, application support, solution management and marketing. Currently Marketing Director at NXP Semiconductors, Mahdi explores the use of innovative RFID products and services in new application markets with focus on Smart Mobility Solutions.

ALL ARTICLES BY THIS AUTHOR