

**UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

FORAS TECHNOLOGIES LTD.,

Plaintiff,

v.

VOLKSWAGEN AG, APTIV PLC, and
VALEO SA,

Defendants.

Case No. 2:23-cv-00314-JRG

JURY TRIAL DEMANDED

AMENDED COMPLAINT FOR PATENT INFRINGEMENT

This is an action for patent infringement arising under the Patent Laws of the United States of America, 35 U.S.C. § 1 *et seq.*, in which Plaintiff Foras Technologies Limited (“Plaintiff” or “Foras”) makes the following allegations against Defendant Volkswagen AG (“VW”), Defendant Aptiv PLC (“Aptiv”), and Defendant Valeo SA (“Valeo”) (collectively, “Defendants”).

INTRODUCTION

1. This complaint arises from Defendants’ unlawful infringement of the following United States patent owned by Plaintiff, which relates to lockstep processing technology: United States Patent No. 7,502,958 (“the ’958 Patent”) (collectively, the “Asserted Patent”).

PARTIES

2. Plaintiff Foras Technologies Limited is a private company limited by shares organized and existing under the laws of Ireland, with its principal place of business at The Hyde Building, Suite 23, The Park, Carrickmines, Dublin 18, Ireland. Foras is the sole owner by

assignment of all right, title, and interest in the Asserted Patent, including the right to recover for past, present, and future infringement.

3. Defendant Volkswagen AG (“VW”) is a foreign corporation organized and existing under the laws of Germany with its headquarters at Berliner Ring 2, 38440 Wolfsburg, Germany. Upon information and belief, VW does business in Texas and in the Eastern District of Texas, directly or through intermediaries. On information and belief, VW is responsible for importing, making, marketing, distributing, offering for sale, and/or selling VW-managed automobile brands (such as VW-branded and Audi-branded automobiles) in the United States (directly or through its wholly-owned subsidiaries), including in this District.

4. Defendant Aptiv PLC (“Aptiv”) is a foreign company organized and existing under the laws of Jersey with its headquarters at 5 Hanover Quay Grand Canal Dock Dublin, D02 VY79, Ireland. On information and belief, Aptiv is responsible for importing, making, marketing, distributing, offering for sale, and/or selling Aptiv components (such as Central Driver Assistance Controllers (zFAS)) included in Audi-branded automobiles in the United States (directly or through its wholly-owned subsidiaries), including in this District.

5. Defendant Valeo SA (“Valeo”) is a foreign company organized and existing under the laws of France with its headquarters at 100 Rue de Courcelles, 75017 Paris, France. On information and belief, Valeo is responsible for importing, making, marketing, distributing, offering for sale, and/or selling Valeo components (such as Front Cameras (FAS)) included in VW-branded and Audi-branded automobiles in the United States (directly or through its wholly-owned subsidiaries), including in this District.

6. Defendants induce their subsidiaries, affiliates, retail partners, and customers in the making, using, selling, offering for sale, and/or importing throughout the United States, including

within this District, infringing products (such as VW-branded and Audi-branded automobiles containing Aptiv and/or Valeo components) and placing such automobiles into the stream of commerce via established distribution channels knowing or understanding that such products would be sold and used in the United States, including in the Eastern District of Texas. Defendants purposefully direct the Accused Products into established distribution channels within this District and the U.S. nationally.

7. On information and belief, VW maintains a corporate presence in the United States via at least its wholly-owned subsidiaries, including Volkswagen Group of America, Inc. (“VW Am.”). VW Am. is corporation organized and existing under the laws of New Jersey, with a corporate headquarters located at 2200 Ferdinand Porsche Dr., Herndon, VA 20171. VW Am. is registered to do business in Texas and may be served through Corporation Service Company d/b/a CSC-Lawyers Incorporating Service Company, 211 E. 7th Street, Suite 620, Austin, TX 78701. On information and belief, VW AM is a wholly owned subsidiary of VW and is responsible for importing, making, marketing, distributing, offering for sale, and selling automotive vehicles and components from Volkswagen-managed brands (e.g., VW, Audi—including Audi of America, Inc.—Porsche, etc.) in the United States. As such, VW Am. is an agent of VW. At the direction and control of VW, U.S.-based subsidiaries, including VW Am., make, use, import, offer to sell, and/or sell VW-branded and Audi-branded automobiles that infringe the Asserted Patent.

8. On information and belief, VW and its U.S.-based subsidiaries (which act as part of a global network of sales and manufacturing subsidiaries) operate as agents of one another and vicariously as parts of the same business group to work in concert together. For example, VW, alone and through at least the activities of their U.S.-based sales subsidiaries (including VW Am.), conduct business in the United States, including importing, distributing, and selling infringing

products, in Texas and this District. *See, e.g.*, Exs. 1-9 (VW and Audi have dealerships and/or service centers at 3600 S Central Expy, McKinney, TX 75070; 5010 State Hwy 121, Frisco, TX 75034; 893 S Stemmons Fwy, Lewisville, TX 75067; 800 S Hwy 31 E, Longview, TX 75604; 3916 S SW Loop 323, Tyler, TX 75701; 4545 N State Line Ave, Texarkana, TX 75503; 1515 I-10 S, Beaumont, TX 77701; 6650 TX, TX-121, McKinney, TX 75070; and 5930 W Plano Pkwy, Plano, TX 75093). For example, VW identifies U.S.-based sales in its financial statements:

PASSENGER CAR DELIVERIES TO CUSTOMERS BY MARKET¹

	DELIVERIES (UNITS)		CHANGE
	2022	2021	(%)
Europe/Other Markets	3,297,402	3,698,948	-10.9
Western Europe	2,615,864	2,761,629	-5.3
of which: Germany	998,000	959,748	+4.0
France	211,430	238,365	-11.3
United Kingdom	377,449	422,594	-10.7
Italy	223,864	248,414	-9.9
Spain	192,311	220,151	-12.6
Central and Eastern Europe	418,513	624,801	-33.0
of which: Czech Republic	103,223	114,250	-9.7
Russia	41,864	204,772	-79.6
Poland	112,389	120,831	-7.0
Other Markets	263,025	312,518	-15.8
of which: Türkiye	102,735	121,885	-15.7
South Africa	71,437	72,847	-1.9
North America	759,791	876,558	-13.3
of which: USA	564,705	647,521	-12.8
Canada	85,860	98,829	-13.1
Mexico	109,226	130,208	-16.1

Ex. 10 (VW 2022 Annual Report at 128 (<https://www.volkswagen-group.com/en/publications/corporate/annual-report-2022-1732>)). VW also explained the following about its U.S.-presence through VW Am. in its 2022 Annual Report:

> USA

In the saturated US market, the proportion of light trucks (particularly SUVs and pickups) is likely to further increase slightly in the coming years. In addition, the electrification of mobility is expected to accelerate due to support measures and legally prescribed fleet emission and fuel consumption targets. The latter factors still depend, however, on which administration is in office. In the USA, Volkswagen Group of America is steadfast in its pursuit to become a full-fledged volume supplier and expand its market share. The expansion of local production capacity – including production for electric vehicles since 2022 – will allow the Group to better serve the market in the North America region. We are also working intensively on offering additional products specifically tailored to the US market. As part of our electrification campaign, we founded a company in the United States in the reporting year with which we aim to tap the market for electric vehicles in the SUV segment with the US brand Scout.

Id. at 242.

9. On information and belief, VW does business itself, or through their subsidiaries, affiliates, and agents, in the State of Texas and the Eastern District of Texas. VW has placed or contributed to placing infringing products, such as VW-branded and/or Audi-branded automobiles containing Aptiv and/or Valeo components, into the stream of commerce via established distribution channels knowing or understanding that such products would be sold and used in the United States, including in the Eastern District of Texas. On information and belief, VW has derived substantial revenue from infringing acts in the Eastern District of Texas, including from the sale and use of infringing products.

10. On information and belief, Aptiv maintains a corporate presence in the United States via at least its wholly-owned U.S.-based subsidiary Aptiv Services US, LLC (“Aptiv US”). Aptiv US is a Delaware corporation with a regular and established place of business at 5725 Innovation Drive, Troy, Michigan 48098. On information and belief, Aptiv maintains a corporate presence in Texas through at least its wholly-owned U.S.-based subsidiary Aptiv US. For example, on information and belief, Aptiv US maintains a regular and established place of business at 48 Walter Jones Building D, El Paso, TX 79906. Aptiv US is registered to do business in Texas and may be served through CT Corporation System, 1999 Bryan St., Suite 900, Dallas, Texas,

75201. Aptiv also advertises for jobs in “El Paso, Texas.” Ex. 11 (Aptiv Job Listing – El Paso, Texas).

11. On information and belief, Aptiv and its U.S.-based subsidiaries (which act as part of a global network of sales and manufacturing subsidiaries) operate as agents of one another and vicariously as parts of the same business group to work in concert together. For example, Aptiv, alone and through at least the activities of their U.S.-based sales subsidiaries (including Aptiv US), conduct business in the United States, including making, using, importing, offering to sell, and/or selling products included in infringing Audi-branded automobiles in Texas and this District. For example, Aptiv identifies U.S.-based subsidiaries, such as Aptiv US, in its list of subsidiaries in its 10K filing with the United States Securities and Exchange Commission. Ex. 12 (Aptiv 2022 10K at 171 (<https://ir.aptiv.com/investors/financial-information/sec-filings/default.aspx>)). Aptiv also identifies its U.S.-based income in its financial filings with the SEC:

14. INCOME TAXES

Income before income taxes and equity income for U.S. and non-U.S. operations are as follows:

	Year Ended December 31,		
	2022	2021	2020
	(in millions)		
U.S. income (loss)	\$ 24	\$ (2)	\$ (65)
Non-U.S. income	966	912	2,019
Income before income taxes and equity loss	<u>\$ 990</u>	<u>\$ 910</u>	<u>\$ 1,954</u>

Id. at 100. As such, Aptiv’s U.S.-based subsidiaries act as agents of Aptiv. At the direction and control of Aptiv, U.S.-based subsidiaries, including Aptiv US, make, use, import, offer to sell, and/or sell Aptiv components included in Audi-branded automobiles that infringe the Asserted Patent.

12. On information and belief, Aptiv does business itself, or through their subsidiaries, affiliates, and agents, in the State of Texas and the Eastern District of Texas. Aptiv has placed or contributed to placing infringing products, such as Audi-branded automobiles containing Aptiv

components, into the stream of commerce via established distribution channels knowing or understanding that such products would be sold and used in the United States, including in the Eastern District of Texas. On information and belief, Aptiv has derived substantial revenue from infringing acts in the Eastern District of Texas, including from the sale and use of infringing products.

13. On information and belief, Valeo maintains a corporate presence in the United States via at least its wholly-owned U.S.-based subsidiary Valeo North America, Inc. (“Valeo NA”). Valeo NA is a Delaware corporation with a regular and established place of business at 350 N. St. Paul St., Dallas, TX 75201. Valeo NA is registered to do business in Texas and may be served through CT Corporation System, 1999 Bryan St., Suite 900, Dallas, TX 75201. On information and belief, Valeo NA is a wholly owned subsidiary of Valeo and is responsible for importing, making, marketing, distributing, offering for sale, and selling Valeo components in the United States. As such, Valeo NA is an agent of Valeo. At the direction and control of Valeo, U.S.-based subsidiaries, including Valeo NA, make, use, import, offer to sell, and/or sell Audi-branded automobiles that infringe the Asserted Patent.

14. On information and belief, Valeo and its U.S.-based subsidiaries (which act as part of a global network of sales and manufacturing subsidiaries) operate as agents of one another and vicariously as parts of the same business group to work in concert together. For example, Valeo advertises that “[w]ith 11 production sites and 3 Development centers across the country, Valeo USA is one of the most successful and innovative companies in North America.” Ex. 13 (<https://www.valeo.com/en/usa/>). Valeo also maintains two different places of business in the state of Texas—one in Dallas and one in Coppell. Ex. 14 (Valeo Dallas); Ex. 15 (Valeo Coppell).

15. On information and belief, Valeo does business itself, or through their subsidiaries, affiliates, and agents, in the State of Texas and the Eastern District of Texas. Valeo has placed or contributed to placing infringing products, such as VW-branded and Audi-branded automobiles containing Valeo components, into the stream of commerce via established distribution channels knowing or understanding that such products would be sold and used in the United States, including in the Eastern District of Texas. On information and belief, Valeo has derived substantial revenue from infringing acts in the Eastern District of Texas, including from the sale and use of infringing products.

JURISDICTION AND VENUE

16. This action arises under the patent laws of the United States, Title 35 of the United States Code. This Court has original subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

17. This Court has personal jurisdiction over Defendants in this action because Defendants have committed acts within this District giving rise to this action and have established minimum contacts with this forum such that the exercise of jurisdiction over Defendants would not offend traditional notions of fair play and substantial justice. Defendants, directly and through subsidiaries or intermediaries, have committed and continue to commit acts of infringement in this District by, among other things, making, using, importing, offering to sell, and selling VW-branded and Audi-branded automobiles containing Aptiv and/or Valeo components that infringe the Asserted Patent.

18. Venue is proper in this District under 28 U.S.C. §§ 1391 and 1400(b). Upon information and belief, Defendants have transacted business in this District and have committed acts of direct and indirect infringement in this District by, among other things, making, using,

importing, offering to sell, and selling products that infringe the Asserted Patents. Venue is proper as to VW, Aptiv, and Valeo because they are foreign corporations organized under the laws of Germany, Jersey, and France, respectively, and suits against foreign entities are proper in any judicial district. *See* 28 U.S.C. § 1391(c)(3); *In re HTC Corp.*, 889 F.3d 1349 (Fed. Cir. 2018).

19. VW, Aptiv, and Valeo may be joined in this action because (1) any right to relief is asserted against Defendants jointly, severally, or in the alternative with respect to or arising out of the same transaction, occurrence, or series of transactions or occurrences relating to the making, using, importing into the United States, offering for sale, or selling of the same accused products (*i.e.*, VW-branded and Audi-branded automobiles with Aptiv and/or Valeo components that infringe the Asserted Patents); and (2) questions of fact common to Defendants will arise in this action.

COUNT I

INFRINGEMENT OF U.S. PATENT NO. 7,502,958

20. Plaintiff realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.

21. Plaintiff owns by assignment all rights, title, and interest, including the right to recover damages for past, present, and future infringement, in U.S. Patent No. 7,502,958, titled “System and method for providing firmware recoverable lockstep protection.” The ’958 Patent was duly and legally issued by the United States Patent and Trademark Office on March 10, 2009. A true and correct copy of the ’958 Patent is attached as Exhibit 16.

22. On information and belief, Defendants have and continue to make, use, offer for sale, sell, and/or import certain products and services, including without limitation the Audi A6, A7, A8, e-tron S, e-tron Sportback, Q8, and S6, which include an Aptiv Central Driver Assistance

Controller (zFAS) (containing Infineon TC29XX chipsets), and VW ID.4, VW Golf, and Audi Q4 e-tron, which include a Valeo Front Camera (FAS) (containing Renesas RH850/P1x-C chipsets) (“Accused Products”), that directly infringe, literally and/or under the doctrine of equivalents, one or more claims of the ’958 Patent. Identification of the Accused Products will be provided in Plaintiff’s infringement contentions disclosed pursuant to the Court’s scheduling order.

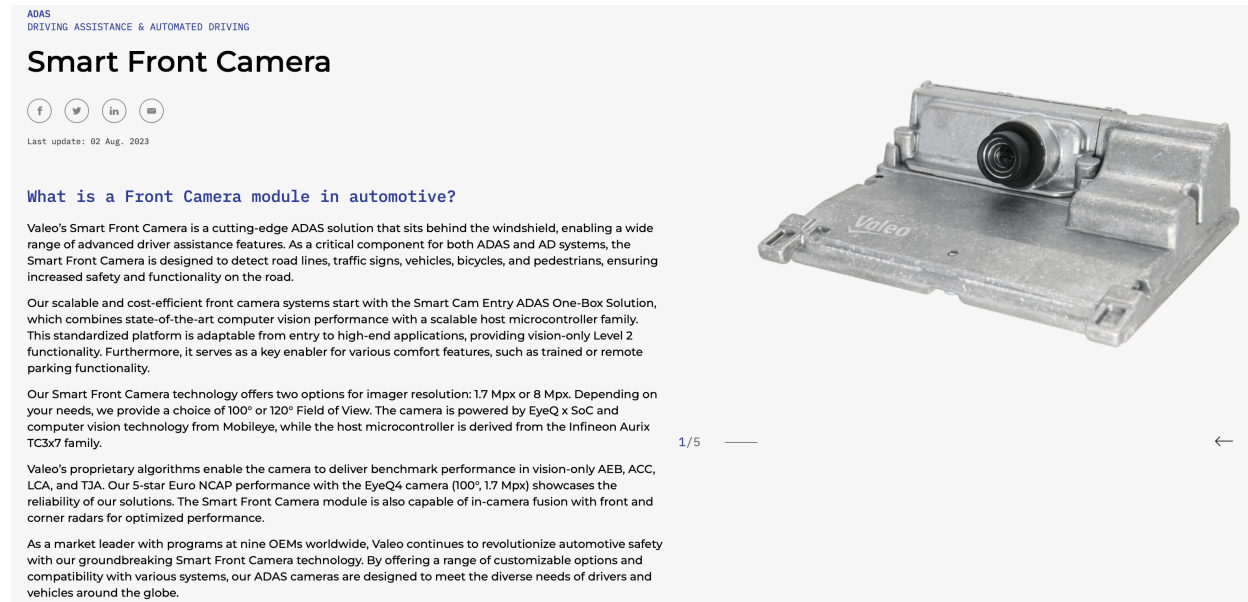
23. The Accused Products satisfy all claim limitations of one or more claims of the ’958 Patent. A claim chart comparing exemplary independent claim 19 of the ’958 Patent to representative Accused Products is attached as Exhibits 17 and 18.

24. By making, using, offering for sale, selling and/or importing into the United States the Accused Products, VW, Valeo, and Aptiv have injured Plaintiff and are liable for infringement of the ’958 Patent pursuant to 35 U.S.C. § 271(a).

25. Valeo, and Aptiv also knowingly and intentionally induce infringement of one or more claims of the ’958 Patent in violation of 35 U.S.C. § 271(b). At least as of the filing and service of Foras’ Complaint, Valeo, and Aptiv have knowledge of the ’958 Patent and the infringing nature of the Accused Products through, for example, the ’958 Patent claim charts attached to the Complaint as Exhibits 17 and 18. Despite this knowledge of the ’958 Patent, Valeo, and Aptiv continue to actively encourage and instruct their customers to use the Accused Products in ways that directly infringe the ’958 Patent. Valeo, and Aptiv engage in many activities that encourage their customers to infringe the ’958 Patent, including, for example, (i) advertising and promotion efforts for components that are included in the Accused Products; (ii) publication of demonstrational videos on its website; (iii) publication of advertising and marketing materials that purport to describe the alleged benefits of the Accused Products; and (iv) publication of user

manuals that instruct customers on how to install and use the Accused Products in an infringing manner.

26. For example, Valeo advertises its front camera as a “cutting-edge ADAS solution” that brings “5-star safety and driver assistance to the end-user” as shown in the screenshots from Valeo’s website below:



ADAS
DRIVING ASSISTANCE & AUTOMATED DRIVING

Smart Front Camera

f w in

Last update: 02 Aug. 2023

What is a Front Camera module in automotive?

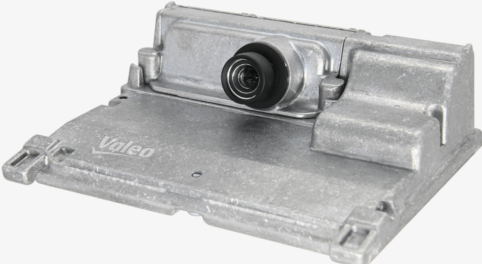
Valeo's Smart Front Camera is a cutting-edge ADAS solution that sits behind the windshield, enabling a wide range of advanced driver assistance features. As a critical component for both ADAS and AD systems, the Smart Front Camera is designed to detect road lines, traffic signs, vehicles, bicycles, and pedestrians, ensuring increased safety and functionality on the road.

Our scalable and cost-efficient front camera systems start with the Smart Cam Entry ADAS One-Box Solution, which combines state-of-the-art computer vision performance with a scalable host microcontroller family. This standardized platform is adaptable from entry to high-end applications, providing vision-only Level 2 functionality. Furthermore, it serves as a key enabler for various comfort features, such as trained or remote parking functionality.

Our Smart Front Camera technology offers two options for imager resolution: 1.7 Mpx or 8 Mpx. Depending on your needs, we provide a choice of 100° or 120° Field of View. The camera is powered by EyeQ x SoC and computer vision technology from Mobileye, while the host microcontroller is derived from the Infineon Aurix TC3x7 family.

Valeo's proprietary algorithms enable the camera to deliver benchmark performance in vision-only AEB, ACC, LCA, and TJA. Our 5-star Euro NCAP performance with the EyeQ4 camera (100°, 1.7 Mpx) showcases the reliability of our solutions. The Smart Front Camera module is also capable of in-camera fusion with front and corner radars for optimized performance.

As a market leader with programs at nine OEMs worldwide, Valeo continues to revolutionize automotive safety with our groundbreaking Smart Front Camera technology. By offering a range of customizable options and compatibility with various systems, our ADAS cameras are designed to meet the diverse needs of drivers and vehicles around the globe.



1/5 ←

Ex. 19 (<https://www.valeo.com/en/catalogue/cda/smart-front-camera/>)

Valeo's novel vision-only system brings 5-star safety and driver assistance to the end-user.

Front Camera enhances active safety and driver assistance functions, such as Autonomous Emergency Braking (AEB), Adaptive Cruise Control (ACC), Lane Keeping Assist System (LKAS) and Traffic Jam Assist (TJA). Valeo's latest Front Camera generation, with 100-degree field-of-view and a 1.7 Megapixel high resolution image, in production since the beginning of 2020, enables passenger cars reaching Euro NCAP 5-stars rating by vision-only technology.

As a key achievement in its ADAS (Advanced Driver Assistance Systems) and Automated Driving strategy, the world's 1st camera-based-and-affordable ADAS system by Valeo supports SAE automation level 2.

The Front Camera monitors the traffic ahead, enabling the car to maintain a safe and legal speed, to stay in its lane, to keep its distance with vehicles ahead, and to react to emergencies.

Front Camera detects speed limit signs and informs the driver or even controls the vehicle so as not to exceed maximum speed.

Front Camera detects the lane marking and thus allows to keep the vehicle in its lane.

Front Camera detects and classifies objects such as vehicles, trucks, pedestrians, cyclists, motorbikes in order to alert the driver and prevent collision by braking the vehicle automatically.

Ex. 20 (<https://www.valeo.com/en/front-camera/>)

27. Valeo touts the benefits of its front camera, discloses its specifications, and provides unique selling points:

What are our Smart Front Camera benefits?			
Standardized Platform	Scalable from entry to high-end	Vision-only Level 2 (L2) functionality	Key enabler for various comfort features like trained or remote parking functionality
Valeo Smart Front Camera specifications			
1.7 or 8 Mpx Imager Resolution	100° or 120° Field of View (FoV)	EyeQ x SoC and CV from Mobileye	Infineon Aurix TC3x7 family Host µC
Unique Selling Points			
Valeo algorithms for vision-only AEB, ACC, LCA, TJA with benchmark performance	5-star Euro NCAP performance with EyeQ4 camera (100°, 1.7 Mpx)	In-camera fusion with front and corner radars for best performance	Market leader with programs at 9 OEMs worldwide

13 million
front cameras produced

Ex. 19 (<https://www.valeo.com/en/catalogue/cda/smart-front-camera/>)

28. In particular, Valeo states that it “offers customers’ active safety functions to achieve top scores in NCAP consumer safety ratings, such as automatic emergency braking, speed limit detection and lane departure warning” and claims that it “pioneered the introduction of front cameras into the mass market” as shown in the screenshot from Valeo’s website below:

MEET EURO NCAP STANDARDS

Valeo offers customers' **active safety functions to achieve top scores in NCAP** consumer safety ratings, such as automatic **emergency braking, speed limit detection and lane departure warning**.

Valeo is the first to have a vision-only system on the market, compliant with 5-stars NCAP 2020 requirements. Front Camera is the master sensor for most of the Active Safety Euro NCAP tests:

- Detection of speed limits: Speed Assist System feature in Euro NCAP
- Detection of objects: Forward Collision Warning & AEB for Car, Pedestrians, Cyclists and Motorbikes
- Detection of Lane Marking for Lane Support system features

TWO DECADES OF LEADERSHIP


Valeo pioneered the introduction of front cameras into the mass market, starting in 2004 with Lane Departure Warning System for Nissan. This was the first series production system to use an integrated computer vision system to detect and classify white lines on the road surface, determine the path of the road and decide if the vehicle's direction was leading to lane departure.

After a decade of Valeo-powered front camera functions, we partnered with Mobileye in 2015 to leverage their computer vision platform.

Valeo is currently the global leader in automotive cameras with more than 60 million cameras produced.

Ex. 20 (<https://www.valeo.com/en/front-camera/>)

29. In addition, Valeo provides promotional videos depicting how the front camera works. See <https://youtu.be/rc2knHHjWks>. Valeo also provides technical training videos on its ADAS system:



Valeo

ADAS OVERVIEW

The diagram illustrates the ADAS system components and market positions. On the left, a car is shown with various sensor ranges: ACC, Pedestrian, Collision, Lane change, Emergency braking, Traffic signs, Oncoming traffic, Parking, and Blind spot. On the right, a top-down view of a car shows sensor ranges for All-round vision, Parking, and Collision. A central play button icon is present. Below the car, the text reads 'Global Market Positions' with a list: 'Driving Assistance #1', 'Interior Controls #2', and 'Telematics #2'. At the bottom, it says 'SMART TECHNOLOGY FOR SMARTER MOBILITY'.

Valeo ADAS - System Overview

Valeo have been an OE supplier of ADAS systems for a while now, ranging from cameras to radar and lidar. In this weeks webinar we will be having a look into the ADAS system and looking at what is ADAS?, Why is ADAS being used? and how it is being used within the modern day vehicle.

As the motor industry is quickly advancing we are always looking for ways to make driving safer, join us for this weeks webinar where we will take you for a system overview of Valeo ADAS systems.

Attend this short webinar and learn the following:

- **What is ADAS (Advanced Driver-Assistance System)**
- **What products are included in the ADAS system**
- **Why ADAS is quickly becoming a vehicle manufacturer preference for new vehicles**

Ideal for motor factors, garages and members of the public to learn about the automotive ADAS system

See Ex. 21(<https://www.valeoservice.us/en-us/online-training>)

30. Likewise, Aptiv advertises itself as “the Leader in Making Safe Mobility Real” describing its work in the field of Advanced Driver Assistance Systems as follows:

We Are the Leader in Making Safe Mobility Real

FLEXIBLE AND SCALABLE ADVANCED SAFETY SOLUTIONS ON THE PATH TO AUTOMATED DRIVING

Aptiv has been a leader in advanced safety for over 20 years. We were the first to deploy radar on a vehicle in 1999 for Adaptive Cruise Control. Since then, we've had many other industry firsts, which are helping the industry realize safer and more convenient mobility solutions.

Aptiv's flexible and scalable solutions are helping to accelerate the adoption of Advanced Driver Assistance Systems (ADAS) globally, enabling new functionality with maximum reuse. For example, our award winning Satellite Architecture solution takes the intelligence out of the sensor and centralizes it into one of Aptiv's powerful domain controllers, increasing performance, reuse and updatability, while reducing sensor mass.

Our expertise in central compute platforms, sensing and perception systems, and high-speed, high-reliability power and data distribution is helping us deliver smarter, safer and more integrated solutions, both outside the vehicle with advanced active safety systems – as well as in the cabin through enhanced user experiences.

See Ex. 22 (<https://www.apativ.com/en/solutions/advanced-safety>)

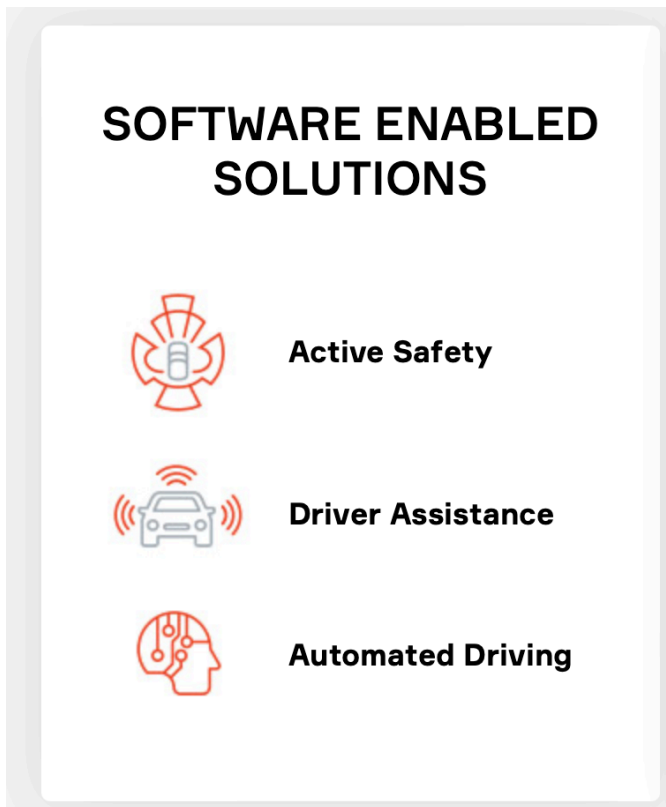
31. Aptiv describes its satellite architecture – used in the Central Driver Assistance Controller (zFAS) – as an “industry leading approach for advanced safety solutions.” See Ex. 23 (<https://www.apativ.com/en/solutions/advanced-safety/satellite-architecture>). Aptiv describes it as “flexible” and “scalable.” Furthermore, Aptiv describes the Central Driver Assistance Controller (zFAS) in an article linked to its website stating that the Audi zFAS system is the “industry’s first centralized computing platform” and touting its “years of experience in developing active safety systems.” Aptiv also advertises that the zFAS system is “safer, more efficient, and more convenient” as shown below:

Getting from Here to There

Aptiv has years of experience in developing active safety systems, including the recent launch of the industry's first centralized computing platform with Audi zFAS system. These Level 3 and 4 automated driving applications are the basis for building fully autonomous Level 5 vehicles. Using Ottomatika and nuTonomy algorithm platforms, the foundation of the Aptiv autonomous driving platform, provide capability in drive perception, planning, and motion control for fully autonomous solutions.


The ultimate objective is safer, more efficient, more convenient mobility. Aptiv's capabilities demonstrate it is possible to not only replicate the perceiving, processing, and thinking of human drivers, but to make it a reality. And this is a good thing, since driver error causes more than 94 percent of motor vehicle accidents, according to the National Highway Traffic Safety Administration.

See Ex. 24 (<https://www.apativ.com/en/insights/article/the-autonomous-driving-platform-how-will-cars-actually-drive-themselves>)



See Ex. 22 (<https://www.aptiv.com/en/solutions/advanced-safety>).

32. Additionally, one of Aptiv's customers, Audi, advertises the benefits of the zFAS technology developed by Aptiv and provides a video depicting the zFAS technology on its website:



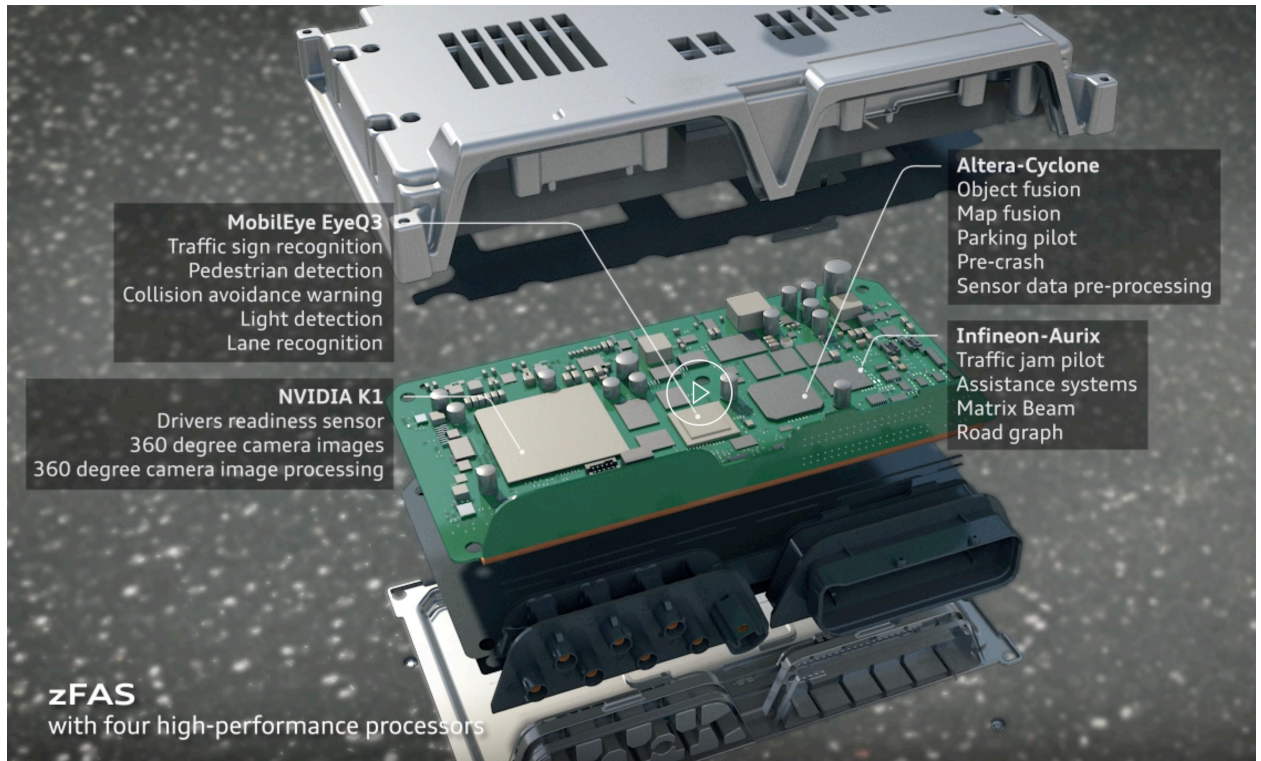
Audi Technology Portal

Audi A8 - Central driver assistance controller (zFAS)

There have previously been several control units, each evaluating the information they pick up for a defined function. Now for the first time, a central driver assistance controller (zFAS) permanently forms a comprehensive image of the surroundings from the sensor data - for a wide range of assistance functions. This is created by complementary sensor systems, plus redundant data fusion in the zFAS and the radar control unit. All assistance systems benefit from the central model of the surroundings - whether adaptive driving assistant, active suspension, park assistance function or traffic jam pilot. Traffic signs are combined with data from a digital map; crossing assist draws on the comprehensive field of activity, as does the emergency braking function, which has been optimized in quality and effect by the redundant design. The zFAS, around the size of a tablet computer is a high-tech data center that integrates high-performance computers and makes its debut in the new A8.

Status: 7/2017

Ex. 25 (<https://www.audi-technology-portal.de/en/electrics-electronics/driver-assistant-systems/audi-a8-central-driver-assistance-controller-zfas>).



Screenshot from video found at <https://www.audi-technology-portal.de/en/electrics-electronics/driver-assistant-systems/audi-a8-central-driver-assistance-controller-zfas> (Ex. 25).

33. Valeo and Aptiv provide these materials knowing and intending (or with willful blindness to the fact) that its customers, such as Audi, VW, and other automobile manufacturers, will commit these infringing acts. Valeo and Aptiv continue to make, use, offer for sale, sell, and/or import the Accused Products, despite their knowledge of the '958 Patent, thereby specifically intending for and inducing its customers to infringe the '958 Patent through the customers' normal and customary use of the Accused Products.

34. Valeo and Aptiv have also infringed, and continue to infringe, one or more claims of the '958 Patent by selling, offering for sale, or importing into the United States, the Accused Products, knowing that the Accused Products constitute a material part of the inventions claimed in the '958 Patent, are especially made or adapted to infringe the '958 Patent, and are not staple articles or commodities of commerce suitable for non-infringing use. At least as of the filing date

and service of the Complaint, Valeo and Aptiv have had knowledge of the '958 Patent and the infringing nature of the Accused Products through, for example, the '958 Patent claim charts attached as Exhibits 17 and 18. Valeo and Aptiv have been, and currently are, contributorily infringing the '958 Patent in violation of 35 U.S.C. §§ 271(c) and/or (f). For example, the Accused Products constitute a material part of the inventions claimed in the '958 Patent, are especially made or adapted to infringe the '958 Patent, and are not staple articles or commodities of commerce suitable for non-infringing use, as demonstrated by the evidence cited in Exhibits 17 and 18.

35. On information and belief, Plaintiff (including its predecessors and any licensees) complied with 35 U.S.C. §287 at least prior to June 30, 2022 because Plaintiff, its predecessors, and any licensees did not make, offer for sale, or sell products that practice(d) the '958 Patent during the relevant time period or were not otherwise required to mark during the relevant time period.

36. As a result of Defendants' direct infringement of the '958 Patent, Plaintiff is entitled to monetary damages (past, present, and future) in an amount adequate to compensate for Defendants' infringement, but in no event less than a reasonable royalty for the use made of the invention by VW, Valeo, and Aptiv, together with interest and costs as fixed by the Court.

37. As a result of Valeo's and Aptiv's indirect infringement of the '958 Patent, Plaintiff is entitled to monetary damages (present and future) in an amount adequate to compensate for Valeo's and Aptiv's infringement, but in no event less than a reasonable royalty for the use made of the invention by Valeo and Aptiv, together with interest and costs as fixed by the Court.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests that this Court enter:

- a. A judgment in favor of Plaintiff that Defendants have infringed, either literally

and/or under the doctrine of equivalents, the '958 Patent;

b. A judgment and order requiring Defendants to pay Plaintiff its damages (past, present, and future), costs, expenses, and pre-judgment and post-judgment interest for their infringement of the '958 Patent;

c. A judgment and order requiring Defendants to pay Plaintiff compulsory ongoing licensing fees, as determined by the Court;

d. A judgment and order requiring Defendants to provide an accounting and to pay supplemental damages to Plaintiff, including without limitation, pre-judgment and post-judgment interest and compensation for infringing products released after the filing of this case that are not colorably different from the Accused Products;

e. A judgment and order finding that this is an exceptional case within the meaning of 35 U.S.C. § 285 and awarding to Plaintiff its reasonable attorneys' fees against Defendants; and

f. Any and all other relief as the Court may deem appropriate and just under the circumstances.

DEMAND FOR JURY TRIAL

Plaintiff, under Rule 38 of the Federal Rules of Civil Procedure, requests a trial by jury of any issues so triable by right.

Dated: March 7, 2024

Respectfully submitted,

/s/ Brett E. Cooper

Brett E. Cooper (NY SBN 4011011)

bcooper@bc-lawgroup.com

Seth R. Hasenour (TX SBN 24059910)

shasenour@bc-lawgroup.com

Jonathan Yim (TX SBN 24066317)

jyim@bc-lawgroup.com

Drew B. Hollander (NY SBN 5378096)

dhollander@bc-lawgroup.com

BC LAW GROUP, P.C.

200 Madison Avenue, 24th Floor

New York, NY 10016

Tel.: (212) 951-0100

Fax: (646) 293-2201

*Attorneys for Plaintiff Foras Technologies
Limited*

CERTIFICATE OF SERVICE

I certify that this document is being served upon counsel of record for Defendants on March 7, 2024 via electronic service.

/s/ Brett E. Cooper

Brett E. Cooper