

**Stefan  
KNIRSCH**

# **Photographs**









# **Physical Description**

**Name: Stefan Knirsch**

**Alias: Stefan Heribert Rudolf Knirsch**

**Sex: Male**

**Race: Caucasian**

**Date of Birth: 5/5/66**

**Place of Birth: Germany (assumed)**

**Citizenship: Germany**

**Height: Unknown**

**Weight: Unknown**

**Hair: Unknown**

**Scars/Tattoos: Unknown**

**NCIC: FBI # /State ID: NA**

**Last Known Add: Unknown**

**Last Known #s: Unknown**



**No U.S. Criminal History**

**Summary of  
Criminal Case and  
Involvement**

See Red Notice.

# **Court Filings**

30

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF MICHIGAN  
SOUTHERN DIVISION

UNITED STATES OF AMERICA

Case:2:19-cr-20033  
Judge: Borman, Paul D.  
MJ: Majzoub, Mona K.  
Filed: 01-17-2019 At 03:01 PM  
INDI USA V. BAUDER ET AL (DA)

v.

VIO: 18 U.S.C. § 371  
18 U.S.C. § 1343  
42 U.S.C. § 7413(c)(2)(A)  
18 U.S.C. § 2

D-1 RICHARD BAUDER,  
D-2 AXEL EISER,  
D-3 STEFAN KNIRSCH, and  
D-4 CARSTEN NAGEL

Defendants.

**INDICTMENT**

THE GRAND JURY CHARGES:

**GENERAL ALLEGATIONS**

At all times relevant to this Indictment:

1. The purpose of the Clean Air Act and its implementing regulations was to protect human health and the environment by, among other things, reducing emissions of pollutants from new motor vehicles, including nitrogen oxides (“NOx”).

2. The Clean Air Act required the U.S. Environmental Protection Agency (“EPA”) to promulgate emissions standards for new motor vehicles. The EPA

established standards and test procedures for light-duty motor vehicles, including emissions standards for NO<sub>x</sub>.

3. The Clean Air Act prohibited manufacturers of new motor vehicles from selling, offering for sale, introducing or delivering for introduction into commerce, or importing (or causing the foregoing with respect to) any new motor vehicle unless the vehicle or engine complied with emissions standards, including NO<sub>x</sub> emissions standards, and was issued an EPA certificate of conformity as required by the Clean Air Act and federal regulations implementing the Clean Air Act.

4. To obtain a certificate of conformity, a manufacturer was required to submit an application to the EPA for each model year ("MY") and for each test group of vehicles that it intended to sell in the United States. The application was required to be in writing, and to be signed by an authorized representative of the manufacturer. The application was required to include the results of testing done pursuant to the published Federal Test Procedures that measure NO<sub>x</sub> emissions, and to contain descriptions of the engine, emissions control system, and fuel system components, including a detailed description of each Auxiliary Emission Control Device ("AECD") installed in the vehicle.

5. An AECD was defined as “any element of design which senses temperature, vehicle speed, engine RPM, transmission gear, manifold vacuum, or any other parameter for the purpose of activating, modulating, delaying, or deactivating the operation of any part of the emission control system.” The manufacturer was also required to include a justification for each AECD. If the EPA, in reviewing the application for a certificate of conformity, determined that the AECD “reduced the effectiveness of the emission control system under conditions which may reasonably be expected to be encountered in normal vehicle operation and use,” and that (1) it was not substantially included in the Federal Test Procedure, (2) the need for the AECD was not justified for protection of the vehicle against damage or accident, or (3) it went beyond the requirements of engine starting, the AECD was considered a “defeat device.”

6. The EPA would not certify motor vehicles equipped with defeat devices. Manufacturers could not legally sell motor vehicles in the United States without a certificate of conformity from the EPA.

7. The California Air Resources Board (“CARB”) (together with the EPA, “U.S. regulators”) issued its own certificates, called executive orders, for the sale of motor vehicles in the State of California. To obtain such a certificate, the

manufacturer was required to satisfy the standards set forth by the State of California, which were equal to or more stringent than those of the EPA.

8. As part of the application for a certification process, manufacturers often worked in parallel with the EPA and CARB. To obtain a certificate of conformity from the EPA, manufacturers were also required to demonstrate that the light-duty vehicles were equipped with an on-board diagnostic (“OBD”) system capable of monitoring all emissions-related systems or components. Manufacturers could demonstrate compliance with California OBD standards in order to also demonstrate compliance with federal requirements. CARB reviewed applications from manufacturers to determine whether their OBD systems were in compliance with California OBD standards, and CARB’s conclusion would be included in the application the manufacturer submitted to the EPA.

9. In 1998, the United States established new federal emissions standards that would be implemented in separate steps, or Tiers. Tier II emissions standards, including for NOx emissions, were significantly stricter than Tier I. For light-duty vehicles, the regulations required manufacturers to begin to phase in compliance with the new, stricter Tier II NOx emissions standards in 2004 and required manufacturers to fully comply with the stricter standards for MY 2007.



**Relevant Companies**

10. Volkswagen AG (“VW AG”) was a motor vehicle manufacturer based in Wolfsburg, Germany.

11. Audi AG (“Audi”) was a motor vehicle manufacturer based in Ingolstadt, Germany, and was approximately 99% owned by VW AG.

12. Volkswagen Group of America, Inc. (“VW GOA”) was a wholly-owned subsidiary of VW AG based in Herndon, Virginia.

13. VW AG, Audi AG, and VW GOA are collectively referred to herein as “VW.”

**Audi Diesel Vehicles Sold in the United States**

14. VW sold, offered for sale, introduced into commerce, delivered for introduction into commerce, imported into the United States, or caused the foregoing actions (collectively, “sold in the United States”) for the following vehicles containing 3.0 liter diesel engines designed and manufactured by Audi (“Subject Vehicles”):

- a. MY 2009-2015 VW Touareg;
- b. MY 2009-2015 Audi Q7;
- c. MY 2014-2015 Audi A6 Quattro;
- d. MY 2014-2015 Audi A7 Quattro;

- e. MY 2014-2015 Audi A8L;
- f. MY 2014-2015 Audi Q5.

15. VW GOA's Engineering and Environmental Office ("EEO") was located in Auburn Hills, Michigan, in the Eastern District of Michigan. Among other things, EEO prepared and submitted applications (the "Applications") for a certificate of conformity and an executive order (collectively, "Certificates") to the EPA and CARB to obtain authorization to sell Audi vehicles in the United States, including each of the Subject Vehicles. VW GOA's Test Center California, located in Oxnard, California, performed testing related to the Subject Vehicles.

16. Audi employees developed the engines for the Subject Vehicles.

17. The Applications to the EPA were accompanied by the following signed statement by a VW representative:

The Volkswagen Group states that any element of design, system, or emission control device installed on or incorporated in the Volkswagen Group's new motor vehicles or new motor vehicle engines for the purpose of complying with standards prescribed under section 202 of the Clean Air Act, will not, to the best of the Volkswagen Group's information and belief, cause the emission into the ambient air of pollutants in the operation of its motor vehicles or motor vehicle engines which cause or contribute to an unreasonable risk to public health or welfare except as specifically permitted by the standards prescribed under section 202 of the Clean Air Act. The Volkswagen Group further states that any element of design, system, or emission control device installed or incorporated in the Volkswagen Group's new motor vehicles or new motor

vehicle engines, for the purpose of complying with standards prescribed under section 202 of the Clean Air Act, will not, to the best of the Volkswagen Group's information and belief, cause or contribute to an unreasonable risk to public safety.

...

All vehicles have been tested in accordance with good engineering practice to ascertain that such test vehicles meet the requirement of this section for the useful life of the vehicle.

18. Based on the representations made by VW employees in the Applications for the Subject Vehicles, EPA and CARB issued Certificates for these vehicles, allowing the Subject Vehicles to be sold in the United States.

19. VW represented to its U.S. customers, U.S. dealers, EPA, CARB, and others that the Subject Vehicles met the new and stricter U.S. emissions standards identified in paragraph 9 above. Further, VW designed a specific marketing campaign to market these vehicles to U.S. customers as "clean diesel" vehicles.

### **The Defendants and Co-Conspirators**

20. From in or about 2002 until in or about February 2012, defendant RICHARD BAUDER was the head of Audi's Diesel Engine Development Department in Neckarsulm, Germany. In that capacity, BAUDER led a team of engineers responsible for designing engines for diesel vehicles in the United States, including each of the Subject Vehicles.

21. From in or about 2009 until in or about May 2013, defendant AXEL EISER worked as head of Audi's Engine Development Division in Ingolstadt, Germany. EISER oversaw Audi's Diesel Engine Development Department and Registration and Testing Department.

22. From in or about May 2013 until in or about May 2015, defendant STEFAN KNIRSCH worked as head of Audi's Engine Development Division in Ingolstadt, Germany. In this capacity, KNIRSCH oversaw Audi's Diesel Engine Development Department and Registration and Testing Department. From in or around January 2016 until in or around September 2016, KNIRSCH served as the head of Technical Development for all of Audi and sat on the management board for Audi. In this capacity, KNIRSCH oversaw Audi's Engine Development Division.

23. From in or about 2002 until in or about February 2017, defendant CARSTEN NAGEL worked as the head of Engine Registration within Audi's Registration and Testing Department in Neckarsulm, Germany. Throughout that time period, NAGEL led a team of employees responsible for preparing and submitting Applications for Certificates to the EPA and CARB to obtain authorization to sell the Subject Vehicles in the United States.

24. From in or about 2002 until in or about November 2015, Zaccheo Giovanni Pamio was the head of Thermodynamics within Audi's Diesel Engine

Development Department in Neckarsulm, Germany. From in or about 2006 until in or about November 2015, Pamio led a team of engineers responsible for designing emissions control systems to meet emissions standards for diesel vehicles in the United States, including each of the Subject Vehicles.

**COUNT 1**

**(18 U.S.C. § 371 – Conspiracy to Defraud the United States,  
to Commit Wire Fraud, and to Violate the Clean Air Act)**

25. Paragraphs 1 through 24 of this Indictment are realleged and incorporated by reference as though fully set forth herein.

26. From at least in or about 2006 and continuing through at least November 2015, in Oakland County, within the Eastern District of Michigan, and elsewhere, defendants RICHARD BAUDER, AXEL EISER, STEFAN KNIRSCH, CARSTEN NAGEL, and others, known and unknown to the Grand Jury, did knowingly, intentionally, and willfully combine, conspire, and confederate and did agree to:

- a. defraud the United States by impairing, impeding, obstructing, and defeating a lawful function of the federal government, that is, the EPA's function of implementing and enforcing emissions standards for air pollutants for new motor vehicles under the Clean Air Act, by deceitful or dishonest means, in violation of 18 U.S.C. § 371;

- b. commit wire fraud, that is, to knowingly, willfully, and with the intent to defraud, having devised and intending to devise a scheme and artifice to defraud and for obtaining money and property by means of materially false and fraudulent pretenses, representations, and promises, transmit and cause to be transmitted by means of wire, radio, and television communication, writings, signs, signals, pictures, and sounds in interstate and foreign commerce for the purpose of executing such scheme and artifice in violation of 18 U.S.C. § 1343; and
- c. violate the Clean Air Act, by making and causing to be made false material statements, representations, and certifications in, and omitting and causing to be omitted material information from, notices, applications, records, reports, plans, and other documents required pursuant to the Clean Air Act to be filed and maintained, in violation of 42 U.S.C. § 7413(c)(2)(A).

**The Purpose of the Conspiracy**

27. The purpose of the conspiracy was for BAUDER, EISER, KNIRSCH, NAGEL, Pamio, and their co-conspirators to defraud the United States and unlawfully enrich VW and themselves by, among other things, (a) deceiving U.S. regulators in order to obtain the necessary Certificates to sell the Subject Vehicles

in the United States; (b) selling the Subject Vehicles to U.S. customers knowing that those vehicles were intentionally designed to detect, evade, and defeat U.S. emissions standards; (c) deceiving U.S. customers by marketing the Subject Vehicles as “clean diesel” and otherwise environmentally-friendly; and (d) concealing Audi’s intentional emissions cheating from U.S. regulators, U.S. customers, and the U.S. public.

**The Manner and Means of the Conspiracy**

28. The manner and means by which BAUDER, EISER, KNIRSCH, NAGEL, Pamio, and their co-conspirators sought to accomplish their conspiracy included the following, in the Eastern District of Michigan and elsewhere.

29. BAUDER, EISER, KNIRSCH, NAGEL, Pamio, and their co-conspirators agreed in person, via email, and via telephone to defraud the United States and Audi customers in the United States, and violate the Clean Air Act, by misleading the United States and Audi customers in the United States about whether the Subject Vehicles complied with U.S. emissions standards, including in written submissions made to EPA or CARB, oral communications at meetings with EPA or CARB, and in marketing materials disseminated within the United States.

**The Scheme to Defraud**

***The Origin and Implementation of the Defeat Device***

30. Beginning in or about 2006, Audi employees working under the supervision of BAUDER and Pamio began to design a new 3.0 liter diesel engine. This engine would be the cornerstone of Audi's major corporate-wide initiative to sell diesel passenger vehicles in the United States that would be marketed as "clean diesel."

31. The proposed Audi 3.0 liter diesel engine employed Selective Catalytic Reduction ("SCR") technology to reduce NOx emissions. The SCR design required a storage tank containing a urea substance, known as "AdBlue," onboard the vehicle to reduce NOx emissions to legal limits. The SCR design also required that the tank be refilled only at the 10,000 mile service interval.

32. BAUDER, Pamio, and their co-conspirators realized they could not calibrate a diesel engine that would meet the strict NOx emissions standards in the United States and the 10,000 mile refilling interval within the design constraints imposed by Audi, including the need for a large trunk and high-end sound system.

33. As a result, Audi employees, acting at the direction of BAUDER, Pamio, and their co-conspirators, designed and implemented defeat devices in the Subject Vehicles, including a software function described below as the "dosing strategy," to cheat the standard U.S. emissions tests.



34. While designing and implementing the defeat device, BAUDER, Pamio, and their co-conspirators knew that U.S. regulators would measure Audi's diesel vehicles' emissions through standard tests with specific, published drive cycles. Audi employees designed the Audi defeat device to recognize whether the vehicle was undergoing standard U.S. emissions testing on a dynamometer (or "dyno") or whether the vehicle was being driven on the road.

35. Specifically, Audi employees, acting at the direction of Pamio and his co-conspirators, designed and implemented a specific dosing strategy, which functioned as a defeat device, for vehicles to be sold in the United States ("the dosing strategy"). During driving consistent with published test cycles, the vehicle dosed AdBlue at higher levels, ensuring compliance with U.S. NOx emissions standards. During regular driving, the vehicle dosed AdBlue substantially less, which resulted in higher NOx emissions but ensured the AdBlue tank would not run unacceptably low prior to reaching the 10,000 mile service interval.

36. In or around January 2008, Audi engineers told BAUDER that, unless Audi increased the size of the AdBlue tank, Audi had to cheat to pass U.S. emissions tests and meet the service interval, referring to the dosing strategy as "cycle beating" that would be "highly critical in the U.S.! (field monitoring, AECD, etc.)" (as translated from the original German).

37. In or around July 2008, a supervisor in Audi's Registration and Testing department confronted BAUDER, cautioning BAUDER that the dosing strategy was illegal and that BAUDER's department should "kill the function."

38. In or around March 2010, an Audi employee in the Registration and Testing department told EISER that the dosing strategy was not compliant with the law.

39. Throughout 2012, an Audi employee from the Diesel Engine Development Department met with EISER on numerous occasions to discuss the fact that the dosing strategy was a "trick" designed to both pass emissions tests and meet the service interval, and to urge EISER to support his department's requests to solve the tank size problem when the requests were put to the rest of senior management for a vote. EISER repeatedly told the Audi executive that he would not support the Diesel Engine Development Department's requests to solve the tank size problem.

40. On or about September 6, 2013, during a meeting with the then-newly-installed Engine Development Division head KNIRSCH, certain Audi employees from the Registration and Testing Department and certain Audi employees from the Diesel Engine Development Department, discussed with KNIRSCH how the dosing strategy worked, and cautioned that this strategy was not in conformity with the law.

NAGEL was present at the meeting and witnessed his colleagues' discussion with KNIRSCH.

41. On or about September 27, 2013, certain Audi employees from the Registration and Testing Department again identified the dosing strategy as illegal to KNIRSCH. KNIRSCH directed the Audi employees from the Registration and Testing Department to assess the risks of being caught cheating by U.S. authorities.

42. In October 2013, KNIRSCH and NAGEL received by email the "risk assessment," which warned that "the key risk lies in the disclosure of software measures that perform so as to interfere with the emission control system in an unauthorized manner" (as translated from the original German). The risk assessment further noted to KNIRSCH and NAGEL that it would be "simple" for authorities to discover the dosing strategy and that, in the past, companies had suffered "severe penalties," "exceptionally strong" "negative publicity," and a "lasting" impairment of the relationship with CARB and EPA (as translated from the original German). KNIRSCH declined to take action with respect to the cars already on the road, and authorized subsequent use of the cheating software in MY14 and MY15 vehicles.

43. In or around 2014, KNIRSCH and BAUDER participated in Audi's public celebration of the 25th anniversary of the TDI "clean diesel" engine and the promotion of the TDI "success story," praising the TDI engine's efficiency and low

emissions. KNIRSCH and BAUDER contributed to presentations celebrating “clean diesel” and gave interviews for inclusion in Audi publications that were distributed within the United States through Audi’s website.

44. Starting with MY09 of Audi’s new “clean diesel” engine through MY15, BAUDER, EISER, KNIRSCH, NAGEL, Pamio, their co-conspirators, and others, then installed, and caused to be installed, the software to implement the defeat device in the Subject Vehicles marketed and sold in the United States. BAUDER, EISER, and KNIRSCH also signed, and caused to be signed, official forms certifying that certain of the Subject Vehicles were in conformity with regulatory requirements and ready to be released from development for production and sale to U.S. customers.

#### *The Concealment of the Defeat Device*

45. In or around March 2014, certain Audi employees, including KNIRSCH, NAGEL, Pamio, and their co-conspirators, learned of the results of a study undertaken by West Virginia University’s Center for Alternative Fuels, Engines and Emissions and commissioned by the International Council on Clean Transportation (the “ICCT study”). The ICCT study identified substantial discrepancies in NOx emission levels for two of VW’s 2.0 liter vehicles, when tested on the road compared to when these vehicles were undergoing EPA and CARB

standard drive cycle tests on a dynamometer. The results of the study showed that two of the three vehicles tested on the road, both VW's 2.0 liter vehicles, emitted NOx at values of up to thirty-five times the permissible limit applicable during testing in the United States.

46. Upon learning of the negative results of the ICCT study, NAGEL, Pamio, and their co-conspirators conducted their own emissions testing using a portable emissions measurement system ("PEMS") on the Subject Vehicles. The results, which Pamio shared directly with KNIRSCH and NAGEL, showed a range of NOx emissions up to twenty-two times the legal limit of the statutory test cycle.

47. Throughout 2014 and 2015, Audi faced increasingly intense questioning from U.S. regulators about NOx emissions, in particular the discrepancy between test results and on-road emissions and the amount of AdBlue dosed. In or around January 2015, CARB told VW and Audi employees that CARB would not certify MY16 3.0 liter vehicles until Audi could first prove that these vehicles did not have the same on-road emissions issues as VW's 2.0 liter vehicles. Oliver Schmidt, the General Manager of the EEO office at VWGOA, sent an email to KNIRSCH, telling him that "our worst fears have come true" and that "we urgently need help with arguments" (as translated from the original German).

48. NAGEL, Pamio, and their co-conspirators proposed to KNIRSCH that Audi would seek to obtain regulatory approval for the MY16 vehicles by focusing exclusively on the MY16 vehicles and providing the best on-road emissions results for the best performing MY16 model without: (i) disclosing the poor results for the MY09-MY15 vehicles; or (ii) revealing the fundamental reason for the higher NOx measurements on the road; that is, software intentionally installed in the Audi 3.0 liter diesel vehicles to detect, evade, and defeat U.S. emissions testing. KNIRSCH agreed to this plan of action.

49. On or about March 24, 2015, NAGEL, Pamio, and other Audi employees met with CARB employees in El Monte, California. NAGEL and Pamio falsely indicated that the Audi 3.0 liter diesel vehicles did not have similar issues to the VW 2.0 liter diesel vehicles, and knowingly presented false and misleading information, which concealed the existence of the defeat device in earlier model years, in order to obtain certification of the MY16 Audi 3.0 liter diesel vehicles. Upon receiving CARB certification, KNIRSCH emailed NAGEL and Pamio, writing "Well done, congratulations!"

***Certification of Audi Diesel Vehicles in the United States***

50. During the certification process for MY09 to MY15, BAUDER, EISER, KNIRSCH, NAGEL, Pamio, and their co-conspirators deliberately failed to

disclose the dosing strategy, and misrepresented, and caused to be misrepresented, to the EPA and CARB staff that the Subject Vehicles complied with U.S. NOx emissions standards, when they knew the vehicles did not.

51. Also as part of the certification process for each new model year, BAUDER, EISER, KNIRSCH, NAGEL, Pamio, and their co-conspirators falsely and fraudulently certified, and caused to be certified, to the EPA and CARB that the Subject Vehicles met U.S. emissions standards and complied with the Clean Air Act. BAUDER, EISER, KNIRSCH, NAGEL, Pamio, and their co-conspirators knew that if they had told the truth and disclosed the existence of the defeat device, Audi would not have obtained the requisite Certificates for the Subject Vehicles and would not have been legally permitted to sell the Subject Vehicles in the United States.

#### *Marketing of "Clean Diesel" Vehicles*

52. Having obtained the necessary EPA and CARB Certificates, BAUDER, EISER, KNIRSCH, NAGEL, Pamio, and their co-conspirators marketed, and caused to be marketed, the Subject Vehicles to the U.S. public as "clean diesel," when they knew that these representations made to U.S. customers were false, that the Subject Vehicles were not "clean," that Audi's diesel vehicles were intentionally designed to detect, evade, and defeat U.S. emissions standards, and that the Subject Vehicles

were polluting the environment with NOx emissions well above U.S. emissions limits.

### Overt Acts

53. In or around 2006 through in or around November 2015, in the Eastern District of Michigan and elsewhere, BAUDER, EISER, KNIRSCH, NAGEL, Pamio, and their co-conspirators took the necessary actions to develop and implement defeat device software in Subject Vehicles that was specifically designed to recognize U.S. emissions tests, cheat such tests, and result in on-road emissions that failed to meet U.S. NOx emissions requirements. In furtherance of the conspiracy and to effect the objects thereof, the defendants and/or other co-conspirators, known and unknown to the Grand Jury, committed the following overt acts.

54. On or about January 23, 2008, the Audi engineers who helped design the dosing strategy sent a presentation to BAUDER and other senior management to warn that, because management would not solve the tank size problem, the only option left was to cheat.

55. On or about July 4, 2008, NAGEL sent an email to Pamio to warn him that Audi employees in the Registration and Testing Department had concluded the



dosing strategy was “indefensible” because it “is a plain Defeat Device and is not certifiable” (as translated from the original German).

56. On or about March 23, 2009, to obtain CARB certification, BAUDER, NAGEL, and Pamio caused VW employees to send CARB a letter affirmatively misrepresenting that there were no defeat devices in the Audi MY09 3.0 liter diesel vehicles.

57. Also as part of the certification process for each new model year, in the Eastern District of Michigan and elsewhere, BAUDER, EISER, KNIRSCH, NAGEL, Pamio and their co-conspirators falsely and fraudulently certified, and caused to be certified, to the EPA and CARB that the Subject Vehicles met U.S. emissions standards and complied with the Clean Air Act, each its own overt act, including the:

- a. Certificate of Conformity (COC) Application for MY 2011 Audi Q7 submitted on or about November 4, 2011;
- b. COC Application for MY 2012 Audi Q7 submitted on or about December 12, 2011;
- c. COC Application for MY 2013 Audi Q7 submitted on or about November 29, 2012;

d. COC Application for MY 2014 Audi Q7 submitted on or about November 13, 2014;

e. COC Application for MY 2014 A6 Quattro, A7 Quattro, A8, A8L, Q5 submitted on or about December 7, 2012;

f. COC Application for MY 2015 A6 Quattro, A7 Quattro, A8, A8L, Q5 submitted on or about February 13, 2014; and

g. COC Application for MY 2015 Audi Q7 submitted on or about December 16, 2014.

58. In or around 2014, BAUDER and KNIRSCH participated in Audi's public celebration of the 25th anniversary of the TDI "clean diesel" engine and the promotion of the TDI "success story," praising the TDI engine's efficiency and low emissions. BAUDER and KNIRSCH presented at events celebrating "clean diesel" and gave interviews for inclusion in Audi publications that were distributed within the United States through Audi's website.

59. On or about April 9, 2014, a VW GOA employee forwarded by email the ICCT study to NAGEL, with notes summarizing the conference at which the ICCT study was presented. The VW GOA employee warned that "[s]ome presenters indicated that they suspected cheating, where the vehicle recognizes it is an [sic] a dyno and runs different calibration that [sic] what it runs in actual driving. We will

have to be careful with this going forward.” NAGEL forwarded this email to Pamio, among others, and wrote “Gianni, perhaps we should take your offer to also flash ...[a] field fix to the fleet located in the field in order to not attract attention here ourselves” (as translated from the original German).

60. Pamio forwarded NAGEL’s email to his co-conspirators and other Audi employees, writing: “Now it is also starting in the U.S.A. with PEMS!!” (as translated from the original German).

61. On or about December 18, 2014, Pamio forwarded KNIRSCH an email attaching a presentation showing that NOx emissions for Audi’s diesel vehicles were up to twenty-two times higher than allowable U.S. standards.

62. On or about March 24, 2015, NAGEL, Pamio, and other Audi employees met with CARB in El Monte, California. NAGEL and Pamio falsely indicated that the Audi 3.0 liter diesel vehicles did not have similar issues to the VW 2.0 liter diesel vehicles, and knowingly presented false and misleading information, which concealed the existence of the defeat device in earlier model years, to obtain certification of the Audi MY16 3.0 diesel vehicles.

All in violation of Title 18, United States Code, Section 371.

**COUNTS 2 through 7**  
**(42 U.S.C. § 7413(c)(2)(A) – Violation of the Clean Air Act)**

63. Paragraphs 1 through 24 of this Indictment are realleged and incorporated by reference as though fully set forth herein.

64. On or about the dates specified as to each count below, in Oakland County, within the Eastern District of Michigan, and elsewhere, defendants RICHARD BAUDER, AXEL EISER, STEFAN KNIRSCH, and CARSTEN NAGEL, did knowingly make and cause to be made, false material statements, representations, and certifications in, and omit and cause to be omitted material information from, notices, applications, records, reports, plans, and other documents required pursuant to the Clean Air Act to be filed or maintained, that is, in VW applications to the U.S. EPA for certificates of conformity for certain diesel vehicles, BAUDER, EISER, KNIRSCH, and NAGEL knowingly omitted, and caused to be omitted, the material fact of the installation of a defeat device on such vehicles from the applications and knowingly and falsely certified, and caused to be certified, that any element of design, system, and emission control installed on and incorporated in such vehicles would not cause the release of pollutants into the ambient air except as specifically permitted by the standards under the Clean Air Act, when, in fact, BAUDER, EISER, KNIRSCH, and NAGEL knew that a defeat device was installed on the vehicles and that, because of that defeat device, when not in the testing mode

the vehicles would release pollutants into the ambient air in violation of the standards set under the Clean Air Act.

<u>Count</u>	<u>Defendant(s)</u>	<u>Date</u>	<u>Description</u>
2	BAUDER	November 4, 2011	COC Application for MY 2011 Audi Q7
3	BAUDER	December 12, 2011	COC Application for MY 2012 Audi Q7
4	EISER	November 29, 2012	COC Application for MY 2013 Audi Q7
5	EISER	December 7, 2012	COC Application for MY 2014 A6 Quattro, A8, A8L, Q5
6	KNIRSCH, NAGEL	February 13, 2014	COC Application for MY 2015 A6 Quattro, A8, A8L, Q5
7	KNIRSCH, NAGEL	December 16, 2014	COC Application for MY 2015 Audi Q7

All in violation of Title 42, United States Code, Section 7413(c)(2)(A) and Title 18, United States Code, Section 2.

**COUNTS 8 through 12**  
**(18 U.S.C. §§ 1343 and 2 – Wire Fraud)**

65. Paragraphs 1 through 24 of this Indictment are realleged and incorporated by reference as though fully set forth herein.

66. From at least in or around 2006 through at least in or around November 2015, in the Eastern District of Michigan, and elsewhere, defendants RICHARD BAUDER, AXEL EISER, STEFAN KNIRSCH, and CARSTEN NAGEL, aided and abetted by others, did knowingly, willfully, and with the intent to defraud, having devised and intended to devise a scheme and artifice to defraud, and for obtaining money and property by means of materially false and fraudulent pretenses, representations, and promises, knowing such pretenses, representations, and promises were false and fraudulent when made, transmitted and caused to be transmitted, by means of wire, radio, and television communication, writings, signals, pictures, and sounds in interstate and foreign commerce for the purposes of executing such scheme and artifice.

**Purpose of the Scheme and Artifice to Defraud**

67. The Grand Jury realleges and incorporates by reference paragraph 27 of this Indictment as though fully set forth herein as a description of the purpose of the scheme and artifice to defraud.

**The Scheme and Artifice to Defraud**

68. The Grand Jury realleges and incorporates by reference paragraphs 30 through 52 of this Indictment as though fully set forth herein as a description of the scheme and artifice to defraud.

**Use of the Wires**

69. On or about the dates specified as to each count below, BAUDER, EISER, KNIRSCH, and NAGEL, in Oakland County, in the Eastern District of Michigan and elsewhere, for the purpose of executing the aforesaid scheme and artifice to defraud, and attempting to do so, did knowingly transmit and cause to be transmitted, by means of wire, radio, and television communication, writings, signals, pictures, and sounds in interstate and foreign commerce for the purposes of executing such scheme and artifice, as set forth below:

<b>Count</b>	<b>Approximate Date</b>	<b>Defendant(s)</b>	<b>Description of Wire Communication</b>
8	January 19, 2012	BAUDER, EISER	Email from VW GOA employee in Michigan to BAUDER, EISER, and others, with "Headlines" from EEO, including notification that Audi AG and EEO are in discussions with CARB related to MY13 diesel SCR certification.
9	February 8, 2012	BAUDER, EISER	Email from VW GOA employee in Michigan to BAUDER and EISER and others, reporting on January TDI sales for the North American Region.
10	February 6, 2013	EISER	Email from VW GOA employee in Michigan to EISER and others, with "Headlines" from EEO, which includes notification of approval of CARB executive order for MY14 Audi A8, A8L, Q5, A6, and A7.

11	March 5, 2014	KNIRSCH, NAGEL	Email from VW GOA employee in Michigan to KNIRSCH and NAGEL and others, forwarding "Headlines" from EEO, which includes notification of approval of the COC for MY15 Audi Q7, A8, A8L, Q5, A6, and A7.
12	February 2, 2015	KNIRSCH, NAGEL	Email from NAGEL to Oliver Schmidt and others in Michigan attaching a draft response to questions from CARB about PEMS test results.

All in violation of Title 18, United States Code, Sections 1343 and 2.

THIS IS A TRUE BILL.

s/Grand Jury Foreperson  
Grand Jury Foreperson

MATTHEW J. SCHNEIDER  
United States Attorney  
Eastern District of Michigan

JEAN E. WILLIAMS  
Deputy Assistant Attorney General  
Environment & Natural Resources  
Division

s/John K. Neal  
JOHN K. NEAL  
Chief, White Collar Crime Unit  
Timothy Wyse  
Assistant United States Attorney  
Eastern District of Michigan

s/Jennifer Leigh Blackwell  
JENNIFER LEIGH BLACKWELL  
Senior Trial Attorney  
JOEL LABISSONNIERE  
Trial Attorney  
Environmental Crimes Section



ROBERT A. ZINK  
Acting Chief  
Fraud Section, Criminal Division  
United States Department of Justice

*s/Christopher Fenton*  
CHRISTOPHER FENTON  
Trial Attorney

Dated: January 17, 2019



# **Red Notice**

**FUGITIVE WANTED FOR PROSECUTION**

Circulation to the media (including Internet) of the extract of the notice as published on INTERPOL's public website: No

**1. IDENTITY PARTICULARS**

**Family name:** KNIRSCH  
**Forename(s):** Stefan  
**Sex:** Male  
**Date and place of birth:** 5 May 1966 - Germany  
**Nationality:** Germany (confirmed)

**Also known as**

	Type	Family name	Forename
1.	Alias	KNIRSCH	Stefan Heribert Rudolf
2.	Alias	YNIRSCH	Stefan Heribert Rudolf
3.	Alias	KNIRSCH	Stefan Heribert
4.	Alias	KNIRSCH	Stefan Heribert Rudo
5.	Alias	KNIRSCH DR	Stefan

**Family name at birth:** KNIRSCH  
**Father's family name and forenames:** KNIRSCH Erhard  
**Mother's maiden name and forenames:** Rosemarie  
**Occupation:** Manager/Engineer at AUDI  
**Languages spoken:** English, French, German  
**Regions/Countries likely to be visited:** Germany

**Identity documents**

	Nationality	Type	Number	Expiry date
1.	Germany	Passport	C8JXLK537	2 September 2019
2.	Germany	Passport	C8JXWLHZ0	26 February 2018

**2. CASE****Facts of the case**

Town	Country	Date
Eastern District of Michigan	United States	From 1 January 2006 to 30 November 2015

**Summary of facts of the case**

From at least 2006 to at least November 2015, while employed at Audi AG, Stefan KNIRSCH and others conspired to sell at least 80,000 diesel vehicles in the U.S. by using defeat devices, that is, software functions designed to cheat on emissions tests mandated by the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB), and lying and obstructing justice to further the scheme. KNIRSCH and others defrauded the U.S. and Audi's U.S. customers, and violated the Clean Air Act by lying and misleading EPA and U.S. customers about whether certain diesel vehicles complied with U.S. emissions standards. KNIRSCH and others used cheating

software to circumvent the U.S. testing process, and concealed material facts about its cheating from U.S. regulators. KNIRSCH is specifically charged with conspiracy to defraud the U.S., to commit wire fraud, and to violate the Clean Air Act, as well as substantive charges of wire fraud and violation of the Clean Air Act.

#### **Additional facts of the case:**

KNIRSCH was an employee of Audi AG (Audi), a subsidiary approximately 99% owned by Volkswagen AG (VW). From about May 2013 to about May 2015, KNIRSCH was the head of Audi's Diesel Engine Development Division in Ingolstadt, Germany. KNIRSCH oversaw Audi's diesel engine development department and registration and testing department. From about January to September 2016, KNIRSCH served as the head of technical development for all of Audi and sat on the management board for Audi. In this capacity, KNIRSCH oversaw Audi's team of engineers responsible for designing emissions control systems to meet emissions standards, including for nitrogen oxides (NOx), for diesel vehicles in the U.S. From about 2006, Audi employees began to design a new 3.0 liter diesel engine that would be placed in certain VW, and Audi diesel vehicles sold in the U.S. for the 2009 through 2016 model years. KNIRSCH and his co-conspirators realized they could not calibrate a diesel engine that would meet the stricter U.S. NOx emissions standards that would become effective in 2007, within the design constraints imposed by other departments at the company.

Nevertheless, in order to market and sell vehicles with the Audi diesel engine in the U.S., KNIRSCH and his co-conspirators directed Audi employees to design and implement defeat devices, called a "dosing strategy" and a "warm-up function," that is, software functions that were designed to cheat the standard U.S. emissions tests. While designing and implementing the defeat devices, KNIRSCH and his co-conspirators knew that U.S. regulators would measure Audi's diesel vehicles' emissions through standard tests with specific, published drive cycles. Audi employees designed the Audi defeat devices to recognize whether the vehicle was undergoing standard U.S. emissions testing on a dynamometer or whether the vehicle was being driven on the road. If the vehicle's software detected driving test conditions, the vehicle performed in one mode, which satisfied U.S. NOx emissions standards. If the software detected that the vehicle was not being tested, it operated in a different mode, in which the vehicle's emissions control systems were reduced substantially, causing the vehicle to emit substantially elevated levels of NOx. On about 04 July 2008, KNIRSCH received advanced warning from an Audi employee responsible for certification that managers in the certification department had concluded the "dosing strategy" was "indefensible," because it "is a plain Defeat Device and is not certifiable."

Starting with model year 2009, through model year 2016, KNIRSCH and his co-conspirators, and others, installed, and caused to be installed the software to implement the defeat devices in the vehicles marketed and sold in the U.S. KNIRSCH and his co-conspirators marketed, and caused to be marketed the vehicles to the U.S. public as "clean diesel," when they knew that these representations made to U.S. customers were false, and that the vehicles were intentionally designed to detect, evade, and defeat U.S. emissions standards, and that the vehicles were polluting the environment with NOx emissions well above U.S. emission limits.

In order to sell motor vehicles in the U.S., manufacturers had to obtain a certificate of conformity from the EPA. In order to sell motor vehicles in the State of California, CARB issued its own certificates, called executive orders. To obtain such a certificate, the manufacturer was required to satisfy the standards set forth by the State of California, which were equal to or more stringent than those of the EPA. VW Engineering and Environmental Office (EEO), located in the Eastern District of Michigan, submitted applications for certificates of conformity to EPA, and submitted applications for an executive order to CARB, to obtain authorization to sell Audi vehicles in the U.S. and in California. Between 2008 and 2015, Audi and VW employees met with the EPA and CARB officials (U.S. regulators) to seek the certifications required to sell the vehicles in the U.S. During these meetings, KNIRSCH and his co-conspirators deliberately failed to disclose the defeat devices, and misrepresented, and caused to be misrepresented to U.S. regulators that the vehicles complied with U.S. NOx emissions standards, when they knew the vehicles did not. On about 23 March 2009, to obtain certification, KNIRSCH's co-conspirators caused VW employees to send CARB officials a letter affirmatively misrepresenting that there were no defeat devices in the model year 2009 vehicles. Also, as part of the certification process for each new model year, KNIRSCH and his co-conspirators falsely and fraudulently certified, and caused to be certified to U.S. regulators that the vehicles met U.S. emissions standards, and complied with standards prescribed by the Clean Air Act.

KNIRSCH is specifically charged with two counts of violating the Clean Air Act by making false statements under the Clean Air Act. On about 13 February 2014, and on about 16 December 2014, KNIRSCH knowingly omitted, and caused to be omitted the material fact of the installation of the defeat device in the application for the certificate of conformity submitted to the EPA for the 3.0 liter diesel 2015 model year Audi A8, A8L, Q5 and A6 Quattro, and for the 3.0 liter diesel 2015 model year Audi Q7, respectively. On both occasions, KNIRSCH knowingly and falsely certified, and caused to be certified that any element of design, system, or emission control installed on, or incorporated in such vehicles would not cause the release of pollutants into the ambient air.

In about March 2014, KNIRSCH and certain other Audi employees learned of the results of a third-party study undertaken into NOx emissions of certain tested vehicles, which identified substantial discrepancies between emission test results and real driving emissions for two of VW's 2.0 liter vehicles. In communications and meetings with U.S. regulators, KNIRSCH and his co-conspirators concealed, and caused Audi employees to conceal the existence of the defeat devices in Audi 3.0 liter diesel vehicles. On about 24 March 2015, KNIRSCH's co-conspirators and other Audi employees met with CARB officials in El Monte, California. KNIRSCH falsely indicated that the Audi 3.0 liter diesel vehicles did not have similar issues to the VW 2.0 liter diesel vehicles, and knowingly presented false and misleading information, which concealed the existence of the defeat devices, to obtain certification of the model year 2016 diesel vehicles. In about November 2015, KNIRSCH's co-conspirators directed a group of Audi engineers to omit key facts about the defeat devices from a presentation they prepared for U.S. regulators to address allegations of emissions cheating.

KNIRSCH is also charged with two specific counts of wire fraud, for receiving two emails from an employee of VW Group of America, Inc., in Michigan. On 05 March 2014, KNIRSCH and others received an email with "Headlines" from EEO, which includes notification of approval of the certificate of conformity related to model year 2015 Audi Q7, A8, A8L, Q5, A6, and A7. On about 2 February 2015, KNIRSCH and others in Michigan received an email with an attachment regarding a draft response to questions from CARB about portable emissions measurement system (PEMS) test results.

# FUGITIVE WANTED FOR PROSECUTION

## ARREST WARRANT OR JUDICIAL DECISION 1/1

**Charge(s):** 1) Conspiracy to defraud the U.S., to commit wire fraud, and to violate the Clean Air Act  
2) Violation of the Clean Air Act (2 counts)  
3) Wire Fraud (2 counts)

**Law covering the offence(s):** 1) Title 18, U.S. Code, Section 371  
2) Title 42, U.S. Code, Section 7413(c)(2)(A); and Title 18, U.S. Code, Section 2  
3) Title 18, U.S. Code, Sections 1343 and 2

**Maximum penalty possible:** Years: 20  
Details: 1) 5 years imprisonment  
2) 2 years imprisonment per count  
3) 20 years imprisonment per count

**Time limit for prosecution or expiry date of arrest warrant:** No time-limit

### Arrest warrant or judicial decision having the same effect

Number	Date of issue	Issued or handed down by	Country
19-cr-20033	26 February 2019	U.S. District Court Eastern District of Michigan	United States

**Name of signatory:** Deborah Tyler, Deputy Clerk  
Copy of arrest warrant available at the General Secretariat in the language used by the requesting country: No

## 3. ACTION TO BE TAKEN IF TRACED

### LOCATE AND ARREST WITH A VIEW TO EXTRADITION:

Assurances are given that extradition will be sought upon arrest of the person, in conformity with national laws and/or the applicable bilateral and multilateral treaties.

### PROVISIONAL ARREST:

This request is to be treated as a formal request for provisional arrest, in conformity with national laws and/or the applicable bilateral and multilateral treaties.

Immediately inform NCB WASHINGTON United States of America (NCB reference: 20190415443 of 27 September 2019) and the ICPO-INTERPOL General Secretariat that the fugitive has been found.