SEALED BY ORDER OF COURT

FILED

AUG 15 2019

SUSAN Y. SOONG
CLERK, U.S. DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE

DAVID L. ANDERSON (CABN 149604)
United States Attorney

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

UNITED STATES OF AMERICA, Plaintiff, v. ANTHONY SCOTT LEVANDOWSKI, Defendant.	CR 19 00377 LHK SVK VIOLATIONS: Title 18, United States Code, Sections 1832(a)(1), (2), (3) & (4) – Theft and Attempted Theft of Trade Secrets; Title 18, United States Code, Sections 1843 and 2323 – Criminal Forfeiture. San Jose Venue

INDICTMENT

The Grand Jury charges:

Introductory Allegations

1. In or about 2009, Google Inc. ("Google") began a self-driving car project known within the company as Project Chauffeur. Google employees working on Project Chauffeur designed and developed both the hardware and software necessary for fully autonomous vehicles. Self-driving vehicles, and many of their component parts, were intended for use in interstate commerce. At all times relevant to this Indictment, Google owned all of the Project Chauffeur intellectual property, including but not limited to, the trade secrets at issue. Google was headquartered, and Project Chauffeur maintained offices in, Mountain View, California.

2. In December 2016, after the events outlined in this Indictment, Project Chauffeur became

Waymo, a stand-alone company with over 600 employees. Waymo operated alongside Google and other technology companies under the umbrella of Alphabet Inc.

3. Uber Technologies, Inc. ("Uber") began as a ridesharing app in or about 2009. By 2015, Uber had expanded its business to include food delivery and other logistics. That same year, Uber began investing in autonomous vehicle technologies. At all times relevant to this Indictment, Uber was headquartered in San Francisco, California.

4. Anthony LEVANDOWSKI joined Google as an engineer in or about April 2007. He was one of the founding members of Project Chauffeur. In or about 2007, 2009, and 2012, LEVANDOWSKI signed employment agreements with Google. Each employment agreement contained, among other provisions, a Confidential Information paragraph, which obligated LEVANDOWSKI to hold Google's Confidential Information, including trade secrets, in confidence. On or about January 27, 2016, LEVANDOWSKI resigned from Google without notice. At the time of his departure, LEVANDOWSKI was in charge of the Light Detection and Ranging (LiDAR) engineering team within Project Chauffeur.

5. Without disclosing it to Google, in or about the spring of 2012, LEVANDOWSKI participated in the formation of a LiDAR company later incorporated as Odin Wave LLC ("Odin Wave"). Odin Wave had a handful of employees and offices in Berkeley, California. The company worked to develop a high-accuracy mapping LiDAR sensor. In or about late 2013, Odin Wave began doing business as Tyto LiDAR LLC ("Tyto") and moved to offices in San Leandro, California. Paperwork formalizing the name change was filed in or about February 2014. By 2015, Tyto was attempting to market its LiDAR technology to self-driving companies, including Uber.

6. No later than in or about September 2015, LEVANDOWSKI decided to leave Google and form a new self-driving company. LEVANDOWSKI's new company was initially called 280 Systems, Inc. but later changed its name to Ottomotto Inc. ("Ottomotto"). In or about fall 2015, LEVANDOWSKI began having discussions with executives at Uber regarding Uber potentially making an investment in or acquiring Ottomotto. Those negotiations intensified in December 2015 and January 2016, with Uber and Ottomotto signing a term sheet in February 2016.

7. On or about April 11, 2016, Uber's Board of Directors approved the Uber/Ottomotto

transaction. Shortly thereafter, Ottomotto acquired Tyto. Uber's acquisition of Ottomotto closed in August 2016. (By the time of the acquisition, Ottomotto had been re-incorporated as Ottomotto LLC and Otto Trucking LLC.)

The Technology

8. The technology and information at issue involved the research, development, and production of LiDAR technology for self-driving vehicles. A LiDAR sensor is typically mounted on the exterior of a self-driving vehicle. It works by sending out an array of high-power, pulsing lasers into the surrounding environment. The laser beams bounce off surrounding objects and return to the sensor, which measures the qualities of the return signals to determine the size, shape, and distance of surrounding objects. Self-driving companies have used LiDAR for critical functions, including but not limited to, mapping and perception. For mapping, LiDAR can be used to create a three-dimensional map of the static environment in which the vehicle will operate. Regarding perception, LiDAR dynamically detects what is happening around a vehicle as it travels through the previously mapped environment. In real time, it provides information to the vehicle about other vehicles, pedestrians, and obstacles on the road.

9. Through years of research and testing, and millions of dollars in investment, Project Chauffeur developed its own customized LiDAR systems. Those custom systems were used for both mapping and perception and consisted of thousands of individual hardware and software components. The success of the LiDAR effort was critical to the overall success of Project Chauffeur. Moreover, having custom LiDAR, as opposed to commercially available LiDAR, was a key differentiator between Project Chauffeur and its competitors in the 2015 and 2016 timeframe.

10. The Google employees working on Project Chauffeur used secure, password-protected repositories to store their files, with access available to employees in the course of their job responsibilities, as authenticated by valid user credentials. Project Chauffeur's repositories included the following:

a. SVN: Project Chauffeur engineers used computer-assisted design (CAD) software to design hardware, including custom LiDAR. CAD files, including circuit board drawings and schematics, were housed on a subversion, or SVN, server hosted on Google's network. To

access SVN, Project Chauffeur employees had to email the SVN administrator to request a username and password.

b. Google Drive: The Project Chauffeur team used Google's corporate drive as a repository for non-CAD files, such as presentations and spreadsheets. Only Google employees could access this Drive, after authentication of their credentials on the Google network.

11. In the months before his departure from Google, LEVANDOWSKI downloaded thousands of Project Chauffeur files. On or about December 11, 2015, he downloaded approximately 14,000 files from SVN. These files contained critical engineering information about the hardware used on Project Chauffeur self-driving vehicles, including schematics for the printed circuit boards used in various custom LiDAR products. On or about December 14, 2015, LEVANDOWSKI transferred the SVN files from his Google laptop to his personal laptop. Additionally, between in or about October 2015 and January 2016, LEVANDOWSKI downloaded, directly to his personal laptop, at least 20 files from the Google Drive, including instructions for calibrating and tuning Google's custom LiDAR and an internal tracking document setting forth, among other things, technical goals for each team within Project Chauffeur.

COUNTS ONE THROUGH THIRTY-THREE: (18 U.S.C. §§ 1832(a)(1), (2), (3) & (4) – Theft and Attempted Theft of Trade Secrets)

12. The allegations contained in Paragraphs 1 through 11 are realleged and incorporated as if fully set forth herein.

13. On or about the dates set forth in the separate counts below, in the Northern District of California and elsewhere, the defendant,

ANTHONY SCOTT LEVANDOWSKI,

intending to convert a trade secret that was related to a product and service used in and intended for use in interstate and foreign commerce to the economic benefit of anyone other than the owner of that trade secret, and knowing and intending that the offense would injure the owner of that trade secret, as specifically alleged in each of Counts One through Thirty-three below:

a. knowingly stole, and without authorization appropriated, took, carried away, concealed,

and by fraud, artifice, and deception obtained trade secrets belonging to Google, and attempted to do so;

b. knowingly and without authorization copied, duplicated, sketched, drew, downloaded, uploaded, altered, photocopied, replicated, transmitted, delivered, sent, communicated, and conveyed trade secrets belonging to Google and attempted to do so; and

c. knowingly and without authorization received, bought, and possessed trade secrets belonging to Google, and attempted to do so, knowing the same to have been stolen and appropriated, obtained, and converted without authorization:

Count	Date	File Name	Description	Source
One	12-11-15	projects/Laser/GBr/gbr-laser-module/3-1-0/gbr-laser-moduleA-3-1-0/laserA.PcbDoc	Transmit Block Configuration	SVN
Two	12-11-15	projects/Laser/GBr/gbr-laser-module/3-1-0/gbr-laser-moduleB-3-1-0/laserB.PcbDoc	Transmit Block Configuration	SVN
Three	12-11-15	projects/Laser/GBr/gbr-laser-module/3-1-0/gbr-laser-moduleC-3-1-0/laserC.PcbDoc	Transmit Block Configuration	SVN
Four	12-11-15	projects/Laser/GBr/gbr-laser-module/3-1-0/gbr-laser-moduleD-3-1-0/laserD.PcbDoc	Transmit Block Configuration	SVN
Five	12-11-15	projects/Laser/GBr/gbr-laser-module/3-1-0/gbr-laser-moduleE-3-1-0/laserE.PcbDoc	Transmit Block Configuration	SVN
Six	12-11-15	projects/Laser/GBr/gbr-laser-module/3-1-0/gbr-laser-moduleF-3-1-0/LsrBrdF.PcbDoc	Transmit Block Configuration	SVN
Seven	12-11-15	projects/Laser/GBr/gbr-motherboard/gbr-motherboard_3-0-0/receiver.SchDoc	Receiver Schematic and Structure	SVN
Eight	12-11-15	projects/Laser/GBr/gbr-motherboard/gbr-motherboard_3-0-0/DAC_rcvr.SchDoc	Receiver DAC Circuit	SVN
Nine	12-11-15	projects/Laser/GBr/gbr-motherboard/gbr-motherboard_3-0-0/flop.SchDoc	Receiver Flip-flop Circuit	SVN
Ten	12-11-15	projects/Laser/GBr/gbr-motor/gbr-motor_2-5-0/gbr-motor.PcbDoc	Motor Design	SVN
Eleven	12-11-15	projects/Laser/PBr/pbr-motor-pcb/pbr-motor-pcb_1-1-4/pbr-motor.PcbDoc	Motor Design	SVN

Twelve	12-11-15	projects/Laser/PBr/pbr-flex-clock/pbr-flex-clock_1-4-1/pbr-flex-clock.PcbDoc	Use and Structure of a Flex PCB	SVN
Thirteen	12-11-15	projects/Laser/PBr/pbr-receiver/pbr-receiver_1-4-1/apd.SchDoc	APD Circuit Design	SVN
Fourteen	12-11-15	projects/Laser/PBr/pbr-motherboard/pbr-motherboard-1-14-0/receiver.SchDoc	Receiver Schematic and Structure	SVN
Fifteen	12-11-15	projects/Laser/PBr/pbr-motherboard/pbr-motherboard-1-14-0/DAC_rcvr.SchDoc	Receiver DAC Circuit	SVN
Sixteen	12-11-15	projects/Laser/PBr/pbr-motherboard/pbr-motherboard-1-14-0/flop.SchDoc	Receiver Flip-flop Circuit	SVN
Seventeen	12-11-15	projects/Laser/PBr/pbr-motherboard/pbr-motherboard-1-14-0/APD_BIAS.SchDoc	APD Circuit Design	SVN
Eighteen	12-11-15	projects/Laser/KBr/kbr-motherboard/kbr-motherboard-1-5-0/pulse_shaper.SchDoc	Pulse Control Circuit	SVN
Nineteen	12-11-15	projects/Laser/TBr/tbr-motherboard/tbr-motherboard_4-2-0/receiver.SchDoc	Receiver Schematic and Structure	SVN
Twenty	12-11-15	projects/Laser/TBr/tbr-motherboard/tbr-motherboard_4-2-0/DAC_rcvr.SchDoc	Receiver DAC Circuit	SVN
Twenty-one	12-11-15	projects/Laser/TBr/tbr-motherboard/tbr-motherboard_4-2-0/flop.SchDoc	Flip-flop Circuit	SVN
Twenty-two	12-11-15	projects/Laser/YBr/ybr-pulser/ybr-pulser_1-1-0/driver.SchDoc	Laser Pulse Driver Design	SVN
Twenty-three	12-11-15	projects/Laser/YBr/ybr-rx-module/ybr-rx-module_1-0-0/ybr-rx_module.SchDoc	Receiver Module Design	SVN
Twenty-four	12-11-15	projects/Laser/BBr/bbr-motherboard/bbr-motherboard_1-0-0/driver.SchDoc	Laser Pulse Driver Design	SVN
Twenty-five	12-11-15	projects/Laser/CBr/laser_module_test/laser_module_test_1-0-2B/laser.SchDoc	Laser Pulser Circuit Schematic	SVN
Twenty-six	12-11-15	projects/Laser/CBr/laser_module_test/spice_sim/laser_module_1-0-1.asc	Simulation Models for Laser Pulser Circuit	SVN
Twenty-seven	11-19-15	Google Fiber Laser for Lidar	Presentation re Project Chauffeur's Unique Fiber Laser Design	Google Drive

Twenty-eight	12-18-15	Thermal Rotary Coupling	Presentation re LiDAR Engineering Issue	Google Drive
Twenty-nine	01-04-16	PBR Intensity Calibration	Instructions for how to calibrate long-range LiDAR intrinsic properties once it is installed on vehicle	Google Drive
Thirty	01-04-16	Pbr Extrinsic Calibration	Instructions for how to calibrate long-range LiDAR to function properly with mid-range LiDAR on vehicle	Google Drive
Thirty-one	01-04-16	Tx and Rx tuning Instructions	Instructions for checking that the laser in the long-range LiDAR is positioned correctly and meets certain criteria	Google Drive
Thirty-two	01-04-16	TBR TESTING STATION	Manual for various quality control tests and assembly steps to be performed on short-range LiDAR during manufacturing	Google Drive
Thirty-three	01-11-16	Chauffeur TL weekly updates - Q4 2015	Internal Project Chauffeur Tracking and Planning Document	Google Drive

Each in violation of Title 18, United States Code, Sections 1832(a)(1), (2), (3) & (4).

FORFEITURE ALLEGATION: (18 U.S.C. §§ 1834 and 2323 – Proceeds and Property Involved in Theft of Trade Secrets)

14. The allegations contained in Counts One through Thirty-three of this Indictment are hereby realleged and incorporated as if fully set forth here. Upon conviction of any of those offenses, the defendant,

ANTHONY SCOTT LEVANDOWSKI,

shall forfeit to the United States of America, pursuant to Title 18, United States Code, Sections 1834 and 2323, any property used, or intended to be used, in any manner or part to commit or facilitate the

commission of the offenses, and any property constituting or derived from any proceeds obtained directly or indirectly as a result of the commission of the offenses.

15. If any of the property described above, as a result of any act or omission of the defendant:

a. cannot be located upon the exercise of due diligence;

b. has been transferred or sold to, or deposited with, a third party;

c. has been placed beyond the jurisdiction of the court;

d. has been substantially diminished in value; or

e. has been commingled with other property which cannot be divided without difficulty,

the United States of America shall be entitled to forfeiture of substitute property pursuant to Title 21, United States Code, Section 853(p), as incorporated by Title 18, United States Code, Section 2323(b).

All pursuant to Title 18, United States Code, Sections 1834 and 2323.

DATED: 8-15-19

A TRUE BILL.

FOREPERSON

DAVID L. ANDERSON
United States Attorney

KATHERINE L. WAWRZYNIAK
ANDREW F. DAWSON
AMIE D. ROONEY
Assistant United States Attorneys

AO 257 (Rev. 6/78)

SEALED BY ORDER OF COURT

DEFENDANT INFORMATION RELATIVE TO A CRIMINAL ACTION - IN U.S. DISTRICT COURT

BY: ☐ COMPLAINT ☐ INFORMATION ☒ INDICTMENT ☐ SUPERSEDING

Name of District Court, and/or Judge/Magistrate Location

NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

OFFENSE CHARGED

18 U.S.C. § 1832(a)(1), (2), (3) & (4) – Theft and Attempted Theft of Trade Secrets; and
18 U.S.C. §§ 1843 and 2323 – Criminal Forfeiture.

☐ Petty
☐ Minor
☐ Misdemeanor
☒ Felony

PENALTY: Maximum Penalties (per Count):
10 years imprisonment;
$250,000 fine, or twice the gross gain/loss;
$100 special assessment; and
3 years' supervised release.

DEFENDANT - U.S

Anthony Scott Levandowski

DISTRICT COURT NUMBER

CR 19 00377 LHK

SVK

DEFENDANT

IS *NOT* IN CUSTODY

1) ☒ Has not been arrested, pending outcome this proceeding. If not detained give date any prior summons was served on above charges ▶

2) ☐ Is a Fugitive

3) ☐ Is on Bail or Release from (show District)

FILED

AUG 15 2019

SUSAN Y. SOONG
CLERK, U.S. DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE

IS IN CUSTODY

4) ☐ On this charge

5) ☐ On another conviction } ☐ Federal ☐ State

6) ☐ Awaiting trial on other charges

If answer to (6) is "Yes", show name of institution

Has detainer been filed? ☐ Yes ☐ No } If "Yes" give date filed

DATE OF ARREST ▶ Month/Day/Year

Or... if Arresting Agency & Warrant were not

DATE TRANSFERRED TO U.S. CUSTODY ▶ Month/Day/Year

PROCEEDING

Name of Complaintant Agency, or Person (& Title, if any)

Federal Bureau of Investigation

☐ person is awaiting trial in another Federal or State Court, give name of court

☐ this person/proceeding is transferred from another district per (circle one) FRCrp 20, 21, or 40. Show District

☐ this is a reprosecution of charges previously dismissed which were dismissed on motion of: ☐ U.S. ATTORNEY ☐ DEFENSE } SHOW DOCKET NO.

☐ this prosecution relates to a pending case involving this same defendant

☐ prior proceedings or appearance(s) before U.S. Magistrate regarding this defendant were recorded under } MAGISTRATE CASE NO.

Name and Office of Person Furnishing Information on this form DAVID L. ANDERSON

☒ U.S. Attorney ☐ Other U.S. Agency

Name of Assistant U.S. Attorney (if assigned) Katherine L. Wawrzyniak

☐ This report amends AO 257 previously submitted

ADDITIONAL INFORMATION OR COMMENTS

PROCESS:

☐ SUMMONS ☐ NO PROCESS* ☒ WARRANT Bail Amount: No bail

If Summons, complete following:
☐ Arraignment ☐ Initial Appearance

Defendant Address:

** Where defendant previously apprehended on complaint, no new summons or warrant needed, since Magistrate has scheduled arraignment*

Date/Time: Before Judge:

Comments: