ARREST WARRAT/DETERTION



UNITED STATES DISTRICT COURT

Central District of California $\int_{\mathbb{R}^{T}}^{\mathbb{C}_{L}}$	
v.	the best of the same
Yi-Chi Shih ("SHIH") and Kiet Ahn Mai ("MAI"),	Case No. 18 - 0097
Defendant(s)	
CRIMINAI	L COMPLAINT
I, the complainant in this case, state that the fo	ollowing is true to the best of my knowledge and belief:
(1) From an unknown date but no later than February	15, 2013, and continuing to October 19, 2015, in the
County of Los Angeles in the Central District of Calif	-
Code Section	Offense Description
Couc Beenon	Offense Description
18 U.S.C. § 371	Conspiracy
(2) And, on or about December 30, 2013, in the Coundefendant SHIH violated:	ty of Los Angeles in the Central District of California,
Code Section	Offense Description
50 U.S.C. § 1705(a), 18 U.S.C. § 2	The International Emergency Economic Powers Act ("IEEPA")
This criminal complaint is based on these facts:	
Please see attached affidavit.	
Continued on the attached sheet.	. /
Continued on the attached sheet.	/5/
	Complainant's signature
	Alexander Storino, Special Agent
	Printed name and title
Sworn to before me and signed in my presence.	Action Acres
Date: JAN 16 2018	PAUL L. ABRAMS
	Judge's signature
City and state: Los Angeles, California	Hon. Paul L. Abrams, U.S. Magistrate Judge
	Printed name and title

AFFIDAVIT

I, Alexander Storino, being duly sworn, depose and state as follows:

I. INTRODUCTION

- 1. I am a Special Agent ("SA") with the Federal Bureau of Investigation ("FBI") and have been so employed since 2009. I am currently assigned to the Los Angeles Field Office, Long Beach Resident Agency. In the course of my duties, I am responsible for investigating the illegal transfer from the United States of commodities, information, and services that are regulated by the U.S. Departments of State, Commerce, and the Treasury. Many of these commodities include "dual use" controlled commodities, that is, commodities that can be used for both commercial and military purposes by adversaries or potential adversaries of the United States.
- 2. My training and experience have provided me with an understanding of the export control laws of the United States, and the related regulations of the U.S. Department of State's Directorate of Defense Trade Control ("DDTC"), the U.S. Department of Commerce's Bureau of Industry and Security ("BIS"), and the Department of the Treasury's Office of Foreign Assets Control ("OFAC"). In addition, based on my experience investigating violations of U.S. export laws and regulations, I know that other criminal violations are often associated with these violations, including conspiracy, fraud and related activity in connection with computers, mail and wire fraud, and international money laundering.

3. I have received both formal and informal training from the FBI and other institutions regarding computer technology and the investigation of electronic communications. I am familiar with related laws, the interpretation and application of federal laws and federal court procedures, and have previously assisted in the execution of numerous federal search and arrest warrants, including search warrants for the search of e-mail accounts, computers, and digital media and associated storage devices.

II. PURPOSE OF AFFIDAVIT

- 4. This affidavit is made in support of a criminal complaint against, and arrest warrants for, Yi-Chi Shih ("SHIH") and Kiet Ahn Mai ("MAI"), hereinafter referenced collectively as "defendants," for a violation of 18 U.S.C. § 371 (Conspiracy). In violating 18 U.S.C. § 371, SHIH and MAI conspired to violate: 18 U.S.C. § 1030(a)(2)(C) (Fraud and Related Activity in Connection with Computers); 18 U.S.C. § 1341 (Mail Fraud); 18 U.S.C. § 1343 (Wire Fraud); and 18 U.S.C. § 1956(a)(2)(A) (International Money Laundering). Additionally, this affidavit is made in support of a separate charge against SHIH, namely, violating 50 U.S.C. § 1705(a) (Violating the International Emergency Economic Powers Act ("IEEPA")).
- 5. The facts set forth in this affidavit are based upon my personal observations, my training and experience, and information obtained from various law enforcement personnel and witnesses, including employees of the FBI, the United States Customs and Border Protection Service ("CBP"), the United States Department of Commerce's Bureau of Industry and Security's

Office of Export Enforcement ("OEE"), and the victim company, U.S. Company B. This affidavit is intended to show merely that there is sufficient probable cause for the requested complaint and warrants and does not purport to set forth all of my knowledge of or investigation into this matter. Unless specifically indicated otherwise, all conversations and statements described in this affidavit are related in substance and in part only. This affidavit is intended to show merely that there is sufficient probable cause for the requested complaint and warrants and does not purport to set forth all of my knowledge of or investigation into this matter. Unless specifically indicated otherwise, all conversations and statements described in this affidavit are related in substance and in part only, and if originally in a foreign language, in reliance on draft and/or automated English-language translations. Further, all dates are approximate, and all email communications described in this affidavit are based on my review of e-mail communications obtained by law enforcement during the investigation of this case.

III. SUMMARY OF PROBABLE CAUSE

- 6. Based on my training, experience, and the facts as set forth in this affidavit, there is probable cause to believe that violations of 18 U.S.C. § 371 and 50 U.S.C. § 1705 have been committed.
- 7. Defendants conspired to execute a scheme to procure and unlawfully export United States technology and products to the People's Republic of China ("PRC" or "China"). The

conspiracy's goals included violations of multiple federal laws, including IEEPA, fraud and related activities with computers, mail and wire fraud, and international money laundering. conspiratorial network included at least three companies -Pullman Lane Productions, LLC ("PULLMAN LANE"), L2kontemporary, Inc. dba MicroEx Engineering ("MICROEX"), and Chengdu GaStone Technology Company, Ltd. ("CGTC").1 In addition, money was transferred to and from a bank account held by JYS Technologies, Inc. ("JYS TECH") in Canada. Defendants' criminal activities included the execution of a scheme to defraud U.S. Company B of its proprietary, export-controlled technology associated with its monolithic microwave integrated circuit ("MMIC") design services, its commercial advantage in the area of MMIC design and design services, and its future financial gain associated with the sale of its design services and products. furtherance of the scheme, defendants gained access to U.S. Company B's computer systems via its web portal by posing as a U.S.-based customer seeking to obtain custom-designed MMICs for use solely in the United States. The conspirators concealed from U.S. Company B defendant SHIH's true intent to transfer its technology and products to the PRC. To carry out the scheme, defendants communicated via e-mail and transferred funds

¹ PULLMAN LANE Productions, LLC (SHIH's company), and MICROEX Engineering (MAI's company) are located in Los Angeles, California; the assets of these entities appear to consist of the funds in bank accounts. Chengdu GaStone Technology Company, Ltd. is a primarily Chinese-based entity located in Chengdu, China.

² The JYS TECH bank account is controlled by a participant in the conspiracy.

electronically in a manner that concealed the true nature of the scheme.

- 8. SHIH, a United States citizen who resides part-time in Los Angeles, and part-time in foreign locations, including China, is an electrical engineer and former employee of United States defense contractors. Beginning in approximately 2011, SHIH held the position of "President" of CGTC. CGTC established in Chengdu, China, a semiconductor fabrication plant in which MMICs, a type of integrated circuit ("IC") device, would be manufactured.
- 9. On August 1, 2014, BIS placed CGTC on its Entity List due to its involvement in activities contrary to the national security and foreign policy interest of the United States -- specifically, that it had been involved in the illicit procurement of commodities and technologies for unauthorized military end use in China. See 79 FR 44681, 8/1/2014. CGTC has remained on the Entity List continuously since August 1, 2014. As a result of its placement on the Entity List, a license from BIS was required to export, reexport, or transfer (in-country) any item subject to the Export Administration Regulations ("EAR") to CGTC, and there was a presumption of denial of a license. See 79 FR 44684, 8/1/2014; 15 CFR § 744.11.3

 $^{^3}$ The EAR imposes controls on the export of items (that is, commodities, software, and technology) to foreign countries. See 15 C.F.R. § 772.1 (definition of "item"). "Subject to the EAR" is a term used in the EAR to describe those items and activities over which BIS exercises regulatory jurisdiction under the EAR. Items that "are subject to the EAR" include all items in the United States and all U.S.-origin items wherever

10. From 2010 to the present, bank accounts held in the name of PULLMAN LANE have received substantial wire transfers (up to \$1,000,000) from international companies, including one located in China that has also been on the Entity list since August 2014. These wire transfers occurred both before and after CGTC was placed on Entity list.

IV. SUMMARY OF APPLICABLE LAWS

11. Based on my training and experience, I know the information set forth below in paragraphs 12 through 23.

A. IEEPA and the Export Administration Regulations

- 12. Pursuant to the International Emergency Economic

 Powers Act ("IEEPA"), the President is granted the authority to

 declare a national emergency to address unusual and

 extraordinary threats to the national security, foreign policy,

 and economy of the United States. The President declares a

 national emergency through executive orders that have the full

 force and effect of law.
- 13. Pursuant to IEEPA, on August 17, 2001, the President issued Executive Order 13,222, which declared a national

located, irrespective of whether a license is required for the export of that item (with certain exceptions described below). 15 C.F.R. § 734.3(a)(1), (2); id. § 734.2(a)(3). Activities of U.S. or foreign persons prohibited by any order issued under the EAR are also "subject to the EAR." 15 C.F.R. § 734.5. Items not subject to the EAR are items exclusively controlled for export by other federal agencies and other specified items not relevant here. See 15 C.F.R. § 734.3(b). No person may engage in, cause, aid and abet, or conspire to engage in any conduct prohibited by or contrary to the EAA (the Export Administration Act, which has been in lapse since 2001), the EAR, or any order issued thereunder. 15 C.F.R. § 764.2; see also §§ 736.2 (general prohibitions), 744.11 (relating to Entity List), Part 738 Supp. 1 (Commerce Country Chart), and Part 774 Supp. 1 (Entity List).

emergency with respect to the unusual and extraordinary threat to the national security, foreign policy and economy of the United States in light of the expiration of the Export Administration Act, 50 App. U.S.C. §§ 2401-2420, which lapsed on August 17, 2001. 66 Fed. Reg. 44,025 (Aug. 22, 2001). While in effect, the EAA regulated the export of goods, technology, and software from the United States. Pursuant to the provisions of the EAA, the Department of Commerce ("DOC")'s Bureau of Industry and Security ("BIS") promulgated the Export Administration Regulations ("EAR"), 15 C.F.R. §§ 730-774, which contained restrictions on the export of goods outside of the United States, consistent with the policies and provisions of the EAA. See 15 C.F.R. § 730.2. In Executive Order 13,222, pursuant to IEEPA, the President ordered that the EAR's provisions remain in full force and effect despite the expiration of the EAA. Presidents have issued annual Executive Notices extending the national emergency declared in Executive Order 13,222 from the time period covered by that Executive Order through the present. See, e.g., 82 Fed. Reg. 39,005 (Aug. 18, 2017).

14. Pursuant to its authority derived from IEEPA, the DOC reviews and controls the export of certain goods and technologies from the United States to foreign countries. In particular, the DOC has placed restrictions on the export of goods and technologies that it has determined could make a significant contribution to the military potential or nuclear proliferation of other nations or that could be detrimental to the foreign policy or national security of the United States.

- 15. The EAR contain a list of names of certain foreign persons including businesses, research institutions, government and private organizations, individuals, and other types of legal persons that are subject to specific license requirements for the export, re-export and/or in-country transfer of specified items. These persons comprise the DOC's "Entity List," which is found at Title 15, Code of Federal Regulations, Part 744, Supplement No. 4. Grounds for inclusion on the Entity List include activities sanctioned by the U.S. State Department and activities contrary to U.S. national security and/or foreign policy interests.
- 16. The persons on the Entity List are subject to export licensing requirements and policies supplemental to those found elsewhere in the EAR.
- 17. It is a federal felony to willfully commit, attempt to commit, conspire to commit, aid and abet the commission of, or to cause a violation of any license, order, regulation, or prohibition issued under IEEPA. 50 U.S.C. § 1705(a), (c).

B. Conspiracy

18. Title 18, United States Code, Section 371 (Conspiracy) provides:

If two or more persons conspire either to commit any offense against the United States, or to defraud the United States, or any agency thereof in any manner or for any purpose, and one or more of such persons do any act to effect the object of the conspiracy, each shall be fined under this tile or imprisoned not more than five years, or both.

C. Fraud and Related Activity in Connection with Computers

19. Title 18, United States Code, Section 1030(a)(2)(C), provides, in pertinent part:

Whoever . . . intentionally accesses a computer without authorization or exceeds authorized access, and thereby obtains . . . information from any protected computer [commits a crime].

D. Mail and Wire Fraud

20. Title 18, United States Code, Section 1341, provides, in pertinent part:

Whoever, having devised or intending to devise any scheme or artifice to defraud, or for obtaining money or property by means of false or fraudulent pretenses, representations, or promises, . . . for the purpose of executing such scheme or artifice or attempting so to do, places in any post office or authorized depository for mail matter, any matter or thing whatever to be sent or delivered by the Postal Service, or deposits or causes to be deposited any matter or thing whatever to be sent or delivered by any private or commercial interstate carrier, or takes or receives therefrom, any such matter or thing, or knowingly causes to be delivered by mail or such carrier according to the direction thereon, or at the place at which it is directed to be delivered by the person to whom it is addressed, any such matter or thing, shall be fined under this title or imprisoned not more than 20 years, or both.

21. Title 18, United States Code, Section 1343, provides:

Whoever, having devised or intending to devise any scheme or artifice to defraud, or for obtaining money or property by means of false or fraudulent pretenses, representations, or promises, transmits or causes to be transmitted by means of wire, radio, or television communication in interstate or foreign commerce, any writings, signs, signals, pictures, or sounds for the purpose of executing such scheme or artifice, shall be fined under this title or imprisoned not more than 20 years, or both.

E. International Money-Laundering

- 22. Title 18, United States Code, Section 1956(a)(2) provides:
 - (2) Whoever transports, transmits, or transfers, or attempts to transport, transmit, or transfer a monetary instrument or funds from a place in the United States to or through a place outside the United States or to a place in the United States from or through a place outside the United States—
 - (A) with the intent to promote the carrying on of specified unlawful activity; or
 - (B) knowing that the monetary instrument or funds involved in the transportation, transmission, or transfer represent the proceeds of some form of unlawful activity and knowing that such transportation, transmission, or transfer is designed in whole or in part—
 - (i) to conceal or disguise the nature, the location, the source, the ownership, or the control of the proceeds of specified unlawful activity; or
 - (ii) to avoid a transaction reporting requirement under State or Federal law,

shall be sentenced to a fine of not more than \$500,000 or twice the value of the monetary instrument or funds involved in the transportation, transmission, or transfer, whichever is greater, or imprisonment for not more than twenty years, or both.

23. Under Title 18, United States Code, Sections

1956(c)(7)(A) (referencing 18 U.S.C. § 1961(1)) and

1956(c)(7)(B)(v) and (D), specified unlawful activities include:

mail fraud, wire fraud, fraud and related activity in connection

with computers, and violations of IEEPA.

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V. STATEMENT OF PROBABLE CAUSE

SHIH, PULLMAN LANE, CGTC, and Chengdu RML Technology Co., Ltd.

- 24. Based on my review of United States Department of Homeland Security ("DHS") immigration records (hereinafter "U.S. immigration records"), I know that SHIH, who was born in Taiwan, immigrated to the United States and became a naturalized citizen in 1989.
- 25. Based on my review of U.S. immigration records and SHIH's biography as it appeared on June 13, 2015, on the website of the Electrical Engineering Department of U.S. University A, I know the following:
- a. SHIH's early employment in the United States included working as an Adjunct Professor in the Electrical Engineering Department of the U.S. Naval Post Graduate School in Monterey, California, from approximately September 1982 through approximately March 1984.
- b. In April 1984, SHIH began employment at a large, U.S.-based defense contractor where he worked on the development of advanced GaAs (gallium arsenide) MMIC design, fabrication, and characterization.
- c. SHIH left the large, U.S.-based defense contractor for an approximate thirteen-month period in 1986-1987, and co-founded a Torrance, California-based company, MM Wave Technology, Inc.
- d. In October 1987, SHIH returned to employment at the large, U.S.-based defense contractor.

- e. SHIH supplemented this work as a lecturer and adjunct professor at U.S. University A beginning in 1990.
- f. From 1992 to 1997, SHIH was employed by the space and communications component of the large, U.S.-based defense contractor, where he served as a senior scientist and was responsible for the development of advanced MMICs and MMIC modules for space applications.
- 26. Based on my review of the above-described biography, as well as documents provided by one of SHIH's former employers, I know the following:
- a. In 1997, SHIH co-founded and served as president of MMCOMM, Inc., a California-based business entity focusing on point-to-point communication and advanced imaging and synthetic aperture radar.
- b. In 2007, MMCOMM, Inc. was acquired by U.S.

 COMPANY A, a cleared U.S. defense contractor, where SHIH

 thereafter served as a Senior Technology Manager until 2011.

 During his employment with U.S. Company A, SHIH received

 training on compliance with U.S. export control laws and

 regulations, including "Export Classifications and EAA Section

 17 Impact," "Export Compliance for Engineering and Technology,"

 "Protecting Proprietary Information," "Antitrust Essentials:

 Communicating with Competitors," and "Illegal Collusion

 (Global): Competition and Antitrust."
- 27. Based on my review of the above-described biography, I also know that SHIH was President of CGTC and General Manager of PULLMAN LANE.

- 28. Based on my review of California Secretary of State records and financial records for PULLMAN LANE, I know the following:
- a. Articles of organization for PULLMAN LANE were originally filed with the California Secretary of State on July 3, 2006. Under the operating agreement signed on July 30, 2006, SHIH holds 90% interest in PULLMAN LANE.
- b. On October 15, 2006, SHIH signed a California Secretary of State Statement of Information for PULLMAN LANE that described the type of business as "Production and consultation services to the entertainment and communication industries."
- c. A Statement of Information, filed with the California Secretary of State on October 18, 2012, described PULLMAN LANE'S business as "Film & Play Production and Consulting" and listed SHIH as the agent for service of process.
- d. In a Statement of No Change, signed by SHIH as "Member Manager" on January 30, 2017, and filed with the California Secretary of State on February 6, 2017, SHIH stated there had been no change in any of the information contained in the previously filed complete Statement of Information.
- e. Bank records reflect expenditures during 2009 and 2010 from a PULLMAN LANE bank account (Chinatrust Bank account 1866) to support U.S. Person 10's career in the entertainment

industry.⁴ However, as discussed in more detail below, the evidence shows that SHIH has used the PULLMAN LANE bank accounts to finance, conduct, and conceal the conspirators' illegal activity.

29. In January 2010, JYS TECH Person 1 sent an e-mail to SHIH, at yichishih@gmail.com, with the subject "Lists," advising SHIH that attached were two files for SHIH's reference. The first attachment, titled "Supplement No.4 to Part 744 - Entity List," dated January 13, 2010, was BIS's Entity List. The second attachment, titled "Q&As on the Bureau of Industry and Security's China Policy Rule," contained a list of questions and answers regarding regulations controlling exports to the PRC. Some of the topics covered included "Military End Use Control," lists of technologies with identified ECCNs, "Validated End User Program," various questions on "military end-use," and descriptions of major weapons systems and policy review for national security controlled items.

⁴ Based on my review of Chinatrust Bank records, I know that in May 2009, PULLMAN LANE opened two bank accounts - XXXXX866 (small business checking) and XXXXX256 (non-personal moneymarket plus account checking). The authorized signers on the accounts were SHIH and U.S. Person 10. On the "New Account Worksheet - BUSINESS," the type of primary business was described as "Entertainment/Communications consultation & production," and the box "no" was checked in response to the question "Do you have any business activities with [a] foreign country?" SHIH and U.S. Person 10 signed the "Signer" information sheets in June 2009.

⁵ An ECCN, aka Export Control Classification Number, is an alphanumeric designation used in the BIS Commerce Control List to identify items for export control purposes. An ECCN categorizes items based on the nature of the product, i.e., type of commodity, technology or software and its respective technical parameters.

- 30. Based on an Open Source Intelligence Report titled "Chengdu Gastone Technology Co., Ltd.," produced by the Defense Intelligence Agency, and dated March 13, 2014, I know the following:
- a. CGTC, also known as Chengdu Jiashi Technology Company, Ltd., is a primarily Chinese-based business entity located in Chengdu, a city in Sichuan Province, China; and
- b. On June 20, 2013, the Chengdu government announced that CGTC had won the land use rights for a specific parcel of land, outside of Chengdu proper, part of or near the Internet of Things Industrial Park.
- 31. Based on my review of an Open Source Intelligence Report titled "Chengdu RML," which was derived from translations of public reports written by Chinese media outlets, produced by the Defense Intelligence Agency and dated September 17, 2015, I know the following about some of CGTC's and SHIH's activities in the PRC.
- a. CGTC was overtly affiliated with numerous Chinabased companies, including Chengdu RML Technology Company, Ltd. ("CRML").
- b. Sometime between October and December 2010, CGTC and CRML jointly established a development headquarters and invested in the building of a microcrystal manufacturing area in Chengdu, China. 6 Co-located with CGTC and CRML was another

⁶ Based on my knowledge of this investigation, I know that epitaxy, which is the development of the microcrystals needed for MMICs, is the first stage in the development of a GaN

China-based company, Chengdu Ganide Technology Company, Ltd. ("Chengdu Ganide").

- c. CRML's main business is in high frequency and ultra-high frequency microwave chip design and transmit/receive ("T/R") module packaging in the radar and communications sectors. I know, based on my review of publically available information on the Internet, T/R modules are utilized in advanced radar and radio frequency ("RF") systems including active electronically scanned arrays ("AESA").
- d. Between January and March 2010, CRML entered into an agreement with the PRC's Weapons Industry 206th Institute to jointly research and develop applied uses for an active TR module. Based on my training and experience, I know the 206th Weapons Industry Institute refers to Institute 206, the Xi'an Electronic Engineering Group Corporation ("XEERI"), an entity that develops hardware and software relating to radar and communications sensors whose products include ground artillery location and fire collection radar, portable battlefield moving target reconnaissance radar, post low altitude target destination radar, air defense fire control systems, coastal defense (marine) radar, and air defense target indication radar, and whose publications have included analysis of the tactical application of cruise missiles.

⁽Gallium Nitride) wafer. As used generally herein, the term "wafer" refers to a very thin disc, approximately 4-6 inches in diameter, which contains integrated circuits.

- e. Between April 2010 and June 2010, CRML and CETC 297 jointly invested to establish Chengdu Ganide Technology Co., Ltd. ("Chengdu Ganide") that would focus on micro systems application design.
- f. Chengdu Ganide manufactures, among other products, MMIC wave chips that are used in radars, electronic warfare, communications, navigation, and guidance systems. Its designers hold degrees from, among other universities, U.S. University A and Canadian University A.
- 32. Based on my review of the same Open Source Intelligence Report referenced in paragraph 31, I know that a PRC-based website published a report on an audit of CGTC and CRML, in which the auditor identified CGTC and CRML as high technology military enterprises involved in high-performance microwave and digital-to-analog hybrid integrated circuit design.
- 33. Based on my review of the same Open Source
 Intelligence Report referenced in paragraph 31, I know that PRC
 press reports identify CRML's general manager and "responsible
 party" as Chen Yaping. United States visa records, which I have
 reviewed, show that Chen Yaping identified himself as the
 General Manager and Chief Technical Supervisor of CRML,

⁷ CETC 29, also known as China Electronics Technology Group Corporation 29 Research Institute, was added to the Entity List on August 1, 2014, in conjunction with CGTC and QTC, for activities contrary to the national security and foreign policy interests of the United States, and a reasonable cause to believe they have been involved in the illicit procurement of commodities and technologies for unauthorized military end use in China.

beginning in October 2007, and re-affirmed that CRML was his employer in 2013. United States visa records also show that when Chen Yaping traveled to the United States in 2013, he listed SHIH's home address as his destination on his visa application. Based on my review of immigration records, I know that Chen Yaping is U.S. Person 11's father.

- 34. Based on my review of the Federal Register, volume 79, pages 44681 and 446684 (August 1, 2014), I know that on August 1, 2014, BIS placed CGTC on the Entity List for engaging in conduct that poses a risk to United States national security and foreign policy interests based on CGTC's illicit procurement of commodities and technologies for unauthorized military end use in China. Based on my training, experience, and review of the current Entity List, I know the following:
- a. The Entity List identifies persons and entities reasonably believed to be involved, or to pose a significant risk of being or becoming involved, in activities contrary to the national security or foreign policy interests of the United States.
- b. The decision to place CGTC on the Entity list, like all decisions regarding additions to, removals from, or other modifications to, the Entity List, was made by the Enduser Review Committee, composed of representatives of the Departments of Commerce (Chair), State, Defense, Energy and, where appropriate, the Treasury.
- c. CGTC has remained on the Entity List continuously since August 1, 2014.

d. As a result of its placement on the Entity List, a license from BIS was required to export, reexport, or transfer (in-country) any item subject to the EAR to CGTC, and there was a presumption of denial of a license.

MAI and MICROEX

- 35. Based on my review of U.S. immigration records, the websites of the State of California and Los Angeles County, employment records, and my knowledge of the investigation, I know the information in paragraphs 36 through 38 below.
- 36. MAI is a naturalized United States citizen who was born in Saigon, Vietnam, and who currently resides in Pasadena, California. MAI is an electrical engineer; he holds B.S. and M.S. degrees in electrical engineering. He worked as a Project Manager at MMCOMM, Inc. from approximately July 1997 through December 2006; SHIH was his supervisor. At MMCOMM, MAI's responsibilities included purchasing products used in research and development. MAI also worked with SHIH at U.S. Company A (a cleared U.S. defense contractor), where MAI worked on a radar project. MAI is the Chief Executive Officer of MICROEX.
- 37. While employed at U.S. Company A, MAI completed multiple trainings with regard to export compliance and handling proprietary information, including the follow:
- a. On or about October 18, 2007, MAI completed a training titled "Export Compliance Awareness."
- b. On or about July 1, 2010, MAI completed a training titled, "Export Compliance for Engineering & Technology."

- c. On or about March 4, 2013, MAI competed a training titled, "Proprietary and Sensitive Information Security Presentation for Defense and Space Access."
- d. On or about December 4, 2014, MAI completed a training titled, "Export Compliance for Engineering & Technology."
- 38. MICROEX is a dba of L2kontemporary, Inc., a California Corporation, established on May 25, 2006, and based in Pasadena, California. MAI is the Director, Chief Executive Officer, and agent for service of process for L2kontemporary, Inc.⁸ MAI registered MICROEX Engineering as a dba of L2kontemporary, Inc. on April 19, 2010. MICROEX is MAI's engineering consulting business. A MICROEX bank account received substantial wire transfers from bank accounts held by PULLMAN LANE (in Los Angeles) and JYS TECH (in Canada), and sent wire-transfers to fund the conspirators' criminal activities. These wire transfers occurred both before and after CGTC was placed on Entity list.

U.S. Company B's Proprietary Semiconductor Technology

- 39. Based on information supplied by U.S. Company B and publically available information on U.S. Company B's website, I know the information in paragraphs 40 through 46.
- 40. U.S. Company B is located in the United States in a state other than California. U.S. Company B offers Foundry Services for microelectronics. In the microelectronics

⁸ L2kontemporary sells and ships clothing to Japan.

industry, a semiconductor fabrication plant (commonly called a fab; sometimes foundry) is a factory where devices such as integrated circuits are manufactured. U.S. Company B describes itself as a leader in GaN-on-SiC MMIC (Monolithic Microwave Integrated Circuit) technology.

- 41. U.S. Company B has described its Full-Wafer Service as follows. U.S. Company B generates a mask set of the customer die designs to be fabricated in its GaN on SiC wafer process. 10 U.S. Company B takes the design files provided by the customer and makes them into a series of exposure plates that are used to define the various layers that are in the circuits. U.S. Company B then fabricates the wafers using this mask set, and ships good wafers per the order to the customer. The term full-wafer means it is only the single customer's die designs on that mask set, as compared to Shared Wafer Service wherein U.S. Company B would fabricate a lot of wafers with multiple customers' die designs on the mask set.
- 42. U.S. Company B's semiconductor technology has a number of different applications in the military and commercial sectors. U.S. Company B currently has, and previously had, United States government and military contracts with the Department of Defense, specifically the Air Force, Navy and

⁹ Based on my consultation with an electrical engineer, I know that "GaN" means Gallium Nitride and "SiC" means Silicon Carbide, and that "GaN-on-SiC" refers to the materials used to manufacture the wafer substrate for a type of MMIC.

¹⁰ Based on information gathered during this investigation, I know that the GaN on SiC wafers manufactured by U.S. Company B typically contain large numbers of integrated circuits, and each individual integrated circuit on the wafer is called a die.

Defense Advanced Research Projects Agency (aka DARPA), and the Department of Energy. The numerous military applications for GaN integrated circuits produced by U.S. Company B include, but are not limited to, electronic warfare, electronic warfare countermeasures, and radar applications.

- 43. U.S. Company B screens prospective customers before allowing access to its Foundry Services. Prospective customers must complete and sign the following:
- a. Before utilizing U.S Company C's Foundry Service, a customer must complete the U.S. Company B Export Compliance Questionnaire. The Export Compliance Questionnaire asks the customer to provide the following information: Company Address; Description of Product to be Manufactured; Approximate Frequency; Approximate Power; will U.S Company C's Design Service be utilized; will this product be subject to your national export control regulations or classified under the Wassenaar Arrangement, Dual-Use Item, Military Equipment; will this product be subject to U.S. export control regulations, EAR, ITAR; and if this product is to be shipped outside of the United States, please indicate the Harmonized Tariff Schedule/Schedule B Commodity Code.
- b. U.S. Company B Process Design Kit (aka PDK)
 Agreement, pursuant to which the customer agrees to comply with
 the terms and conditions of the license, the restrictions on the
 use of the process design kit, all applicable export and import
 requirements, and that he/she would not re-export or release

- U.S. Company B's technology to a national of certain countries, including China.
- 44. In addition, customers access U.S. Company B's Foundry Services via an online web portal. The login page of the portal contains the following warning:

Terms of Use--This system is intended for use by [U.S. Company B's] authorized business partners and employees. If you have reached this page in error and/or have not been given authorization by [U.S. Company B], please leave this page immediately. Use of this connection is monitored and any unauthorized or otherwise illegal use of this connection will be reported to law enforcement authorities.

- 45. U.S. Company B has advised that it would not have continued with the MICROEX wafer purchase transactions if it had known that the ultimate recipient of the technology was the President of an Entity-Listed company in China. U.S. Company B has further advised that its process and/or technology derives independent economic value from not being generally known to the public and it has taken reasonable means to protect the process and/or technology involved in the MICROEX wafer purchase transactions.
- 46. U.S. Company B has further advised, through its employees, as follows:
- a. U.S. Person 4 has explained he/she received customer inquiries and subjected new customers to increased scrutiny. The validation includes determining if the existing company is legitimate, examining the e-mail address associated with the request (as .edu, Yahoo, and Gmail accounts received extra scrutiny), and a review of available basic company

information. If the customer provided information that the end user was a non-U.S. entity, U.S. Person 4 would coordinate with U.S. Company B's trade compliance team for additional scrutiny.

- b. U.S. Company B has different processes for domestic as opposed to international end-use. The information provided by MICROEX was initially alerting to U.S. Company B. U.S. Company B was initially concerned because of the use of a Google e-mail address, no credit history, and a limited internet footprint. However, MAI provided information indicating the products MICROEX would develop/purchase with U.S. Company B were for domestic use only, which fraudulently allayed the concerns of U.S. Company B.
- U.S. Person 9 explained that the process used by U.S. Company B to create individualized Si-based wafers was and is proprietary. The GaN foundry manual and the PDK are specifically proprietary, as is how U.S. Company B prices its products. U.S. Company B has intentionally not patented many of its processes, even though the processes are unique, for fear competitors in other countries would ignore the patents and use the patent submissions as blueprints to create rival foundries.
- 47. Based upon my knowledge of the information gathered during the investigation of this case, I submit that SHIH conspired with MAI and MICROEX to obtain, through fraud, access to U.S. Company B's proprietary technology and products, for the

purpose of using that proprietary technology and those products in an attempt to bolster CGTC's GaN foundry processes, so that CGTC could compete economically with U.S. Company B. I submit further that SHIH knowingly violated IEEPA by causing U.S. Company B MMIC wafers to be exported to China without an export license.

QTC's Financing of the Scheme to Divert U.S. Technology to China

- 48. Based on my review of records received from Chinatrust Bank, I know that on June 14, 2010, the PULLMAN LANE Chinatrust Bank account ending in 866 received \$1,000,000 via a wire transfer from a Bank of China account ending in 001, in the name of Qing'an International Trading Co., Ltd., No. 27, Xiaoyun Rd, Beijing China.
- 49. Based on my review of the Federal Register, volume 79, pages 44681 & 44685 (August 1, 2014), I know the following:
- a. Qing'an International Trading Co., Ltd., is the same as Qing'an International Trading Group, also known as ("aka") Qing'an International Trading Group Company, aka Qing'an Company Shenzhen Station, aka China Qing'an International Trading Group ("QTC").
- b. On August 1, 2014, BIS added QTC to the Entity
 List. QTC was added to the Entity List on the basis of its
 involvement in activities contrary to the national security and
 foreign policy interests of the United States. Specifically,
 the End-user Review Committee had reasonable cause to believe

that QTC had been involved in the illicit procurement of commodities and technologies for unauthorized military end use in China. See 79 FR 44681, 8/1/2014.

- c. As referenced in paragraph 9, CGTC was added to the Entity List on the same day as QTC.
- 50. Based on my review of e-mails obtained pursuant to search warrants and provided by Chinatrust Bank, I know the following:
- a. On June 18, 2010, check #1020, dated June 18, 2010, drawn on PULLMAN LANE Chinatrust Bank account -866, in the amount of \$1,000,000, payable to PULLMAN LANE Productions, LLC, bearing SHIH's signature, was deposited into the PULLMAN LANE Chinatrust Bank account ending in 256, thereby transferring the \$1,000,000 received from QTC from one PULLMAN LANE bank account to another. SHIH's signature appears as the endorsement on the back of check number 1020.
- b. On July 22, 2010, PULLMAN LANE Chinatrust Bank account ending in 256 received \$239,990 via a wire transfer from a Toronto Dominion Bank account in the name of JYS TECH.
- c. On April 7, 2011, PULLMAN LANE Chinatrust Bank account ending in 256 received \$199,990 via a wire transfer from a Toronto Dominion Bank account in the name of JYS TECH.

d. On April 14, 2011, Smartlee¹¹ sent a Chinese-language e-mail to Deng Jieru, ¹² the subject of which was "copy of remittance of USD \$393,500," writing, attached is a copy of a remittance receipt issued by Guangfa Bank, showing that payer, Li Tao, ¹³ on April 14, 2011, has transferred, for RML (a reference to CRML), RMB 2746800.00, ¹⁴ from account number

 $^{^{11}}$ "Smartlee" is believed to be an alias used by Li Tao. See infra fns. 13, 29 and \P 114.

 $^{^{\}rm 12}$ Based on my review of U.S. State Department records, I know the following information.

On a 2011 visa application, Deng Jieru stated that, from 1998 to 2008, she was employed as a "Department General Manager" with China Qing'An International Trade Limited Company" (believed to be the same as QTC, which was placed on the Entity List on August 1, 2014). On the same 2011 visa application, Deng Jieru stated that from 2009 to 2010, she was employed as the "Market Director" with "Chengdu Lei Dian Wei Li Technology Limited Company," where her supervisor was Chen Yaping. Based on my training, experience, and knowledge obtained during this investigation, I know that Chengdu Lei Dian Wei Li Technology Limited Company is another name for Chengdu RML.

On a 2013 visa application, Deng Jieru provided different employment information, stating that, from March 1999 to December 2010, she was employed as a "Department Manager" with China Anqing International Trade Group Limited Company" (believed to be the same as QTC, that was placed on the Entity List on August 1, 2014).

¹³ On May 25, 2016, the U.S. Department of State issued B1/B2 business visas from its Guangzhou post for Chinese citizens Li Tao and Tian Hong. Both Li Tao and Tian Hong, who are husband and wife, listed their employment as Zhuhai TNS Trading, and provided an address in Zhuhai, China. Tao described his duties with Zhuhai TNS Trading as "I am the legal person of company and responsible for overall management of company," and Hong described her duties with Zhuhai TNS Trading as "Business Arrangement." Tao provided an e-mail address of smartlee@163.net. Both Tao and Hong are referenced later in this affidavit. See infra ¶ 114.

¹⁴ Based on historical currency exchange information on the Internet, the US dollar value of RMB 2746800.00 on April 14, 2011 was approximately \$440,000.

6225681328000023844, at Guangfa Bank, Zhuhai Branch, Business

Department, to account number 6222084402000477167, at Industrial

& Commercial Bank of China, Chengdu City Caoshi Branch, Business

Department, in the name of Yi-Chi SHIH.

- e. On April 14, 2011, Deng Jieru forwarded the above-described e-mail to Chen Yaping, at his CRML e-mail address, writing to President Chen Yaping that the copy of the remittance was attached proving that U.S. dollars had been deposited, and that Chen Yaping could notify the payee [SHIH] to check the RMB account at 3 p.m. The e-mail was signed by Deng Jieru, China Qing'an International Trading Company, cell phone: 13910796105, phone: 010-64603424, address: China Qing'an Building, No. 27, Xiaoyun Road, Chaoyang District, Beijing, Zip: 100027.15
- f. On April 14, 2011, Chen Yaping, using his CRML email account, forwarded the above-described two e-mails (in a thread), with the attachment, to SHIH.
- g. On November 10, 2011, PULLMAN LANE Chinatrust
 Bank account ending in 256 received \$199,990 via a wire transfer
 from a Toronto Dominion Bank account in the name of JYS TECH.
- h. On March 5, 2012, PULLMAN LANE Chinatrust Bank account ending in 866 sent \$500,000 via a wire transfer to a

¹⁵ The company listed in the wire transfer and in Deng Jieru's signature block is the same QTC that was placed on the Entity List on August 1, 2014.

Toronto Dominion Bank account ending in 595, held in the name of JYS TECH.

i. On May 11, 2012, PULLMAN LANE Chinatrust Bank account ending in 866 sent \$260,000 via a wire transfer to a Toronto Dominion Bank account ending in 595, held in the name of JYS TECH.

The Scheme to Export U.S. Company B's Technology to China Unlawfully

- 51. I submit there is probable cause to believe that SHIH knew that his diversion of U.S. Company B's commodities and technology to China was unlawful based on his long-time employment with U.S. cleared defense contractors, his receipt of export compliance training, and additional evidence summarized herein.
- 52. On January 27, 2010, JYS TECH Person 1, using tran_teck@sympatico.ca, sent an e-mail to SHIH, at yichishih@gmail.com, with the subject "Lists." The e-mail contained two attachments with the file names "BIS_00 specific companies list YC.pdf" and "BIS_00 Answers and Questions imp YC.pdf." In the e-mail, JYS TECH Person 1 wrote:

Hi Yi-Chi:

Attached are the two files for your reference.

[JYS TECH Person 1]

The first attachment ("BIS_00 specific companies list YC.pdf") is titled "Supplement No.4 to Part 744 - Entity List," is dated January 13, 2010, and is the U.S. Department of Commerce, Bureau of Industry and Security Entity List. The second attachment

("BIS_00 Answers and Questions imp YC.pdf") is titled "Q&As on the Bureau of Industry and Security's China Policy Rule," and contains a list of questions and answers regarding the "Revisions and Clarification of Export and Reexport Controls for the People's Republic China (PRC); New Authorization Validated End-User; Revision of Import Certificate and PRC End-User Statement Requirement". Some of the topics include, but are not limited to "Military End Use Control," lists of technologies with identified ECCNs, "Validated End User Program," various questions on "military end-use," and descriptions of major weapons systems and policy review for national security controlled items.

- 53. Based on my review of BIS records, I know that on March 2, 2012, SHIH signed, as "Official of Ultimate Consignee," a Form BIS-711 -- U.S. Department of Commerce, Bureau of Industry and Security, "Statement by Ultimate Consignee and Purchaser" (hereinafter referenced as "End-User Declaration"). The End-User Declaration was submitted to BIS by California-based U.S. Company L, as part of an application for a technology export license under ECCN 5A991. The End-User Declaration shows the following information:
- a. The Ultimate Consignee (or End-User) was CGTC, located in Chengdu, China;
- b. The nature of the Ultimate Consignee's business was contract semiconductor foundry manufacturing services;

- c. CGTC's business relationship with U.S. Company L was "manufacturing technology licence of 2um inGaP HBT and 0.5um Switch pHEMT Technology;
- d. SHIH's position at CGTC was "President."

 Additional BIS records show that (1) the cost of the manufacturing technology license CGTC was seeking to acquire from U.S. Company L was \$12 million; (2) U.S. Company L represented to BIS that the license was strictly for wafer foundry services to telecommunication applications; (3) on April 26, 2012, BIS returned the license application without action to U.S. Company L, requesting more detailed information about CGTC and the technology to be licensed; and (4) U.S. Company L did not re-submit the application or provide any additional information.
- 54. On April 5, 2012, U.S. Person 1, 16 using xxxxxshih@gmail.com, sent an e-mail to SHIH, at yichishih@gmail.com, with the subject "Re: Calling Atlanta." In the e-mail, U.S. Person 1 wrote, in pertinent part:

Yi-Chi or [JYS TECH Person 1],

[Familial identifier deleted] is trying to call to get in touch with one one [sic] of you but is unable to get through on the phone in China. . . . What are your current cell phone numbers? Also a good friend of mine from business school who was working at a private equity firm in singapore is planning a trip to Chengdu . . . I suggested that it would be great for him to meet with both of you . . . I think [he] could be of help on the project. . . .

Best,

¹⁶ Based on U.S. immigration records and the FBI's review of e-mails seized pursuant to a search warrant, I know that U.S. Person 1 is a family relative of SHIH.

[Name of individual deleted]

55. On April 6, 2012, SHIH, using yichishih@gmail.com, responded to U.S. Person 1 by sending an e-mail with the subject "Re: Calling Atlanta." In the e-mail, SHIH wrote the following text:

My cell phone in China is +86-186-0803-1086 and [JYS TECH Person 1]'s is +86-135-4012-7010. Also attached is a copy of our business paln [sic] for the project for your reference. . . . We will be in Chengdu until later part of April. Please ask your friend to contact us. Thanks.

Yi-Chi

Attached to the e-mail was a file named
"Business_Plan20110925A.ppt." Based on my review of this file,
I know:

- a. The file was a PowerPoint presentation consisting of 59 slides.
- b. SHIH's and JYS TECH Person 1's names appeared in the lower left-hand corner of each and every slide.
- c. The presentation was a business plan for the development of a semiconductor foundry dedicated to designing III-V compound semiconductors.
- d. The following bullet points were written on the Executive Summary page of the presentation:
 - Si semiconductor foundry capability has been growing rapidly in China. But no economically viable III-V semiconductor capability in China. We plan to fill the gap.

¹⁷ Consistent with SHIH's statement, travel records maintained by DHS show that SHIH was outside the United States when he sent this e-mail, and returned to the United States at the end of April 2012.

- World market growth (6%) is pulling and local market demand is driving the need.
- We propose to develop an integrated production line for devices, epi wafers and masks to provide short cycle-time "velocity" service.
- Key technologies: GaAs 6 inch devices, and GaN 4 inch devices. The total capital investment is \$450M.
- The main objectives are: [1] to capture the domestic markets on devices, [2] to start penetrating overseas market in the fourth year, and [3] to break-even and go IPO in 48 to 60 months.
- Our ultimate goal is to dominate the world-wide foundry business in 10 years.
- e. U.S. Company B and other U.S. Companies were referenced in the presentation on a page titled "GaN Device Technology Comparison."
- 56. Also included in the above-described presentation was a list of key persons associated with the venture. Slide 41 of the presentation lists SHIH and "Chen Yapin" as "key persons." 18 In addition, Slide 9 of the presentation is titled "High Value-Added Applications." On Slide 9, there is a section, translated from Chinese, titled "RML products," with pictures of products that resemble semiconductors/integrated circuits. The pictures listed in the "RML products" section have arrows pointing to a section, translated from Chinese, titled "Application Areas." The applications for the RML products listed in the "Application Areas" section, translated from Chinese, include, Airborne

 $^{^{18}}$ Based on the evidence gathered in this investigation, I believe "Chen Yapin" is the same person as Chen Yaping (see supra \P 33).

Collision Radar, Satellite Communications, High-Speed Rail
Collision Radar, Car Crash Radar, and High-Speed Rail
Communication Electronics. 19

- 57. On May 30, 2012, JYS TECH Person 1 sent SHIH an email, asking SHIH to review an attached file. The attachment was a presentation, dated May 30, 2012, titled "Development of GaN HEMT for MMICs" (GaN Gallium Nitride, HEMT High Electron Mobility Transistors, MMIC Monolithic Microwave Integrated Circuit). The presentation provided engineering data on the performance of GaN devices. Page 7 of the presentation listed data on GaN devices from U.S. Company B.
- 58. On June 12, 2012, JYS TECH Person 1 sent SHIH an email, attaching "the file on the GaN foundry for tomorrow." The attachment was a presentation titled "GaN Foundry," dated 2011, that provided engineering data on the performance of GaN devices from U.S. companies and included a list of numerous U.S. companies with a GaN foundry, including U.S. Company B. The header of the presentation on each page was "Chengdu Gastone Technology Co., Ltd" (written in English and Chinese).
- 59. On August 21, 2012, JYS TECH Person 1 sent SHIH an email, attaching "a revised file with some info of Gain Mi [sic]!" The attachment was a presentation titled "A brief summary on GaN activities." Included in the presentation was a reference to the GaN MMIC foundry services of U.S. Company B.

 $^{^{19}}$ Based on the evidence gathered in this investigation, I believe the company referenced in the section titled "RML products" is the same as Chengdu RML (referenced herein as "CRML"), where Chen Yaping is the General Manager (see supra $\P\P$ 30-33).

- 60. On November 9, 2012, a representative of U.S. Company L sent an e-mail to SHIH, at yichishih@gmail.com, in which the representative advised (1) it was difficult for U.S. Company L to provide a GaN foundry process for SHIH, and (2) the representative's feeling was that the technology license (see supra ¶ 53) probably was not going to happen.
- 61. On November 14, 2012, SHIH, via yichishi@gmail.com, sent an e-mail as part of an e-mail thread to U.S. Person 2, 20 with the subject "Re: Fw: Re: CAD files." In the e-mail, SHIH wrote the following:

Please also try to contact [U.S. Company B] to get more information on their foundry service on 0.5-um and 0,25-um GaN process. Their process is the best so far. It would be nice to evaluate their design rules and cell libraries. Thanks.

Yi-Chi.

62. On January 7, 2013, U.S. Person 3²¹ sent an e-mail, as part of an e-mail chain, to SHIH, at e-mail addresses yichishih@yahoo.com and yichishi@gmail.com, with the subject

²⁰ Based on his/her LinkedIn webpage, I know that U.S. Person 2 received a doctorate (Ph.D.) in Electrical and Electronics Engineering from U.S. University A (where SHIH was employed as an Adjunct Professor). In addition, U.S. Person 2 worked for several cleared U.S. defense contractors, including U.S. Company A as a Staff Scientist in its Aerospace Division. SHIH and U.S. Person 2 worked at U.S. Company A together.

²¹ Based on U.S. Person 3's LinkedIn webpage, U.S. Company F's webpage, and additional open-source Internet research, I know the following. U.S. Person 3 received a doctorate (Ph.D.) from U.S. University C in Electrical Engineering, is skilled in MMIC design, and has worked as an engineer with a number of U.S. companies, including U.S. Companies E and F. In January 2015, U.S. Company D and U.S. Company E merged to form U.S. Company F, which offers, amongst other products and services, Gallium Nitride and Gallium Arsenide foundry services.

"Re: Information on [U.S. Company D] GaN and Invoice." An earlier e-mail from U.S. Person 3 to SHIH on November 13, 2012, is included in the e-mail chain. In the November 13, 2012 e-mail, U.S. Person 3 wrote the following:

You are right in that [U.S. Company D] currently doesn't provide the foundary [sic] service on 0.25um GaN process yet.

It is 18-24 months out according to their schedule. However, [U.S. Company B] provides 0.25um GaN process even though I don't have detailed information as much as on [U.S. Company D]. [U.S. Company B] didn't want to work with [U.S. Company E].

In terms of consistency and reliability, [U.S. Company B] provides the best process as you know. I believe that it would be better to use [U.S. Company B's] device as the standard criteria for your process to compete.

Execution of the Scheme to Defraud U.S. Company B of Its Technology and Divert It to China Unlawfully

U.S. Company B Foundry Project 93B2 for MICROEX (Lot 1)

- cause to believe that MAI, using his company MICROEX and posing as a legitimate U.S. Company B customer located in the United States, contracted with U.S. Company B to gain access through fraud to U.S. Company B's proprietary Foundry Services, and then provided to SHIH the identifiers necessary for access to U.S. Company B's Foundry Services, located on its computer system.
- 64. On February 15, 2013, MAI, via microexeng@gmail.com, sent an e-mail to U.S. Person 4²² with the subject "Foundry service." In the e-mail, MAI wrote the following:

²² Based on interviews conducted with U.S. Company B, I know that U.S. Person 4 is an employee of U.S. Company B, that he/she

I'm interested in the Full-Wafer Service for GaN, 0.25um process. Please send documents to:

Kiet Mai President MicroEx Engineering microexeng@gmail.com 626-3319-3661 Thanks, Kiet.

65. On February 15, 2013, U.S. Person 4 sent an e-mail to MAI, at microexeng@gmail.com, responding to the above-described e-mail as follows:

Hello Kiet,

. . . . I am attaching our general brochure on foundry services, as well as two forms that will need [to be] completed and signed. Since you are a new company and do not have a company website or email, could you please send me the details of your company location and any registration for you [sic] company in the state you are doing business. We must do these checks for export compliance reasons.

Attached to the e-mail was a "U.S. Company B] Export Compliance Ouestionnaire."

66. On February 15, 2013, MAI, via microexeng@gmail.com, responded by e-mail to U.S. Person 4, writing:

Thank you, [U.S. Person 4], I'll get back to you after I look into Wassernaar²³ and others since I don't have

received the described e-mail at his/her U.S. Company B e-mail address, that all e-mails and any other correspondence sent from or to U.S. Person 4 referenced in this affidavit were sent from or to his/her U.S. Company e-mail address, and within the scope of his/her duties at U.S. Company B, and that U.S. Person 4 identified his/her position in these e-mails as "Program Manager, Foundry Services."

[T]he Wassenaar Arrangement (WA), has been established in order to contribute to regional and international security and stability, by promoting transparency and greater responsibility in transfers of conventional

²³ According to the website, www.wassenaar.org:

any knowledge of these. I'm mainly interested in commercial applications but I want to make sure there are no issues.

67. On February 15, 2013, U.S. Person 4 responded by e-mail to MAI's above e-mail, writing:

Kiet,

We are more interested in your company information. For the end use questionnaire, we just need general application (Commercial or Military) but with specific frequency range and power level at this time.

Thanks,
[U.S. Person 4]

68. On February 15, 2013, MAI, via

12kontemporary5404@gmail.com, sent an e-mail to SHIH, at

yichishih@gmail.com, with the subject "Re: [U.S. Company B]."

In the e-mail, MAI wrote the following:

Yi-Chi:

Please answer the attached for me, I don't want to make any mistakes.

Kiet.

Attached to the e-mail was the "[U.S. Company B] Export Compliance Questionnaire."

arms and dual-use goods and technologies, thus preventing destabilising accumulations. . . . Participating States seek, through their national policies, to ensure that transfers of these items do not contribute to the development or enhancement of military capabilities which undermine these goals, and are not diverted to support such capabilities.

The Wassenaar Arrangement is also known as the "Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies." I know from my training and experience and publicly available information that the United States is a participant in the Wassenaar Arrangement and that certain U.S. export controls, including those reflected in the EAR, conform to the Wassenaar Arrangement controls.

69. In response to the e-mail referenced in the paragraph above, on February 15, 2013, SHIH, via yichishih@gmail.com, sent an e-mail reply with an attachment to MAI, at 12kontemporary5404@gmail.com, with the subject "Re: [U.S. Company B]." In the e-mail, SHIH wrote the following:

Kiet,

Attached is the filled questionaire [sic] form. Thanks.

Yi-Chi.

The file name of the attachment was "[U.S. Company B] Export Questionnaire-uEx.doc," and it was an Export Compliance Questionnaire for U.S. Company B. The U.S Company C Export Compliance Questionnaire stated:

Please complete the following questions to the fullest extent possible. It is necessary to have detailed information regarding the end-use of the products in order to comply with U.S. export control laws and regulations.

The completed questionnaire provided the following information:

Company address: 990 N. Hill Street, #205 Los Angeles, CA 90012

Description of product to be manufactured: Prototype Circuits for Validation of Design Concepts utilizing high Vbr for Wideband, High-Efficiency Power Amplifiers

Approximate Frequency: 2-3 times per year.

Approximate Power: up to 10 W

Will this product be subject to your national export control regulations or classified under the Wassenaar Arrangement?

Dual-use Item (X) No () Yes Military Equipment (X) No () Yes

Will this product be subject to U.S. export control regulations?

EAR (X) No () Yes

ITAR (X) No () Yes

If product is to be shipped outside of the United States, please indicate the Harmonized Tariff Schedule/Schedule B Commodity Code: n/a

70. In response to the e-mail described in the above paragraph, on February 15, 2013, MAI, via 12kontemporary5404@gmail.com, sent an e-mail reply to SHIH, at yichishih@gmail.com, with the subject "Re: [U.S. Company B]," writing:

Yi-Chi . . . Regarding frequency, it's GHz, should I say 18 GHz?

71. In response to the e-mail described in the above paragraph, on February 17, 2013, SHIH, via yichishih@gmail.com, sent an e-mail reply to MAI, at l2kontemporary5404@gmail.com, with the subject "Re: [U.S. Company B]," writing:

Kiet,

Good catch on the error of frequency. It looks fine now. Thanks.

Yi-Chi.

72. On February 18, 2013, MAI, via microexeng@gmail.com, sent an e-mail to U.S. Person 4 with the subject "Re: Foundry service," writing:

Attached are agreement documents for your records. We will probably have 2 or 3 full-wafer runs a year, G28/40V4.²⁴

Attached to this e-mail were the completed U.S. Company B Process Design Kit (PDK) Agreement and the U.S Company C Export

 $^{^{24}}$ A review of the website for U.S. Company B's foundry reveals that G28/40V4 is one of the two basic families of GaN HEMT MMICs used for design in the U.S. Company B foundry. The features of the G28/40V4 include "0.25-µm gate-length HEMT that can be operated at 28 to 40 V."

Questionnaire - both of which were signed by Kiet Mai, as "President" of "MicroEx Engineering," and dated "2/18/2013." In the U.S Company C Export Questionnaire, the frequency was listed as "up to 18 GHz."

73. On February 18, 2013, U.S. Person 4, with the subject "Re: Foundry service," e-mailed MAI, asking:

Will your company be doing the design, testing and use of the MMICs?

MAI, using microexeng@gmail.com, e-mailed U.S. Person 4, answering:

Yes.

I know, based on my knowledge of this investigation, that neither MAI, nor anyone associated with MICROEX, tested, designed, or used the MMICs referenced in the above-described email.

- 74. Based on my review of documents and information provided to the FBI by U.S. Company B, I know the following:
- a. Prior to accessing U.S. Company B's Foundry services, the PDK must be signed by the customer and U.S. Company B.
- b. When MAI signed the PDK on February 18, 2013, he signed under the words, "AGREED TO BY: CUSTOMER: MicroEx Engineering."
- c. On March 19, 2013, U.S. Person 4, on behalf of U.S. Company B, counter-signed the PDK that MAI had signed previously on February 18, 2013, and e-mailed the counter-signed PDK to MAI.

- d. The PDK covered, among other things, the license and restrictions on use, export and import requirements, and written assurance.
- 75. Section 1 of the PDK was titled, LICENSE/RESTRICTIONS ON USE, and stated, in pertinent part:
 - [U.S. Company B] hereby grants to Customer a nonexclusive license to use the Licensed Program [the Gallium Nitride ("GaN") MMIC Process Design Kit ("PDK")] solely in accordance with the terms and conditions of this Agreement. The "Licensed Program" consists of the executable code and technical data and documentation included in the PDK(s) provided to Customer together with any additional technical data and documents that may be provided by [U.S. Company B] for use in connection with the PDK(s). . . . Customer may not use, copy, modify, or distribute the Licensed Program (electronically or otherwise), or any copy, adaptation, transcription, or merged portion thereof, except as expressly authorized by [U.S. Company B]. . . . Customer's rights may not be transferred, leased, assigned, or sublicensed to any other party. Customer may not allow any other party to use the Licensed Program.

I know, based on my knowledge of this investigation, that SHIH was never an employee or contract worker of MICROEX or MAI, and there was no basis on which SHIH was authorized to access U.S. Company B's Licensed Program or Foundry Services.

76. Section 9 of the PDK was titled, EXPORT AND IMPORT REQUIREMENTS, and stated, in pertinent part:

Customer hereby warrants to [U.S. Company B] that it is not prohibited under U.S. law from receiving the Licensed Program (including technical data and documentation). Customer shall comply with all U.S. and other applicable laws and regulations prohibiting transfers, exports and re-exports to certain end-users and destinations or for certain end-uses and shall not export, directly or indirectly, any Licensed Program (including technical data or documentation) without first obtaining all required licenses and approvals from the appropriate government agencies. . . . Customer shall obtain [U.S. Company B]'s written consent before submitting any application for a

license authorizing the export or re-export of the Licensed Program (including technical data and documentation).

77. Section 10 of the PDK was titled, WRITTEN ASSSURANCE, and stated, in pertinent part:

The terms of this Section 10 do not apply unless Customer is located in, domiciled in, or a national of any country other than the United States of America. In order to receive access to the Licensed Program and Confidential Information, which may involve exposure to certain forms of export-controlled technology of [U.S. Company B] (the "Technology"), Customer understands that it is required under the U.S. Export Administration Regulations (the "EAR," 15 CFR Parts 730-774) to provide the following written assurance. . . In accordance with Section 740.6(a)(1) of the EAR, Customer hereby represents and warrants to [U.S. Company B] that neither Customer nor any of its employees, contract workers or agents will: (a) reexport or release the Technology to a national of a country in Country Groups D:1 or E:2; or (b) export to Country Groups D:1 or E:2 the direct product of the Technology, if such foreign-produced direct product is subject to national security controls as identified on the Commerce Control List (Part 774 of the Export Administration Regulations).

I know, based on my training and experience, that Supplement No. 1 to Part 740 of the U.S. Export Administration Regulations lists China in Country Group D:1.

78. On March 11, 2013, MAI, via microexeng@gmail.com, sent an e-mail to U.S. Person 4 with the subject "Re: Foundry service," writing:

Hi [U.S. Person 4]:

Will you be sending a PO/Foundry Service agreement? I'd assume you will have that in place before you send manual, DRC/guidelines for us to do design layout?

Kiet

626-319-3661

79. On March 11, 2013, U.S. Person 4 responded to MAI's above-described e-mail, writing:

Hello Kiet,

I will get you the signed PDK on Monday when I return to the office as well as access to the [U.S. Company B] portal to download the design kits/foundry manual.

Best regards,

[U.S. Person 4]

80. On March 18, 2013, MAI, via microexeng@gmail.com, sent an e-mail to U.S. Person 4, with the subject "Re: Foundry service," writing:

Hi [U.S. Person 4]:

Please also provide pricing, terms, etc. . . with other info.

Thank you.

Kiet

81. On March 19, 2013, U.S. Person 4 responded to MAI's above-described e-mail writing:

Hello Kiet,

Our dedicated mask set price for 4 PCM wafers is \$130K which includes CAD support, mask and fabrication. Testing of your custom die is not included. The shared mask service is for 40 customer tiles and is priced based on the area you choose. The table is below for the areas. The testing of your die is not included. I am going to give you a call shortly to discuss further details and get you set up with access to the design kits. I have attached our foundry service terms. The prices for the dedicated mask set and shared mask set lots will have payment milestones which I typically include in a formal quote. Let me know if you want one.

[table]

Best regards,

[U.S. Person 4]

- 82. On March 19, 2013, U.S. Company B's representative counter-signed the PDK, and a U.S. Company B representative e-mailed the completed and signed PDK to MAI.
- 83. On March 19, 2013, MAI, using 12kontemporary5404@gmail.com, sent an e-mail to SHIH, at yichishih@gmail.com, with the subject "From kiet," writing:

I just received info from [U.S. Company B] but I'm at ofc today, I'll review the info and forward to you tomorrow. The only issues would be end user and itar and you already are aware of those...kiet.

Based on my training and experience, I know the terms "end user" and "itar" are terms used in the context of U.S. laws and regulations controlling the export of goods and technology from the United States. In this context, I understand the reference to "end user" to mean the ultimate person or entity that will be using the goods or technology being exported from the United States (which can affect the lawfulness of the export), and "itar" to be an acronym for the International Traffic in Arms Regulations (22 C.F.R. Parts 120-130) that contain the U.S. Munitions List, which sets forth specific items within 21 categories of defense articles, technical data, and defense services, that are subject to export licensing controls.

84. On March 19, 2013, MAI, using 12kontemporary5404@gmail.com, forwarded an e-mail chain to SHIH, at yichishih@gmail.com, with the subject "Fwd Foundry service." In the e-mail, MAI wrote:

Yi-Chi:

Here's pricing info. Let me know what's your choice of service. I'll forward you the access info...

Kiet.

The e-mail chain that MAI forwarded to SHIH contained the pricing for U.S. Company B's Foundry Services that had been previously supplied to MAI in an e-mail from U.S. Person 4. In addition, MAI sent a follow-up e-mail to SHIH, referencing the above-described e-mail, and stating:

Yi Chi

I forwarded e-mail from [U.S. Company B], please careful when reply to me just in case not go to [U.S. Company B]

Kiet.

85. On March 19, 2013, U.S. Person 4 sent an e-mail to MAI, at microexeng@gmail.com, with the subject "RE: Foundry service," writing:

Kiet,

I have gone ahead and added you to access the [U.S. Company B] portal for downloading the foundry manual and design kits for MWO or ADS. The information you need is below:

https//portal.[U.S. Company B].com/ Username: kiet_mai Password: tpfnmi

- a. Based on my knowledge of this investigation, I know "MWO" is an acronym for Microwave Office, "ADS" is an acronym for Advanced Design System, and MWO and ADS are software programs utilized in the development of RF and microwave circuits.
- b. Based on information provided by U.S. Company B, I know that the password "tpfnmi" that U.S. Company B provided to MAI in this e-mail was a one-time-use-only password, and that

MAI was required to change this password the first time that he attempted to access U.S. Company B's design portal.

86. On March 19, 2013, MAI, using microexeng@gmail.com, sent an e-mail to SHIH, at yichishih@gmail.com, with the subject "[U.S. Company B] portal." In the e-mail, MAI wrote:

Here's design access...

https//portal.[U.S. Company B].com/****
Username: kiet_mai****
Password: [U.S. Company B]2013.

87. On March 19, 2013, SHIH, using yichishih@gmail.com, sent an e-mail reply to MAI, at l2kontemporary5404@gmail.com, with the subject "Re: From kiet," writing:

Kiet,

Our preference is the dedicated run so that we won't be constrained by schedule with others. The cost 130K is more than double than the GaAs run. Please confirm the size of wafer, 4 inches. I'll confirm with you on the final decision soon. Thanks.²⁵

88. On March 19, 2013, MAI, using microexeng@gmail.com, sent an e-mail to U.S. Person 4 with the subject "Re: Foundry service," writing:

Our run will be dedicated run and just to confirm, deliverable is 4 wafers, yes? Please also confirm the wafer size, 4"?

\$130K is about twice as much as GaAs run, please provide me a formal quote with milestone payments.

Thank you, Kiet.

²⁵ Based on travel records maintained by DHS, SHIH was outside the United States when he sent this e-mail.

As evidenced by the above-described e-mails, MAI was relaying to U.S. Person 4 the information provided by SHIH regarding the foundry services wanted from U.S. Company B.

89. On March 28, 2013, U.S. Person 4 sent an e-mail to MAI, at microexeng@gmail.com, with the subject "RE: Foundry service," writing:

Hello Kiet,

Here is the quote for a full dedicated mask set lot without testing. The wafers are all 100mm diameter. The price is about twice that of GaAs but with 5 to 10 times the performance of power and bandwidth. So I would actually characterize it as very competitive with GaAs technology.

Best regards,

[U.S. Person 4]

90. On May 8, 2013, MAI, using microexeng@gmail.com, sent an e-mail to U.S. Person 4 with the subject "Re: Foundry service," writing:

Sorry for taking awhile to get back to you. I'm preparing a dedicated design for the complete mask. have sketched a reticle plan based on my understanding from the design rule. The maximum reticle size is $8.5 \text{mm} \times 8.5 \text{mm}$. All gate features should be included within 6x6mm for best results. We try to fit all the circuits within 7.2x7.2 mm and try to keep all gate features with 6x6mm. Because you specify that you will need 20 mm2 space for PCM and spread over 16 sites. I am not sure how to do that so I reserve the remaining reticle area for you to put PCM. Please let me know if what I'm doing is correct. Further, if you only need 16 sites for PCM, can I use the rest of the area for test patterns? Another question is what could I get if the gate features are located outside the 6x6 mm area?

Kiet.

Based on my knowledge of the evidence gathered in the investigation, I believe the substance of the above e-mail was written by SHIH.²⁶

91. On May 8, 2013, U.S. Person 4 sent an e-mail to MAI, at microexeng@gmail.com, with the subject "Re: Foundry service," writing:

Hello Kiet,

For reticle planning, you do not need to worry about [U.S. Company B] PCM in any way. We basically use the final reticles shots to set the PCM shot as the same size. The PCM shot is then salt and peppered over 16 slots on the wafer. I am including [U.S. Person 14] in this message so that he look over your basic strategy. He may elect to contact you to help clarify.

Thanks.

[U.S. Person 4]

92. On September 4, 2013, U.S. Person 4 sent an e-mail with two attachments to other employees of U.S. Company B with the subject "New PO from MicroEx Engineering." In the e-mail, U.S. Person 4 wrote:

I just got this PO^{27} from a new customer that needs to be set up. They are a small startup company in California and, hence, appropriate review of business status/credit is requested, before I have the order loaded/acknowledged.

One attachment to the e-mail was a Purchase Order from MICROEX, dated September 3, 2013, number [U.S. Company B]-1301, that listed 5 payment milestones of \$25,000, \$35,000, \$30,000,

²⁶ Based on travel records maintained by DHS, SHIH was outside the United States at the time of this e-mail.

²⁷ Based on my training and experience, I know "PO" is an acronym used in business to mean "Purchase Order."

\$30,000, and \$10,000, totaling \$130,000 for "Delivery of 4 good wafers -- 3 diced wafers mounted on blue tape, 1 un-diced." The Purchase Order also contained the following information:

Bill To: MicroEx Engineering 990 N. Hill Street #205 Los Angeles, CA 90012 P: 626-319-3661

Ship To: MicroEx Engineering 991 Francisco Street Torrance, CA 90502 P: 626-319-3661

Based on open-source Internet research, I know that the address "991 Francisco Street, Torrance, CA 90502" is the location of U.S. Company G, a shipper/freight forwarder headquartered in Japan.

93. On September 9, 2013, MAI, at microexeng@gmail.com, received an e-mail from U.S. Person 4 that was a sales acknowledgement confirming the purchase order from MICROEX and setting dates for five milestone payments, September 9 through December 26, 2013. Also on September 9, 2013, MAI, using microexeng@gmail.com, sent a reply e-mail to U.S. Person 4 with the subject "Re: [U.S. Company B]: Sales Order Acknowledgement - MicroEx Engineering - 1037073." In the e-mail, MAI wrote:

Thanks, [U.S. Person 4], please e-mail the Lot Launch invoice.
Kiet.

94. I know, based on my examination of e-mails obtained during this investigation, that e-mails exchanged between MAI and SHIH during September 16, 2013 through October 19, 2013 show a continuing pattern of communication between MAI and SHIH

regarding the development of the GaN MMIC using U.S. Company B's Foundry Service. These e-mails show that SHIH, using U.S. Company B's design portal, created and revised the design for the GaN MMIC, and that MAI acted as the conduit for communication between SHIH and U.S. Company B employees. SHIH addressed the information provided by U.S. Company B employees, through MAI, by either telling MAI how to respond to U.S. Company B or by changing the design of the GaN MMIC in U.S. Company B's PDK portal.²⁸

95. Based on my review of records received from Chinatrust Bank, I know that on September 23, 2013, the PULLMAN LANE Chinatrust Bank account number ending in -256 received \$199,980 via a wire transfer from China Guangfa Bank, in Zhuhai, China, account number ending in 887-14, held in the name of Zhuhai TNS Trading Co. ("Zhuhai TNS Trading"), Ltd, Rm 1008, ABC Bld, No. 2042, North Fenghuang Road, Xiangzhou, Zhuhai, China.²⁹

²⁸ In addition, based on travel records maintained by DHS, SHIH was outside the United States from September 11, 2013, through December 20, 2013, and therefore, would have been accessing U.S. Company B's design portal from a foreign country.

²⁹ Based on open-source Internet research, and U.S. State Department records, I know the following. Zhuhai TNS Trading does not have its own webpage and has a very limited online footprint, however, the website diigen.com, lists Zhuhai TNS Trading as a company that exports goods from China, and sells goods and related products to the China market. (The website diigen.com describes itself as a free manufacturers' and suppliers' directory, where one can find importers, exporters, distributors and list one's business requirements for free.) In addition, the Chinese website chaojixinxi.com (which describes itself as the China import and export company yellow pages), has

- 96. Based on my review of records provided by Chinatrust Bank and my knowledge of the investigation, I know that during September December 2013, MAI received four checks from SHIH, drawn on the PULLMAN LANE Chinatrust Bank account number ending in -866, made payable to MICROEX, as follows:
- a. \$28,750, check number 1074, dated September 9, 2013, signed by SHIH, for PLP-1301;
- b. \$41,228, check number 1129, dated November 22,2013, signed by U.S. Person 10, for PLP-1302;
- c. \$69,000, check number 1131, dated December 11, 2013, signed by U.S. Person 10, for invoice PLP-1303; and
- d. \$11,500, check number 1135, dated January 2, 2014, signed by SHIH, for PLP-1304.
- 97. Based on my review of records provided by Chinatrust Bank and Bank of America, and my knowledge of the investigation, I know that the above-described four PULLMAN LANE checks were deposited in the L2kontemporary, Inc. dba MICROEX Bank of America account, number ending in -8759, and correspond to the amounts owing on four MICROEX invoices -- PLP-1301, 1302, 1303, 1304 that bill PULLMAN LANE for milestone payments for "NPN,

a listing for Zhuhai TNS Trading. Further, Google maps shows that Zhuhai is located in China's southern Guangdong province (on the coast west of Hong Kong), on the border with Macau. As noted above, U.S. Department of State visa application records show that Li Tao and Tian Hong are Chinese citizens, husband and wife, and employed with Zhuhai TNS Trading. See supra ¶ 50. Both Tao and Hong are referenced later in this affidavit. See infra ¶ 114.

Wideband, High Power GaN MMIC Design, Analysis, Layout & Test Support."

- 98. Based on my review of records provided by Bank of America and Morgan Stanley, I know that MAI, using two U.S. bank accounts, made the milestone payments, totaling \$130,000, to U.S. Company B, as follows:
- a. Two payments, in the form of checks, were made to U.S. Company B from a Bank of America account, number ending in -8759, in the name of L2kontemporary, Inc. dba MICROEX Engineering:
- i. \$25,000, check number 2157, dated September 11, 2013, and
- ii. \$35,000, check number 2003, dated December 2, 2013.
- b. One payment, in the form of a wire transfer of \$70,000, on December 24, 2013, was made to U.S. Company B from a Morgan Stanley account, number ending in -053, in the name of MAI and U.S. Person 5. This wire-transfer was funded by the deposit into this Morgan Stanley account of a \$70,000 check, number 2161, dated December 23, 2013, made payable to MAI, signed by MAI, drawn on Bank of America account, number ending in -8759, in the name of MICROEX.
- 99. On December 23, 2013, MAI, using
 12kontemporary5404@gmail.com, sent an e-mail to SHIH, at
 yichishih@gmail.com, with the subject "From Kiet." In the email, MAI wrote:

Ok, Yi-Chi, I'll be wiring [U.S. Company B] the payment tomorrow and they should ship the wafers on Thursday. I should receive the wafers by next Monday the latest...Kiet.

100. On December 26, 2013, U.S. Person 4 and other U.S.

Company B employees, received an e-mail from another U.S.

Company B employee, with the subject "RE: 93B2 Shipment." The e-mail confirmed the shipment of the wafers to MICROEX on

December 26, 2013, via FedEx, with tracking number 5709 9213

1317. Based on information provided by U.S. Company B, I know it was U.S. Company B's business practice to include with shipments of its products, such as the wafers, a copy of a Commercial Foundry Packing Slip, which, in this instance, listed the Consignee as: "Kiet Mai, MicroEx Engineering, 991 Francisco Street, Torrance, CA 90502" and the Specification of Commodities as: "93B2GM1 - 4 GaN MMIC Wafers, 3 Wafers - Diced, BE1641-12, HG0701-24, LS0125-03, 1 Wafer - Undiced JE0570-20."

101. I know, based on information provided by U.S. Company B, that each of the above-described Wafers contained large numbers of integrated circuits, called "dies." I also know, based on information provided by BIS, that from January 1, 2011 to December 22, 2014, dies on each of the above-described Wafers could not be exported from the United States to the PRC for national security reasons without an export license issued by the BIS. Based on the same information, I also know that from August 1, 2014 to the present, the above-described wafers could not be exported from the United States to CGTC without an export license issued by the BIS because CGTC was on the Entity List.

See infra ¶¶ 104-114 (describing the shipment of the wafers to the PRC).

102. On December 27, 2013, MAI, using
l2kontemporary5404@gmail.com, sent an e-mail to SHIH, at
yichishih@gmail.com, with the subject "From Kiet," writing:

I have the wafers . . . Kiet.

103. On December 27, 2013, SHIH, using yichishih@gmail.com, sent MAI an e-mail at l2kontemporary5404@gmail.com, responding to the e-mail described above, with the subject "Re: From Kiet," writing:

Super. I'm out of town. I'll pick it up this weekend. Thanks.

The Unlawful Export of the U.S. Company B Commodities From the United States

104. On November 4, 2013, U.S. Person 11 sent an e-mail to SHIH, writing:

[U.S. Person 12] Midnight Hoffee Group 1362 N. Carolan Ave. Burlingame, CA 94010 USA.

I know, based on my review of State of California, Secretary of State records and other materials gathered in this investigation that:

- a. "Midnight Hoffee Group" was the name of an import/export business that U.S. Person 11 and U.S. Person 12 set up but that did not generate much activity; and
- b. "1362 North Carolan Avenue, Burlingame, CA 94010" was the address of a business where U.S. Person 12 worked and with which U.S. Person 11 was associated.

105. On December 28, 2013, 30 SHIH, using yichishih@hotmail.com, responded to the above-described e-mail, writing:

[U.S. Person 11],

Please confirm that the package is going to be sent to the following address and some one [sic] can receive it next week:

[U.S. Person 12] Midnight Hoffee Group 1362 N. Carolan Ave. Burlingame, CA 94010 USA

. . . . By the way, should I send the check to your address on the W-9 form? Please confirm. Thanks.

106. On December 28, 2013, U.S. Person 11 sent an e-mail to SHIH, at yichishih@hotmail.com, writing:

Dr. Shih,

Both addresses are correct, please send the package to [U.S. Person 12], check to my address on w9. . . .

Thanks.

[U.S. Person 11]

107. On December 30, 2013, SHIH, using

yichishih@hotmail.com, responded to U.S. Person 11, writing:

[U.S. Person 11],

. . . I'll send the package and the check out today.

Happy Holidays.

Yi-Chi.

³⁰ I know, based on my review of travel records, that on December 22, 2013, U.S. Person 11 left the United States and traveled to Chengdu, China, and that U.S. Person 11 returned to the United States from Chengdu, China, on January 1, 2014. Thus, U.S. Person 11 was not in the United States on December 28, 2013, when SHIH sent this e-mail.

- 108. Subsequently, on the same date (December 30, 2013), SHIH, using yichishih@gmail.com, sent an e-mail to U.S. Person 11, with the subject "RE: [Chinese Characters]: Package Sent."
- 109. On December 31, 2013, SHIH, using yichishih@hotmail.com, sent an e-mail to U.S. Person 11 and U.S. Person 6, with the subject "Package," writing:

[U.S. Person 11] & [U.S. Person 6],

A package sent from LA should arrive today by FedEx tracking No.: 804546557495. Please follow up. Thanks.

Yi-Chi

- 110. Based on my review of business records provided by FedEx, I know the following information about a package identified by tracking number 804546557495:
- a. The package was shipped on December 30, 2013 by "Yi-Chi Shih, PULLMAN LANE Productions, 3040 Beckman Rd, Los Angeles CA, 90068," to [U.S. Person 12], "Midright [sic] Hoffee Group, 1362 N. Carolan Ave. Burlingame, CA 94010."
 - b. The value of the package was listed as \$100.00.
 - c. The package was delivered on December 31, 2013.
- d. [U.S. Person 12] signed for the package when it was delivered.
- 111. On December 31, 2013, U.S. Person 11 sent an e-mail, replying to SHIH's above-described e-mail, writing:

Dr. Shih,

Package was received, will go out to HK tomorrow.

[U.S. Person 11].

112. On January 4, 2014, SHIH, via yichishih@hotmail.com, sent an e-mail to U.S. Person 11, with the subject "Re: Package," writing:

[U.S. Person 11],

Please send me the tracking no. To follow up. Thanks.

Sent from my iPhone Yi-Chi Shih

- 113. Based on information and records provided by U.S. Company H, I know the following:
- a. U.S. Company H is a shipping company located in San Jose, CA.
- b. On January 2, 2014, using U.S. Company H's shipping services, "[U.S. Person 12], [U.S. Company name redacted], 1362 North Carolan ave, Burlingame, CA, 94010 United States Tel: 650-689-5045" sent a package to "Austin Yu, SDV Hong Kong, Rm 1605, 55 Wing Kei Road, Kerry Cargo Centre, Kwai Chung, Hong Kong, 99999 Hong Kong (HK) Tel +852 27652041."
- c. The content of the package was described as "Glass Sample."
 - d. The value of package was listed as "\$100.00."
- e. U.S. Company H used DHL Express to ship the package to Hong Kong. U.S. Company H provided information on the shipment from DHL and the DHL shipping label that showed the same shipper, receiver, addresses of shipper and receiver, description of contents, and value, as that described above.
- f. In addition, the DHL Express records showed the notation "NOEEI Sec 30 37 (a)." Based on my training and

experience, I know that the notation "NOEEI Sec 30 37 (a)" means the shipper claimed an exemption from the legal requirement to submit to the U.S. government electronic export information ("EEI") using the U.S. government's Automated Export System based on the shipment having a value of \$2,500 or less.

114. Based on my review of a U.S. Department of Commerce report of a Post Shipment Verification, 31 conducted by the Export Control Officer 32 in Hong Kong, with Austin Yu, Assistant Airfreight Export Operations Manager, SDV Hong Kong, 33 regarding

³¹ Based on my training, experience, and consultation with OEE agents, I know that Post Shipment Verifications (PSV) are BIS's primary method to detect and prevent illegal transfer of controlled U.S.-origin goods and technology already shipped overseas. BIS may conduct a PSV on any item that is exported from the U.S. and conducts PSV checks to confirm that dual-use items arrived at their destination and are being used as intended. BIS's Export Control Officers or other U.S. government personnel visit companies overseas to meet with importers or end-users in an attempt to verify the use and location of these items.

³² Based on my training, experience, and consultation with OEE agents, I know that Export Control Officers ("ECO") are Special Agents stationed overseas on detail to U.S. Department of Commerce's Foreign Commercial Service. The ECO Program oversees BIS's seven ECOs and provides support to other U.S. Commercial Service Officers stationed abroad that conduct prelicense checks (PLCs) and post-shipment verifications (PSVs), as well as perform outreach and educational activities and liaise with foreign governments on export control issues. BIS ECOs are detailed to the U.S. Commercial Service, and report directly to the Embassies/Consulates to which they are posted. Several of these ECO positions have regional responsibilities extending the reach of their export control activities to forty-three countries.

³³ Based on my knowledge gained during this investigation, I know SDV Hong Kong is a shipping and transport company based at Unit 1605, 16/F Kerry Cargo Centre 55 Wing Kei Road Kwai Chung, New Territories, Hong Kong. SDV Hong Kong is owned by Bollore Logistics International. SDV Hong Kong is also known as Bollore Logistics Hong Kong Ltd.

the January 2, 2014, shipment from U.S. Person 12, I know the following:

- a. On January 6, 2014, Yu received the package that was sent by U.S. Person 12, and, on the same date, Yu received in an e-mail from a representative of SDV's Beijing Office, an air waybill number corresponding to the shipment sent by [U.S. Person 12].
- b. On January 7, 2014, the same representative from SDV's Beijing Office told Yu in an e-mail, "Customer Li Tao will contact you and pick up the goods on today or tomorrow." Yu replied via e-mail that he "will ask Smart come to pick up the cargo on tomorrow." As noted above, Li Tao and Smart, also known as Smart Lee/Smart Li, appear to be the same person. See supra fns. 13, 29 and ¶ 95.34
- 115. Based on BIS records, I know that at no time did defendant SHIH or defendant MAI, or anyone associated with defendants, apply for or obtain an export license from BIS authorizing the export of the Wafers obtained from U.S. Company B from the United States to the PRC.
- 116. Based on my review of records provided by Chinatrust
 Commercial Bank, I know that on January 8, 2014, PULLMAN LANE
 Chinatrust Bank account ending in 256 received \$199,978 via a
 wire transfer from a China Guangfa Bank account number ending in

³⁴ According to Yu, the individual who picked up the shipment was known as Mr. Smart Li, aka Li Tao, aka Smart Lee. Yu provided a China mobile phone number for Li/Lee, that, based on online sources, corresponds to Zhuhai, Guangdong, China.

537-8 in Macau, China, in the name of Zeon Mau Trading Avenida
Do, in Yat Lai Garden 7 Andar AP Macau.

Further Execution of the Scheme to Defraud U.S. Company B of Its Technology

U.S. Company B Foundry Project 93C7 MicroEx Lot (2)

117. On March 19, 2014, SHIH, using yichishih@gmail.com, sent an e-mail to MAI, writing, in pertinent part:

Kiet,

. . . . [T]he GaN MMIC's are still under evaluation. Some of them have good performance. We are looking [for] potential customers for the Ku-band chips for satcom applications. 35 Please ask [U.S. Company B] about the pricing for production wafers of the order of 30 to 60 wafers. Thanks.

Yi-Chi

118. On March 20, 2014, MAI, using

12kontemporary5404@gmail.com, responded by e-mail to SHIH's above-described e-mail, writing, in pertinent part:

Yi-Chi:

. . . .

In regard to [U.S. Company B], have you checked the ITAR on these parts due to high power? Please see attached documents.

If these wafers are to be shipped out of U.S., I'd need to check on harmonized code unless you already have it. No problem to Canada.

³⁵ Based on my training and experience, and information gathered during the investigation of this case, I know that the term "Ku-band" refers to the portion of the electromagnetic spectrum in the microwave range of frequencies from 12 to 18 gigahertz (GHz), and the term "satcom" is a short-form reference to satellite communications.

Kiet

119. On March 20, 2014, SHIH responded to MAI's above-described e-mail, writing, in pertinent part:

Kiet,

. . . .

The PO will come from JYS Technologies ("JYS TECH") in Canada, who will be developing the Ku-band VSAT terminals. The harmonized code should be 8542.33.0000 (Electronic Integrated Circuits: Amplifiers). Let's get a quote first to see if it is feasible from cost view point. Thanks.

Yi-Chi

12kontemporary5404@gmail.com, sent two e-mails to SHIH, at yichishih@gmail.com. In the first e-mail, MAI wrote:

120. On March 20, 2014, MAI, using

OK. I'll get quote from [U.S. Company B] . . . Kiet In the second e-mail, MAI wrote:

Yi-Chi . . . Here are more questions from [U.S. Company B] . . . Kiet.

Will you want on-wafer testing of the devices? Will delivery be of diced wafers on tape or picked into gel packs? Do you want visual screening of die?

121. On June 16, 2014, MAI, using microexeng@gmail.com, sent an e-mail to U.S. Person 4, at U.S. Company B, the subject of which was "From Kiet, wafer run," writing:

We'd like to have another wafer run and it would be very helpful to have a more relaxed payment terms for this run.

Please quote with new payment terms for a run same as last run.

Thank you,

Kiet.

122. Based on my review of the pertinent e-mail communications, I know that over the course of the five months (June - November 2014), MAI and U.S. Person 4 negotiated pricing for the second wafer run.

123. Based on my review of records provided by Chinatrust Commercial Bank, I know that on October 14, 2014, PULLMAN LANE Chinatrust Bank account ending in 256 received \$119,975 via a wire transfer from a HSBC Hong Kong bank account ending in 838, in the name of One Five Nine Investment Holding Limited ("One Five Nine Investment"), in Kowloon (Hong Kong).36

124. On December 1, 2014, upon the completion of price negotiations, MAI, via microexeng@gmail.com, sent an e-mail with one attachment to U.S. Person 4, the subject of which was "New PO from Kiet." In the e-mail, MAI wrote:

Attached is the PO per quote FM0366. I've uploaded the file GaN_GB_20141029 for DRC, please let me know if you have any questions. . .

Kiet

The one attachment to the e-mail contained two pages:

³⁶ Open-source internet searches revealed One Five Nine Investment was incorporated in Hong Kong on August 30, 2007. On June 19, 2015, SHIH, using yichishih@gmail.com, advised the Branch Operations Manager at Chinatrust Bank (who had inquired about the October 14, 2014 incoming wire transfer) that "PULLMAN LANE Productions LLC provides circuit design, device modeling, and test data analysis services to One Five Nine Investment Holding" and that "PULLMAN LANE Productions LLC provides consultation service in market analysis, circuit design, device modeling, and test data analysis of mobile communications industry."

- a. A U.S. Company B Quote for Sale of Services, signed on December 1, 2014, by Kiet MAI, President, MicroEx, describing the subject of the quote as "in response to an e-mail request from Kiet Mai for foundry services in [U.S. Company B's] G28/40V4 process for mask, fabrication and dicing for a engineering dedicated mask lot," and stating a cost paid by milestones of \$130,000; and
- b. A Purchase Order from MICROEX Engineering, titled [U.S. Company B]-1401, with the same "Bill To" and "Ship To" as the previous Purchase Order referenced in paragraph 92 and a payment schedule by milestones of \$130,000.
- 125. On December 1, 2014, U.S. Person 4 sent an e-mail to MAI, writing:

Hello Kiet,

. . . Will you be exporting any of the devices or wafers?

126. On December 1, 2014, MAI, using microexeng@gmail.com, responded to the above-described e-mail, writing:

. . . No, not for export, we're doing development.

Kiet.

As stated above, based on my knowledge of the investigation, I know that at no time did MAI, or anyone associated with MICROEX, test, design, develop, or utilize the products from U.S. Company B.

127. On December 1, 2014, MAI, using microexeng@gmail.com, sent an e-mail with one attachment to U.S. Person 4, the subject of which was "Re: New PO from Kiet," writing:

I think we'll go with the full payment option, the 10% is difficult to pass up. Please change the PO option to the attached revised PO, [U.S. Company B]-1401a and cancel the PO [U.S. Company B]-1401. . . .

Kiet

The one attachment to this e-mail contained a revised U.S.

Company B Quote for Sale of Services and a revised Purchase

Order from MICROEX Engineering. The revised Quote for Sale of

Services and Purchase Order had a revised price of \$117,000.

that on December 1, 2014, MAI prepared an invoice for JYS TECH. The invoice number was JYS-1401a. The invoice contained the same information in the "Bill To" and "Ship To" sections of the invoice: JYS Technologies, Inc. 5860 Auteuil Ave., Suite B, Brossard, PQ J4Z 1M8, Canada, Tel: 1-450-926-8131. The item description on the invoice was "NPN, Wideband, High Power GaN MMIC Design, Analysis, Layout & Test Support, Milestone payment #1" and the amount due was \$120,000.

129. On December 2, 2014, U.S. Person 4 sent an e-mail with two attachments to MAI, at microexeng@gmail.com, with the subject "RE: New PO from Kiet," writing:

Hello Kiet,

Please find attached the Performa [sic] invoice and the electronic funds transfer information. Please let me know when you wire the money.

One attachment was a Pro Forma Invoice from U.S. Company B to MICROEX for customer PO [U.S. Company B]-1401a for \$117,000. The other attachment contained electronic funds transfer information for U.S. Company B.

130. On December 2, 2014, SHIH, using yichishih@hotmail.com, sent an e-mail to JYS TECH Person 1, stating, in pertinent part:

Please prepare to wire the payment of 117K to MicroEx, whose bank account is attached. Th (sic) invoice is also attached. I'll ask him to modify the invoice for JYS and send it over. The funding for this project is being arranged to JYS, but may take some time. I'll explain to you on the arrangement later. Please wire the payment within a week so that we can meet the due date of their payment.

131. On December 2, 2014, JYS TECH Person 1 responded to SHIH's above-described e-mail, writing:

Hi Yi Chi:

How are you. I will arrange the payment soon. Best Regards!

132. On December 4, 2014, MAI, using microexeng@gmail.com, sent an e-mail to U.S. Person 4, with the subject "Re: [U.S. Company B]: Sales Order Acknowledgement - MicroEx Engineering - 1043084." Responding to the above-described e-mail, MAI wrote:

Thank you . . . Kiet

as an acknowledgement that he had received the order acknowledgement from U.S. Company B, and was confirming the

information provided in Purchase Order [U.S. Company B]-1401a from MICROEX.

133. On December 10, 2014, U.S. Person 4 sent an e-mail to MAI, at microexeng@gmail.com, the subject of which was "Re: New designs 93C7," in which he/she wrote:

Kiet,

Are any of the design you are putting on this next mask subject to US ITAR export regulations?

Best regards,

[U.S. Person 4]

134. On December 10, 2014, MAI, using e-mail account microexeng@gmail.com, sent an e-mail in response to U.S. Person 4's above-described e-mail, with the subject "Re: New designs 93C7," in which MAI wrote:

We didn't get good enough agreement in the last design so we need to study further the nonlinear model against simpler structures such as single stage building blocks and the pre-match larger device structures. These are for research study and should not subject to ITAR.

Kiet.

135. Based on my review of Bank of America records, I know that on December 12, 2014, the L2kontemporary, Inc. dba MICROEX Engineering Bank of America account ending in 8759 received a wire transfer in the amount of \$119,990 from JYS TECH.

136. Based on my review of Morgan Stanley and Bank of America records, I know that on December 16, 2014, check number #2473, in the amount of \$117,500, drawn on the L2kontemporary,

Inc. dba MICROEX Engineering Bank of America account ending in 8759, made payable to Morgan Stanley, was deposited into a Morgan Stanley account ending in 089, in the name of a trust held by MAI and [U.S. Person 5].

137. On December 16, 2014, MAI, using microexeng@gmail.com, sent an e-mail to U.S. Person 4, with the subject "Re: MicroEx Payment," in which MAI wrote:

The payment per your wiring instructions was remitted this morning. The reference number is FED 20141216B1Q8021C019734.

Please keep me posted on the progress of the run.

Merry Holidays, Kiet

138. Based on Morgan Stanley records, I know that on December 17, 2014, \$117,000 was transferred from the Morgan Stanley account ending in 089 to a Morgan Stanley Bank, N.A. Portfolio Loan Account ending in 361, in the following names:

[U.S. Person 5] and MAI.

139. On December 16, 2014, \$117,000 was transferred from the Morgan Stanley Bank, N.A. Portfolio Loan Account ending in 361, to U.S. Company B.

140. I know, based on my review of the e-mail communications obtained during the investigation, that during February 20, 2015 - February 24, 2015, MAI, using 12kontemporary5404@gmail.com, forwarded a technical question concerning U.S. Company B's production of the four wafers to

SHIH, at yichishih@gmail.com, and then advised U.S. Company B as directed by SHIH.

141. On March 17, 2015, SHIH, using yichishih@gmail.com, sent an e-mail to U.S. Person 10, with the subject "Package," writing:

[U.S. Person 10],

I need your help to pick up a package from Kiet this coming Friday or Saturday, as soon as it arrives. I'll ask Kiet to contact you when it arrives. Please make sure you'll be available. Thanks.

After that, we need to take one out of four pieces and pack it separately for delivery. Therefore, please prepare a small box (by UPS or FedEx) and air bubble wrap for packaging. We'll talk over FaceTime to go through the details when you have the package ready. Talk to you soon. . .

Sent from my iPhone Yi-Chi Shih³⁷

142. On March 18, 2015, SHIH, using yichishih@gmail.com, sent an e-mail to MAI, via l2kontemporary5404@gmail.com, in which SHIH wrote:

Kiet.

Please call [U.S. Person 10] at [U.S. Person 10's phone number] to pick up the package for me when it arrives. I'll ask [him/her] to make arrangement for UCLA characterization. I'll be back in LA in mid-April. I'll see you then. Thanks.

Yi-Chi

³⁷ Based on travel records maintained by DHS, I know that SHIH was outside the United States from March 2, 2015, through April 25, 2015.

143. On March 18, 2015, MAI, using l2kontemporary5404@gmail.com, responded to SHIH's above-described e-mail, writing:

Ok Yi-Chi, I'll do so. I'll send the final invoice to JYS after [U.S. Person 10] picks up the delivery then. Kiet.

144. On March 20, 2015, U.S. Person 4 sent an e-mail to MAI, at microexeng@gmail.com, with the subject "RE: MicroEx Wafer Order," writing:

Hi Kiet,

Yes, they [the wafers] went out today. Here is the tracking number 5996 5139 0367.

I know, based on records provided by FedEx, that the tracking number provided by U.S. Person 4 is a FedEx tracking number, and that U.S. Company B shipped a package to MAI, MICROEX, on March 20, 2015.

145. On March 23, 2015, U.S. Person 4 sent an e-mail to MAI, at microexeng@gmail.com, with the subject "Fwd: MicroEx Wafer Order," writing:

Looks like it is there.

I know, based on my knowledge of this investigation and records provided by FedEx, that U.S. Person 4 was referencing the delivery to MAI of the package containing the Wafer Order, and this package was delivered to 991 Francisco Street, Torrance, CA on March 23, 2015.

146. On March 23, 2015, MAI, using

12kontemporary5404@gmail.com, sent SHIH an e-mail, at yichishih@gmail.com, with the subject "Re: From Kiet." Following up on his previous e-mail (see supra ¶ 143), MAI wrote:

Yi-Chi:

I left [U.S. Person 10] voice and text messages for picking up the wafers, which arrived today.

Kiet.

147. On March 25, 2015, MAI, using

12kontemporary5404@gmail.com, sent an e-mail with one attachment to SHIH, at yichishih@gmail.com, with the subject "[U.S. Company B] wafer data," writing:

Yi-Chi:

[U.S. Person 10] picked-up the wafers today, wafers' data/packing slip attached.

Kiet

Attached to the e-mail was a [U.S. Company B] Commercial Foundry Packing Slip that listed four diced wafers: BU1823-11, HG0752-36, JE0628-20 and JH0727-45, valued at \$9,000, shipped on March 20, 2015; and a Process Specifications sheet from [U.S. Company B].

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Additional Export of the U.S. Company B Products from the United States

148. On April 6, 2015, JYS TECH Person 1 sent an e-mail to SHIH, at yichishih@hotmail.com, with the subject "Hi !," writing:

Hi Yi Chi:
How are you. For the sample, please send to the
university lab at:
[JYS TECH Person 1]
Electrical and Computer Engineering Department,
[Canadian University A]McConnell Engineering Bldg.,
Room 7073480 University Street, Montreal, Quebec, H3A
0E9, Canada
Tel. 514-398-1747
Please use UPS or HDL and indicate this is a sample
for testing and evaluation purpose. Best regards !
[JYS TECH Person 1]

149. On April 6, 2015, SHIH, using yichishih@gmail.com, with the subject "Re Package," sent an e-mail to U.S. Person 10, writing:

Dear [U.S. Person 10],

Please ask Julian to send the package to [deleted]:

[JYS TECH Person 1]
Electrical and Computer Engineering Department,
[Canadian University A]
McConnell Engineering Bldg., Room 707
3480 University Street, Montreal, Quebec, H3A 0E9,
Canada

Tel. [deleted]

Please use UPS and indicate this is a glass sample for testing and evaluation purpose in the description box and declare a value of \$50. No insurance is required. Thanks.

While at UPS, please ask him to get a box and some packaging materials in preparation for a second sample.

150. On April 6, 2015, U.S. Person 10 sent an e-mail to SHIH, at yichishih@gmail.com, with the subject "Re Package," responding to the above-described e-mail, writing:

Okay! Is it okay to ship it ups Ground or does it need to get there faster?

151. On April 6, 2015, U.S. Person 10 sent an e-mail to SHIH, at yichishih@gmail.com, with the subject "Fwd: Your parcel will soon be on its way." In the e-mail, U.S. Person 10 forwarded to SHIH the UPS shipping confirmation e-mail, and wrote:

The package has been shipped! Here is the tracking number: 1Z054V7A6807770093

Below is the confirmation e-mail from UPS.

152. On April 14, 2015, SHIH, using yichishih@hotmail.com, sent an e-mail to JYS TECH Person 1, with the subject "Re: Hi," writing, in pertinent part:

I just check the tracking on UPS delivery of the sample. It shows that it is being delivered to you. Please keep an eye. Thanks.

Sent from my iPhoneYi-Chi Shih

153. On April 14, 2015, JYS TECH Person 1 sent an e-mail to SHIH, at yichishih@hotmail.com, responding to the abovedescribing e-mail:

Hi Yi Chi: The sample for tests has been received. Thanks ! [JYS TECH Person 1] 154. On April 17, 2015, MAI, using

12kontemporary5404@gmail.com, sent an e-mail with one attachment to SHIH, at yichishih@gmail.com, with the subject "From Kiet," writing:

Hi Yi-Chi:

Is everything ok with the [U.S. Company B] wafers? Are you in LA? Also, I wonder will JYS be sending the last payment to MicroEx soon?

Kiet

Attached to the e-mail was an invoice from MICROEX to JYS TECH for "NPN, Wideband, High Power GaN MMIC Design, Analysis, Layout & Test Support" showing a total due of \$14,550.

155. Based on my review of records provided by Chinatrust
Bank and Bank of America, I know that on October 30, 2015, check
number 1079, dated October 19, 2015, in the amount of \$14,550,
payable to Microex Engineering, drawn on Chinatrust Bank account
number ending in 866, in the name of PULLMAN LANE, signed by
U.S. Person 10, was deposited in the L2kontemporary, Inc. dba
Microex Engineering Bank of America account ending in -759, at a
Bank of America ATM.³⁸

SHIH's Foreign Residences and Relevant Foreign Travel

156. Based on my review of a CBP report, I know the following:

³⁸ In 2016, it was reported to the FBI that SHIH had stated, in substance, with respect to the conduct that is the subject of this investigation, that he (SHIH) did not do anything wrong.

- a. On June 29, 2017, during a secondary inspection at Los Angeles International Airport ("LAX"), CBP interviewed SHIH.
- b. During that interview, SHIH made the following statements:
- i. SHIH stated that (1) he was returning from a 3-month business trip in Taiwan, (2) he worked for a university in Taiwan as an electrical engineering professor, and (3) he traveled to Hawaii in June to attend the International Microwave Symposium 2017 conference.
- ii. SHIH stated that he also went to Chengdu,
 China in March 2017 to do consulting for a company that
 manufactures semiconductors.
- iii. SHIH stated that he currently resides at [exact address provided is deleted here], in Los Angeles.
- iv. SHIH stated that his residence in Taiwan is [exact address provided is deleted here], Taiwan, Taoyuan City.
- $_{
 m V.}$ SHIH stated that he lived in Chengdu, China from 2011-2014.
- 157. Based on my review of travel records maintained by DHS, I know the information about SHIH's foreign travel that is set forth in the table below. This information establishes SHIH's frequent travel outside the United States, but does not necessarily reflect SHIH's final destination on each trip. For

example, I believe, based on evidence gathered during the investigation, that on some occasions, when SHIH arrived in an airport in Japan or Taiwan, his travel continued to China.

Unless stated otherwise, the departure and arrival locations in the table below are airports.

Date	Departed From	Arrived At	Time Outside U.S.
1/10/2007	LAX ³⁹	Taipei, Taiwan	Approximately 2 weeks
1/24/2017	Taipei, Taiwan	LAX	
3/23/2007	LAX	Taipei, Taiwan	Approximately 2 weeks
4/2/2007	Taipei, Taiwan	LAX	
4/20/2007	Chicago, Illinois	Montreal, Canada	Approximately 3 days
4/23/2007	Toronto, Canada	LAX	
8/22/2007	LAX	Tokyo, Japan	Approximately 2 weeks
9/7/2007	Tokyo, Japan	LAX	
11/28/2007	LAX	Guangzhou, China	Approximately 1 week
12/4/2007	Guangzhou, China	LAX	
2/29/2008	LAX	Beijing, China	Approximately 1 week
3/5/2008	Beijing, China	LAX	
4/1/2008	LAX	Osaka Bay, Japan	Approximately 2 weeks
4/14/2008	Taipei, Taiwan	LAX	
7/1/2008	LAX	Guangzhou, China	Approximately 2 months, 1 week
9/9/2008	Tokyo, Japan	LAX	

^{39 &}quot;LAX" means Los Angeles International Airport.

11/12/2008	LAX	Shanghai, China	Approximately 2 weeks
11/28/2008	Shanghai, China	LAX	
2/9/2009	XA.I	Beijing, China	Approximately 2 weeks
2/24/2009	Guangzhou, China	LAX	
7/2/2009	LAX	Beijing, China	Approximately 1 week
7/7/2009	Beijing, China	LAX	
8/28/2009	LAX	Taipei, Taiwan	Approximately 2 weeks
9/13/2009	Taipei, Taiwan	LAX	
11/20/2009	LAX	Beijing, China	Approximately 1 week
11/26/2009	Beijing, China	LAX	
1/1/2010	LAX	Beijing, China	Approximately 2 weeks
1/17/2010	Beijing, China	LAX	
2/17/2010	LAX	Beijing, China	Approximately 2 weeks
3/2/2010	Beijing, China	LAX	
3/30/2010	LAX	Beijing, China	Approximately 1 week
4/4/2010	Beijing, China	LAX	
6/19/2010	LAX	Beijing, China	Approximately 1 week
6/24/2010	Beijing, China	LAX	
8/10/2010	LAX	Beijing, China	Approximately 1 week
8/16/2010	Beijing, China	LAX	
10/9/2010	LAX	Beijing, China	Approximately 2 weeks
10/25/2010	Beijing, China	LAX	
12/3/2010	Chicago, Illinois	Montreal, Canada	Approximately 3 days

12/6/2010	Montreal, Canada	LAX	
12/10/2010	LAX	Beijing, China	Approximately 3 days
12/13/2010	Beijing, China	LAX	
1/14/2011	LAX	Beijing, China	Approximately 4 days
1/18/2011	Beijing, China	LAX	
2/17/2011	LAX	Beijing, China	Approximately 1 week
2/22/2011	Beijing, China	LAX	
3/22/2011	LAX	Paris, France	Approximately 2 weeks
4/3/2011	Paris, France	LAX	
4/21/2011	LAX	Hong Kong	Approximately 1 week
4/28/2011	Hong Kong	LAX	
7/3/2011	LAX	Beijing, China	Approximately 2 months
8/27/2011	Beijing, China	LAX	
9/12/2011	LAX	Shanghai, China	Approximately 4 months
1/14/2012	Shanghai, China	LAX	
1/17/2012	LAX	Montreal, Canada	Approximately 4 days
1/21/2012	Montreal, Canada	LAX	
2/8/2012	LAX	Tokyo, Japan	Approximately 3 months
4/28/2012	Tokyo, Japan	LAX	
5/13/2012	LAX	Tokyo, Japan	Approximately 1 month
6/7/2012	Tokyo, Japan	LAX	
6/14/2012	LAX	Toronto, Canada	Approximately 1 week
6/21/2012	Montreal, Canada	LAX	

6/23/2012	LAX	Tokyo, Japan	Approximately 3 months
9/27/2012	Tokyo, Japan	LAX	
10/15/2012	LAX	Tokyo, Japan	Approximately 2 months
12/19/2012	Tokyo, Japan	LAX	
12/31/2012	LAX	Tokyo, Japan	Approximately 1 month
1/26/2013	Tokyo, Japan	LAX	
2/18/2013	LAX	Tokyo, Japan	Approximately 3 months
5/30/2013	Tokyo, Japan	Seattle, Washington	
6/24/2013	LAX	Tokyo, Japan	Approximately 2 months
9/5/2013	Tokyo, Japan	LAX	
9/11/2013	LAX	Tokyo, Japan	Approximately 3 months
12/20/2013	Tokyo, Japan	LAX	
1/26/2014	Philadelphia, Pennsylvania	Tel Aviv, Israel	Approximately 2.5 months
5/10/2014	Tokyo, Japan	LAX	
6/16/2014	LAX	Tokyo, Japan	Approximately 1 month
7/27/2014	Seoul, Korea	LAX	
9/16/2014	New York, New York	London, United Kingdom	Approximately 3 months
12/18/2014	Tokyo, Japan	LAX	
3/2/2015	LAX	Tokyo, Japan	Approximately 1.5 months
4/25/2015	Beijing, China	LAX	
8/3/2015	LAX	Beijing, China	Approximately 1 week
8/14/2015	Beijing, China	LAX	
9/5/2015	Newark, New Jersey	Paris, France	Approximately 2 weeks

9/30/2015	Montreal,	LAX	
	Canada		
11/16/2015	San Francisco, California	Taipei, Taiwan	Approximately 1 month
12/20/2015	Shanghai, China	LAX	
3/6/2016	LAX	Beijing, China	Approximately 1 week
3/13/2016	Beijing, China	LAX	
7/14/2016	LAX	Montreal, Canada	Approximately 4 days
7/18/2016	unknown	Re-entered the U.S. in a vehicle at Champlain, New York	
8/6/2016	LAX	Guangzhou, China	Approximately 1 week
8/13/2016	Guangzhou, China	LAX	
9/16/2016	LAX	Shanghai, China	Approximately 4 months
1/6/2017	Chengdu, China	San Francisco, California	
2/9/2017	XAJ	Tokyo, Japan	Approximately 2 months
4/2/2017	London, United Kingdom	LAX	
4/12/2017	LAX	Taipei, Taiwan	Approximately 2 months
6/3/2017	Tokyo, Japan	Honolulu, Hawaii	
6/12/2017	Honolulu, Hawaii	Taipei, Taiwan	Approximately 2 weeks
6/29/2017	Taipei, Taiwan	LAX	
8/6/2017	LAX	London, United Kingdom	Approximately 3 months
11/4/2017	Taipei, Taiwan	LAX	
11/28/2017	New York, New York	Montreal, Canada	Approximately 4 days
12/2/2017	Montreal, Canada	LAX	

12/11/2017	LAX	Shenzhen, China	Approximately 1 week
12/17/2017	Shenzhen, China	LAX	

VI. CONCLUSION

158. For all the reasons described above, there is probable cause to believe that SHIH and MAI have violated 18 U.S.C. § 371 (Conspiracy), and that, in addition, SHIH has violated 50 U.S.C. § 1705(a) (IEEPA).

Alexander Storino Special Agent Federal Bureau of Investigation

Subscribed to and sworn before me this day of January, 2018.

PAUL L. ABRAMS

HONORABLE PAUL J. ABRAMS
UNITED STATES MAGISTRATE JUDGE