Case 2:10-mj-02475-DUTY Docu 710 Page 1 of 38. AO 91 Rev. 11/82 CENTRAL DISTRICT OF CALIFORNIA UNITED STATES DISTRICT COURT CLERK, U.S. DISTRICT COURT DOCKET NO. UNITED STATES OF AMERICA MAGISTRATE'S CASE NO. YORK YUAN CHANG, aka York Chang, CENTRAL DISTRICT OF CALIFORNIA aka David Zhang, aka Yuan Zhang LEPING HUANG, aka Nicole Huang, aka Nicola Huang Complaint for violation of Title 50, United States Code, Sections 1701-1706, and Title 15, Code of Federal Regulations, Sections 730 -774. Complaint for violation of Title 18, United States Code, Section 1001. LOCATION NAME OF MAGISTRATE JUDGE UNITED STATES Los Angeles, CA MAGISTRATE JUDGE JAY C. GANDHI PLACE OF OFFENSE ADDRESS OF ACCUSED (IF KNOWN) DATE OF OFFENSE Beginning on a date unknown Los Angeles and and continuing to in or around San Bernardino Counties December 2009; September 8, 2009; February 13, 2010 COMPLAINANT'S STATEMENT OF FACTS CONSTITUTING THE OFFENSE OR VIOLATION: Beginning on a date unknown and continuing to in or around December 2009, in Los Angeles and San Bernardino Counties, within the Central District of California, defendants YORK YUAN CHANG and LEPING HUANG knowingly and willfully conspired to export controlled technology to the People's Republic of China without obtaining an export license in violation of the International Emergency Economic Powers Act, 50 U.S.C. §§ 1701-1706, and the Export Administration Regulations, 15 C.F.R. §§ 730-774. On or about September 8, 2009, in San Bernardino County, within the Central District of California, defendant LEPING HUANG knowingly and willfully made a material false, fictitious, and fraudulent statement and representation during an interview with federal agents. On or about February 13, 2010, in Los Angeles County, within the Central District of California, defendant LEPING HUANG knowingly and willfully made a material false, fictitious, and fraudulent statement and representation during an interview with federal agents. On or about February 13, 2010, in Los Angeles County, within the Central District of California, defendant YORK YUAN CHANG knowingly and willfully made a material false, fictitious, and fraudulent statement and representation during an interview with federal agents. BASIS OF COMPLAINANT'S CHARGE AGAINST THE ACCUSED: (See attached affidavit which is incorporated as part of this Complaint) MATERIAL WITNESSES IN RELATION TO THIS CHARGE: N/A Being duly sworn, I declare that the SIGNATURE OF COMPLAINANT MICHAEL N. DAMASCUS foregoing is true and correct to the best of my knowledge. OFFICIAL TITLE Special Agent - Federal Bureau of Investigation Sworn to before me and subscribed in my presence, DATE SIGNATURE OF MAGISTRATE JUDGE(1) 2010 October

1) See Federal Rules of Criminal Procedure rules 3 and 54.

AUSA: Christopher Grigg; sec: dem REC: DETENTION (Warrants)

AFFIDAVIT

I, Michael N. Damascus, being duly sworn, hereby depose and say:

I.

INTRODUCTION

- 1. I am a Special Agent ("SA") of the United States Department of Justice, Federal Bureau of Investigation ("FBI"), and have been so employed since September 2007. Before joining the FBI, I was employed at K&L Gates, LLP for two years as a computer analyst. During that time I gained experience in computer network management, software implementation, and hardware maintenance/troubleshooting. I am currently assigned to the FBI Los Angeles Field Office, where I have worked for approximately two-and-a-half years. I am responsible for investigating violations of laws relating to national security and illegal transfer of technology. My initial training at the FBI Academy in Quantico, Virginia, included training in national security and criminal investigations, and I have received additional specialized training in technology-related criminal matters since that time. As an FBI Special Agent, I have participated in investigations of violations of United States export laws and regulations.
- 2. As a result of my training and experience, I am familiar with federal laws and regulations governing the export

of goods and technology from the United States, including the International Emergency Economic Powers Act, 50 U.S.C. §§ 1701-1706, the Export Administration Act of 1979, 50 U.S.C. App. §§ 2401-2420, and the Export Administration Regulations, 15 C.F.R. §§ 730-774.

- 3. This affidavit is made in support of a criminal complaint against YORK YUAN CHANG, also known as ("aka") "York Chang," aka "David Zhang," aka "Yuan Zhang" ("ZHANG"), and LEPING HUANG, aka "Nicole Huang," aka "Nicola Huang" ("HUANG") charging them with conspiring to export restricted electronics technology to the People's Republic of China ("PRC") without a license in violation of the International Emergency Economic Powers Act, 50 U.S.C. §§ 1701-1706, and the Export Administration Regulations, 15 C.F.R. §§ 730-774, and with making materially false statements to federal agents in violation of 18 U.S.C. § 1001.
- 4. To summarize, ZHANG and HUANG, long-time business owners whose primary business consists of exporting technology and equipment to the PRC, entered into contracts to design and transfer to the PRC technology for the development and production of two types of high-performance analog-to-digital converters ("ADCs"). To accomplish their goal, ZHANG and HUANG retained two California-based engineers to design the technology and provide training to engineers in the PRC. ZHANG and HUANG never applied or intended to apply for an export license as required under

United States export laws and regulations, despite their knowledge that such a license was required. When questioned by federal agents about the ADC project, they falsely stated, among other things, that the project had been cancelled in early 2009.

Because this affidavit is being submitted for the limited purpose of establishing probable cause for the requested complaint and arrest warrants, I have not included each and every fact known to me concerning this investigation. All of the events to which I refer herein occurred on or about the date or dates noted. All translations from the Chinese language referenced herein are draft translations. I make this affidavit based upon the following: (a) my personal observations and knowledge; (b) review of documents connected with this investigation; and (c) conversations with a number of other law enforcement agents who have jointly participated in this investigation and who are experienced in the area of exporting controlled, dual use items from the United States, including United States Department of Commerce ("DOC"), Bureau of Industry and Security ("BIS"), Office of Export Enforcement ("OEE") SA Carlos R. Olivo ("SA Olivo"). SA Olivo has been employed by the DOC, BIS, OEE since February 1997. He is a graduate of the Federal Law Enforcement Training Center ("FLETC"). He has attended numerous advanced export and specialty seminars addressing the United States export controls relating to national

security and foreign policy. Since becoming an agent, he has conducted and participated in investigations of violations of the United States export laws. As a result of his training and experience, he is familiar with the federal laws relating to the unlawful exportation of commodities, technology, and software. He is responsible for investigating violations of the laws relating to the export of commodities, technology, and software from the United States, including the International Emergency Economic Powers Act, the Export Administration Act of 1979, and the Export Administration Regulations.

II.

EXPORT CONTROL LAWS AND REGULATIONS

6. Based on my training and experience as an FBI SA, as well as on discussions with DOC SA Olivo and other agents, I am aware of the following federal laws and regulations that govern the export of controlled items from the United States to the PRC.

A. Dual Use Export Violations

7. Pursuant to the Export Administration Regulations, 15 C.F.R. §§ 730-774 ("EAR"), the DOC regulates the export of certain commodities, technology, and software (collectively referred to hereinafter as "items") to protect the national security, foreign policy, non-proliferation, and short-supply interests of the United States. EAR provisions in effect at the time of the conduct discussed in this affidavit are found in the

2005, 2006, 2007, 2008, and 2009 versions of the Code of Federal Regulations, 15 C.F.R. §§ 730-774 (2005-2009). Section 730.6 of the EAR (15 C.F.R. § 730.6, "Control purposes") states:

The export control provisions of the EAR are intended to serve the national security, foreign policy, nonproliferation, and short supply interests of the United States and, in some cases, to carry out its international obligations. Some controls are designed to restrict access to dual use items by countries or persons that might apply such items to uses inimical to U.S. interests. These include controls designed to stem the proliferation of weapons of mass destruction and controls designed to limit the military and terrorism support capability of certain countries. . .

Section 730.3 of the EAR (15 C.F.R. § 730.3, "Dual use exports") provides that the term "dual use" generally refers to EAR-controlled items that can have both military and commercial applications.

- 8. First promulgated under the Export Administration Act,
 50 U.S.C. App. §§ 2401-2420, the EAR continue in effect under the
 International Emergency Economic Powers Act, 50 U.S.C.
 §§ 1701-1707 ("IEEPA"), by virtue of Executive Order 13222, as
 extended by successive Presidential Notices.
- 9. IEEPA grants the President of the United States the authority to deal with unusual and extraordinary threats to the national security, foreign policy, or economy of the United States by declaring a national emergency with respect to the particular threat. See 50 U.S.C. §§ 1701, 1702, 1704. The President declares a national emergency through Executive Orders.

- At 50 U.S.C. § 1705(a), IEEPA provides "[i]t shall be unlawful for a person to violate, attempt to violate, conspire to violate, or cause a violation of any license, order, regulation, or prohibition issued under this chapter."
- 10. Through the EAR, the DOC imposes licensing or other requirements before an item or technology subject to the EAR may be lawfully exported from the United States or lawfully re-exported from another country. Pursuant to 15 C.F.R. § 736.2(b)(1), the EAR generally bans the unlicensed exportation and re-exportation of controlled items and, as provided in 15 C.F.R. § 772, generally defines the term "item" to mean "commodities, software, and technology." Under Section 734.2(b)(2) of the EAR, (15 C.F.R. § 734.2(b)(1), "Export of technology or software"), "export" of technology or software includes "[a]ny release of technology or software subject to the EAR in a foreign country." Under Section 734.2(b)(3) of the EAR, (15 C.F.R. § 734.2(b)(1), "Definition of 'release' of technology or software"), "[t]echnology or software is 'released' for export through:
- (i) Visual inspection by foreign nationals of U.S.-origin equipment and facilities;
- (ii) Oral exchanges of information in the United States or abroad; or
 - (iii) The application to situations abroad of personal

knowledge or technical experience acquired in the United States."

- Supplement Number 1 to Part 774 of the EAR contains the Commodity Classification List ("CCL"). The CCL identifies dual use items and technology subject to BIS licensing requirements based on various reasons, such as missile technology, nuclear proliferation, anti-terrorism, and national security concerns. The CCL categorizes items and technology under Export Commodity Classification Numbers ("ECCNs"), which are based on technical specifications. Each ECCN entry in the EAR identifies all applicable reasons for control and references a Country Chart column name and number for each reason (e.g., NS [for National Security] Column 2). The Country Chart, contained in Supplement Number 1 to Part 738 of the EAR, is a matrix with a list of country names on one axis and a list of control reasons and numbers on the other. If an "X" appears in the box created by the intersection of a given country row and a given control column name and number, then exportation to the given country of all ECCN entries that list the given control column name and number is restricted. Any such items or technology cannot be exported to that country without a prior valid license or license exception.
- 12. The EAR establish the responsibility of BIS, with the input of other federal agencies, to approve or deny export license requests. Individuals and companies in the United States

seeking to export items or technology with an ECCN that, as indicated by the Country Chart, is restricted for export to the country of destination, must first submit an export license application to BIS in Washington, D.C., and receive approval of the license prior to exportation. Furthermore, BIS may establish licensing conditions to maintain control over the end-use and the transfer of dual use items and technology.

- 13. Section 764.2(a) of the EAR (15 C.F.R. § 764.2(a), "Engaging in Prohibited Conduct") states, in pertinent part: "No person may engage in any conduct prohibited by or contrary to, or refrain from engaging in any conduct required by the EAA, the EAR, or any order, license or authorization issued thereunder."
- 14. Section 764.2(b) of the EAR (15 C.F.R. § 764.2(b), "Causing, Aiding, or Abetting a Violation") states, in pertinent part: "no person may cause, aid, abet, command, induce, procure, or permit the doing of any act prohibited, or the omission of any act required, by the EAA, the EAR, or any order, license or authorization issued thereunder."
- 15. Section 764.2(d) of the EAR (15 C.F.R. § 764.2(d), "Conspiracy"), states:

No person may conspire or act in concert with one or more persons in any manner or for any purpose to bring about or to do any act that constitutes a violation of the EAA, the EAR, or any order, license or authorization issued thereunder.

16. Section 764.2(e) of the EAR (15 C.F.R. § 764.2(e),

"Acting with Knowledge of a Violation") states, in pertinent part:

No person may order, buy, remove, conceal, store, use, sell, loan, dispose of, transfer, transport, finance, forward, or otherwise service, in whole or in part, any item exported or to be exported from the United States, or that is otherwise subject to the EAR, with knowledge that a violation of the EAA, the EAR, or any order, license or authorization issued thereunder, has occurred, is about to occur, or is intended to occur in connection with the item.

B. Applicable Criminal Penalties

17. Because the EAA has lapsed and the EAR continue in effect under IEEPA pursuant to executive order, IEEPA's criminal penalty provisions apply to violations of the EAR. In conjunction with the prohibitions of 50 U.S.C. § 1705(a) discussed in paragraph 9 above, at 50 U.S.C. § 1705(c), IEEPA provides:

A person who willfully commits, willfully attempts to commit, or willfully conspires to commit, or aids or abets in the commission of, an unlawful act described in subsection (a) of this section shall, upon conviction, be fined not more than \$1,000,000, or if a natural person, may be imprisoned for not more than 20 years, or both.

III.

STATEMENT OF PROBABLE CAUSE

A. Zhang's And Huang's Experience As Exporters

18. I reviewed reports and records from DOC and United
States Immigration Customs Enforcement ("ICE") documenting
previous interviews conducted with ZHANG and HUANG (who are
husband and wife) regarding their export activities conducted via

their business, GTSI, which at all relevant times was located within the Central District of California. On July 31, 2000, DOC OEE SA Derrick Lee conducted an DOC Outreach visit at GTSI and spoke to HUANG and ZHANG. ZHANG was the primary point of contact and identified himself as Senior Vice President of GTSI. ZHANG indicated GTSI had been in business since 1995 and exports electronics and semi-conductor equipment valued at approximately \$500,000 per year to the PRC. ZHANG stated that the majority of GTSI's exports require an export license and that GTSI had applied for a DOC export license in May 2000, but the application was returned without action. ZHANG further stated that an FBI agent visited GTSI in 1998 to inquire about visitors from "SISS," which SA Lee's report defined as the "Sichuan Institute of Solid State." [Agent note: based on my knowledge of the investigation, including information regarding GTSI contained in DOC records and FBI reports, "SISS" and "Sichuan Institute of Solid State" refers to the Sichuan Institute of Solid-State Circuits, also known as the 24th Research Institute, as discussed in paragraphs 24 and 26 below.]

19. On January 13, 2003, DOC OEE SA Lou Vanzant conducted a DOC Outreach visit at GTSI. HUANG acted as the point of contact for GTSI and identified herself as the company manager. HUANG indicated that GTSI previously applied for a DOC export license, but the application was rejected. HUANG indicated she was

responsible for the company's export documentation, and that she consulted the DOC's BIS website for information on export controls and restrictions on GTSI's products.

On April 2, 2003, ICE SAs Michael Twomey and Meg Condon conducted a Project Shield America presentation at GTSI. Project Shield America, similar to DOC's Outreach program, is an industry outreach and enforcement initiative developed by ICE to prevent the illegal export of munitions and sensitive technology to terrorists, criminal organizations, and foreign adversaries. component of Project Shield America and DOC's Outreach program is to visit industry officials to educate them about United States export laws and to solicit their assistance in preventing illegal foreign acquisition of their products. Both HUANG and ZHANG participated in the presentation. ZHANG was identified as the CEO of GTSI, and HUANG was identified as the General Manager and the person responsible for reviewing transactions involving the export of equipment or technology outside of the United States. HUANG stated during this presentation that she believed she was sufficiently knowledgeable about export controls to ensure that the appropriate screening and licensing procedures are followed and that she had accessed the DOC website to determine if an export license was required. HUANG also indicated that she was aware that the United States restricts the flow of certain technical data, whether written, oral, or visual, and that she

was aware that the restrictions apply when she or her employees live, travel, or transmit information abroad or merely come in contact with foreigners visiting the United States. HUANG was given instructional and promotional information which included advisements of United States export control laws and regulations.

- 21. I reviewed DOC records reflecting GTSI's history of applications for DOC export licenses. On or about May 2, 2000, GTSI applied to DOC BIS for a license to export a controlled item to the PRC. The application was returned to GTSI without action due to insufficient information regarding the end-user stated by GTSI.
- 22. On or about September 24, 2003, GTSI applied for a DOC BIS license to export controlled items to the PRC. The application was returned to GTSI without action after the Department of Defense raised concerns regarding the risk of diversion to unauthorized end-users/end-uses and GTSI was unable to provide sufficient information to BIS to establish the bona fides of GTSI's stated clients.
- 23. On or about June 17, 2004, GTSI, with the assistance of a law firm with offices in Baltimore, Maryland, and Washington, D.C., again applied to DOC BIS for a license to export to the PRC the same items that were the subject of GTSI's September 2003 application. DOC BIS rejected the application because of a risk that the items would be diverted to unauthorized end-uses or

end-users.

B. The ADC Project

Background

- 24. Special Agents of the FBI interviewed a confidential source ("CS1") on November 27, 2009. As I explain below, the information from CS1 has been corroborated by other sources of information, including intercepted conversations and e-mails. I reviewed an FBI report documenting the November 27, 2009 interview, in which CS1 informed agents that two engineers based in the United States, Engineer #1 and Engineer #2 (collectively "the Engineers"), joined a project by ZHANG and HUANG to develop and provide ADC technology to the 24th Research Institute located in Chongqing, PRC (the "24th RI"). As explained in paragraph 26, below, the 24th RI is also known as the Sichuan Institute of Solid-State Circuits ("SISC").
- a. CS1 stated that the Engineers discussed the ADC project with HUANG and others in a conference call in December 2008 and that the Engineers traveled to Chongqing, PRC, in February 2009, where they met ZHANG and gave a presentation to the 24th RI in a highly secured building with uniformed guards checking all entrants.
- b. In April 2009, the Engineers visited ZHANG at his home in the Los Angeles area. During this visit, ZHANG showed the Engineers contracts for the ADC project and, when the

Engineers expressed concerns over certain provisions of the contracts, stated that the contracts had been approved by senior PRC officials and that modifications could not be made. CS1 stated that the primary contract, titled "High Performance 8-Bit, 14-Bit ADC(s) Business Contract on the Transfer of Design and Testing Technologies," was between GTSI and the 24th RI and spelled out the project requirements. CS1 stated that the Engineers' names were included at the 24th RI's insistence to ensure that they would serve as the experts providing the technical assistance required from GTSI in the contract and that the Engineers had a separate agreement with GTSI.

- c. CS1 stated that the Engineers traveled to the 24th RI in Chongqing, PRC, in May 2009 to commence the project. CS1 stated that upon return to the United States, Engineer #2 was searched by United States Customs.
- 25. Based on my training and experience, my work on this investigation, my work with other agents, and discussions with DOC SA Olivo and other agents, I understand that ADCs are electronic devices that convert analog signals like sound, movement, and temperature into digital signals. ADCs are critical in many electronic systems because computers only process digital signals. I have reviewed websites of ADC manufacturers Texas Instruments, National Semiconductor, Linear Technology, and Analog Devices, websites of American science

organizations, and the Electronics Technology chapter of the Department of Defense's Military Critical Technologies List, published in September 2006, and learned that high-speed ADCs are dual use items having a variety of military and civilian applications. Military applications include: RADAR, SONAR, electronic warfare, avionics imaging, munitions, and targeting. Because of their military applications, ADCs with certain specifications are controlled for national security reasons and require a license from the Department of Commerce before they can be exported to the PRC.

- 26. I reviewed a printed copy of the SISC Chinese website, www.sisc.com.cn, which had been translated by an FBI language analyst. The website states that SISC is also known as the 24th Research Institute of the China Electronics Technology Corporation ("CETC"). A review of the website reveals that SISC develops products for use in aerospace, satellites, and RADAR, and has made contributions to the modernization of the national defense of the PRC.
- 27. I reviewed multiple e-mails and draft translations of conversations that were recorded as part of the investigation of the ADC project; at the time the recordings were made, ZHANG and HUANG did not know that their conversations were being recorded. The e-mails and recorded conversations corroborate information provided by CS1.

- 28. On or about November 20, 2008, ZHANG participated in a recorded telephone conversation with Zhengfan Zhang, who, according to FBI draft translations of publicly accessible Chinese-language websites, including SISC's website discussed in paragraph 26 above, is a high-ranking official identified as the President of the 24th RI. According to a draft translation of that conversation prepared by an FBI language analyst, ZHANG discussed ADCs with Zhengfan Zhang and said that there were some concerns because the specifications were controlled and that things with these specifications cannot be made for China.
- 29. On or about January 20, 2009, HUANG sent an e-mail to defendant ZHANG and to Zhengfan Zhang of the 24th RI. According to a draft translation of that e-mail prepared by an FBI language analyst, HUANG said that the plan was to have the two Engineers fly to Chongqing, PRC, on February 11, and to have the information exchanged on February 13 and 14.
- 30. On or about January 27, 2009, HUANG and ZHANG participated in a recorded telephone conversation. According to a draft translation of that conversation prepared by an FBI language analyst, HUANG told ZHANG that HUANG had booked tickets for the Engineers to travel to the PRC on February 11, 2009.
- 31. On or about February 16, 2009, ZHANG sent an e-mail to HUANG. According to a draft translation of that e-mail prepared by an FBI language analyst, in the e-mail, ZHANG forwarded to

HUANG an e-mail, dated February 15, 2009, that ZHANG received from Ruzhang Li regarding a technical collaboration project between GTSI and the 24th RI for the design of three ADCs, in which Ruzhang Li provided the specifications for the 8-Bit ADC and the 14-Bit ADC, set out conditions of the contract, and listed questions that needed to be answered by the design team.

- 32. An internet search by an FBI language analyst revealed an article on www.news.uestc.edu.cn, which is a page on the University of Electronic Science and Technology of China website. A printed copy of this website was translated by an FBI language analyst. This translation identified Ruzhang Li ("Director Li") as a researcher with the PRC's National Key Laboratory of Analog Integrated Circuits and the 24th Research Institute (also known as SISC). This website also indicated that Li is the chief ADC expert for the General Armament Department of the People's Liberation Army ("PLA"). The PLA is the unified military organization of land, sea, and air forces for the PRC. According to the website, Li has been awarded several PRC National Defense Technology Progress Awards.
- 33. On or about February 16, 2009, ZHANG sent an English-language e-mail to Engineer #2, in which ZHANG said, "Thank you for your effort to give the presentation in customer site. It is very impressive to them. I believe we can get at least part of the project, may be all. The customer has more requirement for

- us. I will send to you asap."
- 34. On or about March 1, 2009, ZHANG sent an English-language e-mail to the Engineers, copied to HUANG, in which ZHANG said, "I am in Chongqing right now. After discussing with them, they agree to let us design the 8 and 14 bit ones for them."
- 35. On or about March 2, 2009, ZHANG sent an English-language e-mail to the Engineers, copied to HUANG, in which ZHANG said that ZHANG was managing to get \$1 million for the 8-Bit ADC and the 14-Bit ADC (referring to getting the 24th RI to pay \$1 million for the ADC project).
- 36. On or about March 10, 2009, ZHANG participated in a recorded telephone conversation with an engineer residing in the United States who is not one of the Engineers referenced above. According to a draft translation of that conversation prepared by an FBI language analyst, ZHANG and the engineer discussed the ADCs and their applications, including applications in instrumentation and RADAR, and the engineer told ZHANG that if the speed of the ADCs is too high, the application is not permitted due to concerns that the ADCs will be used in military applications.
- 37. On or about April 24, 2009, HUANG sent an e-mail to ZHANG and Engineer #1, copied to Engineer #2, in which HUANG said that the contract for the Chongqing project would be signed in days, and that defendant HUANG was preparing an "agreement

between us" that would be based on the contract with Chongqing (the "Cooperation Agreement").

38. On or about April 25, 2009, HUANG sent an e-mail to Engineer #1 and ZHANG, copied to Engineer #2, in which HUANG attached drafts of a Business Contract, a Transfer Agreement, and the Cooperation Agreement, and asked the Engineers to check the Cooperation Agreement, the Business Contract, and the Transfer Agreement. In the e-mail, HUANG stated that the Business Contract and Transfer Agreement had been "agreed by us and the End-user" (referring to the 24th RI).

<u>Search Of Engineer #2 By Customs And Border Protection And Seizure Of The COPIED MATERIALS</u>

- 39. I reviewed a report dated May 29, 2009, prepared by United States Customs and Border Protection ("CBP") Officer Kevin Shia, and learned the following:
- a. On May 29, 2009, Engineer #2 arrived at San

 Francisco International Airport aboard EVA Airways flight # 028

 from Taipei Chiang Kai Shek International Airport, Taiwan via

 Hong Kong International Airport and Chongqing Jiangbei Airport in
 the PRC.
- b. Engineer #2 was referred by CBP for a secondary inspection where he was interviewed by CBP Officers Shia and Christopher Borst. Engineer #2's belongings were also searched pursuant to CBP's border search authority. Pursuant to border authority, CBP Officers Shia and Borst and ICE SA Jason Collins,

ICE Supervisory SA Cheryl Peterson, and ICE Computer Forensics

Agent Da Shun Li copied and detained copies of certain media

files and documents in Engineer #2's possession that appeared to

represent illegal technology transfer, as well as certain

documents that were in a foreign language (hereinafter referred

to as the "COPIED MATERIALS").

- 40. I reviewed the COPIED MATERIALS, which were inventoried on CBP Form 6051D No. 519303. The COPIED MATERIALS were itemized on this form and described as: (1) "82 pages copies of docs," and (2) 1 disk B identified as SF09-049 LA14G408LA0066. The COPIED MATERIALS included the following paper documents:
- a. Certified corporate charter documents for "MRF Technology, Inc." ("MRF Technology""), dated May 12, 2009, reflecting incorporation by Engineer #2 on April 30, 2009 in the Independent State of Samoa.
- b. HSBC, Hong Kong branch, opening bank account documentation for MRF TECHNOLOGY, dated May 20, 2009.
- c. A contract in Chinese entitled "High Performance 8-bit, 14-bit ADC(s) Business Contract for Transfer of Design and Testing Technologies" ("Business Contract"). A draft translation by an FBI language analyst indicates that the agreement is between the Engineers, "G.T.S.I. Corp. (Beijing)," "G.T.S.I. Corp. (USA)," and the Sichuan Institute of Solid-State Circuits ("SISC"). The contract provides that the Engineers are to design

and develop 8-bit 1.5 GSPS and 14-bit 125 MSPS ADCs for SISC in the PRC, for which services GTSI (Beijing) will pay GTSI \$1 million.

- d. A contract in Chinese entitled "Cooperation Agreement" between MRF Technology, Bellmore Limited, Inc.

 ("Bellmore Limited"), and GTSI ("Cooperation Agreement"). A draft translation by an FBI language analyst indicates that the Cooperation Agreement refers to the Business Contract described above and states that the parties have entered the Cooperation Agreement to smoothly execute and complete the Business Contract. The Cooperation Agreement bears HUANG's signature above a hand-written date of 5/15/2009.
- e. A contract in Chinese entitled "High Performance 8-bit, 14-bit ADC(s) Agreement for Transfer of Design and Testing Technologies" ("Transfer Agreement"). A draft translation by an FBI language analyst indicates that this agreement is between GTSI and SISC, and requires GTSI to provide technical experts to design, develop, and oversee the production of 8-bit 1.5 GSPS and 14-bit 125 MSPS ADCs that match the specifications, functionality, and characteristics of specified 8-bit and 14-bit ADCs produced by United States manufacturers. The Transfer Agreement includes a signature block for Ruzhang Li as the authorized representative of SISC (discussed in paragraph 26 above).

- f. A travel agency itinerary issued by America Asia Travel Center, Inc., for Engineer #2's travel to the PRC, which is addressed to GTSI.
- g. A document titled "ADC project plan, schedule and critical technologies & team members' biography."
- 41. A review of the contracts found in the COPIED MATERIALS indicates that the contracts appear to call for the Engineers to provide designs and technical instruction to engineers at SISC in order for SISC to develop, produce, and manufacture 8-bit 1.5 GSPS and 14-bit 125 MSPS ADCs. Specifically, the contracts called for GTSI and the Engineers to design and transfer to the PRC technology required to develop, produce, and use ADCs having the same specifications, functionality, and characteristics as two existing ADCs that were designed and are manufactured by two American companies.

ZHANG And HUANG Continue The ADC Project

42. According to the November 27, 2009 report of CS1's statements to the FBI, CS1 stated that after being inspected by Customs on May 29, 2009, Engineer #2 was scared and called Engineer #1. Engineer #1 then called HUANG. On or about June 1, 2009, HUANG participated in a recorded telephone conversation with Engineer #1. According to a draft translation of that conversation prepared by an FBI language analyst, HUANG and Engineer #1 discussed the fact that Engineer #2 had been searched

while going through Customs at the airport upon his return to the United States from the PRC on May 29, 2009, and HUANG said that what they needed to know was what Engineer #2 said, how much was copied, what he was asked and how he answered, and that Engineer #2's home phone was already unsafe.

- 43. According to the November 27, 2009 report of CS1's statements to the FBI, CS1 stated that shortly after the call between HUANG and Engineer #1, HUANG flew to San Jose, California, to meet with the Engineers. During the meeting (which occurred on or about June 2, 2009), HUANG instructed Engineer #1 to send her an e-mail saying that the Engineers could not do the project. As explained below, the purpose of the e-mail was to cover up the project.
- 44. On or about June 2, 2009, HUANG participated in a recorded telephone conversation with ZHANG. According to a draft translation of that conversation prepared by an FBI language analyst, HUANG and ZHANG discussed the search of Engineer #2 at the airport, and HUANG said, "I think there's a problem, how could this happen? . . . Yes, I reckon it is going to come down on us very soon."
- 45. I reviewed an e-mail sent on or about June 3, 2009 from Engineer #1 to Engineer #2 and HUANG, copied to ZHANG, in which Engineer #1 writes "After reviewing the 14 and 8 bits ADC work listed by you, the schedule and the specifications are both too

difficult for us. Therefore we are not able to sign the contract with you. ¶ Sorry for not able to do the work for you and we are looking for future cooperation opportunity. Thanks for the understanding." Based on the evidence and records in this case, including the information provided by CS1 discussed in paragraphs 42 and 43, above, and HUANG's statements discussed in paragraph 53, below, I believe that HUANG requested that this e-mail be sent for the purpose of creating the false appearance that the ADC project was cancelled. Further, as discussed in paragraphs 51 and 52, below, during an interview with federal agents on September 8, 2009, HUANG falsely told the agents that the ADC project had been cancelled and presented Engineer #1's June 3, 2009 e-mail as support for her false claim.

46. I reviewed an e-mail sent on or about June 8, 2009 from a PRC-based GTSI employee to the Engineers and copied to HUANG. According to an FBI draft translation of the e-mail, the PRC-based GTSI requests that the Engineers examine feedback contained in an attachment to the e-mail. Attached to the e-mail is a two-page document written in Chinese. A draft translation of the attachment reveals that the document, signed by Director Li on behalf of the 24th RI, discusses the Engineers' travel to Chongqing and the ADC project. The document states that the 24th RI hopes to work in sync with the Engineers in the coming two months and states that the technical agreement clearly states the

progress for each stage of the projects. The document notes that the technical collaboration has two objectives: research and development of high-performance products; and fostering high quality talents to improve the 24th RI's design methodology and establish scientifically effective design flows. The document requests that the Engineers provide a general plan in the form of a report to the 24th RI before July. The document states: that the Engineers should, as part of their job, focus on fostering the talents of the 24th RI's design staff; that the 24th RI's staff should work and learn under the Engineers' guidance; and that the 24th RI hopes that the general circuit design can be completed as soon as possible so that the Engineers can travel to Chongqing to provide on-site quidance.

47. I reviewed an English-language e-mail sent on or about June 18, 2009 by HUANG to the Engineers stating "[t]he first payment with USD73,000 has been made and wired to Bellmore Account." The e-mail: indicates that the \$73,000 is part of a total \$100,000 first payment, which is "10% of total"; provides a break down of each Engineer's share by name; and states "[p]lease check the bank account and let me know when you receive it.

Thanks!" [Agent's note: a review of the translated Business Contract reveals that the total contract price is \$1 million and that the Business Contract provides that an initial 10 percent payment will be made within 5 weeks after the contract is signed.

Accordingly, there is probable cause to believe that HUANG's June 18, 2009 e-mail refers to the initial payment for the ADC project.]

- 48. I reviewed an English-language e-mail sent on or about June 22, 2009, by Engineer #1 sent to HUANG and Engineer #2. In the e-mail, Engineer #1 responds affirmatively to a Chinese-language e-mail sent by HUANG to the Engineers on or about June 19, 2009. According to a draft translation of HUANG's e-mail by an FBI language analyst, HUANG asks Engineer #1 to review the Bellmore account to confirm that he received the funds.
- 49. On or about June 12, 2010, CS1 was interviewed.

 According to an FBI report of that interview, CS1 stated that

 Bellmore was a company belonging to Engineer #1 and that Engineer

 #2 had also established an overseas company, MRF Technology, for

 purposes of receiving payment for the ADC project but, after

 Engineer #2 was inspected at the airport, HUANG instructed

 Engineer #2 not to use his company. CS1 stated that work on the

 ADC project continued. According to CS1, the Engineers

 participated in on-going communications with HUANG, ZHANG, and

 personnel at the 24th RI, including conference calls and e-mail

 exchanges. CS1 stated that a bulk of the work was done in July

 and August 2009. According to CS1, the Engineers participated in

 weekly conference calls with 24th RI engineers during July and

 August 2009. At approximately the end of August 2009, the 24th

RI engineers stopped participating in the conference calls.

According to CS1, the Engineers learned from ZHANG that the 24th

RI engineers were working on reverse-engineering¹ the ADCs.

- 50. On September 3, 2009, FBI agents interviewed CS1.

 According to a report of that interview, CS1 told agents that

 ZHANG participated in a call with the Engineers that focused on
 when the Engineers would be able to deliver the ADCs and when
 they could travel to Chongqing. CS1 told agents that, during the
 call, ZHANG suggested that Engineer #2 travel to Chongqing to
 work with designers there to resolve ADC design issues and that
 ZHANG warned the Engineers that they could face a penalty if they
 did not deliver the ADCs on time.
- 51. On September 8, 2009, HUANG was visited by DOC SA Olivo and FBI SA Noel Neeman at GTSI's office in San Bernardino County. According to a report of the ensuing interview, HUANG stated that GTSI's yearly revenue is between \$7 million to \$8 million. HUANG stated that GTSI had been exporting goods from the United States since 1995 and that she is familiar with export compliance rules. HUANG also stated that, approximately every three years, she received visits from U.S. government export officials who

According to open-source information available via the Internet, "reverse-engineering" generally refers to the process of discovering the technological principles of an item by taking it apart. Regarding integrated circuits, the process can include grinding off successive layers of the chip and, using an electron microscope, taking pictures layer by layer to reveal the chip's construction.

provided verbal instruction to her on export rules. HUANG also stated that she received export compliance material via mail and that she checks the DOC BIS website for export information.

HUANG said that she understood that certain technology has dual uses, and that export licenses may be required for the export of dual use technology. She stated that she was familiar with ECCNs and understood that showing certain technology to a foreign visitor can be considered an export.

During the visit, HUANG was questioned about the ADC project. HUANG falsely stated that the ADC project had been cancelled, and provided SAs Neeman and Olivo with a copy of an e-mail from the Engineers dated June 3, 2009, stating that the Engineers declined to undertake the project because the work was too difficult. SA Neeman provided HUANG a copy of Category 3 of the CCL and advised HUANG that ADCs are dual use technology and that some ADCs require a license to export. SA Neeman pointed out sections 3A001.a.2 and 3A001.a.5 to HUANG and circled the words "analog-to-digital converters," which appear in both sections. SA Neeman also pointed out and circled section 3E001, which applies to technology controlled under 3A001. SA Neeman explained that the export of designs and plans for the development of certain technology can also require a license. HUANG acknowledged that she understood this. When the agents asked what conversations HUANG had regarding whether the ADC

project was export-controlled, she said that because the project was cancelled early on, she did not have any conversations about export controls. HUANG said that if she had an item that was controlled and required a license, she would use a lawyer in Washington, D.C., with whom she had worked in the past.

In the evening of September 8, 2009, HUANG and the Engineers participated in a recorded telephone conversation. According to a draft translation of that conversation prepared by an FBI language analyst, Engineer #2 stated that agents had visited him that day and had given him copies of the export regulations and had told him that the ADCs were export-controlled. Engineer #2 described to HUANG and Engineer #1 what types of ADCs were controlled and said that he now realized that what they were doing was in the controlled category and that he could not continue to do it. Engineer #2 said that if they continued, they might end up in jail. HUANG, who stated that agents had also visited her that day, asked Engineer #2 what he told the agents who visited him about the project. Engineer #2 stated that he told the agents that they stopped the project, to which HUANG replied "So, basically, our lines were the same." HUANG described her statements to the agents and that she showed the agents Engineer #1's e-mail about discontinuing the project. HUANG stated that they needed to be on the same page and asked if Engineer #2 said he stopped and was not doing it anymore. HUANG

gave instructions on how to answer future questions from agents. When Engineer #1 asked HUANG to re-send the e-mail about cancelling the project and explained that he had deleted it, HUANG stated that the e-mail was intended to be saved and that the purpose of the e-mail was to keep a record in case of any trouble in the future. Referring to Engineer #2's inspection by Customs in May 2009, HUANG stated that the reason she kept sending e-mail and asked the Engineers to send stuff back to her was because she was sure that agents would come to check on them.

- 54. On or about September 25, 2009, HUANG and ZHANG participated in a recorded telephone conversation with the Engineers. According to a draft translation of that conversation prepared by an FBI language analyst, Engineer #2 stated that the Engineers were afraid. In the ensuing discussion, HUANG told Engineer #1 to think of the situation as though he was doing research and development in the United States and that his reasoning should be that "As long as it is not from us that it is given [Agent's note: referring to exporting Engineer #1's work], is [sic] has nothing to do with me. This should be the reasoning. Right?" ZHANG then stated that it is best not to discuss more over the phone.
- 55. On or about October 29, 2009, ZHANG and HUANG participated in a recorded telephone conversation with the Engineers and Director Li of the 24th RI. According to a draft

translation of that conversation prepared by an FBI language analyst, ZHANG and HUANG discussed the ADC Project with the Engineers and Director Li. ZHANG told the Engineers that he had told the 24th RI that tape-out² by December was not a problem. ZHANG told Director Li that at about the middle of the month, they would have the core piece brought over [Agent note: referring to bringing designs for the ADC cores to the PRC.] HUANG told the Engineers that the target was to get it done.

participated in a recorded telephone conversation with the Engineers. According to a draft translation of that conversation prepared by an FBI language analyst, ZHANG specifically asked whether there was a problem with tape-out being done before December 31st; the Engineers responded that, without help, the possibility was extremely low. ZHANG stated "You can first make an 8, and then make a 14. Either is fine. Which one is faster, work on that one first." Later in the conversation, the Engineers, HUANG, and ZHANG discuss the possibility of obtaining reverse-engineered information regarding 8-bit and 14-bit ADCs to help the Engineers complete their work on the ADC cores. ZHANG

² According to open-source information available via the Internet, "tape-out" generally refers to delivery of final designs, typically contained in a database, to fabrication facilities ("fab") to begin the manufacturing process. Before the advent of electronic media, design databases were stored on tape that was physically delivered to the fab.

stated that he will ask Chongqing [Agent's note: referring to the 24th RI] if they have reverse-engineered data.

- 57. On or about October 31, 2009, ZHANG and HUANG participated in another recorded telephone conversation with the Engineers. According to a draft translation of that conversation prepared by an FBI language analyst, ZHANG states that he spoke to them (referring to the 24th RI) and they can provide their 8-bit peripheral circuitry. ZHANG, HUANG, and the Engineers then discuss completing the work. HUANG discussed that aborting the work would result in penalties based on the contract, that it would be best to avoid such problems, and that they would do the 8-Bit ADC first. HUANG then stated that they agreed to do one tape-out in December and another in January.
- 58. On or about November 1, 2009, ZHANG and HUANG participated in a recorded telephone conversation with the Engineers, Director Li, and Li Liang, an engineer at the 24th RI. According to a draft translation of that conversation prepared by an FBI language analyst, HUANG told Director Li and Li Liang that the plan was to try to have the chip produced by the end of December and that the core for the 14-Bit ADC had been completed. ZHANG told Director Li and Li Liang that they were aiming to finish the first one on time and the second one in January.
- 59. According to the FBI report of CS1's June 12, 2010 interview, HUANG and the Engineers exchanged a series of e-mails

in early November 2009 in which HUANG forwarded to the Engineers information relating to reverse-engineered files. On or about November 3, 2009, HUANG sent two e-mails to the Engineers including and e-mail account and associated passwords for the Engineers to access the reverse-engineered 8-bit ADC files via the Internet. On or about November 4, 2009, HUANG sent an e-mail to the Engineers with an attached report from a Beijing company regarding the reverse-engineered 8-bit ADC. On or about November 12, 2009, HUANG sent an e-mail to the Engineers in which HUANG forwarded Director Li's responses to Engineer #1's questions about the reverse-engineered schematics. I have reviewed copies and draft translations of those e-mails, which confirm the above information provided by CS1 regarding the e-mails.

60. According to the FBI report of CS1's June 12, 2010 interview, CS1 stated that the plan was for the Engineers to complete the 8-Bit ADC first by integrating their work on the core of the 8-Bit ADC into the reverse-engineered data and that the 24th RI would reverse engineer the 14-Bit ADC, which HUANG, ZHANG, and the Engineers would use to complete the 14-Bit ADC.

Search Of Engineer #1 By Customs And Border Protection

61. On or about November 12, 2009, HUANG and ZHANG participated in a lengthy recorded telephone conversation with the Engineers in which they discussed the fact that, earlier that day, Engineer #1 was inspected at an airport by United States

Customs officials upon returning to the United States from the PRC. According to a draft translation of that conversation prepared by an FBI language analyst, Engineer #1 stated that the officials kept his computer, which contained the files they provided [Agent note: referring to the reverse-engineered files], including the content and circuit diagrams. HUANG told Engineer #1 that she had told him not to bring this kind of thing when entering or leaving the country and that Engineer #1 was definitely being watched. HUANG asked Engineer #1 if he had deleted the e-mails from the last couple of days. ZHANG said, "In any case, we have to cover this thing, right?"

participated in a recorded conversation with the Engineers.

According to a draft translation of that conversation prepared by an FBI language analyst, the Engineers said that they had put the ADC project on hold because they were afraid of being arrested.

Engineer #1 asked ZHANG and HUANG to apply for an export permit.

HUANG replied, "I don't know how things are at David's place [referring to ZHANG], but if we don't meet the deadline, I'll be in trouble." ZHANG said they should remember that U.S. companies also needed their high-end product, and that these days, controls were loosening. ZHANG said they could apply through the normal channel, but "if we really run out of time, we should deal with it when the problem really arises." Based on the contents of the

conversation and other communications between HAUNG and ZHANG and the Engineers, including HUANG's reference to meeting the deadline, there is probable cause to believe that ZHANG's statements regarding their intent to get a license were not genuine and were meant solely to persuade the Engineers to continue their work on the ADC project.

Interviews of HUANG and ZHANG on February 13, 2010

- 63. On February 13, 2010, search warrants were executed at the offices of GTSI and the residence of ZHANG and HUANG.

 Federal agents interviewed HUANG and ZHANG together at their residence in Los Angles County before the searches commenced.

 According to an FBI report of that interview, ZHANG stated that he knew agents visited GTSI in September 2009 to discuss ADC project and that he knows about ECCNs and asks manufacturers whether items are controlled; if items are controlled he will not proceed or will have seller deal with license issues. HUANG said if they need a license they will get one, and she knows how to look up ECCNs to check if items are controlled. ZHANG falsely stated to the agents that the ADC project was stopped in May 2009 because the specifications were too high performing.
- 64. According to an FBI report of a separate interview of HUANG conducted on February 13, 2010, HUANG falsely stated to federal agents that the Engineers were never paid for their work on the ADC project.

C. The Licensing Determinations

- I have reviewed six certified Licensing Determinations ("LDs") issued by the DOC dated September 28, 2010. In those LDs, Eileen M. Albanese, Director, Office of National Security and Technology Transfer Controls, DOC, certifies that the 8-bit 1.5 GSPS ADC and the 14-bit 125 MSPS ADC contemplated by the contracts found in the COPIED MATERIALS, described above, are classified under ECCN 3A001.a.5.a.1 and ECCN 3A001.a.5.a.4, respectively, and are controlled for national security and anti-terrorism reasons. The LDs state that licenses were required for export each of those ADCs to the PRC during the time period of June 1, 2008 through August 19, 2010. Additionally, the LDs state that the overall circuit design technology and system architecture design technology that the Engineers were required to provide for the 8-Bit and 14-Bit ADCs under the contracts found in the COPIED MATERIALS discussed above are controlled for national security and anti-terrorism reasons. technology is classified under ECCN 3E001, a license was required to export this technology to the PRC during the period June 1, 2008 through August 19, 2010.
- 66. On October 7, 2009, I spoke with SA Olivo who told me that he has periodically checked the Export Control Automated Support System ("ECASS") during the course of this investigation, most recently in October 2010. SA Olivo informs me that ECASS is

a BIS database that, as well as other functions, tracks and records information and/or applications submitted by companies and/or persons for export licenses and commodity classifications. A search of ECASS indicated that no information or license application relating to the ADC project has been submitted by ZHANG, HUANG, GTSI, the Engineers, or any other person or entity and that no such license has been issued.

IV.

CONCLUSION

67. Based on the foregoing, there is probable cause to believe that YORK YUAN CHANG and LEPING HUANG have conspired to knowingly export restricted electronics technology to the People's Republic of China ("PRC") without a license in violation of the International Emergency Economic Powers Act, 50 U.S.C. §§ 1701-1706, and the Export Administration Regulations, 15 C.F.R. §§ 730-774, and have made materially false statements to federal agents in violation of 18 U.S.C. § 1001.

Michael N. Damascus, Special Agent Federal Bureau of Investigation

Subscribed and sworn to before me on October 2010.

THE HONORABLE JAY C. GANDHI UNITED STATES MAGISTRATE JUDGE