UNITED STATES DISTRICT COURT EASTERN DISTRICT OF MICHIGAN SOUTHERN DIVISION

UNITED STATES OF AMERICA,

Plaintiff,

Case:2:10-cr-20454

and 2323: Forfeiture

Judge: Battani, Marianne O

MJ: Whalen, R. Steven

Filed: 07-21-2010 At 03:49 PM

INDI USA V SEALED MATTER (EB)

v.

D-1 YU QIN, aka YU CHIN,

and

D-2 SHANSHAN DU, aka SHANNON DU,

Defendants.

18 U.S.C.§ 1832(a)(3), (a)(5):
Unauthorized Possession of
Trade Secrets;
18 U.S.C. § 2: Aiding and Abetting;
18 U.S.C. § 1343: Wire Fraud;
18 U.S.C. § 1512(c)(1): Obstruction of
Justice; 18 U.S.C. § 981(a)(1)(C),
28 U.S.C. § 2461, 18 U.S.C. §§ 1834

INDICTMENT

THE GRAND JURY CHARGES:

GENERAL ALLEGATIONS

At all times pertinent to this indictment:

1. General Motors Company ("GM") was a company that designed, manufactured, and marketed automobiles. GM's corporate headquarters were located in Detroit, Michigan. GM distributed its products in interstate and foreign commerce to all areas of the United States, and all over the world.

- 2. GM was involved in the development and production of hybrid electric vehicles for over a decade and expended many millions of dollars in the research and development of hybrid electric vehicles. Hybrid electric vehicles obtain power from both traditional internal combustion engines fueled by gasoline as well as from electric motors powered by batteries.
- 3. From 1985 to August 30, 2005, defendant YU QIN, aka YU CHIN (D-1), worked at Controlled Power Company (CPC) in Troy, Michigan, a company that designs and manufactures electrical power equipment and systems.
- 4. Defendant SHANSHAN DU, aka SHANNON DU (D-2), wife of defendant YU QIN (D-1), was hired by GM in 2000 as an engineer within GM's Advanced Technology Vehicles group, located at 1996 Technology Drive, Troy, Michigan, and was employed there until March 18, 2005. During her GM employment, defendant SHANSHAN DU (D-2) had access to trade secrets of GM relating to hybrid vehicle technology.
- 5. In light of the sensitivity and value of information relating to its hybrid vehicle development, GM took reasonable measures to protect and keep secret such information, including restricting access to this information, maintaining electronic and physical security features, training employees on information security measures, marking documents with proprietary warnings, and requiring the execution of non-disclosure agreements by employees and suppliers.

- 6. On or about July 25, 2001, defendant SHANSHAN DU (D-2) signed an agreement with GM in which she agreed to protect GM proprietary information created or obtained in the course of her employment. Defendant SHANSHAN DU (D-2) further agreed she would return all GM documents to GM upon the termination of her employment with GM.
- 7. In 2000, defendant YU QIN (D-1) and defendant SHANSHAN DU (D-2) incorporated Millennium Technology International, Inc. (hereinafter "MTI") in Michigan. MTI engaged in business activities related to power electronics the business of defendant YU QIN's (D-1) employer, CPC motor control, and hybrid vehicles.
- 8. On or about January 28, 2005, defendant SHANSHAN DU (D-2) was offered a severance agreement in return for her resignation from GM.
- 9. On or about March 14, 2005, defendant SHANSHAN DU (D-2) accepted GM's severance offer in writing.
- 10. On or about March 17, 2005, during defendant SHANSHAN DU's (D-2) exit interview with GM, defendant SHANSHAN DU falsely certified in writing that she had returned all GM documents, in printed and electronic form, in her possession, whether located in her office, home or any other off-site location.

COUNT ONE

(CONSPIRACY TO POSSESS TRADE SECRETS WITHOUT AUTHORIZATION 18 U.S.C. § 1832(a)(5))

D-1 YU QIN, aka YU CHIN D-2 SHANSHAN DU, aka SHANNON DU

- 1. The General Allegations, paragraphs 1 through 10, are incorporated into this Count by reference.
- 2. Beginning on or about December 9, 2003 and continuing to on or about May 23, 2006, in the Eastern District of Michigan, Southern Division, defendant YU QIN (D-1) and defendant SHANSHAN DU (D-2) did combine, conspire, and agree to knowingly possess trade secrets belonging to GM, while knowing the same to have been stolen and appropriated, obtained, and converted, without authorization, which trade secrets related to and were included in a product that is produced for and placed in interstate and foreign commerce, intending to convert such trade secrets to the economic benefit of someone other than GM, and intending and knowing that the offense would injure GM.

OBJECTS OF THE CONSPIRACY

3. It was the object of the conspiracy for defendant YU QIN (D-1) and defendant SHANSHAN DU (D-2) to possess GM's trade secrets relating to hybrid vehicles, knowing that information had been stolen and appropriated, and converted without authorization, and to exploit those GM trade secrets for their own economic interests and the business interests of their company, MTI, and to conceal from GM

representatives, law enforcement, and others their unauthorized possession of GM trade secret information and their MTI-related activities.

MANNER AND MEANS

In furtherance of the conspiracy, defendant YU QIN (D-1) and defendant SHANSHAN DU (D-2) employed the following manner and means, among others:

- 4. It was part of the conspiracy that defendant SHANSHAN DU (D-2) would seek a new work reassignment and thereby gain access to GM's trade secrets relating to the motor control of a hybrid vehicle.
- 5. It was part of the conspiracy that defendant YU QIN (D-1) would make efforts to form joint venture companies, in association with MTI, that would develop and sell motor control technology for hybrid vehicles in China.
- 6. It was part of the conspiracy that defendant SHANSHAN DU (D-2) would obtain GM trade secrets relating to the motor control of hybrid vehicles and provide that information to her husband, defendant YU QIN (D-1), for the benefit of his economic interests and those of MTI.
- 7. It was part of the conspiracy that defendant YU QIN (D-1) would use the GM trade secret information provided by his wife, defendant SHANSHAN DU (D-1), for the benefit of his economic interests and those of MTI.
- 8. It was part of the conspiracy that defendant YU QIN (D-1) would provide MTI documents incorporating the GM information to defendant SHANSHAN DU (D-1)

for her review.

- 9. It was part of the conspiracy that defendant YU QIN (D-1) would market and promote MTI by referencing capabilities of MTI that were related to the GM trade secret information provided by defendant SHANSHAN DU (D-1).
- 10. It was part of the conspiracy that defendant SHANSHAN DU (D-1) would copy thousands of GM documents, including documents containing GM trade secrets, to an external drive used for MTI business shortly after GM offered her a severance package.
- 11. It was part of the conspiracy that during her GM exit interview defendant SHANSHAN DU (D-1) would falsely represent to GM that she had returned all GM confidential and proprietary information to GM.
- 12. It was part of the conspiracy that defendant YU QIN (D-1) would seek employment in the hybrid vehicle area and promote himself by referencing capabilities that were directly related to the GM trade secret information provided by defendant SHANSHAN DU (D-1).
- 13. It was part of the conspiracy that defendant YU QIN (D-1) and defendant SHANSHAN DU (D-2) would make materially false representations and take steps to conceal their MTI-related activities and their unauthorized possession of GM trade secret information from GM, law enforcement, and others.

OVERT ACTS

In furtherance of the conspiracy and to accomplish its objects, defendant YU QIN (D-1) and defendant SHANSHAN DU (D-2) committed and caused others to commit the following overt acts, among others:

- 14. On or about November 17, 2003, defendant SHANSHAN DU (D-2), at her request, was reassigned to work involving the motor control system of hybrid vehicles and thereby gained access to GM trade secrets information relating to the motor control system of hybrid vehicles.
- 15. On or about December 9, 2003, defendant YU QIN (D-1) developed a plan to sell hybrid vehicle technology through a joint venture company in China.
- 16. On or about December 9, 2003, defendant SHANSHAN DU (D-2) copied or caused to be copied to a personal electronic storage device confidential GM documents that related to the hybrid vehicle motor control system and that were unrelated to her work.
- 17. On or about January 12, 2004, defendant YU QIN (D-1) coordinated with a third party in developing a business plan for a joint venture in China which would sell technology relating to the motor control of a hybrid vehicle in China.
- 18. On or about March 10, 2004, defendant YU QIN (D-1) uploaded a confidential GM document, "Hybrid Electric Drive System," containing GM trade secrets onto his desk top computer at his CPC work place.

- 19. On or about March 15, 2004, defendant YU QIN (D-1) uploaded a document using information from that GM confidential document to his CPC desk top computer.
- 20. On or about March 17, 2004, defendant YU QIN (D-1) emailed defendant SHANSHAN DU (D-2) at her GM email address a document which incorporated information from the GM confidential document, "Hybrid Electric Drive System," and which made reference to the "GM IGBT," the power switches GM uses in its hybrid vehicles through which current passes to the electric motor.
- 21. On or about April 27, 2004, defendant SHANSHAN DU (D-2) used her GM email address to email defendant YU QIN (D-1) a GM trade secret computerized model that simulates and assesses hybrid vehicle motor control and the GM trade secret data to input into the model.
- 22. On or about February 2, 2005, approximately five days after GM offered defendant SHANSHAN DU (D-2) a severance package, defendant SHANSHAN DU (D-2) copied thousands of GM documents, including documents containing GM trade secrets, to an external hard drive used for MTI company business.
- 23. On or about March 17, 2005, defendant SHANSHAN DU (D-2) signed a Property Clearance Form during her GM exit interview in which she falsely claimed that she had returned all GM documents in her possession as required upon her leaving employment with GM.

- 24. On or about April 26, 2005, defendant YU QIN (D-1) and defendant SHANSHAN DU (D-2) uploaded and caused to be uploaded GM documents containing trade secret information onto a computer located at their Davis Court residence in Troy, Michigan.
- 25. In or about July and August 2005, defendant YU QIN (D-1) communicated with others, by email and in person, about collaborating on a new business venture which would provide hybrid vehicle technology to Chery Automobile, a Chinese automotive manufacturer based in China and a competitor of GM.
- 26. On or about August 30, 2005, when questioned by CPC representatives regarding his involvement in MTI, defendant YU QIN (D-1) falsely denied that he had ever held a position or had any involvement in MTI.
- 27. From on or about March 10, 2004 and continuing to on or about August 30, 2005, defendant YU QIN (D-1) and defendant SHANSHAN DU (D-2) possessed and aided and abetted the possession of GM documents containing trade secrets, described in Count Two, on an external hard drive used for MTI company business.
- 28. On or about October 17, 2005, defendants YU QIN (D-1) and SHANSHAN DU (D-2) accessed and caused the access of GM documents containing trade secrets that were located on an electronic storage device.
- 29. On or about November 1, 2005 and continuing to on or about November 22, 2005, defendant YU QIN (D-1) applied for employment in the hybrid vehicle field and

submitted resumes listing as one of his "major accomplishments" the design and simulation of the hybrid vehicle motor control system, the subject of GM trade secret documents that he possessed.

- 30. From on or about August 31, 2005 and continuing to on or about May 23, 2006, defendant YU QIN (D-1) and defendant SHANSHAN DU (D-2) possessed and aided and abetted the possession of GM documents containing trade secrets, described in Count Three, on electronic storage devices at their residence on New Castle Drive in Troy, Michigan.
- 31. On or about May 23, 2006, defendant YU QIN (D-1) and defendant SHANSHAN DU (D-1) drove to a dumpster behind a grocery store where defendant YU QIN (D-1) discarded plastic bags containing shredded documents responsive to federal grand jury subpoenas seeking information relating to MTI and hybrid vehicles.
 - 32. All in violation of 18 United States Code, Section 1832(a)(5).

COUNT TWO (UNAUTHORIZED POSSESSION OF TRADE SECRETS -- 18 U.S.C. § 1832(a)(3); AIDING & ABETTING - 18 U.S.C. § 2)

D-1 YU QIN, aka YU CHIN D-2 SHANSHAN DU, aka SHANNON DU

- 1. The General Allegations, paragraphs 1 through 10, and paragraphs 3 through 31 of Count One are incorporated in this Count by reference.
- 2. Beginning on or about March 10, 2004 and continuing to on or about August 30, 2005, in the Eastern District of Michigan, Southern Division, defendant YU

QIN (D-1) and defendant SHANSHAN DU (D-2) did knowingly possess, and aid and abet the possession, (on an external hard drive used for MTI company business, and elsewhere), of trade secrets belonging to GM contained in the documents listed below, knowing them to have been stolen and appropriated, obtained, and converted, without authorization, which trade secrets related to and were included in a product that is produced for and placed in interstate and foreign commerce, intending to convert such trade secrets to the economic benefit of someone other than GM, and intending and knowing that the offense would injure GM.

Document Description

Hybrid Motor Controller Card Software Source Code (Flex Controller)

Hybrid Motor Controller Card Schematics (Flex Controller)

Hybrid Motor Controller Card Schematics (TriBCA Controller)

Powerpoint Describing Features Of Software on Hybrid Motor Controller Card

"Inverter Control Board Specification"

Schematics for Hybrid Vehicle Controller Card (BCA Controller)

"Hybrid Electric Drive, DPIM Component Technical Specification for Concept Sample"

"EP 40/50 Model Year 2006 Dual Power Inverter Module Specification"

"Hybrid Electric Drive System, AHS-2 Action Item Consideration"

Simulation and analyses of induction motor design

"Hybrid Electric Drive, Global Statement of Requirements"

"Preliminary Analysis of the Post-Fault Short Circuit Response For Strong Magnet FWD"

Schematics for Simulator Hybrid Vehicle Controller Card (TriBCA Controller)

Schematics For Simulator Hybrid Motor Controller Card Programmable Logic Device

Simulation Electric Motor Model (HPMSyn)

Flux values for Simulation Electric Motor Model

"Generic Analog Input Circuit Continuity Diagnostic"

3. All in violation of 18 United States Code, Sections 1832(a)(3) and 2.

COUNT THREE ITHORIZED POSSESSION OF TRADE SECRE

(UNAUTHORIZED POSSESSION OF TRADE SECRETS -- 18 U.S.C. § 1832(a)(3); AIDING & ABETTING -- 18 U.S.C. § 2)

D-1 YU QIN, aka YU CHIN

D-2 SHANSHAN DU, aka SHANNON DU

- 1. The General Allegations, paragraphs 1 through 10, and paragraphs 3 through 31 of Count One are incorporated in this Count by reference.
- 2. Beginning on or about August 31, 2005 and continuing to on or about May 23, 2006, in the Eastern District of Michigan, Southern Division, defendant YU QIN (D-1) and defendant SHANSHAN DU (D-2) did knowingly possess, and aid and abet the possession, (on electronic storage devices), of trade secrets belonging to GM contained in the documents listed below, knowing them to have been stolen and appropriated, obtained, and converted, without authorization, which trade secrets related to and were included in a product that is produced for and placed in interstate and foreign commerce, intending to convert such trade secrets to the economic benefit of someone other than

GM, and intending and knowing that the offense would injure GM.

Document Description			
Hybrid Motor Controller Card Software Source Code (Flex Controller)			
Powerpoint Describing Features Of Software on Hybrid Motor Controller Card			
Inverter Control Board Specification			
Schematics for Hybrid Vehicle Controller Card (BCA Controller)			
"Hybrid Electric Drive, DPIM Component Technical Specification for Concept Sample"			
"EP 40/50 Model Year 2006 Dual Power Inverter Module Specification"			
Hybrid Electric Drive System, AHS-2 Action Item Consideration			
Simulation and analyses of induction motor design			
Simulation Electric Motor Model (HPMSyn)			
Flux values for Simulation Electric Motor Model (HPMSyn)			

3. All in violation of 18 United States Code, Sections 1832(a)(3) and 2.

Schematics and Layout for Oil Pump Drive for Hybrid Vehicle

COUNTS FOUR THROUGH SIX (WIRE FRAUD -- 18 U.S.C. § 1343)

D-1 YU QIN, aka YU CHIN D-2 SHANSHAN DU, aka SHANNON DU

- 1. The General Allegations, paragraphs 1 through 10, and paragraphs 3 through 31 of Count One are incorporated in this Count by reference.
- 2. From on or about December 9, 2003 to on or about May 23, 2006, in the Eastern District of Michigan, Southern Division and elsewhere, defendant YU QIN (D-1)

and defendant SHANSHAN DU (D-2), having devised and having intended to devise a scheme and artifice to defraud GM of its property – namely, its confidential information relating to hybrid vehicles described in Count 2 – by means of materially false and fraudulent pretenses, representations, promises, and omissions, did knowingly transmit and cause to be transmitted by means of wire communication, in interstate and foreign commerce, writings, signs, signals, and pictures for the purpose of executing the scheme, as described below:

Count	Date	Wire Communication
4	08/02/05	Email relating to hybrid vehicle business venture with Chery Automobile Company
5	08/10/05	Email relating to hybrid vehicle business venture with Chery Automobile Company
6	08/15/05	Email relating to hybrid vehicle business venture with Chery Automobile Company

3. All in violation of 18 United States Code, Section 1343.

COUNT SEVEN (OBSTRUCTION OF JUSTICE -- 18 U.S.C. § 1512(c)(1))

D-1 YU QIN, aka YU CHIN

- 1. The General Allegations, paragraphs 1 through 10, and paragraphs 3 through 31 of Count One are incorporated in this Count by reference.
- 2. On May 23, 2006, in the Eastern District of Michigan, Southern Division, defendant YU QIN (D-1) did attempt to corruptly mutilate and conceal business records of Millennium Technologies International, Inc. and Millennium Power Technology, Inc.

with the intent to impair the integrity of the records and their availability for use in an official proceeding, that is, proceedings before a federal grand jury.

3. All in violation of 18 United States Code, Section 1512(c)(1).

FORFEITURE ALLEGATIONS (18 U.S.C. § 981(a)(1)(C), 28 U.S.C. § 2461, 18 U.S.C. §§ 1834 and 2323 - Criminal Forfeiture)

D-1 YU QIN, aka YU CHIN D-2 SHANSHAN DU, aka SHANNON DU

- 1. The allegations contained in the General Allegations and in Counts One through Six above are incorporated by reference as if set forth fully herein, for the purpose of alleging forfeiture pursuant to the provisions of Title 18, United States Code, Section 981, Title 28, United States Code, Section 2461, and Title 18, United States Code, Sections 1834 and 2323.
- 2. As a result of the violations of Title 18, United States Code, Sections 1343 and 1832, as set forth in Counts One through Six of this Indictment, defendants YU QIN (D-1) and SHANSHAN (D-2) DU, shall forfeit to the United States any property, real or personal, constituting, or derived from, any proceeds obtained, directly or indirectly, as a result of such violations, pursuant to 18 U.S.C. § 981(a)(1)(C), 28 U.S.C. § 2461, 18 U.S.C. §§ 1834 and 2323, and/or any property used, or intended to be used, in any manner or part to commit or facilitate the commission of an offense under 18 U.S.C. § 1832, pursuant to 18 U.S.C. §§ 1834 and 2323.

- 3. Property subject to forfeiture to the United States pursuant to Title 18, United States Code, Sections 1834 and 2323 includes, but is not limited to, the following:
 - a) Two Hundred Seventy Nine Thousand, Four Hundred, Six Dollars and Fifty Cents (\$279,406.50) in U.S. Currency in lieu of the real property located at 4905 Davis Court, Troy, Michigan, more fully described as:

T2N, R11E, SEC 14 Hartford Square Sub

Lot 35 4-9-88 FR 001

Parcel ID: 20-14-126-009,

and

b) the real property located at 1850 New Castle Drive, Troy, Michigan, more fully described as:

T2N, R11E, SEC 5 Wyngate of Troy Subdivision

LOT 67

PARCEL ID: 20-05-301-067.

- 5. <u>Substitute Assets</u>: If the property described above as being subject to forfeiture, as a result of any act or omission of the defendant(s):
 - a) Cannot be located upon the exercise of due diligence;
 - b) Has been transferred or sold to, or deposited with, a third party;
 - c) Has been placed beyond the jurisdiction of the Court;
 - d) Has been substantially diminished in value; or

e) Has been commingled with other property that cannot be subdivided without difficulty;

it is the intent of the United States, pursuant to 21 U.S.C. § 853(p), to seek to forfeit any other property of defendants up to the value of the forfeitable property described above.

THIS IS A TRUE BILL.

s/Grand Jury Foreperson
GRAND JURY FOREPERSON

BARBARA L. McQUADE UNITED STATES ATTORNEY

s/Cathleen M. Corken
CATHLEEN M. CORKEN
Assistant U.S. Attorney
Dated: 7/21/16