

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

UNITED STATES OF AMERICA : **CRIMINAL NO.** _____
v. : **DATE FILED:** _____
TUNG PHAM : **VIOLATIONS: 18 U.S.C. § 1832(a)(2)**
 : **(theft of trade secrets - 2 counts)**
 : **18 U.S.C. § 1343 (wire fraud – 7 counts)**
 : **Notice of Forfeiture**

INDICTMENT

COUNT ONE

THE GRAND JURY CHARGES THAT:

INTRODUCTION

1. At all times relevant to this Indictment, Company A was a company with facilities located within the Eastern District of Pennsylvania, as well as in Europe and Asia. Among other things, Company A manufactured pastes that were used in the manufacturing of photovoltaic cells (solar cells).

2. At all times relevant to this Indictment, companies that manufactured solar cells used pastes containing metals, such as silver and aluminum, to create the cells. Aluminum paste is used to create the backside of the solar cell; silver paste is used on the front side of the solar cell. The silver paste is applied to a sheet of silicon in a process called “printing,” in which the paste is pressed through a stencil to create the lines on the solar cell that conduct electricity. The silicon sheet with the paste on it is then heated to harden the paste and to make it adhere to the silicon.

3. At all times relevant to this Indictment, glass was used in the silver pastes to aid in the fusion of the silver to the silicon. The cells that had the greatest efficiency, measured by the

amount of their electrical output, used glass that contained lead. An important area of research and development in the industry was the creation of an efficient glass that did not use lead.

4. From in or about September 2008 until on or about May 3, 2011, the defendant TUNG PHAM was employed by Company A as a scientist in the development of pastes for the manufacture of solar cells. Pham's work included research and development of silver pastes and lead-free glass for use in silver paste.

5. In his employment agreement with Company A, defendant TUNG PHAM agreed that any projects that he worked on while employed by Company A were the property of Company A. He further agreed that he would take all reasonable steps necessary to protect any information regarded by Company A as a secret process or trade secret from theft or disclosure to unauthorized persons. He further agreed that any intellectual property devised, developed or discovered by him while employed by Company A was the property of Company A.

6. In his employment agreement with Company A, defendant TUNG PHAM agreed that he would not work for a competitor of Company A for a period of one year after leaving Company A, unless Company A released him from this obligation.

THE FACTS

7. In or about September 2010, defendant TUNG PHAM told his supervisor that he needed to take some time off because his wife's family was coming to visit.

8. In fact, between on or about September 29, 2010 and on or about October 4, 2010, defendant TUNG PHAM traveled to China where he met another Company A employee, known to the grand jury, and who is identified here as WL. PHAM and WL met investors to plan the creation of a Chinese company that would compete with Company A.

9. In or about September and October 2010, defendant TUNG PHAM, in the course of his employment with Company A, devised formulations for lead free glass.

10. Between on or about October 15, 2010 and on or about November 23, 2010, the defendant TUNG PHAM and his assistant tested the formulations for lead free glass at Company A. After each set of tests, defendant TUNG PHAM would modify the formulations to improve the product and his assistant would test them.

11. On or about October 30, 2010, defendant TUNG PHAM signed an employment agreement with a person in China, whose name is known to the Grand Jury, and who will be referred to here as WHZ. In that agreement, defendant PHAM agreed that he would work “to develop the silver paste (and aluminum paste in the next stage after developed silver paste) applied to back or front electrode of single-crystal silicon or multi-crystal silicon solar cell.”

12. On or about November 19, 2010, defendant TUNG PHAM copied the formulations for lead free glass that he had been working on at Company A to his home computer. These formulations derived independent economic value from the fact that they were not generally known, and could not be readily ascertained through proper means, by the public. Company A had taken reasonable steps to keep them secret.

13. On or about November 19, 2010, defendant TUNG PHAM copied more than 1,000 documents belonging to Company A to his home computer. Among those documents were particular files that contained the formulations for products that Company A was selling. These formulations derived independent economic value from the fact that they were not generally known, and could not be readily ascertained through proper means, by the public. Company A had taken reasonable

steps to keep them secret. The names of the files and the corresponding Company A product code name are as follows:

<u>FILE NAME</u>	<u>PRODUCT CODE NUMBER</u>
702_34 New Ag for clogging issue	9235H
702-34 on Ginetch 80 Ohm 05_05_09	9235H
702_29 QC 702_2B Lot 032409	9257
702_35 Refined and optimized 702-34E	9271 and 9273
702_74 Au doped 9273	9410 and 9411

14. On or about February 27, 2011, defendant TUNG PHAM sent an e-mail to WL in China telling him that he would send a revised contract because he was concerned that Company A could prevent him from working for the new company under the terms of his employment contract with Company A. He wrote, in part:

You should confirm with Mr [WHZ]. And I will send him the new contract with new starting date and some minor change about my vacation time. And another version for [Company A] where I state we will make Al paste in the first year. Bear with me if [Company A] give me hard time even one year no competition, we still can find a way to work, specialy R&D, I can do anytime and anywhere.

“Al” is the chemical symbol for aluminum.

15. On or about February 28, 2011, defendant TUNG PHAM sent an e-mail to WL, attaching the proposed revised contract, which removed any mention of silver paste, and provided in part that the purpose of the contract was:

To develop the aluminum paste (and possible other solar materials application in the next stage after aluminum business is mature) applied to back electrode of mono-crystal silicon or multi-crystal silicon solar cell.

16. In the signature line of this contract, defendant TUNG PHAM, put the name WHZ.

17. In the body of the e-mail to WL, defendant TUNG PHAM wrote in part:

Since Aluminum is not [Company A] product, so they may release me from the binding contract.

18. On or about March 1, 2011, WL sent an e-mail message to defendant TUNG PHAM, questioning the wisdom of putting the name of WHZ because Company A could use that name to find out the name of the company and discover that defendant TUNG PHAM was working on silver paste. WL wrote in part (all typographical errors in original):

do you need show [Company A] the real one :
[WHZ]
I/D card No. *****93X
i mean , if we let [Company A] the boss name , they can find at once the comany name and find the businnin running project --- silver paste.
can we use aother invastor name with another ID card?

19. On or about March 1, 2011, at 11:55 PM, defendant TUNG PHAM wrote back to WL, "In that case, you can put in any name and ID card then you sign it. That will be fine with me."

20. On or about March 2, 2011, at 7:28 AM, WL sent an e-mail to defendant TUNG PHAM, attaching a new version of the contract with the name XX substituted for WHZ.

21. On or about April 11, 2011, at 1:22 PM, defendant TUNG PHAM accessed his company-issued computer and altered the formulations for the lead free glass that he had worked on in the fall of 2010. This alteration made the formulations less useful. Defendant TUNG PHAM removed one element from some of the formulations. In other formulations, he substituted a different element for the one that he had removed. These formulations of lead free glass on defendant PHAM's company computer were the only copies of those formulations that Company A had.

22. On or about April 11, 2011 at 1:35 PM, defendant TUNG PHAM e-mailed his resignation to his supervisor.

THE CHARGES

23. On or about November 19, 2010, at Conshohocken in the Eastern District of Pennsylvania, defendant,

TUNG PHAM

with the intent to convert a trade secret that is related to a product that is produced for and placed in interstate and foreign commerce, knowingly and without authorization copied, duplicated, downloaded, and uploaded to his home computer, trade secrets, that is, the formulas for Company A's products, code numbers 9411 and 9271, and the formula for lead free glass that he had been working on at the Company, to the economic benefit of himself and his new employer and intending and knowing that his actions would injure Company A.

In violation of Title 18, United States Code, Section 1832(a)(2).

COUNT TWO

THE GRAND JURY FURTHER CHARGES THAT:

1. Paragraphs 1 through 22 of Count One are incorporated by reference.
2. On or about April 11, 2011, in the Eastern District of Pennsylvania, defendant,

TUNG PHAM

with the intent to convert a trade secret that is related to a product that is produced for and placed in interstate and foreign commerce, knowingly and without authorization altered and destroyed a trade secret, that is the formula for lead free glass that he had been working on by altering and changing the formula for lead free glass that was stored on the computer that Company A had issued to him, to the economic benefit of himself and his new employer and intending and knowing that his actions would injure Company A.

In violation of Title 18, United States Code, Section 1832(a)(2).

COUNTS THREE THROUGH NINE

THE GRAND JURY FURTHER CHARGES:

1. Paragraphs 1 through 22 of Count One are incorporated by reference.
2. From on or about September 22, 2010, until on or about May 3, 2011, in the Eastern

District of Pennsylvania and elsewhere, defendant,

TUNG PHAM

devised and intended to devise a scheme and artifice to defraud and to obtain money and property from Company A by means of false and fraudulent pretenses, representations, and promises.

HOW THE DEFENDANT EXECUTED THE SCHEME

3. It was part of the scheme that defendant TUNG PHAM took steps to defraud Company A of its right under his employment contract to prevent him from working for a competitor for a period of one year after he left the employment of Company A.

It was further part of the scheme that:

4. Defendant TUNG PHAM sent e-mail messages to WL in China devising a method to defeat this provision of his employment contract.

5. Defendant TUNG PHAM created a fake employment contract that removed any mention of the fact that he planned to work on silver paste for his new employer and substituted aluminum paste instead.

6. Defendant TUNG PHAM planned to show this new fake employment contract to Company A to convince them to let him work for his new employer.

7. On or about December 8, 2010 at 11:15 PM EST, defendant TUNG PHAM sent an e-mail message to WL, saying in part:

This is what I'm thinking how to resign from [Company A]. I have to let them know. Because if they find out; they can bring me to US court and I have to pay fine. I will talk to you when we have a chance. I also have an invitation to Taiwan to develop aluminum paste for them; but not stay in Taiwan. I can use this contract to resign from [Company A].

8. On or about February 27, 2011, at 8:42 PM EST, defendant TUNG PHAM sent an e-mail message to WL, saying in part:

You should confirm with Mr [WHZ]. And I will send him the new contract with new starting date and some minor change about my vacation time. And another version for [Company A] where I state we will make Al paste in the first year. Bear with me if [Company A] give me hard time even one year no competition, we still can find a way to work, specialy R&D, I can do anytime and anywhere.

9. On or about February 28, 2011, at 11:52 PM EST, defendant TUNG PHAM sent an e-mail to WL, attaching the proposed revised contract, which provided in part that the purpose of the contract was:

To develop the aluminum paste (and possible other solar materials application in the next stage after aluminum business is mature) applied to back electrode of mono-crystal silicon or multi-crystal silicon solar cell.

There was no mention of silver paste in this contract.

10. In the body of the February 28, 2011 e-mail to WL, defendant TUNG PHAM wrote in part:

Since Aluminum is not [Company A] product, so they may release me from the binding contract.

11. On or about March 1, 2011 at 9:17 PM EST, WL sent an e-mail message to defendant TUNG PHAM, questioning the wisdom of putting the name of WHZ because Company A could use that name to find out the name of the company and discovery that defendant TUNG PHAM was working on silver paste. WL wrote in part (all typographical errors in original):

do you need show [Company A] the real one :

[WHZ]

I/D card No. *****93X

i mean , if we let [Company A] the boss name , they can find at once the comany name and find the businnin running project --- silver paste . can we use aother invastor name with another ID card?

12. On or about March 1, 2011 at 11:55 PM EST, in response defendant TUNG PHAM sent an e-mail to WL saying in part:

In that case, you can put in any name and ID card then you sign it. That will be fine with me.

13. On or about March 2, 2011, at 7:28 AM EST, WL sent an e-mail to defendant TUNG PHAM, attaching a new version of the contract with the name XX substituted for WHZ.

14. On or about April 11, 2011, defendant TUNG PHAM resigned from Company A.

15. On or about April 12, 2011, at 9:52 AM, defendant TUNG PHAM sent an e-mail to his supervisor in which he falsely stated, "The reason I left [Company A] is accepting another offer to build up a factory for Al." At the time defendant TUNG PHAM well knew that he would be working on silver paste.

16. On or about each of the dates below, each e-mail message constituting a separate count of this Indictment, in the Eastern District of Pennsylvania and elsewhere, for the purpose of executing the scheme, defendant

TUNG PHAM

transmitted and cause to be transmitted by means of wire, the following e-mail messages:

<u>COUNT</u>	<u>DATE</u>	<u>TIME</u> (All times listed are EST)	<u>SENDER</u>	<u>RECEIVER</u>	<u>CONTENT</u>
THREE	12/08/2010	11:15 PM	TUNG PHAM	WL	Suggests using Taiwan contract
FOUR	02/27/2011	8:42 PM	TUNG PHAM	WL	Says he will send new contract referring to aluminum paste
FIVE	02/28/2011	11:52 PM	TUNG PHAM	WL	Attaches revised contract
SIX	03/01/2011	9:17 PM	WL	TUNG PHAM	Suggests using a different name for signer of the contract
SEVEN	03/01/2011	11:55 PM	TUNG PHAM	WL	Agrees to use of "any name."
EIGHT	03/02/2011	7:28 AM	WL	TUNG PHAM	Sends contract using the name XX
NINE	04/12/2011	9:52 AM	TUNG PHAM	Supervisor	Says his new contract is for "Al"

All in violation of Title 18, United States Code, Section 1343

NOTICE OF FORFEITURE

THE GRAND JURY FURTHER CHARGES THAT:

1. As a result of the violations of Title 18, United States Code, Section 1832, defendant

TUNG PHAM

shall forfeit to the United States of America any property used or intended to be used, in any manner or part, to commit, or to facilitate the commission of, such offense(s), including, but not limited to:

All documents, whether in paper or electronic format, taken from Company A;
Dell Dimension desktop: 8FVKP61
Dell Adamo Thirteen laptop: 8S37RN1
Gateway W340UI laptop: N196C 210 01111
Microcenter 8 GB thumb drive: No serial number
Relay 6 MB silver thumb drive: No serial number
Bosch 1 GB thumb drive: No serial number
Metalor gold 3.8 GB thumb drive: No serial number
Imation 1 GB thumb drive: No serial number
San Disk silver 256 MB thumb drive: No serial number
Red wireless USB device: No serial number
Seagate 160 GB hard drive, 5MT0D91H
Western Digital 500 GB hard drive, WCAPW2413545
Maxtor 40 GB hard drive, 362134722669TSZXX
Samsung 128 GB hard drive, S0F5NEAZ702255
Hitachi 100 GB hard drive, ARC5VU2L

2. If any of the property 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

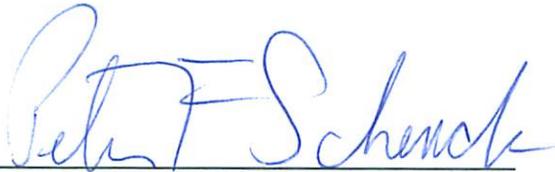
(e) has been commingled with other property which cannot be divided without difficulty;

it is the intent of the United States, pursuant to Title 21, United States Code, Section 853(p), to seek forfeiture of any other property of the defendant up to the value of the property subject to forfeiture.

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

A TRUE BILL:

GRAND JURY FOREPERSON



**ZANE DAVID MEMEGER
UNITED STATES ATTORNEY**