

AO 257 (Rev. 6/78)

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

BY: COMPLAINT INFORMATION INDICTMENT
 SUPERSEDING

OFFENSE CHARGED

COUNT ONE: 18 U.S.C. § 1831(a)(5) – Conspiracy to Commit Economic Espionage;
COUNT TWO: 18 U.S.C. § 1831(a)(1), (2), (3), and (4) – Attempted Economic Espionage.

Petty
 Minor
 Misdemeanor
 Felony

PENALTY:

COUNT ONE: \$500,000 fine, 3 years supervised release and restitution, Special Assessment: \$100.00
COUNT TWO: \$500,000 fine, 3 years supervised release and restitution, Special Assessment: \$100.00

PROCEEDING

Name of Complainant Agency, or Person (& Title, if any)
FBI Special Agent Cynthia Ho and FBI Special Kevin Phelan

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

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

this is a reprosecution of charges previously dismissed which were dismissed on motion of:

U.S. Att'y Defense } SHOW DOCKET NO.

this prosecution relates to a pending case involving this same defendant } MAGISTRATE CASE NO.

prior proceedings or appearance(s) before U.S. Magistrate regarding this defendant were recorded under

Name and Office of Person Furnishing Information on THIS FORM
BRIAN J. STRETCH, ACTING
 U.S. Att'y Other U.S. Agency

Name of Asst. U.S. Att'y (if assigned)
JOHN H. HEMANN

Name of District Court, and/or Judge/Magistrate Location
NORTHERN DISTRICT OF CALIFORNIA

FILED

DEFENDANT - U.S. 2016 JAN -5 P 2:27

Pangang Group Company, Ltd. SUSAN Y. SOONG
CLERK, U.S. DISTRICT COURT
NO. DIST. OF CA.
DISTRICT COURT NUMBER
CR 11-0573 JSW

DEFENDANT

IS NOT IN CUSTODY

- 1) Has not been arrested, pending outcome this proceeding. If not detained give date any prior summons was served on above charges
- 2) Is a Fugitive
- 3) Is on Bail or Release from (show District)

IS IN CUSTODY

- 4) On this charge
 - 5) On another conviction
 - 6) Awaiting trial on other charges } Fed'l State
- If answer to (6) is "Yes", show name of institution

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

DATE OF ARREST Month/Day/Year

Or... if Arresting Agency & Warrant were not Month/Day/Year

DATE TRANSFERRED TO U.S. CUSTODY

This report amends AO 257 previously submitted

ADDITIONAL INFORMATION OR COMMENTS

PROCESS:

SUMMONS NO PROCESS* WARRANT Bail Amount: _____

If Summons, complete following:

Arraignment Initial Appearance

Defendant Address: _____

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

Date/Time: December 16, 2016 9:30 A.M.

Before Judge: Duty Magistrate

Comments: _____

AO 257 (Rev. 6/78)

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

BY: COMPLAINT INFORMATION INDICTMENT
 SUPERSEDING

OFFENSE CHARGED

COUNT ONE: 18 U.S.C. § 1831(a)(5) - Conspiracy to Commit Economic Espionage;
COUNT TWO: 18 U.S.C. § 1831(a)(1), (2), (3), and (4) - Attempted Economic Espionage.

Petty
 Minor
 Misdemeanor
 Felony

PENALTY:

COUNT ONE: \$500,000 fine, 3 years supervised release and restitution, Special Assessment: \$100.00
COUNT TWO: \$500,000 fine, 3 years supervised release and restitution, Special Assessment: \$100.00

PROCEEDING

Name of Complainant Agency, or Person (& Title, if any)
FBI Special Agent Cynthia Ho and FBI Special Kevin Phelan

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

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

this is a reprosecution of charges previously dismissed which were dismissed on motion of:

U.S. Att'y Defense

this prosecution relates to a pending case involving this same defendant

prior proceedings or appearance(s) before U.S. Magistrate regarding this defendant were recorded under

SHOW DOCKET NO.

MAGISTRATE CASE NO.

Name and Office of Person Furnishing Information on THIS FORM
BRIAN J. STRETCH, ACTING
 U.S. Att'y Other U.S. Agency

Name of Asst. U.S. Att'y (if assigned)
JOHN H. HEMANN

Name of District Court, and/or Judge/Magistrate Location
NORTHERN DISTRICT OF CALIFORNIA

DEFENDANT - U.S.

2016 JAN -5 P 2:27

Pangang Group Steel Vanadium & Titanium Company Ltd.
SUSANN Y. SOONG
CLERK OF COURT
NO. DIST. OF CA.

DISTRICT COURT NUMBER
CR 11-0573 JSW

DEFENDANT

IS NOT IN CUSTODY

- 1) Has not been arrested, pending outcome this proceeding. If not detained give date any prior summons was served on above charges
- 2) Is a Fugitive
- 3) Is on Bail or Release from (show District)

IS IN CUSTODY

- 4) On this charge
- 5) On another conviction
- 6) Awaiting trial on other charges } Fed'l State

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

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

DATE OF ARREST
Month/Day/Year

Or... if Arresting Agency & Warrant were not
Month/Day/Year

DATE TRANSFERRED TO U.S. CUSTODY

This report amends AO 257 previously submitted

ADDITIONAL INFORMATION OR COMMENTS

PROCESS:

SUMMONS NO PROCESS* WARRANT Bail Amount: _____

If Summons, complete following:

Arraignment Initial Appearance

Defendant Address: _____

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

Date/Time: December 16, 2016 9:30 A.M.

Before Judge: Duty Magistrate

Comments: _____

AO 257 (Rev. 6/78)

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

BY: COMPLAINT INFORMATION INDICTMENT
 SUPERSEDING

Name of District Court, and/or Judge/Magistrate Location
NORTHERN DISTRICT OF CALIFORNIA

OFFENSE CHARGED

COUNT ONE: 18 U.S.C. § 1831(a)(5) – Conspiracy to Commit Economic Espionage;
COUNT TWO: 18 U.S.C. § 1831(a)(1), (2), (3), and (4) – Attempted Economic Espionage.

Petty
 Minor
 Misdemeanor
 Felony

PENALTY:

COUNT ONE: \$500,000 fine, 3 years supervised release and restitution, Special Assessment: \$100.00
COUNT TWO: \$500,000 fine, 3 years supervised release and restitution, Special Assessment: \$100.00

PROCEEDING

Name of Complainant Agency, or Person (& Title, if any)
FBI Special Agent Cynthia Ho and FBI Special Kevin Phelan

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

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

this is a reprosecution of charges previously dismissed which were dismissed on motion of:

U.S. Att'y Defense

this prosecution relates to a pending case involving this same defendant

prior proceedings or appearance(s) before U.S. Magistrate regarding this defendant were recorded under

SHOW DOCKET NO.

MAGISTRATE CASE NO.

Name and Office of Person Furnishing Information on THIS FORM
BRIAN J. STRETCH, ACTING
 U.S. Att'y Other U.S. Agency

Name of Asst. U.S. Att'y (if assigned)
JOHN H. HEMANN

DEFENDANT - U.S. 2016 JAN -5 P 2:27

SUSAN Y. SOONG
Pangang Group Titanium Industry Company, Ltd.

DISTRICT COURT NUMBER
CR 11-0573 JSW

DEFENDANT

IS NOT IN CUSTODY

- 1) Has not been arrested, pending outcome this proceeding. If not detained give date any prior summons was served on above charges
- 2) Is a Fugitive
- 3) Is on Bail or Release from (show District)

IS IN CUSTODY

- 4) On this charge
- 5) On another conviction
- 6) Awaiting trial on other charges } Fed'l State

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

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

DATE OF ARREST

Month/Day/Year

Or... if Arresting Agency & Warrant were not

Month/Day/Year

DATE TRANSFERRED TO U.S. CUSTODY

This report amends AO 257 previously submitted

ADDITIONAL INFORMATION OR COMMENTS

PROCESS:

SUMMONS NO PROCESS* WARRANT Bail Amount: _____

If Summons, complete following:

Arraignment Initial Appearance

Defendant Address: _____

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

Date/Time: December 16, 2016 9:30 A.M.

Before Judge: Duty Magistrate

Comments: _____

AO 257 (Rev. 6/78)

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

BY: COMPLAINT INFORMATION INDICTMENT
 SUPERSEDING

OFFENSE CHARGED

COUNT ONE: 18 U.S.C. § 1831(a)(5) – Conspiracy to Commit Economic Espionage;
COUNT TWO: 18 U.S.C. § 1831(a)(1), (2), (3), and (4) – Attempted Economic Espionage.

Petty
 Minor
 Misdemeanor
 Felony

PENALTY:

COUNT ONE: \$500,000 fine, 3 years supervised release and restitution, Special Assessment: \$100.00
COUNT TWO: \$500,000 fine, 3 years supervised release and restitution, Special Assessment: \$100.00

PROCEEDING

Name of Complainant Agency, or Person (& Title, if any)
FBI Special Agent Cynthia Ho and FBI Special Kevin Phelan

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

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

this is a reprosecution of charges previously dismissed which were dismissed on motion of:

U.S. Att'y Defense

this prosecution relates to a pending case involving this same defendant

prior proceedings or appearance(s) before U.S. Magistrate regarding this defendant were recorded under

SHOW DOCKET NO.

MAGISTRATE CASE NO.

Name and Office of Person Furnishing Information on THIS FORM
BRIAN J. STRETCH, ACTING
 U.S. Att'y Other U.S. Agency

Name of Asst. U.S. Att'y (if assigned)
JOHN H. HEMANN

Name of District Court, and/or Judge/Magistrate Location
NORTHERN DISTRICT OF CALIFORNIA

DEFENDANT - U.S. 2016 JAN -5 P 2:27

Pangang Group International Economic & Trading Company

DISTRICT COURT NUMBER
CR 11-0573 JSW

DEFENDANT

IS NOT IN CUSTODY

- 1) Has not been arrested, pending outcome this proceeding. If not detained give date any prior summons was served on above charges
- 2) Is a Fugitive
- 3) Is on Bail or Release from (show District)

IS IN CUSTODY

- 4) On this charge
- 5) On another conviction
- 6) Awaiting trial on other charges } Fed'l State

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

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

DATE OF ARREST

Month/Day/Year

Or... if Arresting Agency & Warrant were not

Month/Day/Year

DATE TRANSFERRED TO U.S. CUSTODY

This report amends AO 257 previously submitted

ADDITIONAL INFORMATION OR COMMENTS

PROCESS:

SUMMONS NO PROCESS* WARRANT Bail Amount: _____

If Summons, complete following:

Arraignment Initial Appearance

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

Defendant Address: _____

Date/Time: December 16, 2016 9:30 A.M.

Before Judge: Duty Magistrate

Comments: _____

AO 257 (Rev. 6/78)

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

BY: COMPLAINT INFORMATION INDICTMENT
 SUPERSEDING

OFFENSE CHARGED

COUNT ONE: 18 U.S.C. § 1831(a)(5) – Conspiracy to Commit Economic Espionage;
COUNT TWO: 18 U.S.C. § 1831(a)(1), (2), (3), and (4) – Attempted Economic Espionage.

Petty
 Minor
 Misdemeanor
 Felony

PENALTY:

COUNT ONE: 15 years imprisonment, \$500,000 fine, 3 years supervised release and restitution, Special Assessment \$100.00
COUNT TWO: 15 years imprisonment, \$500,000 fine, 3 years supervised release and restitution, Special Assessment \$100.00

PROCEEDING

Name of Complainant Agency, or Person (& Title, if any)
FBI Special Agent Cynthia Ho and FBI Special Kevin Phelan

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

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

this is a reprosecution of charges previously dismissed which were dismissed on motion of:
 U.S. Att'y Defense } SHOW DOCKET NO.

this prosecution relates to a pending case involving this same defendant }
 prior proceedings or appearance(s) before U.S. Magistrate regarding this defendant were recorded under } MAGISTRATE CASE NO.

Name and Office of Person Furnishing Information on THIS FORM BRIAN J. STRETCH, ACTING
 U.S. Att'y Other U.S. Agency

Name of Asst. U.S. Att'y (if assigned) JOHN H. HEMANN

Name of District Court, and/or Judge/Magistrate Location
NORTHERN DISTRICT OF CALIFORNIA

FILED

DEFENDANT - U.S. 2016 JAN -5 P 2: 28

Hou Shengdong
SUSAN Y. SEONG
CLERK, U.S. DISTRICT COURT
DISTRICT COURT NUMBER CR 11-0573 JSW
DIST. OF CA.

DEFENDANT

IS NOT IN CUSTODY

- 1) Has not been arrested, pending outcome this proceeding. If not detained give date any prior summons was served on above charges _____
- 2) Is a Fugitive
- 3) Is on Bail or Release from (show District) _____

IS IN CUSTODY

- 4) On this charge
 - 5) On another conviction
 - 6) Awaiting trial on other charges } Fed'l State
- If answer to (6) is "Yes", show name of institution _____

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

DATE OF ARREST _____
Month/Day/Year

Or... if Arresting Agency & Warrant were not _____
Month/Day/Year

DATE TRANSFERRED TO U.S. CUSTODY _____

This report amends AO 257 previously submitted

ADDITIONAL INFORMATION OR COMMENTS

PROCESS:

SUMMONS NO PROCESS* WARRANT Bail Amount: NO BAIL

If Summons, complete following:

Arraignment Initial Appearance

Defendant Address: _____

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

Date/Time: _____

Before Judge: _____

Comments: _____

AO 257 (Rev. 6/78)

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

BY: COMPLAINT INFORMATION INDICTMENT
 SUPERSEDING

OFFENSE CHARGED

COUNT ONE: 18 U.S.C. § 1831(a)(5) - Conspiracy to Commit Economic Espionage;
COUNT TWO: 18 U.S.C. § 1831(a)(1), (2), (3), and (4) - Attempted Economic Espionage.

Petty
 Minor
 Misdemeanor
 Felony

PENALTY:

COUNT ONE: 15 years imprisonment, \$500,000 fine, 3 years supervised release and restitution, Special Assessment \$100.00
COUNT TWO: 15 years imprisonment, \$500,000 fine, 3 years supervised release and restitution, Special Assessment \$100.00

PROCEEDING

Name of Complainant Agency, or Person (& Title, if any)
FBI Special Agent Cynthia Ho and FBI Special Kevin Phelan

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

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

this is a reprosecution of charges previously dismissed which were dismissed on motion of:
 U.S. Att'y Defense } SHOW DOCKET NO.

this prosecution relates to a pending case involving this same defendant }
 prior proceedings or appearance(s) before U.S. Magistrate regarding this defendant were recorded under } MAGISTRATE CASE NO.

Name and Office of Person Furnishing Information on THIS FORM BRIAN J. STRETCH, ACTING
 U.S. Att'y Other U.S. Agency

Name of Asst. U.S. Att'y (if assigned) JOHN H. HEMANN

Name of District Court, and/or Judge/Magistrate Location
NORTHERN DISTRICT OF CALIFORNIA

DEFENDANT - U.S.

Dong Yingjie 2016 JAN -5 P 2: 28

DISTRICT COURT NUMBER
CR 11-0573 JSW
SUSAN Y. SOONG
CLERK, U.S. DISTRICT COURT
NO. DIST. OF CA.

DEFENDANT

IS NOT IN CUSTODY

- 1) Has not been arrested, pending outcome this proceeding. If not detained give date any prior summons was served on above charges _____
- 2) Is a Fugitive
- 3) Is on Bail or Release from (show District) _____

IS IN CUSTODY

- 4) On this charge
- 5) On another conviction
- 6) Awaiting trial on other charges } Fed'l State
- If answer to (6) is "Yes", show name of Institution _____

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

DATE OF ARREST _____
Month/Day/Year

Or... if Arresting Agency & Warrant were not _____
Month/Day/Year

DATE TRANSFERRED TO U.S. CUSTODY _____

This report amends AO 257 previously submitted

ADDITIONAL INFORMATION OR COMMENTS

PROCESS:

SUMMONS NO PROCESS* WARRANT Bail Amount: NO BAIL

If Summons, complete following:

Arraignment Initial Appearance

Defendant Address: _____

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

Date/Time: _____

Before Judge: _____

Comments: _____

United States District Court

FOR THE
NORTHERN DISTRICT OF CALIFORNIA -5 P 2: 27

VENUE: OAKLAND

FILED
2011 MAR
SUSAN Y. SOONG
CLERK, US DISTRICT COURT
NO. DIST. OF CA.

UNITED STATES OF AMERICA,

v.

CR 11-573 JSW

Pangang Group Company, Ltd.; Pangang Group Steel Vanadium & Titanium Company, Ltd.; Pangang Group Titanium Industry Company, Ltd.; Pangang Group International Economic & Trading Company; Hou Shengdong; And Dong Yingjie.

DEFENDANT(S).

THIRD SUPERSEDING INDICTMENT

COUNT ONE: 18 U.S.C. § 1831(a)(5) – Conspiracy to Commit Economic Espionage;
COUNT TWO: 18 U.S.C. § 1831(a)(1), (2), (3), and (4) – Attempted Economic Espionage.

A true bill.



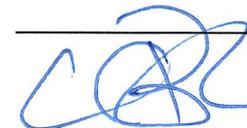
Foreman

Filed in open court this 5th day of

January, 2016



Clerk



Bail, \$

Summons for the four corporate defendants for December 16, 2016 at 9:30 AM
no bail arrest warrants for Hou Shengdong and Dong Yingjie

1 BRIAN J. STRETCH (CABN 163973)
Acting United States Attorney

FILED

2016 JAN -5 P 2: 28

SUSAN Y. SOONG
CLERK, U.S. DISTRICT COURT
NO. DIST. OF CA.

7 UNITED STATES DISTRICT COURT
8 NORTHERN DISTRICT OF CALIFORNIA
9 OAKLAND DIVISION

10 UNITED STATES OF AMERICA,

11 Plaintiff,

12 v.

13 PANGANG GROUP COMPANY, LTD.;
14 PANGANG GROUP STEEL VANADIUM &
TITANIUM COMPANY, LTD.;
15 PANGANG GROUP TITANIUM INDUSTRY
COMPANY, LTD.; PANGANG GROUP
16 INTERNATIONAL ECONOMIC &
TRADING COMPANY; HOU SHENGDONG;
and DONG YINGJIE,

17
18 Defendants.

) No. CR 11-0573 JSW

) VIOLATIONS: 18 U.S.C. § 1831(a)(5) – Conspiracy
) to Commit Economic Espionage; 18 U.S.C. §
) 1831(a)(1), (2), (3), and (4) – Attempted Economic
) Espionage

) (OAKLAND VENUE)

19
20 THIRD SUPERSEDING INDICTMENT

21 The Grand Jury charges that at all times relevant to this Third Superseding Indictment:

22 INTRODUCTORY ALLEGATIONS

23 1. The government of the People’s Republic of China (PRC) publicly identified the
24 development of chloride-route titanium dioxide (TiO2) production technology as a scientific and
25 economic priority. Economic growth in the PRC had created significant demand for TiO2, and because
26 PRC companies had not been able to develop clean, efficient TiO2 production technology, the PRC was
27 a net importer of TiO2 from western countries. Chloride-route TiO2 production technology was closely
28 held by western companies, including E.I. du Pont de Nemours & Company (DuPont), which had

1 invented and improved the technology through intensive research and development over many years.
2 DuPont was not willing to sell or license its proprietary technology to PRC companies to build TiO₂
3 factories in the PRC.

4 2. Aware of the PRC's national priority and the barriers placed by DuPont on access to the
5 technology, at the times set forth below, individuals named in this Third Superseding Indictment
6 obtained TiO₂ trade secrets belonging to DuPont and conveyed information containing those trade
7 secrets to companies controlled by the PRC government without authorization from DuPont.

8 Defendants

9 3. The State-Owned Assets Supervision and Administration Commission of the State
10 Council (SASAC) was a special government agency of the PRC. It was under the direct control of the
11 State Council, the PRC's highest government authority. According to its website, SASAC "performs
12 investor's responsibilities, supervises and manages the state-owned assets of the enterprises under the
13 supervision of the Central Government . . . and enhances the management of the state-owned assets."
14 The appointment of senior officers and directors of central state-owned assets was controlled by the
15 Organization Department of the Communist Party of China Central Committee and managed by
16 SASAC.

17 4. Defendant PANGANG GROUP COMPANY LIMITED (PANGANG GROUP), also
18 known as Panzhihua Iron and Steel (Group) Co., Ltd., was a state-owned enterprise controlled by
19 SASAC and located in Sichuan Province, PRC. The Chairman and certain other senior managers of
20 PANGANG GROUP were officials of the Communist Party of China. In or about 2002, PANGANG
21 GROUP acquired, through a joint venture, Jinzhou Titanium Industry Co., Ltd. (PANGANG Jinzhou),
22 which operated a small TiO₂ manufacturing facility in Liaoning Province, PRC.

23 5. PANGANG GROUP controlled the following subsidiaries (referred to collectively in this
24 Third Superseding Indictment as the "PANGANG GROUP companies"):

25 a. Defendant PANGANG GROUP STEEL VANADIUM & TITANIUM
26 COMPANY LIMITED (PGSVTC), which shared senior management with PANGANG GROUP.

27 b. Defendant PANGANG GROUP TITANIUM INDUSTRY COMPANY
28 LIMITED (PANGANG GROUP TITANIUM) was formed in 2007 by PANGANG GROUP to develop

1 a large chloride-route TiO₂ factory in Sichuan Province. PANGANG GROUP TITANIUM was owned
2 and controlled by PANGANG GROUP and PGSVTC.

3 c. Defendant PANGANG GROUP INTERNATIONAL ECONOMIC & TRADING
4 COMPANY (PIETC) was the financing arm of PANGANG GROUP. It was responsible for securing
5 the financing and handling the economic affairs of projects conducted by PANGANG GROUP. PIETC
6 was owned and controlled by PANGANG GROUP and PGSVTC.

7 6. Defendant HOU SHENGDONG was a citizen of the PRC and worked for PANGANG
8 GROUP and PANGANG GROUP TITANIUM where he served as Vice Director of the Chloride
9 Process TiO₂ Project Department.

10 7. Defendant DONG YINGJIE was a citizen of the PRC and worked for PANGANG
11 GROUP and PANGANG GROUP TITANIUM, where he served as Vice Director/Senior Engineer of
12 the Project Department of Titanium Dioxide by Chloride Process.

13 Co-Conspirators Known To The Grand Jury

14 8. WALTER LIAN-HEEN LIEW, also known as LIU YUANXUAN (WALTER LIEW),
15 was a resident of California, and an owner and executive of USA PERFORMANCE TECHNOLOGY,
16 INC. (USAPTI) and its predecessor companies, LH PERFORMANCE, Inc. and PERFORMANCE
17 GROUP (USA), Inc. (PERFORMANCE GROUP). WALTER LIEW was born in Malaysia in 1957,
18 emigrated to the United States in 1984, and became a naturalized citizen of the United States in 1993.

19 9. USAPTI was a California corporation headquartered in Oakland, California that offered
20 engineering consulting services. USAPTI succeeded to the rights and obligations of its predecessor
21 companies, LH PERFORMANCE, Inc. and PERFORMANCE GROUP, with respect to those
22 companies' TiO₂ business, and the business names were sometimes used interchangeably.

23 10. TZE CHAO, also known as ZHI ZHAO (TZE CHAO), was a resident of Delaware and
24 an owner of two consulting firms: Cierra Technology, Inc. (Cierra), incorporated in the State of
25 Delaware, and Zhi Hua Technology Co., Ltd. (Zhi Hua), a Hong Kong-based entity. TZE CHAO was
26 born in China in 1934, emigrated to the United States in 1967, and became a naturalized citizen of the
27 United States in December 1972. CHAO was a DuPont employee from 1966 to 2002.

1 11. ROBERT J. MAEGERLE was a resident of Delaware and an owner of a consulting firm,
2 Pinewater Designs, Inc. MAEGERLE was a process engineer, among other things, for DuPont from
3 1956 to 1991.

4 DuPont Trade Secrets and Confidentiality Protections

5 12. DuPont was a company headquartered in Wilmington, Delaware that manufactured TiO₂,
6 a commercially valuable white pigment that was used in a large number of materials ranging from paints
7 to plastics to paper. DuPont manufactured TiO₂ at plants in the United States, Mexico, and Taiwan
8 using proprietary technology and sold it throughout the world in interstate and foreign commerce,
9 including in the PRC. DuPont was the world's largest producer of TiO₂ pigment, and its TiO₂
10 accounted for approximately one-fifth of all world-wide TiO₂ sales.

11 13. DuPont invented the chloride-route process for manufacturing TiO₂ in the 1940s and has
12 refined this process over time. The production of TiO₂ through the chloride-route is a complex
13 manufacturing process, and DuPont has been continually working to improve its process since its
14 invention. Through its seventy years of experience, research and development, DuPont has developed a
15 proprietary TiO₂ process that provides DuPont with a competitive advantage in the international
16 marketplace.

17 14. DuPont's TiO₂ technology included, but was not limited to, the following trade secrets:

18 a. **Trade Secret 1:** The DuPont chloride-route process to manufacture TiO₂. Trade
19 Secret 1 includes ways and means in which proprietary and non-proprietary components were compiled
20 and combined by DuPont to form substantial portions of the TiO₂ manufacturing process, Trade Secrets
21 2 through 5 set forth below.

22 b. **Trade Secret 2:** DuPont Drawing No. W1245258, titled "Edge Moor Plant
23 Oxidation W/RPS System Drawing." This drawing, marked with the DuPont oval logo trademark,
24 explicitly stated that the "information and know-how [on the drawing] may not be used nor the drawing
25 reproduced without the written permission of DuPont." The drawing provided information about TiO₂
26 oxidation area process, including detailed process flow descriptions for each major stream within the
27 process, including stream capacities, chemical compositions, temperatures, pressures, and physical
28

1 states. The drawing included details related to pipeline sizes, automatic and manual valve sizes and
2 locations, detailed instrumentation requirements, and safety relief devices.

3 c. **Trade Secret 3:** DuPont Accession Report No. 18135, titled “Improved Mixing
4 Correlation for the $TiCl_4$ Oxidation Reaction Computer Model,” dated September 7, 1994, which
5 appended a mathematical equation, referred to as the “Diemer correlation,” and related code in the
6 Fortran language for a computer model. The correlation, which enabled the calculation of the mixing
7 time and distance required for the completion of the oxidation process for any DuPont reactor under any
8 set of process conditions, incorporated historical operating data from DuPont’s production lines and its
9 oxidation science. On its cover page, the report was marked “DuPont Confidential – use and dispose per
10 DISO [DuPont Information Security Organization] policy,” and “[t]his report contains confidential
11 information and each holder is responsible for its safekeeping. When no longer needed, please destroy
12 or dispose of in conformance with PIP [Proprietary Information Protection] Guidelines.”

13 d. **Trade Secret 4:** DuPont Flow Sheet No. EK2411, titled “Edge Moor Pigments
14 Plant Flow Sheet – Reaction Area,” with handwritten notations. This flow sheet, bearing the DuPont
15 oval logo trademark, was marked “DuPont Confidential – Special Control,” and provided that the
16 “employee receiving this registered print will sign and print the attached acknowledging card, will
17 properly safeguard this print and will be held personally accountable for this print.” The flow sheet
18 contained information about the TiO_2 reaction area process, *e.g.*, the process of treating ores with
19 chlorine gas, including the inter-connectivity of all major streams between the reaction area equipment,
20 which illustrates where and how DuPont injects chemical additives, fuel, feedstocks, purge gases and
21 coolants to the process. This flow sheet also included roughly 30 alphanumeric handwritten references
22 to a proprietary, internally-commissioned computer simulation model on the ASPEN-PLUS® platform,
23 known as the Reaction Aspen-Plus (RAP) model, which was described in a separate confidential DuPont
24 technical report. The handwritten references matched the specific nomenclature used for the RAP
25 model, which was created for plant optimization projects and capacity expansions.

26 e. **Trade Secret 5:** DuPont Document EM-C-8510-0148, titled “60,000 Metric Tons
27 Per Year Scope/Basic Data,” dated October 31, 1985, addressed to R.J. MAEGERLE (the “Basic Data
28 Document”). This 407-page document, which was designated “Confidential – Special Control,” and

1 issued in numbered copies, provided the scope and basic data for DuPont's then-planned chloride-route
2 plant in Taiwan, which later opened in Kuan Yin, Taiwan. It contained the process and equipment
3 information necessary to design a greenfield (*e.g.*, a plant built from scratch at an undeveloped site),
4 world-class production scale, integrated chloride-route TiO₂ production line. The Basic Data
5 Document's security statement provided that the report is "highly confidential" and "[m]uch of the
6 report data are considered in the 'trade secret' category and should not be released to vendor
7 representatives and non-Company personnel." The Basic Data document was itself a trade secret and it
8 contained numerous discrete trade secrets within it.

9 15. DuPont protected the confidential information surrounding its TiO₂ technology,
10 including its trade secrets, to prevent unauthorized use or disclosure, by a variety of measures, including,
11 but not limited to:

- 12 • limiting visitor access to its TiO₂ facilities;
- 13 • transmitting, receiving, and destroying confidential information in a secure manner;
- 14 • requiring employees to execute non-disclosure agreements;
- 15 • requiring separating employees to certify that they had returned all confidential or
16 secret DuPont materials;
- 17 • compartmentalizing information surrounding the TiO₂ process and access to it;
- 18 • requiring permission to access data systems that contain TiO₂ documentation -
19 including drawings, equipment specifications, instrument specifications, logic
20 diagrams, standard operation procedures, maintenance work practices, technology
21 reports, etc.;
- 22 • sending letters to former DuPont employees and/or competing companies that hired
23 former DuPont employees regarding the protection of its trade secrets; and
- 24 • maintaining physical security measures in and around TiO₂ production facilities,
25 including fences, gates, locks, guard facilities, surveillance, escort requirements,
26 identification badges, and prohibitions on photography and videotaping.

1 COUNT ONE: (18 U.S.C. § 1831(a)(5) – Conspiracy to Commit Economic Espionage)

2 16. The allegations contained in Paragraphs 1 through 15 are re-alleged and incorporated as
3 if fully set forth herein.

4 17. Beginning in or about 1998, and continuing to in or about October 2011, in the Northern
5 District of California and elsewhere, defendants

6 DONG YINGJIE,
7 HOU SHENGDONG,
8 PANGANG GROUP,
9 PGSVTC,
PANGANG GROUP TITANIUM, and
PIETC,

10 together with others known and unknown to the Grand Jury, knowingly combined, conspired and agreed
11 to:

12 a. knowingly steal and without authorization appropriate, take, carry away, and
13 conceal, and by fraud, artifice, and deception obtain trade secrets belonging to DuPont; and

14 b. knowingly and without authorization copy, duplicate, sketch, draw, alter,
15 photocopy, replicate, transmit, deliver, send, communicate, and convey trade secrets belonging to
16 DuPont; and

17 c. knowingly receive, buy and possess trade secrets belonging to DuPont, knowing
18 the same to have been stolen, appropriated, obtained and converted without authorization;
19 intending and knowing that the offenses would benefit a foreign government, namely the PRC, and
20 foreign instrumentalities, namely PANGANG GROUP, PGSVTC, PANGANG GROUP TITANIUM,
21 and PIETC, in violation of Title 18, United States Code, Sections 1831(a)(1), (a)(2) and (a)(3).

22 Manner and Means of the Conspiracy

23 18. In order to develop chloride-route TiO₂ production capabilities and circumvent DuPont's
24 restriction on its proprietary technology, companies owned and controlled by the PRC government and
25 employees of those companies, including the PANGANG GROUP companies named in this Third
26 Superseding Indictment, attempted to illegally obtain technology that had been developed by DuPont.

27 19. In the 1990s, the government of the PRC prioritized the development of chloride-route
28 TiO₂ technology. PRC government officials met with WALTER LIEW and asked him to transfer

1 chloride-route TiO₂ technology to the PRC. By the beginning of 1998, WALTER LIEW had assembled
2 a team that included former DuPont employees, including MAEGERLE and others, to assist him in his
3 efforts to convey DuPont's TiO₂ technology to entities in the PRC.

4 20. WALTER LIEW executed contracts with state-owned entities in the PRC for chloride-
5 route TiO₂ projects that relied on the transfer of illegally obtained DuPont technology, including: (a) a
6 \$5,600,000 contract in 1998 with the import and export company of Chengde Iron & Steel Group; (b) a
7 \$6,180,000 contract in 2005 with PIETC and PANGANG Jinzhou for a 30,000 metric tons per year
8 (MTPY) project; (c) a \$7,000,000 contract in 2007 with PANGANG Jinzhou for a 30,000 MTPY
9 project; and (d) a \$17,800,000 contract in 2009 with PIETC and PANGANG GROUP TITANIUM for a
10 100,000 MTPY project.

11 21. MAEGERLE had detailed knowledge of DuPont's TiO₂ technology and expertise in
12 building TiO₂ production lines. In furtherance of the contracts entered into by WALTER LIEW,
13 MAEGERLE provided WALTER LIEW and USAPTI with DuPont information, including information
14 contained in Trade Secret 5.

15 22. The PANGANG GROUP companies and computer hackers unknown to the Grand Jury,
16 in a line of effort parallel to the PANGANG defendants' actions to obtain DuPont trade secrets through
17 WALTER LIEW and TZE CHAO, without authorization remotely accessed DuPont computers that
18 stored TiO₂ information and stole from those computers, among other things, trade secret information
19 related to the chloride-route production of TiO₂, and transmitted such information to computers outside
20 of the United States. This stolen information was then provided to PANGANG employees working on
21 the PANGANG GROUP projects identified below, including defendants DONG YINGJIE and HOU
22 SHENGDONG.

23 PANGANG GROUP Projects

24 23. In approximately 2003, PANGANG Jinzhou, a subsidiary of PANGANG GROUP,
25 decided to build a larger, more efficient 30,000 MTPY chloride-process plant. WALTER LIEW wrote
26 letters in 2003 and 2004, claiming to possess the complete TiO₂ process technology and attempting to
27 sell his services to PANGANG Jinzhou to design its new factory.

1 24. In March 2004, PANGANG GROUP hired CHAO as a consultant because of his
2 experience with and knowledge of DuPont's TiO₂ technology. At PANGANG GROUP's direction,
3 TZE CHAO contacted WALTER LIEW and asked LIEW about his chloride-route TiO₂ technology.

4 25. As part of the negotiation process for the PANGANG Jinzhou contract, WALTER LIEW
5 also provided PANGANG Jinzhou with numerous photographs of DuPont facilities, which revealed
6 proprietary and confidential aspects of the manufacturing process. WALTER LIEW obtained these
7 photographs from MAEGERLE who was not authorized to take or disseminate them outside DuPont.

8 26. In or about 2008, PANGANG GROUP put out a request for proposal for a 100,000
9 MTPY chloride-route TiO₂ project in Chongqing, PRC. Both USAPTI and Cierra (TZE CHAO's
10 company) submitted bids. No other engineering firm bid on the project. In their efforts to obtain the
11 contract, both USAPTI and Cierra represented to PANGANG GROUP that they possessed DuPont
12 technology.

13 27. Throughout 2008, WALTER LIEW and MAEGERLE for USAPTI and CHAO for Cierra
14 provided detailed information to PANGANG GROUP regarding the design and construction of the new
15 facility. During these technology exchanges, PANGANG GROUP employees, including DONG
16 YINGJIE, HOU SHENGDONG, and an official from PANGANG GROUP TITANIUM, asked
17 WALTER LIEW and TZE CHAO for DuPont blueprints and the names of former DuPont employees
18 who would work on the project.

19 28. In 2009, PANGANG GROUP hired USAPTI to design the project in Chongqing. The
20 parties to the contract were USAPTI, PANGANG GROUP, and PIETC, and the beneficiary of the
21 contract was PANGANG GROUP's subsidiary, PANGANG GROUP TITANIUM.

22 29. Following the execution of the contract for the 100,000 MTPY project, USAPTI,
23 PANGANG GROUP TITANIUM, and PIETC had a series of meetings in San Francisco and the PRC to
24 advance the project. At various times, WALTER LIEW, MAEGERLE, and others attended meetings on
25 behalf of USAPTI, and DONG YINGJIE, HOU SHENGDONG, and others attended meetings on behalf
26 of PANGANG GROUP TITANIUM.

27 30. The basic design information USAPTI delivered to PANGANG GROUP TITANIUM in
28 August 2009 contained numerous features based on technology directly misappropriated from DuPont.

1 At the request of an official from PANGANG GROUP TITANIUM, TZE CHAO reviewed USAPTI's
2 designs in China in September 2009. TZE CHAO prepared a report for PANGANG GROUP
3 TITANIUM with specific suggestions for improving USAPTI's designs. TZE CHAO's suggestions
4 relied, in part, on DuPont's trade secrets, which he included in his report.

5 31. Between on or about January 6, 2006 and on or about July 7, 2011, PIETC and
6 PANGANG Jinzhou paid USAPTI and its predecessor, PERFORMANCE GROUP, at least \$27,000,000
7 for work on the 30,000 MTPY and 100,000 MTPY TiO₂ projects.

8 32. Proceeds from the sale of DuPont technology to PANGANG GROUP were paid to
9 WALTER LIEW, PERFORMANCE GROUP and USAPTI through letters of credit, letters of guarantee,
10 and wire transfers established at various banks located in the PRC. To obtain this money, WALTER
11 LIEW drew down on letters of credit and letters of guarantee and was the recipient of wire transfers on
12 behalf of PERFORMANCE GROUP and USAPTI through Mega International Commercial Bank in San
13 Jose, California, California Pacific Bank in San Francisco, California, Cathay Bank in Millbrae,
14 California, and East West Bank in Oakland, California. WALTER LIEW and CHRISTINA LIEW
15 wired millions of dollars in proceeds from PANGANG GROUP to CHRISTINA LIEW's relatives in the
16 PRC through bank accounts in Singapore and elsewhere.

17 Overt Acts

18 33. In furtherance of the conspiracy and to effect its objects, defendants committed the
19 following overt acts, among others, in the Northern District of California and elsewhere:

20 34. On or about March 15, 1998, MAEGERLE sent a facsimile to WALTER LIEW that
21 contained proprietary and confidential information about DuPont's TiO₂ plant costs and personnel data,
22 including information from Trade Secret 5.

23 35. On or about October 8, 2005, MAEGERLE emailed WALTER LIEW a series of
24 photographs from various DuPont facilities that contained proprietary and confidential information
25 about DuPont technologies associated with its chloride-route TiO₂ process.

26 36. On or about November 25, 2005, WALTER LIEW on behalf of PERFORMANCE
27 GROUP entered into a \$6,180,000 contract on the 30,000 MTPY chloride-route TiO₂ project with
28 PIETC on behalf of PANGANG Jinzhou.

1 37. On or about April 17, 2008, WALTER LIEW directed Mega Bank to wire \$759,982 to an
2 account at the Development Bank of Singapore (DBS) in the name of Huadong Equipment Solutions,
3 Pte, Ltd. (Huadong), over which WALTER LIEW had signature authority.

4 38. On or about May 29, 2008, WALTER LIEW directed DBS to wire \$750,000 from the
5 Huadong account in Singapore to an HSBC account in Hong Kong belonging to CHRISTINA LIEW's
6 father, a resident of the PRC, over which WALTER LIEW had signature authority.

7 39. On or about May 30, 2008, WALTER LIEW directed the transfer of approximately
8 \$670,000 from the HSBC account of CHRISTINA LIEW's father into a deposit account.

9 40. On or about June 2, 2008, employees of PANGANG GROUP companies, including HOU
10 SHENGDONG, agreed that PANGANG GROUP would work with Cierra and TZE CHAO if they
11 employed former DuPont employees and possessed blueprints for DuPont's TiO2 plants.

12 41. On or about July 15, 2008, WALTER LIEW and CHRISTINA LIEW informed
13 PANGANG GROUP TITANIUM that their drawings would replicate DuPont's DeLisle plant.

14 42. On or about August 22, 2008, MAEGERLE provided a USAPTI consultant with electronic
15 copies of confidential, proprietary DuPont documents during a business trip to the PRC, including Trade
16 Secret 2, Trade Secret 4, and a set of the photographs described in Paragraph 35.

17 43. On or about October 25, 2008, MAEGERLE emailed WALTER LIEW specific
18 information from Trade Secret 5 and stated that "[t]he Jinzhou specifications were scaled down" from
19 information from Trade Secret 5.

20 44. In or about July 2009, MAEGERLE drafted a three-page document entitled, "100K T/Y
21 TiO2 CHLORINATOR DESIGN," which referenced specific confidential, proprietary data contained in
22 the Basic Data Document (Trade Secret 5), which he used to scale up for the 100,000 MTPY project.

23 45. On or about September 3, 2009, MAEGERLE sent WALTER LIEW an email containing
24 a specific and confidential figure from Trade Secret 5.

25 46. On August 8, 2010, USAPTI executed a \$796,000 contract with PIETC for PANGANG
26 GROUP Chongqing Titanium Industry Co., Ltd. to procure equipment for the 100,000 MTPY project.

27 47. In or about November 2010, WALTER LIEW provided a portion of Trade Secret 3 to a
28 USAPTI employee.

1 48. A USAPTI employee emailed himself portions of Trade Secret 3 on February 22, 2011,
2 March 4, 2011, and March 8, 2011.

3 49. On or about July 19, 2011, WALTER LIEW concealed Trade Secret 2 and Trade Secret 4
4 at his residence in Orinda, California.

5 50. On or about July 19, 2011, CHRISTINA LIEW attempted to prevent law enforcement from
6 gaining access to a safe deposit box at Bank of East Asia in Oakland, California that contained copies of
7 Trade Secret 2 and 4 and the photographs referenced in Paragraph 34.

8 51. On or about July 20, 2011, DONG YINGJIE, an employee of PANGANG GROUP
9 TITANIUM, possessed and carried into the United States from the PRC information obtained through
10 unauthorized access to DuPont computers, including approximately eight documents that contained
11 information regarding Trade Secret 1.

12 52. On or about July 20, 2011, DONG YINGJIE possessed and carried into the United States
13 from the PRC a document entitled “Chloride technology reveiew – Pangang” containing stolen DuPont
14 proprietary trade secret information regarding Trade Secret 1.

15 53. On or about July 20, 2011, DONG YINGJIE possessed and carried into the United States
16 from the PRC a document entitled “Assessment of the Proposed Pangang 100k tpa TiO2 Chloride
17 Process Flowsheet and P&ID (Zhi Hua Technology Co., Ltd. 9/25/090)” that contained information
18 regarding Trade Secret 1.

19 54. In or about October 2011, HOU SHENGDONG attempted to contact TZE CHAO for
20 additional assistance with the 100,000 MTPY project.

21 All in violation of Title 18, United States Code, Section 1831(a)(5).

22
23 COUNT TWO: (18 U.S.C. § 1831(a)(1), (2), (3), and (4) – Attempted Economic Espionage)

24 55. The allegations contained in Paragraphs 1 through 15 are re-alleged and incorporated as
25 if fully set forth herein.

26 56. Beginning on a date unknown, but no later than 2008, and continuing to on or about
27
28

1 October 2011, in the Northern District of California and elsewhere, defendants

2 DONG YINGJIE,
3 HOU SHENGDONG,
4 PANGANG GROUP,
5 PGSVTC,
6 PANGANG GROUP TITANIUM, and
7 PIETC

8 knowingly attempted to

9 a. steal and without authorization appropriate, take, carry away, and conceal, and by
10 fraud, artifice, and deception obtain trade secrets belonging to DuPont; and

11 b. without authorization copy, duplicate, sketch, draw, alter, photocopy, replicate,
12 transmit, deliver, send, communicate, and convey trade secrets belonging to DuPont; and

13 c. receive, buy and possess trade secrets belonging to DuPont, knowing the same to
14 have been stolen, appropriated, obtained and converted without authorization; specifically, Trade Secret
15 1, intending and knowing that the offense would benefit a foreign government, namely the PRC, and
16 foreign instrumentalities, namely PANGANG GROUP, PGSVTC, PANGANG GROUP TITANIUM,
17 and PIETC, in violation of Title 18, United States Code, Section 1831(a)(1), (a)(2), and (a)(3).

18 All in violation of Title 18, United States Code, Section 1831(a)(4).

19 FORFEITURE ALLEGATION: (18 U.S.C. §§ 1834 and 2323 – Proceeds and
20 Property Involved in Economic Espionage)

21 57. The allegations contained in Counts One and Two of this Third Superseding Indictment
22 are hereby re-alleged and incorporated by reference for the purpose of alleging forfeiture pursuant to
23 Title 18, United States Code, Sections 1834 and 2323.

24 58. Upon conviction of the offenses in violation of Title 18, United States Code, Section
25 1831 set forth in Counts One and Two of this Third Superseding Indictment, defendants

26 DONG YINGJIE,
27 HOU SHENGDONG,
28 PANGANG GROUP,
PGSVTC,
PANGANG GROUP TITANIUM, and
PIETC

1 shall forfeit to the United States of America, pursuant to Title 18, United States Code, Sections 1834 and
2 2323, any property used, or intended to be used, in any manner or part to commit or facilitate the
3 commission of the offenses; and any property constituting or derived from any proceeds obtained
4 directly or indirectly as a result of the commission of the offenses.

5 59. If any of the property described above, as a result of any act or omission
6 of the defendants:

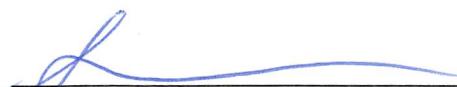
- 7 a. cannot be located upon the exercise of due diligence;
- 8 b. has been transferred or sold to, or deposited with, a third party;
- 9 c. has been placed beyond the jurisdiction of the court;
- 10 d. has been substantially diminished in value; or
- 11 e. has been commingled with other property which cannot be divided
12 without difficulty,

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

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

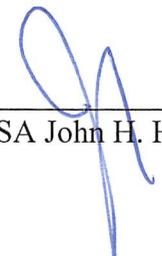
16
17 DATED: 1/5/16

A TRUE BILL

18
19 
FOREPERSON

20 BRIAN J. STRETCH
21 Acting United States Attorney

22 
23 DAVID R. CALLAWAY
24 Chief, Criminal Division

25 (Approved as to form: 
26 AUSA John H. Hemann
27
28