American University International Law Review

Volume 36 | Issue 4 Article 5

2021

# TRIPing on Trade Secrets: How China's Cybertheft of U.S. Trade Secrets Violated TRIPS

Kassidy Schmitz

# TRIPING ON TRADE SECRETS: HOW CHINA'S CYBERTHEFT OF U.S. TRADE SECRETS VIOLATED TRIPS

KASSIDY SCHMITZ*



* J.D. Candidate 2022, American University Washington College of Law; B.S. in Mechanical Engineering, Patent Law concentration, The George Washington University, 2017. Thank you to my parents, who have tirelessly encouraged and supported me in my academic career, culminating in achieving my dream of pursuing a legal career. Thank you to all the friends, mentors, and professors that served as sounding boards for this Note. A special thanks to the incredible editing team of Vol. 36 that provided feedback and guidance without which this Note would not be what it is.

# I. INTRODUCTION

It is estimated that unfair business practices originating from China cost the United States economy anywhere between $225 billion and $600 billion a year.[1] A large portion of these losses is due to cybertheft of U.S. trade secrets, but it does not account for the full cost of intellectual property infringement.[2] While trade secret theft is harder to track due to lack of public disclosure, one in five companies said China stole their intellectual property in 2019.[3]

---

1. *
THE NAT'L BUREAU OF ASIAN RESEARCH, UPDATE TO THE REPORT OF THE COMMISSION ON THE THEFT OF AMERICAN INTELLECTUAL PROPERTY (IP COMMISSION REPORT) 1 (2017) [hereinafter IP COMMISSION REPORT]

2. *See id.* at 1, 2 (explaining that studies suggest that trade secret theft is between 1% and 3% of GDP, which means the cost to the U.S. economy is anywhere from $180 billion to $540 billion).

3. Erin Rosenbaum, *1 in 5 corporations say China has stolen their IP within the last year: CNBC CFO survey*, CNBC: GLOBAL CFO COUNCIL (Mar 1, 2019, 5:00 AM), https://www.cnbc.com/2019/02/28/1-in-5-companies-say-china-stole-their-ip-within-the-last-year-cnbc.html.

On July 7, 2020, two Chinese hackers, Li Xiaoyu and Dong Jiazhi, were indicted in a Washington district court on eleven counts, one of which was conspiracy to commit theft of trade secrets.[4] For almost two decades, China has been hacking U.S. companies and carrying out these thefts, but U.S. companies see litigation as too costly to take any legal action.[5]

China joined the World Trade Organization (WTO) in December of 2001 and, thus, agreed to abide by all WTO Agreements and treaties.[6] Among these is the Agreement on Trade-Related Aspect of Intellectual Property (TRIPS).[7] TRIPS was created to provide minimum standards for intellectual property protection and enforcement.[8] Article 3 of TRIPS mandates that the intellectual property protection a Member provides its own nationals is the minimum protection it must provide to nationals of other WTO Members.[9] Article 39 states that trade secrets should be protected.[10] Finally, Article 41 requires that enforcement procedures be available to provide effective action against infringement.[11]

This Comment argues that China's continuous cybertheft of U.S. companies' trade secrets, as seen in the indictment of Li Xiaoyu and Dong Jiazhi, violates Articles 3, 39, and 41 of TRIPS.

---

4. Indictment ¶ 2, *United States v. Xiaoyu*, (No. 4:20-cr-06019-SMJ), 2020 WL 5412794 (E.D. Wash. July 7, 2020).

5. Zak Doffman, *'National Security Threat' as Chinese Hackers are 'Allowed' to Target U.S. Businesses*, FORBES (Apr 13, 2019, 2:33 AM), https://www.forbes.com/sites/zakdoffman/2019/04/13/u-s-businesses-allowing-chinese-government-hackers-to-steal-american-secrets/#3780a9ea4d43.

6. *China and the WTO*, WTO – MEMBER INFORMATION, https://www.wto.org/english/thewto_e/countries_e/china_e.htm#:~:text=China%20has%20been%20a%20member%20of%20WTO%20since%2011%20December%202001 (last visited Oct. 4, 2020); ANTONY TAUBMAN ET AL., A HANDBOOK ON THE WTO TRIPS AGREEMENT 8 (2012) (explaining that TRIPS is binding on each Member of the WTO from the date the WTO Agreement becomes effective for that country).

7. Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 U.N.T.S. 299 [hereinafter TRIPS Agreement].

8. UNCTAD-ICTSD, RESOURCE BOOK ON TRIPS AND DEVELOPMENT 1, 17 (2005) [hereinafter UNCTAD-ICTSD].

9. TRIPS Agreement, *supra* note 7, art. 3(1).

10. TRIPS Agreement, *supra* note 7, art. 39(1).

11. TRIPS Agreement, *supra* note 7, art. 41(1).

Part II of this Comment discusses the background of the TRIPS agreement and the history of international intellectual property protection.[12] It also provides an overview of each TRIPS article, the WTO jurisprudence, and the details of the Li and Dong indictment.[13] Part III of this Comment analyzes China's obligations under TRIPS via the specific language of each TRIPS article.[14] Part III further assesses a potential counterargument to China's obligations.[15] Part IV recommends the use of the WTO dispute settlement procedures using violation complaints under TRIPS and enforcing the Economic and Trade Agreement.[16] Part IV also recommends a less-common option of filing a non-violation complaint under GATT 1994.[17] Part V will conclude that China's cybertheft of U.S. companies' trade secrets violated its obligations Articles 3, 39, and 41 of TRIPS.[18]

# II. BACKGROUND

## A. HISTORY OF TRIPS: PARIS CONVENTION FOR THE PROTECTION OF INDUSTRIAL PROPERTY (1883)

The Paris Convention for the Protection of Industrial Property of 1883 (Paris Convention) is one of the main conventions of the World Intellectual Property Organization (WIPO) and is one of the first multi-lateral agreements on the protection of intellectual property.[19] It applies to patents, trademarks, and other forms of intellectual property, in addition to protection against unfair competition.[20] There are three categories of provisions in the Convention: national treatment, right of priority, and common rules.[21] Under the provisions on national

12. *See* discussion *infra* Part II.A.
13. *See* discussion *infra* Part II.B-C.
14. *See* discussion *infra* Part III.A-C.
15. *See* discussion *infra* Part III.D.
16. *See* discussion *infra* Part IV.A-B.
17. *See* discussion *infra* Part IV.C.
18. *See* discussion *infra* Part V.
19. Paris Convention for the Protection of Industrial Property, as last amended on Sept 28, 1979, 21 U.S.T. 1583, 828 U.N.T.S. 305 [hereinafter Paris Convention].
20. *See Summary of the Paris Convention for the Protection of Industrial Property (1883)*, WORLD INTELLECTUAL PROPERTY ORGANIZATION, https://www.wipo.int/treaties/en/ip/paris/summary_paris.html (last visited Oct. 4, 2020).
21. *Id.*

treatment, the Convention provides that each Contracting State must grant the same protection of industrial property to nationals of other Contracting States that it grants to its own nationals,[22] which is identical to the requirement of Article 3 of TRIPS.[23] Most notably, the Paris Convention does not provide any protection for trade secrets.[24] All parts of the Paris Convention are incorporated by reference in TRIPS.[25] The right of priority and common rules only apply to the prosecution of patents, marks, and industrial designs (design patents).[26]

## B. TRIPS ARTICLES AT ISSUE

The purpose of TRIPS is to reduce the barriers to international trade while accounting for the role that intellectual property plays.[27] Because the Paris Convention fell short in certain aspects,[28] TRIPS was created to ensure effective and adequate protection of intellectual property rights, including trade secrets.[29]

### *i. Article 3 – National Treatment*

Article 3 of TRIPS states that each Member needs to provide intellectual property protection to the "nationals of other Members"

22. *See* Paris Convention, *supra* note 19, arts. 2–3.

23. *See* TRIPS Agreement, *supra* note 7, art. 3(1).

24. *See* Paris Convention, *supra* note 19, art. 1(2) (outlining that protection is only for patents, copyrights, and trademarks).

25. *See* TRIPS Agreement, *supra* note 7, art. 2 (stating that Members must still fulfill their obligations under the Paris Convention).

26. *See* UNCTAD-ICTSD, *supra* note 8, at 46 (explaining that the Paris Convention is still used to interpret TRIPS).

27. *See* TRIPS Agreement, *supra* note 7, pmbl. (establishing the purpose of TRIPS as a way to reduce "impediments" to international trade and ensure adequate protection of intellectual property rights).

28. *See* UNCTAD-ICTSD, *supra* note 8, at 39, 46 (commenting that the broadness and non-specificity of definitions in the Paris Convention rendered its usefulness almost null).

29. The TRIPS mandate was adopted in September of 1986 during the Uruguay Round of trade negotiations, which also created the World Trade Organization (WTO) and updated the General Agreement on Tariffs and Trade (GATT 1994). *See generally* General Agreement on Tariffs and Trade 1994, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187 [hereinafter GATT 1994]; Marrakesh Agreement Establishing the World Trade Organization, Apr. 15, 1994, 1867 U.N.T.S. 154 [hereinafter WTO Agreement].

that is "no less favorouable" than the intellectual property protection it provides to its own nationals.[30]

"Intellectual property" is defined in Article 1.2 as all the categories of intellectual property that are subject to Sections 1 through 7 of Part II of the Agreement,[31] which includes Article 39, which outlines protection for undisclosed information.[32] Therefore, trade secrets are protected intellectual property rights under Article 3 of TRIPS.[33]

The first element of Article 3 is that protection under TRIPS is to be provided to "nationals of other Members."[34] TRIPS does not provide an explicit definition for "nationals" in either context "nationals of other Members" or "own nationals."[35] The only guidance TRIPS provides is in Article 1, where it provides that nationals of other Members are natural or legal persons who would be eligible for protection under previous intellectual property agreements.[36] However, none of those agreements explicitly define nationals.[37] Professor Bodenhausen, a lead commentator on the Paris Convention, explains the application of "nationals" with respect to the Paris Convention.[38] The nationality of both natural and legal persons, such as companies and associations, is to be determined by the authorities where the application of the Paris Convention, and, by extension, TRIPS, is sought.[39]

---

30. TRIPS Agreement, *supra* note 7, art. 3(1).

31. TRIPS Agreement, *supra* note 7, art. 1(2). *See also* TRIPS Agreement, *supra* note 7, arts. 9–38 (covering the standards concerning the availability, scope, and use of intellectual property rights).

32. TRIPS Agreement, *supra* note 7, art. 39.

33. *See* TRIPS Agreement, *supra* note 7, art. 1(2) (providing that all categories of intellectual property discussed by the Agreement are protected by the Agreement).

34. TRIPS Agreement, *supra* note 7, art. 3(1).

35. TRIPS Agreement, *supra* note 7, art. 3(1).

36. *See* TRIPS Agreement, *supra* note 7, art. 1(3) (referring to the Paris Convention (1967), the Berne Convention (1971), the Rome Convention, and the Treaty of Intellectual Property in Respect of Integrated Circuits).

37. *See* Paris Convention, *supra* note 19, arts. 2–3.

38. G. H. C. BODENHAUSEN, UNITED INTERNATIONAL BUREAUX FOR THE PROTECTION OF INTELLECTUAL PROPERTY (BIRPI), GUIDE TO THE APPLICATION OF THE PARIS CONVENTION FOR THE PROTECTION OF INDUSTRIAL PROPERTY 27 (1969).

39. *See id.* at 27–28 (explaining that local authorities are in the best position to define who nationals are).

The second element of Article 3 is the intellectual property protection provided to other Members is "no less favourable" than the intellectual property protection it provides to its own nationals.[40] The guiding case for interpreting the "no less favourable" language is *EC – Trademarks and Geographical Indications*.[41] The European Communities (EC)[42] had a regulation that contained two different sets of procedures for the registration of geographical indications (GI) for agricultural products and foodstuffs.[43] The GI protection was not available under the Regulation in geographical areas located in certain countries unless the countries entered into international agreements with the EC.[44] The Panel found that the extra hurdle of obtaining these agreements was discriminatory against non-EC members and considered less favorable treatment.[45] The Panel stressed that "[t]he benchmark for the obligation is the treatment accorded *by the European Communities* to the European Communities' own nationals" and that the treatment accorded by other Members to their own respective nationals was not relevant.[46]

Conversely, in *Indonesia – Auto Industry*, the Panel did not find a discriminatory practice despite there being different requirements for other WTO nationals.[47] Under Indonesian law, cars marketed under the National Car Programme have to bear a trademark owned by an Indonesian company that created the trademark.[48] The Panel

40. TRIPS Agreement, *supra* note 7, art. 3(1).

41. Panel Report, *European Communities – Protection of Trademarks and Geographical Indications for Agricultural Products and Foodstuffs*, ¶ 3.1, WTO Doc. WT/DS174/R (adopted Mar. 15, 2005) [hereinafter EC – Trademarks and Geographical Indications Panel Report].

42. *See generally* Will Kenton, *European Community (EC)*, INVESTOPEDIA, (Feb. 8, 2020) https://www.investopedia.com/terms/e/european-community.asp#:~:text=The%20six%20founding%20member%20countries,Maastricht%20Treaty%20went%20into%20effect (explaining that the European Community was the precursor to the European Union).

43. EC – Trademarks and Geographical Indications Panel Report, *supra* note 41, ¶¶ 2.1, 7.38, 7.39.

44. *Id.* ¶ 7.139.

45. *Id.* ¶ 7.140.

46. *Id.* ¶ 7.413.

47. Panel Report, *Indonesia – Certain Measures Affecting the Automobile Industry*, ¶ 14.268, WTO Doc. WT/DS64/R (adopted July 2, 1998) [hereinafter Indonesia - Auto Industry Panel Report].

48. *See id.* ¶¶ 2.16, 14.268.

acknowledged that the law limited the use of trademarks owned by foreign companies so they could not be used in one particular way.[49] However, it did not find an issue regarding the acquisition of trademark rights; limiting the types of marks that qualified under the National Car Programme did not mean that trademark rights could not be acquired at all.[50]

### *ii. Article 39 – Trade Secrets*

Article 39 provides protection for undisclosed information, otherwise known as trade secrets.[51] Article 39.1 limits the protection of undisclosed information to acts of "unfair competition as provided in Article 10*bis* of the Paris Convention (1967)."[52] Article 39.1 further provides that undisclosed information be protected in accordance with 39.2.[53]

#### *1. Article 39.2 – Main Clause*

Article 39.2 defines who is entitled to the protection, the type of information protected, and what the information is protected against.[54] Article 39.2 states that "[n]atural and legal persons shall have the possibility of preventing information lawfully within their control from being disclosed to, acquired by, or used by others without their consent in a manner contrary to honest commercial practices."[55] As discussed previously, "natural and legal persons" are defined under national law.[56] The right to prevent the disclosure, acquisition, and use of the information only arises when the means used are "contrary to

49. *See id.* ¶ 14.268 (recognizing that, under the current law, the U.S. was, effectively, unable to participate in the National Car Programme unless they partnered with Indonesian companies).

50. *See id.* (explaining that the U.S. could still obtain trademarks through other avenues).

51. TRIPS Agreement, *supra* note 7, art. 39.

52. TRIPS Agreement, *supra* note 7, art. 39(1). *See* Paris Convention, *supra* note 19, art. 10*bis* (outlining examples for honest commercial practices).

53. TRIPS Agreement, *supra* note 7, art. 39(1).

54. See TRIPS Agreement, *supra* note 7, art. 39(2) (outlining that legal persons are entitled to protection of their undisclosed information against dishonesty commercial practices).

55. *Id.*

56. Bodenhausen, *supra* note 38, at 27–28.

honest commercial practices"; determining a definition of "honest" and "disclosed to, acquired by, or used by others" requires looking outside of TRIPS.[57]

There is no WTO jurisprudence for Article 39 of TRIPS that defines "honest" or "disclosed to, acquired by, or used by others."[58] Of the five WTO disputes filed that cite a violation of Article 39 as a cause of action, none have received a ruling from the WTO.[59] Although Article 39.1 references Article 10*bis* of the Paris Convention, Article 10*bis* and footnote 10 are devoid of any definition.[60]

The Vienna Convention sets forth that terms of an international treaty are given their ordinary meaning in "their context and in light of [the treaty's] object and purpose."[61] The Convention outlines that either agreements or instruments made by parties in connection with the conclusion of the treaty or subsequent agreements or practices made by the parties may be used as interpretation tools.[62] There are no

57. Vienna Convention on the Law of Treaties arts. 31–32, *opened for signature* May 23, 1969, 1155 U.N.T.S. 340 (entered into force Jan. 27, 1980) [hereinafter Vienna Convention] (outlining treaty interpretation tools).

58. UNCTAD-ICTSD, *supra* note 8, at 532.

59. Notification of Mutually Agreed Solution According to the Conditions Set Forth in the Agreement, *Argentina – Patent Protection for Pharmaceuticals and Test Data Protection for Agricultural Chemicals*, ¶ 9, WTO Doc. WT/DS171/3 (June 20, 2002) (settled); Notification of Mutually Agreed Solution According to the Conditions Set Forth in the Agreement, *Argentina – Certain Measures on the Protection of Patents and Test Data*, ¶ 9, WTO Doc. WT/DS196/4 (June 20, 2002) (settled); Joint Communication from China and the European Communities, *China – Measures Affecting Financial Information Services and Foreign Financial Information Suppliers*, ¶ 1, WTO Doc. WT/DS372/4 (Dec. 8, 2008) (settled); Request for Consultations by the European Union, *China – Certain Measures on the Transfer of Technology*, ¶ 1, WTO Doc. WT/DS549/1 (June 6, 2018) (in consultations); Constitution of the Panel Established at the Request of the European Union, *Turkey – Certain Measures Concerning the Production, Importation and Marketing of Pharmaceutical Products*, ¶ 1, WTO Doc. WT/DS583/4 (Mar. 18, 2020) (panel composed).

60. *See* Paris Convention, *supra* note 19, art. 10*bis* (outlining examples of unfair competition, such as confusing or misleading the customer and discrediting the competitor); TRIPS Agreement, *supra* note 7, art. 39(2), n.10 (giving examples of practices that are contrary to honest commercial practices, such as those that take place in a contractual relationship and acquisition of undisclosed information by third parties).

61. Vienna Convention, *supra* note 57, art. 31(1).

62. *See id.* art. 31(2–3) (outlining interpretation tools).

such agreements between WTO members, which leads to using Article 32 of the Convention.[63] The Uniform Trade Secrets Act of 1985 (UTSA), which heavily influenced the language chosen for Article 39 of TRIPS,[64] and the Economic Espionage Act[65] may be consulted to find a clear definition of "honest" and "disclosed to, acquired by, or used by others."[66]

The UTSA outlines trade secret protection in the U.S.[67] It provides disclosure, acquisition, and use by others as three methods of misappropriation.[68] In the case of disclosure and use, a third party that is not the secret holder, such as an employee, breaches a contractual or implied duty to maintain secrecy.[69] For acquisition, the infringer has either acquired the information from a third party, who breached their duty to maintain the secret, or has obtained the information by improper means.[70] The UTSA delineates examples of "improper means," or dishonest means, which include "theft, bribery, misrepresentation, breach or inducement of a breach of a duty to maintain secrecy, or espionage through electronic or other means."[71] While "electronic or other means" are not explicitly defined in the

63. *See id.* art. 32(a) (stating that supplementary means may be used when art. 31 leaves the meaning of terms "ambiguous or obscure").

64. *See id.* art. 32 (providing that supplementary means of interpretation may include any previous treaties that were used in the creation and conclusion of the current treaty); UNCTAD-ICTSD, *supra* note 8, at 521 (explaining that the language in Article 39 of the TRIPS Agreement is substantially based on the UTSA); THE LAW AND THEORY OF TRADE SECRECY: A HANDBOOK OF CONTEMPORARY RESEARCH 551 (Rochelle C. Dreyfus et Aa. eds., 2011) (explaining that the language of the UTSA was integrated into the drafts the U.S. proposed for Article 39).

65. The Economic Espionage Act, 18 U.S.C. § 1832.

66. TRIPS Agreement, *supra* note 7, art. 39(2).

67. *See* UNIFORM TRADE SECRETS ACT § 1(4) (Nat'l Conf. of Comm'rs on Unif. State L. 1985) (defining a trade secret) [hereinafter UTSA].

68. *See id.* § 1(2) (defining methods of misappropriation).

69. *Id.* § 1(2)(ii).

70. *Id.* § 1(2)(i–ii).

71. *Id.* § 1(1). *Compare* Dishonest Definition, *Merriam-Webster.com Dictionary*, https://www.merriam-webster.com/dictionary/dishonest (last accessed Mar. 13, 2021) (defining "dishonest" as characterized by lack of truth, honesty, or trustworthiness) *with* Improper Definition, *Merriam-Webster.com Dictionary*, https://www.merriam-webster.com/dictionary/dishonest (last accessed Mar. 13, 2021) (defining "improper" as not in accord with fact, truth, or right procedure).

UTSA, they are well understood to encompass hacking.[72]

*2. Article 39.2 – Trade Secret Test*

Article 39.2 then sets forth a test to determine if information is considered a trade secret.[73] The first prong of the test is that the information must not be "generally known among or readily accessible" by people in the industry in which the information exists.[74] This language is also found in the UTSA under the first prong of the definition of a trade secret.[75]

The "generally known" language of the UTSA has been interpreted by U.S. courts several times.[76] In *In re Maxxim*, Maxxim was a medical supply company that sold custom procedure trays (CPTs) to hospitals.[77] Maxxim claimed they had a trade secret in the design and contents of the CPTs.[78] The court held there were no trade secrets because the design and contents were generally known.[79] Tray contents were identified in bills of materials that hospitals used without restriction and the design of the tray was obvious to the user.[80]

In *MAI Systems Corp. v. Peak Computer, Inc.*, MAI created field information bulletins (FIBs).[81] The company had taken security measures to ensure the security of their trade secrets, such as limiting access to only management and employees with security clearance and

72. The Economic Espionage Act of 1996 made it a crime to obtain a trade secret using a computer. 18 U.S.C. § 1832.

73. *See* TRIPS Agreement, *supra* note 7, art. 39(2)(a–c) (defining a trade secret as information that is not generally known or readily accessible, has commercial value from being secret, and where reasonable steps have been taken to protect its secrecy).

74. TRIPS Agreement, *supra* note 7, art. 39(2)(a).

75. *See* UTSA § 1(4)(i) (defining a trade secret as information that is not "generally known to" others).

76. In re Maxxim Med. Grp., Inc., et al., 434 B.R. 660, 685 (Bankr. M.D. Fla. 2010); MAI Sys. Corp. v. Peak Comput., Inc., 991 F.2d 551, 522 (9th Cir. 1993).

77. *In re Maxxim Med. Grp., Inc., et al.*, 434 B.R. at 672.

78. *Id.*

79. *See id.* at 690 (explaining that if information is necessarily disclosed upon use, it is generally known).

80. *Id.* at 691.

81. MAI Sys. Corp. v. Peak Comput., Inc., No. CV 92-1654-R, 1992 WL 159803, at *1, *2 (C.D. Cal. Apr. 14, 1992) (enumerating that FIBs include service manuals, technical manuals, and supplements thereof).

a security password.[82] The court found that these measures were sufficient to prove that the information was not generally known to the public.[83]

The second step in the trade secret analysis set forth in Article 39.2 is that the information has "commercial value because it is secret."[84] Similar language of "independent economic value" is found under the first prong of the definition of trade secret in the UTSA.[85] An important difference to note is that the commercial value under Article 39.2 needs to be actual commercial value, while the UTSA provides protection for both actual and potential commercial value.[86]

In *Electro-Craft Corp. v. Controlled Motion, Inc.*, Electro-Craft Corp (ECC) developed and manufactured moving coil motors.[87] A handful of ECC employees left ECC, started Controlled Motion, Inc. (CMI), and, shortly thereafter, CMI brought to market a moving coil motor identical to that of ECC.[88] The Minnesota Supreme Court held that ECC derived economic value from the motor being secret because of the time and money expended by ECC to develop it.[89] The court reasoned that the information gave ECC a competitive advantage because a competitor could not produce a comparable motor without a similar investment of time and money.[90]

In *Cisco Systems, Inc. v. Chung*, Cisco developed engineering specifications for a next-generation conference room collaboration

82. *Id.*

83. *See* MAI Sys. Corp. v. Peak Comput., Inc., 991 F.2d 511, 522 (9th Cir. 1993); Cisco Sys., Inc. v. Chung, No. 19-cv-076562-PJH, 2020 WL 4505509, at *1, *5 (N.D. Cal. Aug. 5, 2020) (holding that requiring employees to agree to a proprietary information agreement as a condition of employment and to annually certify that they would not use a company's assets for non-company purposes, monitoring an employee's network activity, and restricting access to offices and data systems were precautions sufficient to show that the information is not generally known by others).

84. TRIPS Agreement, *supra* note 7, art. 39(2)(b).

85. UTSA § 1(4)(i).

86. UNCTAD-ICTSD, *supra* note 8, at 529.

87. Electro-Craft Corp. v. Controlled Motion, Inc., 332 N.W.2d 890, 894 (Minn. 1983).

88. *Id.* at 895–96.

89. *See id.* at 901.

90. *See id.*

device.[91] Four employees left to work for a competitor, taking with them the specifications.[92] The California district court found that there was no evidence to suggest that the specifications themselves maintained independent economic value.[93] The value of a category of information must be expressly tethered to a particular subject matter at issue, not just a broad category of information, such as source code.[94]

The final prong of the trade secret analysis of Article 39.2 is that the company must take reasonable steps to keep the information secret under the circumstances in which the trade secret exists.[95] This same language is found under the second prong of the definition of a trade secret in the UTSA.[96]

In *Rockwell Graphic Systems, Inc. v. DEV Industries, Inc.*, Rockwell manufactured printing presses and parts thereof.[97] Piece part drawings existed for vendors of Rockwell parts and assembly drawings of the presses existed for customers to repair the presses.[98] DEV Industries, a direct competitor of Rockwell, was found to be in possession of over one hundred piece part drawings.[99] Rockwell kept all its engineering drawings, including piece part and assembly drawings, in a vault.[100] Access to the vault and the building in which the vault was stored was limited to authorized employees, most of

91. Cisco Sys. Inc., v. Chung, No. 19-cv-076562-PJH, 2020 WL 4505509, at *1, *4 (N.D. Cal. Aug. 5, 2020).

92. Order Re Motions to Compel Arbitration, Stay the Case, and Dismiss, Cisco Sys. Inc. v. Chung, 462 F.Supp. 3d 1024, 1031–34 (N.D. Cal. 2020).

93. *See Cisco Sys., Inc.*, 2020 WL 4505509, at *7 (suggesting that the end product having economic value does not give the materials used to develop and manufacture the product independent economic value).

94. *See id.* at *5 (noting that if alleging significant resources are invested in obtaining the trade secrets, the investments need to be tied to specific matters and not just general categories of information).

95. TRIPS Agreement, *supra* note 7, art. 39(2)(c).

96. UTSA § 1(4)(ii) (" . . . is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.").

97. Rockwell Graphic Sys., Inc. v. DEV Indus., Inc., 925 F.2d 174, 175 (7th Cir. 1991).

98. *Id.* at 175–76.

99. *Id.* at 176.

100. *Id.* at 177.

whom were engineers.[101] The authorized employees were required to sign an agreement to not disseminate the drawings or disclose their contents but were allowed to make copies of the drawings and leave the building with them.[102] They were also required to sign the drawings in and out from the vault.[103] The court of appeals held that, while Rockwell could have taken more steps to limit the copying of the drawings, the steps they took to maintain the drawings' secrecy were reasonable under the circumstances.[104] The court reasoned that the additional steps would have come at a cost to Rockwell that most likely would have outweighed the benefits of increased security of the drawings.[105]

In contrast, in *Electro-Craft, Inc.*, ECC took minimal precautions in screening its handbook and did not require all employees to sign confidentiality agreements.[106]While ECC's main plant had some guarded entrances, seven unlocked entrances did not have signage that indicated limited access.[107] Frequent informal tours were given to vendors and customers with no warnings as to the confidential nature of the information they would see.[108] ECC did not explicitly tell employees that the features of its motors were secret but rather treated them as not secret as no internal or external technical documents were marked "Confidential" and employees had unrestricted access to them.[109] The Minnesota Supreme Court held that these measures were not reasonable to protect the secrecy of the information because there were essentially no steps taken.[110]

### *iii. Article 41 – Enforcement*

The purpose of TRIPS is to establish minimum standards, not to harmonize the wide range of differences that exist in national laws

101. *Id.*
102. *Id.*
103. *Id.*
104. *See id.* at 180.
105. *See id.*
106. Electro-Craft Corp. v. Controlled Motion, Inc., 332 N.W.2d 890, 901–02 (Minn. 1983).
107. *Id.*
108. *Id.* at 903.
109. *Id.*
110. *See id*.

with respect to enforcement rules.[111] Article 41 provides the standards that the procedures need to meet, such as being "fair and equitable"[112] and that remedies must serve as a deterrent.[113]

Article 41.1 states that Members need to ensure that enforcement procedures outlined in TRIPS are "available" to allow for enforcement against "any act of infringement" of intellectual property rights covered by TRIPS.[114]

Trade secrets are intellectual property rights protected under TRIPS.[115] An "infringement" of an intellectual property right occurs when acts under the exclusive control of the title holder and not subject to admissible exceptions, are performed by third parties without the authorization of the title holder.[116] Infringement of a trade secret is called "misappropriation" and is discussed in Section 2 of this Part.[117] Accordingly, misappropriation of trade secrets is included in "any act of infringement" under TRIPS.[118]

In *China - Intellectual Property Rights*, China's Copyright Law was challenged for excluding from protection the publication or distribution of certain works that were prohibited by other laws in China.[119] The Panel found that all works protected by the Berne

111. *See* Vienna Convention, *supra* note 57, art. 31(1) (stating that the underlying purpose of a treaty can inform the interpretation of the treaty); UNCTAD-ICTSD, *supra* note 8, at 575 (explaining that the purpose of TRIPS was to establish general standards, not to harmonize all the current law); Panel Report, *Saudi Arabia – Measures Concerning the Protection of Intellectual Property Rights*, ¶ 7.183, WTO Doc. WT/DS567/R (adopted Jun. 16, 2020) [hereinafter Saudi Arabia - Intellectual Property Rights].

112. TRIPS Agreement, *supra* note 7, art. 41(2).

113. TRIPS Agreement, *supra* note 7, art. 41(1).

114. TRIPS Agreement, *supra* note 7, art. 41(1).

115. *See* TRIPS Agreement, *supra* note 7, art. 1(2) (defining intellectual property as all the categories of intellectual property that are subject to Sections 1 through 7 of Part II of the Agreement, which includes Article 39).

116. UNCTAD-ICTSD, *supra* note 8, at 575–76. *See* Panel Report, *China – Measures Affecting the Protection and Enforcement of Intellectual Property Rights*, ¶ 7.173, WTO Doc. WT/DS362/R (adopted Jan. 26, 2009) [hereinafter China - Intellectual Property Rights Panel Report] ("any act falling within scope of [intellectual property rights] . . . without the authorization of the right holder or outside the scope of an applicable exception is *a priori* an act of infringement.").

117. *See* discussion *supra* Part II.B.

118. TRIPS Agreement, *supra* note 7, art. 41(1).

119. China – Intellectual Property Rights Panel Report, *supra* note 116, ¶ 2.4.

Convention (1971), which the TRIPS Agreement incorporates by reference via Article 9.1, must be protected under China's Copyright Law.[120] Thus, an act of infringement on any of these works is within the meaning of "any act of infringement of intellectual property rights" as set out in Article 41.1 of the TRIPS Agreement.[121] The Panel concluded that, in the absence of protection of intellectual property rights, there cannot be enforcement against infringement because there would be nothing to infringe.[122]

### C. CHINA'S TRADE SECRET LAWS

Article 3 of TRIPS requires that the bar for trade secret protection for nationals of other Members is that given to nationals of the Member at issue.[123] China protects trade secrets under several different laws, but the most comprehensive is Article 10 of the Law Against Unfair Competition of the People's Republic of China (Anti-Unfair Competition Law).[124] Under Article 3 of TRIPS, this serves as the bar for nationals of other Members.[125] Under the Anti-Unfair Competition Law, a claim for trade secret misappropriation consists of a two-step analysis: whether there is a trade secret to protect and whether the acquisition, use, or disclosure of the trade secret is prohibited and thus misappropriated.[126] The article defines a trade secret and methods of acquisition, use, or disclosures that constitute misappropriation.[127]

---

120. *Id.* ¶ 7.173.

121. *Id.*

122. *Id.* ¶¶ 7.168, 7.179.

123. *See* TRIPS Agreement, *supra* note 7, art. 3(1) (stating that each Member needs to provide protection to the nationals of other Members that is at least the same as the protection it provides to its own nationals).

124. Zhong Hua Ren Min Gong He Guo Fan Bu Zheng Dang Jing Zheng Fa (中华人民共和国反不正当竞争法) [Anti-Unfair Competition Law of the P.R.C.] (promulgated by the Standing Comm. Nat'l People's Cong., Sept. 2, 1993, effective Dec. 1, 1993), art. 10 (China). [hereinafter Anti-Unfair Competition Law]. *See* J. Benjamin Bai & Guoping Da, *Strategies for Trade Secrets Protection in China*, 9 NW. J. TECH. & INTELL. PROP. 351, 355–57 (2011) (outlining that trade secrets are briefly covered under contract, company, labor, and labor contract law, but none are as detailed or comprehensive as the Anti-Unfair Competition Law).

125. *See* TRIPS Agreement, *supra* note 7, art. 3(1) (stating that the minimum protection a Member needs to provide to other Members is the protection it provides to its own nationals).

126. Bai & Da, *supra* note 124, at 355.

127. Anti-Unfair Competition Law, *supra* note 121, art. 10 (defining a trade secret

The Company Law of 1904 in China established several different types of companies and created them as juristic, or legal, persons.[128] Although this Company Law was replaced and subsequently revised, the prong of legal personhood provided to companies remained.[129]

### D. STATE RESPONSIBILITY AT THE WTO

For a WTO complaint to be brought, there needs to be a government measure at issue as WTO Agreements, such as TRIPS, are only binding on the signatory Member.[130] Generally, non-governmental, private actors cannot violate the obligations of the signatory Members in a violation complaint.[131] However, if the private actions have strong ties to governmental action, this may permit attribution of the private action to the Member.[132] In a non-violation complaint, the standard is

---

as "information which is not known to the public, which is capable of bringing economic benefits to the owner of the rights, which has practical applicability and which the owner of rights has taken measure to keep secret" and defining misappropriation as either obtaining trade secrets from owners by "stealing, promising gain, resorting to coercion or other improper means", or disclosing, using, or allowing other to use trade secrets obtained by "stealing, promising gain, resorting to coercion or other improper means" or by "breaking an engagement or disregarding the requirement of the owners of the rights to maintain the trade secrets in confidence.").

128. JiangYu Wang, *Overview of the company law regime in China*, *in* COMPANY LAW IN CHINA: REGULATION OF BUSINESS ORGANIZATIONS IN A SOCIALIST MARKET ECONOMY 1, 3 (2014).

129. *See id.* at 3–7 (outlining the history of the Company Law).

130. *Possible Object of a Complaint – Jurisdiction of Panels and the Appellate Body*, WTO DISPUTES https://www.wto.org/english/tratop_e/dispu_e/disp_settlement_cbt_e/c5s3p1_e.htm (last visited Feb. 17, 2021).

131. *Id.*

132. *See* Panel Report, *Argentina – Measures Affecting the Export of Bovine Hides and the Import of Finished Leather*, ¶ 11.51, WTO Doc. WT/DS155/R (adopted Dec. 19, 2000) [hereinafter Argentina – Bovine Hides Panel Report] (finding that it is possible that a government's involvement with a private party could be considered a governmental measure); Report of the Panel, *Japan – Trade in Semi-Conductors*, ¶ 117, L/6309 (May 4, 1988), GATT BISD (35th Supp.), at 116, 147 (1989) [hereinafter Japan – Semi-Conductors Report of the Panel] (finding that an administrative structure implemented by the Japanese government which was designed to exert maximum possible pressure on a private sector constituted a governmental measure); Santiago M. Villalpando, *Attribution of Conduct to the State: How the Rule of State Responsibility may be Applied within the WTO Dispute Settlement System*, 5 J. INT'L ECON. L. 393, 400 (explaining that the majority of cases

"sufficient government involvement," which is determined on a case-by-case basis.[133] There is no guidance as to specific criteria to determine what is strong government ties or sufficient government involvement as no complaints have been brought that have required the WTO to create a test.[134]

## E. THE LONG CON: THE INDICTMENT OF LI XIAOYU AND DONG JIAZHI

On July 7, 2020, Li Xiaoyu and Dong Jiazhi were indicted by a grand jury in the U.S. with one count of conspiracy to commit theft of trade secrets and one count of unauthorized access of a computer, along with nine other related counts.[135] From at least Sept 1, 2009, through July 2020, the defendants gained unauthorized access to computers of US companies and stole hundreds of millions of dollars worth of intellectual property, including trade secrets.[136] They were, at times, hacking on behalf of the Ministry of State Security (MSS) to the People's Republic of China (PRC).[137] They worked closely with at least one MSS Officer on several of their hacks.[138] In one specific instance, the MSS Officer provided Li with malware to compromise the mail server of a Burmese human rights group.[139] In other instances, Li and Dong used malicious programs, such as "web shells" and credential-stealing software programs, on victim networks without

---

with attribution at issue are with measures applied by the central government of the State and not individuals within the government or solely private individuals).

133. Panel Report, *Japan – Measures Affecting Consumer Photographic Film and Paper*, ¶ 10.56, WTO Doc. WT/DS44/R (adopted Apr. 22, 1998) [hereinafter Japan – Film Panel Report] ("[P]ast GATT cases demonstrate that the fact that an action is taken by private parties does not rule out the possibility that it may be deemed governmental if there is sufficient governmental involvement with it. . . . [T]hat possibility will need to be examined on a case-by-case basis.").

134. *See* Villalpando, *supra* note 132, at 408–09 (lamenting that the Panel stopped short with the case-by-case determination because it was not necessary in the specific case and that there need to be criteria to determine government involvement).

135. *Xiaoyu*, *supra* note 4, ¶ 2.

136. *Id.* ¶ 3.

137. *See id.* ¶¶ 4–5 (stating that the information stolen was of obvious interest to the MSS).

138. *See id.* ¶¶ 4, 5, 7 (stating that Li and Dong were aided by the MSS on at least one occasion).

139. *Id.* ¶ 7.

authorization.[140]

The type of data that Li and Dong stole ranged from source code from software companies to information about drugs under development to weapon designs and testing data from defense contractors.[141] There were at least two known U.S.-based pharmaceutical companies where Li and Dong stole data.[142] From the Massachusetts company, Li and Dong stole the chemical structure of anti-infective agents, the chemical engineering processes needed to create said agents, and the test results from the company's research.[143] From the California company, Li and Dong stole the chemical structure and design of a treatment for a common chronic disease, and the testing, toxicity, and dosing research related to that treatment.[144] In both cases, the indictment found data stolen were trade secrets because each victim took reasonable measures to keep the information secret, and the information derived independent economic value from not being generally known and readily ascertainable by another who can obtain economic value from the disclosure or use of the information.[145] After the data were stolen, Li and Dong sent the data to China, then sold it for profit or provided it to the MSS Officer.[146]

## III. ANALYSIS

China violated Articles 3, 39, and 41 of TRIPS. China violated Article 3 because it does not provide trade secret protection to U.S. companies, even though it does provide the protection to its own companies under the Anti-Unfair Competition Law.[147] China violated Article 39 because the information China stole from the U.S. companies was trade secrets and hacking is not an "honest commercial practice."[148] China violated Article 41 by facilitating the theft of U.S. trade secrets because, by not providing U.S. companies protection for

140. *Xiaoyu*, *supra* note 4, ¶¶ 15(e), 15(j), 20–73.
141. *Id.* ¶ 15(b).
142. *Id.* ¶ 16, 76.
143. *Id.* ¶ 16.
144. *Id.*
145. *Xiaoyu*, *supra* note 4, ¶ 76.
146. *Id.* ¶ 15(n).
147. *See* discussion *infra* Part III.A.
148. *See* discussion *infra* Part III.B.

trade secrets, the enforcement procedures in place for misappropriation of trade secrets are not available to U.S. companies.[149]

### A. CHINA VIOLATED ARTICLE 3 BECAUSE IT DOES NOT PROVIDE THE SAME INTELLECTUAL PROPERTY PROTECTION TO U.S. COMPANIES AS IT DOES TO ITS OWN NATIONALS

China violated Article 3 because it does not provide trade secret protection to U.S. companies.[150] Article 3 requires Members to provide intellectual property protection that is "no less favourable" to nationals of other Members.[151] Trade secrets, which are what Li and Dong stole, are a form of protected intellectual property.[152]

"Nationals" are defined under local law.[153] Under China's Company Law, companies are legal persons, and thus, "nationals," of China.[154] U.S. companies, therefore, qualify as "nationals of other Members" for intellectual property protection in China under Article 3.[155] The minimum intellectual property protection China must provide to U.S. companies under the TRIPS Agreement is the protection it provides to Chinese companies.[156]

Under the Chinese Anti-Unfair Competition Law, trade secrets of

149. *See* discussion *infra* Part III.C.

150. *See* EC – Trademarks and Geographical Indications Panel Report, *supra* note 41, ¶ 7.413 (explaining that the minimum intellectual property protection a state must provide is the same protection it gives its own nationals).

151. TRIPS Agreement, *supra* note 7, art. 3(1).

152. *See generally* TRIPS Agreement, *supra* note 7, arts. 1(2), 39(1) (providing that all intellectual property outlined in the TRIPS Agreement, including the undisclosed information under Article 39, is subject to protection); discussion *infra* Part III.B (proving that the information that was stolen was considered trade secrets under Article 39).

153. *See* Bodenhausen, *supra* note 38, at 27-28 (explaining that nationality should be determined by the authorities where the Paris Convention is being applied because they are in the best position to make that determination).

154. Wang, *supra* note 128, at 3.

155. TRIPS Agreement, *supra* note 7, art. 3(1).

156. *See* EC – Trademarks and Geographical Indications Panel Report, *supra* note 41, ¶ 7.413 (explaining that the minimum obligation under Article 3.1 is the treatment accorded by the European Communities to the European Communities' own nationals).

Chinese nationals are entitled to trade secret protection.[157] When the Chinese government[158] provided the means to hack U.S. companies,[159] as well as collected the stolen trade secrets, it effectively decided that the trade secrets of U.S. companies were not entitled to the same protection as Chinese trade secrets.[160] In *EC – Trademarks and Geographical Indications*, GI protection was unavailable to countries not recognized by the EC Regulations until they entered into an international agreement or satisfied other conditions.[161] The additional conditions and procedures were considered hurdles that discriminated against certain countries.[162] Similarly, in this case, by not providing trade secret protection to U.S. companies, China was discriminating against U.S. companies, and, thus, providing "less favourable" treatment than it provided to Chinese nationals.[163]

China's actions contrast those in *Indonesia – Auto Industry*, where the limitation of the types of trademarks that could be used to market cars was found to not be discriminatory because it did not limit all uses and acquisitions of trademarks.[164] As the Panel's holding implies, a limitation on all uses and acquisitions, which is essentially not recognizing any trademark rights, would be discriminatory and a

157. *See* Anti-Unfair Competition Law, *supra* note 124, art. 10 (defining trade secrets and methods of infringement).

158. *Compare* Panel Report, *Japan – Trade in Semi-Conductors*, ¶ 117, WTO Doc. BISD 35S/116 (May 4, 1988) (finding that an administrative structure put in place by the Japanese government designed to exert pressure on a private sector was a governmental measure), *with Xiaoyu*, *supra* note 4, ¶¶ 4–5, 7 (stating that Li and Dong were aided by the MSS on at least one occasion).

159. *Xiaoyu*, *supra* note 4, ¶¶ 15, 76.

160. *Compare* Anti-Unfair Competition Law, *supra* note 124, art.(10) (providing that Chinese nationals are protected against disclosure and use of trade secrets that are obtained by improper means, such as stealing), *with Xiaoyu*, *supra* note 4, ¶¶ 15, 76 (enumerated the methods the MS Officer aided Li and Dong in stealing information from U.S. companies).

161. EC – Trademarks and Geographical Indications Panel Report, *supra* note 41, ¶ 7.139.

162. *See id.* (reflecting that the hurdle was significant enough that no third country had entered into an agreement or satisfied the conditions of the Regulation).

163. *Id.*; TRIPS, *supra* note 7, art. 3(1).

164. *See Indonesia – Auto Industry Panel Report*, *supra* note 47, ¶ 14.268 (finding that the law for acquiring trademark rights for a company of a WTO Member and for a company operating under the National Car Programme was not different, and, therefore, not discriminating against other WTO Members).

violation of Article 3 "no less favourable treatment" requirement.[165] In this case, by stealing U.S. trade secrets, China has not recognized, or has ignored, any trade secret protection to U.S. companies, regardless of how they are being used or what they cover.[166] This is synonymous with treating the rights as if they do not exist.[167] Thus, China violated its obligations under Article 3 to provide at least equal trade secret protection to U.S. companies as required by the TRIPS Agreement.[168]

### B. CHINA VIOLATED ARTICLE 39 BECAUSE HACKING IS NOT AN "HONEST COMMERCIAL PRACTICE"

Article 39.2 provides trade secret protection for "natural and legal persons."[169] As previously discussed, the China Company Law designates companies as legal persons.[170] Thus, the U.S. pharmaceutical companies are entitled to trade secret protection under Article 39.[171]

#### *i. China acquired the information*

First, trade secret holders are protected against the information "being disclosed to, acquired by, or used by others" without their permission.[172] Of the three methods of misappropriation,[173] China's

165. *See id.* TRIPS Agreement, *supra* note 7, art. 3(1).

166. *See generally Steal*, BLACK'S LAW DICTIONARY (11th ed. 2019) *available at* Westlaw (defining "steal" as taking property illegally with the intent to keep it); *Ignore*, MERRIAM-WEBSTER.COM DICTIONARY, https://www.merriam-webster.com/dictionary/ignore (last visited Mar. 14, 2021) (defining *ignore* as refusing to take notice of); *Recognize*, MERRIAM-WEBSTER.COM, https://www.merriam-webster.com/dictionary/recognize (last visited Feb. 18, 2021) (defining *recognize* as to acknowledge or take notice of in some definite way).

167. *Contra Recognize*, *supra* note 166.

168. *See* TRIPS Agreement, *supra* note 7, art. 3(1) (requiring that Members provide protection to nationals of other Member states equal to the protection it provides its own Members).

169. *Id.* art. 39(2).

170. Wang, *supra* note 128, at 3; *see* Bodenhausen *supra* note 38, at 27–28 (explaining that authorities where the Paris Convention is being applied are in the best position to define what a national is under local laws).

171. *See* TRIPS Agreement, *supra* note 7, art. 39(2) (stating that "natural and legal persons" are entitled to trade secret protection).

172. TRIPS Agreement, *supra* note 7, art. 39(2).

173. *See* UTSA § 1(2)(i-ii) (providing that disclosure, use, and acquisition are methods of misappropriation).

method constitutes acquisition because it knew the information was obtained by improper means.[174] On several occasions, after stealing data and information and transferring it back to China, Li and Dong sold the information for profit or provided it directly to the Chinese government.[175] Given that the data was regarding pharmaceuticals that were under development and not widely known at the time of the hack, China should have known it was not acquired legally.[176] On at least one occasion, China had actual knowledge the means were improper because a Chinese government official was involved and provided Li and Dong with malware to facilitate their hacking.[177]

Second, China acquired the information from the U.S. companies "in a manner contrary to honest commercial practices."[178] As per the UTSA and EEA, theft and hacking are considered improper means of acquiring information, and, therefore, dishonest commercial practices.[179] China committed at least fifty-three overt acts of unauthorized access of confidential information via electronic means.[180] In one instance, China installed malicious software programs known as "web shells" on victim networks.[181] In another instance, China uploaded credential-stealing software programs to victim computer networks to steal passwords from authorized network users.[182] In both instances, China used an electronic means to steal the information, which is improper proper means, and thus, not an honest

174. *Compare* UTSA § 1(2)(i) (defining one method of misappropriation as "acquisition of a trade secret of another by a person who knows . . . that the trade secret was acquired by improper means"), *with Xiaoyu*, *supra* note 4, ¶¶ 15(n), 29 (listing at least two occasions where Li transferred stolen data to China).

175. *Xiaoyu*, *supra* note 4, ¶¶ 15(n), 29.

176. *Id.* ¶¶ 15(b), 16.

177. *Id.* ¶ 7.

178. TRIPS Agreement, *supra* note 7, art. 39(2).

179. *See* UTSA § 1(1) (listing "theft" and "espionage via electronic methods" as improper means); 18 U.S.C. § 1832 (making it a crime to obtain a trade secret using a computer); TRIPS Agreement, *supra* note 7, art. 39(2)(n 10) (providing that an example of "a manner contrary to honest commercial practices" is acquiring a trade secret by a party that knew dishonest commercial practices were involved in the acquisition).

180. *Xiaoyu*, *supra* note 4, ¶¶ 19–73.

181. *Xiaoyu*, *supra* note 4, ¶ 15(e).

182. *Id.* ¶ 15(j).

business practice.[183]

*ii. The information China acquired was trade secrets*

Finally, the information obtained must be trade secrets under Article 39.[184] The first prong of the trade secret analysis under TRIPS is to determine if the information is "generally known" or "readily accessible."[185] The information China stole was not "generally known" or "readily accessible."[186] Similar to the steps of limiting access to information to certain employees and requiring passwords taken by the companies in both *MAI Systems Corp.* and *Cisco Systems*, the U.S. companies in this case limited access to information to only employees that had certain credentials.[187] The U.S. companies took several other security measures that required Li and Dong to employ several different methods to access the information.[188] These security measures show that the information was not generally known or readily accessible to the public, unlike the design of the custom procedure trays[189] in *In re Maxxim* that was observable by the user, not

183. *Id.* ¶ 15(e); *see* UTSA § 1(1) (listing examples of improper means).

184. TRIPS Agreement, *supra* note 7, art. 39(1).

185. *Id.* art. 39(2)(a).

186. *Id.* art. 39(2)(a).

187. *Compare* MAI Sys. Corp. v. Peak Comput., Inc., 991 F.2d 511, 521-22 (9th Cir. 1993) (finding that measures such as limiting access to only management and employees with security clearance and a security password were enough to show that the information was not generally known or readily ascertainable) *and* Cisco Sys., Inc. v. Chung, No. 19-cv-076562-PJH, 2020 WL 4505509, at *1, *5 (N.D. Cal. Aug. 5, 2020) (holding that requiring employees to agree to a proprietary information agreement as a condition of employment and to annually certify that they would not use a company's assets for non-company purposes, monitoring an employee's network activity, and restricting access to offices and data systems were precautions sufficient to show that the information is not generally known by others), *with Xiaoyu*, *supra* note 4, ¶¶ 25–30, 45, 46, 52–54, 57 (listing all the methods Li and Dong used to gain unauthorized access to the companies' information).

188. *Xiaoyu*, *supra* note 4, ¶¶ 25–30, 45, 46, 52–54, 57 (listing all the methods Li and Dong used to gain unauthorized access to the companies' information, suggesting that there were at least some electronic security measures in place on the computers and networks that were accessed).

189. *See What is a custom surgical tray*, CPT MEDICAL, https://cptmed.com/what-is-a-custom-surgical-tray (defining a custom procedure tray as medical equipment to provide disposable items used during surgery that are specific to each procedure).

restricted, and commonly known in the industry.[190]

Both pharmaceutical companies had information stolen that had commercial value because it was secret, which satisfies the second prong of Article 39.2.[191] Similar to the investments made by the company in *Electro-Craft Corp.*, both pharmaceutical companies invested a significant amount of time and money in developing their chemical structures and designs of their treatments.[192] Possession of this information would allow a competitor to leverage the research and be able to focus research on areas of higher potential return on investment without the initial and significant investments of time and money that the pharmaceutical companies had already made.[193]

The information the pharmaceutical companies are claiming as trade secrets is sufficiently tied to the specific subject matter, unlike the broad categories of information in *Cisco Systems, Inc*.[194] In *Cisco Systems, Inc.*, the broad categories of information of artwork prototypes, user experience design documentation, user interview

190. *Compare Xiaoyu*, *supra* note 4, ¶ 11 (outlining that all overt acts were carried out without authorization and explaining that a limited number of people had access to the information, as evidenced by most of the information being password protected), *with In re Maxxim Med. Grp., Inc., et al.*, 434 B.R. at 660, 685 (explaining that information that is necessarily disclosed upon use is generally known) *and* AgencySolutions.com, LLC v. Trizetto Grp., 819 F.Supp.2d 1001, 1022 (E.D. Cal. 2011) (finding that when information is by its nature information normally known to other people skilled in the same field, it is generally known) *and* Religious Tech. Ctr. v. Netcom On-Line Commc'n Serv., Inc., 923 F. Supp. 1231, 1253, 1256 (N.D. Ca. 1995) (explaining that the relevant group that the information needs to be generally known to are competitors that can benefit from the information, and clarifying that there is no requirement that there actually be active competitors in the field, thus potential competition is sufficient).

191. *See* TRIPS Agreement, *supra* note 7, art. 39(2)(b) (having commercial value from being secret is a necessary step of determining whether there is a trade secret to protect).

192. *Compare* Electro-Craft Corp. v. Controlled Motion, Inc., 332 N.W.2d 890, 901–02 (Minn. 1983). (explaining that a prospective competitor could not produce a comparable motor without a similar investment of time and money), *with Xiaoyu*, *supra* note 4, ¶ 16.

193. *Xiaoyu*, *supra* note 4, ¶ 16.

194. *Compare Cisco Sys.*, 2020 WL 4505509 at *1, *5 (noting that if alleging significant resources are invested in obtaining the trade secrets, the investments need to be tied to specific matters and not just general categories of information), *with Xiaoyu*, *supra* note 4, ¶ 16 (outing the specific type of information stolen from the pharmaceutical companies).

feedback, and source code were not expressly tied to any of the specific subject matters at issue, specifically Cisco's contributions to 5G technology, communications product portfolio, strategy and costs for the pre-release video conferencing display product, and component specification and competitive differentiators for its other unspecified products.[195] In this case, the subject matter at issue is pharmaceuticals and the information stolen was specific chemical agents.[196] For the Massachusetts pharmaceutical company, the information stolen was the chemical structure of anti-infective agents, the chemical engineering processes needed to create those agents, and the test results from the research conducted with those agents, which are all specifically tied to the chemical agents.[197] For the California pharmaceutical company, the information stolen was the chemical structure and design of a treatment for a common disease, along with the testing, toxicity, and dosing research related to the treatment, which are all specifically tied to the treatment.[198] That, in combination with the information giving the pharmaceutical companies a competitive advantage,[199] supports a finding that the information had "commercial value because it was secret."[200]

The pharmaceutical companies most likely took reasonable precautions under the circumstances to protect their secrets, in

195. *Cisco Sys.*, 2020 WL 4505509 at *5.
196. *Xiaoyu*, *supra* note 4, ¶ 16.
197. *Xiaoyu*, *supra* note 4, ¶ 16.
198. *Id.*
199. *See* Electro-Craft Corp. v. Controlled Motion, Inc., 332 N.W.2d 890, 901–02 (Minn. 1983) (finding a competitive advantage in a significant investment of time and money to obtain the information); *see also* AvidAir Helicopter Supply Inc. v. Rolls-Royce Corp., 663 F.3d 966, 972 (8th Cir. 2011) (citing Penalty Kick Mgmt. Ltd. v. Coca Cola Co., 318 F.3d 1284, 1291 (11th Cir. 2003)) ("[E]ven if all the information is publicly available, a unique combination of that information, which adds value to the information, also may qualify as a trade secret"). *But see* Nationwide Mut. Ins. Co. v. Mortensen, 606 F.3d 22, 29 (2d Cir. 2010) (denying trade secret protection for information that had merely changed in form but not substance).
200. TRIPS Agreement, *supra* note 7, art. 39(2)(b); *see also R*eligious Tech. Ctr. v. Netcom On-Line Commc'n Serv., Inc., 923 F.Supp. 1231, 1253 (N.D.Ca. 1995) (holding that information can have commercial value if it being in the exclusive control of the right holder has a significant financial impact on the right holder, such as providing a majority of a company's operating expenses).

compliance with the third requirement of Article 39.2.[201] As evidenced from the methods that Li and Dong used to access the secrets, there were at least some security measures in place, such as limited access to information to only certain users.[202] In *Rockwell Graphic Systems*, the company took at least half a dozen steps to protect its secrets, including keeping all its engineering drawings in a vault and limiting access to the vault and the building in which the vault was stored to authorized employees, which were found to be reasonable.[203] Similarly, Li and Dong broke through several physical and electronic security measures to gain unauthorized access to the data.[204] In one case, Li used an employee's credentials without authorization to obtain information that the employee was authorized to access.[205] In another case, Li used a web shell to print a list of user accounts that had administrator-level privileges.[206] While these security measures show the information was not generally known or readily accessible, they also support a finding that the pharmaceutical companies took reasonable measures to protect their secrets.[207] Even though the measures were not enough to deter Li and Dong, they were at least more than the measures of lax physical security, unrestricted tours, and lack of indication of confidentiality of the motors and technical

201. *See Xiaoyu*, *supra* note 4, ¶¶ 23, 34 (listing some of the methods Li and Dong used to gain access to information that only certain employees were authorized to access); TRIPS Agreement, *supra* note 7, art. 39(2)(c) (requiring that the information be subject to reasonable steps as part of the trade secret analysis); UTSA § 1(4)(ii) (requiring that the information is the subject of reasonable efforts under the circumstances to maintain secrecy as part of the trade secret analysis).

202. *Xiaoyu*, *supra* note 4, ¶¶ 23, 34.

203. *See* Rockwell Graphic Sys. v. DEV Industries, Inc., 925 F.2d 174, 180 (7th Cir. 1991) (explaining that, given the circumstances, no further steps were necessary as the cost of additional steps may begin to outweigh the benefits they would provide); *see also E. I. duPont deNemours & Co. v. Christopher et al.*, 431 F.2d 1012, 1016-17 (5th Cir. 1970) (finding that to require an "enormous expense" to protect a trade secret against an offense would be unreasonable).

204. *Xiaoyu*, *supra* note 4, ¶¶ 25–30, 45, 46, 52–54, 57.

205. *Id.* ¶ 23.

206. *Id.* ¶ 34.

207. *Compare Cisco Sys.*, 2020 WL 4505509 at *1, *5 (finding that several security measures were sufficient to prevent information from being generally known), *with Rockwell Graphic Sys.*, 925 F.2d at 177, 180 (finding that several security measures were reasonable measures to maintain secrecy).

documents taken by the company in *Electro-Craft Corp.*[208] However, similar to how the company in *Rockwell Graphic Systems* could have taken additional measures, the measures taken by the pharmaceutical companies were most likely reasonable under the circumstances.[209]

### C. CHINA VIOLATED ARTICLE 41 BY FACILITATING THE THEFT OF U.S. INTELLECTUAL PROPERTY

Under Article 41.1, there must be procedures in place to allow enforcement "against any act of infringement of intellectual property rights covered by this Agreement."[210] As per Article 1.2, trade secrets are protected intellectual property rights under the TRIPS Agreement.[211] Li and Dong misappropriated trade secrets[212] and misappropriation of trade secrets is considered an infringement of an intellectual property right.[213] Therefore, Li and Dong infringed an intellectual property right protected under TRIPS and China must provide enforcement procedures for U.S. companies to pursue an infringement action.[214] While China has enforcement procedures in place for the misappropriation of trade secrets,[215] these procedures are

208. *See* Electro-Craft Corp. v. Controlled Motion, Inc., 332 N.W. 2d 890, 901–03 (Minn. 1983) (lamenting that the steps taken were minimal and that intent to maintain secrecy not sufficient and affirmative actions are necessary).

209. *See Rockwell Graphic Sys.*, 925 F.2d at 177, 180 (holding that reasonableness is based on the given circumstances).

210. TRIPS Agreement, *supra* note 7, art. 41(1).

211. *See* TRIPS Agreement, *supra* note 7, art. 1(2) (defining "intellectual property" under the Agreement to refer to all categories of intellectual property in Part II of the Agreement, which includes Article 39).

212. *See* discussion *supra* Part III.B.

213. *See* discussion *supra* Part II.B(ii).

214. *See* TRIPS Agreement, *supra* note 7, art. 41(1) (requiring Members to make available enforcement procedures against any act of infringement of the intellectual property protected by the Agreement, which includes trade secrets).

215. Anti-Unfair Competition Law, *supra* note 124, art. 10. *See generally* James Pooley, *Has China Finally Embraced Robust Trade Secret Protection?*, IP-WATCHDOG (June 14, 2020) https://www.ipwatchdog.com/2020/06/14/china-finally-embraced-robust-trade-secret-protection/id=122471/ (discussing certain articles of the Judicial Interpretations of China's civil trade secret laws the Supreme People's Court published on June 9 in response to the U.S.-China trade agreement signed in January 2020 and how they are more specific and closer to U.S. trade secret law, cautioning that Judicial Interpretations are quasi-legislative enactments of the Supreme People's Court that can have the force of law, but that is not always the case); Mark Cohen, *SAMR Releases Draft Trade Secret Rules for Public Comment*,

not available to U.S. companies. By infringing U.S. companies' trade secret rights by stealing the trade secrets, China is effectively not recognizing, or ignoring, their intellectual property rights as provided by TRIPS.[216]

In *China - Intellectual Property Rights*, China excluded certain types of works from copyright protection,[217] and the Panel concluded that there cannot be enforcement against infringement of intellectual property rights that do not exist because there would be nothing to infringe.[218] Thus, by excluding certain works from protection, China was making the enforcement procedures unavailable.[219] Similarly, China eliminated trade secret protection for U.S. companies by not recognizing their trade secret rights from the onset.[220] By not providing U.S. companies protection for trade secrets, the enforcement procedures in place for misappropriation of trade secrets are not

---

CHINA IPR (Sept. 12, 2020), https://chinaipr.com/2020/09/12/samr-releases-draft-trade-secret-rules-for-public-comment, (translating the Draft Trade Secret Protection Rules the Chinese State Administration for Market Regulation (SAMR) released on Sept. 4, 2020, discussing how the new rules are directed towards handling administrative enforcement of trade secrets by SAMR and how the new rules specifically extend trade secret protection to foreign nationals, which had been a point of contention in the earlier rules where the definition of a 'right holder' was discriminatory).

216. *See generally Infringement*, BLACK'S LAW DICTIONARY (11th ed. 2019) *available at* Westlaw (defining "infringement" in regards to intellectual property to mean interfering with the exclusive rights of an intellectual property right holder); *Ignore*, *supra* note 166 (defining "ignore" as refusing to take notice of); *Recognize*, *supra* note 166 (defining "recognize" as to acknowledge or take notice of in some definite way).

217. China - Intellectual Property Rights Panel Report, ¶ 2.4, WTO Doc. WT/DS362/R (Jan. 26, 2009).

218. *See id.* ¶ 7.178 (refuting China's argument that right holders still have access, explaining that not preventing right holders from filing and pursuing claims in vain is not sufficient).

219. *See id.* ¶ 7.179 (explaining that articles under the enforcement umbrella of TRIPS specify that judicial authorities shall have the ability to take certain actions but, when copyright protection is denied under Chinese Copyright Law, the judicial authorities lose their authority under Chinese law, and the enforcement procedures under TRIPS become unavailable because there is no judicial authority to carry them out).

220. *See generally* Steal Definition, *Black's Law Dictionary*, *supra* note 166; Infringement Definition, *Black's Law Dictionary*, *supra* note 216; Ignore Definition, *Merriam-Webster*, *supra* note 166.

available to them under Article 41.1.[221] Therefore, China violated its obligation to make available to U.S. companies enforcement procedures for the misappropriation of trade secrets.[222]

### D. SUMMARY OF ARGUMENTS

China violated Article 3's "no less favourable treatment" requirement because it does not provide the same intellectual property protection to U.S. companies as it does to its own nationals.[223] China did not recognize any trade secret protection for U.S. companies, which is discriminatory.[224]

China violated Article 39 because hacking is not an "honest commercial practice."[225] The information stolen from the pharmaceutical companies by Lin and Dong was not "generally known,"[226] had "commercial value from being secret,"[227] and was "subject to reasonable steps under the circumstances."[228] Thus, the

221. *See China - Intellectual Property Rights*, WTO Doc. WT/DS362/R, ¶ 7.179.

222. *See* TRIPS, *supra* note 7, at art. 41(1) (requiring Members to make available enforcement procedures against any act of infringement of the intellectual property protected by the Agreement, which includes trade secrets).

223. TRIPS, *supra* note 7, art. 3(1). *See* EC – Trademarks and Geographical Indications Panel Report, supra note 41, ¶ 7.413 (explaining that the minimum intellectual property protection a state must provide is the same protection it gives its own nationals).

224. *See* EC – Trademarks and Geographical Indications Panel Report, *supra* note 41, ¶ 7.139 (finding that any difference in requirements based on country of origin was discriminatory).

225. TRIPS, *supra* note 7, at art. 39(2); UTSA § 1(1) (defining "improper means" of acquiring a trade secret to include "espionage via electronic means"); 18 U.S.C. § 1832 (making it a crime to use a computer to obtain a trade secret). *See generally* Steal Definition, *Black's Law Dictionary*, *supra* note 166; Infringement Definition, *Black's Law Dictionary*, *supra* note 216.

226. TRIPS, *supra* note 7, at art. 39(2)(a). *See Cisco Sys., Inc. v. Chung*, No. 19-cv-076562-PJH, 2020 WL 4505509, at *1, *5 (N.D.Cal. Aug. 5, 2020) (finding that several security measures were sufficient to prevent information from being generally known).

227. TRIPS, *supra* note 7, at art. 39(2)(b). *See Electro-Craft Corp. v. Controlled Motion, Inc.*, 332 N.W. 2d 890, 901 (Minn. 1983) (explaining that a significant investment of time and money gave a company a competitive advantage if a competitor would also need to invest a significant amount of time and money to obtain the same result).

228. TRIPS, *supra* note 7, at art. 39(2)(c). *See Rockwell Graphic Sys. v. DEV Industries, Inc.*, 925 F.2d 174, 177, 180 (7th Cir. 1991) (finding that several security

companies had protectable trade secrets under Article 39 of TRIPS, and, by misappropriating the trade secrets, China violated Article 39 of TRIPS.[229]

China violated Article 41 by removing trade secret protection for U.S. companies.[230] By not providing U.S. companies protection for trade secrets, the enforcement procedures in place for misappropriation of trade secrets are not available to them under Article 41.1.[231] Therefore, China violated its obligation to U.S. companies to make enforcement procedures available for the misappropriation of trade secrets.[232]

### E. COUNTER ARGUMENT – THE FLEXIBILITIES IN ARTICLE 1 DO NOT ABSOLVE CHINA OF ITS OBLIGATIONS UNDER TRIPS

Article 1.1 of the TRIPS Agreement provides two important points of flexibility to Members in implementing TRIPS.[233] The second sentence of Article 1.1 contains the first point that Members can choose to implement "more extensive protection" than what is outlined in the Agreement if so desired, but that is not required.[234] This measure allows a degree of flexibility in how a member integrates the requirements of TRIPS, which is consistent with how other Articles are drafted.[235] However, as Article 1.1 explicitly makes clear with

---

measures were reasonable measures to maintain secrecy under the given circumstances).

229. TRIPS, *supra* note 7, at art. 39(2)(a-c).

230. *See generally* Steal Definition, *Black's Law Dictionary*, *supra* note 166; Infringement Definition, *Black's Law Dictionary*, *supra* note 157.

231. *See* Panel Report, *China – Measures Affecting the Protection and Enforcement of Intellectual Property Rights*, *supra* note 116, ¶ 2.4 (finding that removing copyright protection for certain types of works inherently made the infringement enforcement procedures unavailable because there was no right to infringe).

232. *See* TRIPS Agreement, *supra* note 7, at art. 41(1) (requiring Members to make available enforcement procedures against any act of infringement of the intellectual property protected by the Agreement, which includes trade secrets).

233. *See* TRIPS Agreement, *supra* note 7, at art. 1(1) (providing that Members may implement more extensive measures than those provided in the Agreement and are free to determine the methods of implementation).

234. TRIPS Agreement, *supra* note 7, at art. 1(1); *see* UNCTAD-ICTSD, *supra* note 8, at 17, 24 (explaining that TRIPS only sets minimum standards).

235. *See* UNCTAD-ICTSD, *supra* note 8, at 24 (noting that several requirements outlined in TRIPS are framed in flexible terms).

phrasing it as "more extensive," the provisions provided in the Agreement are the floor for required protections of intellectual property, not the ceiling.[236] Members, including China, are still obligated to provide the minimum protections outlined in the agreement.[237]

The second point of flexibility under Article 1.1 is the third sentence that provides that Members are "free to determine" methods of implementing the provisions of the agreement within their own legal systems.[238] This point of flexibility is important because it recognizes that intellectual property law is inherently not rigid.[239] It allows Members to determine how best to meet their obligations under the TRIPS Agreement while working within their established legal systems.[240] This discretion does not, however, extend to choosing with which obligations to comply.[241] Members, including China, are still required to implement all provisions of TRIPS.[242]

# IV. RECOMMENDATIONS

## A. THE U.S. SHOULD FILE DISPUTES USING THE WTO DISPUTE SETTLEMENT PROCESS

The WTO dispute settlement system is in place for Member States to initiate enforcement proceedings for agreements for which the

236. *See* EC – Trademarks and Geographical Indications Panel Report, supra note 41, ¶ 7.413 (explaining that protection provided to other countries is at least that provided to nationals of the country providing the protection).

237. *See* TRIPS Agreement, *supra* note 7, at art. 1(1) (requiring that Members abide by the provisions of the Agreement).

238. TRIPS Agreement, *supra* note 7, at art. 1(1).

239. *See* UNCTAD-ICTSD, *supra* note 8, at 18 (explaining that because intellectual property law is inherently flexible, the express text of TRIPS needed to reflect that).

240. *See* Appellate Body Report, *India – Patent Protection for Pharmaceutical and Agricultural Chemical Products*, ¶ 59, WTO Doc. WT/DS50/AB/R (Dec 19, 1997) [hereinafter India - Patents] (interpreting art. 1.1).

241. *See* Panel Report, *Canada – Term of Patent Protection*, ¶ 6.94, WTO Doc. WT/DS170/R (May 5, 2000) [hereinafter Canada – Patents] (explaining that Members cannot ignore a set of requirements while attempting to implement others).

242. *See* UNCTAD-ICTSD, *supra* note 8, at 24 (explaining Article 1.1 authorizes Members to implement the rules in a manner most appropriate for itself, as long as the implementation is in line with the rest of the requirements of TRIPS).

WTO is governing body, such as disputes, which arise when one WTO member takes actions that one (or more) other WTO members consider to in violation of their obligations under a WTO agreement.[243] The procedures are relatively fast, efficient, and effective; most disputes are settled in about a year.[244] The ultimate goal in the dispute process is for the violating country to comply with the ruling of the Panel.[245] The first stage is to enter into consultations where the parties try to settle their differences.[246] If consultations fail, the case is taken to the panel and the panel makes a ruling; if the violating country does not comply with the ruling within a reasonable time, the next step is that the violating country provides compensation, such as in the form of reduced tariffs.[247]

The U.S. won or favorably settled seventy-five out of the seventy-nine WTO cases it has brought.[248] Even so, it is unlikely China will comply within a reasonable time considering that the hacking has been happening for almost two decades, sometimes even under the supervision of the government.[249]

The most effective way for the U.S. to push China to comply is to file as many disputes as possible at one time.[250] This will send China

243. *Understanding The WTO: Settling Dispute, World Trade Organization*, WTO-DISPUTES, at 1–2, https://www.wto.org/english/thewto_e/whatis_e/tif_e/disp1_e.htm (last visited Oct. 25, 2020).

244. *Id.*

245. *Id.* at 3.

246. *Id.* at 2.

247. *Id.* at 2–3.

248. *Fixing the Foundation: The Policymaking Process*, U.S. CHAMBER COM., at 1, https://www.uschamber.com/issue-brief/enforce-trade-agreements.

249. *See* Laura Sullivan & Cat Schuknecht, *As China Hacked, U.S. Businesses Turned A Blind Eye*, ALL THINGS CONSIDERED (Apr. 12, 2019), https://www.npr.org/2019/04/12/711779130/as-china-hacked-u-s-businesses-turned-a-blind-eye (explaining the history of China's hacking).

250. *See* James Bacchus, *How the World Trade Organization Can Curb China's Intellectual Property Transgressions*, CATO INSTITUTE, at 1–2 (Mar. 22, 2018), https://www.cato.org/blog/how-world-trade-organization-can-curb-chinas-intellectual-property-transgressions (explaining that using the WTO dispute settlement system is the most effective way to hold China accountable because, in the past, when China was been found to be violating its WTO obligations, it has complied with WTO rulings and that staying in the WTO is important as to not undermine the WTO, which, in turn, would undermine U.S. intellectual property

a message that the U.S. will not tolerate violations of a trade agreement that both parties are obligated to comply with.[251] The one caveat is that in order to bring disputes, the U.S. needs willing plaintiffs.[252] This has proven to be a challenge in the past.[253] Despite the tens of thousands of companies that have been victims of China's cybertheft over the past two decades, very few want to come forward for fear of "jeopardizing [the] billions of dollars of trade" and business they do with China, in addition to having to answer to shareholders.[254]

The U.S. government has known about the severity of the problem for many years but has not focused efforts on it.[255] To encourage companies to come forward, the U.S. needs to make the extent of the threat and damage public and make known that the full force of the U.S. government is ready to support the companies should they choose to come forward.[256] The U.S. government needs to stress in public

---

rights and for China to be judged by impartial and objective WTO jurists).

251. *See id.* at 2 (expressing that fusing the WTO dispute settlement system in this way would be a true test of the U.S.'s and China's commitment to the WTO); *see also* Argentina – Bovine Hides Panel Report, *supra* note 132, ¶ 11.51 (finding that it is possible that a government's involvement with a private party could be considered the governmental measure required to bring a violation complaint).

252. *See Introduction to the WTO dispute settlement system*, WTO–DISPUTES, https://www.wto.org/english/tratop_e/dispu_e/disp_settlement_cbt_e/c1s4p1_e.htm#:~:text=The%20only%20participants%20in%20the,parties%20or%20as%20third%20parties (last visited Oct. 25, 2020) (explaining that only WTO Member governments can bring disputes, not individual plaintiffs).

253. *See* Sullivan & Schuknecht, *supra* note 249 (illustrating that companies are hesitant to bring forward cases of trade secret theft for various reasons).

254. *See id.* at 3–4, 8 (chronicling an instance when a secretive group of the Chinese military broke into computer systems of American companies, stealing all information they accessed and, when presented with the option to pursue legal recourse, the company declined because of the potential financial fallout); Doffman, *supra* note 5, at 3 (discussing the public announcement made by Google in 2010 that they, along with at least twenty other companies, had been victims of a cyber-attack by China, yet Google was the only company that came forward); Kate M. Growley et al., *Is Chinese IP Theft Coming to an End?*, CROWELL MORNING (Feb. 25, 2020), https://www.crowelltradesecretstrends.com/2020/02/is-chinese-ip-theft-coming-to-an-end/ (explaining that U.S. companies want access to the immense Chinese market).

255. *See* Sullivan & Schuknecht, *supra* note 249 (lamenting that the Department of Commerce, Department of the Treasury, the U.S. Trade Representative, and the U.S. State Department all knew how serious the issue was and the universal answer from each was "Bad problem, but not my problem").

256. *See id.* at 8 (explaining that a large part of the reason companies are not

statements with data showing that the potential financial consequences the companies will face are well worth it to halt and prevent China's nefarious behavior and protect the future innovations of U.S. companies.[257]

## B. THE U.S. SHOULD ENFORCE THE US-CHINA TRADE AGREEMENT SIGNED IN JANUARY 2020

On January 15, 2020, the U.S. and China entered into Phase One of the Economic and Trade Agreement, a free-trade agreement.[258] The very first chapter of the agreement is on Intellectual Property and Article 1.2 covers trade secrets and confidential business information.[259] This section is what is sometimes referred to as a TRIPS-Plus Agreement.[260] Under Article 1.4 of the agreement, China agreed that "electronic intrusions" were one way to misappropriate trade secrets and, under Article 1.8, agreed to provide for criminal procedures for misappropriation.[261]

One way for the U.S. to enforce the trade agreement is under

---

coming forward is that the companies do not want to jeopardize the billions of dollars of trade they do with China); IP COMMISSION REPORT, *supra* note 1, at 16 (explaining that companies are reluctant to come forward out of fear of harming investment opportunities of diminishing market valuation).

257. *See* IP COMMISSION REPORT, *supra* note 1, at 2 (estimating that hacking, specifically, costs the U.S. economy at least $400 billion, which includes the full cost of infringement and misappropriation); Attorney General William Barr, Address at the Dept. of Justice's China Initiative Conf. (Feb. 6, 2020), (laying forth an aggressive plan to address China's theft of U.S. intellectual property, warning how short-term complacency from the private sector with China's actions could have costly long-term effects); *Information About the Department of Justice's China Initiative and a Compilation of China-Related Prosecutions Since 2018*, DOJ PUB. AFF. OFF., https://www.justice.gov/opa/information-about-department-justice-s-china-initiative-and-compilation-china-related (last updated Oct. 20, 2020) (enumerating specific measures the DOJ is taking to combat China's intellectual property theft).

258. Matthew P. Goodman, et al., *What's Inside the U.S.-China Phase One Deal?*, CSIS, at 1 (2020).

259. Economic and Trade Agreement, U.S.-China, art. 1.2, (Jan. 15, 2020) [hereinafter Economic and Trade Agreement].

260. Dalindyebo Bafana Shabalala, *Access to Trade Secret Environmental Information: Are TRIPS and TRIPS-Plus Obligations a Hidden Landmine?*, 55 COLUMN. J. TRANSNAT'L L. 648, 706 (2017).

261. Economic and Trade Agreement, *supra* note 259, arts. 1.4, 1.8.

Section 301 of the Trade Act of 1974.[262] Under Section 301, the U.S. has the authority to impose trade sanctions on foreign countries that either violate trade agreements or engage in other unfair trade practices.[263] The U.S. has done this in the past for China on essentially the same issue of technology transfer and theft of intellectual property.[264] The Office of the United States Trade Representative (USTR) decided in that case that tariffs against China were appropriate to recover the $50 billion in damages.[265] In this case, the damages are significantly more,[266] over a longer period of time,[267] and the methods by which the information was obtained are very similar,[268] so there is a high probability the USTR will find that tariffs are an appropriate measure again.

### C. THE U.S. SHOULD FILE A NON-VIOLATION COMPLAINT THROUGH THE WTO DISPUTE SETTLEMENT SYSTEM UNDER GATT 1994

A non-violation complaint is used to challenge any measure applied by another WTO Member that results in nullification or impairment of a benefit given to the affected Member via an agreement that both Members are party to.[269] The benefit can be nullified or impaired as

262. 19 U.S.C. §§ 2111-2462.

263. *Section 301*, INTERNATIONAL TRADE ADMINISTRATION, https://legacy.trade.gov/mas/ian/tradedisputes-enforcement/tg_ian_002100.asp (July 25, 2018).

264. *USTR Announces Initiation of Section 301 Investigation of China*, U.S. TRADE Representative, (Aug. 18, 2017), https://ustr.gov/ [https://ustr.gov/about-us/policy-offices/press-office/press-releases/2017/august/ustr-announces-initiation-section].

265. Notice of Determination and Request for Public Comment Concerning Proposed Determination of Action Pursuant to Section 301: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation, 83 Fed. Reg. 14906, 14907 (Apr. 6, 2018).

266. IP COMMISSION REPORT, *supra* note 1, at 2.

267. *Xiaoyu*, *supra* note 4, ¶ 3.

268. *See Section 301 Investigation Fact Sheet*, OFFICE OF THE UNITED STATES TRADE REPRESENTATIVE, https://ustr.gov/about-us/policy-offices/press-office/fact-sheets/2018/june/section-301-investigation-fact-sheet (last accessed Oct. 25, 2020) (outlining that cyber intrusions of U.S. commercial computer networks to gain unauthorized access to commercially-valuable business information were among the unfair practices China implemented).

269. GATT 1994, *supra* note 29, art. XXIII(1).

the result of the failure of another Member to carry out its obligations under specific WTO agreements, the application by another Member of any measure, or the existence of any other situation.[270] There is no requirement that an agreement be violated to file a complaint.[271] Although Article 64.1 of TRIPS incorporated the non-violation complaint practice of Article XXIII of GATT 1994 as a dispute settlement option,[272] there has been a moratorium on non-violation complaints based on TRIPS since 1998.[273]

However, a non-violation complaint may still be possible under GATT 1994.[274] While GATT 1994 only dealt with the trade of goods and services, Article XXIII does not restrict non-violation complaints to only be tied to specific tariff concessions or market access commitments by another Member made under GATT; expectation of market access could be indirectly associated with a good or service not covered by a specific concession or tariff.[275] There are three elements of a non-violation claim: (1) identification of a 'measure'; (2) identification of a 'benefit' under an agreement; and (3) proof that the measure nullifies or impairs the benefit.[276] The very few non-violation cases that have been brought have hinged on whether the moving party reasonably expected to receive the benefit.[277] The "measure" in this case would be China's cybertheft.[278] The benefit would be one of the

270. *Id.*
271. *Id.*
272. TRIPS Agreement, *supra* note 7, art. 64(1).
273. *WTO Members Agree to Extend E-Commerce, Non-Violation Moratoriums*, WTO (Dec. 10, 2019), https://www.wto.org/english/news_e/news19_e/gc_10dec19_e.htm (explaining that the moratorium has been extended several times, with the last extension being in December of 2019 until the Ministerial Conference that was to be held in June of 2020).
274. Nirmalya Syam, *Non-Violation and Situation Complaints under the TRIPS Agreement: Implications for Developing Countries* 1, 22 (South Centre, Research Paper, 2020).
275. *Id.* at 22.
276. Robert W. Staiger & Alan O. Sykes, *Non-Violations*, 16 J. INT'L. ECON. L. 741, 753 (2013); *see* GATT 1994, *supra* note 29, art. XXIII(1) (providing that measure needs to be taken by a contracting party, which is a government).
277. Staiger & Sykes, *supra* note 276, at 752.
278. *See* GATT 1994, *supra* note 29, art. XXIII(1) (providing that the benefit of the Agreement can be impeded by "the application by another contracting party of *any* measure, whether or not it conflicts with the provisions of this Agreement,. . . .")

general purposes of GATT, which was to eliminate discriminatory treatment in international commerce and expand the production and exchange of goods.[279] China is discriminating against the U.S. by stealing U.S. trade secrets.[280] The proof that the cybertheft is impairing the benefit is the damage the theft has done to the U.S. economy and the U.S. companies involved.[281] The U.S. could not have reasonably expected China to impede on the production and exchange of goods by stealing U.S. trade secrets.

This is not a perfect recommendation. There have been very few non-violation complaints brought to the WTO and even fewer successful ones; only three cases have panel decisions that adjudicated the non-violation claim on the merits, and none of the claims succeeded.[282] The only successful non-violation claims were before the creation of the WTO in the GATT years.[283] The successful claims all involved commercial measures such as subsidies and tariffs,[284] which are not present in this case. However, in principle, non-violation complaints can be brought about any type of measure, and even "other situations."[285] In addition, there is no requirement of evidence of improper behavior, only that a benefit was impeded.[286] The result of a non-violation complaint is that the parties make a mutually satisfactory adjustment, which is not as severe or permanent a solution as a violation claim, but it would at least compensate U.S. companies.[287]

---

(emphasis added); Panel Report, *Japan – Measures Affecting Consumer Photographic Film and Paper*, ¶ 10.56, WTO Doc. WT/DS44/R (Apr. 22, 1998) (commenting that an action taken by private parties may be deemed governmental if there is sufficient governmental involvement).

279. GATT 1994, *supra* note 29, pmbl.

280. The assumption being made is that China is not stealing other countries' trade secrets. It is most likely a safe assumption that China is stealing other countries' trade secrets, as well, but not every country, which still makes the measure discriminatory.

281. IP COMMISSION REPORT, *supra* note 1, at 2.

282. Staiger & Sykes, *supra* note 276, at 748.

283. *Id.* at 745.

284. *Id.* at 753–54.

285. *Id.*; GATT 1994, *supra* note 29, art. XXIII(1).

286. Panel Report, *Korea – Measures Affecting Government Procurement*, ¶ 7.99, WTO Doc WT/DS163 (June 19, 2000).

287. Staiger & Sykes, *supra* note 276, at 748.

## V. CONCLUSION

China's cybertheft of U.S. companies' trade secrets is a violation of the TRIPS Agreement. The cybertheft violated Article 3 as it does not provide U.S. companies with the same trade secret protection as Chinese companies. Article 39 was violated because the theft was of trade secrets. By not providing trade secret protection to U.S. companies, there are, by definition, no enforcement procedures available under Article 41 of the Agreement. The U.S. needs to hold China accountable and can do so through the WTO dispute settlement procedures with violation complaints filed under TRIPS, non-violation complaints filed under GATT 1994, and enforcing the Economic and Trade Agreement U.S. and China signed in January 2020.