Questions from Senator Tillis

With Reponses from Mark Cohen

Witness for the May 14, 2025

Senate Committee on the Judiciary

<u>Subcommittee on Intellectual Property Hearing</u>
"Foreign Threats to American Innovation and Economic Leadership"

Responses of Mark Cohen – Senior Technology Fellow, Asia Society of Northern California and Edison Fellow, the University of Akron School of Law

1. How would you explain, specifically to those not steeped in intellectual property (IP) law, why IP and strong IP rights are so vital to the continued prosperity of our country?

IP rights protect intangible human creations. These creations might include a brand, a creative work such as a painting or movie, an invention and/or a design. In many cases, these intangible properties can be copied for much less than cost to create the original work. The inventor or creator requires the IP right to protect her creation from coping by others. The rights also enables the creator to seek investment and to commercialize his or her creation, and thereby also benefits investors in new products or creative works. For example, a new pharmaceutical product may cost billions of dollars to develop and test but may be capable of being copied for very little. If there are no IP rights, the pharmaceutical company will not be financially able to support the investment required to develop a new pharmaceutical product.

IP rights do not only address ownership of a creation. IP rights also create platforms for collaboration by clearly defining what each party has invented and enabling two or more parties to share in additional improvements. In addition, certain IP rights such as patents require disclosure to the public, for which the inventor is given a limited time to exclude others from practicing the invention (typically 20 years). This public disclosure adds t the common knowledge of technology and also stimulates further improvements by others on the original invention.

One way of looking at this question is to imagine a world without IP rights. IP rights form an important part of the legal tools required for pre-industrial economies to modernize. A good example is imperial China. One of the reasons that imperial China did not enter an industrial revolution was the lack of clear property rights protection, including intellectual property rights. Inventions that were made in one Chinese dynasty, such as printing, horology, and gunpowder, may have failed to develop in a succeeding dynasty due in part to the lack of a patent-type system to encourage protection and improvements of a disclosed, registered invention. As Prof. Kenneth Pomeranz has noted:

European institutions that developed over the course of the early modern period allowed the returns to certain narrow but significant classes of activity to match more closely the contributions of those activities to the economy than was the case in China. It has been plausibly argued, for instance, that the development of patent law in eighteenth-century England allowed inventors to capture something closer to the full value of their work and thus may have influenced the technological breakthroughs of the Industrial Revolution.¹

2. As early-stage innovators develop new products for the market, to what extent are strong IP protections necessary in raising capital?

A good study to look at on the relationship between raising capital and strong IP protections is the Berkeley study on high tech entrepreneurs and the patent system that was conducted in 2008.² This study noted that patents offer benefits by limiting competition, attracting financing, and increasing the chances of an acquisition or IPO. These benefits will vary by industry. The study also pointed out the need for additional reforms to make the patent system more attractive to high tech entrepreneurs. As other studies have also shown, the importance of different forms of IP protection will vary by industry.³

3. What IP priorities should the U.S. government pursue in ongoing dialogues with China?

During the Obama period and earlier, there were numerous bilateral dialogues which covered intellectual property issues. These included the Joint Commission on Commerce and Trade ("JCCT"); the IP Working group under the JCCT; the Strategic and Economic Dialogue (S&ED); the Judicial Exchange; the Innovation Dialogue managed by the Office of Science and Technology Policy, and various working groups established under the dialogues that focused on specific industrial sectors or issues. In addition, numerous agencies have arrangements with their Chinese counterparts, which have included engagement on IP-related issues.

Many of these dialogues initially ceased during the first Trump administration. For the most part, they were also not revived during the Biden period. During the Biden administration, USPTO nonetheless signed a new memorandum of cooperation with the China National IP Administration on April 22, 2024. USPTO Director Vidal also met with Vice Premier Ding Xueqiang on April 15, 2024. Nevertheless, much of the focus in recent years has instead been on negotiating trade agreements by cabinet-level officers on issues of major economic concern. This has reduced the opportunity for more granular-level discussions by the US government interagency and its experts with their respective counterparts. Moreover,

¹ Kenneth Pomeranz, The Great Divergence - China, Europe, and the Making of the Modern World Economy (2000), at p. 106.

² Stuart J. H. Graham, Robert P. Merges, Pamela Samuelson, Ted M. Sichelman, "High Technology Entrepreneurs and the Patent System: Results of the 2008 Berkeley Patent Survey," https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1429049.

³ The Alliance of U.S. Startups and Inventors for Jobs, "Policy Report – The Importance of an Effective and Reliable Patent System to Investment in Critical Technologies," (2020), at p. 14, https://static1.squarespace.com/static/5746149f86db43995675b6bb/t/5f2829980ddf0c536e7132a4/1596467617 939/USIJ+Full+Report Final 2020.pdf.

⁴ CNIPA, "CNIPA and USPTO Hold Bilateral Talks and Sign a New Memorandum of Understanding on Cooperation," (April 22, 2024), https://english.cnipa.gov.cn/art/2024/4/22/art_1340_191789.html.

⁵ State Council of the PRC, "Chinese Vice Premier Meets with USPTO Director in Beijing" (Xinhua, April 15, 2024). https://english.www.gov.cn/news/202404/15/content_WS661d1a5cc6d0868f4e8e611a.html.

notwithstanding the Phase 1 Agreement's inherent contemplation of a Phase 2 Agreement, negotiations for a Phase 2 agreement have not taken place.

The Phase 1 Agreement also specifically contemplated additional cooperation on IP issues. Article 1.33 states:

The Parties agree to strengthen bilateral cooperation on the protection of intellectual property rights and promote pragmatic cooperation in this area. China National Intellectual Property Administration and the United States Patent and Trademark Office will discuss biennial cooperation work plans in the area of intellectual property, including joint programs, industry outreach, information and expert exchanges, regular interaction through meetings and other communications, and public awareness.

In addition to a cessation of bilateral IP dialogues during the Trump and Biden periods, the private sector US-China IP Experts Dialogue ("Experts Dialogue"), which had been run by the US Chamber of Commerce, has also ceased. This was an important "Track 2" dialogue. Both the Track 1 and Track 2 IP-related dialogues were instrumental in introducing many reforms to China's IP system. The issues advanced by the Experts Dialogue included supporting specialized IP courts in China, protecting design patents for graphical user interfaces, supporting China's emerging system of case law, protecting personality rights, improving the system for legitimate technology transfer, and introducing amicus briefs to China's court system.

Carefully managed dialogues can advance IP protection between the United States and China on intellectual property. They are an important tool. However, they should not be an end in themselves, or a delaying tool to wait out a change in administrations.

Participants in these dialogues should also have at least a basic understanding of Chinese law and China's IP related institutions. A recent example of a failure to understand Chinese legal institutions occurred in the renewals of the bilateral science and technology agreement, including a legally significant mistranslation (Dec. 2024), a renewal during the pendency of a WTO dispute on a related issue (2018), and a renewal of the agreement notwithstanding that a key provision regarding IP was contradicted by Chinese law (2016).

US officials participating in bilateral negotiations with China should be given training on negotiating with China and the Chinese legal system. During my time at USPTO, we occasionally hosted classes of this nature. It is often the case that Chinese negotiators in bilateral trade agreements, including IP, have studied or worked in the United States. They also often speak and read English. US negotiators often do not have such a background on Chinese culture or law. One consequence of such a lack of understanding, for example, is

⁶ Mark A. Cohen, "The Revised US-China Science and Technology Agreement – A Narrow Bridge To Drive Further Cooperation," (https://chinaipr.com/2025/04/21/the-revised-us-china-science-and-technology-agreement-a-narrow-bridge-to-drive-further-cooperation/.

that US negotiators may not understand that they are often negotiating non-binding commitments from their Chinese counterparts.⁷

Another part of the challenges of the dialogue structure arises from there being both public and private law aspects of intellectual property that need to be addressed. Public law aspects include such areas as antitrust law, criminal IP law, management of patent and trademark offices, IP in bilateral science cooperation, availability of Customs remedies to address infringing imports, and the role of IP in each country's innovation ecosystem. However, key private law aspects, such as the role of civil litigation, the commercial licensing of intellectual property, the role of "Bayh-Dole" type regimes in commercialization of state-financed IP rights, use of IP for start-ups, and China's increasingly aggressive approach to asserting its "judicial sovereignty" in multi-country civil IP litigation, should also be addressed in a Track 2 or Track 1.5 dialogue with private sector participation. Due to the overwhelming importance of civil remedies in the US IP enforcement regime, federal judges can also be helpful voices of experience in discussions in any dialogue that focuses on civil remedies.

Certain issues, such as transparency of judicial decision making could belong in both a Track 1 and Track 2 type dialogue. Transparency is the single greatest challenge now facing governments and rightsholders. Without transparency, we cannot evaluate China's adherence to any commercial law or bilateral agreement, including the US-China Phase 1 Agreement. The lack of clear commitments to judicial and administrative IP transparency in the Phase 1 Agreement was the single biggest flaw in that text. Since that agreement was signed, China has further cut back on transparency. Some estimates are that the case publication rate in civil litigation has declined by two-thirds. In addition, a WTO panel has since partially ruled against the European Union, which had sought greater transparency of certain Chinese judicial decisions. In this context, bilateral negotiations to advance transparency in IP are of paramount importance.

4. While China is certainly the leading foreign bad actor posing a threat to U.S. innovation and economic leadership, it's not the only one. Which countries besides China should U.S. foreign policy focus on and what are the best tools at our disposal to deal with this behavior?

China presents a significant challenge to well-established IP norms, because of such factors as its economic heft, its strategic embrace of IP, its increasing technological might, and lack

⁷ Mark A. Cohen, "Some Observations on SAMRs New Antimonopoly Guidelines for SEPs," (www.chinaipr.com Nov. 20, 2024), https://chinaipr.com/2024/11/20/some-observations-on-samrs-new-antimonopoly-guidelines-for-seps/.

⁸ Mark A. Cohen, "Responses to Questions for the Record, Hearing on IP and Strategic Competition with China: Part IV – Patents, Standards and Lawfare," (Dec. 18, 2024), at p. 1.

https://www.congress.gov/118/meeting/house/117764/documents/HHRG-118-JU03-20241218-QFR009-U9.pdf.

⁹ See WTO, "DS611: China-Enforcement of Intellectual Property Rights,"

https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds611_e.htm. See also China – Enforcement of Intellectual Property Rights (WT/DS611/11), Notification of an Appeal by the European Union, at para. 7.394 regarding cases that do not "establish or revise principles or criteria and are therefore not of 'general application" within the meaning of Article 63 of the TRIPS Agreement.

https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=Q:/WT/DS/611-11.pdf&Open=True.

of transparency in key sectors. On the positive side, the Chinese government has also committed significant resources to creating a complex and increasingly important system that is also well utilized by its people. China has in fact committed significant resources to developing an IP system that is both large and strong, even if it is often perceived by the West as unfair.

There are several tools that are available to address third country bad actors in addition to the use of Special 301 and other political tools.

If the issue involves education and training, the USPTO's IP Attaché program has offices throughout the world which actively engage in education and training. Another tool involves the impact of supply chain restructuring on intellectual property. High value goods that are manufactured over extended supply chains are also IP-intensive goods. The restructuring of these supply chains to economies other than China should bring opportunities for these economies to further develop their IP systems. Alternatively, a failure to accelerate development of these IP systems could contribute to a repetition of the kind of "IP theft" issues that western companies have experienced in China. The United States has 60 bilateral science agreements with foreign countries. USTR's Special 301 report also lists 26 countries that are also closely associated with supply chain reshoring, including Indonesia, Vietnam, India, Mexico and Thailand. These countries should be prioritized for training and engagement by the US government.

The United States can also partner with allied countries in advancing IP issues of common concern, including working with IP officers and/or diplomats with IP responsibilities from the European Union, the United Kingdom, France, Japan and Korea. When I served as IP Attaché in Beijing, I worked extensively with these and other countries.

While we have multiple tools at our disposal, these tools are unfortunately divided up by agency and department. USTR has the authority to negotiate trade-related IP agreements, as well as to raise issues at the WTO and file WTO disputes. USPTO and the State Department can engage in technical assistance and training. Industry and industry trade associations can engage in advocacy in conjunction with the US and other governments. WIPO can also play a constructive role. We can also work with foreign governments. Law enforcement and DOJ officers stationed overseas can also engage in training on criminal IP matters. U.S. trade associations and companies located overseas also often have valuable experience. In complex economies such as China, multiple pathways for engagement should be utilized to advance issues of key concern. Ideally, these pathways should be sequenced to support progressively higher levels and more intense engagement by the US government and the international community to achieve successful negotiated outcomes.

5. What are your thoughts on patent eligibility reform and isn't it true that bringing greater clarity to patent eligibly is a matter of national security? What are your thoughts on the

 $^{^{10}}$ USTR, 2025 Special 301 Report, (USTR 2025), $\underline{\text{https://ustr.gov/issue-areas/intellectual-property/special-301/2025-special-301-report}$.

Patent Eligibility Restoration Act, which I reintroduced alongside Senator Coons this Congress?

The United States should reform its laws to restore eligibility to subject matter that has been ruled ineligible by the Supreme Court and to restore more predictability and certainty to the jurisprudence under this part of the Patent Act. 11 Reform, such as PERA, would bring us in line with our major international economic counterparts and competitors in terms of what we allow into our patent system. This is important to make sure that we do not lose innovation, investment and other opportunities to jurisdictions that provide greater protection and certainty, including China. Much of the developed world today has broader patent eligibility than the United States for software and biological innovation (including diagnostics). Weak patent protection for diagnostics encourages development in other countries, including by creating greater dependence on China and potentially weakening US national security. Agricultural innovations also help ensure food security in price, quantity, and quality. There are also national security implications to declining patent eligibility. For example, biopharmaceuticals are essential to public health and preempting and responding to foreign biological weapons. In addition, advanced communications technologies are necessary for reliable communication across military entities, economic players, and public safety enforcement.

With respect to AI specifically, in its December 2024 report on patent-eligible subject matter, the Congressional Research Service has noted that although the number of patent applications pertaining to AI has increased over the past 10 years, some stakeholders worry that AI inventions may be at risk under the current framework because of patent eligibility issues, i.e., that "they may be characterized as methods of organizing human activity, mental processes, or mathematical concepts." ¹²

6. What is the USPTO doing regarding China's misuse of its patent and trademark system and how effective are these steps?

USPTO has taken many steps to address misuse of the US patent and trademark system by Chinese applicants. The history of these concerns as well as an analysis of the impact of the legislative, regulatory and enforcement steps taken are described in an article that I wrote for the Akron Law Review, "Parallel Play: The Simultaneous Professional Responsibility Campaigns Against Unethical IP Practitioners by the United States and China." ¹³

¹¹ See Paul Michel, "America Risks Losing the Technology Race to China," INTERNATIONAL BUSINESS TIMES (Feb. 19, 2025 at 5:26 PM), https://www.ibtimes.com/america-risks-losing-technology-race-china-3764179; see also Paul Michel & Kathleen O'Malley, "Congress Needs to Clean Up the Supreme Court's Mess on Patents," (The Hill, Mar. 13, 2024), https://thehill.com/opinion/4530270-congress-needs-to-clean-up-the-supreme-courts-mess-on-patents/.

¹² Congressional Research Service, "Patent Eligible Subject Matter: An Overview," (CRS Dec 4, 2024), https://www.everycrsreport.com/reports/IF12563.html.

¹³ Mark A. Cohen, "Parallel Play: The Simultaneous Professional Responsibility Campaigns Against Unethical IP Practitioners by the United States and China," 56 Akron Law Review 325 (2023), https://ideaexchange.uakron.edu/akronlawreview/vol56/iss2/5/.

In my article I noted that USPTO's efforts to address these concerns likely constituted the largest cross-border attorney disciplinary effort ever conducted by the United States, and probably the largest ever undertaken by any bar authority in the world. I discussed several additional areas for improvement, including increased ethics education of dual-admitted (United States/Foreign) IP lawyers in the United States to underscore the differences in US IP practice; reform to USPTO rules and practices in handling conflict of law issues in attorney discipline; greater transparency by Chinese attorney regulatory authorities when they undertake action against the same targets for enforcement as USPTO; an enhanced use of civil actions; more joint enforcement actions; and more government to government engagement to achieve better practical outcomes.

7. Can you give us some sense regarding how China analyzes U.S. technological threats? Does China use the kind of analyses that the US – and indeed Congress – pioneered?

There are multiple sources of data that can be utilized to assess technological competitiveness. They also vary by type of technology. In recent years with the development of AI tools, semi-automatic approaches that aggregate scientific, intellectual property, technological, trade and other data have also been advanced. A useful survey of many of these approaches can be found in the article "Innovation Warfare." In the view of the authors of that article (2020), Asia was leading in the application of machine learning to conduct future oriented technology assessments (FTAs) using patent data. China, Taiwan and Korea held the top ten spots in total number of research articles published on this topic. By contrast, the United States ranked fourth in FTA research. The article also highlighted the role that various foreign patent offices, including the Canadian, Scandinavian and Singaporean patent offices, in performing FTAs. In the view of the authors of that article, "the computing infrastructure, and data mining competencies required to perform modern FTA analysis" made it likely that sophisticated FTA tools would not be available for purchase at that time. Chinese firms with access to enhanced FTA capabilities would enjoy significant competitive advantages. 14 Since that time there has however been significant commercial progress on FTA tools, although FTAs still need to be made more widely available to and incorporated by decision makers.

The Asia Society of Northern California is hoping to organize an event in the fall in Washington DC based on a program we organized in San Francisco on how to analyze China's technological competitiveness. ¹⁵ We look forward to inviting the members and their staff to that event.

¹⁴ Jeanne Suchodolski, Suzanne Harrison & Bowman Heiden, "Innovation Warfare," 22 North Carolina Journal of Law & Technology 175, 226 (2020) https://journals.law.unc.edu/ncjolt/wp-content/uploads/sites/4/2020/12/NCJOLT-Vol.22.2 3 Suchodolski-et-al.pdf.

¹⁵ Asia Society, "Event Recap: Has the Sleeping Dragon Woken Up? A Workshop on US-China Tech Competition and Collaboration" (Feb. 4, 2025), https://asiasociety.org/northern-california/event-recap-has-sleeping-dragon-woken-workshop-us-china-tech-competition-and-collaboration.

8. Should the U.S. renew the bilateral U.S.-China Science and Technology Agreement, which was extended in December 2024? Does this present any concern in terms of protecting U.S. IP and scientific development?

The US-China bilateral Science and Technology Agreement (the S&T Agreement) provides a framework for government-to-government cooperation in science and technology. In the past, it has also served as a useful forum to explore patent and IP issues with scientists and engineers who use the IP systems of their respective countries. The S&T Agreement also provided a voice for the private sector engaged in R&D and helped establish standards for private sector cooperation.

I believe that the S&T Agreement should continue to be used and extended by both countries. The S&T Agreement provides a foundation to address shared challenges faced by both countries as well as in addressing challenges facing the global community. China is also increasingly capable of contributing to scientific advancement in a range of fields. This is an opportunity that we should not waste.

The S&T Agreement with China should also be a model that the US can use with other countries and that other countries may wish to use with China. In addition, the S&T Agreement should serve as a model for appropriate oversight of international scientific collaboration. The United States should carefully oversee and evaluate the products of our collaborative research, whether it is scientific publications, patents, or other output. ¹⁶

9. For years, a main focus of U.S. diplomatic engagement was on trademarks and copyright issues. In recent years an additional focus has been on technology (e.g., patent, trade secret, and technology transfer) issues. In your opinion, should the U.S. focus equally on all of these issues in our engagement with China?

Technology that is protected by IP should be a priority of US engagement with China because of its importance to the US economy and US competitiveness. Such technologies primarily rely upon such IP rights as patents, trade secrets and software copyrights.

Our engagement with a rapidly developing economy such as China's must be forward-leaning and should not only address past harms. This means that, in retrospect, the US should have also progressively focused at an early stage on China's emerging technological competencies rather than unduly emphasize problems from the flood of counterfeit and substandard products emanating from China.

Another important pivot in our engagement with China should be a greater focus more on IP as a private right. We should highlight the strengths of China's market-oriented efforts at encouraging innovation by the private sector, which may also provide useful examples for the US, including China's high speed litigation procedures, the availability of low cost IP

¹⁶ See Reuters, "Exclusive – US Government Funding Yielded Hundreds of Patents for China-Based Researchers" (Aug 29, 2024), https://www.usnews.com/news/world/articles/2024-08-29/exclusive-us-government-funding-yielded-hundreds-of-patents-for-china-based-researchers.

rights which are granted quickly, and other substantive policy developments in rapidly emerging technologies. We should also try to engage China on its various government-oriented approaches to IP, including such issues as use of multi-year plans, the role of the government in subsidizing IP rights, the involvement of local governments, the roles of government and private sector funded R&D, etc.

10. The Phase I Economic and Trade Agreement included commitments by China to changes that would improve trade secret protection in that country, but they need to be fully implemented in order to truly protect innovators. What are your thoughts regarding China's compliance and implementation of the Phase One Agreement, specifically related to the biopharmaceutical and creator industries? What remains to be done to ensure that the trade secrets of American companies are safe in China?

In the absence of greater transparency by Chinese courts and regulatory institutions, it is impossible to come to reliable conclusions regarding how China has implemented the Phase 1 Agreement in the biotech sector. USTR in its Special 301 Report for 2025, has highlighted such issues as post filing supplementation of data, patent linkage, unfair commercial use of data generated to obtain marketing approval for pharmaceutical products remain, as well as newly arising issues involving use of genetic resources. The impact of these developments on the foreign business community is often hard to ascertain as the numbers of foreign-related cases have traditionally been very low.

11. Misappropriation of trade secrets is a danger that American innovators face every day around the globe. The Phase I Economic and Trade Agreement included commitments by China to changes that would improve trade secret protection in that country, but they need to be fully implemented in order to truly protect innovators. What remains to be done to ensure that the trade secrets of American companies are safe in China?

In its Special 301 Report, USTR continues to identify trade secret protection as "weak." The report underscores necessary legislative and regulatory changes in China's criminal and civil enforcement regime, including "high evidentiary burdens, limited discovery, difficulties meeting stringent conditions to enforce agreements and difficulties in obtaining deterrent-level damage awards."

In a blog post published shortly after the Phase 1 Agreement was concluded, I noted that lack of transparency would make it especially difficult to assess how reforms in trade secret enforcement were being implemented by China:

The [Phase 1] Agreement also entails no obligations to publish more trade secret cases, to make court dockets more available to the public, and to generally improve transparency in administrative or court cases, which might have made the Agreement more self-enforcing. Due to the relatively small number of civil and criminal trade secret cases and recent legislative reforms, the greater publication of cases would be very helpful in

assessing the challenges in litigating this area and China's compliance with the Agreement. ¹⁷

Perhaps due to declining levels of transparency, USTR does not cite any cases to support its conclusions. Low utilization by foreigners of China's civil, criminal and administrative enforcement mechanisms in the protection of trade secrets continues to be a significant problem in both enforcing the right and understanding the nature of the challenges facing the foreign business community. Due to high labor mobility rates in China, it is also important that foreign companies utilize non-IP remedies, such as non-compete agreements, to restrict access by competitors to confidential information they may have.

12. What is the current landscape of China's data security laws, cybersecurity laws, personal information protection laws, and cross-border data transfer laws, and what threats do that landscape poses for the data and IP of American companies?

China's privacy and data security regime can be distinguished from the US regime in several ways:

- A. China's privacy law regime is complicated by a complex interrelated structure of private and public rights, and including civil, criminal and administrative enforcement which are not codified in one law. China's implementation of privacy legislation also follows other patterns in Chinese law-making, which have generally embraced a relatively high degree of experimentalism on national and local levels than is typical in Western countries. China's experimental legislative approach includes a high toleration for frequent amendments and is often additionally accompanied by a high degree of local experimentation. Education and outreach are also often accompanied by legislation and enforcement activities. This approach can especially be useful in light of China's rapidly evolving economy and China's need to adjust its laws based on developments in technologies and markets.
- B. Privacy-related cases are still relatively few in China. A search this year on the official Chinese judicial database (*wenshuwang*) for references to the Personal Information Protection Law (2021) revealed only 606 cases. Most of these cases were civil cases (440), and most of them were decided in 2023 (275). Beijing and Guangdong (Canton) were the only two jurisdictions that heard over 100 cases. Out of 382 civil cases, the vast majority (302) were heard at the basic or the lowest court level. ¹⁸ The relatively high number of grass roots decisions suggests that litigation is being explored by Chinese

¹⁷ Mark A. Cohen, "The Phase 1 IP Agreement: Its Fans and Discontents," (www.chinaipr.com Jan. 21, 2020), https://chinaipr.com/2020/01/21/the-phase-1-ip-agreement-its-fans-and-discontents/; Mark A. Cohen, "China's Judiciary: The case of the Missing Cases," (Hinrich Foundation, July 18, 2023), https://www.hinrichfoundation.com/research/wp/tech/the-case-of-the-missing-cases/.

¹⁸ See also Hunter Dorwart, "Chinese Data Protection in Transition; A look at Enforceability of Rights and the Role of the Courts," (2022), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4163016 at pp. 25-27 for an English language summary of some earlier cases.

- citizens on a local level. These numbers might be contrasted with published civil court cases on China's official databases of over 93 million cases.
- C. While there is no specific information on foreign entity utilization of the enforcement system, there have been cases where foreign entities have been the subject of Chinese privacy enforcement actions. There have also been a few cases involving illegal export of data. For example, a case was brought against a Western hotel chain exporting data overseas. ¹⁹ In 2013, before the enactment of PIPL, a case was brought against Dun & Bradstreet under Article 253(a) of the Criminal Law for obtaining, providing, or selling a citizen's personal information. D&B was reportedly fined 1 million RMB. ²⁰ The case occurred at the same time as a decision by the National People's Congress was adopted to begin the regulation of the collection of electronic information. ²¹
- D. China has taken the position that foreign authorities should respect China's national sovereignty in requesting data and the only channel for doing so is judicial assistance. This is why China refused to accede to the Convention on Cybercrime. Article 32 of the Convention provides for the method of directly obtaining overseas electronic data evidence through the Internet, which China regards as a violation of other countries' sovereignty.
- E. In a recent article, Prof. Mark Jia noted that China's approach to privacy is also consistent with the use of privacy law by regimes such as Russia, and Pakistan.²² The autocratic "embrace" of privacy by these countries, may have an initial focus on state-run efforts to protect newly defined rights and interests, and a relatively weak civil system especially at the beginning of the new regime.²³ According to Prof. Jia and others, Constitutional law may also have an impact on the development of privacy and IP legislation.
- F. The US approach towards the role of law in China's privacy regime has generally been more dismissive than the European approach. The US approach has often focused on the

¹⁹ Michael Mayhew, "Latest Legal and Compliance Updates in China," (Integrity Associates Dec. 2, 2024), https://www.integrity-research.com/latest-legal-and-compliance-updates-in-china/.

²⁰ Covington Inside Privacy, "Dun & Bradstreet Reportedly Fined RMB \$1 Million for Illegally Obtaining Personal Information in China; Four Employees Imprisoned (Jan. 10, 2013), https://www.insideprivacy.com/international/china/dun-bradstreet-reportedly-fined-rmb-1-million-for-illegally-obtaining-personal-information-in-china/.

²¹ The Decision of the Standing Committee of the National People's Congress on Strengthening Online Information Protection requires "network service providers" and other "enterprises or public institutions" to clearly indicate the "use, method, and scope" of their collection of an individual's "personal electronic information." (Dec. 28, 2012).

²² Mark Jia, "Authoritarian Privacy," U. of Chicago Law Review, 733, 769 (2024), at fn. 467-473.

²³ See Mark A. Cohen, Testimony before House Judiciary Committee (Dec. 18, 2024), "IP rights have historically been used by different economies, including autocratic and communist economies, to advance state power and industrial policy interests. For example, IP has been used with varying success to advance the industrial policy interests of the Soviet Union and China. North Korea, like the United States, has a patent clause in its constitution." https://judiciary.house.gov/files/evo-media-document/cohen-testimony.pdf.

role of the Chinese Communist Party in regulating privacy. The United States has also focused on the role of China's National Intelligence Law (NIL). Article 7 of the NIL imposes obligations to cooperate with intelligence work. It has "been held up as proof that Chinese citizens and businesses are all potential espionage risks". ²⁴ These concerns have been expressed by legislators and concerned citizens on both sides of the Atlantic. To the contrary of that position, scholars such as Jeremy Daum, a Senior Research Scholar in Law and Senior Fellow at the Paul Tsai China Center at Yale Law School, have noted that Article 7 of the NIL is "far from clear that it was ever intended to require active participation in information gathering or sharing. More importantly, even an accurate understanding of the law isn't very useful in addressing the threat of espionage...."²⁵ Article 7 appears in the "General Provisions" of the NIL, where a law's basis, scope, purpose and general principles are listed, along with the general roles to be played by various agencies. Usually, these broad roles are later expanded upon in the law itself. Language in the opening section is otherwise often hortatory, without defined legal responsibilities. Comparison might be made with other laws where cooperation is to be provided with authorities including: the People's Police Law, ²⁶ the Armed Police Law, ²⁷ the Counterterrorism Law, ²⁸ the Biosecurity Law, ²⁹ and the Counterespionage Law. 30 Some of these laws provide greater specificity, including penalties for refusal to cooperate (Police Law), and fines (the Cybersecurity Law).

- G. Some commentators have also viewed the development of a United States national privacy regime as the greater priority and have pointed out the inconsistency between an aggressive international posture with weak and unharmonized domestic federal and state legislation.³¹
- H. There are also useful comparisons to be made between China's emerging privacy regime, its intellectual property regime and property law generally. Some Chinese scholars have noted that commercial data possesses unique characteristics in property form, interests and value that create challenges in applying existing IPR protections to data. Application of traditional property law also poses significant challenges in light of how

²⁴ NIL, Article 7.

²⁵ Jeremy Daum, "What China's National Intelligence Law Says, Why It Doesn't Matter" (China Law Translate, April 22, 2024), https://www.chinalawtranslate.com/en/what-the-national-intelligence-law-says-and-why-it-doesnt-matter/; see also Bonnie Girard, "The Real Danger of China's National Intelligence Law" (The Diplomat, Feb. 23, 2019), quoting Prof. Gu Bin ("Western fears of party influence on Chinese companies are overblown"), https://thediplomat.com/2019/02/the-real-danger-of-chinas-national-intelligence-law/.

²⁶ The People's Police Law, art. 34.

²⁷ Armed Police Law, Art. 39.

²⁸ Counter Terrorism Law, Art. 9.

²⁹ Bio Security Law, Art.13.

³⁰ Counterespionage Law, Art. 8.

³¹ Graham Webster, "App bans Won't Make Us Security Risks Disappear," MIT Technology Review (Sept 21, 2020); Samm Sacks, Crystal Zheng, and Graham Webster, "Moving Data, Moving Target," (DigiChina Oct. 25, 2024), https://digichina.stanford.edu/work/moving-data-moving-target/.

such data is developed, utilized and shared compared to other property rights and sharing of commercial data.³²

13. China has a clearly stated goal of supremacy in advanced drug development and biotechnology. This industry is critical to U.S. strategic and economic security and is extremely dependent on strong IP protection to support the massive investments needed for breakthrough discoveries. What has been China's activity in this area, including its outbound licensing activity?

Overall licensing of technology continues to be a strength of the US economy, with a positive balance of trade.³³

In the past 10-20 years the landscape for licensing IP to and from China has changed dramatically. Among the changes that have occurred are an increased importance of China as a licensing destination; an increasingly important role of licensing to unrelated parties (rather than as part of a foreign investment in a foreign-owned investment project in China); and an increasingly important role of China as an outbound licensor in high tech and pharmaceuticals. Nonetheless, there are relatively few published court cases by which to judge the adequacy of the judicial environment for licensing.

In recent years, there here have been several billion dollar deals with Western biopharma companies for licensing out of new pharmaceutical compounds that were concluded in the last few years.³⁴ One British group estimated big pharma was in-licensing 28% of innovator drug from Chinse companies in 2024 to \$41.5 billion, an increase of 66% from the prior year.³⁵

China has a vast reserve of talent in life science and has long had plans to develop its biopharmaceutical sector. These successes also offer opportunities for further collaboration with Chinese parties as well as the possibility for additional reforms in China's licensing and technology transfer regime. Some in the West also view these developments with national security concerns arising from China's rapid development in biotechnology.³⁶

³² See, e.g., Wenjia Zhao and Peicheng Wu, "From Data Ownership to Data Sharing: A New Property Regime of Commercial Data in China." (2025), available at SSRN: https://ssrn.com/abstract=5098768.

³³ See, e.g., Brian C. Moyer, "The Economic Contribution of Licensing to the U.S. Economy" (Bureau of Economic Analysis, June 8, 2016), in the presentation "The Economic Contribution of Technology Licensing" (June 8, 2016), https://sls.gmu.edu/cpip/wp-content/uploads/sites/31/2016/07/USPTO-CPIP-Tech-Licensing-Conference-Slides.pdf.

³⁴ MERICS, "Lab leader, Market Ascender: China's Rise in Biotechnology," (Apr 24, 2025), https://merics.org/en/report/lab-leader-market-ascender-chinas-rise-biotechnology.

³⁵ Global Data, "Large Pharma Drug Licensing From China Reaches Record high at 28% in 2024, Reveals Global Data," (April 9, 2025), https://www.globaldata.com/media/business-fundamentals/large-pharma-drug-licensing-from-china-reaches-record-high-at-28-in-2024-reveals-globaldata/.

³⁶ See National Security Commission on Emerging Biotechnology, "Charting the Future of Biotechnology," (April 2025), https://www.biotech.senate.gov/final-report/chapters/.

14. China often seems to be open about their big, long-term goals. Their leadership lays out detailed 5 Year Plans and President Xi has recently called for "self-reliance and self-strengthening" to develop AI in China. But it also seems the U.S. government sometimes struggles to clearly understand and anticipate China's tech trajectory. How do you think we are doing in terms of understanding and staying ahead of China's innovation plans and what could our own government do better?

In terms of understanding China's technological direction, I believe that it would be helpful to reconstitute and update services such as Open Source Enterprise or the Foreign Broadcast Information Service, with a focus on technology and competitiveness. These open-source intelligence projects in the past helped educate Americans about political, legal and technological developments in China.

While much focus had been placed in the past on the "Made in China 2025" plan, there are also more granular industry-specific plans and local plans that are highly important to understand China's developmental directions. They can also be critical to US companies seeking to craft appropriate business and legal strategies. In light of the diversity of these plans and the various ways that they may be implemented, an open-source information service could be a useful contribution as well.

An example of how Chinese plans could impact US IP litigation occurred a few years ago in a PTAB IPR patent dispute (IPR2023-00521) involving a magnesium material used in fracking. I submitted an expert statement on Chinese industrial policies plans regarding magnesium processing and product development including extensive background on the academic and industrial background to the party challenging the patent in order to demonstrate how Chinese industrial policies were focused on these products and this technology.³⁷ I also described various national and local policies regarding magnesium processing and product development, and noted in particular that in the complainant's hometown of Chongqing, "Magnesium appears 11 times in the Five Year Plan ... for High-Quality Development of Manufacturing Industry (2021-20215)."³⁸ I also noted that foreign patent applications in certain key technology areas identified in national plans may face negative discrimination from China.

15. The Government Accountability Office (GAO) recently released a report regarding quality at the USPTO. What is your opinion of the GAO's conclusions and recommendations? Do you have any other suggestions for the USPTO to improve patent quality and the patent examination process?

³⁷ Paul Morinville, "China uses the USPTO to Take A Critical Minerals Market" (Innovation Gadfly, Feb. 15, 2024), https://innovationgadfly.com/china-uses-the-uspto-to-take-a-critical-minerals-market/. My declaration is found here: https://innovationgadfly.com/wp-content/uploads/2024/02/2001-Mark-Cohen-Declaration.pdf.

³⁸ Id. at p. 17.

I respectfully refer the Subcommittee to a study by the Sunwater Institute which concluded that "that the USPTO appears to reject valid claims more than it issues invalid ones." The study also noted that "invalidation rates are not suitable proxies to measure the quality of issued patents: challenged patents are not representative of all issued patents and are subject to selection biases both in terms of which patents are challenged and which cases go to final adjudication rather than settlement or other resolution." Finally, this study raised important questions concerning what innovations could have been commercialized but foundered because of decisions not to file patents and/or PTO decisions to reject valid claims.

16. In recent years, there has been an increasing amount of litigation involving patents that are standard to an interoperable technology, such as cellular communication or Wi-Fi. Among the countries that have attempted to take control of standard essential patent licensing is China. What implications does China's increasing involvement in standard essential patent rate setting have for U.S. companies? Can we expect it to be beneficial for either patent owners or licensees?

I recently co-authored an article with Dr. Kirti Gupta on this topic: "The New SEP Powerhouse: How China is Shaping Global Patent Disputes". We concluded:

"China's growing influence in global SEP [Standards Essential Patent] disputes marks a significant shift in the landscape of international patent law. ... Chinese courts are asserting jurisdiction over the setting of global FRAND royalty rates, a move that challenges traditional patent regimes in the United States, United Kingdom, and EU. While this strengthens China's role as a key extra-territorial player and norm setter in SEP litigation, it also raises important issues surrounding transparency, as the limited public access to judicial decisions and the anonymization of case rulings hinder broader analysis and international scrutiny.

Furthermore, China's assertive legal strategies ... and its evolving stance as both a net licensor and a growing R&D hub, signal a strategic push to rebalance the global patent system. As Chinese tech giants such as Huawei and ZTE expand their SEP portfolios, their growing influence will continue to shape the future of global technology standards and patent licensing, prompting other jurisdictions to adapt their policies and legal frameworks accordingly." ⁴⁰

China's involvement in rate setting is a positive development for many Chinese licensee companies. Its benefits for foreign licensors are less clear. The Chinese government, including its courts and antitrust agencies, have progressively been increasing their extraterritorial influence. My own research has shown that the Chinese courts have adopted

³⁹ Sunwater Institute, PATENT QUALITY IN THE UNITED STATES: FINDINGS AND SUGGESTIONS FOR POLICYMAKERS, (Sept. 2024), https://sunwater.org/wp-content/uploads/2024/09/SWI-Policy-Report-Patent-9-23-2024.pdf. Note that I was a peer reviewer for this study.

⁴⁰ Kirti Gupta and Mark Cohen, "The New SEP Powerhouse: How China is Shaping Global Patent Disputes" (CSIS, May 7, 2025), https://www.csis.org/blogs/perspectives-innovation/new-sep-powerhouse-how-china-shaping-global-patent-disputes.

unique and inconsistent approaches to FRAND that tend disaggregate FRAND from being a unitary concept and emphasizes differential or discriminatory treatment as a component of "FRAND." These translations are inconsistent with international practices. ⁴¹ The EU has filed two WTO disputes in the past several years addressing China's use of antisuit injunctions, China's efforts to set global SEP rates and China's lack of transparency in its judicial decision making.

As companies such as Huawei and Xiaomi become more active licensors of SEPs, any lower valuation and protection standards that the Chinese courts and agencies establish may also work against them. China will hopefully address this aspect of the SEP problem by gradually improving its system for licensing SEPs. The extraterritorial reach of China's SEP cases, however, remains concerning. These cases can undermine the legitimate jurisdictional authority of other countries.

Thank you for the opportunity to answer these questions. My answers represent my personal opinions only.

⁴¹ See Mark Cohen, "China's Diverse FRAND Translations Severely Impacting Court Decisions at Home and Abroad," (Intellectual Asset Management, Jan. 31, 2024), https://www.iam-media.com/article/chinas-diverse-frand-translations-severely-impacting-court-decisions-home-and-abroad. An updated and more extensive version of this article is forthcoming in the European Intellectual Property Review.

Questions from Senator Schmitt With Reponses from Mark Cohen

Witness for the May 14, 2025

Senate Committee on the Judiciary

<u>Subcommittee on Intellectual Property Hearing</u>
"Foreign Threats to American Innovation and Economic Leadership"

Responses of Mark Cohen – Senior Technology Fellow, Asia Society of Northern California and Edison Fellow, the University of Akron School of Law

Q: One problem that has been discussed is the misuse of the U.S. courts by foreign governments and sovereign wealth funds to access sensitive information, including trade secrets. The concern is third-party litigation funding. This seems like a problem we should be able to limit with targeted legislation. How are foreign governments like China or Russia able to use U.S. courts to steal trade secrets and other sensitive technical information with third-party litigation funding?

A: District court judges are equipped with authority to limit access to sensitive information, including trade secrets. To structure protective orders and other measures in an international context, they also need to be aware of the forces behind the litigation. When district court judges decide to give a party access to a trade secret in a technical case, such as patent litigation, the judge needs to know the risks of trade secret misappropriation. These may not be easy to track if the plaintiff is based overseas or has ties to or is funded by a foreign adversary. Moreover, many of these foreign legal systems are not transparent. US law firms have also been reducing their presence in China; this may also affect the quantity and quality of information regarding the latest developments in China's trade secret regime available to US companies and policy makers. These are complex issues, particularly in countries such as China, where the lines dividing the government, the party and the private sector are often unclear. I believe that very few judges understand how complex the inquiry regarding protection of confidential information can be, particularly when addressing the role of national and local technology-oriented industrial policies, incentives to develop competitive technologies with the West, and complex Chinese financial, business, political and party networks.¹

One vehicle for potential misappropriation is when assistance is given to foreign and international tribunals and to litigants before such tribunals pursuant to 28 U.S. Code § 1782. Section 1782 provides that any judicial order "may prescribe the practice and procedure, which may be in whole or part the practice and procedure of the foreign country or the international tribunal, for taking the testimony or statement or producing the document or other thing." To the extent that a U.S. court is persuaded that trade secret information should be produced for use

¹ See Curtis J. Milhaupt, "Responsible Capitalism' and the China Conundrum," (SLS Blogs, March 8, 2022), https://law.stanford.edu/2022/03/08/responsible-capitalism-and-the-china-conundrum/.

in a foreign proceeding, it should be prevailed upon to require that production take place pursuant to various protective measures, including the protections afforded by an enforceable confidentiality order in the foreign country, as well as any guarantees that can be provided by US-based affiliates.

Similar problems regarding opacity and complexity of the Chinese system may also arise with regard to inquiries by the judiciary concerning Chinese litigation funding. A few judges have begun to request disclosure of outside funding, but most courts do not require it.² It may also be important to distinguish between private and public sources of litigation funding, and to have a critical view of what role, if any, the Communist Party may be playing in such litigation funding. Moreover, there is an active and large class of independent inventors and IP owners in China who are also active users of China's domestic IP enforcement regime that might be distinguishable from any government-supported litigation funding endeavors.³ As more data is made available, meaningful comparisons may also be made possible among foreign funding, domestic private litigation funding, sovereign wealth funds, and any distinct characteristics of activities and funding in critical technologies.

Q: Do district court judges have all the information they need to guard against IP theft from foreign governments that are funding litigation? How can they guard against trade secret misappropriation in litigation discovery if they are not aware that a foreign government or sovereign wealth fund is financing the litigation and behind the discovery requests? If Congress were to legislate in this area, what information would be needed and in what circumstances? Would it address most of the problems with intellectual property theft in litigation discovery to require disclosure of funding from a foreign government or sovereign wealth fund in cases where an intellectual property claim is asserted?

A: I am confident in the ability of US courts to issue and enforce protective orders concerning confidential information made available to the parties and/or their counsel involving US counsel for US trade secrets to be used in US proceedings. In environments where lawyers are not easily sanctionable by judges or courts, or where standards for trade secret protecting may make confidentiality obligations more difficult to enforce, trade secret protections could be easily lost to foreign actors for US-protected information. Such risks are especially heightened if a party is also working in or employed by foreign entities.

Chinese courts can also issue protective orders. However, the newness of the protective order procedure in Chinas, coupled with the lack of transparency and lack of data around their implementation, has made it very difficult to ascertain how protective orders are administered

² Josh Landau, "Not Just Delaware: Litigation Funding Transparency Progress Across Multiple States" (Patent Progress, Feb. 15, 2024) https://patentprogress.org/2024/02/not-just-delaware-litigation-funding-transparency-progress-across-multiple-states/.

³ Mark A. Cohen, "Understanding Service Inventions – Data" (<u>www.chinaipr.com</u> Dec. 1, 2012), <u>https://chinaipr.com/2012/12/01/understanding-service-inventions-data/</u>.

and their effectiveness. See my earlier testimony before the Senate where I discuss this more fully.⁴

Q: One of the most concerning things about the use of third-party litigation funding by foreign adversaries is that it is not clear how frequently it is used in our courts. Do we know how widespread third-party litigation funding is? How can we know whether foreign adversaries are involved without disclosure of foreign funding sources?

A: States Attorney Generals have also been raising concerns over these threats, including litigation financing involving Chinese entities. However, I have not seen hard data. A principal concern is whether third party litigation funding for litigation in the United States that originated from foreign government financing could be used to unfairly disrupt sectors of the US or other economies. If the data and facts support it, requiring disclosure of these interests could be useful to courts and parties adjudicating such disputes. At the same time, disclosure obligations should not become too onerous, particularly where the litigants and funders are US-based, critical technologies are not involved, and issues concerning misuse of legal process can otherwise be addressed by existing judicial process.

Possible answers to the risks of litigation funding may be found in a study being prepared by the Office of Naval Research, Director of Innovation Protection Policies, which had previously completed a tabletop exercise that explored hypothetical adversary strategies that might be used to exploit the US intellectual property system. That study identified third party litigation funding of IP disputes as a topic requiring further investigation. The Director of Innovation Protection Policies is scheduled to complete research on third party litigation funding in July 2025.

China's approach to litigation support arises from several atypical sources, including subsidies for foreign patent applications, financial assistance for international litigation, direct investment by the state, and litigation insurance programs that may be subsidized by the government.

USPTO has previously documented the impact of non-market factors in Chinese patent and

⁴ Statement of Mark A. Cohen on "Engaging and Anticipating China on IP and Innovation", hearing before the Senate Committee on the Judiciary Subcommittee on Intellectual Property, hearing on Foreign Competitive Threats to American Innovation and Economic Leadership (April 18, 2023), https://www.judiciary.senate.gov/imo/media/doc/2023-04-18%20PM%20-%20Cohen%20-

https://www.judiciary.senate.gov/imo/media/doc/2023-04-18%20PM%20-%20Cohen%20-%20Testimony.pdf.

⁵ See Bob Goodlatte, State Attorneys General Raise Concerns About Threats Raised by Litigation Funding, Patent Progress (Jan. 18, 2023), https://www.patentprogress.org/2023/01/state-attorneys-general-raise-concerns-about-threats-posed-by-litigation-funding/; ILR Briefly, "A New Threat: the National Security Risk of Third Party Litigation Funding," (U.S. Chamber of Commerce Institute for Legal Reform, Nov. 2022), https://instituteforlegalreform.com/wp-content/uploads/2022/11/TPLF-Briefly-Oct-2022-RBG-FINAL-1.pdf.

⁶ Copies of the Tabletop Exercise Report can be obtained by contacting the Office of Naval Research Legislative Affairs team: Ms. Adrienne Honigstock, adrienne.j.honigstock.civ@us.navy.mil; or Mr. Roger Henkle, timothy.r.henkle.civ@us.navy.mil.

trademark filings, including subsidies.⁷ Shortly after the publication of this USPTO report, the Chinese patent office announced efforts to eliminate subsidies for overseas patent filings. While subsidies for overseas patent litigation are reportedly declining, other subsidies may remain intact. For example, Hangzhou city will cover 50% of the costs of a successful overseas litigation up to 100,000 RMB. The 100,000 RMB cap (about \$14,000) is, of course, a relatively small part of a typical IP court litigation.⁸

I also believe that disclosure of government subsidies involving patent filings from overseas would be useful. The United States requires disclosure under the Bayh-Dole Act; we should impose a similar obligation on foreign government funded patent applications before the USPTO.

Depending on where the data leads, the extensive use of government funding for litigation or overseas filings in intellectual property may also raise concerns that a country like China is not considering IP as a "private property right", as is required by the preamble to the TRIPS Agreement.

In many cases it might not be apparent that a party asserting a US patent has links to China's military-industrial complex. Chinese companies may be reluctant to admit government influence to maintain plausible deniability, for tactical reasons in a litigation or due to the potentially pervasive impact on the types of disclosures it might need to make in other contexts. Networks can be extensive and complex. There are also no unified practices or policies across different US government agencies to assess party or state ownership or control of Chinese enterprises. An understanding of these networks is important to such diverse areas as litigating financing, securities regulation, international trade remedies, export controls, economic espionage, trade sanctions, and Department of Defense procurement.

⁷ USPTO, "Trademarks and Patents in China: The Impact of Non-Market Factors on Filing Trends and IP Systems" (USPTO, Jan. 2021) https://www.uspto.gov/sites/default/files/documents/USPTO-TrademarkPatentsInChina.pdf.

⁸ Notice of Hangzhou Municipal Administration for Market Supervision on Issuing the of "Implementing Rules of the Hangzhou Municipality For the Allocation Factors of Hangzhou Intellectual Property Specialty Funds" 杭州市市场监督管理局关于印发《杭州市知识产权专项资金分配因素实施细则》的通知 (Oct 25, 2023), https://scig.hangzhou.gov.cn/art/2023/10/27/art 1229144701 1837824.html.

⁹ See, e.g., OFFICIAL JOURNAL OF THE EUROPEAN UNION, "Commission Implementing Regulation (EU) 2024/2754 of 29 October 2024." The EU imposed a definitive countervailing duty on imports of new battery electric vehicles designed for the transport of persons originating in the People's Republic of China. The report noted that: "The claims raised by CATL were general and unsubstantiated. The Commission highlighted that the relationship between the GOC [Government of China] and CATL has been extensively covered... and that several provincial documents explicitly support ... how [CATL] is linked with the undertaking of national key tasks." (Para. 488), https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ:L_202402754.

¹⁰ Larry Sussman, "How the U.S. Targets China's Military-Civil Fusion Efforts," (Wire Screen Blog March 20, 2024), https://www.wirescreen.ai/blog/military-civil-fusion.

¹¹ Li-Wen Lin and Curtis J. Milhaupt, "We are the (National) Champions: Understanding the Mechanisms of State Capitalism in China, 65 Stan. L. Rev 697 (2013), https://www.stanfordlawreview.org/wp-content/uploads/sites/3/2013/05/Lin_Milhaupt_65_Stan._L. Rev. 697.pdf (2013).

These difficulties in assessing Chinese state and party involvement in an intellectual property dispute does not mean that efforts should not be made to improve litigation transparency in order to better understand China's emerging role in global IP systems. As one study noted, "a lack of evidence regarding TPLF [third party litigation funding] furthering national and economic security threats does not indicate that no threats exist, but rather, that it is too difficult to collect such information." However, it is also conceivable that the litigation funding has been largely privately directed, and has arisen in conjunction with the growth of Chinese private sector IP owners, Chinese law firms, growing markets for intellectual property, China's desire to be a major licensor of intellectual property, and other factors. I encourage Congress to look into these issues further and/or ask for a report on this matter from the Congressional Research Service or other appropriate organization.

¹²American Security Project, "Perspective – National Security Implications of Foreign Third-Paty Litigation Financing," (American Security Project, May 8, 2025), https://www.americansecurityproject.org/perspective-national-security-implications-of-foreign-third-party-litigation-financing/.

Questions from Senator Schiff With Reponses from Mark Cohen

Witness for the May 14, 2025

Senate Committee on the Judiciary

<u>Subcommittee on Intellectual Property Hearing</u>
"Foreign Threats to American Innovation and Economic Leadership"

Responses of Mark Cohen – Senior Technology Fellow, Asia Society of Northern California and Edison Fellow, the University of Akron School of Law

- 1. This February, the U.S. Department of Justice ("DOJ") charged a former Google software engineer with seven counts of economic espionage and seven counts of theft of trade secrets for stealing proprietary information related to Google's artificial intelligence technology. Between May 2022 and May 2023, this individual uploaded thousands of confidential files to his personal Google Cloud account and he secretly affiliated himself with two China-based technology companies before becoming founder and CEO of his own AI and machine learning technology company in China. This is just one example of the IP theft from foreign adversaries we've seen in the AI supply chain from the proprietary information used to create foreign models, to the patented chips that power them, to the copyrighted works they train on.
 - a. How can the United States stop the Chinese government and Chinese companies, from stealing the proprietary information of American companies developing AI technology?

Stopping systematic theft of trade secrets and other intellectual property requires a coordinated effort by federal and local authorities as well as rightsholders/victims. As Chinese companies change their supply chains for goods sold to the West, it may also become increasingly important to engage third countries that are now part of that extended supply chain. Many goods that are made over extended supply chains are also IP and technology intensive. For example, 82% of the products that have been identified by the United Nations as being made over extended supply chains fall within the USPTO list of IP-intensive industries. Recognizing the risks posed by weak IP protection in these third country supply chains would also require that the US government direct more efforts to improve their IP regimes and anticipate newly emerging problems. Such efforts also present the possibility of establishing virtuous cycles through integrating these new markets with IP systems that address IP theft and other risks and ultimately contribute to innovation.¹

https://www.hinrichfoundation.com/media/mbfc5j2j/a-techno-globalist-approach_hinrichfoundation_october-2020.pdf.

¹ Mark A. Cohen and Philip C. Rogers, "A Techno-Globalist Approach to Intellectual Property and Supply Chain Disruption" (Hinrich Foundation, Oct. 20, 2020),

Preventing transmission of confidential files through stronger security protocols is one important step towards reducing risk. Standard Operating Procedures need to be altered considering evolving risk assessments, including risks posed by engagement with different countries, companies or individuals. US companies should also consider instituting better forensic measures to track trade secret theft, such as by using non-functional software code to trace unauthorized copying, or incorporating design elements in products that anticipate future improvements not otherwise known to the public. Many US companies also need to alter their methods for protecting proprietary information in higher risk markets such as China through improved internal security measures. Employees should also ensure that information is not made available to unsecure platforms, such as by uploading to public artificial intelligence tools.

US companies may also wish to monitor patent office filings in China for filings made by ex-employees. After an employee trade secret theft, such filings have been made on an anonymous basis. A patent granted under those circumstances might then be asserted against the legitimate innovator. Anonymous Chinese patent applications of this type have also been implicated in US trade secret litigation. One US company facing this problem noted that "U.S. companies could face extreme difficulty in proving or even discovering the connection between Chinese patent applications and individuals who have misappropriated trade secrets."

When the alleged perpetrators are no longer resident in the US, US criminal remedies may bring only a pyrrhic sense of justice. Law enforcement can sometimes leverage mutual legal assistance agreements with foreign countries, including China, to seek extradition or other collaboration. Further delays and difficulties may, however, be encountered if the technology is being adopted for manufacturing in a third country.

To address the problem of trade secret misappropriation from US sources, the federal government may wish to consider passing legislation that makes it legal for a US company to conclude non-compete agreements compatible with local foreign law with skilled employees when they are sent overseas. Currently, states such as California afford a pathway for skilled employees to leave for China or other countries with the knowledge that their non-compete agreement is illegal under California law and is unenforceable. As I noted in my comments to a proposed FTC rule banning non-compete agreements:

US employers [should] be free to insist that employees sign non-compete agreements that conform to other jurisdictions, such as Germany or China, where compensation may be required for the period when the non-compete is in effect. In my own experience, US multinationals are already

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² Bonumose, Inc., "Bonumose Successfully Concludes Trade Secret Litigation" (April 9, 2019), https://us15.campaign-archive.com/?u=40794964f3c596bd352c4648c&id=8147801cb0/.

quite familiar with foreign non-compete agreements for their technically skilled staff and have the know-how to draft agreements that generally comply with the multiple jurisdictions where they operate. If California companies had been able to draft non-compete clauses with similar provisions, they would likely have limited their exposure to overseas trade secret misappropriation during the past several years, which would have benefited the economic and national security interests of the whole country.³

Foreigners, including Americans in China, seldom use Chinese legal remedies for trade secret theft. Although China has significantly amended its trade secrets laws to conform to US pressure, US companies rarely use these remedies. The United States should seek to improve access to these enforcement mechanisms. In addition, these procedures might also need to be undertaken in conjunction with political intervention by the US Embassy and other political pressure to ensure a fair result and counter any domestic political pressure.

b. Why is the theft of this critical software and technology a national security issue?

Many forms of AI-related technology have direct or indirect military applications in addition to civil applications. These risks were outlined in the final report of the National Security Commission on AI. That report concluded:

Leadership in AI is necessary but not sufficient for overall U.S. technological leadership. AI sits at the center of the constellation of emerging technologies, enabling some and enabled by others. The United States must therefore develop a single, authoritative list of the technologies that will underpin national competitiveness in the 21st century and take bold action to catalyze U.S. leadership in AI, microelectronics, biotechnology, quantum computing, 5G, robotics and autonomous systems, additive manufacturing, and energy storage technology.⁴

2. The United States Patent and Trademark Office houses the largest team of experts devoted to international IP policy in the federal government. USPTO's Office of Policy and International Affairs ("OPIA") plays an integral role in both ensuring that the United States continues to lead the world in innovation and ensuring that American innovation is protected abroad.

³ Comments of Mark A. Cohen, Director and Distinguished Senior Fellow Berkeley Center for Law and Technology University of California, Berkeley Law School "The Federal Trade Commission's Notice of Proposed Rulemaking on A Non-Compete Clause Rule and Its International Impact",

https://chinaipr.com/2023/03/19/the-proposed-ftc-rule-on-non-compete-agreements-and-china/.

⁴ Executive Summary, "National Security Commission on Artificial Intelligence Final Report" (NSCAI, 2021), https://reports.nscai.gov/final-report/.

a. Can you explain why it's important for USPTO to have a dedicated team of experts who work on international IP policy?

Under the American Inventors Protection Act, USPTO advises the President of the United States through the Secretary of Commerce on all intellectual property matters. As the lead agency at the WIPO, USPTO is also involved in negotiating and representing the US in IP-related matters, including the 28 different treaties administered by WIPO. USPTO has also led or assisted in negotiating other IP-related treaties, including the TRIPS Agreement.

Apart from treaty-related discussions, USPTO is a member of the IP-5, TM-5 and ID-5, consisting of the five largest patent, trademark and design offices respectively. These offices seek to improve cooperation among one another's offices and share their respective experiences in handling emerging IP challenges as well as improving quality and efficiency.

USPTO also has a team of 13 IP Attachés stationed overseas which help in managing and coordinating USG IP policy in the regions to which they are posted. Often these officials also speak the local language and have a deep understanding of local law and challenges. These officials also often serve to coordinate the IP-related policies of the Embassy. When I served at the US Embassy – Beijing, I was the Ambassador's principal assistant in managing the Embassy IP Task Force, which consisted of all relevant agencies involving in IP policy and enforcement, including American Citizen Services, the Foreign Commercial Service, the Economics Section of the Embassy, the Environment, Science and Public Health Section of the Embassy, the Customs Service, the Legal Attaché (from USDOJ), the USTR office, and the Foreign Agricultural Service. I also managed a budget for technical assistance with Chinese counterparts. We organized annual roundtables with the US Ambassador and Chinese counterparts to address issues of common concern. In addition, we often organized educational programs on topics that we felt China did not adequately understand or which were necessary to create good will in advance of any political pressure. I was also authorized by the Embassy's public affairs section to work directly with Chinese media in the Chinese language to raise US government IP concerns. My activities were also widely reported on in the US and Chinese media.

b. Would it be a mistake for USPTO to reduce the number of experts in OPIA who work on international policy?

Yes, it would be a mistake to reduce the number of experts at OPIA who work on international policy. The USPTO team is critical to the US remaining a leader in intellectual property in the world. Its expertise is also critical to understanding the IP systems of other nations, including those that may pose threats to the US. There is no other office in the US government with the same breadth and depth on global IP issues as OPIA. In areas such as patent and trademark prosecution and enforcement, the OPIA team also has the unmatched resources and experience of whole USPTO, with thousands of IP professionals. Many OPIA team members also have decades of experience on IP issues both inside and outside of the government.

A better approach to managing US government-wide resources on international IP policy would be to develop and reward work-sharing arrangements. With IP-related offices in such agencies as the Department of Justice, Department of Homeland Security, State Department, International Trade Administration, the White House "IP Enforcement Coordinator", and the Office of the US Trade Representative, there is a need for coordination, training and work-sharing, which should involve greater in-depth analyses and strategies, and more specialized support for US industry.

c. Is it possible for the United States to lead the world in innovation without engaging in international diplomacy on intellectual property issues?

It is impossible for the United States to lead the world in innovation without engaging in international diplomacy on intellectual property issues.

It is quite possible, however, for autocratic societies or societies without free markets to dominate global IP and thereby diminish the role of markets and/or of free-market oriented IP policies. One does not need to have a 100% free-market system to support an IP system. The Soviet Union had long been one of the 10 largest IP offices in the world. Nazi Germany also conducted numerous experiments in its patent system despite war-imposed austerity measures. North Korea has a patent clause in its constitution. China, despite its mixture of its private and public economic systems, has the largest patent and trademark office in the world, whether judged in terms of activities of its patent and trademark office, or in terms of civil, criminal and administrative litigation involving the patents and trademarks it registers. In these and many other economies, IP can serve such different purposes as an incentive for market reform, an important tool of the state to encourage innovation, and/or a means of exerting continued control

over various state sectors. An absence of informed US leadership could conceivably facilitate the rise of less market-oriented approaches to IP.

The United States should remain a voice for an IP system that stimulates market-based economic activity, individual creativity and entrepreneurship. This is consistent with the preamble to the TRIPS Agreement which acknowledges the risk that IP can be used as a statist tool, when it declares that the members of the WTO have recognized that "intellectual property rights are private rights."

As WIPO has documented, the global IP system has grown from year to year. ⁵ US industry is a major participant in that growth, with its domestic and overseas filings, enforcement and investments. The United States is also the largest licensor of intellectual property to the world. International markets for IP-intensive US industries offer a necessary scalability for manufacturing and marketing new US inventions. Advancing IP enforcement also advances commercial rule of law generally.

We should continue to support an IP system the supports our companies, promotes technological progress, and that advances economic opportunities for all. USPTO is a key US government resource in those efforts.

⁵ WIPO, "World Intellectual Property Indicators Report: Global Patent Filings Reach Record High in 2023" (Nov. 7, 2024), https://www.wipo.int/pressroom/en/articles/2024/article_0015.html .