Suzanne Harrison & Mark Cohen Witness Response to questions from Senator Tillis for the Senate Committee on the Judiciary Subcommittee on Intellectual Property Hearing "Foreign Competitive Threats to American Innovation and Economic Leadership"

Note: Statements followed by an "SH" refer to Suzanne Harrison, and "MAC" refers to Mark Cohen. If a matter is referred to as SH & MAC, it is coauthored.

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

Answer:

To raise capital from investors, early-stage companies must convincingly show investors they have the following:

- A new and novel product, technology and/or service that meets an unmet customer need, or provides a significant advantage over a current product or service in the market.
- Competent management that has both content expertise and can navigate the myriad of start-up hurdles and bring a successful product or service to market.
- That their offering has distinct competitive advantages (cost or pricing, intellectual property (IP), first mover advantage, etc.) to assist in succeeding in the marketplace.

Your question relates specifically to whether IP provides a competitive advantage to early-stage companies. Historically, all investors and venture capitalists required some (or multiple) form(s) of intellectual property before they would invest in a company, such as patents, trade secrets, trademarks, or copyrights. This is due, in some part, to the fact that investors would participate in their portfolio companies over a number of years and were generally placing a large amount of money in each investment. Today, this is no longer the case universally. In some industries such as pharmaceuticals, nanotechnology, chemicals, oil & gas, aerospace, etc. these requirements still hold, and investors still require their portfolio companies to obtain and maintain IP protections as part of their investment criteria. In other industries such as social media, some consumer products, software, fin tech, automotive, artificial intelligence, and more, the amount of money invested in each company is much smaller, and also the amount of time to bring a product to market is less, which means that in the case of patents, investors have already cashed out of their investments before the patents are even issued, making them less relevant to their investing criteria. Additionally, the ability of patents to exclude others has been seriously eroded since eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388 (2006). Finally, the cost of patent litigation has skyrocketed and is no longer affordable for many startup companies, and the Patent Trial and Appeal Board (PTAB) is viewed by investors as particularly patent owner unfriendly, meaning that most small patent owning companies who find themselves at PTAB do not emerge with valid patents. Therefore, the use of patents to provide a competitive advantage to investors is no longer believable to them

for the industries mentioned above and others like them. Trade secrets are still considered by investors as a viable form of IP competitive advantage, however, the high cost of litigation makes this a very undesirable route and given the high level of ambiguity around IP litigation, again, while viewed as better than patents, still is not viewed as an effective remedy for small entities. It should be noted that to the extent that a proprietary process is easily reverse engineered, trade secrets may be a particularly weak form of protection. (SH)

A still useful but dated report on the role of standards in high tech startups is a survey done by Berkeley Law "High Technology Entrepreneurs and the Patent System: Results of the 2008 Berkeley Patent Survey" that was published in 2009: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1429049. (MAC)

2. *How big of a threat is China's involvement with Standard Essential Patents (SEPs), especially in light of their connection to critical international technical standards such as the 5G telecommunications standard?*

Answer:

Having Chinese companies participate in standards bodies and SEPs licensing in general is not an issue, as it is part of the normal competitive dynamic amongst companies. All global companies are welcome to participate in creating a worldwide set of standards that govern relevant new technologies that all can use. What is an issue, however, is allowing nation states to use companies as a "front" for their nation state efforts to manipulate standards bodies and SEP's in ways that are advantageous for them. This appears to be what the Chinese government did with Huawei, using their technology which was part of a telecommunications standard to commit spying/espionage on other nation states. This is not the intent of SEP's and standards bodies and should not be allowed. (SH).

Additionally, there may be concerns over proxy use by the Chinese government of private or quasi-private entities to obtain patents, including having them declared as standards essential. In the United States, a positive step to address this type of issue would be for the USPTO to be authorized to require disclosure of foreign government support for the technology that is the subject of a US patent application or grant. (MAC)

3. **Approximately 80% of all economic espionage prosecutions brought by the DOJ allege conduct that would benefit the Chinese state and approximately 60% of all trade secret cases involve China.**

What steps can and should the DOJ take to further address this critical issue?

Chinese trade secret theft prosecutions may be divided into two parts: prosecutions in which a party is charged as an agent of the government of China or the Communist Party, and prosecutions in which a party is charged as acting on behalf of China or to advance Chinese national goals. The former is what I like to call "State-mandated" while the latter is "State-inspired." Theft of core national security technology is most likely accomplished by professional spies. Theft of other forms of technology that serve national competitiveness goals is likely handled on a less formal basis by private or quasi-private operations. Our law addresses both forms of espionage by encompassing perpetrators "intending or knowing that the offense will benefit any foreign government, foreign instrumentality." (18 USC Sec 1381). However, it is likely that the tools that can be used to address these two different types of conduct differ.

There may be a stronger case for a WTO case when trade secrets are stolen by a state actor. The TRIPS Agreement requires that "Members shall protect undisclosed information" (Art. 39). This language imposes an affirmative obligation to protect and, by inference, not to steal trade secrets. There are also other WTO remedies that may be available to address inadequacies in China's trade secret regime, including the non-publication of foreign-related trade secret cases, discrimination against foreigners in trade secret cases involving technologies of interest to China, the availability of a mechanism for file patents anonymously in China (thereby facilitating patent disclosure and Chinese ownership of foreign trade secrets), and the low availability of preliminary injunctions for trade secret misappropriation. Another tool that the United States should adopt is to ensure that non-compete agreements are available to US companies internationally to provide more immediate and easier relief that prevents trade secret misappropriation by competitors.

With regard to state-inspired trade secret misappropriation, greater use may be made of predictive analytical tools as well as analyses of Chinese industrial policies to determine which types of technologies are most vulnerable to Chinese trade secret misappropriation. One initial step might be to track prior prosecutions by the FBI by the technologies identified in Made in China 2025, to better determine if the FBI has targeted technologies of key interest to Chinese industrial development. The FBI should be encouraged to work with USPTO to develop a better understanding of targeted technologies.

Greater resources may also be provided to the USITC to support small businesses filing Section 337 cases involving trade secret misappropriation.

Finally, USDOJ may wish to develop deeper relations with individual states and with foreign countries to support information sharing and joint prosecutions. Internationally, this can be done through mutual legal assistance treaties and agreements. (MAC)

4. *How important are strong IP protections to sustaining U.S. leadership in economically and strategically important industries that are R&D intensive?*

Answer:
One measure of an economy is its level of national competitiveness which is defined as economic and technological competitiveness and national security. Intellectual property (IP) is important engine to maintaining or increasing each of the three areas. IP, and in particular patents, can be used to provide a competitive advantage, specifically as technology control positions. A patent is a "negative" right. In theory, the owner of a patent has the right to preclude anyone else from using the patented invention, unless specifically authorized by the patent holder.[1] Patents have another important attribute, as a technology control position.

"*Patents help innovative entities straddle the dimension of time. Savvy entities protect innovation value streams both in the present and in the future via a portfolio of patents. Many leaders think of intellectual property, and patents in particular, as simply a necessary defensive expenditure. But experienced leaders realize that intellectual property is a type of real option that connects current R&D investments to future benefits inclusive of the ability to control and manage outcomes at a later point in time. The difference between these two points of view is significant. Under U.S. law, a patent is a right to exclude others from making, using, or selling the patented invention. These rights mean that others must have the patent owner's permission to practice the invention claimed in the patent. Therefore, the patent owner "controls" how the patented technology is to be utilized and holds the option to exercise that right throughout the life of the patent. Patents are, therefore, real options on control positions, or simply for ease of discussion, control positions. The real option nature of patents, however, nonetheless provides key insights on their optimum use as control positions. Entities file patent applications hopeful that the resulting patent may prove to be of some use or value in the future. Often one or more of these future anticipated uses of a patent, such as licensing, technology transfer, influencing standards-setting or other technology adoption, or stopping infringement, fails to materialize. In such a case, the patent option is null. But, if one of these uses were to come about, the patent option is "called" and the patent often assumes a significant amount of value through that use. That value, or future return, varies depending on the precise use and may not materialize at all. Thus, not all patents are equally valuable. Entities, therefore, try to file as many patents to obtain as many options to assert a control position in the future as possible. The first and most obvious means of using patents as control positions is to obtain them at all. Every such control position a U.S. entity obtains is one that its adversaries do not obtain. In the context of Innovation Warfare, patents can be used to own and control relevant technology future(s) for U.S. interests. Either a U.S. company can own and control a*

[1] This was largely true until 2006, when the U.S. Supreme Court, in its wisdom, decided to increase the burden on patent owners to obtain injunctions, even against intentional infringers of valid patents. eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388 (2006). This case is one of several such cases that have led in large part to the decline in innovation.

relevant patent asset, or the U.S. government can own and control the patent asset. In either scenario, a U.S. entity, not an adversary, owns and controls the patent asset."

Most executives understand that patents are options on potential technology futures. Companies that are sophisticated about their IP strategy both blanket strategically interesting technology areas with patent options and take efforts to ensure that their desired technology future is one that the industry ecosystem will ultimately choose and accept. For patents to be used as technology control positions, they need to be able to exclude others which provides an incentive for companies to either license the technology or risk going to court to adjudicate the answer. The Supreme Court over the last 15 years has made a series of legal decisions which have seriously eroded the right of a patent to exclude others. Thus, the Supreme Court has been effectively creating innovation policy through their legal decisions, which has resulted in more ambiguity regarding what can and cannot be patented, whether or not a patent is valid, and what is the effective remedy if one's patent rights are upheld? Regardless of the industry, Executives want more reliable patent rights which translates to clear criteria for disclosure, obviousness, and eligibility. Additionally, you would need to bring back injunctions to be able to effectively preclude others from using your patented technology without the patent owner's permission. Additionally, one would need to review how damages are calculated, as in my 30 years of experience, less than 5% of large corporate portfolios are truly valuable. Damages need to be updated to reflect this reality, particularly in technology areas with large numbers of patents to a product. While it is true, some patents are very valuable, most are not, and this should be reflected in the damages model. (SH)

5. Have changes to U.S. patent law contributed in some way to our nation's inability to keep pace with China? If so, what reforms to our patent system are necessary?

Answer:
As was stated above, Executives want more reliable patent rights which translates to clear criteria for disclosure, obviousness, and eligibility. Additionally, you would need to bring back injunctions to be able to effectively preclude others from using your patented technology without the owner's permission. The USPTO should ensure that both the examiners and PTAB judges are using the same decision criteria and applying them in the same manner to ensure that patents issued by the agency have the highest probability of validity. (SH)

Instability in patent eligible subject matter may contribute to waning competitiveness in several ways: (a) patents may not be granted or deemed unenforceable; (b) the patent may be deemed to be unstable or unclear in light of unclear precedents; (c) the patent may be granted in overseas markets, thereby encouraging investment and economic growth in those markets at the potential expense of the US market. (MAC)

In addition, our US patent system has lagged behind China in terms of engaging with small businesses, women and underrepresented minorities to encourage their contributions. The cohort of small businesses filing for patents in the United States is smaller than China in both absolute and relative terms. China also has low-cost mechanisms, such as utility model patents and expedited patent litigation, that reduces costs for its own inventors. (MAC)

6. **In 2022, the Biden Administration helped lead an effort to waive IP rights on COVID-19 vaccines. After decades of pressing the world to strengthen and respect IP rights, the U.S. is potentially now seen as willing to give away valuable U.S. technologies to foreign competitors. Despite the President signing a bill announcing a formal end to the pandemic, the Administration is considering granting additional waivers – this time for the production and supply of COVID-19 diagnostics and therapeutics and there have been talks to expand waivers to other technology areas.**

   a. **Is waiving IP rights the way to solve global problems?**

   b. **How do our foreign competitors view this sort of posturing, which comes at the expense of our nation's IP system?**

   c. **What cost does this waiver exact terms of lost jobs, investments made, and capital flowing to other nations?**

   d. **What are the risks to innovation and to U.S. leadership in these fields if waiving IP protections becomes the norm?**

   Answer:
   6(a): Waiving IP rights may be a tool to address national emergencies, as part of a toolbox of various tools, with just compensation provided to those affected by such a measure. Other measures are much less invasive and should be prioritized in lieu of IP rights waivers, including supporting delivering of leading edge medication from US manufacturers, addressing issues in health care delivery, assisting with measures that address extensive risks posed by counterfeit and substandard medicines, and supporting the licensed manufacture of active pharmaceutical ingredients through patent pools, licensing and other voluntary mechanisms. Voluntary mechanisms may also be faster, more flexible and more adaptive than state mandated waivers.

   6(b): This type of posturing is viewed as a weakening support by the United States for protection of IP in global markets and is a win for those who are opposed to intellectual property or who are global strategic competitors.

6(c): I have no data on lost jobs, investment, and capital flow. Additional factors are a reduction in investment incentives, an increase in incentives to relocate to countries that oppose waivers, an increased reluctance in incentives to cross-license or codevelop new medications due to instability in economic incentives from patents, and possibly increased reliance on trade secrets to protect new innovations in order to minimize costs from patent infringement, if circumstances of the invention suggest that trade secret protection would be sufficient.

6(d): Extending additional mechanisms for waiving IP rights such as were originally negotiated in the TRIPS Agreement or in the Doha Declaration, are part of a continuous effort to erode IP protections. As these protections erode, the fundamental reasons for the US supporting the creation of the WTO and the TRIPS Agreement, are further compromised. There is also additional erosion possible in national treatment of US companies in foreign countries by reason of internationally sanctioned appropriation of foreign IP rights. Further erosion is possible in other technologies.(MAC)

7. Malicious foreign actors sometimes use the U.S.' system and culture of openness as a weapon against us. The Global Intellectual Property Center found that online piracy costs the U.S. economy at least $29.2 billion in lost revenue annually. Other democracies, such as the U.K. and Australia, have developed what some consider more effective means to enforce their rights online than we have here in the U.S.

   What can Congress do to address this purported gap and what can the U.S. government do to ensure that the U.S. supports progress towards more effective online enforcement?

   We believe that questions 7 and 8 are best directed to Patrick Kilbride from the US Chamber of Commerce (SH & MAC).

8. Which countries besides China should U.S. foreign policy focus on, and what are the best tools at our disposal to monitor and combat their behavior?

   We believe that questions 7 and 8 are best directed to Patrick Kilbride from the US Chamber of Commerce (SH & MAC).

9. What should the U.S. government be doing with its allies in the Indo-Pacific region to ensure that the U.S. does not forfeit its leadership in IP to competitors like China?

   Currently there is limited appetite for new Free Trade Agreements. As a consequence, the United States risks losing its prior leadership role in supporting increased international IP protection and gap filling in older IP-related agreements, such as the TRIPS Agreement. China has signaled its intention to join TPP. Moreover, China and many economies have

signed on to the Regional Comprehensive Economic Partnership which also includes significant IP commitments.

Notwithstanding this significant impediment, there are additional steps that can be considered to advance US interests in intellectual property overseas until a new consensus emerges on free trade agreements. The State Department, USPTO and the State Department should continue to advocate for higher IP standards at international bodies, including WIPO, WTO, UNESCO, ITU, Interpol, WCO, and WIPO. The USPTO also has numerous bilateral or plurilateral agreements, including among the five largest patent, trademark and industrial design offices. US Customs, USDOJ and the Copyright Office also enjoy important bilateral or multilateral agreements.

Offshoring and de-risking of supply chains with China also creates an opportunity to support stronger IP protection. The US government may wish to consider focusing on improving intellectual property in those economies which are benefiting from US reshoring, including providing technical assistance. Supporting IP in extended supply chains should be an interagency goal for all relevant US government agencies, including State, USTR, ITA, and others.

The USPTO IP Attaché program should be expanded to repositioned to provide greater support on IP-related issues in countries with increased importance to our economy due to their role in newly reconfigured supply chains. (MAC)

10. Huawei cannot build products with advanced semiconductors and their sales in the U.S. and elsewhere are severely restricted due to national security reasons. However, Huawei continues to accumulate U.S. patents and enforce patents in U.S. Courts.

    a. In light of this, is Huawei becoming a patent assertion entity?

    b. Does this seem like a deliberate strategy by Huawei to manipulate the U.S. patent system for their own advantage?

    c. Are there any other conclusions that we can we draw from this?

Answer:
10a. No. Huawei would love to sell its products in the US and globally, however because of the Chinese government use of their technology to commit spying/espionage against other nation states, they are not allowed to sell in the US. It is actually beneficial to the US to have Huawei litigate its US patents in the US courts, as our Article 3 justice system can be used to ensure that US citizens have a fair and reasonable system to adjudicate their rights. If you litigate in the US under a known set of principles, the result will likely be a settlement, of all world-wide claims. The result will have been achieved in a forum which US citizens

deem to be fair and equitable, using all the constitutional protections afforded under our system and with which they are familiar. (SH)

10b. Perhaps. Neither Mark nor I are aware of any data that could determine the answer to this question, nor do we have any public information to make a determination. (SH & MAC)

10c. Yes. The Chinese government is very adept at using the openness of the West against us. They are good at manipulating the system and US citizens to provide them with knowledge, expertise and technology because we have not effectively messaged this concern to our own citizens. We need to explain to Americans that the Chinese government is running an Innovation Warfare strategy against us and that they will go to great lengths to disguise their efforts to access technology and IP for their own gain. (SH)

11. Huawei has sued U.S. companies in Germany for their use of standardized WiFi technology. These companies are now at risk of injunctions that would block sale of their products there.

How can we work together with our allies to assure that Huawei does not weaponize the international patent system against U.S. industry?

Answer:
American business is very adept at normal competitive actions, such as pricing, litigation, etc. If Huawei is merely using its IP rights as part of normal competition, this potential litigation is fine. But if instead, Huawei is being aided and abetted by the Chinese government to help achieve its geopolitical goals and objectives, by using their unlimited resources, and assistance, to tip the scales towards a more favorable outcome for their company, than nation states are using the court system in a manner different then its intended purpose, and it is no longer a fair fight. This is the larger and more important issue that needs to be addressed. (SH)

12. In recent years, there has been growing concern about the involvement of foreign interests – and particularly of foreign sovereign wealth funds – in funding U.S. patent litigation. This potentially creates a serious risk is that litigation will be manipulated to the benefit of foreign competitors or with the intent of harming the competitiveness or technological leadership of U.S. industry. This risk is particularly concerning with respect to patent litigation because it often involves sensitive or emerging technologies.

Do you agree that the involvement of foreign governments in funding domestic patent litigation raises significant concerns with respect to U.S. national and economic security? If so, what can be done to adequately address this?

Answer:
Yes. First, the justice system should not be repurposed as an investment vehicle. Second, there is a need to allocate the risk of litigation in a way that allows all participants equal access to justice. Small companies often find it difficult to litigate against large competitors based on the different power and economic disparities. One way to allocate the financial risk is through insurance products rather than investment vehicles, as the insurance products can be regulated. Allowing foreign wealth funds to fund litigation allows them access to discovery information which likely contains sensitive technology information. (SH)

US judges should be required to have foreign funded patent assertion entities disclose government ownership or investment in the PAE. USPTO should also require disclosure of foreign government support for patent and trademark applications. (MAC)

13. **TikTok has a history of undermining artists and their intellectual property rights around the globe. In Australia, TikTok has used hit music to drive up the popularity of its platform, but has restricted user access to the copyrighted music, hurting artists and fans in an attempt to devalue IP globally. TikTok is not a trustworthy partner when it comes to protecting U.S. IP, creative industries, and user privacy.**

    What steps can and should the Congress and/or the U.S. government take to address this?

    We believe this question is best answered by others. (SH & MAC)

14. **America's copyright sector exported $230 billion in 2021. The core copyright industries account for more than 52% of the digital economy and 48% of the digital economy's employment. These initiatives that the Administration is negotiating – Indo-Pacific Economic Framework (IPEF), U.S.-Taiwan Initiative, Americas Partnership for Economic Prosperity (APEP) – include digital trade chapters.**

    Do you agree that it's imperative for these digital chapters to include obligations to provide meaningful enforcement and that U.S. Trade Representative Tai should not miss this opportunity to take action?

    Answer:

    I agree that IP chapters are critical to the successful implementation of IPEF, the US-Taiwan initiative, and APEP.

    The Administration may have limited negotiating leverage if we are not offering much in terms of reductions in market access restrictions (reduced tariffs, increased product or serve market access, etc.). Nonetheless, these agreements can espouse positive commitments that are not directly linked to negative trade concessions. These can include

increased support for technical assistance on IP, placement of IP attaches, availability of investment guarantees or political risk insurance, supporting collaborative research, assistance with standardization practices, MOUs with other USG agencies on IP and IP-relates issues, negotiations towards patent prosecution highways and exchanges of information with IP officials, training of officials, etc. In addition, the administration should still seek to gap-fill TRIPS Agreement and other treaties, through encouraging such measures as (a) enhanced transparency; (b) avoiding misuse of antitrust mechanisms; (c) encouraging criminal remedies for trade secret misappropriation; and (d) joint development of other best practices. If these packages are appropriately bundled, it may also be possible to obtain improved enforcement for IP protection and support US goals of securing our supply chains and improving IP protection. (MAC)