Welcome to CSIS. I’m Sujai Shivakumar, senior fellow and director of the Renewing American (Innovation) Project here at CSIS. It’s my pleasure to welcome you today to a conversation with Jonathan Barnett, professor at the University of Southern California, on the issue of the China challenge and patents.

Leading the conversation will be Andrei Iancu, who is a cofounder of the Renewing American Innovation Project, and a former director of the USPTO. So, without further ado, Andrei, I turn it over to you.

Thank you very much. Thank you, Sujai, for the kind introduction. Thank you to CSIS for hosting this event. And thank you for everybody for watching this program. And welcome, Professor Barnett. I very much look forward to our conversation.

But before we do that, very briefly, just by way of introduction, Jonathan Barnett is Torrey H. Webb Professor of Law at USC, the University of Southern California. And he is the director of the law school’s Media, Entertainment and Technology Law Program. Professor Barnett teaches primarily intellectual property law, antitrust, along with a whole host of other issues that he focuses on, including contracts, corporate law, and the like. Professor Barnett, prior to academia, worked as a lawyer in private practice.

He has an undergraduate degree from the University of Pennsylvania, a Masters of Philosophy from Cambridge University, and a J.D. from the Yale Law School – a stellar combination. Obviously, you’re not UCLA Law School, but we’ll forgive you for that transgression. Professor Barnett is highly published as well, with lots and lots of academic papers. Most importantly, last year he published a terrific book called “Innovators, Firms and Markets: The Organizational Logic of Intellectual Property.” And he currently is working on a new book, and we will talk about both of them now.

So, let’s start, professor, with perhaps you can tell us a little bit about your book that was published last year.

Sure. Thank you, Andrei. And thank you to CSIS for the opportunity to speak to you today.

The book that you mentioned looked at 120 years of U.S. economic history and legal history. And what it shows is that the source of U.S. competitive advantage in the innovation economy relies, to a surprising extent, on the patent system. Why is the patent system so important? Because the patent system often levels the playing field between the inventor, whose key asset is an idea, and large, established companies
who have scale and scope that is very difficult to compete with.

If you look at some of the most fertile periods of U.S. innovation history – the late 19th, early 20th century where we get inventions like the airplane, the automobile, electrification, early wireless communications. You look again at the late 19th, early 20th centuries, you get the biotech revolution, and you get the smart phone revolution, what you see in common in both of those areas, robust enforcement of patents and creative disruptors coming into the innovation economy, what I like to call maverick inventors who have a new idea, that challenge the dominant design. Patents are part of the magic that makes that happen.

Why? Because patents bring in risk capital that allows them to cultivate the invention and to disrupt the established market. And I saw this pattern repeating itself over and over. Why did I write the book? I wrote the book because our current policy trajectory is undermining the source of this competitive disadvantage by weakening the patent system, the infrastructure that is part of this creative disruption engine that makes our innovation economy so unique.

Mr. Iancu: So, I do want to segue in a minute to your new book and what you see the future holding, but let’s delve just a little bit deeper for our audience into the reasons as to why the patent system and patents in particular play such an important role in innovation creation, disruptive innovation, and overall economic growth.

Because there is an argument that some are making that, look, innovation just happens. It will happen if you provide the right economic conditions. You invest sufficient resources, both from the government and private sector, in research and development. And then all the patents will do after that is effectively pull the ladder behind you – behind the innovators, to that it blocks access to the next generation of innovators. And the argument says, those folks who make that argument will say, why can’t we just make it free for all? Wouldn’t that be better, and more readily accessible if we just – we create innovation and just let everybody just have free access to it?
Prof. Barnett: Sure. Well, we don't have to guess the answer to that question. From roughly the late 1930s through the late 1970s, as I discuss in my book, we pursued that very same policy. The federal government at that time was the chief funder of R&D, and the R&D was subject to various types of legal contractual restrictions that made it very difficult or, in many cases impossible, to patent the fruits of that R&D, and to then take that into the market. If you look at committee reports during that time, agency reports, there's consistent reports about the reluctance of the private market to commercialize that technology.

And what the agencies and the committees start to realize is, what's the missing piece? The missing piece is a property right. It simply is not commercially rational for a private market to sink the tens of millions, sometimes hundreds of millions of dollars that are required to take an idea that is funded at the basic research level and to do all the work that's required to turn that into a commercially and technically viable product.

What happens when we rejuvenate the patent system, as we did in the early '80s, when we take away the restrictions on patenting federally funded R&D, which we did with the Bayh-Dole Act in 1980? We see a flowering of innovation. The biotech revolution, the start of that, coincides almost exactly with the resurgence of the patent system. This is – this is a success story not just for innovation. It’s a success story for competition. What happens in biotech? Instead of all of the R&D and commercialization happening inside big pharma, we have startups doing that, partnering with big pharma. Again, it's the patent that makes that happen. It allows the inventor to attract the risk capital, and it allows the innovator to safely interface with a larger company.

Mr. Iancu: In your various research, have you found any example in economic human history where explosive innovation growth has happened in the absence of a robust intellectual property system?

Prof. Barnett: Yeah, let me be clear. I am not of the view that if we were to drastically continue to weaken the patent system that innovation would come to a halt. Because if we look at economic history, at least in the U.S., what we find, again, if we look at that postwar period – is that an innovation desert, the postwar period? Not at all. But where did innovation take place? It took place inside large corporate labs. AT&T, which had statutory national monopoly, GE, DuPont, RCA.
So, what happens when you pull the patent system out? You get what I call a hierarchical innovation economy. The entrepreneur doesn’t have a place anymore because they don’t have a viable business model. Let me illustrate this for you with a data point. In 1957, according to NSF data, roughly 5 percent of all private R&D expenditures were attributed to small firms, the finest firms, with less than 1,000 employees. Let’s take that all the way through 1980, where we continue to have a weak patent system. Antitrust makes it very difficult to license IP. What’s the number in 1980? It’s roughly still around 5 percent.

We now have the resurgence of the patent system with the establishment of the federal circuit in the early ’80s and Bayh-Dole. By the 1990s roughly a quarter of all private R&D expenditures in the United States are now attributed to small firms. Why is this happening? Again, the property right equalizes the patent field between the inventor, between the maverick, and the established firm. This is – again, it’s a success story for innovation. It’s a success story for competition. And segueing, I think, into some of the topics we’ll be discussing today, it’s a segue for the U.S.’s national competitive advantage in the global economy.

Mr. Iancu: OK. So, with all of that in mind, despite all the evidence of success that a robust property right provides for economic growth, there has been a trend and an effort in the past decade, maybe more, you’ll tell us, to rewrite the rules and to weaken the intellectual property system. Can you talk a little bit about that? And maybe this is an opportunity for you to tell us what your next book is about that you’re working on.

Prof. Barnett: Sure. I think the key juncture point, if we just want to zero in on a particular event, would be the Supreme Court’s decision in 2006 in the case involving eBay v MercExchange. And while the court may or may not have intended for this effect to transpire, but the way that that decision has been interpreted by the lower courts is that to simplify matters to a certain extent in the IT space today, it is very difficult to secure an injunction against a – against an adjudicated patent infringer.

So, let’s appreciate what we’ve done there. In the IT space today, inventors are operating under something like a compulsory licensing system. What is – what is the problem with this? Well, if the patent equalizes or does something to balance out the playing field between the maverick inventor and the large established firms, well, when we weaken the patent system – and specifically we weaken the key property-like feature of the patent system – what we’ve done is we’ve made that playing field again uneven for the benefit of firms that have more resources to litigate, that have the resources to take existing innovations and to turn them into products where, in many cases, compensation is not being made to the individuals and the firms that invented that in the
Building on my previous research, again over a century’s worth of research, we are heading down a trajectory where we’re undermining the source of disruptive innovation that is the key distinguishing feature of the U.S. innovation economy. Other countries innovate, but we innovate from the bottom up. We innovate through the entrepreneur. And the patent system is essential for that. My new book is about that. My new book is about how the rules of the patent system have been rewritten – in many cases inadvertently, with the best of intentions – in a way that undermines the property right system that is the – that is the backstop, that is the infrastructure that is necessary for an entrepreneurial innovation economy.

Mr. Iancu: Who benefits from rewriting the intellectual property rulebook to weaken the property right?

Prof. Barnett: Yeah. What I think has happened here is that we’ve had a confluence of the views of certain advocates – again, with the best of intentions – to open up the – open up information assets to increase access. And on the other hand, we have certain portions, not all, certain portions of the tech industry that operate under a business model that thrives under a weak intellectual property system. It’s a business model that takes informational assets, that aggregates it, that assembles it. It’s an innovative contribution in its own right. However, over the longer-term trajectory it’s not healthy for the innovation ecosystem. Again, why? Because it takes away the property right that is necessary for the innovator to attract investment and to translate that innovation into commercializable products.

Mr. Iancu: One industry group in the United States that clear benefits from a weaker IP system are the established, large, big technology companies. First of all – well, let me just ask, why is that? And then, I’d like to explore who else also benefits – has an aligned interest. But, I mean, established firms inherently benefit from weaker intellectual property rights to some extent on balance anyway, to prevent a disruptor coming through, as you have indicated. But why in particular the big technology companies? Because there are other big companies out there that perhaps don’t benefit to the same extent. Like the big pharma companies, it’s a different model. Some big manufacturing companies in the traditional space. Why in particular the big tech companies?
Prof. Barnett: Yeah. So, let’s – to make things simple, let’s set aside pharma, because pharma is an area where, big or small, we’re not familiar with any known business model today that is not patent dependent in pharma. But to address – so in IT, we have a greater diversity of business models, to the extent to which they are dependent on the patent system. So, a large, integrated firm, if we look at AT&T from the postwar period or we if we look at Google or Apple today, why are they not dependent on the patent system? Because they’ve constructed an integrated product services ecosystem where, whether they innovate or whether they use innovations that have been innovated by others, it can be monetized within a complex product services ecosystem that is very difficult for anyone else to replicate.

But who is dependent on the patent system? There’s two types of entities that are dependent on the patent system in the IT space. One I’ve mentioned, which is our hero the maverick, the individual, the small firm inventor. The investor’s only asset is the idea, the technology. The inventor requires capital. It requires the infrastructure of the larger firm to monetize that component. And the inventor needs that patent to safely interface with the Google, the Apples, or, in the old days, AT&T, RCA, and so forth. It makes that transaction happen. It’s actually good for both parties.

There’s another entity, which is not necessarily of small size in the IT space, which is dependent on the patent system. And that is an entity that monetizes innovation through a licensing structure. These are today’s idea factories. Thomas Edison in Menlo Park, New Jersey called his – called his enterprise an idea factory, an invention factory. In the wireless space, if you’re using your smartphone, the brains of that smartphone are being invented and refined day-in, day-out, by only four or five companies located all in the U.S. or Europe. They all rely on the same business model. It’s a licensing-based business model. They generally are not manufacturers of the devices that we use, but they’re manufacturers of the chip designs and other components that make that happen. The patent system is necessary for that business model to be commercially viable.

Mr. Iancu: At the same time, we are in a global technology competitive race with China – and other countries, but mainly China – given their size and focus on gaining a competitive advantage. Where does China play in this international IP ecosystem? And how do they view, on balance, the strength of intellectual property rights?
Sure. What’s really interesting, and part of what the new book is about, is that domestically we have a conflict of business models in the IT space. On the one hand, we have the integrated ecosystem-based business model. This thrives under big silo-type ecosystems. There are very few companies that can sustain it. On the other hand, we have what I’ll call the brain trust model, which is based on focusing on the invention factory and licensing that out to tens, sometimes hundreds, of device producers.

This conflict between business models then recapitulates itself at a national/international level, because, again, focusing on the wireless industry, the China-based companies who are leaders in the wireless space, they use an integrated model, or they are only device producers. They are generally not located at the top of the tech supply chain. And for that reason, they are using far more IP in general than they are making. And of course, their rational interest is therefore to adopt policies, whether it’s through patent law, through antitrust law to the extent it impacts patent law, to devalue IP rights.

For the very simple reason that if you’re operating through an integrated model, if you’re at the middle of the supply chain, you’re not generating the technological inputs that make the device happen for the most part, IP is an input. And like any manufacturer, it’s perfectly rational to take every step that you can to reduce the price of that input as low as possible. What’s unique about China is that they seem to have used their patent and antitrust law policies and apparatus in service of the device – local device producers, to reduce their input costs. And I can talk a little bit more in detail about how that has happened.

I’d love you to do that, but what I’m wondering first is does China, as a whole country, behave approximately, collectively, like a large, established, integrated product company? And the reason I ask that is, if on balance they are net – meaningfully a net consumer of other people’s innovation, as opposed to a net producer of original innovation – don’t they, likewise, want to reduce just overall the price of accessing that innovation and acquiring as much as it can, through whatever means, but at a lower cost?

Yes, absolutely. In the wireless space – and I don’t want to speak more generally – but in the wireless smartphone space – and let’s understand, actually, what’s at stake when we talk about wireless. Because we are no longer – as we move into 5G and 6G further out on the horizon, we are not just talking about smartphones. We shouldn’t even – instead of the word “wireless” I’ll try to use the word “connectivity.” We already see this moving into the – into mobility space, right?
Mr. Iancu: The automobiles.

Prof. Barnett: With the automobile. The car today is a computer on wheels, right? It will move into the smart home, the smart buildings. So, it’s very hard to overestimate the importance of this particular industry. And again, as you said, in the current configuration, to the best of our knowledge, the China-based companies that are – that are leaders in this area, they are leaders in device manufacturing. They excel in processes and in developing processes. However, they are not leaders at the very top of the supply chain and therefore, as a result, through business negotiation, through business practices – but what is – again, what is unique about China? It’s that the patent and antitrust laws have been deployed in service of a national interest, a rational national interest, in reducing the costs of that particular input, which in this case is technology.

Mr. Iancu: So there seems to be an amazing alignment of interests between the large, established technology IT firms in the United States and Chinese national interests, at least with respect to connectivity issues.

Prof. Barnett: Absolutely. And in my new book, I call this the accidental confluence, or the accidental alliance. It’s an accidental confluence of interests between the large platform tech business model of U.S.-based companies – again, why? Because in certain technology areas, technology for those companies, in your smartphone device but in all of the connectivity devices more generally, technology – certain technologies are an input for the platform companies. And therefore, in their advocacy and lobbying, it’s perfectly rational to push for policies that reduce patent protections and reduce the cost that is necessary to acquire those technologies.

That same business model is then extrapolated at the level of an entire country, in the case of China, where they’re located at roughly the same point in the supply chain, and therefore we see similar not only advocacy but implementation of these policies to weaken patent protections. This reduces the input cost for the producer or for the platform-based company. However, what is the harm? The harm is not only that it reduces the renumeration to those who innovate. The fundamental harm is that the ecosystem is damaged. Not only the national; the international, the global innovation ecosystem is damaged. Why? I go back to my original point: We need a disruptor. We need the maverick to have the incentives to go into that very risky endeavor which is known as innovation.

In particular, in the connectivity space, I don’t – it’s not widely appreciated why the licensing model is so beneficial to the market. And so let me just talk about that for a second. The licensing model is
sometimes disparaged as a tax. This really reflects a misunderstanding. The licensing model is a – is a win from a policy perspective because it pushes out the technology to every device producer who wants to use it.

What’s the alternative? The alternative is AT&T circa 1965. We have a national monopoly. Is it innovative? Yes, it is. But all the innovation is happening inside the AT&T silo. If we compare that to wireless, to connectivity, we have a handful of firms who specialize in innovation, but we have tens to hundreds of producers in the world who are able to produce the devices that use it.

Mr. Iancu: To some extent, it democratizes technology and innovation and economic growth, which is basically the core of the American experiment, so to say, and the great economic growth over the past couple hundred years.

Prof. Barnett: Exactly. It’s very counterintuitive. The patent system actually opens up access. Why? Because it takes the technology, and it puts it into what I call a property envelope. Now with that property envelope, I can put my technology on the negotiating table, we can set a price. Markets start to develop. We’re very, very familiar with this idea in tangible goods. We need property rights in order for markets to develop. The same logic applies with intangible goods, with technologies.

If we have a secure property right system if I know as an innovator that if you infringe my innovation, I can go get an injunction. Well, with that property rights backstop now we can start setting prices, we can start creating all types of primary and secondary markets that are based on those innovations. Now when we change the legal system and we say, well, you might not get an injunction, you probably won’t get an injunction, all of those markets start to degrade, they start to wither away. Does that mean innovation collapses? No. Innovation goes back to the silo inside the big – the big ecosystem model.

Mr. Iancu: Well, and I would argue – and not having done the personal research – but I would argue still that while innovation might still happen in that alternative system, where it goes back into a silo, it’s not going to be at the same level, because you’re going to have fewer firms, fewer people, fewer minds actively pursuing, competing against each other to bring out more and more ideas, and better ideas, it seems to me.

Prof. Barnett: Yeah, well – yeah. What technology history shows, if we look at the percentage of GDP invested in R&D, you know, over roughly several decades going back to the early 20th century, is that the share of – share of GDP allocated to R&D doesn’t move that much in the U.S. And so right
now where we are in the U.S., the share of – the share of GDP invested in R&D is about at historical levels. But what we do see is that when the patent system is weakened, innovation becomes conservative. It becomes incremental. And it’s about refining the existing design. And again, that goes back to my original point. Why is that?

Because the maverick doesn’t thrive in the big corporate atmosphere. The maverick thrives as a startup founder, as a startup CEO. But in many technology industries, the startup is not economically viable. It’s not – it’s not an attractive economic proposition to investors without the patent system to work towards rebalancing, equalizing the playing field in the interface between the large established firm.

Mr. Iancu: And in fact, to your point precisely, there a recent article in The Wall Street Journal from last month titled “Stagnant Scientific Productivity Holding Back Growth.” And they basically articulate precisely your point. R&D investment in the United States, it’s at roughly historical norms of about 3 percent of GDP, going back to the ’60s and thereabouts. Roughly about the same, give or take a little bit, through the present. Yet, the fruits of that effort, according to The Wall Street Journal, have been diminishing.

And the – according to the article, the best metric for it – the best metric for this is the contribution of innovation to growth. And it has slowed down to about half the historic rates. So, in other words, despite the fact of level, more or less, investment in research and development, the output of that is about half of what it used to be. And the article posits lots of thoughts and questions as to why that is. It doesn’t mention patents at all. But really, you know, it’s actually not that big of a mystery, right? What is the missing piece?
Prof. Barnett: Yeah, so I like to think of the innovation ecosystem in this ecological sense. We've got different parts of the ecosystem, and they need different policy instruments. So, I think the enactment of the CHIPS Act is a great achievement. And the money that's going into basic research is a great contribution because government has an important role to play in basic research. Basic research generates so many gains and so many positive externalities that it's often not rational for a private entity to fund that. And it's great, the focus on chip manufacturing, obviously essential.

But, yes, there's the missing piece. And the missing piece is how do you translate that research into commercially and technically viable products? And if you look at various industries, often the most capital-intensive – and it's also technically demanding – is the commercialization process. Taking the basic research and translating that into products that consumers and the target industry can use. That's where we need the patent system. The patent system creates the property envelope. It allows the inventor to interface with the VC firm. It allows the biotech inventor to interface with big pharma.

Let me illustrate this for you. We're coming out of the pandemic. One of the reasons the pandemic, thankfully, did not last any longer than it did was the amazing development of vaccines. And let's look just at one, the BioNTech-Pfizer vaccine. This illustrates beautifully this ecosystem model. The BioNTech-Pfizer vaccine built on many years of government-funded basic research into mRNA technology. But how is that translated into the actual vaccine that has helped millions, tens – hundreds of millions of people? Through a scientist-founded startup. The tech is transferred out of the academic space, it's protected by a patent. The startup attracts VC capital. The startup is able to interface with big pharma. Big pharma is necessary to bring the scale, the scope, the expertise to do the manufacturing and the testing.

So, I can't think of a better illustration of something that we're all familiar with. The benefit is tangible. And the patent system is – was critical for making that happen, just as the basic research is critical. But both pieces need to be there. Otherwise, what we're liable to do is we're going to throw a lot of money but we're not going to get a lot of value for our investment, as some of the data you're referencing is suggesting.
Mr. Iancu: And, going back to the CHIPS Act, there’s a very good example. You know, if fully funded the CHIPS Act promises to provide $200 billion worth over the next several years of taxpayer money into the silicon chip manufacturing industry. But there is nothing within the CHIPS Act or surrounding the CHIPS Act to address the weakening intellectual property system surrounding it.

And to your point, you know, there is a worry that, you know, we’re going to throw all this money at it and it’s going to dissipate. But to me, more importantly, if we really want to maximize the 200 billion (dollars), or however much we put into the CHIPS Act from taxpayer money, we want to leverage private industry alongside with it, and multiply the effects, and create a public-private partnership. How are we going to do that if private industry doesn’t have a reliable property right?

Prof. Barnett: Yeah, I couldn’t agree more. There has to be something done. Either the judicial trajectory reorients itself or legislative intervention or a shift in antitrust policy with respect to licensing of patents in the wireless space, in order to reset investment expectations. That when you invest money into translating basic/applied research into new connectivity products, and you’re successful in doing so – which only occurs a minority of the time. But when you’re successful in doing so, you will be able to reap the rewards from that.

And the other thing to appreciate is that when you have a secure property right, again, it’s not just about the innovator and the investors reaping rewards. But a successful innovation has, what I’ll call, a force multiplier effect that ripples throughout the whole economy. Think of all of the new business models – if you use Uber; if you use Lyft, if you use DoorDash, if you use Spotify. All of these are based on the wireless innovations that took us from 2G to 3G, where we went from voice into rich text and data transmission. That standard, the WCDMA standard, was based in part on the inventions of a small firm that relies – that relied and continues – no longer a small firm – continues to rely on a licensing-based patent model.

Mr. Iancu: You mentioned antitrust several times. So, I want to talk just a little bit about that. It is – antitrust laws and anti-trust regulations do overlap and work in conjunction with patents and intellectual property laws, and the intellectual property ecosystem. Let’s talk a little bit about that, because that regime, the anti-trust regime in the United States, has also come under attack. And to some extent, in an unhelpful way, alongside with a weakening of the intellectual property regime. Maybe you can talk a little
bit about that, and what are the examples in the antitrust world, and what should we do about it?

Prof. Barnett: Yeah. To fully understand the innovation policy in the IT space, but specifically in connectivity, mobility, wireless, et cetera, we have to look not just at the patent system, but antitrust. And why is antitrust so important? Because antitrust impacts licensing. It impacts what I can do with that property envelope. It impacts that force multiplier effect of how I – of the extent to which the innovator, who is not working under the integrated business models, not inside the big silo, how can that technology be monetized and disseminated throughout the market.

So unfortunately, since roughly the mid-2000s, where the Supreme Court started issuing decisions to weaken patent protections – roughly around the same time antitrust regulators in this country, competition regulators in the European Union, have been operating – with the exception of the DOJ antitrust division under the previous administration – have adopted the view that the license is a tax, that the standard essential patents in the wireless industry are inflating prices for consumers, and causing the market to grow at a lower rate than would otherwise be the case.

But everywhere that we look in the wireless industry, that doesn't seem to be the case at all. The wireless communications device, which we're familiar with in the smartphone, there is no technology in modern history that has been adopted more rapidly and more widely. And why is that? Well, if you adjust for quality, the prices of smartphone devices have actually been declining over time, which explains why they're adopted so widely. The licensing model, which is in turn based on the patent system, is part of the reason for that. Why? Because it pushes out the technology to any device producer who wants to use it, creates competition in the device market, it improves access to technology.

The policy of the antitrust regulators in the U.S. and EU in limiting and impeding the licensing and enforcement of patents in the wireless space have been posing a threat to what is an amazing success story. It's hard to find a bigger success story, either from a technology standpoint or an economic standpoint. That policy not only threatens innovation, it not only threatens to create an unproductive outcome from a competition perspective, right, but also it is eroding the source of the competitive advantage of the U.S. wireless and the European wireless industry – all of which rests on a business model which is focused on the patent system.
Mr. Iancu: I want to talk a little bit about the consequences – the ultimate consequences of all this. And here at CSIS, we are particularly focused on a variety of things, but national security is a major topic. So, you’ve spoken about, you know, the reasons what’s happening in the IP world, in the antitrust world. And the remarkable confluence of goals between the big technology firms and China’s interests. What are the ultimate consequences here? Is there an impact on national security, and why, of these various policies?

Prof. Barnett: Yeah. Thank you for that question. And this is why I was particularly interested in being able to speak to you today. It’s difficult to overestimate the significance of the wireless communications technology. Again, it’s not just about the smartphone. It will permeate every part of personal and business life. The U.S. and the European Union are currently the innovation leaders in this space. They occupy the top of the supply chain. They are constantly generating new innovations to make this wireless technology happen.

The business model on which every single lead innovator in this space relies upon requires a robust patent system. It also requires an antitrust regime that recognizes that licensing is, in general, efficient. It is in general competitive. And when we move away from that, when we make the patent system weaker, when we impede the enforcement of patents that are held by innovators in the wireless space, what we’re doing is we’re undermining the source of innovation. We’re actually reducing access to the technology because the industry will be forced to migrate to an integrated model.

But in the global competitiveness space, in the national – from a national security perspective, we are inadvertently, with the best of intentions, we are inadvertently undermining the source of the U.S. and Western innovation economy. It’s an entrepreneurial innovation economy. It’s a bottom up, it’s a messy innovation system. And it requires investment by entrepreneurs, it requires investment by the holders of risk capital. And at the end of the day, all of those stockholders need a secure, a robust property rights system in order to make all of that rational.
Mr. Iancu: Look, I couldn’t agree more. And I personally, likewise, cannot emphasize enough how important this is for the United States, and how critical immediate attention needs – how critically important that immediate attention is paid to this issue. China knows what it’s doing. It is very focused in innovating in its own way. Again, another recent Wall Street Journal article identifies that the current Chinese government is packing its ranks with science and technology experts. Nearly 40 percent of the total seats in the Chinese Central Committee have technical expertise. And they’re super focused on it. And they’re telling us that they are. The president, Mr. Xi, said, quote, “We must regard science and technology as our primary productive force, talent as our primary resource, and innovation as our primary driver of growth.” They recognize it at the highest levels. And for the United States to compete in the face of this increased and focused competition, from China and elsewhere, we have to maintain and improve our own systems. We have to compete in our own way. And the way we compete is through the private market, through disruptive innovation, and growth, as you indicate, Professor, from the bottom up. If we don’t attend to this, we have no other engine of economic innovative growth and we’re going to be left behind.

Prof. Barnett: Yeah. I couldn’t agree more. Putting my – the book I published recently, the book that I’m currently working on, we have over a century’s worth of history. We don’t need to guess. The most fertile, the most entrepreneurial, the most innovative periods in U.S. technology history, they’ve relied on the maverick inventor. They’ve relied on the entrepreneur. The entrepreneur needs the property rights system to make this happen. Again, to go back, but just to refine this point again, the basic research money from the government is critical. It gets the innovation engine moving. But the missing piece is that property rights system.

What the property right system does – we’re fully familiar with this outside the technology system, but the logic applies in tech as well. When you have a property rights system that is robust, that’s secure, the private market starts to invest. It allocates that capital to inventions that will take those wireless technologies and create all sorts of new business models, not just in communications, in health care, and in all manner of industries. That’s the magic of the U.S. innovation economy.

It’s a messy innovation economy. It’s not top down. It’s bottom up. But for
bottom up to work, it needs to have a patent system. It needs to have an antitrust system that recognizes that robust enforcement of patents and secure licensing of patents – it’s not a tax. It’s a force multiplier effect. It creates gains, not just for the innovator but it creates actually far more gains, of far higher orders of magnitude, of all of the consumers and the businesses that benefit from that.

Mr. Iancu:
Forward looking, do you have any specific recommendations for policy changes? What would be the most important things, immediate things, that should be attended to?

Prof. Barnett:
I would have two things on my wish list. I think one would be an explicit reaffirmation – it’s already there in the licensing guidelines on intellectual property at the agencies. But a reaffirmation, a recognition of the view that licensing is, in general, efficient. It’s, in general, pro-competitive. It is, in general, pro-consumer. I think that would send an important signal to the markets and bolster the licensing-based business model that, as we can see in wireless, produces all of those efficient and competitive effects.

My wish list on the patent system would be intervention by Congress to correct the eBay decision or, what I should say more precisely, the interpretation of the decision, to restore the presumption of irreparable harm. That if you have – that if you have shown that your patent is valid, if you have shown that it is infringed, that you are then entitled to an injunction. That will restore the property rights backstop. And what we’ll see, I would predict, is that you’ll see the risk capital market, the VC market, they will respond to that, and they will start putting money back into the areas that are patent dependent.

And it just so happens that some of the areas of tech economy that are patent dependent – IT hardware, life sciences – those are some of our most mission-critical industries today. And restoring greater security of property rights, resetting expectations would be good, again, not just for the innovators but, more importantly, for all of the consumers and the businesses that will ultimately benefit from that innovation.

Mr. Iancu:
Yeah, I mean, frankly, one of the most important aspects of any property right – whether it’s the land that you have for agriculture or your own home – whatever the property right is, or the personal property that you have, the watch that you wear, is the right to exclude others, right? The right to put the fence around it and keep others out or, if they trespass, to
evict them, and – or, if they take your watch away, to have rule of law that can get it back for you and prevent its theft in the first place. Any property right, in my view, again, I’m not an academic, but it seems like you need to have the right to exclude.

And for intellectual property, we know from the Constitution that the constitutional provision is to provide and secure for inventors the exclusive right to their discoveries. Now, I recognize that there are various academic interpretations of this. But the Supreme Court’s eBay decision that was – the way it was interpreted below, was to make it very difficult to exclude others, making it very difficult to actually have a property right in these intellectual assets.

Prof. Barnett: Yeah. And let me just add two things on that. In the wireless connectivity space in particular, where the U.S. courts are right now on the virtual inability to secure an injunction in that inventive space, we are becoming an outlier in that area. If you look at courts in Germany and the U.K., they are issuing injunctions in this – in this area. And, I should also say, historically that it has been through the grand sweep of U.S. patent history – it has never been in doubt, until the eBay decision, that if you – if the infringer is adjudicated to be an infringer, then you are entitled to the injunction. Which, again, is the signature element of a property right.

The other point is a more fundamental point I want to point out. Is that the right to exclude is also part of what I’ll call the enabling function of the patent. So, when you’re able to set boundaries between those who have – who have the right to use the asset and those who don’t, what happens? It enables a whole slew of transactions. Again, our biotech startup back in the early 1980s, all of a sudden, they are able to monetize that innovation, they are able to enter into licensing agreements with large pharmaceutical firms, or not just one, that innovation gets pushed out in the market.

When we take away the property right, that innovation is going to stay in house. And this is the counterintuitive point. When the patent system is weakened, markets actually tend to become less competitive, because innovation has to take place inside the small firms. So that right to exclude is actually – it’s an enabling function. It actually increases access. It also actually lowers entry barriers into markets because it makes it easier for startups to come into the market.
Mr. Iancu: And it actually increases competition in a dynamic way, you know, enabling more and more and additive new technologies.

Prof. Barnett: That’s right. And we can see that if we look at – if we look at advocacy, if we look at lobbying today, again, outside of the pharmaceutical space, we see other than firms that are relying on licensing-based business models, our large, established firms in the IT area have lobbied consistently – whether it’s in the Supreme Court, whether it’s in Congress – to weaken the patent system. Again, why? It’s either because technology is an input for those companies, in particular tech spaces, or they operate under an ecosystem model. Who is lobbying for strong patent rights? The venture capital community, small firms, and firms that rely on the licensing-based business model that disseminates technology. It’s a vertically disintegrated model.

Mr. Iancu: And you’ve said several times today that some of this lobbying to weaken intellectual property laws is done with the best of intentions. And potentially we have unintended consequences here, and potentially an unintended or accidental alignment with China. Yet, I’ve heard you in the past talk about, and I want to close with this – to give you an opportunity to talk about this again – I’ve heard you talk about the wonderful term that I like – I liked when I heard it from you the first time – about intellectual tyrannies. Maybe you can talk a little bit about what are those intellectual tyrannies. What do you mean by that?

Prof. Barnett: Yeah. What I mean by that is I think that our intellectual property policy discussions, both in the patent area and in the antitrust area, have suffered from a form of group think. Again, it’s this idea of thinking of the patent as a tax, the patent as a monopoly. And therefore, if that’s true, of course it makes perfect sense to weaken the patent system. Won’t we then open up the market, make it more competitive, make it more innovative?

Again, history tells us that that is not what happens. That when you weaken the patent system, the innovation system becomes distorted. Innovation skews towards the larger firms, and the larger firms are great at process innovation. They’re great at scaling up. They’re not good at disrupting their own dominant design.

And, again, I’ll close with a point I think I started. The secret to the U.S. innovation economy is the inventor entrepreneur. And the inventor entrepreneur has, over and over, relied on the patent system to equalize
the playing field. And that’s where I would hope that policymakers that are involved with the patent system and are involved with the antitrust system, that that is a point that can be more deeply appreciated.

Mr. Iancu: Professor, thank you very much. Tremendous insights. And I look forward to continuing the conversation.

Mr. Barnett: Thank you. Likewise.

Mr. Iancu: Thank you.

(END)