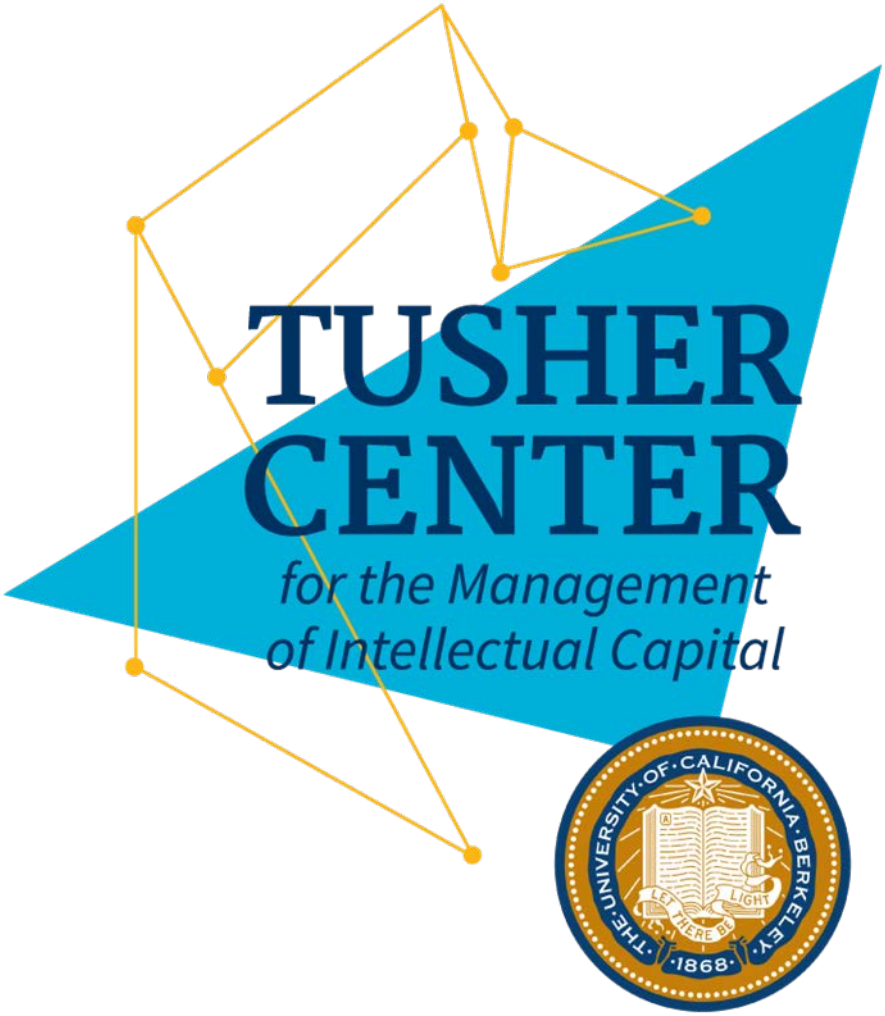

DAVID KAPPOS

Keynote Talk

First Annual IP Management Conference:

"Intellectual Property Issues in a Global Context: Management & Policy Concerns"

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Heynes Room, The Faculty Club, UC Berkeley

Haas School of Business

First of all, thank you very much, David Teece, for inviting me and for convening this first meeting of the Tusher Center and starting to get a research agenda going. This is extremely exciting and I'm really pleased to be here this morning. For me, it's a homecoming, go Bears! It's great to be back in Berkeley. And I'd like to note a couple of comments. First of all, the U.S. may not be good at everything, but we're good at innovation. That's a great comment to start the morning off with. I'll stipulate that by saying we're perhaps not great at a lot of things, but to say we're great at innovation is to say we're great at the most important thing. That is really critical to me. Innovation has been said a couple of times by the Dean-- thank you very much, by the way, for wearing a tie, it's good to be one of three or so counter-cultural people in this room [laughter], be different here in Berkeley.

It's wonderful to hear and to start a discussion based on the fact that innovation is where the action is, because I really believe it's right here in this Valley more than anywhere else on the planet. But it's also true on the other side of this country. In Japan, where I was a few weeks ago, and China, where I've been several times this year, it's true. It's true all over Europe - Northern, Southern - the Middle East and India. Everyone everywhere is talking about innovation. That's the first thing they say, and then the second thing they say, of course, is that this Valley is the model for it. So, Tusher Center couldn't be doing better things, and it couldn't be doing it in a better way.

So, in keeping with the desire of this group to get into a tangible research agenda and talk about things we can do, I'm going to do something I don't always do in talks like this. I'm going to focus on a couple of international themes, rather than just say it's important to study

innovation or the patent system. I would like to begin by talking about antitrust and its relationship with intellectual property, which I think needs to be one of a number of themes of the Center.

Antitrust is becoming increasingly important. It's a body of law that looks at the here and now and, in some ways, drives via its rearview mirror and gets too much precedence over another body of law that's all about the future. By that, I mean the patent laws and the innovation-related laws in general. So, let's look at a couple things. First of all, what I view as the dangerous effect of antitrust has run amok on an international level, with enforcement authorities overseas threatening to regulate patent licensing and patent enforcement practices well beyond their borders.

Second, I want to discuss how the overextension of the antitrust regime here in the U.S. is, in a very important way, a precipitator of what's going on overseas. We are not setting a good example by the way we are overapplying and overextending antitrust principles in this country and fueling the wrongheaded belief that antitrust should be used to check IP rights, wherein it really should be the other way around.

Let's start off this first subtopic, I'll call it international antitrust run amok. This is sort of sung to the tune of the following: how to use the competition laws to help national champions at the expense of consumers and everyone else. In other words, how to turn the antitrust regime right on its head. Take a hypothetical -- you've got an overseas antitrust authority in a big, important country. They declare imminent enforcement action involving patent licensing that will cover devices that are sold and used in the country, as well as those made in the

country, and some of them used in other countries. They do this regardless of the nature of the manufacturer -- it could be big, it could be small, it could be based in our country, it could be based in another country -- doesn't matter.

This is a hypothetical antitrust story. And then they say, "Uniformity applies to abuses of dominant market positions that eliminate, restrain or restrict market competition without distinguishing whether or not the devices made and sold in our country are for use in our country, and it is animated by the goal of safeguarding fair and orderly market competition." That's sounds really good, safeguarding fair and orderly market competition -- who wouldn't want that?

And then, this hypothetical authority wraps up by confirming plans for a remedial order, applicable to sales of devices licensed under applicable patents anywhere in the world, so long as the product is manufactured in the country. So that is an egregious hypothetical, an egregious nightmare example of an antitrust regulator threatening to flaunt all notions of international comity, ensuring that decrees run within its borders and not outside its borders, etc. It's so over the top that I bet you're thinking it could never happen other than in an academic environment like UC-Berkeley.

But it is happening. This is exactly the approach that overseas antitrust regulators are taking, or threatening at least, and I think they are running amok. It's an example of the way other countries are looking at the ability of their antitrust regulators to come after foreign interests for the express benefit of national champions, without any thought to local or

overseas consumers. Consumers don't matter in this regard; it's all about advantaging local champions over international competition.

Now let's step back with that hypothetical in mind and talk for just a minute about this intersection between patents and antitrust in international law. First, patents are created by an individual nation, right? They are rights that apply only within the nation's borders, you would say. So, an Indian patent is granted in India, it applies in India and it's governed by Indian law, and that's it. So when a product is sold or used in India, we would say the seller and user have to comply with the patent laws of India.

This holds even if the product is manufactured elsewhere, so the manufacturing is left aside in this equation. But, of course, since most patent laws do include coverage for manufacturing, it gets more complicated than that. Using and selling aren't the only ways that authorities regulate patent property and that's why this issue becomes legitimately complicated. You're talking about making, using and selling and at least two of those things, making vs. using and selling, can happen at different times. So we'll return to that concept.

The second major basic point is that the territorial scope of patents is consistent with a fundamental principle that every sovereign nation has the power to govern its own territory. So, with respect to patents, the idea is that each country has the power to determine boundaries for its own territory that are consistent with the treaties it has entered and agreed to, the extent to which patents will be used to encourage innovation, to allow public to benefit from ideas, etc. All the things that go into patent law.

Of course, to avoid intrusions into sovereignty between various countries, the terms on which a country's patents can be enforced and licensed have to be determined exclusively by that country's laws and their enforcement authority. So you get this strong notion with respect to the patent regime that you've got to keep inside your borders and not go outside your borders.

The importance of having each country regulate its own patents is palpable from both an economic and policy viewpoint as well as a sovereignty perspective. So much so that, say in academic circles, the sources are too numerous to cite for the proposition that international comity requires each country to regulate its own patents and not to try and regulate those of other countries.

To recap: basic rule, sales and usage of patented products for a given country are governed by the laws of that country, end of story. Sales and usage of other countries are governed by laws of those countries, end of story. No country regulates the licensing of another country's patents. Except, again, we have this inconvenient issue of manufacturing which is what complicates the analysis. So, with that in mind, where are we headed in a world where this basic principle breaks down? And this is where we're going to get a possible research agenda.

Where this basic principle breaks down, either due to the complication of the manufacturing right or for simple national power grabs, managing local champions, or for whatever reason that a single nation’s regulators may say, "We really do want to extend our power on patents.” Well, here's where we're headed, it's called chaos. Regulating license terms

governing the sale and use of patented products in another country creates chaos for international antitrust importing.

Here are some examples. Think about the conflict and confusion in the enforcement of competition laws when you cause an international system to have overlapping and inconsistent regimes, which is exactly what you get when you have more than one antitrust authority governing the use of patents in a single country. You've got transactions with consumers, foreign countries that become subject to two, or maybe even more, and more conflicting sets of legal requirements. You've got legal requirements governing supplier sales of patented products in the same country, varying depending on the country that the product was manufactured in. You get the same product but if it was made in Country A vs. Country B, once it gets into Country C it's got to be treated differently -- you can't manage that. Sellers will face inconsistent requirements if a country where the product is made imposes one set of obligations and the country in which the product is sold imposes a different set of obligations.

Consumers will find economic choices governed not by the laws of their own country, but by foreign government's policy judgments regarding nations, competition and consumer protection outside of their own borders. So this topic of the effects of national antitrust authorities imposing their judgment about competition in ways that extend beyond their borders is, to me, a very ripe target. It is becoming more and more important as antitrust authorities all over the world, in more and more countries, gain steam and want to use policies that, while operating under the color of antitrust, are actually designed to advantage national champions rather than consumer welfare.

So what do we need to do to avoid this chaos and return or move to a more orderly antitrust regime? Well, it's not that hard, actually. We need to apply the principles of comity that we are already familiar with in the international legal regime. International law, of course, respects a sovereign's right to regulate transactions in which it has the greatest interests. This includes transactions regarding patent rights that the sovereign created and the regulation of foreign patent rights, as I've already mentioned, violates this internationally.

But under the basic international comity principle, national antitrust laws govern only conduct having substantial and direct effects on regulating a nation's markets. National antitrust should not interfere where another sovereign has a greater interest. So you get the sense right away for weighing or balancing interests in this area. There are two major points that illuminate the basic rule. First, patents issued in a country primarily affect that country only. You've got to anchor the analysis or view that a patent issued in India primarily affects activities in India. A patent issued in China primarily affects activities in China. Patents issued by a national sovereign are governed, and should be governed exclusively, by that sovereign's laws and have no application outside the domestic market. If you take that concept forward, what you say is that there's no competition for licensing or enforcement of patents across national boundaries.

Now you're starting to hear concepts that echo antitrust. If there's no competition across national boundaries, then you would say the price of a patent in the U.S. does not affect the price of a patent in China. These are different items of commercial impact. If the invention is valuable you may get some impact because of the counterpart patent in China to a patent in

the U.S. both based on the same invention certainly can have a varying impact, depending on the quality of the invention. But if you take a random set of patents, you'd say there is no relationship between the value of the patent in one country and the value in another. So the only technology licensing market in which competition is affected by license terms by a country's patents is just that specific country. To regulate royalties charged in another country is to regulate conduct having no meaningful effect on the domestic market.

I'm tying in antitrust concepts here to say courts and antitrust authorities worldwide have limited extraterritorial application of their antitrust laws to reach only that foreign conduct with substantial anti-competitive effect on competition in their domestic market. Now, I'll end this portion with the way the English House of Lords has put it: "Claims to extraterritorial jurisdiction are particularly objectionable in the field of antitrust legislation because, among other reasons, such legislation reflects national economic policy which may not coincide and may be indirectly in conflict with that of other states." So, this is the English House of Lords reflecting on this intersection between international antitrust and intellectual property and saying you've got to be really careful and you've got to draw in your impact or you will be overstepping into the boundaries of other countries.

For my last point, let’s focus on international comity. International comity principles require declining jurisdiction when a foreign sovereign has a superior interest in regulating the relevant conduct. Even where two countries have formal authority in their laws to regulate conduct with effect on domestic commerce, the country that has less right and for whom the

impact is more indirect will, under international comity, refrain and let the sovereign that has more direct interest be the one to decide conduct.

Comity thus provides limitation on the exercise of jurisdiction and helps ensure that the nation with the greatest interest -- and that balance is coming up -- the greatest interest in each case is able to apply its laws and policies, recognizing that not every nation arguably having an interest in the situation will have the greatest interest. It's the nation that has the greatest interest that should be operating in this area. So, comity principles serve to provide, in my view, a very strong backdrop here and in terms of the research agenda for our overseas antitrust counterparts, helping them see the importance of respecting comity, understanding comity and applying comity so that it's not just some kind of a convenient American concept that's being forced on them because the Americans don't want them enforcing their antitrust laws on Americans, but because it is a matter of international reciprocity. This is exactly the kind of research that I think the Tusher Center has the natural respect and objectivity to be able to come out with views that are going to be helpful to the whole legal system.

I think, in the end, this issue of comity and appropriate application of antitrust regimes is going to be definitive but centrally important in the next few decades of the 21st century as intellectual property and antitrust come more into contact. So that's the international dimension across which threats to govern patent-based transactions extraterritorially, in my view, threaten so much chaos.

I said I'd talk about two topics, so I will spend a few minutes on the other one, focusing back where David started -- what are we doing in the US that is leading to so much chaos, and

what kind of example are we setting in this country? This is the section I call domestic bad example. So what are we doing that is inviting countries that need the strength of their IP systems, inviting them instead to weaken their IP systems and damage the value of IP in the U.S. and their own countries under the guise of antitrust enforcement? This is another “sung to the tune of” and the tune isn't a very good one. So here's what's going on. We've got this domestic situation in the U.S. right now in which critics are all too cavalierly seeking to heap reform on top of reform on our own system and putting it under its own sort of domestic siege.

While at the same time, you've got this surge in favor of cheap access to today's technology using the antitrust laws. This is the point that David made early on. It's certainly easy to get cheap access to today's technology. You could get rid of the IP system and you'll have cheap access to today's technology, but the problem is you won't have much in the future, and that's what the issue is here. But, ironically, this is happening against the backdrop of some of the most fiercely competitive industries in existence. Against that backdrop, we're seeing the competition law being used to destabilize and debilitate the strong innovation incentives provided by patent protection.

So, I'm going to leave it to others today to come back to this issue of the advisability of the new IEEE rules on standard essential patents and the DOJ's overly prompt endorsement of them. I would, though, encourage us to take a step back and ask what data there is -- right David, there's a topic of data? Without the rhetoric, what data is there that would suggest that these major IEEE policy shifts were needed? All right, let's take a look at this. In this case, the new IEEE SEP rules came on the heels of the IEEE's creation under its old policy of 802.11, which

IEEE itself counts as a heritage accomplishment. Perhaps the single most important standard to the history of mankind was created under the old rules not the new ones.

It seems to me just a little odd that the demonstrated success of the old policy in creating one of the most important and successful standards known to mankind would provide the groundswell to throw out the old policy in favor of a new approach that, whether good or bad, overall unquestionably tilts the field in favor of standards implementers over innovators. So it's a question of whether IEEE has taken a page out of the playbook of the commissioner of the U.S. patent office in the late 1800's who made the infamous statement that all important inventions had been created as of that time. It feels like a replay, doesn't it, of the same issue?

Now, as with legislative reforms, many of the supporters of an antitrust solution to the patent problem, as it's called, rely on a narrative rooted in emotional appeals. Forget about data, this is about emotional appeals, not facts. It’s not difficult to imagine how this narrative has gained traction. It's like Tom and Jerry, it's like the Hatfields and McCoys, it's like the Yankees and the Red Sox, if I can give you a New York/Boston image. Antitrust authorities and monopolies have a storied rivalry and, of course, since a patent is, in a way, a grant of monopoly rights -- although not really, as I would argue -- it's no wonder that the system is scrutinized by agencies attuned to rooting out and busting up monopolies.

But a patent is a singular and very different kind of monopoly. First of all, patents have term limits, so they naturally must go away, unlike other monopolies. To the extent a monopoly afforded by a patent poses a threat to competition, and I don't think it does, the threat is by definition limited by time. Secondly, a patent is a monopoly to something that wouldn't even

exist but for the patent itself. So the extent the patent takes something away from competitors, it's something that's taken away that competitors didn't have access to in the first place. So you've got to ask the question, "What is the patent taking out of the marketplace that existed before?" By definition, it is not taking anything out of the marketplace because the invention didn't exist before. So, this leads you to say, "Well, if we're going to just come down on the patent system, what's the principal alternative to a strong patent system?" For those of you that haven't heard, patent filings in the U.S. are now going down about 2% this year.

This is the first time I know of, in the history of our country, where you didn't have a war, you didn't have a great recession or depression, you didn't have any other exogenous event yet inventors are affirmatively giving up on the patent system. They are moving away from it for some reason other than all the reasons they did for the past 200 plus years. I am positive it's because we've really done so much to trash the patent system that folks are saying, "I'll just go with trade secrecy instead." So how finite is the trade secret regime? We're coming to some other topics to think about at the future Tusher Center here. Well, unlike patents that have finite duration, trade secrets have infinite duration.

Unlike patents that put knowledge into the public domain, trade secrets keep knowledge out of the public domain. They frustrate collaboration, they lead to inefficient allocation of resources and they divert attention away from exploitation of technology towards concealment of technology. So, that's not a fine alternative at all I would say, talking about things that need to be studied and talked about here.

Finally, with patents we have a so-called monopoly in which our nation's founders expressly gave their blessing. Patent protection was so important to American development that it's provided for directly in the Constitution, of course; and as vital as competition laws have become, I'm not aware of any antitrust laws in the Constitution, much less an antitrust exemption to the patent clause.

So, you get a sense of where the priorities were from the very beginning. Priorities were, as I understand now, someone else said in this room, leading to favor the future, always leading to the future; the founding fathers and mothers got that, and we need to get back to that. Now, I don't want to overstay my welcome, but I'm kind of getting on a roll here and I've got a few more things I want to talk about.

So, proponents of competition law trumping IP, they make the argument that times have changed. They have certainly changed and you've got patent thickets now and patent holdup. I'm going to say these are unprecedented, a phenomenon that could never have been envisioned by our founding fathers -- things have really changed. Never mind that our nation's most celebrated inventor, Thomas Jefferson, protected his inventions with over 1,000 patents, right? And never mind that the first so-called thicket dates back to the sewing machine war of the 1850's as Professor Mosoff has taught us in some of his work. These proponents will tell you that patent pooling and standard setting must be scrupulously regulated or else the public will be denied fair access to today's technology. Proponents, though, tend not to speak about tomorrow's technology.

This is, again, the central theme. Do we want to lean to the future or do we want to lean to the past? Tomorrow's technology, without the promise of exclusivity, has very little chance of attracting the level of R&D investment required to bring it to fruition. Not surprisingly, proponents do not present analysis of the available data. The data paint a picture of consumers who are not only enjoying access to cutting-edge technology and at reasonable prices, but who hold voracious appetites for improvements that can only be delivered as a result of further investment in R&D. So let's take in some numbers here.

Mobile technology, everybody's favorite, is at the center of the controversy over competition law's role in the patent system. There is a recently released comprehensive study by the Boston Consulting Group on technology's impact that can help us put this debate into context.

One of the great ills that the competition law seeks to cure is artificially inflated prices caused by monopolistic practices. Think about that. To be sure, the exclusivity offered by patents allows a patent holder to command higher prices than it would command without the patent -- that's the point of a patent, don't be surprised about it, right? But the benefits far outweigh the cost. This is borne out by one telling fact from this BCG study. The average mobile subscriber cost per MB, this is in the context of all of these patents and all of these so-called thickets and all of these so-called standard essential patent wars, even if any of that were true, which I would contend none of it is, the average cost per MB for subscribers has decreased 99%. It's gone down 99% from 2005-2013. Infrastructure costs have also seen dramatic falls

with a 95% cost reduction per MB transmitted from 2G networks to 3G networks and a further 67% from 3G to 4G networks.

Now, you want to talk about price competition. If there were any industry that was healthy, if there were any industry that the antitrust should be blessing, it would be the one with that kind of track record. What consumers pay for technology and the value they ascribe to it similarly demonstrates that the patent system is far from a buried asset in this area. That BCG report that I mentioned, across the top six geographic markets for mobile, reveals that each consumer values their access to mobile technology at between $700-$6,000 overall, contributing to a whopping $6.4 trillion surplus, above the cost of devices and services in these six countries alone.

If you think about it, all of the infrastructural investment that's gone into creating a wonderful 3G and 4G network that we enjoy all around the world, all of it has been provided by the private sector; the governments haven't done anything. That has created one of the greatest surpluses in all of humankind. And people are complaining about this? I don't understand it. Consumers are hungry for more advances. 90% of 3G and 4G consumers report wanting faster data speeds, greater coverage, longer battery life, they want more of this stuff. They don't want less of it. They don't want, "We better get antitrust involved in order to restrain people from creating more inventions so we can have better devices." No, no, no. The consumer wants more of it, not less. Global data usage is doubling every year, which could lead to data traffic within a decade 1,000 times greater than today's levels. In order to accommodate this skyrocketing demand, investment in new technologies is going to be critical

in companies in the mobile industry. Companies invested $1.8 trillion in infrastructure R&D from 2009 to 2013, with companies focused in the mobile space investing 21% of revenues in R&D. That percentage is second only to the bio industry in terms of capital and investment into R&D, so the numbers are just staggering. They tell a really, really, really good story.

So I'll wrap things up here. But first, I want to wrap up the discussion of the mobile industry, so let's reexamine the data that we find as it pertains to IP. Antitrust is providing a solution to a problem that doesn't exist, solving a problem that doesn't exist. Except, of course, in the minds of those whose business models are built on reaping the technology harvest of innovators. This comes back to Dave Teece's comment, "You eat the seed corn long enough, you'll have a good time while you do it but eventually the seed corn will run out." It doesn't mean there's no role for competition law across the spectrum of IP reliance in this industry, I'm not saying that at all, there clearly is a role but we need to bring antitrust out of the 19th and 20th centuries and into the 21st century.

We need to acknowledge that the patent law itself is a check on harmful, monopolistic practices, and the antitrust authority is most effective operating at the far fringes of IP. The purpose of competition law is to make examples of those few egregious behaviors demonstrating truly anti-competitive impact. This is where the FTC did justice when it went after MPHJ Technology Investments. Their patent assertion entity was accused of using manifestly deceptive tactics in extracting royalties for patents by threatening lawsuits that were objectively meritless and that it had no intention of ever filing. And when patent holders cross a line like that, from collecting on their investment and innovation to making idle and

surreptitious threats, then the FTC has jurisdiction and its intervention benefits innovators and consumers alike. I applaud the FTC for getting involved in that example.

And I'll give you one more little side note on that. MPHJ was an egregious example of a patent troll sending out thousands of letters. In speaking with the FTC commissioners and in looking at the record, it turns out the way they got MPHJ was not because hundreds and thousands of our moms and dads, hundreds of thousands of Vermont country innkeepers and coffee shop owners in rural Oregon were foolish enough to respond to those letters and send checks to MPHJ. No. The FTC got MPHJ because MPHJ, in their letters, said others are paying us for licenses to these patents. This, when in fact, no one was actually paying them; no one was taking their licenses. So what the FTC's investigation found was that in reality no one, not one person or business actually paid MPHJ as a result of their thousands of letters. That statement turned out to be the untrue statement that enabled the antitrust enforcement authorities to get those guys. So again, you've got to put all this in perspective. It's a great thing to study to get the facts and to put the facts out here, we are legislating based on, we are told, many, many, many patent trolls based on many, many, many thousands of letters and supposedly lots of Americans and small businesses getting duped and doing foolish things in response and it turns out so far the evidence shows, nobody has done any foolish thing. Keep that all in mind.

So, there are plenty of market forces in play to address concentration of power. If you don't believe me, I'd ask how many of you in the audience today are carrying in your pocket a Motorola pager or a Nokia cell phone? Probably none at this stage. The point is that one

company or another has always been touted as an existential threat. And this is coming back to David's point before about an existential threat to an efficient tech market, yet the threat never seems to materialize. And the fact that the threat never materializes isn't in spite of patents, but I would tell you it's because of patents and the innovation that is spurred on by the patent system.

Patents may be a type of monopoly, but they're far from a guarantor of market positions. Counterintuitive maybe, but in reality, it's the patent laws, more so than the antitrust laws, that are best-suited to thwart market dominance in fields that rely on technological advancement. The patent laws provide the most powerful incentive there is for new entrance to invest, creating new technology and it's just these technologies that routinely disrupt dominant firms, dislodging their positions. So the stronger the incentive provided by the IP laws, I would say, the higher the likelihood of disruption and the faster the disruption.

Without new, nimble entrants, with technological contributions quickly becoming available to the standard bearers in the field, these disruptions would be few and far between -- extremely rare, indeed. So, ironically then, the best policy move we can make, and another thing to study here to advance the purpose of the antitrust regime, is to actually strengthen the patent system. Because the more you strengthen the patent system, the more entry there's going to be and the more disruption there's going to be to entrenched interests. This is a strong patent doctrine. The stronger the patent system, the less need there is for antitrust.

So, intellectual property represents -- and it's already been said and I hope this is a theme today -- a long-term investment system, and it is perpetually pitted against short-term

exigencies. We get that. Everyone wants today's innovation on the cheap. The public always has issues about the need to invest for the next innovation. It's the same reason it's so hard to put money in a 401K program. They're about making some sacrifice now in order to have more in the long term-future.

Historically, we've agreed as a nation to pay a little more now for today's innovations in exchange for having more great innovations in the future and it's worked extraordinarily well. Collateral attacks from our antitrust authorities brought on by U.S. advocacy run amok and furthered by overseas antitrust authorities all too willing and all too ready to exploit our own missteps -- none of which is constrained by thoughtful analysis -- undermines the competitive position of our country and job creation engine. David said it's been so uniquely American for generations; we are good at innovation, we cannot lose that. In light of all of this, it's time we reset the relationship between antitrust and IP for the sake of a global international legal system, more importantly for the progress of technology and innovation.